Volume 2 of 2

FHWA-TX-EIS-02-02-DS TxDOT CSJ 0918-45-121

# SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT & DRAFT SECTION 4(f) EVALUATION

# TRINITY PARKWAY

## FROM IH-35E/SH-183 TO US-175/SH-310 DALLAS COUNTY, TEXAS

Executive Order 13274 Project

On August 18, 2004, the Trinity Parkway was designated as a Priority Project for expedited agency environmental review under EO 13274.

U.S. Department of Transportation Federal Highway Administration

Texas Department of Transportation

NTTA NORTH TEXAS TOLLWAY AUTHORITY

FEBRUARY 2009

# VOLUME 2 OF 2

**TRINITY PARKWAY**
**FROM IH-35E/SH-183 TO US-175/SH-310, DALLAS COUNTY, TEXAS**

**SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT**
**AND**
**DRAFT SECTION 4(f) EVALUATION**

---

## LIST OF APPENDICES


**A Correspondence, Participation Events, and Notice of Intent**
- A-1. Correspondence
- A-2. Agency and Public Participation Events
- A-3. Notice of Intent

**B Cultural Resources**

**C Relocation Assistance Information**

**D Cost Estimates**

**E USACE Guidance Documents**

**F Hydrologic and Hydraulic Modeling**

**G Public and Agency Involvement Documentation**
- G-1. Public Hearing Summary and Analysis / Certification
- G-2. Comments and Responses
- G-3. Public Hearing Materials
- G-4. Public Hearing Transcript and Verbal Statements Received
- G-5. Written Statements Received
- G-6. Correspondence
- G-7. Agency and Public Participation Events
- G-8. Speaking Events, Public Debates, and Media Coverage Leading up to the November 6, 2007 Special Election

**H Preliminary Section 404(b)(1) Guidelines Evaluation**

**I TCEQ Section 401 Water Quality Certification Questionnaire**

**J Preliminary Section 404 Mitigation Plan**

**K Structural Design Work Related to November 2006 USACE Consultation/Geotechnical and Operation and Maintenance Workgroup Documentation**
- K-1. Structural Design Work Related to November 2006 USACE Consultation
- K-2. Geotechnical Workgroup Documentation
- K-3. Operations and Maintenance Workgroup Documentation

**L Detailed Supporting Data**
- L-1. Historical Context as it Relates to Cultural Resources
- L-2. Planned Parks / Recreational Development within the Study Area
- L-3. Surface Water Quality Monitoring Data
- L-4. Reasonably Foreseeable Future Actions Considered in the Cumulative Effects Analysis
- L-5. Indirect Land Use Analysis
- L-6. Traffic Redistribution
- L-7. Project Specific MTP and TIP Pages

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX A

# CORRESPONDENCE, PARTICIPATION EVENTS, AND NOTICE OF INTENT

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX A-1

# CORRESPONDENCE

## APPENDIX A-1

## CORRESPONDENCE

| Agency | Address | Date Sent | Information Requested | Date Response | Response | Page |
|---|---|---|---|---|---|---|
| US Environmental Protection Agency (EPA) – Region 6 | 1445 Ross Ave, Suite 1200, Dallas, TX 75202-2733 | | | 7-16-99 In response to scoping meeting | Recommendations and comments associated the scope of DEIS. Listed areas of EPA special concerns. | 5 – 15 |
| | | 8-4-99 | Federal Highways Administration (FHWA) request EPA to be cooperating agency | 8-13-99 | EPA will participate on limited basis | 16 |
| | | | | 10-11-00 E-mail from EPA | Environmental Justice information | 17 |
| US Army Corps of Engineers (USACE) | District Engineer | 8-4-99 | FHWA request USACE to be cooperating agency | 8-20-99 | Will not formally participate as a cooperating agency at this time. Will provide data and assistance within USACE area of expertise. | 18 |
| Regulatory Branch | Presley Hatcher POB 17300, Fort Worth, TX 76102-0300 | 3-30-00 | Request for updated wetland delineation in the Dallas Floodway | 4-19-00 | Acknowledgement and assign project number 200000308 | 19 – 21 |
| Regional Environmental Officer, Federal Emergency Management Agency (FEMA) | Regional Environmental Officer, 800 N. Loop 288, Denton, TX 76201 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | 9-8-99 | Request letter stamped with: "Coordinate with local floodplain administrator to obtain necessary development permit." | 22 |
| | | 5-4-00 | FHWA request FEMA to be Coordinating Agency | | | 23 – 24 |
| US Department of Interior (DOI), National Park Service | 12795 West Alameda Parkway, POB 25287, Denver, CO 80225 | | | 7-21-99 – In response to the published NOI | Rochester Park is encumbered by Section (6)(f)(3) of the L&WCF program. | 25 |
| DOI Regional Environmental Officer | POB 649, Albuquerque, NM 87102 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| US Department of Agriculture - Natural Resources Conservation Service | John Burt, State Conservationist | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | 8-23-99 - In response to the published NOI | Acknowledgement and offer of assistance, if needed | 26 |
| US Department of Housing and Urban Development (HUD) | Administrative Coordinator A. Maceo Smith Federal Building, 525 Griffin St, Suite 860, Dallas, TX 75502-5007 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| US Coast Guard, Eighth District | Bridge Administrative Branch, 501 Magazine Street, New Orleans, LA 70130-3396 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |

| Agency | Address | Date Sent | Information Requested | Date Response | Response | Page |
|---|---|---|---|---|---|---|
| Texas Historical Commission (THC). (The remainder of THC correspondence is in the Cultural Resource Appendix) | Jim Steely, Chief Historian Deputy State Historic Preservation Officer, POB 12276, Austin, TX 78711-2276 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| North Central Texas Council of Governments (NCTCOG) | Mike Eastland, Executive Director, 616 Six Flags Drive, POB 5888, Arlington, TX 76005-5888 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| US Fish and Wildlife Service – Southwest Region | Nancy Kaufman, Regional Director, POB 1306, Albuquerque, NM 87103 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| Texas Commission on Environmental Quality (TCEQ) | Jeff Saitas, Executive Director MC 109, POB 13087, Austin, TX 78711-3087 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | 10-13-99 | Several comments, General Conformity Rules apply but a general conformity analysis of VOCs is not required | 27 – 28 |
| Texas Parks and Wildlife – Habitat Assessment Program | Kathy Boydston 4200 Smith School Road, Austin, TX 78744 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | 10-6-99 | No direct impact on existing TP&WL projects involving Land and Water Conservation Fund and the Local Parks Fund. Recommendations concerning documentation required. | 29 |
| Trinity River Authority (TRA) | Dan Vance, General Manager 5300 South Collins Street, POB 60, Arlington, TX 76018 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| Dallas Area Rapid Transit (DART) | Roger Snoble, Executive Director, POB 660163, Dallas, TX 75266-0163 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | 9-3-99 | Acknowledgement, request impact information for several impact categories | 30 |
| Federal Transit Administration – Region 6 | Regional Environmental Coordinator, 819 Taylor Street, Room 8A36, Fort Worth, TX 76102 | 8-16-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| Federal Aviation Administration (FAA) – Southwest Region | Regional Administrator 2601 Meacham Blvd., Fort Worth, TX 76137-4298 | 9-17-99 | Resource issues and concerns, permit, review, consultation requirements | 9-28-99 | Acknowledgement with potential impact criteria and Form 7460-1 if needed | 31 - 32 |

| Agency | Address | Date Sent | Information Requested | Date Response | Response | Page |
|---|---|---|---|---|---|---|
| National Marine Fisheries Service – Southeast Regional Office | William Hogarth, Regional Administrator, 9721 Executive Center Drive North, St. Petersburg, FL 33702 | 10-26-99 | Resource issues and concerns, permit, review, consultation requirements | | | |
| North Texas Tollway Authority (NTTA) | Chris Anderson, Executive Director of Planning | 11-10-00 | | | Issued News Advisory of Trinity Parkway Cost Estimates | 33 - 36 |
| City of Dallas | Mike Hellmann City of Dallas Park Planner, Dallas City Hall, Room 6FS, 1500 Marilla St, Dallas, TX 75201 | 9-20-01 | Request determination of 4(f) sites/properties along alternatives. Request issues/concerns. Request meeting Oct 5, 01 | 1-31-02 | Trinity River Park does not have 4(f) issues or requirements of TPWL code. No city park is physically impacted by alternatives. Might be close to Moore Park- additional review of Moore Park needed. | 37 |
| Stemmons Deed | | | | | | 38 – 47 |
| FHWA | Mr. Patrick A. Bauer, P.E. District Engineer – Texas Division FHWA Federal Office Building, Room 826 300 East 8th Street Austin, Texas 78701 | 1-29-03 | Strategy Development of the Trinity Parkway DEIS | | | 48 – 50 |
| United States Coast Guard | Homeland Security Chief, Bridge Administrative Branch Eighth Cost Guard District Hale, Boggs Federal Building 501 Magazine Street New Orleans, LA 70130-396 | 3-5-04 | Construction and Operation of the Trinity Parkway Concurrence Regarding Exemption from Bridge Permitting Requirements | | | 51 – 57 |
| City of Dallas | Michael Hellmann City of Dallas Park Sr. Park Planner, Dallas City Hall, Room 6FS, 1500 Marilla St, Dallas, TX 75201 | | Trinity Parkway Alternative Alignments – Review of possible 4(f) Applicability | 4-7-04 | Trinity Parkway is not subject to the Section 4(f) requirements as it pertains to the Trinity River Park. If alignments change and impact any other park land, Section 4(f) review would be in order. | 58 - 59 |

| Agency | Address | Date Sent | Information Requested | Date Response | Response | Page |
|---|---|---|---|---|---|---|
| City of Dallas | Michael Hellmann<br>City of Dallas Park<br>Sr. Park Planner, Dallas City Hall, Room 6FS, 1500 Marilla St, Dallas, TX 75201 | 6-2-04 | Request Section 4(f) – Applicability Concerning Publicly Owned Lands and Existing and Proposed Trails within the Study Area of the Proposed Parkway in Dallas, Texas | | | 60 – 66 |
| City of Dallas | Michael Hellmann<br>City of Dallas Park<br>Sr. Park Planner, Dallas City Hall, Room 6FS, 1500 Marilla St, Dallas, TX 75201 | | Section 4(f) – Applicability Request Concerning Publicly Owned Lands and Existing and Proposed Trails within the Study Area of the Proposed Parkway in Dallas, Texas | 7-23-04 | The land identified as Calypso Park is no longer leased by the City and is no longer used as a city park.<br><br>The land identified as the "un-named parkland" is City designated parkland.<br><br>The "use" of the Trinity River Park allows for transportation uses. | 67 - 68 |
| City of Dallas | Michael Hellmann<br>City of Dallas Park<br>Sr. Park Planner, Dallas City Hall, Room 6FS, 1500 Marilla St, Dallas, TX 75201 | | Section 4(f) – Applicability Request Concerning Publicly Owned Lands and Existing and Proposed Trails within the Study Area of the Proposed Parkway in Dallas, Texas | 10-19-04 | The land identified as the "un-named parkland" has been found to be under private ownership, and is not owned by the City. The property has been removed from the City Park Land Inventory and no longer has a potential use as a park. The property is not subject to Section 4(f). | 69 |

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

Mr. Jerry Hiebert
Executive Director
North Texas Tollway Authority
P.O. Box 190369
Dallas, TX 75219

JUL 16 1999

Dear Mr. Hiebert:

In accordance with our authority under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA), Region 6 Office, would like to take this opportunity to offer comments on the scope of the North Texas Tollway Authority (NTTA) Draft Environmental Impact Statement (DEIS) for the Trinity Parkway Reliever Route, located along the Trinity Parkway Corridor from SH-183/IH-35 interchange to the SH-310/US-175 interchange in Dallas, Texas.

To ensure that all areas of impact assessment are included in the DEIS and to identify those areas of particular concern to EPA, we are submitting recommendations on the scope of the DEIS. In particular, we believe that it is extremely important that the DEIS fully address all alternative alignments, the preferred action, and no action alternative, their direct, indirect and cumulative impacts affecting the Trinity River and the Dallas Floodway; including the Dallas Floodway Extension and the Chain of Lakes and related recreational features of these proposals as they affect the Trinity River and the environment. Of particular concern is the locally preferred alternative's compatibility with existing Federal floodplain management criteria, noise impacts, air quality impacts and the compatibility with park and recreational features proposed within the Dallas Floodway. Our comments, which are enclosed, are based upon the Council on Environmental Quality (CEQ) regulations 40 CFR (Parts 1500-1508) and our authority under Section 309 of the Clean Air Act.

We appreciate the opportunity to comment. If you have any questions, please have your staff contact me or my staff at (214) 665-2258.

Sincerely yours,

Robert D. Lawrence
Chief, Office of Planning and Coordination

Enclosures

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (40% Postconsumer)

EPA

# SCOPING COMMENTS ON THE NORTH TEXAS TOLLWAY AUTHORITY TRINITY PARKWAY RELIEVER ROUTE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) DALLAS, TEXAS

## GENERAL COMMENTS:

The Draft Environmental Impact Statement (DEIS) should rigorously explore and objectively evaluate all reasonable alternatives and, for alternatives which were eliminated from detailed study, adequately discuss the reasons for their having been eliminated (40 CFR 1502.14).

The DEIS should clearly explain the relationship between the program's cost benefit analysis and any analyses of unquantified environmental impacts, values, and amenities (40 CFR 1502.23).

Length of analysis of environmental impacts varies. If the environmental impact is determined to be slight, the assessment of the impact can be short. If a particular impact, or the impact of the total proposed action is determined to be significant, the assessment should include a detailed analysis of the impact addressed over the life of the project.

## SCOPE OF ENVIRONMENTAL ANALYSIS

Section 1502.4 of the Council on Environmental Quality (CEQ) Regulations for Implementing NEPA states that agencies shall make sure the proposal which is subject of an environmental impact statement is properly defined. Agencies shall use the criteria for scope as defined at Section 1508.25 of the CEQ Regulations to determine which proposals shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

Section 1508.25 of the CEQ Regulations identifies "scope" as a range of actions, alternatives, and impacts to be considered in an environmental impact statement. To determine the scope of an environmental impact statement agencies shall consider three types of actions, three types of alternatives, and three types of impacts. These include:

(1) Actions (other than unconnected single actions) which may be:

Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

a. Automatically trigger other actions which may require environmental impact statements.
b. Cannot or will not proceed unless other actions are taken previously or simultaneously.

c. Are interdependent parts of a larger action and depend on the larger action for their justification.

Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

The NTTA should consider analyzing these actions in the same statement. The agency should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

(2) Alternatives, which include:

a. No action alternative.
b. Other reasonable courses of action.
c. Mitigation measures not in the proposed action.

(3) Impacts, which may be:

a. Direct
b. Indirect
c. Cumulative

The above identifies the requirements of proper scope of environmental impact analysis for preparation of an environmental impact statement as defined in the CEQ Regulations.

FLOODPLAIN MANAGEMENT

The DEIS should assess and demonstrate compliance with the Executive Order (EO) 11988 regarding Floodplain Management. Under this EO, each Federal agency is required to provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplain. A copy of the Presidential Order along with a copy of the Federal Highway Administration Regulation 23 CFR Part 650 - Bridges, Structures, and Hydraulics are enclosed to assist you. In particular Section 650.113, "Only Practicable Alternative Finding" regarding significant encroachment of floodplains, and Section 650.103 (b) and (c) which direct FHWA, " to avoid longitudinal encroachments, where practicable" and , "to avoid significant encroachments, where practicable."are called to your attention. The DEIS should demonstrate compliance with these requirements. This information is enclosed for your review and should be fully addressed and incorporated into the analysis of the DEIS.

NOISE

Studies have shown that some of the most pervasive sources of noise in our environment today are those associated with transportation. For this reason, the DEIS should fully assess noise related impacts of the proposed action and the alternatives and its compatability with future land uses along the transportation corridor. We have enclosed a copy of the U.S. Department of Transportation Highway Traffic Noise Analysis and Abatement Policy and Guidance for noise related impacts for your consideration and use in assessing noise impacts of this action. We ask that it be incorporated into the DEIS.

CUMULATIVE IMPACT

The DEIS should assess the cumulative effects of the proposed navigation alternative. Cumulative impact has been defined by CEQ as, "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." Cumulative impact can result from individually minor but collectively significant actions taking over a period of time. Impacts or effects include both direct effects which are caused by an action and occur at the time and place as the action, and indirect effects which are caused by the action and occur later in time and are farther removed in distance but are still reasonably foreseeable.

In assessing cumulative impact, consideration is given to (1) the degree to which the proposed action affects public health or safety, (2) unique characteristics of the geographic area, (3) the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks, and (4) whether the action is related to other actions which are individually insignificant but cumulatively cause significant impact on the environment.

ENVIRONMENTAL JUSTICE EXECUTIVE ORDER #12898

On February 11, 1994, the President signed Executive Order #12898 which addresses environmental justice in minority and low income populations and places new responsibilities upon EPA and other Federal agencies in all activities requiring environmental assessment and review under the National Environmental Policy Act.

In accordance with Title VI of the Civil Rights Act of 1964, the new Executive Order directs each Federal agency to ensure that all programs or activities receiving Federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

The Executive Order further directs each Federal agency to analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq. Mitigation

measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income populations.

Each Federal agency is directed to provide opportunities for community input in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and opposition groups and improving the accessibility of meetings, crucial documents, and notices.

Each Federal agency is required under the Executive Order to ensure that the public, including minority communities and low-income communities, has adequate access to public information relating to human health or environmental planning, regulations, and enforcement when required under the Freedom of Information Act, 5 U.S.C. section 552, the Sunshine Act, 5 U.S.C. Section 552b, and the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Section 11044.

Therefore, the DEIS must address the applicability of the Executive Order to the Federal action being analyzed in the NEPA process and document measures taken by the agency to fully assess the effects on minority communities and low-income communities. Although social and economic impacts have always been a consideration in EPA's Section 309 reviews, the Presidential Executive Order highlights the necessity to better integrate the consideration of human health, social and economic effects into the Section 309 review process. The Executive Order calls for collection and analysis of information on race, national origin, income level and other appropriate information for areas surrounding projects that have expected environmental, health and economic effect on those populations. Environmental Justice impacts should be fully addressed in the DEIS. We have enclosed a copy of the EPA guidance document entitled, "Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses" and a copy of the "Federal Highway Administration Environmental Guidebook Policy Statement for Addressing Environmental Justice In The Project Development/NEPA Process," to assist you in preparing the DEIS.

## POLLUTION PREVENTION

In accordance with the Pollution Prevention Act of 1990 and Executive Order 12856, EPA has launched a significant initiative to incorporate pollution prevention throughout all federal sector activities. One of the principles is a pollution prevention/waste minimization directive is to minimize the use of hazardous materials and the number and size of waste streams. We ask that the DEIS describe pollution prevention and waste minimization policies and practices; including non-point sources of pollution such as run-off from highways and structures within the Trinity River.

## WATER QUALITY

For each alternative under consideration, we request that the DEIS adopt a process to

ensure that the following water quality concerns are assessed. The discussion in the DEIS should be of sufficient detail to determine which sites are environmentally preferable. Site-specific water quality problems need to be assessed in greater detail, if applicable, including the adoption of site-specific mitigation measures to protect water quality and beneficial uses.

- Discuss potential impacts to water quality, beneficial uses and biological resources. Water quality and beneficial uses may be adversely impacted by construction and operation. Evaluate the potential of all program activities to cause adverse impacts to water quality, protected uses and biological resources.

Water quality may be adversely affected by the placement of fill materials in wetlands and other waters of the United States; increased sedimentation, erosion, or turbidity; the runoff of hydrocarbons, heavy metals, toxic materials or other pollutants; the accidental release of hazardous waste; and the accidental discharge of fuels or toxic materials.

- Identify all surface waters that may be affected by the proposed program. Identify the existing and potential beneficial uses of these surface waters. Protected beneficial uses for streams, creeks, lagoons, tidal areas and other surface waters may include one or more of the following: cold and warm freshwater habitat; marine habitat; fish spawning and migration; shellfish habitat; wildlife habitat; preservation of rare, threatened or endangered species; groundwater recharge; freshwater replenishment; public drinking water supplies; agricultural supply; and water contact and non-contact recreation.

Protecting water quality ensures the protection of its beneficial uses. Especially critical is the protection of several sensitive uses. It is important to protect water quality in order to maintain freshwater and wildlife habitats, since many species are sensitive to the introduction of pollutants or the adverse modification of their habitats. It is also important to protect groundwater recharge and freshwater replenishment, particularly if public drinking water supplies could be adversely affected. These sensitive beneficial uses should be carefully considered when evaluating potential impacts caused by the placement of fill, erosion, sedimentation, the runoff of pollutants, and the accidental discharge of hazardous waste or toxic substances.

- Discuss how the project will comply with state and local water quality management plans, state water quality objectives; and state-adopted, EPA-approved water quality standards. Under Section 313 of the CWA, the project must meet state water quality standards regardless of the proposed activity and manage in a manner to protect or improve water quality where standards are not established.

In 1987, Congress amended the CWA by adding Section 319. Section 319 requires states to assess non-point source water pollution problems, develop non-point source pollution management programs, and implement controls to protect and improve water quality and beneficial uses. We ask that the lead agency and project sponsor work closely with appropriate state water pollution control agencies to determine what pollution control measures should be adopted to implement the state's non-point source management plans.

- Identify critical habitat areas (wildlife feeding and drinking areas; fishery migration, spawning or rearing areas; sensitive aquatic habitats such as wetlands; riparian resources; critical habitat for threatened and endangered species. Describe the existing beneficial uses and resource values of these critical areas, and potential impacts to them from the proposed program.

- Discuss what mitigation measures (e.g., best management practices; non-point source controls will be implemented to protect or improve water quality, beneficial uses, and biological resources.

- Describe current drainage patterns in the program areas. Assess how altering drainage patterns and characteristics will affect drainage hydrology, surface runoff, erosion potential, soils vegetation, and water quality.

- Discuss affects on the flood plain. This includes using maps prepared by the Federal Emergency Management Agency and other appropriate agencies to determine whether the proposed action is located in or will likely affect a flood plain. If affected, the applicant should discuss these impacts and also describe the alternatives considered. Document compliance with E.O. 11988 on flood plain management.

We request that the lead agency work closely with state water pollution control agencies, state fish and game agencies, and the U.S. Fish and Wildlife Service, on water quality standards; the protection of water quality, beneficial uses and biological resources; mitigation and monitoring for adverse impacts.

## GROUND WATER COMMENTS

For each alternative under consideration, we request that the DEIS adopt a process to ensure that the following ground water concerns are assessed. The discussion in the DEIS should be of sufficient detail to determine which site is environmentally preferable.

- Describe current ground water conditions in the program areas. Assess any likely impact to ground water quality and quantity from program activities.

- Identify mitigation measures to prevent or reduce adverse impacts to ground water quality and discuss their effectiveness. We recommend that the lead agency work closely with state and local agencies which regulate the protection of ground water resources (i.e., state health departments and water pollution control agencies.) Coordination efforts should be documented in the DEIS.

## WETLANDS - CLEAN WATER ACT (CWA)

The DEIS should determine whether the project will require the placement of dredged or fill material into waters of the United States, including wetlands, an activity regulated under

Section 404(b)(1) of the Clean Water Act (CWA). We recommend that the lead agency work closely with EPA Region 6. We recommend the preservation and enhancement of existing wetland resources. The DEIS should consider alternatives which will preserve these resources in perpetuity.

It is essential that the project undertakes every practicable effort to first avoid and then reduce the amount of fill placed into waters of the United States. It would be useful for the DEIS to make an initial determination whether the proposed project may require the placement of fill material in waters of the United States. If so, the DEIS should substantiate that appropriate and practicable steps have been taken to avoid and minimize the adverse impacts on aquatic ecosystems. Finally, the DEIS must describe appropriate and practicable measures to compensate for the unavoidable loss of wetlands and other waters of the United States.

If wetlands or waters of the United States may be impacted by activities regulated by Section 404, we strongly recommend that the DEIS contain a thorough discussion of the proposed program's consistency with Federal Guidelines for specification of disposal sites for dredged or fill materials [the 404(b)(1) Guidelines, found at 40 CFR Part 230]. For each alternative under consideration, we request that the DEIS adopt a process to ensure that the Section 404 concerns are assessed. The discussion in the DEIS should be of sufficient detail to determine which site is environmentally preferable in terms of compliance with the Section 404(b)(1) Guidelines.

In order to demonstrate compliance with the 404(b)(1) Guidelines, the DEIS should meet the following criteria to the extent possible:

- The proposed discharge must be the practicable alternative which would have the least adverse impact on the aquatic ecosystem [40 CFR 230.10(a)]. If wetlands would be filled, then the DEIS should explain why there are no practicable alternatives to locating the project within wetlands and show how the project has been designed to minimize harm to existing wetlands.

- The proposed action must not cause or contribute to significant degradation of waters of the United States including wetlands and other special aquatic sites [40 CFR 230.10(c)]. Significant degradation includes the loss of fish and wildlife habitat and the loss of other wetland habitat values and functions. Significant degradation also includes cumulative impacts.

- The proposed project does not violate state-adopted, EPA-approved water quality standards or jeopardize the continued existence of any species listed as threatened or endangered under the Endangered Species Act [40 CFR 230.10(b)].

- Minimize the number of acres subject to Section 404 jurisdiction that would be permanently lost or degraded due to impacts other than the placement of fill (e.g., the impacts of erosion, sedimentation and runoff of pollutants on wetland habitats; diversion

of water from wetland habitats).

- Characterize baseline conditions. Include maps, text, and tables that feature areas occupied by wetlands, aquatic systems, and non-wetland riparian habitat. Direct, indirect and cumulative impacts to these resources should be fully described.

- Provide a programmatic mitigation proposal to fully compensate for the loss or degradation of wetland habitats, including the proposed mitigation replacement ratio, the habitat value and proposed location of replacement habitats, general grading and revegetation plans and a biological maintenance and monitoring program. Provide clear mitigation goals and objectives and quantifiable criteria by which to judge the success or failure of mitigation. Give firm commitments to ensure the restoration or creation of wetland habitats of equal or greater resource value, and commitments to ensure their protection for the life of the project.

In order to assist EPA, the Army Corps of Engineers, the U.S. Fish and Wildlife Service, and state fish and game agencies in evaluating the proposed project's consistency with the 404(b)(1) Guidelines, we recommend that the DEIS contain the following information:

- If fill activities are contemplated, then we recommend that the DEIS include a map showing the locations and types of wetland which would be filled. Wetlands should be mapped according to procedures described in the 1987 Corps of Engineers Wetland Delineation Methodology Manual.

- List the number of acres subject to Section 404 jurisdiction that would be filled and the types and quantities of fill material that would be discharged into waters of the United States, including wetlands and their special aquatic sites. Compensation must be provided for all unavoidable wetland losses.

- List the number of acres subject to Section 404 jurisdiction that would be permanently lost or degraded due to impacts other than the placement of fill (e.g., the impacts of erosion, sedimentation and runoff of pollutants on wetland habitats; diversion of water from wetland habitats).

- Describe the habitat value and location of habitats are permanently lost or degraded.

- Characterize baseline conditions. Include maps, text, and tables that feature areas occupied by wetlands, aquatic systems, and non-wetland riparian habitat. Direct, indirect and cumulative impacts to these resources should be fully described.

- Provide a specific mitigation proposal to fully compensate for the loss or degradation of wetland habitats, including the proposed mitigation replacement ratio, the habitat value and proposed location of replacement habitats, specific grading and revegetation plans and a biological maintenance and monitoring program. Provide clear mitigation goals and

objectives and quantifiable criteria by which to judge the success or failure of mitigation. Give firm commitments to ensure the restoration or creation of wetland habitats of equal or greater resource value, and commitments to ensure their protection for the life of the program.

## CLEAN AIR ACT

For each alternative under consideration, we request that the DEIS adopt a process to ensure that the air quality concerns identified below are assessed. The discussion in the DEIS should be of sufficient detail to determine which site or transportation service system is environmentally preferable.

Discuss existing air quality conditions in terms of National Ambient Air Quality Standards (NAAQS), Federal Prevention of Significant Deterioration (PSD) increments, and state air quality standards. Conformity to state air quality laws and transportation planning should be discussed.

Identify whether program activities could adversely affect air quality in terms of ambient concentrations and the numbers of federal/state standards and increment violations.

Discuss the types and effectiveness of mitigation measures that will be used to protect air quality (e.g., vapor recovery systems, fumes incinerators, and dust control measures during construction phase). Identify parties which will be responsible for implementing air quality mitigation measures.

Coordinate and include documentation of coordination with state/local/regional air pollution control agencies on air quality planning, air quality modeling, compliance with federal/state air quality standards, the need for air permits, air quality monitoring, and mitigation for adverse impacts.

## PESTICIDES

The DEIS should state whether or not any pesticides (e.g., herbicides, insecticides, rodenticide, fungicides, etc.) will be used for vegetation clearance or control, maintenance and harvest operations, or the control of rat, mosquito or other vector populations. If so, the types of pesticides, application rates, and application procedures should be addressed. Any pesticides used must be registered with the EPA and the state, and label directors and instructions followed. All applicable state regulations must also be followed. In addition, because the regulatory status of chemicals is constantly changing, EPA recommends that a periodic review of the chemical's current regulatory status be done prior to application. Should pesticides be used, EPA recommends that a specific section of the DEIS be devoted to the subject.

## AGRICULTURAL LAND

The DEIS should clarify if any agricultural land would be impacted by the program. If so,

the document should use the U.S. Department of Agriculture classification scheme to describe the present use of agricultural land which would be affected. If this acreage is prime agricultural land (Class 2), consideration should be given to the CEQ (August 30, 1976 and August 11, 1980) which urge the protection of prime agricultural land. Mitigation measures should be developed to avoid loss of any such valuable resources.

## HISTORIC PRESERVATION

36 CFR Part 800 of the Historic Preservation Act requires Federal agencies to identify and determine the effect of the action on any district, site, building, structure, or object listed in or eligible for listing in the National Register of Historic Places. The DEIS should demonstrate proper coordination with the state historical preservation officer. If adverse impacts are identified, the Federal agency should request formal consultation with the Advisory Council on Historic Preservation (36 CFR, Part 800). Compliance with Executive Order 121593 is required and should be fully documented in the DEIS.

## ENDANGERED SPECIES

The DEIS should demonstrate adequate coordination with the Fish and wildlife Service to identify any adverse effects, determine the effect and take measures to eliminate it and fully comply with the requirements under Section 7 of the Endangered Species Act. Section 7 consultation should be fully documented and discussed in the DEIS.

## MITIGATION

Section 1502.14(f) of the CEQ regulations state what an EIS must address for each alternative appropriate mitigation measures not included in the proposed action or alternatives. Section 1508.20 defines mitigation to include: a) avoiding the impact altogether by not taking a certain action or parts of an action; b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; c) rectifying the impact by repairing, rehabilitating or restoring the affected environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and e) compensating for the impact by replacing or providing substitute resources or environment. Mitigation should be fully addressed in the DEIS.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

AUG 13 1999

Walter C. Waidelich, Jr.
District Engineer
Federal Highway Administration
Texas Division Office
300 East Eighth Street
Austin, TX 78701

Dear Mr. Waidelich:

Thank you for your recent letter, dated August 4, 1999, inviting our Agency's participation in the development of a Draft Environmental Impact Statement (DEIS) for the Trinity Parkway Reliever Route, Dallas County, Dallas, Texas.

EPA Region 6 will be able to participate in a limited basis because of limited resources. We are already participating with the North Texas Tollway Authority and the City of Dallas staff in the preparation of this document. We participated in the public scoping meeting and provided detailed scoping comments, dated July 16, 1999, for those areas we believe to be fully evaluated in the DEIS. A copy is enclosed for your reference. For specific environmental resource issues, your staff and consultants are welcome to visit with our Regional staff experts to discuss specific technical data collection and impact analysis concerns.

I am the designated Regional point of contact for this EIS project related correspondence and meeting scheduling for discussions with Regional staff for technical assistance.

We appreciate this opportunity to participate in the National Environmental Policy Act (NEPA) planning and decision making process and look forward to working with your staff. If you have any questions, please contact me at 214-665-7451 or E-MAIL me at jansky.michael@epa.gov for assistance.

Sincerely yours,

Michael P. Jansky, P.E.
Regional 309 Review Coordinator

Enclosures

Internet Address (URL) • http://www.epa.gov
Recycled/Recyclable • Printed with Vegetable Oil Based Inks on Recycled Paper (Minimum 25% Postconsumer)

## Cargo, Douglas

**From:** Augurson.Shirley@epamail.epa.gov
**Sent:** Wednesday, October 11, 2000 5:17 PM
**To:** Cargo, Douglas
**Cc:** Balandran.Olivia-R@epamail.epa.gov; Carney.Gerald@epamail.epa.gov; Arthur.Warren@epamail.epa.gov
**Subject:** RE: EJ Contact Names for Trinity Parkway Project

Internet HTML

Douglas,

I got your phone call while I was out of the office last week regarding follow-up on the EJ meeting/information. We're having a hard time getting all
of the necessary people together here, but I do have some information for you.
I got a phone call back from Brenda Moore with the West Dallas community. She
provided names of 4 individuals who want to work on this initiative:

1) Brenda Moore
Phone: (214) 638-8794
New Start for Better Env.

2) Rev. R.T. Conley
(214) 638-4434
New Start for Better Env.

3) Barbara Thompson
(214) 637-6440
Westmoreland Heights Neighborhood Assn.

4) Pat Stephens
Westmoreland Heights Neighborhood Assn.

Maps were done on each of the six options you presented. The EJ maps show a
high potential (EJ index ranking of 75 out of 100) for impacts on EJ communities
in the affected areas. When we get together to review this information, you
will see this clearly depicted on the maps. Some of the next steps we would
suggest you take is to look at specific potential impacts (postive and negative), i.e., increased traffic, flood control, dust/noise during construction, disruption of traffic patterns, etc. Subsequently, you may want
to identify possible mitigation steps to address those impacts. Convening a
series of meetings of the the community stakeholder group can be useful in
executing these steps of the process. Look forward to meeting with you soon.

Shirley Augurson
EPA, Region 6
Office of Environmental Justice (6RA-DJ)
Dallas, TX

1

Paxton/rg/8-6389/1549

August 20, 1999

Environmental Division

Mr. Walter C. Waidelich, Jr.
District Engineer
U.S. Department of Transportation
Federal Highway Administration
300 East 8th Street
Austin, Texas 78701

Dear Mr. Waidelich:

Thank you for your letter dated August 4, 1999, requesting the U.S. Army Corps of Engineers, Fort Worth District, become a cooperating agency on the EIS proposed Trinity Parkway reliever route in the city of Dallas, Dallas County, Texas.

The Fort Worth District has in the past and is currently participating in Major Investment Study Project Coordination Work Groups with the Texas Department of Transportation and appreciates the continued opportunity to work with you on projects of mutual interest. We are aware that the Federal Flood Protection project in Dallas may be directly affected by the alternative routes of the proposed Trinity Parkway. We recognize that there is an interrelationship of these two projects; however, we prefer not to formally participate as a cooperating agency in your NEPA process at this time in order that your plan formulation and selection will not be inadvertently biased. We remain ready to fully cooperate with your agency and provide data and assistance within our areas of expertise.

Requests for review of your EIS in the area of floodplains and wetlands should be sent to the attention of Mr. Paul M. Hathorn, Chief, Environmental Resources Branch. Thank you again for the opportunity to act as a cooperating agency on the development of the EIS for this project.

Sincerely,

James S. Weller
Colonel, Corps of Engineers
District Engineer

MFR: Fed Hwy Admin requests "cooperating agency" status of all Federal Agencies on all their projects. In the past, Ch, EV has responded. Because of front office suspense, DE will sign these.

CESWF-EV-EE PAXTON
CESWF-EV-E HATHORN
CESWF-EV-R LEAD
CESWF-EV FICKEL
CESWF-DDE-PM MOCEK
~~CESWF-XO~~ MCCARTH
CESWF-DE WELLER

Halff Associates
ENGINEERS • ARCHITECTS • SCIENTISTS
PLANNERS • SURVEYORS

8616 NORTHWEST PLAZA DRIVE
DALLAS, TEXAS 75225
(214) 346-6200
FAX (214) 739-0095

March 30, 2000
AVO 17826

Mr. Preseley Hatcher
U.S. Army Corps of Engineers
Regulatory Branch
P.O. Box 17300
Fort Worth, Texas 76102-0300

Re: Request for an updated wetland delineation for the Dallas Floodway and associated drainage sumps, in Dallas, Texas

Dear Mr. Hatcher:

Halff Associates, Inc. (Halff) is currently involved with several projects, namely the NTTA Trinity Parkway and the City of Dallas Lakes Project, which could potentially impact jurisdictional wetlands and waters of the U.S. The projects are within or associated with the Dallas Floodway (Floodway) in downtown Dallas, Texas. These projects vary in size and scope, however, the majority of impacts could occur within the floodway between the Elm Fork/West Fork confluence and the Central Wastewater Treatment Plant. Figures 1A-C show this portion of the Floodway and the study corridor on U.S.G.S Quadrangle Maps for Irving, Dallas and Oak Cliff, Texas.

In 1993, the City of Dallas applied for a Section 10 and 404 permit (#199300146) to desilt and excavate a section of the Trinity River within the floodway. Dallas Public Works retained Halff to assist in delineating jurisdictional wetlands within the floodway as part of that project. The enclosed set of maps labeled "Trinity River Channel Modification" shows the delineation submitted with the desiltation permit. Halff believes that the wetland delineation associated with that permit has expired or will expire shortly and requests an extension or approval of a new delineation. This updated delineation will then be used to assess impacts of upcoming projects.

UPDATED DELINEATION

Field investigations of the project area were conducted on various days between March and October 1999 by Halff environmental staff. Prior to field reconnaissance, aerial photographs, soil survey maps, and U.S. Fish & Wildlife National Wetland Inventory (NWI) maps were reviewed. Based on the large amount of information available, the routine on-site determination method was used. The delineation from the 1993 desiltation permit was used as a baseline reference in completing the current delineation.

Wetland delineation points were concentrated near wetland areas from the Halff 1993 delineation. A significant amount of earthwork has occurred within the floodway since 1993 and mapped wetlands were field checked to ensure that vegetation, soils, and hydrology still met the criteria to be considered jurisdictional wetlands. Field inspections were made at various times during the year and vegetation varied accordingly. Photographs of site conditions taken at various times during the year and completed wetland data forms characterizing typical conditions within the Dallas Floodway are enclosed in Appendix A.

# Halff Associates

ENGINEERS • ARCHITECTS • SCIENTISTS
PLANNERS • SURVEYORS



The majority of the impacts from the desiltation project involved widening the cross section of the river channel. The first phase of the project between the DART RR and IH-35 has been completed and none of the wetlands in the immediate vicinity were impacted during construction. Only one area showed evidence of wetland disturbance (Photograph 2). A visual inspection of the immediate area concluded that the majority of the fill was placed in non-wetland areas near the Floodway access road and only the edge of the wetland had been impacted.

Halff recognizes that segments of the historical West Fork and Elm Fork river channels are jurisdictional. Halff requests the Corps' assistance in the jurisdictional determination of man-made drainage sumps adjacent to the levees outside of the floodway. The segments of historical river channel collect stormwater runoff from urbanized Dallas and Oak Cliff. This runoff then collects in on-channel (to the historical river channel) drainage sumps before draining into the floodway. Halff believes that the drainage sumps (labeled in Figures 2 and 3) adjacent to Corinth Street and west of Houston/Inwood Avenue are jurisdictional based on their association with historical river channel. Several small linear drainages (labeled as "man-made drainage sumps") adjacent to the floodway were considered isolated, man-made drainages excavated in an upland. Even though they may sometimes exhibit wetland characteristics they have not been included as jurisdictional waters of the U.S.

Please review the enclosed data sheets, photographs, and maps and determine whether or not you concur with our delineation. In the event that a permit for a future project is submitted to the Corps, a detailed localized delineation with project impacts would be submitted with the application. However, duringthe initial review of these future projects, Halff would like to evaluate potential impacts based on a delineation that has been approved by the Corps. We would be pleased to meet with you in your office or in the field to discuss the jurisdictional eligibility of the drainage sumps or to discuss the floodway in general. If you have any questions or require any information, please do not hesitate to call at (214)-346-6200.

Sincerely,
HALFF ASSOCIATES, INC.

David Morgan, Vice President
Environmental Scientist

Russell Marusak
Environmental Scientist

Enclosures

cc: Mr. Chris Anderson – NTTA
Mr. Greg Ajemian, P.E. – City of Dallas

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

REPLY TO
ATTENTION OF:

May 19, 2000

RECEIVED
MAY 2 2 2000
Halff Associates, Inc.

Environmental Division
Regulatory Branch

SUBJECT: Project Number 200000308, Dallas Trinity Lakes Project

Mr. David Morgan
Vice President
Halff Associates, Inc.
8616 Northwest Plaza Drive
Dallas, Texas 75225

Dear Mr. Morgan:

Thank you for your letter dated March 30, 2000. Your request has been assigned Project Number 200000308.

Mr. David Martin has been assigned as the regulatory project manager for your request and will be evaluating it as expeditiously as possible. However, because of our permit workload it will take a while for us to respond.

You may be contacted for additional information about your request. For your information, we are enclosing guidance on submittals and mitigation that may help you prepare future requests or supplement your current request.

If you have any questions about the evaluation of your request, please contact Mr. David Martin at the address above or telephone (817)978-4625 and refer to your assigned project number. Please note that it is unlawful to start work without a Department of the Army permit if one is required.

Wayne A. Lea
Chief, Regulatory Branch

Enclosures

Halff Associates
ENGINEERS • ARCHITECTS • SCIENTISTS
PLANNERS • SURVEYORS

8616 NORTHWEST PLAZA DRIVE
DALLAS, TEXAS 75225
(214) 346-6200
FAX (214) 739-0095

RECEIVED

August 16, 1999
AVO 17826

SEP 10 1999

FEDERAL EMERGENCY MANAGEMENT AGENCY
REGION VI
REGIONAL ENVIRONMENTAL OFFICE
Coordinate with Local Government Floodplain Administrator to obtain necessary development permit.
Kyle Mills 9/8/99
Environmental Officer Date

Mr. Kyle M. Mills, Regional Environmental Officer
**Federal Emergency Management Agency**
Region VI Federal Center
800 N. Loop 288
Denton, TX 76201

Re: Trinity Parkway EIS Agency Scoping Process

Dear Mr. Mills:

Halff Associates, Inc. has been retained by the North Texas Tollway Authority (NTTA), in cooperation with the Federal Highway Administration (FHWA) and Texas Department of Transportation (TxDOT), to prepare an Environmental Impact Statement (EIS) for the proposed Trinity Parkway reliever route from SH-183/IH-35E to SH-310/US-175 in the city of Dallas, Dallas County, Texas. Your agency has been identified as having legal jurisdiction, special expertise, and/or EIS review requirements associated with the completion of the Trinity Parkway EIS.

Pursuant to the National Environmental Policy Act and FHWA scoping requirements, we are requesting your agency to: (1) identify specific issues and concerns to be addressed in the EIS; (2) identify environmental resource issues that would assist in the refinement of project alternatives; and/or (3) identify permit requirements, review requirements, and consultation procedures related to project development.

Enclosed is a copy of the FHWA Notice of Intent, which was published in the *Federal Register* on June 16, 1999. Included is a study area map indicating the project limits and the approximate locations of four preliminary build alternatives currently being considered. We look forward to your response concerning this important project. If you have any questions or require any additional information, please do not hesitate to contact me at (214) 346-6200.

Sincerely,
HALFF ASSOCIATES, INC.

John R. Hoffman

John R. Hoffman, Environmental Scientist
Lead Project Scientist

cc: Mr. Jerry Hiebert, Executive Director, NTTA, 3015 Raleigh Street, Dallas, TX 75219
Ms. Kathy Dimpsey, Env. Coord., FHWA, 300 E. 8th St., Rm. 826, Austin, TX 78701
Ms. Elvia Gonzalez, Supervisor-Field Area 2, TxDOT, 125 E. 11th St., Austin, TX 78701
Mr. Tim Nesbitt, P.E., TxDOT Dallas Office, PO Box 3067, Dallas, TX 75221-3067

Enclosures

U.S. Department
of Transportation
**Federal Highway
Administration**

Texas Division Office
300 East 8th Street,
Rm 826
Austin, Texas 78701

May 4, 2000

In Reply Refer To:

HA-TX

Mr. Ross Richardson
Chief, Community Mitigation Programs Branch
Federal Emergency Management Agency
800 North Loop 288
Denton, Texas 76201

Dear Mr. Richardson:

The Federal Highway Administration (FHWA), in cooperation with the North Texas Tollway Authority (NTTA) and Texas Department of Transportation (TxDOT), is initiating an Environmental Impact Statement (EIS) for the proposed Trinity Parkway reliever route from the SH-183/IH-35E interchange to SH-310/US-175 in the City of Dallas, Dallas County, Texas. Since the project may involve a longitudinal encroachment of a flood plain and your agency has special expertise on regulatory flood ways, we are requesting you to be a cooperating agency.

The purpose of the proposed Trinity Parkway reliever route is to relieve traffic congestion on IH-35E and IH-30 within the City of Dallas. In 1998, A Major Transportation Investment Study (MTIS) was completed by TxDOT in order to develop a locally-preferred plan to solve transportation problems along the Trinity River corridor in Dallas and to integrate with community plans and goals for the Trinity River resource. The study was focused on transportation needs in the IH-35E/IH-30 interchange on the west side of downtown Dallas, locally known as the "Mixmaster," and the depressed segment of IH-30 south of downtown, locally known as the "Canyon." The MTIS Recommended Plan of Action is comprised of seven elements, which include improvements to existing facilities, improving alternative transportation modes, and constructing a reliever route along the Trinity River. The MTIS considered in detail four corridors for the proposed reliever route. These included Stemmons Freeway (IH-35E), Industrial Boulevard, the east Trinity River levee and the west Trinity River levee.

Your agency's involvement should entail those areas under its jurisdiction and no direct writing or analysis will be necessary for the document's preparation. The following are activities we will take to maximize cooperation:

1. Invite you to coordination meetings;

2. Consult with you on any relevant technical studies that will be required for the project;

3. Organize joint field reviews with you;

4. Provide you with project information, including the study results;

5. Encourage your agency to use the above documents to express your views on subjects within your jurisdiction or expertise; and

6. Include information in the project environmental documents that cooperating agencies need to discharge their National Environmental Policy Act (NEPA) responsibilities and any other requirements regarding jurisdictional approvals, permits, licenses, and/or clearances.

We look forward to your response to this request and your role as a cooperating agency on this project. If you have any questions or would like to discuss in more detail the project or our agency's respective roles and responsibilities during the preparation of this EIS, please contact Sal Deocampo at (512) 916-5988.

Sincerely Yours,

Walter C. Waidelich, Jr.
District Engineer

cc: Mr. Jerry Hiebert, Executive Director, North Texas Tollway Authority
Mr. John Hoffman, Halff Associates
Mr. Tim Nesbitt, Texas Department of Transportation, Dallas District

# United States Department of the Interior
## NATIONAL PARK SERVICE

INTERMOUNTAIN REGION
Intermountain Support Office - Denver
12795 West Alameda Parkway
Post Office Box 25287
Denver, Colorado 80225-0287

RECEIVED ON
JUL 26 1999
TEXAS DIVISION
FHWA

IN REPLY REFER TO:

July 21, 1999

Walter C. Waidelich, Jr.
District Engineer
Federal Highway Administration
300 E. 8th Street
Room 826
Austin, TX 78701

RE: Notice of Intent to Prepare a Draft Environmental Impact Statement for the Trinity Parkway Reliever Route, From SH-183/IH-35E Interchange to SH-310/US-175 Interchange, Dallas County, Texas.

Dear Mr. Waidelich:

The proposed Trinity Parkway Reliever Route transportation corridor study area includes Rochester Park. This Dallas, Texas community park was developed with assistance from the Land and Water Conservation Fund (L&WCF) program in grant number 49-00175. Accordingly, Rochester Park is encumbered by section 6(f)(3) of the L&WCF Act of 1965 (Public Law 88-578, as amended).

As the environmental impact statement planning process proceeds, we recommend additional consultation with the Texas Parks and Wildlife Department to determine if there are conflicts with section 6(f)(3). This section states in part: "No property acquired or developed with assistance under this section shall, without the approval of the Secretary [of the Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreational properties of at least equal fair market value and of reasonable equivalent usefulness and location."

The responsible official for administering the L&WCF program in Texas is Andrew Sansom, Executive Director, Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744. → 512-912-7120

If you should have any questions, please contact me at (303) 969-2377.

Sincerely,

Greg Cody

Greg Cody
NEPA/Section 106 Specialist
National Park Service
Intermountain Region-Denver Support Office
12795 W. Alameda Pky
Denver, CO 80225-0287

OPTIONAL FORM 99 (7-90)
FAX TRANSMITTAL | # of pages ▸ 1
To John Hoffman | From Kathy / FHWA
Dept./Agency | Phone # 512-916-5917
Fax # 214-739-0095 | Fax #
NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

USDA United States Department of Agriculture

Natural Resources Conservation Service

101 South Main
Temple, Texas
76501-7682

August 23, 1999

RECEIVED

AUG 27 1999

Mr. John Hoffman
Environmental Scientist
Halff Associates, Inc.
8616 Northwest Plaza Drive
Dallas, Texas 75225-4292

Dear Mr. Hoffman:

We have reviewed the FHWA Notice of Intent to prepare an Environmental Impact Statement for the proposed Trinity Parkway reliever route. We have no specific suggestions relative to specific issues or environmental issues that would assist in the refinement of the project alternatives. We do not have permitting requirements. We are available to assist in natural resource concerns identified, particularly related to the soil resource.

Thank you for allowing us to comment on this important project.

Sincerely;

For

JOHN P. BURT
State Conservationist

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*

# TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

RECEIVED
OCT 21 1999

October 13, 1999

Mr. John R. Hoffman
Environmental Scientist
Halff Associates
8616 Northwest Plaza Drive
Dallas, Texas 75225

Re: Trinity Parkway EIS Agency Scoping Process

Dear Mr. Hoffman:

The following staff of the Texas Natural Resource Conservation Commission (TNRCC) have reviewed the above-referenced project and offer the following comments:

It has been determined from a review of the information provided that an Application for TNRCC Approval of Floodplain Development Project need not be filed with TNRCC. Our records show that the community is a participant in the National Flood Insurance Program and as such has a Flood Hazard Prevention Ordinance/Court Order. Accordingly, care should be taken to ensure that the proposed construction takes into account the possible Flood Hazard Areas within the community's floodplains. Please notify the community floodplain administrator to ensure that all construction is in compliance with the community's Flood Hazard Prevention Ordinance/Court Order.

If you have any questions regarding water quantity, please feel free to contact Mr. Mike Howard, Water Quantity Division, at (512) 239-6155.

The Office of Air Quality has reviewed the above-referenced project for General Conformity impacts in accordance with 40 CFR Part 93 and Chapter 101.30 of the TNRCC General Rules. The proposed project is located in Dallas County, which is classified as a serious ozone nonattainment area. Therefore, general conformity rules apply.

The two criteria pollutants of concern as precursors to ozone formation are volatile organic compounds (VOCs) and nitrogen oxides (NOx). An increase of 50 tons per year for VOCs, resulting from the proposed project, could trigger general conformity analysis. However, the analysis of projected emissions predicts a net increase of VOC emissions well below the 50 tons

P.O. Box 13087 • Austin, Texas 78711-3087 • 512/239-1000 • Internet address: www.tnrcc.state.tx.us

per year significance level. Therefore, a general conformity analysis for VOCs will not be required.

Although any demolition, construction, rehabilitation or repair project will produce dust and particulate emissions, these actions pose no significant impact upon air quality standards. The minimal dust and particulate emissions can easily be controlled with standard dust mitigation techniques by the construction contractors.

If you have any questions regarding air quality, please feel free to contact Mr. Wayne Young, Air Quality Planning and Assessment Division, at (512) 239-0774.

We recommend the environmental assessment address actions that will be taken to prevent surface and groundwater contamination during and after construction.

If you have any questions regarding water quality, please contact Mr. Clyde Bohmfalk, Policy and Regulations Division, at (512) 239-1315.

Thank you for the opportunity to review this project. If I may be of further service, please call me at (512) 239-1454.

Sincerely,

Mary Lively

Mary Lively
Office of Environmental Policy, Analysis, & Assessment
Texas Natural Resource Conservation Commission

TEXAS PARKS & WILDLIFE

COMMISSIONERS

LEE M. BASS
CHAIRMAN, FT. WORTH

RICHARD (DICK) HEATH
VICE-CHAIRMAN, DALLAS

ERNEST ANGELO, JR.
MIDLAND

JOHN AVILA, JR.
FT. WORTH

CAROL E. DINKINS
HOUSTON

ALVIN L. HENRY
HOUSTON

KATHARINE ARMSTRONG IDSAL
DALLAS

NOLAN RYAN
ALVIN

MARK E. WATSON, JR.
SAN ANTONIO

PERRY R. BASS
CHAIRMAN-EMERITUS
FT. WORTH

ANDREW SANSOM
EXECUTIVE DIRECTOR

*To manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations.*

October 6, 1999

Mr. John R. Hoffman, Environmental Scientist
Halff Associates
8616 Northwest Plaza Drive
Dallas, Texas 75225

Re: Trinity Parkway EIS Agency Scoping Process

Dear Mr. Hoffman:

Thank you for coordinating with this agency in your activities concerning the preparation of an Environmental Impact Statement (EIS) for the proposed Trinity Parkway reliever route from SU-183/IH-35E to SH-3210/US-175 in the city of Dallas, Dallas County, Texas.

There will be no direct impact on existing Texas Parks & Wildlife projects involving the Land and Water Conservation Fund and the Local Parks Fund (now Texas Recreation and Parks Account).

Because of the location and size of the project, there may be extensive adverse impacts to fish and wildlife resources. Therefore, we recommend an inventory of existing natural resources along the proposed routes. Also, specific evaluations should be designed to predict project impacts upon these natural resources. Sufficient documentation must be supplied to accurately interpret the value of the natural resources involved and the extent to which the project will impact these resources.

Analysis should include descriptions of the types and amount of existing fish and wildlife habitats, i.e., acreage estimate of vegetation communities (especially high qualify habitats such as drainages, wetlands, and hardwood bottomlands). Documentation should include aerial and ground photographs, topographic maps, schematic diagrams, terrain maps, charts and tables, and narrative descriptions sufficient to describe, quantify, and qualify the data. Mitigation should be an integral part of the document. Mitigation should incorporate avoidance, minimization, and compensation. Information concerning threatened and endangered species can be obtained from our Biological Conservation Data System (512/912-7021).

Sincerely,

Ray C. Telfair II

Ray C. Telfair II, Ph.D.
Natural Resource Specialist

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512-389-4800
www.tpwd.state.tx.us

Dallas Area Rapid Transit
P.O. Box 660163
Dallas, Texas 75266-0163
214/749-3278

September 3, 1999

Mr. John R. Hoffman
Halff Associates, Inc.
8616 Northwest Plaza Drive,
Dallas Texas 75225-4292

Dear Mr. Hoffman:

In response to your letter "Trinity Parkway EIS Agency scoping Process," DART is interested in the impact of your project on the major investment studies (MIS) in the Southeast and Northwest corridors, the Light Rail Transit (LRT) Starter System and Trinity Railway Express (TRE) operations.

Your project is included in the baseline assumptions for DART's two major investment studies. Consequently, we would welcome information on possible refinements to your project that might result through the EIS process. We have no specific concerns to be addressed, but we would like to know the environmental impacts of your project in the following areas:

1. Induced Developments
2. Noise, Vibration, and Electromagnetic Fields (EMF)
3. Air quality
4. Utilities
5. Hazardous/Regulated Materials
6. Short- and long-term construction impacts

These environmental areas are important as DART moves into the PE/EIS phase of project development of the Southeast and Northwest corridors.

DART is also interested in the specific interface of your project with the ATSF Railroad Trestle at the Trinity River, the LRT bridge at the Trinity River and the TRE bridge over Stemmons Freeway. The ATSF Railroad Trestle has been determined to be eligible for inclusion in the National Register and the City of Dallas is seeking a grant application to restore the trestle for use as a trail.

Your contact person for this project will be Victor Ibewuike. You can reach him at (214) 749-2821. Thank you for contacting DART regarding this scoping process.

Sincerely,

Tom K Ryden

Tom K. Ryden, P.E.
AVP, Capital Planning & Development

c: Doug Allen
John Hoppie
Victor Ibewuike

U.S. Department of Transportation
Federal Aviation Administration

Southwest Region
Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Fort Worth, Texas 76193-0000

SEP 28 1999

Mr. John Hoffman
Halff Associates
8616 Northwest Plaza Drive
Dallas, TX 75225

Dear Mr. Hoffman:

Thank you for your letter dated September 17, 1999, requesting the Federal Aviation Administration's (FAA) comments on the proposed Trinity Parkway reliever route in Dallas, Texas.

The FAA's comments are limited to the potential aeronautical effects of the proposed action. In this regard, Federal Aviation Regulation Part 77 requires notification if any of the associated work results in structures exceeding 200 feet in height above the ground or penetrating imaginary surfaces extending outward and upward at one of the following slopes:

100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway at a public-use airport with a runway length greater that 3,200 feet,

50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway at a public-use airport with a runway length equal to or less than 3,200 feet, or

25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area at a public-use heliport.

If any element of the proposed action is expected to exceed the above criteria, please complete an FAA Form 7460-1 for each occurrence and send it to the FAA Southwest Regional Office. A copy of the form is enclosed should you require it.

Thank you for the opportunity to comment on the proposed action. If you need additional forms or if this agency can be of further assistance, please contact Mr. Dean McMath at (817) 222-5617.

Sincerely,

Clyde M. DeHart, Jr.
Regional Administrator
Southwest Region

Enclosure

NORTH TEXAS TOLLWAY AUTHORITY
5900 West Plano Parkway • Plano, Texas 75093 www.ntta.org

**NEWS ADVISORY**

**SUBJECT:** North Texas Tollway Authority Receives Cost Estimates on Trinity Parkway

**FOR IMMEDIATE RELEASE:**
November 10, 2000

**FOR MORE INFORMATION CONTACT:**
Jo Ann Borst, Director
Communications and Marketing
214/461-2065
Email: jborst@ntta.org

## North Texas Tollway Authority Receives Projected Costs on Proposed Trinity Parkway Project

Dallas, Texas – Officials with the North Texas Tollway Authority (NTTA) and the City of Dallas received estimated costs today on the five Trinity Parkway design alternatives being evaluated as part of the Environment Impact Statement (EIS) process. Halff Associates, the Dallas engineering consulting firm who conducted the Trinity Parkway's EIS for NTTA, released the findings.

According to the North Texas Tollway Authority (NTTA) and Dallas City officials, the proposed Trinity Parkway would be a reliever route around the congested I-30 "Canyon" and I-30/I-35E "Mixmaster" near downtown Dallas. In September 2000, the American Automobile Association designated the MixMaster as one of the top ten worst commuting trouble spots in the USA. Two interstates merge at the Mixmaster, and the interchange struggles to carry hundreds of thousands of vehicles a day through this bottleneck.

Halff Associates reported that the probable total capital cost for construction for the different alternatives ranged from $620 million for the "combined parkway-riverside" alternative, $669 million for the "split parkway-riverside" alternative, $865 million for the "split parkway-landslide" alternative, $923 million for the "industrial at-grade" alternative within the Industrial Boulevard Corridor, to $1.2 billion for the "industrial elevated" alternative within the Industrial Boulevard Corridor. These costs are current year costs and have not been adjusted for future inflation. By implementing one of these alternatives, accrued congestion savings are estimated to be in excess of $1 billion. A sixth option is the "no-build" alternative.

-more-

The consulting firm indicated that the estimates of probable cost include construction, right-of-way acquisition, relocation expenses, design, testing and management, environmental mitigation and landscaping. The estimates assume specific credits from other agencies for associated improvements in the project corridor, such as raising the Dallas floodway levees and programmed modifications to several existing bridge crossings. The estimated costs also include a 20 percent contingency allocation.

The Trinity Parkway project was first studied in detail in a Major Transportation Investment Study (MTIS) by the Texas Department of Transportation (TxDOT) in 1996-1998. At the time of the MTIS, the preferred configuration was the "split parkway-riverside" option, which carried an estimated construction and right-of-way cost of $394 million for a non-tolled roadway. The MTIS reported an additional $46 million for design testing, inspection and administrative costs. When adjusted for inflation, this total cost would be expected to rise to approximately $500 million in year 2000 dollars.

Because of public input and the conversion of the Trinity Parkway into a toll facility, several elements of the proposed project have significantly changed subsequent to the MTIS process. For instance, changes to the "split parkway riverside" alternative include an additional $12 million for requested connections to South R.L. Thornton (I-35E); $42 million for toll plazas; $28 million for access ramps from arterial streets to the floodway parks; $32 million for lane additions and deletions; and $21 million for landscape and walls adjacent to the city lakes and parks. Remaining differences between the old and new estimates can be explained by better detail in the engineering designs.

"Considering the impacts of construction inflation over the past several years and additions to the scope of the project, our current estimates appear consistent with those developed for the MTIS ," says Martin Molloy, president of Halff Associates. "The new analysis did not change the relative ranking of the various alternatives' costs. We feel that the scope changes reflect the continuing input and comments we received from the community during the process of studying these alternatives. The challenge is to look at value engineering, construction staging and other means to reduce the final costs. These estimates will continue to be refined as the EIS process is completed, and a detailed schematic is developed for the chosen alternative."

-more-

Funding for the Trinity Parkway must come from a variety of sources. The City of Dallas has committed $84 million to the project from the City's 1998 Bond Program. In 1998, the NTTA completed preliminary toll feasibility studies, which indicated that approximately $150 million in construction funds could be supported by potential toll revenues.

"The preliminary feasibility studies were completed almost two years ago," explains Christopher Anderson, planning director for the NTTA. "Since that time, additional traffic and travel studies have been conducted as a part of the environmental process. We hope that as more detailed feasibility studies are conducted in the future, the findings may eventually translate into increased toll revenues over earlier estimates, which would enable the NTTA to participate in construction costs at a greater level."

Another significant portion of funding for the project will have to come from TxDOT. "A project of this magnitude will require special funding consideration from TxDOT," says Jay Nelson, TxDOT Dallas district engineer.

The Trinity Parkway would be a reliever route to the congested I-30 Canyon and Mixmaster near downtown Dallas. "The transportation significance of this reliever route in alleviating traffic congestion is indicated by the fact that four out of every five vehicles in the MixMaster actually bypass the Dallas Central Business District," says Tim Nesbitt, TxDOT Trinity River Corridor Project manager.

According to Michael Morris, director of transportation of the North Central Texas Council of Governments, the Trinity Parkway is one of the most crucial improvements planned in the region's Mobility 2025 Plan. "Without a significant addition of roadway capacity in this corridor, congestion will increase to a point of gridlock and will have adverse regional effects on air quality and sustainable development," says Morris.

-more-

The cost estimates and other details of the environmental process will be presented to the Dallas City Council on Wednesday, November 15, 2000, Dallas City Hall. By spring 2001, a draft Environmental Impact Statement will be complete and available to the public for review. A public hearing to receive comments on the study will be scheduled during the first or second quarter of 2001.

The planning, design, funding and construction of a toll facility is a long and complicated process. Ultimate funding and construction is dependent on many factors not in the control of the NTTA or other governmental entities. A substantial amount of information must be obtained and many decisions made by the NTTA Board of Directors and other entities before the project could go forward.

The North Texas Tollway Authority, a political subdivision of the State of Texas, is authorized to acquire, construct, maintain, repair and operate turnpike projects in the North Texas region. The NTTA serves the four-county area of Collin, Dallas, Denton and Tarrant Counties and is responsible for the Dallas North Tollway System, consisting of the Dallas North Tollway, President George Bush Turnpike, Addison Airport Toll Tunnel, and the Mountain Creek Lake Bridge project in the City of Grand Prairie. The North Texas Tollway Authority is able to raise capital for construction projects through the issuance of turnpike revenue bonds. NTTA toll projects are not a part of the State highway system and receive no tax funding for their portion of the roadway. Tolls are collected to repay debt, operate and maintain the roadways.

For additional information about the North Texas Tollway Authority, Dallas North Tollway System and the TollTag® Online Store, visit www.ntta.org or call 214-461-2000.

-30-

CITY OF DALLAS

January 31, 2002

Mr. David S. Morgan
Halff Associates
8616 Northwest Plaza Dr.
Dallas, Texas 75225

RE: Impact on existing parks associated with the proposed Trinity Parkway

Dear Mr. Morgan:

Per your request, I have reviewed the five alignment options of the proposed Trinity Parkway for potential impact to existing park land. I based my evaluation on the draft documents that your firm prepared for the North Texas Tollway Authority dated September 2000. As such, my evaluation is based on those plans only and further evaluation would be required should the plans change.

The alignments that are in or touch the Trinity River Park (between the levies) will not have 4 (f) issues or fall under the requirements of the Texas Parks and Wildlife Code as the deed indicates the property is to be used for park and transportation uses. In reviewing all five alignment options, it appears that no city park will be physically impacted other than the Trinity River Park. However, the "split Parkway-landside/alternative 5" alignment appears to route close to the northern boundary of Moore Park. Be advised that public hearings and mitigation are required in accordance with the Texas Parks and Wildlife Code if Moore Park property is needed for the Trinity Parkway. It may be necessary to review more detailed plans for this alignment as it pertains to Moore Park.

Please advise if you require further information or assistance. You may contact me directly at 214-670-4103.

Sincerely

Michael Ca. Hellmann

Michael Hellmann
Senior Park Planner
Mhellma@ci.dallas.tx.us

C: Willis C. Winters
Leong Lim
Richard Stauffer
Rebecca Dugger, Trinity River Office

Share: Mike Hellmann Folder—Trinity Parkway alignment impact

CITY OF DALLAS
TEXAS

PARK & RECREATION BOARD
Wm. B. Dean, M.D., President
J. D. Wright, Vice-President
Floyd Y. Gish
Pettis Norman
John D. Gilliland
Mrs. Ebby Halliday Acers
Lee Drain

L. B. Houston, Director
Jean Croft, Secretary

January 13, 1972

Mr. John Stemmons
Industrial Properties
12th Floor - Stemmons Tower East
2700 Stemmons Freeway
Dallas, Texas

Dear Mr. Stemmons:

At its meeting Monday, January 10, 1972 the Park and Recreation Board accepted the escrow deed on the 930 acres of land owned by Industrial Properties within the floodplain of the Trinity River between the levees.

May I express to you our sincere appreciation for this generous offer on your part. We are pledged to do our very best to carry out the conditions necessary for consummation of the transfer. To that end, we have proposed bond monies for the sponsored share in a federal land buying program. We have an application on file for assistance in acquiring the remainder of land within the limits of the flood control district.

We believe your action is timely and we are confident that it will be extremely helpful in successfully achieving the favorable vote on the bond program.

Thanks again from all of us on the Park Board.

Sincerely,

Wm. B. Dean, M.D.

Wm. B. Dean, M.D., President
Park and Recreation Board

LBH/d

CITY OF DALLAS

January 17, 1974

Mr. John Stemmons, President
Industrial Properties Corporation
Dallas, Texas

Dear Mr. Stemmons:

Please refer to that certain Escrow Agreement dated January 1, 1972, executed by Industrial Properties Corporation and the City of Dallas and Dallas Title Company as Escrow Agent. Paragraph IV, Page 4 of that Agreement provides that the opinion of the City Attorney "that the City has acquired title to all of said lands, has suits pending that will result in acquiring said title, or has failed to acquire title to all of said lands by January 1, 1974, shall be conclusive upon the parties hereto."

In my opinion, the City of Dallas, as of January 1, 1974, either had title to or had suits pending that will result in acquiring said title to all of the lands referred to in said Agreement.

Very truly yours,

N. Alex Bickley
City Attorney

NAB/w

JAN 17 1974

OFFICE OF THE CITY ATTORNEY CITY HALL DALLAS, TEXAS 75201 TELEPHONE 214/748-9711

THE STATE OF TEXAS )
)
COUNTY OF DALLAS ) KNOW ALL MEN BY THESE PRESENTS:

THAT INDUSTRIAL PROPERTIES CORPORATION, a Texas Corporation, with its principal office and place of business at Dallas, Dallas County, Texas, acting by and through its President, John M. Stemmons, duly authorized to execute the herein conveyance, for and in consideration of the public purposes which are now and are to be performed and rendered by the City of Dallas, a municipal corporation, and as a gift to said City of Dallas for exclusively public purposes, has given, granted and confirmed and by these presents does give, grant and confirm unto the said City of Dallas, for use as public park and recreational purposes, all those certain tracts of land lying and being situated in the City and County of Dallas, Texas, and being more particularly described as follows:

> BEING all lands owned by Industrial Properties Corporation, which lie within that portion of City and County of Dallas Levee Improvement District as shown on map bearing title: "District map, City and County of Dallas Levee Improvement District, and Dallas County Levee Improvement District No. 5, by Myers, Noyes and Forrest, District Engineers," and designated Exhibit "A" attached hereto and made a part hereof and which lands lie West of the East Toe of the East Levee and East of the West Toe of the West Levee, and containing approximately 930 acres.

TO HAVE AND TO HOLD the same unto the said The City of Dallas, upon the following terms and conditions:

I.

The said property shall be used for parks, open space, recreational, transportation facilities, including roadways on and adjacent to the levees, and such uses as are necessarily incident to the navigation channel, and all of which uses shall be generally consistent with the concept of the Coordinated Plan for Open Space Development of the

-1-

Trinity River System of the Dallas Park Board dated December, 1969 and adopted by the Park Board and approved by the City Council on March 9, 1970. The use of the lands shall be for public and public-related purposes consistent with the concept of such plan, and shall be under the control of the City of Dallas, provided that the City shall have the right to grant franchises and concessions incident to the operation of recreational facilities under the usual policy of the Park Board, and the right to enter into such agreements and grant such conveyances or easements as are necessary and incident to the navigation of the Trinity River.

By acceptance of this deed, the City of Dallas covenants and agrees that said lands shall never be used in any manner that will in any way interfere with the accomplishment of the purposes of Section 59, Article 16 of the Constitution of the State of Texas as amended, including the control, storing, preservation, and distribution of the storm sewers and flood waters of the Trinity River and the reclamation and drainage of lands lying within the boundaries of Dallas County Flood Control District as described in the said act creating said District or that will in any way interfere with the performance of or diminish the obligations of the City of Dallas to use, operate, maintain, improve, and repair all of the properties transferred and conveyed to said City to accomplish the purposes of Chapter 355, Acts of the 49th legislature, 1945, and to do any and all things necessary or convenient to control floodwaters and prevent damage to persons and property from the floodwaters of the Trinity River and its tributaries within the area under its control, or the obligations assumed by the City of Dallas to maintain and operate the improvements made by the United States Corps of Engineers in the Flood Control System.

All of said lands so acquired, including the lands described in Exhibit "A" attached hereto, shall be used for parks, open space, recreational, transportation facilities, including roadways on and adjacent to the levees, and such uses as are necessarily incident to the navigation channel, and all of which uses shall be generally consistent with the concept of the Coordinated Plan for Open Space Development of the Trinity River System of the Dallas Park Board dated December, 1969, and adopted by the Park Board and approved by the City Council on March 9, 1970. The use of the lands shall be for public and public-related purposes consistent with the concept of such plan, and shall be under the control of the City of Dallas, provided that the City shall have the right to grant franchises and concessions incident to the operation of recreational facilities under the usual policy of the Park Board, and the right to enter into such agreements and grant such conveyances or easements as are necessary and incident to other public uses and to the navigation of the Trinity River.

IT IS UNDERSTOOD AND AGREED, however, that said lands shall never be used in any manner that will in any way interfere with the accomplishment of the purposes of Section 59, Article 16, of the Constitution of the State of Texas, as amended, including the control, storing, preservation, and distribution of the storm waters and flood waters of the Trinity River and the reclamation and drainage of lands lying within the boundaries of said Dallas County Flood Control District, as described in said act creating said District, or that will in any way interfere with the performance of or diminish the obligations of the City of Dallas as set forth in contract dated September 6, 1968.

III.

IT IS UNDERSTOOD AND AGREED that in the event the City has not acquired title to or instituted suits in eminent domain to acquire title to and deposited the awards necessary to acquire possession of all lands situated in said floodway and within the City of Dallas by January 1, 1974, then Escrow Agent shall return the hereinabove described Deed to Industrial, and said Deed shall be of no force and effect. In the event City does acquire title to all of said lands within said floodway either by negotiation or eminent domain free and clear of any encumbrances except the floodage easements in favor of City and County of



VOL PAGE
7-1021 1461

C.4 Sec.
72-126

DEED RECORD

# ESCROW AGREEMENT

THE STATE OF TEXAS )
COUNTY OF DALLAS )

This AGREEMENT this day entered into by and between Industrial Properties Corporation, of Dallas County, Texas, hereinafter called "Industrial", the City of Dallas, Texas, hereinafter called "City" and Dallas Title and Guaranty Company, of Dallas County, Texas, as escrow agent, hereinafter called "Escrow Agent".

## WITNESSETH:

Industrial is the owner of certain lands being more particularly described in Exhibit "A" attached hereto and made a part hereof, all of which lands are situated within the floodway of Dallas County Flood Control District, the boundaries of which are described in the act creating said District (Acts of 49th Legislature, Chapter 335, Page 619), and all of which properties are subject to easements acquired by City and County of Dallas Levee Improvement District and to other easements heretofore granted and presently existing.

By instrument dated September 6, 1968, City and County of Dallas Levee Improvement District, Dallas County Levee Improvement District No. 5, and Dallas County Flood Control District transferred, assigned and conveyed all properties of whatsoever nature, both realty and personalty and belonging to said Districts, to the City of Dallas as to properties situated within the city limits of Dallas and to the City of Irving as to properties situated within the City of Irving, Texas, and such cities have assumed the obligations of such districts as to properties situated within the city limits of each of said cities, and in particular the City of Dallas has assumed the obligations to maintain the diversion channel and floodway of the Trinity River where the same lie within the city limits of the City of Dallas, Texas, all of which obligations are fully set forth in said instrument dated September 6, 1968.



VOL PAGE
7402-1 1179

It is the desire of Industrial and of the City that all such lands situated within the floodway as above described be made available for parks, open space, recreational, and transportation facilities as set out below.

NOW, THEREFORE, IT IS HEREBY AGREED by and between Industrial, the City and the Escrow Agent as follows:

I.

Industrial has executed and has delivered to Escrow Agent a Deed without Warranty, conveying to City all of the lands described in Exhibit "A" attached hereto, subject to all easements heretofore granted or acquired over and across said lands and subject to the Joint Plan of Reclamation heretofore adopted by City and County of Dallas Levee Improvement District and Dallas County Levee Improvement District No. 5, such conveyance conditioned, however, that said lands shall be used only for public purposes as hereinafter provided.

II.

City agrees to use its best efforts to acquire by gift, purchase or the exercise of the power of eminent domain the title to all other lands situated within the floodway and the lands upon which the levees have been constructed, situated within the boundaries of Dallas County Flood Control District as described in said act creating said District and that are presently within the city limits of the City of Dallas, Texas, and as shown on map bearing title:

DISTRICT MAP
City and County of Dallas
Levee Improvement District
and
Dallas County Levee
Improvement District No. 5

Myers, Noyes & Forrest
District Engineers

Morgan Engineering Co.
Consulting Engineers

Exhibit "B"

a print of which map is attached hereto and made a part hereof.

ESCROW AGREEMENT - PAGE TWO

VOL PAGE
7-1021 1480

II.

This conveyance is subject to easements heretofore acquired by City and County of Dallas Levee Improvement District and the use of said property by the City of Dallas, Texas for the above specified purposes shall be subservient to said easements and to the rights and privileges of City and County of Dallas Levee Improvement District, its successors and assigns, to overflow said lands and to do any and all other things necessary to control flood waters of the Trinity River. This conveyance is further subject to the joint Plan of Reclamation adopted by City and County of Dallas Levee Improvement District and Dallas County Levee Improvement District No. 5, and to all easements heretofore granted or acquired over, across or under said lands.

This conveyance is without warranty of title.

IN WITNESS WHEREOF, Industrial Properties Corporation has caused this instrument to be executed this 1st day of January, 1972.

INDUSTRIAL PROPERTIES CORPORATION

ATTEST: BY President.

Secretary

THE STATE OF TEXAS )
)
COUNTY OF DALLAS )

BEFORE ME, the undersigned authority, in and for said County, Texas, on this day personally appeared JOHN M. STEMMONS, President of INDUSTRIAL PROPERTIES CORPORATION, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said INDUSTRIAL PROPERTIES CORPORATION, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, This 1st day of January, A. D., 1972.

Jeanette F. Gretelund
Notary Public in and for Dallas County, Texas
My Commission Expires: June 1, 1972

-3-

Dallas Levee Improvement District and Dallas County Levee Improvement District No. 5 and other existing easements, and subject to Joint Plan of Reclamation of said Levee District, and Dallas County Levee Improvement District No. 5, then said Escrow Agent shall deliver said Deed to City.

IV.

The opinion of the City Attorney of the City that the City has acquired title to all of said lands, has suits pending that will result in acquiring said title, or has failed to acquire title to all of said lands by January 1, 1974, shall be conclusive upon the parties hereto.

IN WITNESS THEREOF, this instrument has been executed this the 1st day of January, 1972.

ATTEST:

Secretary

INDUSTRIAL PROPERTIES CORPORATION

By President

ATTEST:

City Secretary

CITY OF DALLAS, TEXAS

By City Manager

COUNTERSIGNED:

City Auditor

APPROVED AS TO FORM:

City Attorney

DALLAS TITLE COMPANY, Escrow Agent

By President

CORPORATION ACKNOWLEDGMENT

THE STATE OF TEXAS,
COUNTY OF Dallas

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared John M. Stemmons, President of Industrial Properties Corporation, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said Industrial Properties Corporation a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 28th day of January A. D. 19 74

(L.S.)

Notary Public in and for Dallas County, Texas.

C.O.P.A.E. 71021 1182

All those certain tracts of land lying and being situated in the City and County of Dallas, Texas, and being more particularly described as follows:

BEING all lands owned by Industrial Properties Corporation, which lie within that portion of City and County of Dallas Levee Improvement District as shown on map bearing title: "District map, City and County of Dallas Levee Improvement District, and Dallas County Levee Improvement District No. 5, by Myers Noyes and Forrest, District Engineers," and designated Exhibit "A" attached hereto and made a part hereof and which lands lie West of the East Toe of the East Levee and East of the West Toe of the West Levee, and containing approximately 930 acres.

VOL. PAGE
74021 1463

EXHIBIT "A"

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

5900 W. Plano Parkway, Suite 100, Plano, TX 75093
P.O. Box 260729, Plano, TX 75026
214.461.2000 Fax 214.528.4826

January 29, 2003

Mr. Patrick A. Bauer, P.E.
District Engineer – Texas Division
Federal Highway Administration
Federal Office Building, Rm 826
300 East 8th Street
Austin, TX 78701

**RE: Strategy for Development of the Trinity Parkway Draft Environmental Impact Statement (DEIS)**

Dear Mr. Bauer:

The Trinity Parkway DEIS has been forwarded to the Environmental Affairs Division – TxDOT, and FHWA for an anticipated two to three month concurrent review. In advance of forwarding this DEIS for FHWA Atlanta review, we felt it prudent to provide you with a synopsis of the DEIS' developmental strategy for this regionally significant project. This Environmental Impact Statement is unique. It may ultimately address multiple objectives proposed by several agencies.

After several months of discussion, and with concurrence from FHWA Austin staff, the implementing agencies reached consensus on a developmental strategy:

1) From among the many competing objectives, identify the primary and secondary purpose and needs.
2) The Trinity Parkway DEIS will address the identified primary purpose & need - transportation. If the decision makers elect to recommend one of the transportation build alternatives, the attendant secondary purpose & needs will be addressed in subsequent environmental documents.
3) Tiering the decision making process, and the subsequent development of environmental documents as a function of these decisions, provides the decision makers with structure and a clearer understanding of the additive effect of their stepped-decisions with respect to the possible social, economic and environmental benefits, impacts, costs and associated mitigation measures.

As evidenced by the signatures below, this letter affirms the City of Dallas' (City), the US Army Corps of Engineers' (USACE) and the North Texas Tollway Authority's (NTTA) concordance in the proposed strategies for preparation of the Trinity Parkway Draft Environmental Impact Statement. These strategies were adopted due to the potential complexity and interrelated nature of the "reasonable and foreseeable actions" being considered by these agencies.

Major projects are being planned and developed within the Dallas Floodway reach of the Trinity River floodplain. The NTTA is planning and developing projects that are related to transportation. Three of the five transportation alternatives currently being evaluated by NTTA in the DEIS are located either within or along the Trinity River floodplain; these alternatives originated from TxDOT's Trinity Parkway Corridor Major Transportation Investment Study March 1998. Currently the City is assessing a series of recreational implementation strategies. One option proposes major recreational amenities within the Trinity River floodplain, including a system of lakes, parks and trails, which are articulated in the City's Trinity River Corridor, Master Implementation Plan December 1999. In addition, two concurrent studies are underway – one considers urban design elements; the other is evaluating the configuration, functionality, and operability issues of the floodway lakes. Depending upon the recommendation of a

Donald D. Dillard, *Chairman* • Donna R. Parker, *Vice Chairman* • Jack Miller • David D. Blair, Jr • Printice L. Gary • Paul N. Wageman • Kay Walls
Jerry Hiebert, *Executive Director* • Katharine D. Nees, *Deputy Executive Director* • Ruby Franklin, *Secretary* • Susan A. Buse, *Treasurer*

transportation build alternative alignment, the USACE may be requested to consider flood damage reduction and ecosystem restoration projects along this same reach of the Trinity River. All of these potential projects are discussed conceptually in the USACE' Final Programmatic EIS for the Upper Trinity River Basin dated June 2000. The USACE is planning and developing projects that are related to flood damage reduction and ecosystem restoration. The projects being planned and developed by the NTTA, City of Dallas, and USACE have the potential for Federal funding.

Contained within the outline of each EIS strategy below is a description of potential projects, actions or documentation. Please note that as used here, "floodway alternative"' would mean the recommendation of one of these levee options: Split River, Split Landside or Combined Parkway alternative; "Industrial Alternative" means one of the alignments roughly following existing Industrial Boulevard, either the Industrial At-Grade or the Industrial Elevated option.

- Strategy Assuming Final Floodway Alternative Is Recommended:

  Step 1. NTTA/ FHWA prepares the DEIS– primary Purpose & Need identified as transportation. Secondary purpose & needs identified –as flood damage reduction, ecosystem restoration and the City of Dallas' recreational amenities.

  After public hearings, the City of Dallas would declare a preferred alignment, and after this declaration the NTTA Board of Directors would recommend a preferred alignment. The City and NTTA would then formally request that USACE be a Cooperating Agency in the EIS process and initiate investigations as to participation in a multi-objective project, which includes transportation in the floodway. Prior to becoming a Cooperating Agency, the USACE must first determine a Federal (USACE) interest in participating in the project for the purposes of flood damage reduction, ecosystem restoration, and recreation.

  Step 2. Prepare Draft Supplemental EIS (DSEIS) - NTTA/FWHA would be "Lead Agency" with USACE as "Cooperating Agency". Preparation of the DSEIS is predicated on the recommendation of an alternative transportation alignment for the Trinity Parkway, which would be located within or adjacent to the floodway. The DSEIS would address those floodway impacts of the recommended Trinity Parkway alternative with respect to the functionality and operability of the lakes, water quality, flood damage reduction, environmental restoration and recreation that may be located within the existing Dallas Floodway, relative to floodway projects being planned and developed by USACE and the City of Dallas. The DSEIS would also address EO 11988 (longitudinal floodplain development), and in more complete fashion address Section 404, Section 10 and the Corridor Development Certificate (CDC) process.

  A second round of public hearings would be held to present these additional impacts and obtain public comment.

  Step 3. Prepare Final EIS - prepared by NTTA with contributions from USACE and City of Dallas – addresses and responds to public comments received on DEIS and DSEIS.

  Step 4. Issue ROD – Two RODS to be signed by FHWA & USACE as Lead and Cooperating Agencies, respectively. Whether FHWA and USACE issue a joint ROD or independent RODs will be determined after additional consultation with legal staff from FHWA and USACE.

- Strategy Assuming an Industrial Boulevard Alternative is Recommended:

  Step 1. Same as strategy above, except no request would be made of the USACE to participate as a Cooperating Agency.

  Step 2. City of Dallas could request USACE to initiate evaluations of flood damage reduction, ecosystem restoration, and recreation within the floodway assuming that there would be no transportation corridor associated with the floodway area. The City's non-transportation related projects would be carried forward by the USACE in an EIS and ROD separate from the Trinity Parkway EIS.

  Step 3 – Prepare Final EIS – prepared by NTTA. Transportation ROD issued and signed by FHWA

- Strategy Assuming the No-Build Alternative is Recommended:

  Step 1. Environmental investigations by NTTA cease, pertinent study materials forwarded to the City of Dallas.

  Step 2. City of Dallas could request USACE to initiate evaluations of flood damage reduction, ecosystem restoration, and recreation within the floodway assuming that there would be no transportation corridor associated with the floodway area. These City of Dallas non-transportation related projects would be carried forward by the USACE in an EIS and ROD separate from the Trinity Parkway EIS.

Until a transportation alternative is identified and recommended for selection by FHWA, all Trinity River related projects by the City of Dallas and USACE within the existing Dallas Floodway will likely remain on hold, irrespective of the developmental strategy. If either an Industrial or No-Build Transportation alternative is recommended, the City could request participation by USACE who would pursue a separate EIS and ROD for its non-transportation related projects by tiering off the existing Upper Trinity River Programmatic Environmental Impact Statement.

Staff representatives from FHWA, EPA, USACE, NCTCOG, City of Dallas, and the Texas Department of Transportation participated in this strategy's formulation.

Endorsement of the EIS preparation strategies in no way commits or obligates any of the signatories to implementing any of the actions being considered, in whole or part.

If additional information or clarification is required, please contact:

City of Dallas – Greg Ajemian, P.E., 214.671.9504, gajemian@pbw.ci.dallas.tx.us

USACE – Gene Rice, P.E., 817.886.1374, gene.t.rice@swf02.usace.army.mil

NTTA - Christopher Anderson, Planning Director, 214.461.2021, canderson@ntta.org.

| | | |
|---|---|---|
| Jill A. Jordan, P.E. | Michael J. Mocek, P.E. | Jerry Hiebert |
| Assistant City Manager | Deputy District Engineer | Executive Director |
| City of Dallas | U.S. Army Corps of Engineers | North Texas Tollway Authority |
| | Fort Worth District | |

LOCKE LIDDELL & SAPP LLP
ATTORNEYS & COUNSELORS

2200 ROSS AVENUE
SUITE 2200
DALLAS, TEXAS 75201-6776

AUSTIN • DALLAS • HOUSTON • NEW ORLEANS

(214) 740-8000
Fax: (214) 740-8800
www.lockeliddell.com

**WRITER'S DIRECT DIAL:**
**(214) 740-8670**
**E-MAIL: faddison@lockeliddell.com**

March 5, 2004

**VIA FEDERAL EXPRESS**
Marcus N. Redford, P.E.
United States Coast Guard
Homeland Security
Chief, Bridge Administration Branch
Eighth Coast Guard District
Hale Boggs Federal Building
501 Magazine Street
New Orleans, LA 70130-3396

RE: Construction and Operation of the Trinity Parkway
Concurrence Regarding Exemption from Bridge Permitting Requirements

Dear Mr. Redford:

Please be informed we represent the North Texas Tollway Authority ("NTTA") in connection with construction and operation of the Trinity Parkway located in the City of Dallas, Dallas County, Texas. Certain alternatives under consideration for the Parkway involve the crossing of the Trinity River at various locations in Dallas County in the City of Dallas between its proposed northern terminus at IH-35E/SH 183 and the proposed southern terminus at US 175/SH 310. The Federal Highway Administration ("FHWA"), the Texas Department of Transportation ("TxDOT"), the NTTA and the City of Dallas are lead agencies and sponsors of the Trinity Parkway project.

NTTA, its consultants and counsel, have reviewed, *inter alia*, the Coast Guard regulations addressing bridge construction and navigable waters of the United States found at 33 C.F.R. § 115, those regulations concerning the definition of navigable waters of the United States including 33 C.F.R. § 329, and various provisions of the Rivers and Harbors Act of 1899 and the Clean Water Act. In addition, we have reviewed U.S. Coast Guard Bridge Permit Application Guide and Bridge Clearance Guide on the USCG website. Based on this investigation, and the criteria set forth in pertinent, statutory and regulatory authority, the Trinity River at this location appears to be a "navigable water of the United States." According to the Bridge Clearance Guidance, it also appears, however, that this portion of the Trinity River ordinarily receives the favorable consideration of exemption under the bridge permitting process. 33 CFR 1, Subchapter J-Bridges.

Alternatives 4 and 5 under consideration would include bridge construction crossing the main stem of the Trinity River. The alternatives would run just west of, and parallel to, Interstate 35-E in Dallas as it passes downtown. From downtown, the alternatives under consideration either follow the floodway or Industrial Blvd. until reaching the proposed south terminus at US 175/SH 310.

Seven alternatives are under consideration, including the following:

- Alternative 1 – No-Build
- Alternative 2A – Irving / Industrial Blvd. – Elevated
- Alternative 2B – Irving / Industrial Blvd. – At Grade
- Alternative 3A – Combined Parkway / Riverside (original)
- Alternative 3B – Combined Parkway / Riverside (modified)
- Alternative 4 – Split Parkway / Riverside
- Alternative 5 – Split Parkway / Landside

Alternatives 4 and 5 of the build alternatives would involve bridge construction across the Trinity. A related project of the City of Dallas may involve the construction of "signature bridges" across the Trinity. These signature bridges may be constructed, regardless of the Alternative selected by NTTA. In addition to FHWA participation, the construction of the project will involve federal assistance. Our preliminary investigation indicates the Trinity River at this location is non-tidal, and is not used and is not susceptible to use in its natural condition or by reasonable improvement as a means to transport interstate or foreign commerce. It does not appear the main stem of the Trinity River is used by vessels greater than 21 feet in length. While the West Fork of the Trinity River has been designated by the U.S. Army Corps of Engineers as navigable, the main stem of the River does not include the West Fork. According to the Corps' Ft. Worth District, the navigable portion of the Trinity River is defined to be that portion "from the point of intersection of Houston, Madison and Walker counties upstream to Riverside Drive in Ft. Worth, Tarrant County, Texas." The Fort Worth District of the U.S. Army Corps of Engineers maintains a list of navigable waters that fall within the Fort Worth, Albuquerque, and Tulsa Districts. I have enclosed a copy of the Fort Worth District's list of navigable waters for your convenience.

As you may also recall, channelization of the Trinity River (known locally in Dallas as the "Trinity River Project") was authorized by the Rivers and Harbors Act of 1965, Public Law 89-289. The Trinity River Project, however, was never undertaken. Had it gone forward, the Trinity River Project would have included the construction of a commercially feasible, multi-purpose channel along the River from North Texas to the Houston Ship Channel. After passage of Public Law 89-289, the U.S. Congress restudied navigation features of the Trinity River

Project in an effort to confirm the economic feasibility of channelization. At that time, the studies demonstrated that channelization at any point upstream of Liberty, Texas (approximately 50-miles above the mouth of the River) was not economically feasible. In 1973, a local bond election to finance the multi-purpose channel was defeated. With the defeat in the bond election, the effort to develop the Trinity River into a navigable water ended.

In 1996, a TxDOT transportation project included reconstruction of an existing 4-lane section of the Corinth Street Bridge to a proposed 6-lane divided section. As a part of the project, TxDOT corresponded with the Coast Guard to confirm the project would be exempt from Coast Guard permitting. I have enclosed a copy of the Coast Guard's April 1, 1996 correspondence on this point. In that instance, the Coast Guard concurred that the Corinth Street Bridge construction project was exempt from U.S. Coast Guard navigational bridge permit requirements.

Based on the information set forth herein, we respectfully request a determination that the Trinity Parkway Project falls into an excluded category under the Surface Transportation Act ("STA"), § 144(h) of Title 23 of the U.S. Code. By reason of this provision, certain bridges – which are constructed, reconstructed, rehabilitated or replaced with federal assistance imposed under Title 23 of the U.S. Code – are not subject to the permitting requirements imposed under 33 U.S.C. § 401 and § 525(b), respectively. Additionally, we request that the proposed bridges be exempt from the U.S. Coast Guard lighting requirements because no vessel traffic transits the waterway nor do we have information that it will transit it in the future. Pursuant to Title 23 of the Code of Federal Regulations, Part 118, § 118.40(b) we respectfully submit the Trinity Parkway should be exempt from the requirement to provide bridge lighting for the structures as well.

Please contact me in writing to confirm the Trinity Parkway Project meets the subject criteria set forth above and is exempted from Coast Guard permitting requirements. Additionally, please confirm your concurrence that the proposed project will be exempt from the U.S. Coast Guard lighting requirements because no vessel traffic transits the waterway nor will transit it in the future.

Should you have any questions, please don't hesitate to contact me. We appreciate your attention to this matter.

Very truly yours,

LOCKE LIDDELL & SAPP LLP
Attorneys & Counselors

By: Frederick W. Addison, III

FWA:kp
Enclosure

cc: Chris Anderson
Frank Stevenson
Martin Malloy

U.S. Department of Transportation
United States Coast Guard

Commander
Eighth Coast Guard District
Hale Boggs Federal Building

501 Magazine Street
New Orleans, LA 70130-3396
Staff Symbol: (obl)
Phone: (504) 589-2965

16591D
April 1, 1996

Mr. Charles R. Tucker
Director of Transportation
Texas Department of Transportation
P. O. Box 3067
Dallas, Texas 75221-3067

Dear Mr. Tucker:

This is in reference to your letter dated March 19, 1996, with attachments, regarding the proposed reconstruction of the existing four-lane section of Corinth Street, which crosses the Trinity River, mile 498.3 at Dallas, Dallas County, Texas, to accommodate a six-lane section.

In a letter received by this office from the Federal Highway Administration (FHWA) dated March 22, 1996, a determination was made by FHWA that the proposed bridge modification project should be exempt from Coast Guard permit requirements. This determination is based on the fact that federal funds will be utilized in the project and because the waterway is not used and is not susceptible to use in its natural condition or by reasonable improvement as a means to transport interstate or foreign commerce and that the waterway is not tidal.

By the conditions stated above, this bridge falls into an excluded category under the Surface Transportation (STA) Act. Section 144(h) of Title 23 U.S. Code was enacted in 1978 to reduce paperwork and related costs in the execution of the Coast Guard's bridge permit programs. This section has been amended by the Act of April 2, 1987 (Public Law 110-17), to further reduce paperwork and related costs in the permitting of bridges funded by this ACT. By reason of this provision, certain bridges -- which are constructed, reconstructed, rehabilitated or replaced with federal assistance imposed under Title 23 U.S. Code -- are no longer subject to the permitting requirements imposed under 33 U.S.C. 401 and 525(b). The bridges which fall into this excluded category are those that cross waterways:

(1) which are not used and are not susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce; and

(2) which are: nontidal; or if tidal, used by vessels less than 21 feet in length.

( ) Dist. Engr.
( ) Asst. Dist. Engr.
( )
( )
( )
( ) Action
( ) Advise
( ) Comment

Tucker CRT
HALL

EXHIBIT D
NAVIGATIONAL CLEARANCE
RELATED CORRESPONDENCE, CONT.

Since FHWA has the responsibility for the STA Act, the Coast Guard accepts this determination that the bridge project meets the criteria and is exempted for Coast Guard Bridge Administration purposes.

You have requested that the proposed bridge be exempt from the U.S. Coast Guard lighting requirements because no vessel traffic transits the waterway nor will transit it in the future. Pursuant to Title 33 of the Code of Federal Regulations, Part 118, Section 118.40 (b), you are hereby exempt from the requirement to provide bridge lighting for this structure.

This determination does not relieve you of your responsibility to obtain appropriate permits from any other federal or state and local agency having jurisdiction in this matter.

Sincerely,

John Wachter

JOHN WACHTER
Chief, Bridge Administration Branch
By direction of the Commander
Eighth Coast Guard District

Copy: Mr. Tamer A. Ahmed, FHWA, Austin, TX

EXHIBIT D
NAVIGATIONAL CLEARANCE
RELATED CORRESPONDENCE, CONT.

US Army Corps of Engineers
Fort Worth District

# Navigable Waters of the United States in the Fort Worth, Albuquerque, and Tulsa Districts Within the State of Texas

March 20, 1999

For purposes of Section 10 of the Rivers and Harbors Act of 1899, navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently being used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce (33 CFR 329.4). Navigable waters include lakes and other on-channel impoundments of navigable rivers. Under Section 10, the U.S. Army Corps of Engineers (USACE) regulates any work in or affecting navigable waters of the United States. The following waters are considered to be navigable waters of the United States and thus fall within the jurisdiction of the USACE in the Fort Worth, Albuquerque, and Tulsa districts. Navigable waters in the Galveston District are determined on a case-by-case basis and, therefore, are not included in this list. The USACE district(s) within which these navigable waters lie are indicated as: SWF (Fort Worth District), SWT (Tulsa District), and SPA (Albuquerque District).

| | |
|---|---|
| **Angelina River:** | From Sam Rayburn Dam in Jasper County upstream to U.S. Highway 59 in Nacogdoches and Angelina counties and all USACE lands associated with B.A. Steinhagen Lake in Jasper and Tyler counties, Texas. [SWF] |
| **Big Cypress Bayou:** | From the Texas-Louisiana state line in Marion County, Texas, upstream to Ellison Creek Reservoir in Morris County, Texas. [SWF] |
| **Brazos River:** | From the point of intersection of Grimes, Waller, and Washington counties upstream to Whitney Dam in Hill and Bosque counties, Texas. [SWF] |
| **Colorado River:** | From the Bastrop-Fayette county line upstream to Longhorn Dam in Travis County, Texas. [SWF] |
| **Neches River:** | USACE lands associated with B.A. Steinhagen Lake in Jasper and Tyler counties, Texas. [SWF] |
| **Red River:** | From the U.S. Highway 71 bridge at the Texas-Arkansas state line upstream to the Oklahoma-Arkansas state line and from Denison Dam on Lake Texoma upstream to Warrens Bend, approximately 7.25 miles north-northeast of Marysville, in Cooke County, Texas. [SWT] |
| **Rio Grande:** | From the Zapata-Webb county line upstream to the point of intersection of the Texas-New Mexico state line and Mexico. [SWF, SPA] |
| **Sabine River:** | From the point of intersection of the Sabine-Vernon parish line in Louisiana with Newton County, Texas upstream to the Sabine River-Big Sandy Creek confluence in Upshur County, Texas. [SWF] |
| **Sulphur River:** | From the Texas-Arkansas state line upstream to Wright Patman Dam in Cass and Bowie counties, Texas. [SWF] |
| **Trinity River:** | From the point of intersection of Houston, Madison, and Walker counties upstream to Riverside Drive in Fort Worth, Tarrant County, Texas. [SWF] |

# LOCKE LIDDELL & SAPP LLP

ATTORNEYS & COUNSELORS

2200 ROSS AVENUE
SUITE 2200
DALLAS, TEXAS 75201-6776

AUSTIN • DALLAS • HOUSTON • NEW ORLEANS

(214) 740-8000
Fax: (214) 740-8800
www.lockeliddell.com

**WRITER'S DIRECT DIAL:**
**(214) 740-8670**
**E-MAIL: faddison@lockeliddell.com**


April 14, 2004

John R. Hoffman
Vice President - Environmental Scientist
Halff Associates, Inc.
8616 Northwest Plaza Drive
Dallas, Texas 75225-4292

RE: Trinity Parkway Alternative Alignments – City of Dallas Review of Possible 4(f) Applicability

Dear John:

Enclosed please find a copy of the City of Dallas letter confirming the Trinity Parkway Alternatives currently under consideration will not have Section 4(f) implications. I have retained the original in my files. As you know, Section 4(f) is not implicated because of the transportation corridor reservation found within the Stemmons deed and the escrow agreement for the other properties within the flood plain. I understand Halff will be using this letter in connection with the DEIS currently being circulated to TxDOT and FHWA.

Please give me a call with any questions.

Very truly yours,

LOCKE LIDDELL & SAPP LLP
Attorneys & Counselors

By: Frederick W. Addison, III

FWA:kp
Enclosure

cc (w/ encl.): Chris Anderson
Frank Stevenson

CITY OF DALLAS

April 7, 2004

Mr. Frederick W. Addison, III
Locke Liddell & Sapp, LLP
2200 Ross Avenue
Suite 2200
Dallas, Texas 75201-6776

RE: Trinity Parkway Alternative Alignments—Review of Possible 4(f) Applicability

Dear Mr. Addison:

I am in receipt of your March 8, 2004 letter requesting the City of Dallas Park and Recreation Department's evaluation of the Section 4(f) applicability to the Trinity Parkway alternative alignments on behalf of the North Texas Tollway Authority. I apologize for my late response.

I have reviewed the latest Parkway alternatives as presented in the packet attached to your letter. It appears that the only park land that the alignments will touch is the Trinity River Park. The Trinity River Park consists of land that was donated by John Stemmons and additional land that was purchased by the City, as required by Mr. Stemmons as a condition of his donation. The original deed records, including the escrow agreement, clearly indicates that the donated property and the additional property that was purchased, is to be used for "parks, open space, recreational, transportation facilities, including roadways on and adjacent to the levees, and such uses as are necessarily incident to the navigation channel". The proposed use of the land for the Trinity Parkway is in compliance with the use criteria. It is therefore my opinion that the proposed Trinity Parkway project is not subject to the Section 4(f) requirements as it pertains to the Trinity River Park. If the alignments change and impact any other park land, such as nearby Moore Park and Rochester Park, Section 4(f) review would be in order.

Please feel free to contact me directly at 214-670-4103 should you need additional information.

Sincerely,

Michael C. Hellmann

Michael Hellmann, Sr. Park Planner
City of Dallas
Park and Recreation Department
Mhellma@ci.dallas.tx.us

C: Dave Strueber
Leong Lim
Rebecca Dugger, Trinity River Office—6BS
Mary Ayala, Trinity River Office—6BS

Halff Associates

8616 NORTHWEST PLAZA DRIVE
DALLAS, TEXAS 75225
(214) 346-6200
FAX (214) 739-0095

June 2, 2004
AVO 17826

Mr. Michael Hellmann, Sr.
Senior Park Planner
Park and Recreation Department
City Hall
**City of Dallas**
1500 Marilla, Room 6FN
Dallas, TX 75201

RE: Section 4(f) - Applicability Request Concerning Publicly Owned Lands and Existing and Proposed Trails within the Study Area of the Proposed Trinity Parkway in Dallas, Texas

Dear Mr. Hellmann:

Thank you for your letter dated April 7, 2004 to Mr. Rick Addison of Locke, Liddell and Sapp, LLP. His letter (March 8, 2004) was requesting the City of Dallas' evaluation of the Section 4(f) applicability to the Trinity Parkway alternative alignments within the Dallas Floodway/Trinity River Park. Your letter referenced the John Stemmons deed which indicated that the donated property and the additional property that was purchased, is to be used for "parks, open space, recreational, transportation facilities, including roadways on and adjacent to the levees, and such uses as are necessarily incident to the navigation channel." Your letter stated "It is therefore my opinion that the proposed Trinity Parkway project is not subject to the Section 4(f) requirements as it pertains to the Trinity River Park. If the alignments change and impact any other parkland, such as nearby Moore Park and Rochester Park, Section 4(f) review would be in order."

On May 10, 2004 the North Texas Tollway Authority (NTTA) and Halff Associates, Inc. (Halff) received review comments on the March 2004 version of the Draft Environmental Impact Statement (DEIS) for the Trinity Parkway from TxDOT-ENV and FHWA-Austin. Several of the comments refer to Section 4(f) issues.

Listed below are comments that I need your assistance in addressing.

1. In the latest DEIS, Calypso Park had been removed based on updated information you provided us. Please confirm that Calypso Park is land owned by the Dallas Housing Authority (DHA) and was leased to the Dallas Park and Recreation Department. Confirm that the lease expired and DHA has decided to develop the property for other non-park uses.

2. We added the "Unnamed Park" to our existing and proposed park inventory table and showed it's location on a map. You had indicated that this property was owned by the Dallas Parks Department but it is not classified as a park. FHWA is asking "why isn't the unnamed park a 4(f)?" Please confirm that the site is not an existing or planned park.

3. FHWA's comment "We need additional information (deeds were requested earlier, but never furnished) on all proposed parks within the study area to make a defensible Section 4(f) determination for each property that is potential 4(f)."

Enclosed are two tables from the DEIS - Table 3-11 Existing Parks and Recreational Areas and Table 4-32 Potential Impacts on Parks and Recreational Areas and Figure 3-15 showing the existing and proposed parks in the study area with the various Trinity Parkway alignments overlaid on an aerial image. Halff is in the process of compiling the deeds for the Dallas Floodway (Trinity River Park). Our request to the Dallas Park and Recreation Department is to make a Section 4(f) Applicability Determination for each of the existing and proposed parks within the study area. Please confirm that the identified existing parks in the study area are publicly-owned parks significant for recreation purposes and that the City has determined that the proposed project alternatives would not have negative impacts to the park(s). Also, please confirm that the City has determined that the project alternatives would not have negative impacts to any proposed park in the study area because of distance away or concurrent planning.

4. The first three questions were from FHWA and this question is from TxDOT-ENV which is very similar to Question 3, but also asks for Section 4(f) determination for proposed trails. The question is "NTTA needs to submit a letter to FHWA through TxDOT requesting a determination that Section 4(f) does or does not apply for all the parks and proposed trails within the Trinity Parkway project area. Once FHWA's determination is received, a copy of it needs to be included in the DEIS." Enclosed is Table 3-12 Proposed Trails within the Study Area and an aerial map illustrating all the existing and proposed trails in the study area. Our request to the Dallas Parks and Recreation Department is to make a Section 4(f) Applicability Determination for each of the trails. Please confirm that the City has determined that the project alternatives would not have negative impacts to existing trails or proposed trails in the study area because of distance away or concurrent planning.

Please review the enclosed information. We would appreciate your response to these questions and to present your determination as to whether our not the proposed Trinity Parkway alternatives would involve Section 4(f) with the parks and trails planned within the study area.

You may contact me at (214) 346-6390 should you need additional information in making the 4(f) determination. We appreciate your assistance in this matter.

Sincerely,
HALFF ASSOCIATES, INC.

David S. Morgan

David S. Morgan, Vice President
Environmental Scientist

DSM:sps

Halff Associates



Enclosure

C: Mr. Christopher Anderson - North Texas Tollway Authority
Mr. Rick Addison, - Locke, Liddell, and Sapp

## TABLE 3-11. EXISTING PARKS AND RECREATIONAL AREAS

| Plate ID | Name | Location | Property Owner | Acres | Function/Usage | §4(f) | §6(f) |
|---|---|---|---|---|---|---|---|
| 1 | Sleepy Hollow Park | 1200 Sleepy Hollow Lane | PARD | 0.62 | Neighborhood park with picnic, swimming pool, playground, and multi-use court facilities. | Yes | No |
| 2 | Pegasus Park | 3000 Pegasus Park Drive | PARD | 7.41 | Urban open space park with no recreational facilities. | Yes | No |
| 3 | Un-named parkland | Along the Old West Fork Channel between Hampton Road and Highland Park landfill | PARD | ±1.0 | Owned by the City of Dallas PARD, but not a designated existing or proposed park. Urban open space land with no recreational facilities. | No | No |
| 4 | Trinity River Greenbelt Park (Identified as "Trinity Park" within the limits of the Dallas Floodway) | From Northwest Highway to AT&SF Rail-road Bridge | PARD | 3,652 | Urban open space park with 177 water acres and two soccer fields. Majority extends beyond study corridor boundaries. The Dallas Floodway encompasses approximately 2000 acres of this park (Trinity Park). A special feature is Crow Lake located adjacent to the south of Sylvan Avenue. The lake area includes sculptures, a volleyball court, and a 0.66-mile walking trail. | No | No |
| 5 | Nash/Davis Park | 3700 N. Hampton | PARD | 11.91 | Community park with a community recreation center. Includes picnic, swimming pool, tennis, sandlot ball field, softball field, playground, and multi-use court facilities. The park is shared with Carr Elementary School. Extends beyond study area boundaries. | Yes | No |
| 6 | Bickers Park | 1400 Bickers | DHA | 2.89 | Neighborhood park with softball field, playground, and multi-use court facilities. | Yes | No |
| 7 | Shaw Park | 3600 Ladd Street | PARD | 0.11 | Neighborhood park with no recreational facilities. | Yes | No |
| 8 | Benito Juarez Park | 3352 N. Winnetka | PARD | 6.10 | Neighborhood park with soccer field and picnic facilities. Extends beyond study area boundaries. | Yes | No |
| 9 | Hattie R. Moore Park | 3212 N. Winnetka | PARD | 3.66 | Community park with a community recreation center. Includes picnic, tennis, play- fields, playground, and multi-use court facilities. Park shared with DeZavala Elementary School. | Yes | No |
| 10 | Pueblo Park | 3226 Bataan Street | PARD | 0.55 | Neighborhood park with picnic, playground, and multi-use court facilities. | Yes | No |
| 11 | Oak Cliff Founders Park | 1300 North Zang | PARD | 16.11 | Urban open space park with 0.25-mile hike/bike trail. Extends beyond study area boundaries. | Yes | No |
| 12 | Eloise Lundy Park | 1200-1229 Sabine | PARD | 3.38 | Community park with a community recreation center. Includes picnic, swimming pool, tennis, softball field, playground, and multi-use court facilities. | Yes | No |
| 13 | Moore Park | 1900 E. Eighth Street | PARD | 24.46 | Community park with picnic, tennis, baseball and sandlot ball field, playground, swimming pool, and multi-use field and court facilities. | Yes | No |
| 14 | Rochester Park | 3000 Rochester | PARD | 983.28 | Regional park with natural areas and trails. Includes playground, picnic, softball, football, soccer, and multi-use court facilities. Special features include a lake and fishing piers. Majority extends beyond study area boundaries. | Yes | Yes |
| 15 | Forest Park | 2906 Parnell | PARD | 2.40 | Neighborhood park with picnic, swimming pool, playground, and multi-use court facilities. | Yes | No |

**Sources:** City of Dallas PARD 1997, 1999.
**Notes:** Plate ID Numbers correspond to the locations shown on **Plate 3-15**.
**PARD** = Park and Recreation Department (City of Dallas)
**DHA** = Dallas Housing Authority

## TABLE 3-12. PROPOSED TRAILS WITHIN THE STUDY AREA

| Proposed Trail | Description | Type/Function | Trails Linked | Comments |
|---|---|---|---|---|
| Trinity Park Trail | Follows south side of river in floodway to the Great Trinity Forest. Extends beyond study area boundaries. | Hike and Multi-Use | Links to trail system in floodway and Great Trinity Forest. | Hard surface, off street. |
| Bernal/Canada Drive Trail | From existing Bernal Trail along old West Fork meanders in Oak Cliff to Dallas Floodway. Extends beyond study area boundaries. | Hike and Bike | Links with Cockrell Hill Trail and with trail system in floodway. | Hard surface, off street. |
| Old Trinity Trail | Follows old river channel meanders near and across IH-35 E and Industrial. Extends beyond study area boundaries. | Hike and Bike | Cockrell Hill, Turtle Creek, and Katy Trails (outside of study corridor). | -Hard surface, off street.<br>-Friends of Old Trinity Trail, a local non-profit organization, has been active in helping establish phase 1 of this trail. |
| Coombs Creek Trail | Originates from Oak Cliff and merges with Great Trinity Trail near Houston and Jefferson Viaducts. Terminates at Trestle Trail junction. Extends beyond study area boundaries. | Hike and Bike | Links with trail system in floodway. | Hard surface, off street. |
| Continental Avenue Pedestrian Bridge | Conversion of existing bridge from vehicular use to pedestrian use only. | Pedestrian with bicycle access at north and south ends. | Links with trail system in floodway. | -Hard surface, off street.<br>-Provides access to proposed central community park and to large civic lake area. |
| Trestle Tail | Follows the DART ROW east of the Trinity then crosses the river on the Old AT&SF Railroad Bridge into Oak Cliff. Extends beyond study area boundaries. | Hike and Bike | Links with trail systems in floodway and Great Trinity Forest. | -Hard surface, off street.<br>-Part of Veloweb.<br>-Projected to be region's second most highly used commuter trail. |
| Great Trinity Trail | Follows along floodway from confluence to the Great Trinity Forest. Extends beyond study area boundaries. | Includes a network of trails/access points in the floodway for numerous user groups – walkers, bicyclists, skaters, equestrians, and canoeists. | Links with trail systems in floodway and Great Trinity Forest. Also, Cockrell Hill, Coombs Creek, Katy, Trestle, and Bernal/Canada Drive Trails. | -Hard surface, off street.<br>-Part of Veloweb. |
| Katy Trail (south extension) | Follows Houston Street south to Oak Cliff across the Houston Street Viaduct. Extends beyond study area boundaries. | Hike and Bike | Links with trail system in floodway. | -Hard surface, off street.<br>-Part of Veloweb.<br>-Projected to be region's most highly used commuter trail. |
| Cockrell Hill Trail | From south side of Trinity River near Hampton Road through West Dallas to Cockrell Hill community. Extends beyond study area boundaries. | Hike and Bike | Links with trail system in floodway. | Hard surface, off street. |
| Trinity River | Follows river channel. Extends beyond study area boundaries. | Water trail for canoes/kayaks | Links with Elm/West Forks, and other water bodies outside of study corridor. | Proposed canoe access sites at Sylvan, Corinth, and IH-45. |

## TABLE 3-12. PROPOSED TRAILS WITHIN THE STUDY AREA

| Proposed Trail | Description | Type/Function | Trails Linked | Comments |
|---|---|---|---|---|
| Dallas Floodway - Soft-Surface Trails | Located in areas with little tree cover on the west or south side of the river away from pedestrian areas. | Equestrian and Bike | Links with trail system in floodway and Great Trinity Forest. | Proposed 30-horse equestrian center in floodway near Houston/ Jefferson Viaducts. |
| Great Trinity Forest - Soft-Surface Trails | Located in DFE area along river and proposed chain-of wetlands. Extends beyond study area boundaries. | Equestrian, Nature, and Bike | Links with trail system in floodway and Great Trinity Forest. | Proposed 50-horse equestrian center near Loop 12. |
| **Dallas Floodway – Levee Top Trails** | | | | |
| Stemmons Trail | From Westmoreland to Commerce (east levee) | Pedestrian | Links to proposed levee top promenades and trail system in floodway. | Hard surface, off street. |
| West Dallas Trail | From Westmoreland to Commerce (west levee) | Pedestrian | Links to proposed levee top promenades and trail system in floodway. | Hard surface, off street. |
| Cedars Trail | From IH-35E to Corinth (east levee) | Pedestrian | Links to proposed levee top promenades and trail system in floodway. | Hard surface, off street. |
| Bottoms to Corinth | From IH-35E to Corinth (west levee) | Pedestrian | Links to proposed levee top promenades and trail system in floodway. | Hard surface, off street. |

**Sources**: City of Dallas 1999b; Dallas County Commissioners Court 1997.
**Note**: Proposed trails include proposed, endorsed, and sponsored trails.

## TABLE 4-32. POTENTIAL IMPACTS ON PARKS AND RECREATIONAL AREAS

| Plate ID Number | Site Description | Trinity Parkway Build Alternatives | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2A | 2B | 3A | 3B | 4 | 5 |
| 1 | Sleepy Hollow Park (Existing) | P, N, V | P, N, V | P, N, V | P, N, V | P, N, V | P, N, V |
| | *Closest Distance to/from Build Alternative* | 720 feet (0.14 miles) | 720 feet (0.14 miles) | 720 feet (0.14 miles) | 720 feet (0.14 miles) | 720 feet (0.14 miles) | 720 feet (0.14 miles) |
| 4 | Trinity River Greenbelt Park (Existing) | P, V | P, V | R (171) P, V | R (152) P, V | R (205) P, V | R (14) P, V |
| | *Closest Distance to/from Alternative* | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge | Encroaches within park | Encroaches within park | Encroaches within park | Encroaches within park |
| 11 | Oak Cliff Founders Park (Existing) | --- | --- | --- | --- | P, N, V | P, N, V |
| | *Closest Distance to/from Alternative* | 2,880 feet (0.55 miles) | 2,400 feet (0.45 miles) | 1,980 feet (0.38 miles) | 1,980 feet (0.38 miles) | 300 feet (0.06 miles) | 240 feet (0.05 miles) |
| 13 | Moore Park (Existing) | --- | --- | --- | --- | P, V | P, V |
| | *Closest Distance to/from Alternative* | 2,520 feet (0.48 miles) | 2,520 feet (0.48 miles) | 1,980 feet (0.38 miles) | 1,980 feet (0.38 miles) | 1,980 feet (0.38 miles) | 2,400 feet (0.45 miles) |
| 18 | Great Trinity Forest Park (Planned) | P, V | P, V | P, V | P, V | P, V | P, V |
| | *Closest Distance to/from Alternative* | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge | Adjacent to park at AT&SF RR Bridge |

**Key to Terms:** **R** = right-of-way acquisition anticipated (estimated number of acres shown in parentheses) (see **Section 4.1.2**); **P** = proximity effects; **N** = noise impact (see **Section 4.15**); **V** = visual intrusion (see **Section 4.16**); **>** = greater than the quantity shown; **---** = no impact anticipated.

**Notes:** All distances shown in feet (miles). Calculated distances/areas are estimates only.
Plate ID numbers correspond to the locations shown on **Plate 3-15 (Chapter 3)** and **Plate 4-7 (Chapter 4)**.
Visual intrusion is generally considered to be the introduction of the highway facility into an area where none existed previously.

CITY OF DALLAS

July 23, 2004

Mr. David Morgan
Halff Associates
8816 Northwest Plaza Drive
Dallas, Texas 75225

RE: Section 4(f)—Applicability Request Concerning Publicly Owned Lands and Existing and Proposed Trails Within the Study Area of the Proposed Trinity Parkway in Dallas, Texas

Dear Mr. Morgan:

I have received your June 2, 2004 requesting further information regarding the above referenced subject pertaining to additional questions you have received from the NTTA and the FHWA. I will attempt to address your questions in the order you have asked in your letter.

1. You have asked about the status of Calypso Park. Calypso Park was a 4.7-acre piece of land that was part of a master lease agreement, covering multiple other sites, with the Dallas Housing Authority. The Dallas Housing Authority exercised their right to terminate a portion of the master lease. As such, Calypso Park is no longer used as a city park and is in control of the Dallas Housing Authority.

2. You have asked about the status of the unnamed park land near the Old Trinity Meanders. This is essentially a drainage sump. Although there is no name or active use of the property, it is dedicated park land. There are no formal plans for the use of this property at this time. However, due to its location to the Old Trinity Meanders, it will probably be used, eventually, as part of the Old Trinity Trail Project.

3. You have asked me to make a 4(f) determination of existing and proposed parks in your study area. The identified existing parks in your study area are city owned parks and are significant for recreation purposes. As stated in my previous letters, it is my opinion that the proposed parkway project alternatives will not have a negative impact to any existing park in the study area. The only existing park that seems to be impacted is the Trinity River Park, which is allowable for recreation, flood control, and transportation uses as specified by the John Stemmons deed and conditions set therein. The Trinity Parkway fits into this criteria.

   There are two proposed parks that have been identified in the study area. Both are existing city property, but are not currently dedicated park land. One is the Old Trinity Meanders Channel. This will be the location of the

DEPARTMENT OF PARK AND RECREATION CITY HALL DALLAS, TEXAS 75201 TELEPHONE 214/670-4100
It is our mission to enhance the quality of life for our customers by providing leisure, cultural and educational services while preserving, conserving and promoting our natural and physical resources.

Old Trinity Trail. A master plan for this trail has been completed. The proposed trail will connect to the East Floodway Levee at Sump B, located just west of Sylvan Avenue.

The other proposed park in the study area is identified in the recently adopted Downtown Parks Master Plan. This proposed park is called the "Reunion Gateway." This is a proposed landscape area that surrounds the edge of downtown at Reunion Arena. I do not believe that any of the proposed project alternatives will have a negative impact in this proposed park.

4. You have asked for a 4(f) determination pertaining to proposed trails in the study area. All of the proposed trails listed in Table 3-12 in your letter should not be negatively effected due to concurrent planning initiatives. It is anticipated that the final design of the Trinity Parkway will accommodate all proposed trail connections to the Trinity Park and Levee System. The Trinity Parkway project could enhance access opportunities to proposed trails. One of the goals for the Trinity project as a whole is to improve access to existing and proposed recreational opportunities.

I hope this information is helpful. Please feel free to contact me at 214-670-4103 should you have any questions.

Sincerely,

Michael E. Hellmann

Michael Hellmann, Sr. Park Planner
Park and Recreation Department
Mhellma@ci.dallas.tx.us

CITY OF DALLAS

RECEIVED
OCT 2004

October 19, 2004

Mr. David Morgan
Halff Associates
8616 Northwest Plaza Drive
Dallas, Texas 75225

RE: Section 4(f) applicability request concerning property located in the Trinity Parkway study area near the old confluence of the Elm Fork and West Fork of the Trinity River in the City of Dallas, Texas

Dear Mr. Morgan:

I have received your October 12, 2004 letter requesting my response concerning the additional property ownership information you provided concerning the above-described portion of the Trinity Parkway study area. You have asked for my concurrence that the subject property situated in what has been previously described as dedicated parkland (i.e., unnamed parkland) owned by the City of Dallas is in fact under private ownership.

I was curious to understand why we had this property in our inventory. After much research, it has been determined that this piece of property was dedicated as a "public use easement." It seems that the public use easement is for a drainage sump purpose and not for park purposes. It was added to the park land inventory in error. Based on this information, the subject property has been removed from our park land inventory and therefore, is not subject to the provisions of Section 4 (f).

This letter serves to clarify the comments made in my letter dated July 24, 2004. I hope this information is helpful. Please feel free to contact me at 214-670-4103 should you have any questions.

Sincerely,

Michael E. Hellmann

Michael Hellmann, Sr. Park Planner
Park and Recreation Department
Michael.hellmann@dallascityhall.com

DEPARTMENT OF PARK AND RECREATION CITY HALL, 6FN 1500 MARILLA DALLAS, TEXAS 75201 TELEPHONE 214/670-4100
It is our mission to enhance the quality of life for our customers by providing leisure, cultural and educational services while preserving, conserving and promoting our natural and physical resources.

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX A-2

# AGENCY AND PUBLIC PARTICIPATION EVENTS

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX A-2 - CONTENTS LIST

## AGENCY AND PUBLIC PARTICIPATION EVENTS


| Item | Topic | Date | Page |
|---|---|---|---|
| Agency and Public Participation Events | | | 1 – 11 |
| Public Scoping Meeting Summary | | 7-8-99 | 12 – 15 |
| CAWG List and Meeting Attendance Summary | | | 16 – 19 |

THIS PAGE INTENTIONALLY LEFT BLANK

# AGENCY AND PUBLIC PARTICIPATION EVENTS

| Date | Category | Event |
|---|---|---|
| May 17, 1999 | AC | Conducted Interagency Scoping Meeting (FHWA, TxDOT, USACE, EPA, City of Dallas, NTTA) |
| June 16, 1999 | | Notice of Intent to Prepare an EIS for Trinity Parkway Published in Federal Register |
| June 29, 1999 | IET | Trinity River Executive Team Meeting* |
| July 6, 1999 | AC | Coordination with City of Dallas and USACE staff regarding scope of the NTTA EIS |
| July 8, 1999 | OM | Conducted Public Scoping Meeting |
| July 27, 1999 | IET | Trinity Executive Team Meeting |
| August 10, 1999 | AC | Conducted Interagency Coordination Scoping Meeting and Bus Tour of Project Corridor (FHWA, TxDOT, USACE, EPA, City of Dallas, NTTA) |
| August 24, 1999 | IET | Trinity Executive Team Meeting |
| September 8, 1999 | AC | Conducted Interagency Cultural Resource Scoping Meeting Bus Tour of Project Corridor (FHWA, TxDOT, USACE, EPA, City of Dallas, NTTA) |
| September 21, 1999 | OP | Presentation to Trinity River Corridor Citizens Committee Transportation Subcommittee (Matt Craig) |
| September 28, 1999 | IET | Trinity Executive Team Meeting |
| October 4, 1999 | CAWG | Conducted first in a series of CAWG Meetings<br>Topics discussed: introductions and role of citizen advisory work group, overview of engineering issues, and overview of environmental issues. |
| October 26, 1999 | IET | Trinity River Executive Team Meeting |
| October 30, 1999 | CAWG | Study Corridor Bus Tour for CAWG Members |
| November 3, 1999 | OP | Presentation to the Dallas Plan Conference |
| November 7, 1999 | OP | Presentation to Richardson Church Group |
| November 8, 1999 | OP | Presentation to the TRCCC Recreation Sub-committee |
| November 9, 1999 | AC | Tour of Study Corridor with City of Dallas staff |
| November 10, 1999 | CAWG | Tour of Study Corridor with CAWG members |
| November 17, 1999 | OP | Presentation to West Dallas Business Association |

| Date | Category | Event |
|---|---|---|
| November 22, 1999 | IET | Trinity Executive Team Meeting |
| November 30, 1999 | BF | Presentation to the NTTA Board of Directors |
| December 13, 1999 | CAWG | Conducted second in a series of CAWG Meeting<br>Topics discussed: alternative alignments and typical sections, review of EIS format and status; overview of Dallas Trinity River Master Implementation Plan Access points & types. |
| December 27, 1999 | IET | Trinity Executive Team Meeting |
| January 4, 2000 | AC | Meeting with TRCCC and Dallas Landmark Commission |
| January 6, 2000 | AC | Interagency meeting with State Historic Preservation Officer to define Cultural Resources Area of Potential Effects |
| January 10, 2000 | CAWG | Conducted third in a series of CAWG Meeting<br>Topics discussed: Trinity Parkway Corridor MIS Scope versus Trinity Parkway EIS Scope, update on engineering design development and other issues, ramp connections to IH-35 south. |
| January 25, 2000 | AC | Presentation to city of Dallas and USACE staff regarding scoping issues associated with the NTTA EIS |
| January 25, 2000 | IET | Trinity Executive Team Meeting |
| February 8, 2000 | OP | Presentation to West Dallas Business Associations |
| February 14, 2000 | CAWG | Conducted fourth CAWG Meeting<br>Topics discussed: hazardous material site assessments, cultural resources and parklands (historic/archaeological and Section 4(f), status of community impact analysis - land use, displacements, and Environmental Justice, and update on engineering design development and other issues. |
| February 22, 2000 | IET | Trinity Executive Team Meeting |
| February 24, 2000 | OP | Meeting with T.R. Hoover (South Dallas) Neighborhood Association |
| February 29, 2000 | OP | Presentation to TRCCC Transportation Subcommittee |
| March 1, 2000 | AC | Coordination meeting held with City of Dallas to discuss EIS coordination on lakes and levee improvements |
| March 2, 2000 | AC | Briefing held with Dallas County Judge Jackson |
| March 13, 2000 | CAWG | Conducted fifth CAWG Meeting<br>Topics discussed: energy and utility relocations, natural resources (wetlands, woodlands, endangered species), visual impact analysis, and update on engineering design development and other issues. |
| March 16, 2000 | OP | Luncheon held for setting up and attending information displays at Stemmons Corridor Business Association |

| Date | Category | Event |
|---|---|---|
| March 23, 2000 | PM | Public Meeting conducted in South Dallas |
| March 28, 2000 | IET | Trinity Executive Team Meeting |
| March 29, 2000 | AC | Briefing with State Representative Yvonne Davis |
| March 30, 2000 | OP | Meeting with Jim Sherman at ExxonMobile |
| April 3, 2000 | AC | Meeting with City of Dallas Corp of Engineers and FHWA to discuss EIS coordination |
| April 5, 2000 | AC | Briefing with Dallas County Judge Jackson |
| April 6, 2000 | OP | Presentation to the Water Environment Association of Texas (WEAT) |
| April 10, 2000 | CAWG | Conducted sixth CAWG Meeting<br>Topics discussed: update on visual assessment, transportation impacts, temporary effects during construction, water quality, and update on engineering design development and other issues. |
| April 17, 2000 | OP | Meeting with Freightliner Corporation representatives |
| April 19, 2000 | BF | Presentation to NTTA Board - Project Update |
| April 25, 2000 | IET | Trinity Executive Team Meeting |
| May 8, 2000 | AC | Presentation to City of Dallas Transportation - Telecommunicating Subcommittee |
| May 8, 2000 | CAWG | Conducted seventh CAWG Meeting<br>Topics discussed: traffic modeling, toll rates, and collection methods, toll plaza layout and design, and update on engineering design development and other issues. |
| May 18, 2000 | OP | Annual meeting of the Stemmons Corridor Business Association |
| May 19, 2000 | OP | Briefing to the Greater Dallas Chamber of Commerce |
| May 22, 2000 | AC | Presentation to City of Dallas Transportation - Telecommunicating Subcommittee |
| May 22, 2000 | AC | Sub-committees Briefing to EPA and NEPA staff with City of Dallas and NTTA |
| May 23, 2000 | OP | Meeting with the TR Hoover Community Development Corporation (Ideal Neighborhood Association) |
| May 30, 2000 | IET | Trinity Executive Meeting |
| June 5, 2000 | AC | Briefing Dallas County Judge Jackson |

| Date | Category | Event |
|---|---|---|
| June 12, 2000 | CAWG | Conducted eighth CAWG Meeting<br>Topics discussed: hydraulic analysis, introduction to air quality analysis, introduction to noise analysis, and update on engineering design development and other issues. |
| June 27, 2000 | IET | Trinity Executive Team Meeting |
| June 28, 2000 | AC | Agency Coordination Meeting to Review Scope and incorporate Dallas Lake into EIS |
| July 25, 2000 | IET | Trinity Executive Meeting |
| July 25, 2000 | PM | Conducted Public Meeting for Industrial Corridor Businesses |
| August 11, 2000 | AC | Agency Coordination Meeting to discuss EIS formatting and Dallas Lake inclusion |
| August 18, 2000 | AC | Meeting with EPA staff to discuss Environmental Justice |
| August 22, 2000 | IET | Trinity Executive Team meeting |
| August 29, 2000 | AC | City of Dallas City Manager Briefing |
| September 6, 2000 | OP | Presentation to the Stemmons Corridor Business Association |
| September 11, 2000 | CAWG | Conducted tenth CAWG Meeting<br>Topics discussed: incorporation of lakes into EIS, traffic analysis, hydraulic analysis, cost estimates and right-of-way needs, overview of alternatives EIS evaluation matrix, and remaining EIS work and schedule. |
| September 14, 2000 | OP | Exhibit displays and attendance at the Stemmons Corridor Business Association meeting |
| September 15, 2000 | AC | Coordination meeting with TxDOT and NCTCOG |
| September 19, 2000 | OP | Presentation to the TRCCC Economic Development and Transportation Subcommittees |
| September 20, 2000 | | Presentation to the NTTA Board Project Update and Preliminary Findings |
| September 26, 2000 | IET | Trinity Executive Team Meeting |
| October 3, 2000 | AC | Agency Coordination meeting to discuss USACE combining Floodway EIS into a Joint Supplemental EIS with NTTA EIS |
| October 18, 2000 | OP | Briefing to Richardson Chamber of Commerce Transportation Committee |
| October 24, 2000 | IET | Trinity Executive Team Meeting |
| October 30, 2000 | AC | Briefing by Dallas Asst. City Manager to Dallas City Council followed by Bus Tour of Study Area |

| Date | Category | Event |
|---|---|---|
| October 30, 2000 | BF | Briefing by NTTA to Dallas Mayor's Trinity River Interagency Summit |
| October 31, 2000 | AC | Presentation and Briefing to Dallas City Manager and Assistant City Manager |
| November 15, 2000 | AC | Briefing and presentation to Dallas City Council |
| November 28, 2000 | AC | Coordination meeting with Corps of Engineers to discuss excavation plan |
| November 30, 2000 | AC | Briefing to State Representative Yvonne Davis |
| December 5, 2000 | IET | Trinity Interagency Executive Team Meeting |
| December 27, 2000 | OP | 10:00 - 11:00 AM Radio Broadcast - KRLD 1080AM - The Charlie Jones Show - Regarding Trinity River. Guest host Ms. Laura Miller (City Councilwomen). Panel guests included Honorable Lee Jackson (Dallas County), Mr. Walter Skipwith (Halff Associates, Inc.), and Mr. Ned Fritz via telephone. |
| January 10, 2001 | OP | Briefing to Stemmons Corridor Business Association Board of Directors |
| January 17, 2001 | AC | Meeting and field trip with members of Texas Historical Commission, TxDOT Environmental, TxDOT Dallas, NTTA, City of Dallas, and Consultant Architect to categorize structures displaced by each alternative. |
| January 23, 2001 | IET | Trinity Interagency Executive Team Meeting |
| February 5, 2001 | OP | Briefing to Oak Cliff Chamber of Commerce Board of Directors |
| February 21, 2001 | OP | Briefing to the Dallas Chapter of American Society of Landscape Architects |
| February 27, 2001 | IET | Trinity Interagency Executive Team Meeting |
| March 8, 2001 | IET | Trinity Interagency Executive Team Meeting |
| March 26, 2001 | IET | Trinity Interagency Executive Team Meeting |
| April 10, 2001 | OP | Oak Cliff Chamber of Commerce Development Meeting |
| April 19, 2001 | AC | Mayor's Summit on the Trinity River Corridor with members of USACE, TxDOT, NTTA, Texas Parks and Wildlife, EPA, and City of Dallas |
| April 19, 2001 | OP | Presentation to the American Institute of Architects – Dallas–Fort Worth Chapter |
| April 24, 2001 | IET | Trinity Interagency Executive Team Meeting |

| Date | Category | Event |
|---|---|---|
| May 3 – 31, 2001 | OP | Trinity River Corridor Comprehensive Land Use Plan Stakeholders Meetings Schedule (16 Meetings) |
| May 3, 2001 | OP | Presentation to the Lovers Lane Methodist Church – North Dallas Shepard's Center |
| May 22, 2001 | IET | Trinity Interagency Executive Team Meeting |
| July 2, 2001 | OP | Presentation to the Oak Cliff Chamber of Commerce |
| July 19, 2001 | OP | Presentation to the Oak Cliff Chamber of Commerce |
| July 24, 2001 | IET | Trinity Interagency Executive Team Meeting |
| August 10, 2001 | OP | Briefing to Highland Park Mayor and City Council Committee |
| August 10, 2001 | AC | Meeting with EPA and NTTA to review alternatives and Environmental Justice overview |
| August 22, 2001 | AC | Coordination meeting held with City of Dallas, USACE, FHWA, NTTA and EPA to discuss Joint Development Projects and Streamlining the Supplemental EA with the DEIS |
| August 28, 2001 | IET | Trinity Interagency Executive Team Meeting |
| September 10, 2001 | OP | Blachard & NTTA Coordination Meeting |
| September 12, 2001 | AC | Coordination Meeting with Operation, Planning and Regulatory personnel at USACE, with City of Dallas and NTTA to overview alternatives within the Dallas Floodway and operations design criteria for the levees |
| September 19, 2001 | OP | Presentation TRCCC Transportation and Economic Development Subcommittees |
| September 25, 2001 | IET | Trinity Interagency Executive Team Meeting |
| October 2, 2001 | AC | Small Group Coordination Meeting |
| October 2, 2001 | OP | Trinity Commons Bus Tour |
| October 11, 2001 | OP | Mayor's Summit Preparation |
| October 15, 2001 | OP | Urban Land Institute Briefing |
| October 23, 2001 | IET | Trinity Interagency Executive Team Meeting |
| October 25, 2001 | OP | Dallas Assembly Briefing |
| December 4, 2001 | IET | Trinity Interagency Executive Team Meeting |
| December 12, 2001 | OP | Dallas Real Estate Council Presentation |
| January 22, 2002 | IET | Trinity Interagency Executive Team Meeting |

| Date | Category | Event |
|---|---|---|
| February 19, 2002 | IET | Trinity Interagency Executive Team Meeting |
| March 26, 2002 | IET | Trinity Interagency Executive Team Meeting |
| April 19, 2002 | BF | Dallas Councilman Leo Chaney |
| April 20, 2002 | IET | Trinity Interagency Executive Team Meeting |
| April 26, 2002 | BF | Presentation to City of Dallas Council and Mayor Miller |
| May 28, 2002 | IET | Trinity Interagency Executive Team Meeting |
| May 28, 2002 | PM | Economic Development of Trinity Corridor |
| June 2002 | OP | Mayor's Summit Presentation |
| June 25, 2002 | IET | Trinity Interagency Executive Team Meeting |
| July 23, 2002 | IET | Trinity Interagency Executive Team Meeting |
| August 1, 2002 | OP | Dallas Urban Design consultant pre-proposal Meeting |
| August 27, 2002 | IET | Trinity Interagency Executive Team Meeting |
| September 5, 2002 | OP | Dallas Urban Design Consultant Kick Off Meeting |
| September 9, 2002 | BF | Dallas Council Transportation and Telecommunication Committee (CTTC) Meeting |
| September 12, 2002 | AC | Meeting with Dallas and NCTCOG for Sept. 23 Council CTTC meeting |
| September 23, 2002 | BF | Dallas Council CTTC Meeting |
| September 24, 2002 | IET | Trinity Interagency Executive Team Meeting |
| October 3, 2002 | AC | Dallas Urban Design Coordination Meeting |
| October 14, 2002 | BF | Dallas Council CTTC Meeting |
| October 16, 2002 | AC | Dallas Urban Design Coordination Meeting |
| October 18, 2002 | AC | Meeting with Dallas and NCTCOG for Oct. 28 Council CTTC Meeting |
| October 22, 2002 | IET | Trinity Interagency Executive Meeting |
| October 28, 2002 | BF | Dallas Council CTTC Meeting |
| December 3, 2002 | IET | Trinity Interagency Executive Team Meeting |
| January 13, 2003 | BF | Dallas City Council CTTC Meeting |

| Date | Category | Event |
|---|---|---|
| January 28, 2003 | IET | Trinity Interagency Executive Team Meeting |
| January 30, 2003 | AC | City of Dallas and Oncor Energy regarding Electric Transmission Main Routing |
| February 25, 2003 | IET | Trinity Interagency Executive Team Meeting |
| February 27, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| February 28, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| March 5, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| March 24, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| March 25, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| March 25, 2003 | IET | Trinity Interagency Executive Team Meeting |
| April 9, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| April 15, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| April 16, 2003 | BF | City Council Briefing |
| April 25, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| May 15, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| May 21, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| May 22, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| May 23, 2003 | BF | Dallas Mayoral Briefing |
| May 27, 2003 | IET | Trinity Interagency Executive Team Meeting |
| June 10, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| June 13, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |

| Date | Category | Event |
|---|---|---|
| June 16, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| June 24, 2003 | IET | Trinity Interagency Executive Team Meeting |
| July 2, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| July 16, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| July 22, 2003 | IET | Trinity Interagency Executive Team Meeting |
| August 26, 2003 | IET | Trinity Interagency Executive Team Meeting |
| September 5, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| September 9, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| September 12, 2003 | AC | City of Dallas Mayor's Meeting |
| September 15, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| September 23, 2003 | AC | Trinity Interagency Executive Team Meeting |
| September 25, 2003 | AC | Meeting with City of Dallas, Dallas Plan, NTTA and NCTCOG regarding Urban Design Proposals |
| October 2, 2003 | BF | City of Dallas Mayor's Meeting |
| October 8, 2003 | BF | City of Dallas Council Briefing on EIS Revisions |
| October 10, 2003 | AC | City of Dallas Project Scheduling |
| October 15, 2003 | BF | NTTA Board of Directors Briefing |
| October 17, 2003 | BF | Dallas Mayor meeting with NTTA and TxDOT |
| October 28, 2003 | IET | Trinity Interagency Executive Team Meeting |
| November 4, 2003 | AC | Dallas Councilman Ed Oakley and Oncor |
| November 19, 2003 | AC | City of Dallas, TxDOT and NTTA on UPRR impacts and Woodall Rodgers Extension Coordination |
| November 21, 2003 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| January 16, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| January 20, 2004 | IET | Trinity Interagency Executive Team Meeting |

| Date | Category | Event |
|---|---|---|
| January 27, 2004 | IET | Trinity Interagency Executive Team Meeting |
| February 12, 2004 | AC | City of Dallas, TxDOT and NTTA on UPRR impacts and Woodall Rodgers Extension Coordination |
| February 13, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| February 17, 2004 | CAWG | Conducted CAWG Meeting |
| February 24, 2004 | PM | Public Meeting conducted in West Dallas |
| February 24, 2004 | IET | Trinity Interagency Executive Team Meeting |
| February 26, 2004 | PM | Public Meeting conducted in South Dallas |
| March 9, 2004 | OP | TR Hoover Neighborhood Association Presentation |
| March 9, 2004 | OP | New Hope Baptist Church Presentation |
| March 18, 2004 | OP | Bus Tour for South Dallas Elected Official's Staff & Neighborhoods |
| March 23, 2004 | IET | Trinity Interagency Executive Team Meeting |
| March 27, 2004 | OP | Booth at TR Hoover Neighborhood Association Community Fair |
| March 27, 2004 | OP | Clean South Dallas Joint Neighborhood Associations' Meeting |
| April 9, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| April 21, 2004 | OP | Leadership Dallas Presentation |
| April 23, 2004 | AC | City of Dallas, TxDOT and NTTA on UPRR impacts and Woodall Rodgers Extension Coordination |
| May 14, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| May 25, 2004 | IET | Trinity Interagency Executive Team Meeting |
| June 4, 2004 | | Presentation to the Dallas Regional Mobility Coalition |
| June 14, 2004 | AC | NTTA and TxDOT regarding connection of TP to IH 35 South |
| June 16, 2004 | BF | Representative Yvonne Davis, Councilman Ed Oakley, Councilman Hill |
| June 22, 2004 | BF | Senator Royce West and Representative Terry Hodges. Councilman Oakley. Councilman Chaney. |
| June 22, 2004 | IET | Trinity Interagency Executive Team Meeting |
| June 23, 2004 | BF | New Hope Church - Presentation to Trustees |
| July 27, 2004 | IET | Trinity Interagency Executive Team Meeting |

| Date | Category | Event |
|---|---|---|
| August 18, 2004 | -- | Ceremony to announce Environmental Streamlining of TP by FHWA Administrator Mary Peters and Texas Governor Rick Perry |
| August 24, 2004 | IET | Trinity Interagency Executive Team Meeting |
| September 09, 2004 | BF | St. Phillips Neighborhood Development Corporation |
| September 10, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| September 16-17 2004 | BF | South Dallas Local and State Elected Officials |
| September 18, 2004 | OP | West Dallas Chamber of Commerce |
| September 21, 2004 | IET | Trinity Interagency Executive Team Meeting |
| October 19, 2004 | BF | FHWA Deputy Director Briefing and Bus Tour |
| October 26, 2004 | IET | Trinity Interagency Executive Team Meeting |
| November 5, 2004 | BF | Dallas Mayor's Meeting with NTTA and TxDOT |
| November 16, 2004 | BF | South Dallas Local and State Elected Officials |

**NOTES**:
* **Trinity River Executive Team** includes staff from the following organizations: City of Dallas Trinity River Corridor Project, NCTCOG, USACE (Fort Worth District and Dallas Division); TCEQ (Arlington Field Office), EPA (Region VI), TxDOT (Dallas District), and NTTA.

**Acronym Legend**
AC: Agency Coordination
IET: Interagency Executive Team
PM: Public Meeting
OP: Outside Presentation
CAWG: Community Advisory Work Group (Community Advisory Work Group consists of 54 representatives from neighborhood, businesses, civic groups, landowners, and environmental groups.) Meetings are open to the public.
BF: Briefing

**NORTH TEXAS TOLLWAY AUTHORITY**
**PUBLIC SCOPING MEETING**
**TRINITY PARKWAY**
**ENVIRONMENTAL IMPACT STATEMENT**
**JULY 8, 1999**

## 1.0 Executive Summary

Pursuant to the National Environmental Policy Act (NEPA), on July 8, 1999, a public scoping meeting was conducted for the Trinity Parkway Environmental Impact Statement (EIS) at the Ramada Plaza Hotel, located at 1011 S. Akard Street in Dallas, Texas. The purpose of the meeting was to initiate public/agency involvement for the scoping process, which would be used to identify the range of alternatives, environmental impacts, and significant issues to be addressed in the EIS. The meeting opened with an approximate one-hour technical presentation, summarizing the role of the North Texas Tollway Authority (NTTA), the results of the TxDOT *Trinity Parkway Corridor Major Transportation Investment Study (MTIS)*, and information concerning the EIS process, including public/agency involvement activities, environmental issues, alternatives, and the project schedule. After the technical presentation and a short intermission, the attendees were asked to present verbal comments concerning scoping issues to be addressed in the EIS.

## 2.0 Meeting Format and Summary of Technical Presentation

Project exhibits were displayed before, during and after the meeting. The exhibits depicted the study corridor with four preliminary Build Alternatives (one along Industrial Boulevard and three along the Dallas Floodway), existing study corridor land use, the cause of the existing and projected traffic problems, and proposed cross-sections for the four preliminary Build Alternatives. The city of Dallas included an exhibit illustrating the proposed Trinity River Master Implementation Plan. Meeting handouts along with the city of Dallas publication *Trinity River Corridor 1998 Year in Review* were distributed at the sign-in table prior to the meeting.

The meeting began with opening remarks and introductions by Mr. Jerry Hiebert, Executive Director, with the NTTA. Mr. Hiebert provided an overview of the NTTA and discussed the reasons for sponsoring the preparation of the EIS. He presented the meeting's agenda and methods for the public to offer comments on the study.

Mr. Martin Molloy, President of Halff Associates, Inc., summarized the results of the TxDOT *Trinity Parkway Corridor MTIS*, which explained the cause of existing and future traffic problems in the Trinity River Corridor and presented elements of the adopted MTIS Plan of Action, including the proposed reliever route (Trinity Parkway) for solving traffic problems. Included was a discussion of the four preliminary Build Alternatives selected from the MTIS for the reliever route, which include the following:

Industrial Boulevard Alternative

- An elevated roadway (double-deck) over existing Industrial Boulevard with eight general-purpose lanes.

Trinity River Alternatives

- A combined parkway with eight general purpose lanes on the river side of the east levee,
- A split parkway with eight general purpose lanes on the river side of both levees, and
- A split parkway with eight general-purpose lanes on the land side of both levees.

Typical sections and computer renderings of the alternatives were displayed and discussed. In addition, details were presented concerning possible access to IH-30 and IH-35E along the reliever route near downtown Dallas.

Mr. David Morgan presented an overview of the EIS process, including NEPA requirements, the EIS scoping process, plans for public/agency involvement, environmental resource issues, and the anticipated project schedule. Copies of the slides presented during the technical presentation are presented in Appendix A.

Mr. Hiebert concluded the technical presentation by asking for public comments concerning the project. Following a brief intermission, citizens spoke before the group offering their comments. Mr. Hiebert adjourned the meeting after conclusion of the public comment session.

## 3.0 DISPLAYS

Exhibits were displayed showing background on the cause of the existing and projected traffic problems, the proposed study corridor depicted with the four preliminary Build Alternatives, existing land use within the study area, and diagrams and typical sections of alternative routes evaluated during the TxDOT MTIS. Included was an exhibit illustrating the proposed Trinity River Master Implementation Plan provided by the city of Dallas.

## 4.0 HANDOUTS

- Meeting Agenda
- Copy of the slides used during the technical presentation
- Trinity Parkway EIS - Information Sheet
- Trinity Parkway EIS - Public Scoping Meeting Written Comment Sheet
- City of Dallas - *Trinity River Corridor 1998 Year in Review*

Copies of the meeting handouts are presented in Appendix B.

## 5.0 MEETING DETAILS

| | |
|---|---|
| Date: | July 8, 1999 - 7:00 PM to 9:30 PM |
| Location: | Ramada Plaza Hotel<br>1011 S. Akard Street<br>Dallas, Texas 75215 |
| Attendance: | Approximately 130 People |

**Summary of Oral Comments**

Moderator: Mr. Jerry Hiebert, Executive Director, NTTA

The following is a summary of the oral comments received:

- Widespread opposition to a roadway alternative built between the levees
- Widespread support for a roadway built outside of the levees, including Industrial Boulevard
- Concerns about potential loss of trees caused by the river alternatives
- Concerns about increased flooding downstream due to an alternative built between the levees
- Concerns about air, noise, and visual effects caused by the reliever roadway
- Concerns about a reliever roadway built between the levees and its effect on planned recreational facilities within the Dallas Floodway
- Concerns about the reliever roadway dividing communities located on both sides of the river
- Concerns about building a reliever roadway instead of developing mass transit alternatives
- Concerns about the river alternatives and their potential effects on the migratory path of certain bird species
- Concerns about the effects of urban development and adjacent land use changes caused by the reliever roadway
- Concerns about exceeding the approved funding of the reliever roadway due to the proposed signature bridges across the river
- Concerns about costs associated with design and operation as a toll facility

## 6.0 SUMMARY OF WRITTEN COMMENTS

During the public scoping meeting, written comment sheets were distributed. The comment sheets were provided to the attendees to state general comments, suggestions or concerns (e.g. alternatives, environmental concerns, significant issues, etc.) to be addressed in the EIS. Six comment sheets during the meeting and by direct mail. In addition, 23 letters were received. Copies of the written comments received are presented in Appendix C.

## 7.0 MEETING NOTIFICATION PROCESS

**Direct Mailings**

Mail lists provided by TxDOT, Army Corps of Engineers, and the Trinity River Corridor Citizens Committee were used for direct mailings to notify interested citizens, property owners, and elected officials of the meeting. Each mailing included a cover letter and the public meeting notice. A copy of the letter circulated is presented in Appendix D.

**Legal Advertisements**
Legal notices of the meeting were published in *The Dallas Morning News* on June 23, 1999 the *Dallas Weekly* on June 29, 1999 and the *El Sol de Texas* on June 25, 1999. Copies of the legal notices are presented in Appendix D.

**Newspaper Advertisements**
A paid advertisement announcing the meeting was published in *The Dallas Morning News* on July 7, 1999. A copy of the advertisement is presented in Appendix D.

## 8.0 MEETING RECORDS

**Photographs**
Photographs taken during the July 8, 1999 public scoping meeting are presented in Appendix E.

**Transcript**
Court Reporters Associated prepared a transcript of the proceedings of the public scoping meeting. A copy of the transcript is presented in Appendix F.

**Record of Attendance**
Copies of the sign-in sheets completed during the meeting are presented in Appendix G.

## TABLE A-2.1. COMMUNITY ADVISORY WORK GROUP - TRINITY PARKWAY EIS

| Rep | Title | First Name | Last Name | Company | Address |
|---|---|---|---|---|---|
| Staff | Mr. | Greg | Ajemian | City of Dallas | OCMC, 320 E. Jefferson |
| Staff | Mr. | Chris | Anderson | NTTA - Planning Director | P. O. Box 260729 |
| Alt | Mr. | Monte | Anderson | Best Southwest Chamber | 2021 N. Hampton, Ste. 140 |
| Rep | Ms. | Shirley | Augurson | Environmental Protection Agency | US EPA - Region 6 (6RA-DJ) 1445 Ross Avenue, Suite 1200 |
| Staff | Ms. | Alva | Baker | Baker Consulting Associates | 2401 South Blvd. |
| Rep | Mr. | Shallie | Bey | W. Dallas Neighborhood Development Corp. | 2907 N Hampton Rd |
| Staff | Mr. | Mark | Bouma | NTTA | 16610 Dallas Parkway, Suite 2300 |
| Rep | Ms. | Carol | Brandon | Dallas Park & Recreation Board | 116 Halsey |
| Rep | Mr. | Charles D. | Briner | Save Open Space | 8924 Capri Drive |
| Rep | Ms. | Barbara | Brown | Big City Crushed Concrete, Inc. | 5900 Willow Lane |
| Alt | Mr. | Mason C. | Brown | Big City Crushed Concrete, Inc. | PO Box 29816 |
| Rep | Mr. | John | Cappello, Pres. | West Dallas Chamber | 2424 N. Westmoreland Road |
| Rep | Mr. | Bill | Ceverha | New Trinity Coalition | 2911 Turtle Creek Blvd., #900 |
| Rep | Mr. | John | Clark | TRCCC - Econ. Dev. Comm. Chair | 1912 Shumard Oak Lane |
| Staff | Mr. | Matthew | Craig | Halff Associates | 8616 Northwest Plaza Drive |
| Alt | Mr. | Tom | Crow | Sierra Club | 5715 Surrey Square Lane |
| Alt | Ms. | Diane | Curry | Dallas Park & Recreation Board, President | 6658 Ridgeview Circle |
| Staff | Mr. | Harold | Denney | Administrator Assistant County Commissioner District 1, Jim Jackson | 2311 Joe Field Road |
| Staff | Ms. | Rebecca | Dugger, P.E. | City of Dallas | 320 East Jefferson, Room 107 |
| Staff | Mr. | David | Dybala, P.E. | City of Dallas | Public Works Department; City Hall 1500 Marilla, Room 6BN |
| Alt | Ms. | Lela | Edward, Chair | W. Dallas Neighborhood Development Corp. | 2907 N Hampton Rd |
| Rep | Ms. | Lillie Mae | Fain | E. Oak Cliff Neighborhood District 10th Street Comm. Dev. District | 640 S. Moore Street |
| Rep | Mr. | E. Larry | Fonts | Central Dallas Association | 1201 Elm Street, Suite 5310 |
| Rep | Mr. | Brad | Forslund | JPI Properties | 600 E. Las Colinas Blvd., Suite 1800 |
| Alt | Mr. | Ned | Fritz | Texas Committee on Natural Resources | 4144 Cochran Chapel |
| Alt | Mr. | Thomas | Fry | Texas Trails Network, President-Elect | PO Box 469002 |
| Rep | Ms. | Shirley | Garcia | Magna Vista /Cedar Crest Neighborhood District - Cadillac Heights | 814 La Salle |
| Rep | Mr. | Reginald | Gates | Dallas Black Chamber of Commerce | 2838 Martin L. King, Jr. Blvd. |
| Alt | Ms. | Esther | Gebhardt | Greater Dallas Chamber of Commerce | 1201 Elm Street, Suite 2000 |
| Rep | Mr. | David | Gray | Texas Committee on Natural Resources | 9432 Viewside Drive |
| Staff | Mr. | Bill | Hale, P.E. | TxDOT | PO Box 133067 |
| Rep | Mr. | Lee | Halford, Jr. | Industrial Properties Corporation | 400 East Carpenter Freeway |
| Alt | Ms. | Donna | Halstead, Pres. | Dallas Citizen's Council | 901 Main Street, # 6212 |
| Alt | Mr. | Gregg | Hamill | Industrial Properties Corporation | 400 East Carpenter Freeway |
| Rep | Mr. | Elton | Harwell | Greater Dallas Planning Council | 7702 Queens Garden Drive |
| Rep | Mr. | Welton | Haynes | Magna Vista /Cedar Crest Neighborhood District | 1438 Bonnie View Rd |
| Alt | Mr. | Tad | Heimburger | N. Oak Cliff Neighborhood District | 2158 Kessler Court |
| Alt | Mr. | Robert | Hensley, Jr. | Mixmaster Bus. Assoc. | 424 S. Industrial Blvd |

| Rep | Title | First Name | Last Name | Company | Address |
|---|---|---|---|---|---|
| Rep | Mr. | Don | Hicks | Oak Cliff Chamber of Commerce Chairman Transportation Committee | 2909 S. Hampton Road, LB #32 |
| Staff | Mr. | Jerry | Hiebert | NTTA | P. O. Box 260729 |
| Rep | Ms. | Joanne | Hill | Friends of the Trinity | 4518 Ridge Rd |
| Staff | Mr. | John | Hoffman | Halff Associates | 8616 Northwest Plaza Drive |
| Rep | Mr. | Craig C | Holcomb, Chair | TRCCC | PO Box 150248 |
| Rep | Mr. | Mark | Housewright | TRCCC Transportation Comm. Chair | PO Box 4650 |
| Alt | Mr. | Rick | Howell | Central Dallas Association | 1201 Elm Street, Suite 5310 |
| Staff | Ms. | Donna | Huerta | NTTA | P. O. Box 260729 |
| Alt | Ms. | Ann | Huntington | Trammell Crow Company | 2200 Ross Ave., #3700 |
| | Mr. | Lee | Jackson, Chancellor | University of North Texas System | P. O. Box 311220 |
| Rep | Mr. | Charles | Johnson | TRCCC - Vice Chairman | 3055 S. Marsalis Ave. |
| Rep | Ms. | Debra | Johnson | W. Dallas Neighborhood District Voice of Hope Ministries | 4144 Norco |
| Alt | Mr. | Greg | Johnson | Dallas Methodist Hospitals Foundation | PO Box 655999 |
| Alt | Mr. | Norris | Johnson | S. Dallas Neighborhood District | 3419 Edgewood |
| Rep | Ms. | Maureen | Jones | N. Oak Cliff Neighborhood District | 1136 Woodlawn Ave |
| Alt | Mr. | Ronald | Jones | S. Dallas Neighborhood District | 1507 Brook Valley Court |
| Staff | Ms. | Jill | Jordan, P.E. | City of Dallas | City Hall, 1500 Marilla Street, 4DN |
| Rep | Mr. | Rick | Keeler | Best Southwest Chamber | 2021 N. Hampton, Ste. 140 |
| | Honorable Judge | Margaret | Keliher | Dallas County Commissioners Court | 411 Elm Street |
| Alt | Mr. | David | Kerr | Greater Dallas Planning Council | 3710 Rawlins, LB 21, Suite 830 |
| Rep | Mr. | Mike | Koesling | Woodbine Development Corp. | 1445 Ross Ave., Suite 5000 |
| Alt | Ms. | Maurine | Lee | Dallas County Audubon Society | 4012 Southwestern Blvd. |
| Alt | Ms. | Kelly | Lindig | Woodbine Development Corp. | 1445 Ross Ave., Suite 5000 |
| Rep | Mr. | Charles | Lively | Trinity Improvement Association | 660 S. Zang Blvd. |
| Rep | Ms. | Rosa | Lopez | W. Dallas Neighborhood District Vecinos Unidos, Inc. | 3603 N. Winnetka Ave |
| Rep | Ms. | Wendy | Lopez | Greater Dallas Chamber of Commerce LopezGarcia Group | 1825 Market Center Blvd., Suite 150 |
| Staff | Mr. | Sam | Lopez | City of Dallas | 1500 Marilla Street |
| Alt | Mr. | Ernest | Lopez, Pres. | West Dallas Business Assoc. | 3110 Ruder Street |
| Alt | Ms. | Kathy | Love | Dallas County Commissioners Court | 411 Elm Street |
| | Ms. | Barbara | Mallory Caraway | Barbara Mallory Caraway & Associates | 1934 Argyle |
| Alt | Ms. | Maxey | Marshall | Magna Vista /Cedar Crest Neighborhood District | 2949 King Cole Circle |
| Staff | Ms | Judy | Marsicano | US Army Corps of Engineers | 819 Taylor Street, Room 3A24 P.O. Box 17300 |
| Alt | Mr. | Joe | May | Cedars/Fair Park/E. Dallas Neighborhood District | 2206 N Garrett |
| Rep | Ms. | Dorothy | McCary | W. Dallas Neighborhood District (Ledbetter Gardens Neighborhood) | 4132 Norco |
| Alt | Ms. | Vicki | Meek | Cedars/Fair Park/E. Dallas Neighborhood District/S. Dallas Cultural Center | 3400 Fitzhugh |
| Rep | Mr. | Bud | Melton | Texas Trails Network | PO Box 141318 |
| Rep | Mr. | Bennett | Miller | Cedars/Fair Park/E. Dallas Neighborhood District | 1711 S. Ervay Street |
| Rep | Ms. | Jackie | Mixon | S. Dallas Neighborhood District | 2558 Starks |
| Staff | Mr. | Martin | Molley | Halff Associates | 8616 Northwest Plaza Drive |
| Alt | Mr. | Robert | Moore | Oak Farms Dairy | PO Box 655178 |
| Staff | Mr. | David | Morgan | Halff Associates | 8616 Northwest Plaza Drive |
| Alt | Mr. | John | Morris | N. Oak Cliff Neighborhood District | 1302 Eastus Drive |

| Rep | Title | First Name | Last Name | Company | Address |
|---|---|---|---|---|---|
| Staff | Mr. | Michael | Morris | NCTCOG | Centerpoint II<br>616 Six Flags Dr., Suite 220 |
| Rep | Mr. | Alford | Neal | E. Oak Cliff Neighborhood District | 438 Ave E |
| Staff | Mr. | Tim | Nesbitt | TxDOT | PO Box 133067 |
| Alt | Mr. | David | Newman | Stemmons Corridor Business Assoc. | 8303 Chancelor Rd. |
| Alt | Mr. | Charles | O'Neal | Dallas Black Chamber of Commerce | 2838 Martin L. King, Jr. Blvd. |
| Rep | Ms. | Diane | Ragsdale | S. Dallas Neighborhood District<br>Innercity CDC | 4907 Spring Ave. |
| Rep | Mr. | Campbell | Read | Dallas County Audubon Society | 5839 Monticello |
| Staff | Ms. | Michelle | Releford | TxDOT | P.O. Box 133067 |
| Alt | Dr. | I.M. | Rice | Trinity Improvement Association | 660 S. Zang Blvd. |
| Staff | Mr. | Gene | Rice | US Army Corps of Engineers | 819 Taylor Street, Room 3A24<br>P.O. Box 17300 |
| Alt | Mr. | Burl D. | Ridge | Magna Vista /Cedar Crest Neighborhood District | 1935 Cedar Crest Blvd |
| Rep | Ms.. | Renee | Riggs | Stemmons Corridor Business Assoc. | P.O. Box 568887 |
| Rep | Mr. | Craig | Roberts | Oak Farms Dairy | PO Box 655178 |
| Rep | Mr. | Sherman | Roberts | Cedars/Fair Park/E. Dallas Neighborhood District (ORCDC) | 5826 Fox Hill Lane |
| Rep | Mr. | Warren L. | Rutherford | Dallas Methodist Hospitals Foundation | 400 S. Zang Blvd. Ste1214, LB56 |
| Alt | Ms. | Nancy | Ruttle Loyd, Pres. & CEO | Oak Cliff Chamber of Commerce | 660 South Zang Blvd. |
| Alt | Ms. | Patricia | Stephens | W. Dallas Neighborhood District | 3643 Gallagher St |
| Staff | Mr. | Rick | Thomas | Halff Associates | 8616 Northwest Plaza Drive |
| Rep | Mr. | Jed | Thompson | Blackard Developments | 5385 FM 2934 |
| Rep | Mr. | Arturo | Violante | Dallas Hispanic Chamber of Commerce | 4622 Maple |
| Rep | Ms. | Mary | Vogelson | Save Open Space | 9316 Guernsey |
| Rep | Mr. | John | Ward | West Dallas Business Assoc.<br>Dallas Transfer & Terminal | 2424 N. Westmoreland |
| Alt | Ms. | Debra | Washington | E. Oak Cliff Neighborhood District<br>10th Street Comm. Dev. District | PO Box 3759 |
| Rep | Mr. | Nelvin | Washington | W. Dallas Neighborhood District | 4307 Bernal Drive |
| Rep | Mr. | Joe | Wells | Sierra Club | 2726 Kingston Street |
| Rep | Ms. | Sarah | Wilke | W. Dallas Neighborhood District | 3100 Crossman |
| Rep | Mr. | Charlie | Williams | S. Central Comm. Dev. Corp. | 9412 Jill Lane |
| Staff | Mr. | Sam | Williams | Baker Consulting Associates | 2401 South Blvd. |
| Rep | Mr. | Marcus | Wood | Mixmaster Bus. Assoc. | 6060 N. Central Expressway, Ste. 333 |

**TABLE A-2.2. MEETING ATTENDANCE SUMMARY**

| Meeting Date | Citizen's Total | City/County Officials | NTTA & Staff | Meeting Total |
|---|---|---|---|---|
| October 4, 1999 | 53 | 1 | 4 | 58 |
| October 30, 1999 (Bus Tour) | 29 | 1 | 5 | 35 |
| December 13, 1999 | 43 | 2 | 7 | 52 |
| January 10, 2000 | 55 | 3 | 8 | 66 |
| February 14, 2000 | 58 | 2 | 9 | 69 |
| March 13, 2000 | 48 | 1 | 9 | 58 |
| April 10, 2000 | 48 | 2 | 8 | 58 |
| May 8, 2000 | 45 | 1 | 7 | 53 |
| June 12, 2000 | 40 | 1 | 7 | 48 |
| September 11, 2000 | 49 | 1 | 12 | 62 |
| February 17, 2004 | 25 | 7 | 9 | 41 |

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX A-3

# NOTICE OF INTENT

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX A-3 - CONTENTS LIST

## NOTICE OF INTENT


| Item | Topic | Date | Page |
|---|---|---|---|
| Notice of Intent | ---- | 06-19-99 | 1 |
| Notice of Intent | ---- | 12-12-00 | 2 |

THIS PAGE INTENTIONALLY LEFT BLANK

new alignments to the east or west of Marysville.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, and local agencies, and to private organizations and citizens who have previously expressed, or are known to have, an interest in this proposal. In addition, scoping meetings will be held during the latter part of 1999. Public notice for these scoping meetings will be given. A public hearing will be held. Public notice will be given of the time and place of the hearing. The draft EIS will be available for public and agency review and comment prior to the public hearing.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address provided above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program)

Issued on: June 7, 1999.

**Robert F. Tally,**

*Chief, Program Delivery Team—North Sacramento, California.*

[FR Doc. 99–15201 Filed 6–15–99; 8:45 am]

BILLING CODE 4910–22–M

---

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

### Environmental Impact Statement: Dallas County, Texas

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of intent.

**SUMMARY:** The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed transportation project in Dallas County, Texas.

**FOR FURTHER INFORMATION CONTACT:** Mr. Walter C. Waidelich Jr., District Engineer, Federal Highway Administration, 300 E. 8th Street, Room 826, Austin, Texas 78701, Telephone (512) 916–5988.

**SUPPLEMENTARY INFORMATION:** The FHWA, in cooperation with the Texas Department of Transportation (TxDOT) and the North Texas Tollway Authority (NTTA), will prepare an environmental impact statement (EIS) for the Trinity Parkway reliever route from the SH–183/IH–35E interchange to SH–310/US–175 interchange to relieve traffic congestion on IH–35E and IH–30 within the City of Dallas. In 1998. A Major Transportation Investment Study (MTIS) was completed by TxDOT in order to develop a locally-preferred plan to solve transportation problems along the Trinity River corridor in Dallas and to integrate with community plans and goals for the Trinity River resource. The study was focused on transportation needs in the IH–35E/IH–30 interchange on the west side of downtown Dallas, locally known as the ''Mixmaster,'' and the depressed segment of IH–30 south of downtown, locally known as the ''Canyon.'' The MTIS Recommended Plan of Action is comprised of seven elements, which include improvements to existing facilities, improving alternative transportation modes, and constructing a reliever route along the Trinity River. The MTIS considered in detail four corridors for the proposed reliever route. These included Stemmons Freeway (IH–35E), Industrial Boulevard, the east Trinity River levee and the west Trinity River levee.

During the MTIS process, numerous alternatives were evaluated for the reliever roadway. The analysis of effects for each of the reliever roadway alternatives included the estimation of construction and right-of-way costs, traffic capacity considerations, effect on natural and cultural assets, effect on social and economic conditions, impacts on Trinity River projects, number of displacements, effect on access to adjacent properties, and difficulty/disruption in construction. From the preliminary alternatives considered, four build alternatives, one along existing Industrial Boulevard and three along the Trinity River levees, were identified as potential alternative alignments that warrant further study. The principal variations of the three alternatives along the Trinity River levees consist of a combined roadway with eight general purpose lanes along the river side of the east levee; a split parkway with four general purpose lanes along the river side of both levees; and a split parkway with four general purpose lanes along the land side of both levees. The Industrial Boulevard alternative consists of an elevated roadway (double-deck) with eight general purpose lanes and two high-occupancy vehicle (HOV) lanes. These alternatives and the no-build alternative along with any other reasonable alternatives identified during the scoping and public involvement processes will be analyzed in further detail during the EIS review process.

The EIS will include a discussion of the effects of other known and reasonably foreseeable agency actions proposed within the Trinity Parkway corridor study area, which include proposed projects by the US Army Corps of Engineers (USACE) and the City of Dallas. The USACE has proposed flood control improvements consisting of the proposed Dallas Floodway Extension, which encompasses the Dallas Floodway from the AT&SF Railroad near Corinth Street to IH–20; and proposed flood control improvements from the AT&SF Railroad to Royal Lane in Dallas. The USACE has submitted a final EIS for the proposed Dallas Floodway Extension project. The proposed flood control improvements between the AT&SF Railroad and Royal Lane will be evaluated as part of a Programmatic EIS to be completed by the USACE for the Trinity River complex from the southern boundary of Dallas County to the upper reaches of the Trinity River Elm Fork, West Fork, and Clear Fork. The City of Dallas has proposed various Trinity River floodway improvements, which include the construction of lakes, wetlands, hike and bike trails, parks, and other recreational amenities. This project is identified as the City of Dallas Trinity River Master Implementation Plan and is currently in the planning stage.

A public scoping meeting is planned to be held in the summer of 1999. The date will be announced locally at a later time. This will be the first in a series of meetings to solicit public comments on the proposed action. In addition, public hearings will be held. Public notice will be given of the time and place of the meetings and hearings. The Draft EIS will be available for public and agency review and comment prior to the public hearings.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address provided above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of Federal programs and activities apply to this program.)

**Walter C. Waidelich, Jr.,**

*District Engineer, Austin, Texas.*

[FR Doc. 99–15262 Filed 6–15–99; 8:45 am]

BILLING CODE 4910–22–M

under Section 9 of the IFTA Act on March 13, 1998 (63 FR 12572), March 19, 1999 (64 FR 13623), October 15, 1999 (64 FR 56015), and October 24, 2000 (65 FR 64472).

The Government of Israel and the Government of the Hashemite Kingdom of Jordan have agreed to the designation of the Mushatta International Complex (protocol dated November 22, 2000), the El Zay Ready Wear Manufacturing Company Duty Free Area (protocol dated January 12, 2000) and the Al Qastal Industrial Zone (protocol dated November 22, 2000) as Qualifying Industrial Zones. The Government of Israel and the Government of Jordan further agreed that merchandise may enter, without payment of duty or excise taxes, areas under their respective customs control in association with the Mushatta, El Zay and Al Qastal Qualifying Industrial Zones. Accordingly, the Mushatta International Complex, the El Zay Ready Wear Manufacturing Company Duty Free Area and the Al Qastal Industrial Zone meet the criteria under paragraphs 9(e)(1) and (2) of the IFTA Act.

Therefore, pursuant to the authority delegated to me by the President in Proclamation 6955, I hereby designate the Mushatta International Complex, the El Zay Ready Wear Manufacturing Company Duty Free Area and the Al Qastal Industrial Zone, as established by the January 12, 2000 and November 22, 2000 Amending Protocols to the Agreement Between the Government of the Hashemite Kingdom of Jordan and the Government of the State of Israel on Irbid Qualifying Industrial Zone, as Qualifying Industrial Zones under section 9 of the IFTA Act, effective upon the date of publication of this notice, applicable to goods shipped from these Qualifying Industrial Zones after such date.

Dated: December 4, 2000.

**Charlene Barshefsky,**

*United States Trade Representative.*

[FR Doc. 00–31627 Filed 12–11–00; 8:45 am]

BILLING CODE 3901–01–P

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

### Environmental Impact Statement: Dallas County, TX

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of intent.

**SUMMARY:** The FHWA issued a Notice of Intent to prepare an Environmental Impact Statement (EIS) for a Trinity Parkway reliever route, a transportation project, in the **Federal Register** on June 16, 1999 (Volume 64, Number 115). The FHWA is now issuing this supplementary Notice of Intent to include in the EIS a City of Dallas evaluation of a proposed City of Dallas Lake Plan located within the Trinity River Dallas Floodway in Dallas County, Texas. This proposed Lake Plan potentially affects the project corridor for the transportation project, and several of the route alternatives under consideration. Supplementary analysis is needed to fully address the impacts of joint development of these actions.

**FOR FURTHER INFORMATION CONTACT:** Mr. Patrick A. Bauer, P.E., District Engineer, Federal Highway Administration, 300 East Eighth Street, Federal Office Building, Room 826, Austin, Texas 78701, Telephone (512) 536–5950. Mr. Jerry Hiebert, Executive Director, North Texas Tollway Authority (NTTA), 5900 West Plano Parkway, Suite 100, Plano, Texas 75093, Telephone (214) 522–6200.

**SUPPLEMENTARY INFORMATION:** The FHWA, jointly with the Texas Department of Transportation and the NTTA, and in cooperation with the City of Dallas, will prepare an EIS for the Trinity Parkway reliever route and associated improvements in the project corridor. Associated improvements include one or more proposed lakes, recreation amenities, and possible wetlands as identified in the City of Dallas Trinity River Corridor Master Implementation Plan Lake Design and Recreational Amenities Report, which are located within the Dallas Floodway.

Impacts caused by construction and operation of the Trinity Parkway and the Dallas Lake Plan will vary according to the alternatives selected. Generally, these projects may impact floodplains, water quality, air quality, socio-economic conditions, historic and other man-made structures.

The Draft EIS will be available for public and agency review and comment prior to the public hearing. To ensure that the full range of issues related to this proposed action are addressed and all significant issues identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA or NTTA at the address provided above.

Issued on: December 1, 2000.

**Salvador Deocampo,**

*Urban Programs Engineer, Federal Highway Administration.*

[FR Doc. 00–31462 Filed 12–11–00; 8:45 am]

BILLING CODE 4910–22–M

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

### Intelligent Transportation Society of America; Public Meeting

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of public meeting.

**SUMMARY:** The Intelligent Transportation Society of America (ITS AMERICA) will hold a meeting of its Board of Directors on Thursday, January 11, 2001. The meeting begins at 2:00 p.m. and ends at 6 p.m. The letter designations that follow each item mean the following: (I) is an information item; (A) is an action item; (D) is a discussion item. The General Session includes the following items: (1) Introductions and ITS America Antitrust Policy and Conflict of Interest Statements (I); (2) Review & and Approval of August 6, 2000 Board Meeting #35 Minutes and November 5, 2000 #36 Minutes (A); (3) Federal ITS Initiatives Report (I/D); (4) Coordinating Council Report (I/D/A); (5) State Chapters Council Report (I/D); (6) International Affairs Council & World Congresses Reports (I/D); (7) ITS America Trade Association Report (I); (8) Interim President's Report (External Issues) (I/D); (9) Other Business;

**Business Session**

(US DOT participants excused; Board Members, ITS America Members and Staff Only.) (10) Report to the Executive Committee (I/D); (11) Report of the Nominating Committee (I); (12) Report of the Finance Committee and Approval of 2001 Budget (I/D/A); (13) Interim President's Report (Internal Issues)(I/D); (14) Other Business and Schedule for Meetings This Year.

ITS AMERICA provides a forum for national discussion and recommendations on ITS activities including programs, research needs, strategic planning, standards, international liaison, and priorities.

The charter for the utilization of ITS AMERICA establishes this organization as an advisory committee under the Federal Advisory Committee Act (FACA) 5 USC app. 2, when it provides advice or recommendations to DOT officials on ITS policies and programs. (56 FR 9400, March 6, 1991).

# APPENDIX B

# CULTURAL RESOURCES

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX B - CONTENT LIST

## CULTURAL RESOURCES


| Item | Topic | Date | Page |
|---|---|---|---|
| THC | Project review Under Section 106 of the Historic Preservation Act | July 2, 2002 | 1 |
| TxDOT | Section 106: Identification of Historic Properties Targeted for Displacement | June 5, 2002 | 2 - 5 |
| Halff Associates | Report of Directly Impacted Structures (50 years old) | February 27, 2001 | 6 |
| THC | Project Review Under the Antiquities Code of Texas | January 17, 2001 | 7 - 8 |
| THC | Project Review Under the Antiquities Code of Texas - Permit #2302 | April 20, 2000 | 9 - 11 |
| THC | Project review Under Section 106 of the Historic Preservation Act | March 16, 2000 | 12 |
| TxDOT | Section 106: Identification of Potential Effect | March 10, 2000 | 13 |
| Trinity Parkway Project Meeting Minutes | Historical and Archeological Background | January 6, 2000 | 14 - 16 |
| THC | Ancillary Information - eligibility of bridges crossing Dallas Floodway | April 22,1999 | 17 - 18 |
| Lisa Hart, TxDOT – ENV (Historical Studies Branch) | Ancillary information - Continental Street Bridge | January 21, 1999 | 19 - 20 |
| TxDOT – ENV (Cultural Resources Management) | Ancillary Information - Corinth Street Viaduct | March 14, 1995 | 21 - 22 |
| TxDOT – ENV (Archeological Studies Program) | Section 106 and Antiquities Code Coordination | January, 8, 2004 | 23 |
| Locke Liddell & Sapp, LLP to City of Dallas | Section 4(f) – Applicability Request | March 8, 2004 | 24 - 27 |
| FHWA | Tribal Coordination | August 19,2002 | 28 - 33 |
| THC | Antiquities Permit Extension | December 11, 2006 | 34 |
| AR Consultants | Draft Archaeological Testing report | September 7, 2006 | 35 |
| THC | Draft Archaeological Testing report | October 12, 2007 | 36 |
| AR Consultants | Final Archaeological Testing report | November 5, 2007 | 37 |
| AR Consultants | Final Archaeological Testing report | November 27, 2007 | 38 |
| THC | Antiquities Permit - Completed Permit | December 3, 2007 | 39 |

THIS PAGE INTENTIONALLY LEFT BLANK

TEXAS HISTORICAL COMMISSION

*The State Agency for Historic Preservation*

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

cc: CRM

July 2, 2002

TxDOT - ENV
JUL 12 2002
CRM

RECEIVED
JUL 10 2002
TxDOT - ENV

Mario Sanchez, Ph.D., R.A.
Environmental Affairs Division
Texas Department of Transportation
125 E. 11th Street
Austin, Texas 78701-2483

*Re: Project review under Section 106 of the National Historic Preservation Act of 1966, Trinity River Parkway Corridor (CSJ # 0918-45-121 and -122), Dallas, Dallas County, Texas. (FHWA)*

Dear Dr. Sanchez:

Thank you for providing information regarding the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Bob Brinkman, has completed its review of the proposed project. We concur that six properties identified in the Area of Potential Effects (APE) for the alignment alternatives are eligible for listing on the National Register of Historic Places (NRHP). These properties are:

- c.1925 City of Dallas Water Pumping Facility, 2255 Irving (Site 113 in this study), eligible under Criterion C, Architecture, at the local level of significance;
- 1954 shipping/warehouse facility, 1715 Market Center (Site 172), eligible under Criterion C, Architecture, at the local level of significance;
- 1947 shipping/warehouse facility, 1202 Industrial (Site 199), eligible under Criterion C, Architecture, at the local level of significance;
- 1920 Procter and Gamble manufacturing facility / Dallas Public Schools storage facility, 3701 Lamar (Site 287), eligible under Criterion A, Community Development, and Criterion C, Architecture, at the local level of significance;
- 1950 Sportatorium, 1000 Industrial (Site 375), eligible under Criterion A, Community Development, at the local level of significance;
- 1948-50 Oak Cliff Box Company, 1212 Industrial (Sites 387-388), eligible under Criterion C, Architecture, at the local level of significance.

We concur that the other 311 structures built before 1961 represent common building types or have had sufficient loss of architectural and historic integrity, and are therefore **not eligible** for listing on the NRHP. We also concur that no potential historic districts eligible for listing on the NRHP exist in the APE, due to significant alterations and loss of architectural integrity.

We look forward to further consultation with your office, and hope to maintain a partnership that will foster effective historic preservation. Thank you for your participation in this federal review process. If you have any questions concerning this review or if we can be of further assistance, please contact Bob Brinkman at 512/463-8769.

Sincerely,

for: F. Lawerence Oaks
Executive Director, Texas Historical Commission

cc: Jeff Dunn, Dallas CHC, 1445 Ross Ave., Ste. 4000, Dallas TX 75202-2790
✓Jim Anderson, Dallas CLG, 1500 Marilla, City Hall Rm 5CN, Dallas TX 75204

P.O. BOX 12276 · AUSTIN, TX 78711-2276 · 512/463-6100 · FAX 512/475-4872 · TDD 1-800/735-2989
www.thc.state.tx.us

Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

June 5, 2002

**SECTION 106: IDENTIFICATION OF HISTORIC PROPERTIES TARGETED FOR DISPLACEMENT**

Dallas County
CSJ # 0918-45-121; 0918-45-122

Trinity River Parkway Corridor

Mr. Bob Brinkman
History Division
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Mr. Brinkman:

The proposed project will be undertaken with federal funding and permits. In accordance with the Programmatic Agreement (PA) among TxDOT, FHWA, the Advisory Council on Historic Preservation, and the THC, this letter *continues* Section 106 consultation for the proposed Trinity River Parkway. *We hereby initiate a new phase of coordination to determine the eligibility of properties targeted for displacement within the area of potential effects (APE) in the five project alternatives.*

**PROJECT BACKGROUND:**

The Trinity River Parkway is intended to solve transportation problems along the Trinity River Corridor in the city of Dallas, Dallas County, Texas. The project will also be integrated with plans for the Trinity River Floodway, a major open space resource in the center of Dallas. High population growth, lack of alternative routes, and use of single occupant vehicles have extended the hours of congestion, increased the number of accidents, and contributed to air pollution in this part of Dallas.

The Trinity Parkway is designed to lessen congestion and to improve mobility in central Dallas and its adjacent areas. Five alternatives have been identified to meet the goal of increased efficiency in the mobility of travelers in central Dallas.

The APE for each of these alternatives was determined in previous correspondence between our agencies. The THC letter from John W. Murphey dated March 16, 2000 (see-attached) approved the proposed APE, provided certain changes were made to the boundaries. Those changes were made in June 20, 2000, and we now include new APE maps for use in your review.

## HISTORIC RESOURCE SURVEY:

The specific purpose of this correspondence is to forward for your review the attached "Historic Resource Survey of the Building Displacements for the Trinity River Parkway" (dated February 19, 2001). This survey identifies 317 buildings 50 years of age or older at the time of letting in 2010. These structures would be displaced because they are directly located *within the right-of-way* of the five alternatives. *Please note that none of these displaced buildings are currently determined eligible or listed in the National Register.*

Among the goals of the survey (page 3) the following are included:

1. Categorizing of buildings as high, medium, or low potential for eligibility to the National Register of Historic Places (post-1961 buildings are not categorized).
2. Determining whether any buildings to be displaced are individually eligible to the National Register of Historic Places.
3. Determining whether any buildings to be displaced contribute to a potential historic district eligible to the National Register of Historic Places.

TxDOT staff and the SHPO previously evaluated two properties included in the survey. The results of this coordination was not incorporated into the survey, but are included below:

1. Site ID # 306, Raul's Restaurant (the Longhorn Ballroom), a medium priority building, was determined not eligible in a THC letter dated October 20, 1999 (see-attached).
2. Site ID # 330, Kay Detention Center, a low priority building, was determined not eligible in a THC letter dated August 3, 2001 (see-attached).

In addition, we have the following comments regarding certain findings of the survey:

1. Site ID # 4, the former Howard Johnson Motor Inn (built in 1964) is considered eligible in the survey. TxDOT staff believes that the building is **not eligible**, as it is not the best representative of this hotel chain. The buildings were designed with specific features to function as signs, and this example no longer fulfills this role. Its distinctive orange roof is now blue, and the stylized cupola atop the lobby structure is missing.
2. The survey presents two potentially eligible historic districts:
   -District "A," c. 1951-60 (pages 84-86, 94), along Irving Blvd. between Inwood Road and Wycliff Ave.
   -District "B," c. 1947-60 (pages 87-91, 95), along and adjacent to Irving Blvd. between Wycliff/Sylvan Avenues and the Woodall Rogers Fwy.
   The districts are based on the continuity of their warehouse-shipping facility type of architecture, and on the fact that the area was originally developed by Trammel Crow, a noted Dallas developer. TxDOT staff has determined that the buildings in these "A" and "B" districts have numerous alterations and that better examples of Trammel Crow developments exist in the Dallas area.

3. Since TxDOT staff differs with some of the eligibility determinations in the survey, we request that you do not consider in your review portions of pages 7-8 regarding the number of properties being displaced in each alternative that may be individually eligible or contributing to an eligible historic district.

**DETERMINATIONS OF ELIGIBILITY:**

Based on the above information, we determined that the identified potential historic districts "A" and "B" are **not eligible** to the National Register. We also determined that, of the 317 pre-1961 structures identified in the survey, only the following *high priority* structures listed in page 83 are **eligible** to the register:

1. Site ID # 113, City of Dallas/Irving Water Pumping Facility (c. 1925), under Criterion C, Architecture, at the local level.
2. Site ID # 172, 1715 Market Center (1954), shipping/warehouse facility, under Criterion C, Architecture, at the local level.
3. Site ID # 199, 1202 Industrial (1947), shipping/warehouse facility, under Criterion C, Architecture, at the local level.
3. Site ID # 287, 3701 Lamar, Dallas Public Schools storage facility (1920), formerly Procter and Gamble manufacturing facility, under Criterion C, Architecture, and Criterion A, Community Development, both at the local level.
4. Site ID # 375, 1000 Industrial, The Sportatorium (1950), under Criterion A, Community Development, at the local level.
6. Site ID # 387-388, 1212 Industrial, Oak Cliff Box Company (1948, 1950), comprising a 1948 Art Moderne office building with an attached brick warehouse/shipping facility built in 1950, under Criterion C, Architecture, at the local level.

Color photos of all high and medium priority buildings are offered for your review. All building locations are plotted on maps, and all structures are visually recorded in contact sheets at the end of the study. We have placed the site ID number in each frame of the contact sheets.

We request your written concurrence with these determinations of eligibility within 30 days of receiving this letter. If you need further information, please feel free to call me at 416-2770.

Sincerely,

Mario L. Sánchez, Ph.D., R.A.
Historical Architect
Environmental Affairs Division

Attachments

cc. Dallas District, Dan Perge
Dallas District, Timothy Nesbitt
Halff Associates, Rick Thomas
Alston Architects, Neely Plumb
ENV/PM, Elvia Gonzalez
ENV/PM, Mario L. Sánchez

Halff Associates
ENGINEERS • ARCHITECTS • SCIENTISTS
PLANNERS • SURVEYORS

8616 NORTHWEST PLAZA DRIVE
DALLAS, TEXAS 75225
(214) 346-6200
FAX (214) 739-0095

February 27, 2001
AVO 17826

TRANSMITTED VIA FEDERAL EXPRESS

Ms. Ann Irwin
Environmental Services
Texas Department of Transportation
125 East 11th Street
Austin, TX 78701-2483

RE: Report of Directly Impacted Structures (50 years old) for the Trinity Parkway Environmental Impact Statement, Dallas, Texas

Dear Ms. Irwin:

Please find enclosed two copies of the Historic Resources Survey report identifying directly impacted ±50 year old structures/properties along each alternative alignment of the Trinity Parkway Environmental Impact Statement (EIS).

Mario Sanchez of your office and Greg Smith of the Texas Historic Commission (THC) viewed these properties/structures along with Alston Architects and others on January 17, 2001. The purpose of the field trip was to familiarize TxDOT and THC with the structures and to categorize the structures into categories of low, medium, and high potential for eligibility determinations.

We are hopeful that the eligibility determinations can be expedited so the 4(f) evaluations can be incorporated into the draft EIS.

Please forward one copy of the report to Greg Smith of THC. If you have any questions or need additional information please do not hesitate to call David Morgan or me at (214) 346-6200 or ~~Jess~~ Neely Plumb of Alston Architects at (214) 826-5466.

Sincerely,

Halff Associates, Inc.

R Thomas

Rick Thomas

RNT/sps
Enclosure (1)

C: Mario Sanchez, TxDOT (letter with report)
Greg Smith, THC (PO Box 12276, Austin, TX 78711-2276) (letter only)
Chris Anderson, North Texas Tollway Authority (letter only)
Mr. Jess Neely, Alston Architects (letter only)

TEXAS HISTORICAL COMMISSION
*The State Agency for Historic Preservation*

GEORGE W. BUSH, GOVERNOR
JOHN L. NAU, III, CHAIRMAN
F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

RECEIVED
JAN 18 2001
TXDOT - ENV

January 17, 2001

Nancy A. Kenmotsu, Ph.D., Supervisor
Archeology Studies Program - Environmental Affairs Division
Texas Department of Transportation - Dewitt C. Greer State Highway Bldg.
125 E. 11th Street
Austin, Texas 78701-2483

Re: Project review under the Antiquities Code of Texas
Draft report, Trinity River Parkway Study, Dallas County, Texas
(TxDOT TAC# n/a)

Dear Dr. Kenmotsu:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the draft archival and archeological investigation from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff led by Myles Miller has examined the above referenced draft report. We cannot complete our review because several sections of the draft report are missing and labeled as "In Preparation". In addition, for a project of the magnitude of the proposed Trinity River Parkway, we find that this preliminary draft overview lacks much or most of the detailed information and accompanying maps that would be necessary for a comprehensive overview and assessment of cultural resources. We have provided some general comments and required revisions in the attachment to this letter, and strongly recommend that the archeological consultant thoroughly revise and expand the report.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please contact Myles Miller at 512/463-5864.

Sincerely,

for
F. Lawerence Oaks, Executive Director

enclosure

LO/wjm/mm

NESBITT

P.O. BOX 12276 • AUSTIN, TX 78711-2276 • 512/463-6100 • FAX 512/475-4872 • TDD 1-800/735-2989
*www.thc.state.tx.us*

**Attachment**
*Comments and Required Revisions*

1. Several typographic errors are present in the report and need to be corrected.

2. On Page 1 it is stated that a Texas Antiquities Permit was secured from the THC for this project. However, the permit number is not included on the report title page or mentioned in the body of the report. Is an Antiquities Permit required for such an overview?

3. Several maps, figures, and discussions are either missing or labeled as "In Preparation".

4. Figure 9 - we cannot differentiate between Zones 3 and 4 on the black-and-white copy of this figure provided to our office. We also note that these probability zones are based on a [unreferenced] 1978 report. Wouldn't it be possible to refine and update these zones based on more recent archeological findings over the past twenty years?

5. The draft report lacks any semblance of maps or figures that would illustrate the relationship(s) between the proposed highway corridor alternatives, topographic landforms, Holocene depositional units and other geomorphic data, the presence of highly disturbed urban environments, cultural resource probability areas, and so forth.

6. The recommendations section needs to be thoroughly expanded, and must take into account the topics listed in comment #5 above. Figures and maps showing the proposed alignments need to be included.

TEXAS HISTORICAL COMMISSION
*The State Agency for Historic Preservation*

GEORGE W. BUSH, GOVERNOR
JOHN L. NAU, III, CHAIRMAN
F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

April 20, 2000

S. Alan Skinner, Ph.D.
AR Consultants
P.O. Box 820727
Dallas, TX 75382-0727

Re: Project review under the Antiquities Code of Texas
Trinity Parkway, Dallas County, TX
Permit #2302

Dear Colleague:

Thank you for your Antiquities Permit Application for the above referenced project. This letter presents the final copy of the permit application from the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas.

Please keep this copy for your records. Additionally, please note that the Antiquities Permit investigations require production of 20 copies of the final report and verification that any artifacts recovered and records produced during the investigations are curated at the repository listed in the permit.

**If you have any questions concerning this permit or if we can be of further assistance, please contact Lillie Thompson at 512/463-1858. The reviewer for this project is Bill Martin.**

Sincerely,

William A. Martin

for
F. Lawerence Oaks, State Historic Preservation Officer

FLO/lft

Enclosure

cc: John R. Hoffman, North Texas Turnpike Authority c/o Halff Assoc.

P.O. BOX 12276 • AUSTIN, TX 78711-2276 • 512/463-6100 • FAX 512/475-4872 • TDD 1-800/735-2989
*www.thc.state.tx.us*

*State of Texas*

# TEXAS ANTIQUITIES COMMITTEE

***ARCHEOLOGY PERMIT # 2302***

*This permit is issued by the Texas Historical Commission, herafter referred to as the Commission, represented herein by and through its duly authorized and empowered representatives. The Commission, under authority of the Texas Natural Resources Code, Title 9, Chapter 191, and subject to the conditions hereinafter set forth, grants this permit for:*

***Reconnaissance***

*To be performed on a potential or designated landmark or other public land known as:*

***Title: Trinity Parkway***
***County: Dallas***
***Location: Trinity River channel, levee, and vicinity***

*Owned or Controlled by: (hereafter known as the Permittee):*

***North Texas Turnpike Authority c/o Halff Associates***
***8616 Northwest Plaza Dr.***
***Dallas, TX 75225***

*Sponsored by (hereafter known as the Sponsor):*

***North Texas Turnpike Authority c/o Halff Associates***
***8616 Northwest Plaza Dr.***
***Dallas, TX 75225***

*The Principal Investigator/Investigation Firm representing the Owner or Sponsor is:*

***Alan Skinner***
***AR Consultants, P.O. Box 820727***
***Dallas, TX 75382***

*This permit is to be in effect for a period of:*

***1 year***

*and Will Expire on:*

***4/11/01***

*During the preservation, analysis, and preparation of a final report or until furhter notice by the Commission, artifacts, field notes, and other data gathered during the investigation will be kept temporarily at:*

***AR Consultants***

*Upon completion of the final permit report, the same artifacts, field notes, and other data will be placed in a permanent curatorial repository at:*

***Southern Methodist University***

*Scope of Work under this permit shall consist of:*

***For details, see scope-of-work submitted with the permit application.***

## *ARCHEOLOGY PERMIT # 2302*

*This permit is granted on the following terms and conditions:*

*1) This project must be carried out in such a manner that the maximum amount of historic, scientific, archeological, and educational information will be recovered and preserved and must include the scientific techniques for recovery, recording, preservation and analysis commonly used in archeological investigations.*

*2) The Principal Investigator/Investigation Firm, serving for the Owner/Permittee and/or the Project Sponsor, is responsible for insuring that specimens, samples, artifacts, materials and records that are collected as a result of this permit are appropriately cleaned, and cataloged for curation. These tasks will be accomplished at no charge to the Commission, and all specimens, artifacts, materials, samples, and original field notes, maps, drawings, and photographs resulting from the investigations remain the property of the State of Texas, or its political subdivision, and must be curated at an appropriate repository. Verification of curation by the repository is also required, and duplicate copies of any requested records shall be furnished to the Commission before any permit will be considered complete.*

*3) The Principal Investigator/Investigation Firm serving for the Owner/Permittee, and/or the Project Sponsor is responsible for the publication of results of the investigations in a thorough technical report containing relevant descriptions, maps, documents, drawings, and photographs. A draft copy of the report must be submitted to the Commission for review and apporval. Any changes to the draft report requested by the Commission must be made or addressed in the report, or under separate written response to the Commission. Once a draft has been apporoved by Commission, twenty (20) copies of the final report shall be furnished to the Commission.*

*4) If the Owner/Permittee, Project Sponsor, or Principal Investigator/Investigation Firm fails to comply with any of the Commission's Rules of Practice and Procedure or with any of the specific terms of this permit, or fails to properly conduct or complete this project within the allotted time, the permit will fall into default status and/or the Commission may cancel the permit until such time that the terms of the permit are properly completed. Notification of Cancellation shall be sent to the Owner/Permittee and the Principal Investigator/Investigation Firm, and all work associated with the permit must then stop immediately upon receipt of the notice. Notification of Default status shall be sent to the Principal Investigator/Investigation Firm, and the Principal Investigator will not be eligible to be issued any new permits until such time that the conditions of this permit are complete.*

*5) The Owner/Permittee, Project Sponsor, and Principal Investigator/Investigation Firm, in the conduct of the activities hereby authorized, must comply with all laws, ordinances and regulations of the State of Texas and of its political subdivisions including, but not limited to, the Antiquities Code of Texas; they must conduct the investigation in such a manner as to afford protection to the rights of any and all lessees or easement holders or other persons having an interest in the property; and they must return the property to its original condition insofar as possible, to leave it in a state which will not create hazard to life nor contribute to the deterioration of the site or adjacent lands by natural forces.*

*6) Any duly authorized and empowered representative of the Commission may, at any time, visit the site to inspect the field work as well as the field records, materials, and specimens being recovered.*

*7) For reasons of site security associated with nautical historical resources, the Project Sponsor (if not the Owner/Permittee), Principal Investigator, and Investigation Firm shall not issue any press releases, or divulge to the news media, either directly or indirectly, information regarding the specific location of, or other information that might endanger those resources, or their associated artifacts without first consulting with the Commission; and the State agency or political subdivision of the State that owns or controls the land where the resource has been discovered.*

*8) This permit may not be assigned by the Principal Investigator/Investigation Firm, Owner/Permittee, or Project Sponsor in whole, or in part to any other individual, organization, institution, or corporation not specifically mentioned in this permit, without the written consent of the Commission.*

*9) Hold Harmless: The Owner/Permittee hereby expressly releases the State and agrees that Owner/Permittee will hold harmless, indemnify, and defend (including reasonable attorney's fees and costs of litigation) the State, its officers, agents, and employees in their official and/or individual capacities from every liability, loss, or claim for damages to persons or property, direct or indirect of whatsoever nature arising out of, or in any way connected with, any of the activities covered under this permit.*

*10) Addendum: The Owner/Permittee, Project Sponsor and Principal Investigator/Investigation Firm must abide by any addenda hereto attached.*

*Upon a finding that it is in the best interest of the State, this permit is issued on 4/11/00.*

*James E. Bruseth, for the*
*Texas Historical Commission*

TEXAS HISTORICAL COMMISSION
*The State Agency for Historic Preservation*

GEORGE W. BUSH, GOVERNOR
JOHN L. NAU, III, CHAIRMAN
F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

cc: CRM

March 16, 2000

Mario L. Sanchez
Environmental Affairs Division
Texas Department of Transportation
118 E. Riverside Drive
Austin, TX 78704

MAR 21 2000

Re: Project review under Section 106 of the National Historic Preservation Act of 1966, *Proposed APE for Trinity River Parkway, Dallas, Dallas County, Texas (FHWA/TxDOT)*

Dear Mr. Sanchez:

Thank you for your March 10, 2000, correspondence describing the above referenced project. Pursuant to Section 800.16 (d) of the National Historic Preservation Act, the Agency Official is required to consult with the SHPO to determine and document the area of potential effect (APE) for an undertaking. This letter serves as comment on the proposed APE from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The National Register staff, led by John W. Murphey, has reviewed the proposed APEs for the four alternative parkway alignments. We agree in general with the proposed APEs, but require each alternative to include the entire boundary of the Colonial Hill Historic District. Staff also questioned whether the APE for alignment number two, along Singleton Boulevard, extends far enough to the southwest to capture potentially historic structures that may be directly or indirectly affected by increased traffic from the interchange. A streetscape perspective of Singleton Boulevard would be useful to this analysis.

To complete our review, we request that you resubmit a proposed APE document reflecting the comments outlined above. Thank you for your submission and initiation of Section 106 consultation. We look forward to further consultation in developing an APE for the Trinity River Parkway. If you have any questions concerning our review, please contact John W. Murphey at 512/463-5942.

Sincerely,

John W. Murphey

John W. Murphey, Historian
for F. Lawerence Oaks, SHPO

TxDOT - ENV
MAR 21 2000
CRM

cc: Linda Roark, Division of Architecture

P.O. BOX 12276 • AUSTIN, TX 78711-2276 • 512/463-6100 • FAX 512/475-4872 • TDD 1-800/735-2989

# Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

March 10, 2000

SECTION 106: IDENTIFICATION OF AREA OF POTENTIAL EFFECT

Dallas County
CSJ # 0918-45-121, 122

Trinity River Parkway

Mr. John W. Murphey
History Division
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Mr. Murphey:

The proposed project will be undertaken with federal funding and permits. In accordance with the Programmatic Agreement (PA) among TxDOT, FHWA, the Advisory Council on Historic Preservation, and the THC, this letter initiates Section 106 consultation for the proposed Trinity River Parkway. We hereby initiate coordination to establish the area of potential effect (APE) for the project area.

We are in receipt of materials sent to our office by Alston Architects through AR Consultants dated February 17, 2000, presenting the proposed APE for four alternative parkway alignments. We are in agreement with the proposed APE, except in alignment 2. As presented, that alternative shows only one access point to the elevated parkway across from the south side of the floodplain. It appears that, similar to other alternatives, there will be more than one connection to the parkway from the south side. We have requested clarification from Alston Architects on this issue and we have been informed that if there are to be other access points added from the south side to this alternative, the APE will be extended to reflect them.

We ask you concurrence with the limits set for the APE for this project. If you need further information, please feel free to call me at 416-2770.

Sincerely,

Mario L. Sánchez, Ph.D., R.A.
Historical Architect
Environmental Affairs Division

TRINITY PARKWAY PROJECT
MEETING
MINUTES
Texas Historical Commission
Austin, Texas
January 6, 2000
9:30 AM—12:00 PM

Participants present: Mario L. Sanchez, TxDOT, Bill Martin, THC, Stephen P. Austin, COE, Barbara Hickman, TxDOT, Myles Miller, THC, Nancy Kenmotsu, TxDOT, Ann M. Irwin, TxDOT, John W. Murphey, THC, Norman Alston, Alston Architects, Neely Plumb, Alston Architects, Alan Skinner, Skinner and Assoc.

Alan Skinner opened the meeting and provided background on the Trinity Parkway Project, located in a floodplain developed in the 1930s extending in central Dallas east from I 35 to the southeast of downtown.

Ann Irwin requested a briefing on the purpose and need of the project so that the alternatives being proposed could be better understood. Mr. Skinner stated that I 30 was very congested and that vehicular traffic needed to be moved around the central business district along the proposed parkway. There are forecasts that have Dallas growing by 100% by 2020. There are bridges dating to the 1930's that span the floodplain, although the parkway will be designed to go under them.

Mr. Skinner then stated that since the existing Trinity River was channeled and moved away from the original river course in the 1930's, the existing floodplain is an area of low potential for prehistoric archeology. Remnants of the original river are generally outside of the project APE. Ms Irwin made the point that TxDOT does not go beyond the right-of-way (ROW) footprint to do archeological investigations. This is not the case, however, with architectural research, which goes beyond the ROW. Mr. Skinner stated that they will measure 100 feet either way of the levee for the area of archeological investigation.

Mr. Austin stated that there needed to be coordination between agencies so that benefits are maximized for the COE Upper Trinity River Project and the parkway project. Mr. Skinner stated that the City of Dallas needed to formally request the coordination with the COE.

The discussion then switched to the historic bridges across the floodplain. They are not currently registered Dallas landmarks, although they are eligible for the National Register in all likelihood. The Houston Street Viaduct is listed in the National Register. Mr. Alston stated that interest in the Corinth Street Viaduct is quite high. Ms. Irwin reminded everyone that the Corinth Street Viaduct was included in a resolution by the State Legislature a few years ago requesting TxDOT to keep it in operation. Any attempts to remove it will probably generate national interest.

The discussion again proceeded to archeology. Mr. Skinner stated that the 1930's floodway had been mined for soil to build up areas of downtown. As a result of that disturbance, the potential for archeological deposits is low. Mr. Austin added that there is greater potential for archeology the closer one gets to the original river channel. As a result, the part of the parkway that is nearest to the junction of I 35 will be built on piers to minimize impacts. Ms Irwin reminded the group that all proposed alternates, even the costlier ones with little likelihood of being selected, had to receive a comparable level of study. Mr. Skinner assured her that all alternatives are being studied for potential impacts. Mr. Martin concurred with Mr. Skinner that the potential for archeological deposits is low in the area extending100 feet either way of the levees. The discussion on archeology ended and Mr. Martin, Ms Hickman, Mr. Miller, and Ms Kenmotsu left the meeting.

Mr. Alston then proceeded to make a presentation about impacts on historic structures. Sites 40 years and older will be assessed for impact in the area of potential effect (APE) since construction is planned within ten years, at which time they will be 50 years old. He explained that areas for potential impact exist along the intersection of Iron Ridge and Commonwealth, at the proposed parkway exits, and at bridge connections. The APE will be extended at these sensitive areas. He does not expect to find much architecture of a "distinguished" nature in the APE. Another area for high impact will be that within South Lamar and Starks Ave. A historic neighborhood in the area will be bisected and it will require the removal of some properties.

At this point, Ms. Irwin stated that the 4(f) implications should be taken into consideration regarding study of other feasible or prudent alternatives and included in the NEPA document. Mr. Alston replied that alternatives will be evaluated and the number of properties impacted by each will be given in the EIS. Ms. Irwin stated that 4(f) assessments in EIS studies have gotten to be more important over time. She stated TxDOT needed structure by structure information on properties acquired or impacted as a "constructive use" for the section 4(f) evaluation. Other alignments that would avoid these takings should be studied to satisfy 4(f) requirements. For each alternative, structures should not be presented merely in a large group, but categorized according to decade of construction or some other meaningful grouping. Mr. Alston then added that age of structures and not integrity will be the basis for the historic resource survey within the APE. He then presented the four alternative alignments:

Alternative 1: Separate roads to be laid out along the inside portion of the levees. This is the preferred alternative as to costs and for minimizing impacts to historic properties.
Alternative 2: Single road to be laid out on one side of the levees.
Alternative 3: Separate roads to be laid out along outside portion of the levees
Alternative 4: Referred to as the Industrial Alternative, it is completely elevated.

Mr. Alston then stated that a context for the Brookhollow area (Stemmons Industrial Corridor) has not been developed. The group recognized that noise and traffic will impact the function of adjacent neighborhoods. It was acknowledged that planned

development of lakes and other amenities within the floodplain will certainly generate land use changes that will impact nearby residential structures and neighborhoods.

Mr. Austin noted that Alternative 3 would impact certain sections that fit the profile for an environmental justice assessment. Mr. Alston replied that this alternative would impact an area of modest shotgun houses "The Bottoms" part of the project and that it would be a politically sensitive issue. He then asked Mr. Murphey for the type of information required for evaluating the APE. Mr. Murphey stated that the information must convey a sense for the pattern of development of the area with contextual photographs, as well as those of the most important buildings.

Mr. Alston then discussed Alternative 4, which includes many early 20th century properties in the portion extending south from downtown. This area was developed as a result of the trolley system and includes most of the Colonial Hills neighborhood. Mr. Austin noted that Alternative 4 is the one preferred by the US Corps of Engineers.

Ms. Irwin mentioned that the levee will have to be addressed as a historic property and its integrity will have to be considered. Mr. Austin stated that the levees changed the pattern of development for Dallas and Mr. Skinner concurred that the levees will be addressed in the document establishing the APE. That document will be sent to TxDOT and, eventually, to the THC.

Ms. Irwin made final mention of the need to explore feasible and prudent alternatives to satisfy 4(f) requirements. A preferred alternative is not necessarily the correct one. Alternatives at a variety of locations, including those where there are no takings, should be explored according to 4(f). Ms. Irwin informed Mr. Skinner that TxDOT would need 2 copies of each map showing specific alternatives at the time of submittal. The meeting adjourned at noon.

# Ancillary Information

THIS PAGE INTENTIONALLY LEFT BLANK

TEXAS HISTORICAL COMMISSION

*The State Agency for Historic Preservation*

GEORGE W. BUSH, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

April 22, 1999

Dept. of the Army
Corps of Engineers, Fort Worth District
Attn: William Fickel
P.O. Box 17300
Fort Worth, TX 76102-0300

Re: *Project review under Section 106 of the National Historic Preservation Act of 1966*
*Dallas Floodway Extension Project, Dallas, Dallas County (COE/106)*

Dear Mr. Fickel:

Thank you for your correspondence and the documentation describing the above referenced project. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission. Section 106 of the National Historic Preservation Act requires federal agencies, or their designated representatives, to take into account the effects of their undertakings on historic properties.

The review staff, led by Linda Roark, has completed its review of the information provided. The following properties were evaluated by applying federal criteria for historical designation:

- Santa Fe RR Trinity River Bridge, Dallas, Dallas County, TX
- MKT RR Trinity River Bridge, Dallas, Dallas County, TX
- Southern Pacific RR Trinity River Bridge, Dallas, Dallas County, TX
- Lift Pump Station, east bank of the Trinity River, upriver from I-45 overpass

We concur with the determination that the above-referenced bridges are (each bridge is) ELIGIBLE for listing in the National Register of Historic Places under Criterion C, in the Area of Engineering. The Santa Fe Bridge is significant as a good example of a Pratt through-truss dating from the period 1890-1910, displaying characteristics of its type and method of construction. The MKT Bridge is a good example of Parker through-truss, commonly used by railroads at the turn of the century. The Southern Pacific Bridge is significant as a good example of a Warren through-truss bridge. All three bridges retain a high degree of integrity.

We also concur that the Lift Pump Station, built c.1954 and lacking distinguishing characteristics, is NOT ELIGIBLE for listing in the National Register of Historic Places.

Despite these findings, however, we are unable to complete the review as you requested based on the information provided in the Dallas Floodway Extension Final Environmental Impact Statement (EIS) and report. Given the Area of Potential Effect (APE) identified by the report, we would anticipate the presence of additional historic resources such as the type of vernacular housing and other structures identified in Tables 5 and 6. Without adequate documentation of such resources, we are unable to complete our review or concur with your determinations of eligibility. To facilitate our review, please provide the following information on all pre-1955 resources within the APE in a standard Texas Historic Sites Inventory form (available upon request):

P.O. BOX 12276 · AUSTIN, TX 78711-2276 · 512/463-6100 · FAX 512/475-4872 · TDD 1-800/735-2989
www.thc.state.tx.us

*Trinity River Parkway 60*

- Descriptive and historical information including property type, date of construction, stylistic influences, date of construction and background history for each building/structure/landscape feature
- Photo-documentation of each resource
- Mapped location for each resource

In addition, the EIS should include a statement of methodology as it relates to the gathering of the information.

We are concerned that the APE may not be defined to the extent that it considers all potential effects of the undertaking on historic resources. As an example, the APE boundary is drawn to the south of the National Register-eligible Corinth Street Viaduct. The proximity of the project work to this historic bridge creates the possibility that the project may have an effect on this cultural resource. Until the question of the APE definition is resolved, the eligibility phase of our consultation is completed, and specific project design information is received and reviewed we remain unable to provide a determination of effect for this undertaking.

The existing Programmatic Agreement (PA) for the undertaking addresses only archeological resources. We recommend that the PA be amended to include all cultural resources that may be affected by this undertaking. In addition, we are concerned that this project may be part of a larger undertaking that should be considered as a whole. The Trinity Parkway project, which involves the Corps of Engineers, the North Texas Tollway Authority, the Texas Department of Transportation, the City of Dallas and Dallas County, appears to be based on this and other projects being planned by these various entities. We suggest that a meeting to discuss the overall work being planned in this area would be beneficial.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Linda Roark at 512/463-9122.**

Yours truly,

F. Lawerence Oaks, State Historic Preservation Officer

cc: Jim Anderson, Dallas CLG
Rick Loessberg, Dallas County Historical Commission
Lisa Hart, TxDOT Environmental Affairs Division
Alan Stanfill, ACHP

FLO/LR

Received 1/21/99 from Lisa Hart, Historical Studies Branch, Environmental Division

## Continental Street Bridge

**Overview:**

The Continental Street Viaduct, historically known as the Lamar-McKinney Viaduct, is one of four viaducts constructed during the 1930s as part of a program to relieve traffic congestion over the Trinity River. The bridge is important as a major crossing over the Trinity River and is noted for its long center span and design aesthetic. The Continental Street Viaduct meets National Register eligibility under Criterion C, Engineering, for its design and engineering significance, and as an example of the work of noted Texas' bridge engineer, Francis Hughes.

The approximately 2,120'-0" Continental Street Viaduct is one of four highway viaducts constructed in the early 1930s as part of a plan to relieve traffic congestion over the Trinity River. Prior to the construction of the viaducts, the Dallas-Oak Cliff (Houston Street) Viaduct constructed in 1912, served as the only all-weather road across the Trinity River. By the mid 1920s the steep rise in automobile ownership had exceeded the design capacity of this viaduct, creating the need for additional bridges across the Trinity. This need was met by a $6,950,000 bond issue approved by voters on April 3, 1828, which provided for the construction of four roadway bridges across the Trinity. The bond issue was tied to a larger $23,900,000 bond, which called for various civic improvements to Dallas over a nine year period, including the straightening of the Trinity River and construction of a 25 mile system of levees. The city and county combined forces to form the Flood Control District, which had the responsibility for constructing the levee system. Under the agreement between the two governments, the county was responsible for constructing the viaducts, while the city financed drainage and the approaches to the bridges.

All four viaducts were designed by Francis Hughes (1872- 1953), a consulting engineer with the city of Dallas. A native of Missouri, Hughes began his engineering career as draftsman for the Kansas City Bridge Company, after which he worked for various bridge building firms as a detailer and designer. Prior to moving to Dallas in 1928, Hughes worked as an engineer for several highway and building construction companies, gaining experience designing highway and railway bridges, viaducts, mill buildings, foundries, and mine structures. Some of his more notable works following the four the viaducts over the Trinity River include the National Avenue Subway and Benton Avenue Viaduct; Springfield, MO, Corinth and Cadiz Street Underpasses and Triple Underpass; Dallas, Belknap Street Viaduct; Fort Worth, and the system of 16 bridges across the Trinity River. Although Hughes had no formal education in engineering, on the basis

of his practical knowledge, he became an associate member of the American Society of Civil Engineers in 1902.

The contract for constructing the Continental Street Viaduct was awarded to L.H. Lacy Company of Dallas for $327,822.14. The Continental Street Viaduct was the third viaduct to be constructed. The opening date for all four viaducts was delayed for over a year, as difficulties in obtaining right-of-way land and City budget constraints hampered the construction of the approaches. The Continental Street was probably the last of the four viaducts to open for service.

The Continental Street Viaduct is noteworthy for the long center spans composed of variable-depth cantilever plate girders measuring 200'-0" long over all, including two 40'-0" anchor arms and a 120'-0" main span. These unusually long channel spans were given the same concrete fascia finish as the flanking concrete spans, providing a unified appearance along the total length of the bridge. The aesthetic appearance of the viaduct was further carried by the open-concrete balustrade.

The Continental Street Viaduct has been altered over the years, with deck replacements and repairs to concrete members along the entire length of the bridge. The original light standards were removed in the 1960s and the bridge has extensive cracking and spalling across the concrete surfaces of the structure. Despite these changes, the viaduct retains sufficient integrity of design, materials, workmanship, location, setting, feeling, and association.

4/98

# Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8588

TEXAS DEPARTMENT OF TRANSPORTATION
DISTRICT NO. 18
MAR 17 1995
Dallas, Texas
RECEIVED

March 14, 1995

SECTION 106: DETERMINATION OF NRHP ELIGIBILITY

Dallas County
CSJ: 0048-01-035

Corinth Street Viaduct: From 8th Street to Industrial Boulevard in Dallas

Ms. Amy Dase
National Register Programs
Texas Historical Commission
Austin, Texas 78711

Dear Ms. Dase:

The above undertaking will be carried out with federal assistance. In accordance with the provisions of 36 CFR 800, we hereby initiate coordination on the National Register eligibility of the subject bridge structure.

The proposed project will widen or replace the bridge on Corinth Street at the Trinity River in the city of Dallas. The structure is commonly known as the Corinth Street Viaduct. The project location is indicated on the enclosed map.

The subject bridge was constructed in 1930 and consists of a variable-depth haunched-cantilever girder main span and 64 cast-in-place concrete girder approach spans with variable-depth fascia. The main span exhibits the same concrete fascia finish as the flanking approach spans. The bridge retains its original concrete railings with I-shaped balusters and ornamental pillar-type lighting fixtures. Photographs and additional information are included for your reference.

The Corinth Street Viaduct survives as an intact example of a 1920s/1930s haunched-cantilever girder bridge constructed in an urban area. The bridge was one of four viaducts constructed over the Trinity River floodway during a three-year period between 1929 and 1931. The four bridges were intended to relieve congestion on the then-lone Houston Street (Oak Cliff) Viaduct, a 1912 concrete-arch structure which was the first permanent crossing over the floodway. The Houston Street structure was listed in the National Register of Historic Places in 1984.

The National Register-eligibility of the Corinth Street Viaduct was evaluated at your March 3, 1995 meeting with Gary Hammer of my staff. At that time, the structure was determined

EXHIBIT H
HISTORICAL BRIDGE RELATED CORRESPONDENC

Dallas County
Corinth Street Viaduct: From 8th Street to Industrial Boulevard in Dallas

*eligible* for National Register-listing under Criterion C as a relatively unaltered urban example of a ca. 1930 major steel-girder bridge. The structure may also be eligible under Criterion A for its contribution to the development of the transportation system in the city of Dallas.

We request your written confirmation of the National Register-eligibility of the Corinth Street Viaduct. Should you have any additional questions, please contact Gary Hammer at 416-2755.

Sincerely,

for
Ann M. Irwin, Director
Cultural Resources Management
Environmental Affairs Division

Enclosures

CONCUR

☒ Eligible
☐ Not Eligible

James W. Steely
Deputy State Historic Preservation Officer

3/15/95 acd
Date

EXHIBIT H
HISTORICAL BRIDGE RELATED
CORRESPONDENCE, CONTINUED

CC: CRM 1-8-04

# Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

8 January 2004

**Section 106 and Antiquities Code Coordination**
Dallas County
CSJ 0918-45-121
Antiquities Permit No. 2302

Trinity River Parkway Study from W of IH 35E/US 183 to E of FM 310/US 175

James E. Bruseth, Ph.D.
Department of Antiquities Protection
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711
Dear Dr. Bruseth:

The proposed project will be undertaken with state and federal assistance. As required by the National Historic Preservation Act of 1966, as amended, and by Senate Bill 58, The Antiquities Code of Texas, and our Memorandum of Understanding with your agency, we are coordinating the proposed bridge replacement project with your office.

Please find attached a copy of *The Trinity River Parkway Archival and Archaeological Evaluation* by Dr. S. Alan Skinner and Sonny A. Wheeler of AR Consultants. Their archival and archeological investigation of the Trinity River Parkway study area for the North Texas Tollway Authority has been updated to include the new Alternative 3B, along with new maps and other revisions.

We request your review and comment on the attached draft report. If you have any questions, please call Barbara Hickman at 512-416-2637 or e-mail bhickman@dot.state.tx.us.

Sincerely,

Barbara J Hickman

Barbara J Hickman, Staff Archeologist
Archeological Studies Program
Environmental Affairs Division

Attachment

cc: w/o attach.:Mr. David Morgan
Halff Associates, Inc.
8616 Northwest Plaza Drive
Dallas TX 75225

Dallas District, attn: Mr. Dan Perge
ERG CRM/SBW BJH

TxDOT - ENV
JAN - 8 2004
CRM

LOCKE LIDDELL & SAPP LLP
ATTORNEYS & COUNSELORS

2200 ROSS AVENUE
SUITE 2200
DALLAS, TEXAS 75201-6776

AUSTIN • DALLAS • HOUSTON • NEW ORLEANS

(214) 740-8000
Fax: (214) 740-8800
www.lockeliddell.com

WRITER'S DIRECT DIAL:
(214) 740-8670
E-MAIL: faddison@lockeliddell.com

March 8, 2004

**VIA HAND DELIVERY**
Michael Hellman, Sr.
Senior Park Planner
Park and Recreation Department
City Hall, 6FN
1500 Marilla
Dallas, Texas 75201

RE: Section 4(f) – Applicability Request Concerning Publicly Owned Lands Within or Near Potential Right-of-Way of Dallas Floodway Alternatives Being Studied for Proposed Trinity Parkway in Dallas, Texas

Dear Mr. Hellman:

Please be informed we represent the North Texas Tollway Authority ("NTTA") in connection with construction and operation of the Trinity Parkway, currently being planned and located in the City of Dallas, Dallas County, Texas. NTTA, the Texas Department of Transportation ("TxDOT"), and the Federal Highway Administration ("FHWA") are currently studying proposed alternatives for the Trinity Parkway and are attempting to make a determination regarding the applicability of Section 4(f) of the Department of Transportation Act of 1966. We seek to determine whether publicly owned lands within the Dallas Floodway and near or within the potential right-of-way of four of the six build alternatives include parklands or other 4(f) properties. Depending upon the alternative, each alternative encroaches to a varying degree upon the floodway. For example:

- Alternative 3A is a combined road benched upon the inside of the east levee of the Dallas Floodway.
- Alternative 3B is the same footprint as Alternative 3A but has less main lane capacity.
- Alternative 4 splits the main lanes and is benched along both the inside of the east levee and inside of the west levee of the Dallas Floodway.
- Alternative 5 splits the main lanes and is benched along the outside of the east levee and the outside of the west levee of the Dallas Floodway. Alternative 5, however, crosses the Dallas Floodway in its north and south sections.

DALLAS:67318/65146:1259924v1

The purpose of this letter is to request information from you necessary to allow NTTA, FHWA, and TxDOT to determine the applicability of Section 4(f) to land within the Dallas Floodway that may be impacted by the four potential build alternatives set forth above. I have attached an aerial photograph as Attachment 1 reflecting the various alternatives under consideration, including the four build alternatives that encroach upon the floodway.

Our preliminary investigation to date reveals the following:

1. Based on City of Dallas Park Site data entry (see Attachment 2) the lands within the levees from the AT&SF – Dart Railroad (southern portion of the project area) to Northwest Highway (approximately 4-miles northwest of project area) are known as the Trinity River Park or the Trinity River Greenbelt Park. This park, owned by the Parks and Recreation Department of the City of Dallas, has an area of approximately 3,652.69 acres. The major purposes of the park are described as open space and flood control. Each of the four alignments noted above enters the Trinity River Park.

2. A scoping package was provided to the City of Dallas on September 20, 2001, in an effort to identify public parks within or near the proposed build alternative alignments. The scoping package included a major freeway / highway map of the study area, an aerial photograph, a map showing the parks and recreation areas identified in the study area, and ancillary information pertaining to a previous 4(f) determination within the Trinity River Park near the Corinth Street Bridge made in 1996. Included as Attachment 3 is the map reflecting Parks and Recreation Areas within the study area. On January 31, 2002, you responded on behalf of the City of Dallas (see Attachment 4) stating:

> "The alignments that are in or touch the Trinity River Park (between the levees) will not have 4(f) issues or fall under the requirements of the Texas Parks and Wildlife Code as the deed indicates the property is to be used for park and transportation uses."

The deed referred to in the City of Dallas' letter is known as the "Stemmons Deed." It transferred approximately 930 acres of land owned by Industrial Properties, Inc. within the Dallas Floodway. A copy of the deed and escrow agreement related to it are attached hereto as Attachment 5. The Stemmons Deed conveyed land located between the AT&SF Railroad to a point just north of Hampton/Inwood Road. Attachment 6 is a map showing what we understand to be the boundary of the land encompassed by the Stemmons Deed. In particular, the Stemmons Deed includes the following restriction:

> "... the property shall be used for parks, open space, recreational, transportation facilities, including roadways on and adjacent to the levees ..."

The Stemmons Deed also indicates that some of the parcels within the floodway were, at the time, privately owned parcels not owned by Industrial Properties. Pursuant to an Escrow Agreement executed by the City of Dallas, the remaining parcels outside the boundary of the lands conveyed by the Stemmons Deed were to be acquired by January 1, 1974.

By letter of January 17, 1974, a copy of which is included as Attachment 7, the City of Dallas through its then City Attorney stated:

> "In my opinion, the City of Dallas, as of January 17, 1974, either had title to or had suits pending that will result in acquiring said title to all of the lands referred to in said [escrow] agreement."

Similarly, the City of Dallas Trinity River Corridor Project – History (Attachment 8) indicates the City of Dallas fulfilled the requirements of the Stemmons Deed by acquiring by gift, purchase or the power of eminent domain all remaining privately held lands between the levees by the applicable date in 1974.

I have also enclosed a copy of the March 23, 1995 correspondence (Attachment 9) concerning a parcel of land within the floodway used for the Corinth Street Viaduct project. In connection with the Corinth Street Viaduct project it was confirmed some of the parcels within the floodway were purchased with matching grant funds from the Federal Department of Housing and Urban Development ("HUD") open space project. The letter states:

> "Federal restrictions related to conversions of open-space projects were repealed by the Housing and Urban-Rural Recovery Act of 1983. This action removes any federal requirements related to conversion of open-pace land to other uses."

The letter adds:

> "The original property donation was with the condition that the property could be used for flood control, transportation, and recreation."

NTTA understands these same conditions were applicable to those properties acquired through fee simple purchasing or through exercise of eminent domain

DALLAS:67318/65146:1259924v1

and thus, would apply in connection with the Trinity Parkway. Attachment 10 is a letter from FHWA stating 4(f) does not apply to the parcel of land used for the Corinth Street Viaduct project.

As you can see from Exhibit 1, each build alternative encroaching on the Dallas Floodway falls within the boundaries of the Stemmons Deed. Alternatives 4 and 5, however, cross the floodway northwest of Hampton / Inwood Road.

Our preliminary investigation indicates there are currently no park facilities within the floodway presenting 4(f) issues, or requiring 4(f) analysis. Park facilities within the floodway have been developed under conveyances that provide concurrently for transportation facilities.

Please review the above information. We would appreciate your confirming the City does not believe Section 4(f) applies to any of the park facilities located within the floodway.

Should you have any questions, please don't hesitate to contact me. Please contact me should you need additional information in making the 4(f) determination. We appreciate your assistance in this matter.

Very truly yours,

LOCKE LIDDELL & SAPP LLP
Attorneys & Counselors

By: Frederick W. Addison, III

FWA:kp
Enclosure

cc: Chris Anderson
Frank Stevenson
Martin Malloy – Halff Associates (Via Hand Delivery)

DALLAS:67318/65146:1259924v1

U.S. Department
of Transportation
Federal Highway
Administration

Texas Division Office
300 E. 8th Street, Rm. 826
Austin, Texas 78701

August 19, 2002

In Reply Refer To:
HA-TX

RE: Consultation for FHWA/TxDOT Dallas District
Project Trinity Parkway Toll Road from SH 183/IH 35E
To US 175/SH 310 in Dallas County, Texas. CSJ: 0918-45-121

Mr. Bruce Gonzales, President
The Delaware Nation
P.O. Box 825
Anadarko, Oklahoma 73005

Dear Mr. Gonzales:

The above referenced transportation project is being considered for construction by the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT), and we are in the process of conducting environmental studies for the project. The project is located in an area that may be of interest to your tribe. A brief summary of the proposed project as well as a map of its general location and a map of the specific project location are enclosed for your review. The summary includes information on archeological sites (if any) that are present within the area of the proposed project as well as the recommendations of TxDOT archeologists concerning the proposed project.

In accordance with our Programmatic Agreement under Section 106 of the National Historic Preservation Act, we are writing to request your comments on historic properties of cultural or religious significance to your tribe that may be affected by the proposed undertaking. Any comments you may have on TxDOT's recommendations should also be provided. Please provide your comments within 30 days of receipt of this letter.

Thank you for your attention to this matter. If you have questions, please contact me at (512) 536-5951 or Ms. Barbara Hickman, TxDOT Archeologist, at (512) 416-2637.

Sincerely,

Salvador Deocampo

Salvador Deocampo
Urban Program Engineer

Enclosure
cc w/enclosures: FHWA District Engineer; Ms. Dianna F. Noble, P.E., Director, TxDOT-ENV; Ms. Elvia Gonzales, TxDOT-ENV, Project Manager; Mr. Dan Perge, TxDOT District Environmental Coordinator; Mr. Christopher Anderson, NTTA; Ms. Barbara Hickman, TxDOT Archeologist

The attached letter was sent to the following tribes on 9-5-02:

Mr. James Lee Edwards
Governor
Absentee-Shawnee Executive Committee
2025 S. Gordon Cooper Drive
Shawnee, OK 74801-9381

Mr. Alonzo Chalepah
Chairperson
Apache Tribe of Oklahoma
Cultural Heritage Committee
P. O. Box 1220
Anadarko, OK 73005

Dr. Joe Watkins
BIA-Anadarko
P. O. Box 368
Anadarko, OK 73005

Ms. LaRue Parker
Chairperson
Caddo Tribe of Oklahoma
P. O. Box 487
Binger, OK 73009

Mr. Johnny Wauqua
Chairperson
Comanche Tribe of Oklahoma
IC 32 Box 1720
Lawton, OK 73502

Mr. Bruce Gonzales
President
The Delaware Nation
P. O. Box 825
Anadarko, OK 73005

Mr. Charles D. Enyart
Chief
Eastern Shawnee Tribe of Oklahoma
P. O. Box 350
Seneca, MO 64865

Ms. Bobbi Darnell
Chairperson
Kickapoo of Kansas
P. O. Box 271
Horton, KS 66439

Mr. Danny Kaskaske
Chairperson
Kickapoo of Oklahoma
Business Committee
P. O. Box 70
McCloud, OK 74851

Mr. Raul Garza
Chairperson/NAGPRA Coordinator
Kickapoo Traditional Tribe of Texas
HC1 Route, Box 9700
Eagle Pass, TX 78852

Ms. Sara Misquez, President
c/o Donna Stern-McFadden
Mescalero Apache Tribe
P. O. Box 227
Mescalero, NM 88340

Mr. R. Perry Beaver
Principal Chief
Muscogee (Creek) Nation
P. O. Box 580
Okmulgee, OK 74447

Mr Eddie Tullis, Chairperson
Poarch Creek Indians
5811 Jack Springs Road
Atmore, AL 36502

Mr. John Miller
Chairperson
Pokagon Band of Potawatomi Indians of Michigan
P. O. Box 180
Dowagiac, MI 49047

Ms. Tamara Summerfield
Chairperson
Quapaw Tribal Business Committee
P. O. Box 765
Quapaw, OK 74363

Mr. Billy Cypress, Chairperson
c/o W. S. Steele
Seminole Indian Tribe
Ah-Tah-Thi-Ki Museum
HC-61, Box 21A
Clewiston, FL 33440

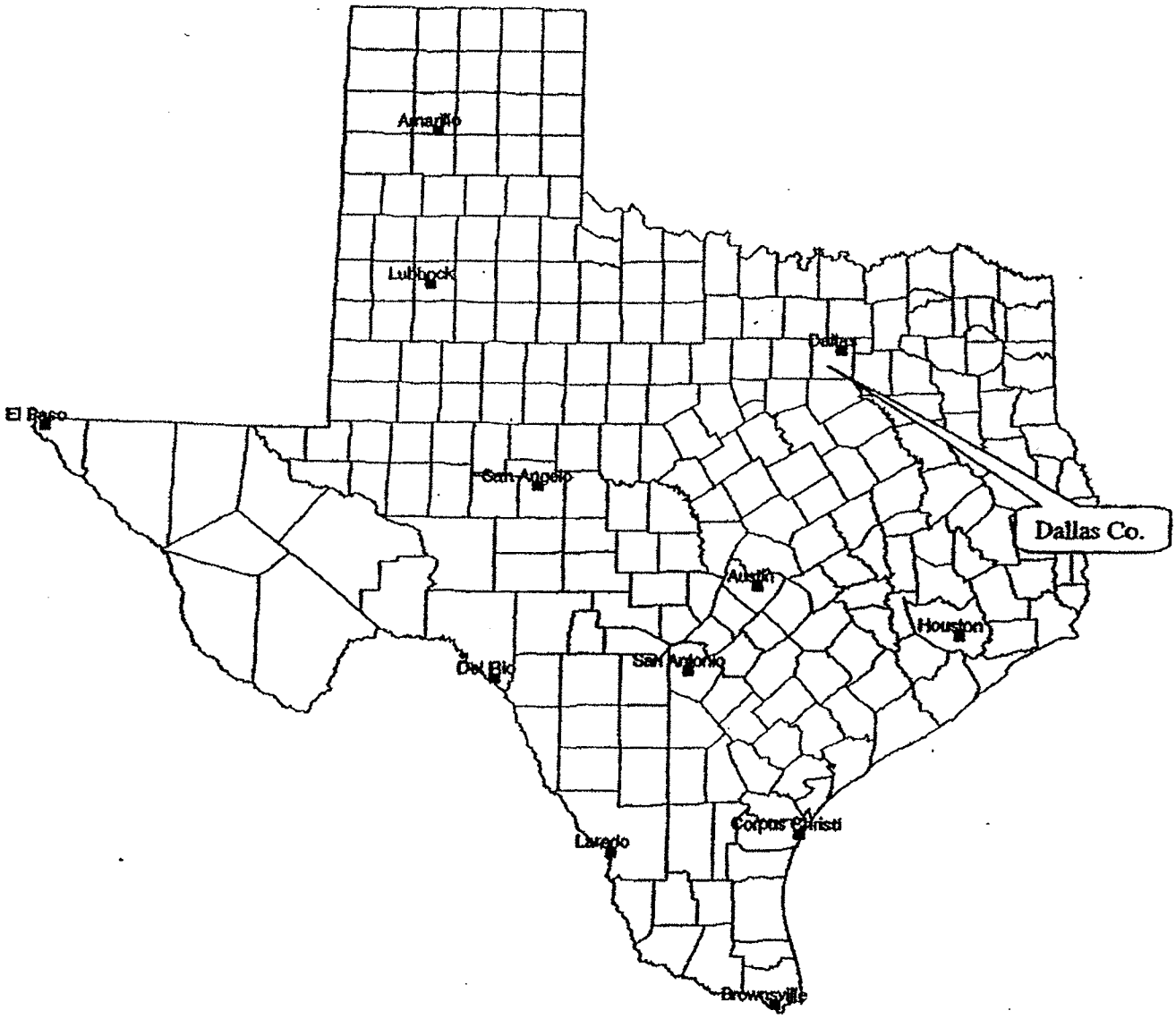
Mr. Kenneth Chambers
Principal Chief
Seminole Nation of Oklahoma
P. O. Box 1498
Wewoka, OK 74884

Mr. Gary McAdams
President
Wichita and Affiliated Tribes
P. O. Box 729
Anadarko, OK 73005

# County Location Map

County __Dallas_____ Project CSJ: _0918-45-121_____

Project Name _Trinity Parkway Toll Road from SH 183/IH 35E to US 175/SH 310___



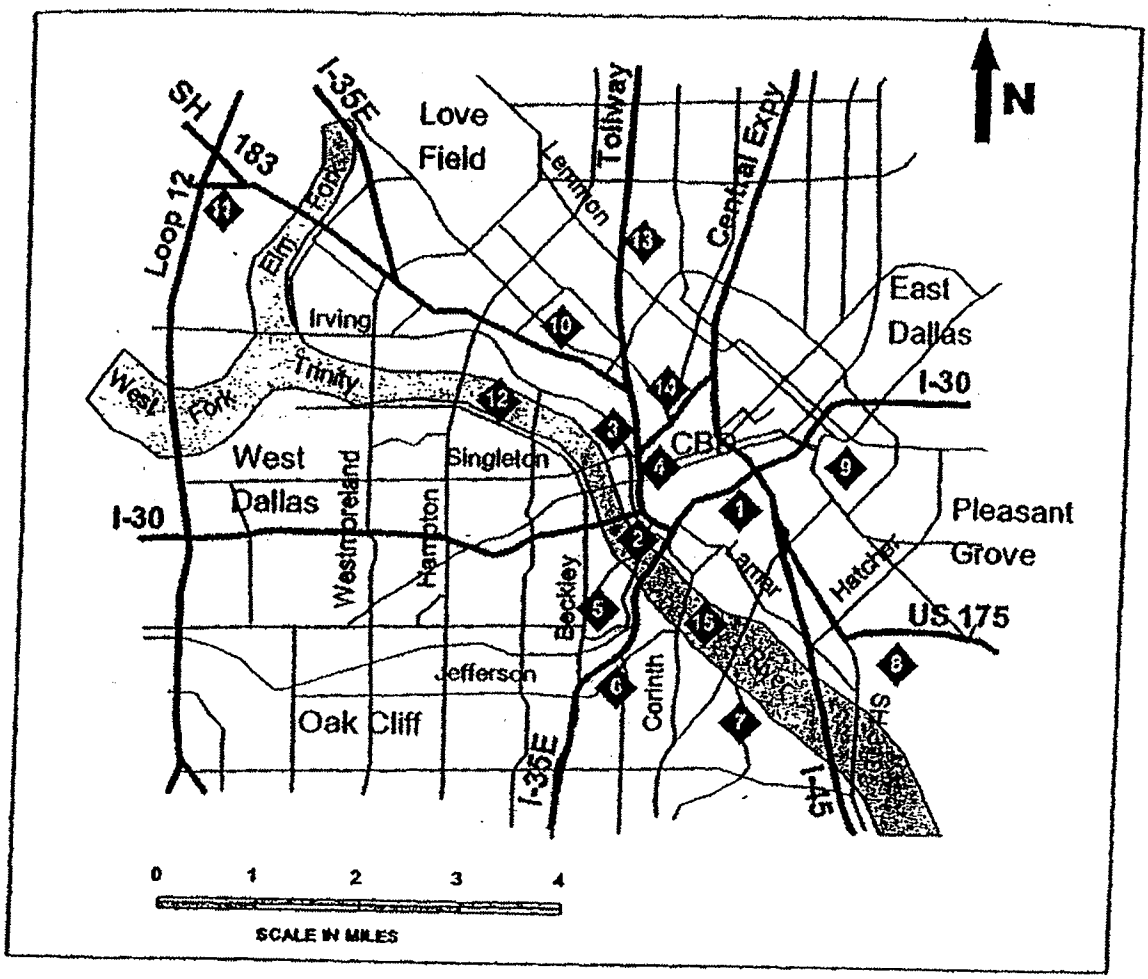



**Figure 1-1 Project Area Map**

**Places of Interest**

1 – Canyon (IH-30)
2 – Mixmaster (IH-35E/IH-30)
3 – Lower Stemmons (IH-35E)
4 – West End and Dealey Plaza
5 – Methodist Medical Center
6 – Dallas Zoo
7 – Cadillac Heights
8 – Rochester Park
9 – Fair Park
10 – Parkland Hospital
11 – Texas Stadium
12 – Dallas Floodway
13 – Dallas North Tollway
14 – Woodall Rodgers Freeway
15 – DART Rail River Crossing

**Other Notes**

- IH-35E north of Dallas CBD is referred to as "Stemmons Freeway"
- IH-35E south of the Dallas CBD is referred to as "South R.L. Thornton Freeway"
- IH-30 west of the Dallas CBD is referred to as the "Tom Landry Freeway"
- IH-30 east of the Dallas CBD is referred to as "East R.L. Thornton Freeway"

Trinity Parkway Dallas County CSJ 0918-45-121

## 1.1 PROJECT DESCRIPTION

The NTTA proposes to construct, operate, and maintain a limited access toll facility from the IH-35E/SH-183 interchange (northern terminus) to the US-175/SH-310 interchange (southern terminus), a distance of approximately nine miles, in the City of Dallas, Dallas County, Texas. The proposed action would provide a needed reliever route around the existing freeway loop, which encircles downtown Dallas.

The Trinity Parkway would consist of six to eight mixed-flow main lanes, local street interchanges, and freeway-to-freeway interchanges at the north termini, south termini, and Woodall Rodgers Freeway connection. Access roads would be added to restore property access where it currently exists, subject to agency justification and approval due to cost, engineering considerations or other impacts. Toll collection facilities would comprise main lane plazas, ramp plazas, and ancillary facilities. The proposed roadway may be constructed in stages, with fewer lanes initially than the ultimate facility. In this case, additional capacity would be added as traffic demand and conditions warrant. Actual construction of the project may also be accomplished in sections, meaning that specific roadway segments may be completed and opened to traffic prior to the completion and opening of the entire length of the facility. Funding for the proposed project is anticipated to be provided by local, state, and federal sources, and through the collection of tolls.

TEXAS HISTORICAL COMMISSION

60128

# ANTIQUITIES PERMIT EXTENSION FORM

RECEIVED
DEC 11 2006
Texas Historical Commission

## GENERAL INFORMATION

Principal Investigator Alan Skinner

Permit Number 4012 Current Expiration Date January 20, 2007

## STATUS OF PERMIT REQUIREMENTS

I. ANALYSIS

List all ongoing analyses all complete for current work

II. REPORT

List the current number of chapters in draft or final form draft being reviewed

III. BUDGET

List funds available to complete all permit requirements sufficient available

## PERMIT EXTENSION REQUEST

Permit Extension Requested for 2 Years ____ Months (1 year minimum)

Principal Investigator S. Alan Skinner
(Signature)

*Please Print*

Name S. Alan Skinner

Mailing Address AR Consultants, Inc. 11040 Audelia Rd, Suite C105

City, State, Zip Dallas, Tx 75243

FOR OFFICIAL USE ONLY

☒ Extension granted
☐ Extension denied

Date reviewed 12-12-06

Dr. F. Lawerence Oaks

New Expiration Date January 20, 2009

Texas Historical Commission
Archeology Division
P.O. Box 12276, Austin, TX 78711-2276
Phone 512/463-6096
www.thc.state.tx.us

TEXAS HISTORICAL COMMISSION
*The State Agency for Historic Preservation*

AR Consultants, Inc.

Archaeological and Environmental Consulting
11020 Audelia Road, Suite C105
Dallas, Texas 75243-9085
Phone: (214) 368-0478
Fax: (214) 221-1519
E-mail: arcdigs@aol.com

September 7, 2007

Bill Martin, Archeologist
Texas Historical Commission
PO Box 12276
Austin, TX 78711

Dear Bill,

Enclosed is a copy of our draft report titled "Archaeological Testing for the Trinity Parkway" that was prepared as part of Permit 4012. The geomorphology for this project was done by Charles Frederick with the assistance of Lance Trask. These guys are the major authors of the enclosed report. As you will see, we located and recorded two sites and recovered two radiocarbon samples from the prehistoric site. The dates are relatively young and in fact compare favorably to the date we got last year on the buried hearth adjacent to the pipeline route through Cedar Hill State Park. We recommend that further trenching is warranted at site 41DL441.

If you have any questions, feel free to contact Charles or Lance or me. We look forward to your review.

Sincerely,

S. Alan Skinner

S. Alan Skinner, PhD
President

Encl. Trinity Parkway Testing – one copy

cc. David Morgan, Halff Associates, Inc.
Skipper Scott, Fort Worth District, Corps of Engineers

HISTORICAL BUILDINGS ARCHAEOLOGY NATURAL SCIENCES

rcd 10/22/07


# TEXAS HISTORICAL COMMISSION

*The State Agency for Historic Preservation*

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR


October 12, 2007

Mr. Wayne Lea
SWFOD-O
Department of the Army
Fort Worth District, Corps of Engineers
P.O. Box 17300
Fort Worth, TX 756102

Re: Project review under Section 106 of the National Historic Preservation Act of 1966
Draft report: *Archaeological Testing for the Trinity River Parkway.*
(COE-FWD/NTTA TAC# 4012)

Dear Mr. Lea:

We are in receipt of the above referenced draft report. This letter serves as comment on the proposed undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission. As the state agency responsible for administering the Antiquities Code of Texas, we also provide comments on compliance with state law.

After examining the document, we find it to be a thorough well written discussion of the various sedimentary depositional units present within the Dallas Floodway. We concur with the authors' recommendation that additional trenching and hand excavation is needed to test site 41DL441 in order to assess its eligibility for inclusion in the National Register of Historic Places. A testing plan must be submitted to this office for review along with an Antiquities Permit for test excavations prior to initiation of this additional work.

We also concur that no further work is needed at site 41DL440, the historic dump. It appears to be ineligible for inclusion in the National Register of Historic Places or for designation as a State Archeological Landmark.

We noted a few typographical errors that should be corrected, but otherwise find the report to be acceptable. We look forward to receiving 20 copies of the final report.

Thank you for your cooperation in this federal and state review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If we can be of further assistance, please Bill Martin at 512/463-5867.**

Sincerely,

William A. Martin

for
F. Lawerence Oaks, State Historic Preservation Officer
FLO/wam

cc: S. Alan Skinner, Ph.D., AR Consultants, Inc.


P.O. BOX 12276 · AUSTIN, TX 78711-2276 · 512/463-6100 · FAX 512/475-4872 · TDD 1-800/735-2989
www.thc.state.tx.us

AR Consultants, Inc.
Archaeological and Environmental Consulting
11020 Audelia Road, Suite C105
Dallas, Texas 75243-9085
Phone: (214) 368-0478
Fax: (214) 221-1519
E-mail: arcdigs@aol.com

November 5, 2007

Wayne Lea
Regulatory Branch
Fort Worth District, Corps of Engineers
PO 17300
Fort Worth, TX 76102

Dear Mr. Lea,

Enclosed are two revised and final copies of our report titled "Archaeological Testing for the Trinity River Parkway" which was reviewed in a letter to you from the Texas Historical Commission dated October 12, 2007. We have addressed the comments provided by the Texas Historical Commission and we are pleased to see that they concurred with our recommendations regarding archaeological sites 41DL440 and 41DL441. We look forward to conducting additional testing at 41DL441.

As this was a Texas Antiquities Code investigation, we are sending the necessary copies and CD to the Texas Historical Commission.

If you have any questions, please contact me at 214 368 0478. Thank you for your concern for the archaeological resources of Texas.

Sincerely,

COPY

S. Alan Skinner, PhD
President

Encl. Trinity Parkway reports-2

cc. Bill Martin, THC with reports and CD
David Morgan, Halff Associates, Inc.

HISTORICAL BUILDINGS ARCHAEOLOGY NATURAL SCIENCES

AR Consultants, Inc.
Archaeological and Environmental Consulting
11020 Audelia Road, Suite C105
Dallas, Texas 75243-9085
Phone: (214) 368-0478
Fax: (214) 221-1519
E-mail: arcdigs@aol.com

November 27, 2007

Barbara Hickman, Staff Archaeologist
Cultural Resources Management Section
Environmental Affairs Division
TxDOT
125 E. 11th St.
Austin, TX 78701-2483

Dear Barbara,

Enclosed you will find a copy of our final report titled "Archaeological Testing for the Trinity Parkway" which describes the results of the excavation of 41 backhoe/trackhoe trenches in the Trinity River floodplain. As you will see we found that much of the floodplain has been heavily mined for fill and probably gravel and that little preserved archaeology was located despite trenching those locations that Charles Frederick and I believed had potential. We did find one buried hearth site that we recommend for further testing.

If you have any questions, please give me a call.

Sincerely,

COPY

S. Alan Skinner, PhD
President

Encl. Trinity Parkway report

cc. David Morgan, Halff Associates, Inc.
Skipper Scott, Corps of Engineers

HISTORICAL BUILDINGS ARCHAEOLOGY NATURAL SCIENCES

TEXAS HISTORICAL COMMISSION

*The State Agency for Historic Preservation*

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

December 3, 2007

Alan Skinner
AR Consultants
11020 Audelia Rd, Ste. C, 105
Dallas, TX 75243

Re: Project review under the Antiquities Code of Texas
CD: Trinity River Parkway, Dallas County
Texas Antiquities Permit #4012
**COMPLETED PERMIT**

Dear Colleague:

Thank you for your correspondence describing the above referenced project. This letter presents the comments of the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas.

The Archeology Division recently received a PDF tagged CD and a completed *Abstracts in Texas Contract Archeology* form for the above referenced permit. The earlier submission of twenty copies of the final report demonstrates completion of your permit requirements under Permit #4012.

Thank you for your cooperation in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Lillie Thompson at 512/463-1858.**

Sincerely,

for
F. Lawerence Oaks, State Historic Preservation Officer

FLO/lft

P.O. BOX 12276 · AUSTIN, TX 78711-2276 · 512/463-6100 · FAX 512/475-4872 · TDD 1-800/735-2989

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX C

# RELOCATION ASSISTANCE INFORMATION

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX C - CONTENTS LIST

## DISPLACEMENT / RELOCATION ASSISTANCE INFORMATION


| Item | Topic | Date | Page |
|---|---|---|---|
| Relocation Assistance Information | --- | --- | 1 - 6 |
| Trinity Parkway Displacements | --- | --- | 7 - 14 |

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX C
# RELOCATION ASSISTANCE INFORMATION

Pursuant to Section 103(a) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, and not withstanding Sections 210 and 305 of this Act, the head of a federal agency may discharge any of his responsibilities under this Act by accepting a certification by a state agency that it will carry out such responsibility, if the head of the lead agency determines such responsibility will be carried out in accordance with state laws which will accomplish the purpose and effect of the Act.

The NTTA may assign relocation responsibilities to other parties, including the City of Dallas. In such an event, relocation procedures described in this appendix would still be applicable. If a Trinity Parkway Build Alternative is recommended and a ROD is issued (estimated to occur in 2009), affected property owners will be notified by mail. Other than properties specifically available or required for early acquisition, it is estimated right-of-way acquisition and first written offers to purchase would occur within one year after issuance of the ROD.

The following explanation is general and informational in nature and is not intended to be a complete or detailed statement of federal and state relocation laws and regulations. Any questions concerning relocation should be addressed to NTTA.

## A. IMPORTANT RELOCATION ASSISTANCE INFORMATION

Any persons to be displaced will be assigned a relocation advisor, who will work closely with each displaced person in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displaced persons jeopardizing or forfeiting any of their benefits or payments. At the time of the first written offer to purchase, owner-occupants are given a detailed explanation of the NTTA's relocation services. Tenant occupants of properties to be acquired are contacted soon after the first written offer to purchase and are also given a detailed explanation of the Relocation Program. To avoid loss of possible benefits, no individual, family, business, farm or non-profit organization should commit to purchase or rent a replacement property without first contacting a relocation advisor.

## B. RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, relocation advisory assistance will be provided to any person, business, farm, or non-profit organization displaced as a result of the acquisition of real property for public use. NTTA will assist

displaced persons in obtaining a comparable replacement dwelling by providing accurate, current, and continuing information on availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary." Non-residential displaced persons will receive information on comparable properties for lease or purchase (Refer to **Section D** for business, farm, and non-profit organization relocation services).

Residential displacement dwellings will be in equal or better neighborhoods at rents or prices within the financial ability of the individuals and families displaced and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displaced persons that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of the Civil Rights Act of 1964, as amended. This assistance will also include supplying information to displaced persons concerning federal and state-assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90-days written notice. Occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement residence, available on the market, is offered to them by the City of Dallas.

## C. RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payment Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to actual costs necessary for or incidental to the purchase or rental of the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any moving costs in excess of 50 miles are the responsibility of the displaced person. The Residential Relocation Program is summarized as follows:

<u>Moving Expenses</u>

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving expenses. Displaced persons will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule.

Replacement Housing Payments

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing. Homeowners who have owned and occupied their property for 180 days or more prior to the date of the first written offer to purchase the property may qualify to receive a differential payment and may qualify to receive reimbursement for certain non-recurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is **$22,500**. If the total entitlement (without moving payments) is in excess of **$22,500**, the Last Resort Housing Program will be used (Refer to Last Resort Housing Program section below).

Rental Supplement

Tenants who have occupied the property to be acquired for 90 days or more and owner-occupants of 90-179 days prior to the date of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when the NTTA determines the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the replacement dwelling. As an alternative, the tenant may qualify for a down-payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations (refer to Down Payment section below). The maximum amount payable to any tenant of 90 days or more and any owner-occupant of 90-179 days, in addition to moving expenses, is **$5,250**. If the total entitlement for rental supplement exceeds **$5,250**, the Last Resort Housing Program will be used.

In addition to the occupancy requirements in order to receive relocation benefits, the displaced person must buy or rent and occupy a "decent, safe, and sanitary" replacement dwelling within 1 year from the date the NTTA takes legal possession of the property, or from the date the displaced person vacates the displacement property, whichever occurs later.

Down-Payment

The down-payment option has been designed to aid owner-occupants of 90-179 days and tenants with no less than 90 days of continuous occupancy before NTTA's first written offer. The down payment and incidental expenses cannot exceed the maximum payment of **$5,250**. The 1-year eligibility period in which to purchase and occupy a "decent, safe, and sanitary" replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program of Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displaced person cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the **$5,250** and **$22,500** limits of the standard relocation procedure, because either the displaced person lacks the financial ability or other valid circumstances. In certain exceptional situations, Last Resort Housing may also be used for tenants of less than 90 days.

After the first written offer to acquire the property has been made, the NTTA will, within a reasonable length of time, personally contact the displaced person(s) to gather important information, including the following:

- Preferences in area of relocation;
- Number of people to be displaced and the distribution of adults and children according to age and sex;
- Location of school and employment;
- Specific arrangements needed to accommodate family member(s) special needs; and
- Financial ability to relocate into comparable replacement dwelling, which will adequately house all members of the family.

## D. THE NONRESIDENTIAL RELOCATION ASSISTANCE PROGRAM

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms, and non-profit organizations in locating suitable replacement property and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for the specific relocation needs of a particular business. The types of payments available to eligible businesses, farms, and non-profit organizations are moving and searching expenses and, possibly, reestablishment expenses or a fixed in lieu payment instead of any moving, searching, and reestablishment expenses. The payment types are summarized as follows:

- The moving of inventory, machinery, equipment, and similar business-related property dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property.

- Displaced business, farms, and nonprofit organizations may be eligible for a payment for the actual direct loss of tangible personal property or the purchase of substitute personal property, which is incurred as a result of the move or discontinuance of the operation. This payment will vary depending upon whether the item is replaced or not; however, it may never exceed the estimated cost of moving and reinstallation.
- Actual expenses related to searching for a new business site, up to **$2,500** for reasonable expenses actually incurred.

Reestablishment Expenses

Actual reestablishment expenses related to the operation of the business at the new location, up to **$10,000** for reasonable expenses actually incurred.

Fixed in Lieu Payment

A fixed payment in lieu of moving and searching payments and reestablishment payment may be available to businesses, which meet certain eligibility requirements. This payment is an amount equal to the average annual net earnings for the last 2 taxable years prior to the relocation and may not be less than **$1,000** or more than **$20,000**.

## E. ADDITIONAL INFORMATION

Relocation Payments Not Income

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or resources for the purpose of determining the extent of eligibility of a displaced person for assistance under the Social Security Act, local “Section 8” housing programs, or other federal assistance programs.

Right to Appeal

Any person, business, farm, or non-profit organization, which has been refused a relocation payment by the relocation advisor or believes the payment(s) offered are inadequate, may appeal for a special hearing of their complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

**THIS PAGE INTENTIONALLY LEFT BLANK**

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 310 Canada Dr, Dallas TX 75212 | HMK Ltd | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 200 Cole St, Dallas TX 75207 | JLCX Property Fund Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 5102 Colonial Ave, Dallas TX 75215 | Jackson A C | 1 | 1 | --- | --- | --- | --- | --- | --- | Residential | 40 / 2 |
| 5105 Colonial Ave, Dallas TX 75215 | Malone Zelma J & | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 5106 Colonial Ave, Dallas TX 75215 | Brown Phillip Joshua | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 5114 Colonial Ave, Dallas TX 75215 | Smith Lewis | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 5117 Colonial Ave, Dallas TX 75215 | Holman James | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 5122 Colonial Ave, Dallas TX 75215 | Packer Detroit Michigan | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 5206 Colonial Ave, Dallas TX 75215 | Standfield Lonnie R | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Residential | 40 / 2 |
| 3130 Commonwealth Dr, Dallas TX 75247 | Powell Elmer C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 160 Continental Ave, Dallas TX 75207 | Watch Omega Holdings LP | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 190 Continental Ave, Dallas TX 75207 | Industrial Ppties Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 132 Corinth St, Dallas TX 75207 | Bishop Engine Replacement | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 201 Corinth St, Dallas TX 75207 | Whitlock Ppties LLC | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 216 Corinth St, Dallas TX 75207 | Ramirez Raul & Rosalinda | 2 | --- | --- | 1 | 1 | --- | --- | --- | Commercial | 33 / 2 |
| 301 Corinth St, Dallas TX 75207 | Bishop Jimmy O | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 166 Express St, Dallas TX 75207 | Last Chance Partners LLC | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1000 Forest Ave, Dallas TX 75215 | Faubion Leo | 3 | 2 | 3 | 2 | --- | 3 | --- | 2 | Commercial | 34 / 2 |
| 3011 Gulden Ln, Dallas TX 75212 | Elliott Don Investments | --- | --- | --- | --- | --- | --- | --- | 2 | Commercial | 101.02 / 1 |
| 3016 Gulden Ln, Dallas TX 75212 | Hargett Electric | --- | --- | --- | --- | --- | 1 | 1 | 1 | Commercial | 101.02 / 1 |
| 3030 Gulden Ln, Dallas TX 75212 | Flores Edward | --- | --- | --- | --- | --- | 2 | 2 | 2 | Residential | 101.02 / 1 |
| 3046 Gulden Ln, Dallas TX 75212 | Cano Anselmo Estate | --- | --- | --- | --- | --- | 1 | 1 | 1 | Residential | 101.02 / 1 |
| 3103 Gulden Ln, Dallas TX 75212 | Lopez Maria Eugenia & | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 3108 Gulden Ln, Dallas TX 75212 | Guamancela Jose Vicente & | --- | --- | --- | --- | --- | 1 | 1 | 1 | Residential | 101.02 / 1 |
| 3109 Gulden Ln, Dallas TX 75212 | Gonzalez Margarito S | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 3110 Gulden Ln, Dallas TX 75212 | Victoriano Christina | --- | --- | --- | --- | --- | 1 | 1 | 1 | Residential | 101.02 / 1 |
| 3111 Gulden Ln, Dallas TX 75212 | Espinoza Jose F P | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 3115 Gulden Ln, Dallas TX 75212 | Martinez Silverio | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 3119 Gulden Ln, Dallas TX 75212 | Mendoza Delores | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 830 Houston St Viaduct St, Dallas TX 75207 | Dallas City Of | --- | --- | --- | --- | --- | --- | --- | 1 | Public | 100 / 3 |
| 166 Howell St, Dallas TX 75207 | Coyote Trading Co Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 167 Howell St, Dallas TX 75207 | Howell Properties | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 169 Howell St, Dallas TX 75207 | Knobler Donald G | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1001 Industrial Blvd, Dallas TX 75207 | Johnson Realty Co | 1 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1449 Inwood Rd, Dallas TX 75247 | Industrial Prop Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3132 Iron Ridge St, Dallas TX 75247 | Bailey Eugene W | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 1630 Irving Blvd, Dallas TX 75207 | Dixie Family Ltd Ps 2 | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1729 Irving Blvd, Dallas TX 75207 | Vichyastit Kittichai & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1800 Irving Blvd, Dallas TX 75207 | Pettigrew Assoc Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1820 Irving Blvd, Dallas TX 75207 | Teweco Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1838 Irving Blvd, Dallas TX 75207 | Turtle Creek & Irving Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1900 Irving Blvd, Dallas TX 75207 | Moks Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1901 Irving Blvd, Dallas TX 75207 | Dallas City Of | 1 | 1 | --- | --- | --- | --- | --- | --- | Public | 100 / 3 |
| 1937 Irving Blvd, Dallas TX 75207 | 1937 Irving LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2001 Irving Blvd, Dallas TX 75207 | Braden Eugene N | 2 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2014 Irving Blvd, Dallas TX 75207 | Mamas Daughters Diner I | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2025 Irving Blvd, Dallas TX 75207 | Amax Investment Co | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 Irving Blvd, Dallas TX 75207 | Mamas Daughters Diner I | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2030 Irving Blvd, Dallas TX 75207 | Chambers Thomas W & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2034 Irving Blvd, Dallas TX 75207 | Lane & McClain Dist Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2042 Irving Blvd, Dallas TX 75207 | Lane & McClain Dist Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2050 Irving Blvd, Dallas TX 75207 | Lane & McClain | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2054 Irving Blvd, Dallas TX 75207 | Lane & Mc Clain | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2062 Irving Blvd, Dallas TX 75207 | Lane McClain Dist Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2100 Irving Blvd, Dallas TX 75207 | Trinity Jlc Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2103 Irving Blvd, Dallas TX 75207 | Monroe Realty Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2108 Irving Blvd, Dallas TX 75207 | Kaighin James G Trustee | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2114 Irving Blvd, Dallas TX 75207 | Pope Patrick G | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2116 Irving Blvd, Dallas TX 75207 | Bae Sonya & Chan | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2120 Irving Blvd, Dallas TX 75207 | Bae Sonya & Chan | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2121 Irving Blvd, Dallas TX 75207 | Warren Brothers Co | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2126 Irving Blvd, Dallas TX 75207 | Bae Sonya & Chan | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2130 Irving Blvd, Dallas TX 75207 | Kason Southwest Corp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2134 Irving Blvd, Dallas TX 75207 | Prachyl Stanley Julian | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2138 Irving Blvd, Dallas TX 75207 | Trinity Land & Cattle Co | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2142 Irving Blvd, Dallas TX 75207 | Buckholt Marty J | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2144 Irving Blvd, Dallas TX 75207 | Hamilton Jack W | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2150 Irving Blvd, Dallas TX 75207 | Lake Barbara A | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2151 Irving Blvd, Dallas TX 75207 | JMDH Realestate Of Dallas | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2154 Irving Blvd, Dallas TX 75207 | Hamilton Tommy Ray & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2156 Irving Blvd, Dallas TX 75207 | Smith G Kent Trustee | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2200 Irving Blvd, Dallas TX 75207 | Tre Investment Co | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2204 Irving Blvd, Dallas TX 75207 | Trinity Land & Cattle Co | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2208 Irving Blvd, Dallas TX 75207 | Hamilton Jack W | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2212 Irving Blvd, Dallas TX 75207 | Herd Randy M & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2221 Irving Blvd, Dallas TX 75207 | Knox Oil Of Tx Inc | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2222 Irving Blvd, Dallas TX 75207 | Jiffy Properties Lp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2226 Irving Blvd, Dallas TX 75207 | Industrial Prop Corp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2227 Irving Blvd, Dallas TX 75207 | Superior Cooling Svcs Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2233 Irving Blvd, Dallas TX 75207 | Feizy Properties Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2241 Irving Blvd, Dallas TX 75207 | Dallas County Employees | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2245 Irving Blvd, Dallas TX 75207 | Dallas City Of | 1 | 2 | --- | --- | --- | --- | --- | --- | Public | 100 / 3 |
| 2255 Irving Blvd, Dallas TX 75207 | Dallas City Of | --- | 3 | --- | --- | --- | --- | --- | --- | Public | 100 / 3 |
| 2308 Irving Blvd, Dallas TX 75207 | Orr Kenneth & Jack Worden | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2312 Irving Blvd, Dallas TX 75207 | Petrucello Michael S Tr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2320 Irving Blvd, Dallas TX 75207 | Germany Building Ii LLC | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2322 Irving Blvd, Dallas TX 75207 | Davis Jeffrey A | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2327 Irving Blvd, Dallas TX 75207 | Moody Day Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2332 Irving Blvd, Dallas TX 75207 | R & M Lynn Investments | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2336 Irving Blvd, Dallas TX 75207 | Ramsey David R | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2344 Irving Blvd, Dallas TX 75207 | East Chuck | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2348 Irving Blvd, Dallas TX 75207 | Hutlabs LLC | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2356 Irving Blvd, Dallas TX 75207 | Moore Vardeman Griffith & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2360 Irving Blvd, Dallas TX 75207 | Powell Elmer C Jr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2366 Irving Blvd, Dallas TX 75207 | Rainbow Oil Prod Co | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2372 Irving Blvd, Dallas TX 75207 | Magnus Partners Lp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2404 Irving Blvd, Dallas TX 75207 | Deb Assets Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2406 Irving Blvd, Dallas TX 75207 | Deb Assets Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2412 Irving Blvd, Dallas TX 75207 | Bess M Sanders Liv Tr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2420 Irving Blvd, Dallas TX 75207 | Magallon Albert | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2425 Irving Blvd, Dallas TX 75207 | Wilemon Enterprises Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2428 Irving Blvd, Dallas TX 75207 | Dreyfus Betsy & Lynn Trst | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2436 Irving Blvd, Dallas TX 75207 | Johnson E O Sr Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2439 Irving Blvd, Dallas TX 75207 | T Four Properties Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2442 Irving Blvd, Dallas TX 75207 | Howell Richard B | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2450 Irving Blvd, Dallas TX 75207 | Deb Assets Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2455 Irving Blvd, Dallas TX 75207 | Trinity Warehouse Lp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2460 Irving Blvd, Dallas TX 75207 | Deb Properties Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2464 Irving Blvd, Dallas TX 75207 | Deb Assets Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2468 Irving Blvd, Dallas TX 75207 | Dealey Mary Alice | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2506 Irving Blvd, Dallas TX 75207 | Dean Floyd F & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2512 Irving Blvd, Dallas TX 75207 | Mitcham Carl & Charlsie | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2515 Irving Blvd, Dallas TX 75207 | Tfb Partners Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2522 Irving Blvd, Dallas TX 75207 | Mitcham Carl & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2525 Irving Blvd, Dallas TX 75207 | Singleton James W Iii Tr | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2528 Irving Blvd, Dallas TX 75207 | Hightower David | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2532 Irving Blvd, Dallas TX 75207 | Market Center Ptnrs Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2535 Irving Blvd, Dallas TX 75207 | Foci Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2536 Irving Blvd, Dallas TX 75207 | Moser Mary Gelineau | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2546 Irving Blvd, Dallas TX 75207 | 2544 2546 Irving Ltd Ps | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2554 Irving Blvd, Dallas TX 75207 | Hoggatt & Roberts Jv | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2560 Irving Blvd, Dallas TX 75207 | Moser Mary Gelineau | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2603 Irving Blvd, Dallas TX 75207 | Moser Mary Gelineau | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2604 Irving Blvd, Dallas TX 75207 | Moser Mary Gelineau | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2608 Irving Blvd, Dallas TX 75207 | Moser Mary Gelineau | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2611 Irving Blvd, Dallas TX 75207 | Spletter Charles J | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2616 Irving Blvd, Dallas TX 75207 | Dahm Georgene M | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2621 Irving Blvd, Dallas TX 75207 | Stuart Hose & Pipe Co Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2622 Irving Blvd, Dallas TX 75207 | Reb Property Company Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2628 Irving Blvd, Dallas TX 75207 | Reb Property Co Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2636 Irving Blvd, Dallas TX 75207 | Crouch James W & | 2 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2640 Irving Blvd, Dallas TX 75207 | Reb Property Co Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2641 Irving Blvd, Dallas TX 75207 | Wrn Properties LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2705 Irving Blvd, Dallas TX 75207 | Bates & Myers Jv | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2711 Irving Blvd, Dallas TX 75207 | Manning Mark D Et Al | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2717 Irving Blvd, Dallas TX 75207 | Crismon Steven V & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2719 Irving Blvd, Dallas TX 75207 | Walnut Realty Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2727 Irving Blvd, Dallas TX 75207 | Khoury Nicola Isss & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2729 Irving Blvd, Dallas TX 75207 | Hunt Denny H | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2730 Irving Blvd, Dallas TX 75207 | Andrews Barry G Etal | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2737 Irving Blvd, Dallas TX 75207 | Germany Building I LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2743 Irving Blvd, Dallas TX 75207 | Young Olive Frances P | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2747 Irving Blvd, Dallas TX 75207 | Bates & Myers Jv #8 Et Al | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2755 Irving Blvd, Dallas TX 75207 | Kelly Moore Paint Co Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2759 Irving Blvd, Dallas TX 75207 | Mcfadden Family Lp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2777 Irving Blvd, Dallas TX 75207 | JLC Ix Property Fund Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2781 Irving Blvd, Dallas TX 75207 | Sounds Etc Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2787 Irving Blvd, Dallas TX 75207 | Kahn Ann Rochelle | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2789 Irving Blvd, Dallas TX 75207 | Garcia Joe | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2797 Irving Blvd, Dallas TX 75207 | Walnut Realty Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2807 Irving Blvd, Dallas TX 75207 | Eulich Virginia W Tr | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2833 Irving Blvd, Dallas TX 75207 | Alford Ella Langdon Tr | 3 | 3 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2845 Irving Blvd, Dallas TX 75207 | Owen Alice E | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2899 Irving Blvd, Dallas TX 75207 | Triple A Oil Co Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2928 Irving Blvd, Dallas TX 75247 | Industrial Prop Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 2936 Irving Blvd, Dallas TX 75247 | Industrial Ppties Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 2939 Irving Blvd, Dallas TX 75247 | Irving Eagle Indust Park | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 2946 Irving Blvd, Dallas TX 75247 | Bond Elizabeth Ann | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 2950 Irving Blvd, Dallas TX 75247 | Lucas Harry B Irv Blvd Jv | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 2964 Irving Blvd, Dallas TX 75247 | Robertson Rita S | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3000 Irving Blvd, Dallas TX 75247 | Gardiner Properties Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3020 Irving Blvd, Dallas TX 75247 | Bright Truck Leasing Corp | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3030 Irving Blvd, Dallas TX 75247 | Goodell Corporation The | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3034 Irving Blvd, Dallas TX 75247 | Bowen & Associates LLC | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3040 Irving Blvd, Dallas TX 75247 | Bowen & Associates LLC | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 3054 Irving Blvd, Dallas TX 75247 | Kkl Investment Partners | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 3060 Irving Blvd, Dallas TX 75247 | Texcam Realty Lp | --- | --- | --- | 1 | --- | --- | --- | --- | Commercial | 100 / 1 |
| 3131 Irving Blvd, Dallas TX 75247 | Cadles Commonwealth | --- | --- | 2 | 2 | 2 | 2 | 1 | 2 | Commercial | 100 / 1 |
| 7009 John W Carpenter Fwy, Dallas TX 75247 | Vaughn Mickey Jo | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 7017 John W Carpenter Fwy, Dallas TX 75247 | Mr Sign Inc | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 7021 John W Carpenter Fwy, Dallas TX 75247 | Prescott Interests Ltd | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 7035 John W Carpenter Fwy, Dallas TX 75247 | Carpenter N V | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 4115 Julius Schepps Fwy, Dallas TX 75215 | Duggan Industries Inc | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 1 |
| 4916 Lakawana St, Dallas TX 75247 | Lakawana Holdings Lp | --- | --- | --- | 1 | --- | 1 | --- | 1 | Commercial | 100 / 1 |
| 5031 Lakawana St, Dallas TX 75247 | Washington Wholesale | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 100 / 1 |
| 5102 Lamar St, Dallas TX 75215 | Vasquez Jose | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 1100 Lenway St, Dallas TX 75215 | Occidental Chemical Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 1212 Lenway St, Dallas TX 75215 | G & A Corporation | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 154 Leslie St, Dallas TX 75207 | Hrh Investment Company | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 167 Leslie St, Dallas TX 75207 | Perry Judy | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 170 Leslie St, Dallas TX 75207 | Trejo Eustorgio | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1410 Loomis Ave, Dallas TX 75215 | Beam James F | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 40 / 1 |
| 141 Manufacturing St, Dallas TX 75207 | Trinity Pky Ptnr Ltd & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1501 Market Center Blvd, Dallas TX 75207 | Chang George C M & | 1 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1601 Market Center Blvd, Dallas TX 75207 | Dixie Family Ltd Ps 1 | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1615 Market Center Blvd, Dallas TX 75207 | Dixie Family Ltd Ps 2 | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1715 Market Center Blvd, Dallas TX 75207 | Orr John H Jr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1301 McDonald St, Dallas TX 75215 | 1301 McDonald Lp | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 1 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1401 Metropolitan Ave, Dallas TX 75215 | Mills Larry | 1 | --- | --- | --- | --- | --- | --- | --- | Residential | 40 / 1 |
| 819 Millard St, Dallas TX 75203 | Moxie Investments Ltd | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 41 / 1 |
| 1212 Motor St, Dallas TX 75207 | Phyllis Ann Accessories | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 2330 N Beckley Ave, Dallas TX 75208 | Ellis G G | --- | --- | --- | --- | --- | --- | --- | 1 | Commercial | 43 / 1 |
| 2516 N Beckley Ave, Dallas TX 75208 | Frost Jack W | --- | --- | --- | --- | --- | --- | --- | 2 | Commercial | 43 / 1 |
| 2634 N Beckley Ave, Dallas TX 75208 | Jones S James Trustee | --- | --- | --- | --- | --- | --- | --- | 3 | Commercial | 43 / 1 |
| 2920 N Beckley Ave, Dallas TX 75212 | Holdridge Ben & | --- | --- | --- | --- | --- | --- | --- | 2 | Commercial | 43 / 1 |
| 188 N Industrial Blvd, Dallas TX 75207 | Dallas County Of | 1 | 1 | --- | --- | --- | --- | --- | --- | Public | 100 / 3 |
| 650 N Industrial Blvd, Dallas TX 75207 | Industrial Ppties Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 707 N Industrial Blvd, Dallas TX 75207 | Shafer George | 2 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 750 N Industrial Blvd, Dallas TX 75207 | Industrial Prpts Corp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 801 N Industrial Blvd, Dallas TX 75207 | Trinity Partners Jv | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 902 N Industrial Blvd, Dallas TX 75207 | Reppas Inc | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 909 N Industrial Blvd, Dallas TX 75207 | Investment Properties Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 910 N Industrial Blvd, Dallas TX 75207 | Ccfp Limited | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 919 N Industrial Blvd, Dallas TX 75207 | Texas Utilities Elec Co | --- | 1 | --- | 1 | 1 | --- | --- | --- | Commercial | 100 / 3 |
| 921 N Industrial Blvd, Dallas TX 75207 | Zimmerman J F And Son | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 922 N Industrial Blvd, Dallas TX 75207 | CCFP Limited | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1010 N Industrial Blvd, Dallas TX 75207 | Moody Herman B Iii & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1012 N Industrial Blvd, Dallas TX 75207 | Moody Herman B Iii & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1022 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1026 N Industrial Blvd, Dallas TX 75207 | Christ George C Trust | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1100 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1101 N Industrial Blvd, Dallas TX 75207 | All Pro Bldg Products Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1104 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1114 N Industrial Blvd, Dallas TX 75207 | XFP Ltd Ps | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1118 N Industrial Blvd, Dallas TX 75207 | XFP Ltd Ps | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1129 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1130 N Industrial Blvd, Dallas TX 75207 | CCFP Limited | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1201 N Industrial Blvd, Dallas TX 75207 | Jernigan Nancy J | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1202 N Industrial Blvd, Dallas TX 75207 | Jernigan Nancy J | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1216 N Industrial Blvd, Dallas TX 75207 | Jernigan Nancey J | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1225 N Industrial Blvd, Dallas TX 75207 | Collins Cragi Hoffman & | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1226 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1230 N Industrial Blvd, Dallas TX 75207 | CCFP Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1300 N Industrial Blvd, Dallas TX 75207 | Danczyk LLC | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1301 N Industrial Blvd, Dallas TX 75207 | C B Enterprise | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1310 N Industrial Blvd, Dallas TX 75207 | Vichyastit Kittichai & | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1313 N Industrial Blvd, Dallas TX 75207 | Padgett Printing Corp | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1314 N Industrial Blvd, Dallas TX 75207 | Pisecco Joseph F | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1318 N Industrial Blvd, Dallas TX 75207 | Nabb Don R | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1322 N Industrial Blvd, Dallas TX 75207 | 1322 N Industrial Blvd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1400 N Industrial Blvd, Dallas TX 75207 | Ramirez John Marcus | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1407 N Industrial Blvd, Dallas TX 75207 | F & T Partnership 3 | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1408 N Industrial Blvd, Dallas TX 75207 | Trevino Frank O & Emilia | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1418 N Industrial Blvd, Dallas TX 75207 | Ramirez Mary Stella | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1421 N Industrial Blvd, Dallas TX 75207 | Castle Mailing Center Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1426 N Industrial Blvd, Dallas TX 75207 | Johnson Donald L | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1430 N Industrial Blvd, Dallas TX 75207 | Mcclain Hazel A G | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 505 N Industrial Blvd., Dallas TX 75207 | Waterfront Towers Lp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1100 N Lancaster Ave, Dallas TX 75203 | City & County Levee | --- | --- | --- | --- | --- | --- | --- | 1 | Public | 20 / 2 |
| 403 N Stemmons Fwy, Dallas TX 75207 | Jefferson Skyline Lp | 3 | 3 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 501 N Stemmons Fwy, Dallas TX 75207 | Watch Omega Holdings Lp | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 3111 N Stemmons Fwy, Dallas TX 75247 | Stemmons Hotel Limited | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | Commercial | 100 / 1 |
| 505 N. Industrial Blvd., Dallas TX 75207 | Waterfront Towers Lp | --- | --- | 1 | 1 | 1 | 1 | --- | 1 | Commercial | 100 / 3 |
| 3301 National St, Dallas TX 75215 | Beall Concrete Inc | 3 | 3 | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 175 Oak Lawn Ave, Dallas TX 75207 | Boyd Scott | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 180 Oak Lawn Ave, Dallas TX 75207 | Lerer Realty Co | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1201 Oak Lawn Ave, Dallas TX 75207 | Goyen Ppties Family Lp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 3519 Parnell St, Dallas TX 75215 | Mcclellan Isaac | 1 | --- | --- | --- | --- | --- | --- | --- | Residential | 34 / 2 |
| 3108 Pastor St, Dallas TX 75212 | Rangel Antonio P | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 3110 Pastor St, Dallas TX 75212 | Martinez Silverio & | --- | --- | --- | --- | --- | --- | --- | 1 | Residential | 101.02 / 1 |
| 209 Payne St, Dallas TX 75207 | Murray Marian J | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 3000 Pegasus Park Dr, Dallas TX 75247 | Mobil Oil Corp | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 1 |
| 161 Pittsburg St, Dallas TX 75207 | Goldau Konrad G & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 170 Pittsburg St, Dallas TX 75207 | Azimi Enterprises | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1143 Quaker St, Dallas TX 75207 | Monroe Realty Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1153 Quaker St, Dallas TX 75207 | Tribble Robert E & Lark | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1165 Quaker St, Dallas TX 75207 | Roberson Corey | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1174 Quaker St, Dallas TX 75207 | Quaker Equities Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1188 Quaker St, Dallas TX 75207 | Quaker Equities Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 3001 Quebec St, Dallas TX 75247 | Quebec Business | --- | --- | --- | 1 | --- | 1 | 1 | 1 | Commercial | 100 / 1 |
| 314 Rock Island St, Dallas TX 75207 | Rock Island Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 326 Rock Island St, Dallas TX 75207 | Rock Island Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 334 Rock Island St, Dallas TX 75207 | Rock Island Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 350 Rock Island St, Dallas TX 75207 | Rock Island Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1100 Rock Island St, Dallas TX 75207 | Clouse C H | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1104 Rock Island St, Dallas TX 75207 | Clouse C H | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1114 Rock Island St, Dallas TX 75207 | Hurt & Hardie Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1120 Rock Island St, Dallas TX 75207 | Hurt & Hardie Inc | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1210 Rock Island St, Dallas TX 75207 | Benda Family Ltd Ps | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1214 Rock Island St, Dallas TX 75207 | Benda Family Ltd Ps | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1228 Rock Island St, Dallas TX 75207 | 5 Star Highlander Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1800 Rock Island St, Dallas TX 75207 | Rockalong LLC | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1808 Rock Island St, Dallas TX 75207 | Eans John E | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1810 Rock Island St, Dallas TX 75207 | Sherard Milligan | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1812 Rock Island St, Dallas TX 75207 | Sherard Milligan F & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1820 Rock Island St, Dallas TX 75207 | Sherard Scott T | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1824 Rock Island St, Dallas TX 75207 | Sherard Martha M | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1908 Rock Island St, Dallas TX 75207 | Rock Island Holding Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1910 Rock Island St, Dallas TX 75207 | HML Holdings LLC | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1918 Rock Island St, Dallas TX 75207 | HML Holdings LLC | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2000 Rock Island St, Dallas TX 75207 | Brock Jerry Lynn | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2006 Rock Island St, Dallas TX 75207 | Brock Jerry Lynn | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5305 S Central Expy, Dallas TX 75215 | Matassa Martin Leonard | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 311 S Industrial Blvd, Dallas TX 75207 | Jiffy Properties Lp | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 314 S Industrial Blvd, Dallas TX 75207 | Taylor David D Jr Et Al | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 323 S Industrial Blvd, Dallas TX 75207 | Lams Family Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 334 S Industrial Blvd, Dallas TX 75207 | Rieke Lucy Christine Tr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 339 S Industrial Blvd, Dallas TX 75207 | Lakhani Mehmood & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 345 S Industrial Blvd, Dallas TX 75207 | Lakhani Mehmood | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 350 S Industrial Blvd, Dallas TX 75207 | Rieke Lucy Christine Tr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 351 S Industrial Blvd, Dallas TX 75207 | Lakhani Mehmood & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 352 S Industrial Blvd, Dallas TX 75207 | Dallas Society For Prev | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 359 S Industrial Blvd, Dallas TX 75207 | Lakhani Mehmood & | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 370 S Industrial Blvd, Dallas TX 75207 | SPCA Of Texas | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 378 S Industrial Blvd, Dallas TX 75207 | Clark Robert E | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 424 S Industrial Blvd, Dallas TX 75207 | Hensley Robert F Sr | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 430 S Industrial Blvd, Dallas TX 75207 | Ngs Partnership Ltd | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 503 S Industrial Blvd, Dallas TX 75207 | Jiffy Properties Lp | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 515 S Industrial Blvd, Dallas TX 75207 | Jiffy Properties L P | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 518 S Industrial Blvd, Dallas TX 75207 | Thompson Joe C | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 525 S Industrial Blvd, Dallas TX 75207 | Little L W | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 526 S Industrial Blvd, Dallas TX 75207 | Industrial Ppties Corp | 4 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 538 S Industrial Blvd, Dallas TX 75207 | Has Partnership Ltd | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 539 S Industrial Blvd, Dallas TX 75207 | Industrial Ppties Corp | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 543 S Industrial Blvd, Dallas TX 75207 | Mitchell Yara L | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 600 S Industrial Blvd, Dallas TX 75207 | Industrial Properties | 3 | --- | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 603 S Industrial Blvd, Dallas TX 75207 | Fouts John | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 801 S Industrial Blvd, Dallas TX 75207 | Industrial Gold Rush Ltd | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 913 S Industrial Blvd, Dallas TX 75207 | Texas Utilities Elec Co | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 915 S Industrial Blvd, Dallas TX 75207 | Texas Utilities Elec Co | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 1010 S Industrial Blvd, Dallas TX 75207 | Famkar Masoud | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1015 S Industrial Blvd, Dallas TX 75207 | H Kim Investment Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1018 S Industrial Blvd, Dallas TX 75207 | Famkar Masoud | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1027 S Industrial Blvd, Dallas TX 75207 | Reyna Roger & Rosa | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1103 S Industrial Blvd, Dallas TX 75207 | Uhrick Mike | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1118 S Industrial Blvd, Dallas TX 75207 | Famkar Masoud | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1119 S Industrial Blvd, Dallas TX 75207 | Hurt & Hardie Inc | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1120 S Industrial Blvd, Dallas TX 75207 | Famkar Masoud | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1123 S Industrial Blvd, Dallas TX 75207 | Uhrick Michael | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1200 S Industrial Blvd, Dallas TX 75207 | Famkar Masoud | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1203 S Industrial Blvd, Dallas TX 75207 | Lindsey Penny | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1207 S Industrial Blvd, Dallas TX 75207 | Martinez Silverio | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1208 S Industrial Blvd, Dallas TX 75207 | Uhrick Michael | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1209 S Industrial Blvd, Dallas TX 75207 | Preston Hubert | --- | 2 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1212 S Industrial Blvd, Dallas TX 75207 | Uhrick Jean Louise | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1213 S Industrial Blvd, Dallas TX 75207 | Yeganeh Mike | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1217 S Industrial Blvd, Dallas TX 75207 | Coleman Lillian Austin | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1219 S Industrial Blvd, Dallas TX 75207 | 5 Star Highlander Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1222 S Industrial Blvd, Dallas TX 75207 | Doan Misty | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |

## TABLE C-1. TRINITY PARKWAY DISPLACEMENTS

| Address | Owners | 2A Bldg./ Displacements | 2B Bldg./ Displacements | 3A Bldg./ Displacements | 3B Bldg./ Displacements | 3C Bldg./ Displacements | 4A Bldg./ Displacements | 4B Bldg./ Displacements | 5 Bldg./ Displacements | Type | Census Tract / Block Group |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1223 S Industrial Blvd, Dallas TX 75207 | Schepps M E | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1819 S Industrial Blvd, Dallas TX 75207 | HMK Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 1919 S Industrial Blvd, Dallas TX 75207 | Womack Alfredia R | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2006 S Industrial Blvd, Dallas TX 75207 | Bishop Jeffrey Ray & | 2 | --- | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2017 S Industrial Blvd, Dallas TX 75207 | RBB Industrial LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2101 S Industrial Blvd, Dallas TX 75207 | Nguyen Randy Dac & | 1 | 1 | --- | 1 | 1 | --- | --- | --- | Commercial | 33 / 2 |
| 2205 S Industrial Blvd, Dallas TX 75207 | Bartholow Rental Co. | 2 | 7 | --- | 1 | 1 | --- | --- | --- | Commercial | 33 / 2 |
| 2209 S Industrial Blvd, Dallas TX 75207 | Atlas Iron & Metal | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 33 / 2 |
| 2214 S Industrial Blvd, Dallas TX 75207 | Hansen Howard | 1 | --- | --- | 1 | 1 | --- | --- | --- | Commercial | 33 / 2 |
| 3301 S Lamar St, Dallas TX 75215 | Recycling Prop Lp | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 3514 S Lamar St, Dallas TX 75215 | G & A Corporation | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 3520 S Lamar St, Dallas TX 75215 | Haney R W | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 34 / 2 |
| 3606 S Lamar St, Dallas TX 75215 | Harpet Investments | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 40 / 1 |
| 3650 S Lamar St, Dallas TX 75215 | Marigos Mike | 1 | --- | --- | --- | --- | --- | --- | --- | Commercial | 40 / 1 |
| 3701 S Lamar St, Dallas TX 75215 | Dallas I S D | 2 | 4 | --- | --- | --- | --- | --- | --- | Public | 40 / 1 |
| 4101 S Lamar St, Dallas TX 75215 | Eudaric Pam | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4110 S Lamar St, Dallas TX 75215 | St Paul Baptist Church | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4115 S Lamar St, Dallas TX 75215 | Eudaric Pam | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4213 S Lamar St, Dallas TX 75215 | Lieu Brothers Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4215 S Lamar St, Dallas TX 75215 | Loshel Company | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4301 S Lamar St, Dallas TX 75215 | Ken Goldberg | 3 | 3 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4501 S Lamar St, Dallas TX 75215 | Gregson David & Linda | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4717 S Lamar St, Dallas TX 75215 | MLOK LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4801 S Lamar St, Dallas TX 75215 | Mahajan Corporation | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 4805 S Lamar St, Dallas TX 75215 | MLOK LLC | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4809 S Lamar St, Dallas TX 75215 | Maldonado Jaime | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4819 S Lamar St, Dallas TX 75215 | Mccormick Betty Lynn | 2 | 2 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4901 S Lamar St, Dallas TX 75215 | Gold Metal Recyclers Inc | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 4915 S Lamar St, Dallas TX 75215 | Clark Ann Trustee | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 5001 S Lamar St, Dallas TX 75215 | La Huot Seng & | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 5022 S Lamar St, Dallas TX 75215 | Esters Joe L | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 40 / 2 |
| 5114 S Lamar St, Dallas TX 75215 | Smith Helen Elizabeth | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 5209 S Lamar St, Dallas TX 75215 | Mabery Jack D | --- | --- | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 1645 Starks Ave, Dallas TX 75215 | Johnson D C | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | Commercial | 40 / 2 |
| 1001 Sylvan Ave, Dallas TX 75207 | Dallas City Of | --- | --- | --- | --- | --- | --- | --- | 1 | Public | 100 / 3 |
| 150 Turtle Creek Blvd, Dallas TX 75207 | One Turtle Creek, Ltd | 1 | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| 167 Turtle Creek Blvd, Dallas TX 75207 | Sawyer Dev Group L P | --- | 1 | --- | --- | --- | --- | --- | --- | Commercial | 100 / 3 |
| TOTAL DISPLACEMENTS | | 285 | 245 | 33 | 40 | 35 | 41 | 35 | 62 | | |

**NOTE:** The information for Alternatives 3A, 3B, and 4A is shaded to denote for the reader that these alternatives are not considered feasible by the USACE due to concerns detailed in **Volume I, Chapter 2, Section 2.3.9**.

# APPENDIX D

# COST ESTIMATES

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX D – CONTENTS LIST

## COST ESTIMATES


| Item | Topic | Date | Page |
|---|---|---|---|
| Cost Estimates | ---- | August 2007 | 1 - 25 |

THIS PAGE INTENTIONALLY LEFT BLANK

## SUMMARY OF PROJECT COSTS

| Category | TRINITY PARKWAY BUILD ALTERNATIVES | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2A | 2B | 3A | 3B | 3C | 4A | 4B | 5 |
| **CONSTRUCTION COSTS (CURRENT $)** | | | | | | | | |
| ROADWAY | 25,646,142 | 58,337,736 | 93,060,458 | 119,559,631 | 106,382,534 | 120,790,591 | 115,923,880 | 126,314,713 |
| STRUCTURES, BRIDGES & WALLS | 774,398,600 | 484,088,750 | 355,023,530 | 353,296,170 | 463,057,520 | 386,287,750 | 501,974,450 | 459,561,540 |
| DRAINAGE & UTILITIES | 78,586,370 | 70,036,810 | 39,773,750 | 42,045,500 | 41,245,750 | 44,181,250 | 44,188,750 | 113,464,500 |
| MISCELLANEOUS- SIGNAGE, LIGHTING, TRAFFIC CONTROL, ETC | 89,449,780 | 93,908,402 | 64,391,074 | 64,685,141 | 56,977,723 | 76,102,836 | 66,293,630 | 76,415,414 |
| TOLL GANTRIES & ITS | 33,365,000 | 33,365,000 | 33,365,000 | 33,365,000 | 33,365,000 | 33,365,000 | 33,365,000 | 33,365,000 |
| MOBILIZATION (10%) | 100,144,589 | 73,973,670 | 58,561,381 | 61,295,144 | 70,102,853 | 66,072,743 | 76,174,571 | 80,912,117 |
| SUBTOTAL- CONSTRUCTION COSTS | 1,101,590,481 | 813,710,368 | 644,175,193 | 674,246,586 | 771,131,380 | 726,800,170 | 837,920,281 | 890,033,284 |
| CONSTRUCTION CONTINGENCIES (20%) | 220,318,096 | 162,742,074 | 128,835,039 | 134,849,317 | 154,226,276 | 145,360,034 | 167,584,056 | 178,006,657 |
| **TOTAL CONSTRUCTION COST (CURRENT $)** | 1,321,908,577 | 976,452,441 | 773,010,232 | 809,095,903 | 925,357,656 | 872,160,204 | 1,005,504,337 | 1,068,039,940 |
| | | | | | | | | |
| **ROW COSTS (CURRENT $)** | | | | | | | | |
| SUBTOTAL- ROW COSTS | 327,091,448 | 294,239,347 | 78,830,051 | 92,516,480 | 93,097,788 | 84,807,801 | 85,474,522 | 95,109,200 |
| ROW CONTINGENCIES (20%) | 65,418,290 | 58,847,869 | 15,766,010 | 18,503,296 | 18,619,558 | 16,961,560 | 17,094,904 | 19,021,840 |
| **TOTAL ROW COST (CURRENT $)** | 392,509,738 | 353,087,216 | 94,596,061 | 111,019,776 | 111,717,346 | 101,769,361 | 102,569,426 | 114,131,040 |
| | | | | | | | | |
| **AGENCY COSTS (CURRENT $)** | | | | | | | | |
| SUBTOTAL- AGENCY COSTS | 303,379,394 | 230,084,725 | 176,019,200 | 184,377,619 | 210,611,396 | 200,916,444 | 229,585,432 | 247,310,587 |
| AGENCY CONTINGENCIES (20%) | 60,675,879 | 46,016,945 | 35,203,840 | 36,875,524 | 42,122,279 | 40,183,289 | 45,917,086 | 49,462,117 |
| **TOTAL AGENCY COST (CURRENT $)** | 364,055,273 | 276,101,670 | 211,223,040 | 221,253,143 | 252,733,675 | 241,099,733 | 275,502,518 | 296,772,704 |
| | | | | | | | | |
| **TOTAL PROJECT COST SUMMARY (CURRENT $) - ROUNDED UP TO NEAREST MILLION** | | | | | | | | |
| TOTAL CONSTRUCTION COST | 1,321,908,577 | 976,452,441 | 773,010,232 | 809,095,903 | 925,357,656 | 872,160,204 | 1,005,504,337 | 1,068,039,940 |
| TOTAL ROW COST | 392,509,738 | 353,087,216 | 94,596,061 | 111,019,776 | 111,717,346 | 101,769,361 | 102,569,426 | 114,131,040 |
| TOTAL AGENCY COST | 364,055,273 | 276,101,670 | 211,223,040 | 221,253,143 | 252,733,675 | 241,099,733 | 275,502,518 | 296,772,704 |
| **TOTAL PROJECT COST (CURRENT $)** | 2,079,000,000 | 1,606,000,000 | 1,079,000,000 | 1,142,000,000 | 1,290,000,000 | 1,216,000,000 | 1,384,000,000 | 1,479,000,000 |
| | | | | | | | | |
| **TOTAL PROJECT COST SUMMARY (ESCALATED $, CONSTRUCTION YEAR 2013 - ENR CCI** | | | | | | | | |
| ESCALATED TOTAL CONSTRUCTION COST | 1,833,359,156 | 1,354,244,956 | 1,072,090,317 | 1,122,137,648 | 1,283,381,437 | 1,209,601,724 | 1,394,537,122 | 1,481,267,946 |
| ESCALATED TOTAL ROW COST | 544,372,987 | 489,697,769 | 131,195,574 | 153,973,676 | 154,941,137 | 141,144,247 | 142,253,859 | 158,288,698 |
| ESCALATED TOTAL AGENCY COST | 504,909,401 | 382,926,273 | 292,945,897 | 306,856,678 | 350,517,127 | 334,381,976 | 382,095,308 | 411,594,995 |
| **TOTAL PROJECT COST (ESCALATED $)** | 2,883,000,000 | 2,227,000,000 | 1,497,000,000 | 1,583,000,000 | 1,789,000,000 | 1,686,000,000 | 1,919,000,000 | 2,052,000,000 |
| | | | | | | | | |
| **POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES (CURRENT $)** | | | | | | | | |
| TOTAL CONSTRUCTION COSTS | 107,367,513 | 107,367,513 | 107,367,513 | 107,367,513 | 107,367,513 | 107,367,513 | 107,367,513 | 107,367,513 |
| TOTAL POSSIBLE SAVINGS TO AGENCY | 5,140,853 | 5,140,853 | 5,140,853 | 5,140,853 | 5,140,853 | 5,140,853 | 5,140,853 | 5,140,853 |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | 112,508,366 | 112,508,366 | 112,508,366 | 112,508,366 | 112,508,366 | 112,508,366 | 112,508,366 | 112,508,366 |

Note: The information for Alternatives 3A, 3B, and 4A is shaded to denote for the reader that these alternatives are not considered feasible by the USACE due to concerns detailed in Volume 1, Chapter 2, Section 2.3.9

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 2A INDUSTRIAL BLVD. ELEVATED**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **MCG** |
| **Date:** | **2/5/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 24,240 | SY | $70 | $1,696,800 |
| 1.01a | Asphalt Shoulders | 28,500 | SY | $50 | $1,425,000 |
| 1.02 | Frontage Road Pavement | 220,122 | SY | $70 | $15,408,517 |
| 1.03 | Ramp Pavement | 25,682 | SY | $70 | $1,797,756 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 52,270 | LF | $3 | $156,810 |
| 1.06 | Pavement Striping (Solid) | 397,780 | LF | $2 | $795,560 |
| 1.07 | Pavement Striping (Broken) | 342,200 | LF | $2 | $684,400 |
| 1.08 | Concrete Traffic Barrier | 43,520 | LF | $38 | $1,653,760 |
| 1.09 | Excavation | 9,120 | CY | $7 | $63,840 |
| 1.09a | Excavation (Haul) | 9,120 | CY | $10 | $91,200 |
| 1.10 | Embankment | 267,500 | CY | $7 | $1,872,500 |
| 1.10a | Embankment (Haul) | 0 | CY | $10 | $0 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 25,646,142** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 475,680 | SF | $60 | $28,540,800 |
| 2.02 | Main Lane Bridge (Special) | 5,247,120 | SF | $95 | $498,476,400 |
| 2.03 | Frontage Road Bridge (Standard) | 0 | SF | $60 | $0 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 175,360 | SF | $60 | $10,521,600 |
| 2.06 | Ramp Bridge (Special) | 1,130,500 | SF | $95 | $107,397,500 |
| 2.07 | Cross Street Bridge | 0 | SF | $60 | $0 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 373,270 | SF | $45 | $16,797,150 |
| 2.10 | Flood Wall | 0 | SF | $50 | $0 |
| 2.11 | Park Access Bridge | 0 | SF | $56 | $0 |
| 2.12 | Pedestrian Park Access Bridge | 0 | SF | $54 | $0 |
| 2.13 | Reunion Pedestrian Platform | 0 | EA | $7,748,810 | $0 |
| 2.14 | Bridge Widening (Standard) | 9,360 | SF | $90 | $842,400 |
| 2.15 | Bridge Widening (Special) | 860,175 | SF | $130 | $111,822,750 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 774,398,600** |
| **3.0 DRAINAGE & UTILITIES** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 547 | STA | $25,000 | $13,675,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 0 | EA | $271,000 | $0 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 9,800 | LF | $50 | $490,000 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 0 | EA | $817,500 | $0 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 32,449 | LF | $100 | $3,244,900 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 27,499 | LF | $200 | $5,499,800 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 13,749 | LF | $390 | $5,362,110 |
| 3.10 | Relocate Small Drainage Lines (<18") | 32,449 | LF | $120 | $3,893,880 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 27,499 | LF | $190 | $5,224,810 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 14,049 | LF | $380 | $5,338,620 |
| 3.13 | Relocate Fiber Optics Line | 27,499 | LF | $250 | $6,874,750 |
| 3.14 | Relocate Trans. Line Tower | 2 | EA | $400,000 | $800,000 |
| 3.15 | Adjust Trans. Line Tower | 58 | EA | $200,000 | $11,600,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 22,549 | LF | $200 | $4,509,800 |
| 3.17 | Relocate Overhead Trans. Line | 9,870 | LF | $210 | $2,072,700 |
| 3.18 | Relocate Eletric Substation | 1 | EA | $10,000,000 | $10,000,000 |
| **SUBTOTAL DRAINAGE** | | | | | **$78,586,370** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 0 | EA | $42,000 | $0 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 1 | EA | $65,000 | $65,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 2 | EA | $100,000 | $200,000 |
| 4.02 | Demolition - Pavement | 220,987 | SY | $5 | $1,104,933 |
| 4.03 | Sodding including Top Soil | 85,660 | SY | $7 | $599,620 |
| 4.04 | Intersection Signalization | 19 | EA | $150,000 | $2,850,000 |
| 4.05 | Signage | 633 | STA | $12,000 | $7,596,000 |
| 4.06 | Lighting | 633 | STA | $10,000 | $6,330,000 |
| 4.07 | Landscape | 9.9 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 633 | STA | $10,000 | $6,330,000 |
| 4.09 | Soundwalls | 70,340 | SF | $18 | $1,266,120 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 154,176 | LF | $30 | $4,625,280 |
| 4.13 | Concrete Sidewalk | 31,556 | SY | $57 | $1,798,667 |
| 4.14 | R.O.W. Prep | 633 | STA | $25,000 | $15,825,000 |
| 4.15 | Traffic Control (Urban) | 633 | STA | $40,000 | $25,320,000 |
| 4.16 | Traffic Control (Floodway) | 0 | STA | $5,000 | $0 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 89,449,780** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 1,001,445,892** |
| **Mobilization (10%)** | **$ 100,144,589** |
| **Sub-Total Construction** | **$ 1,101,590,481** |
| **Construction Contingency (20%)** | **$ 220,318,096** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 1,321,908,578** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,833,359,156** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 1,321,908,578** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 6,609,543** |
| | Feasibility Studies (0.5%) | **$ 6,609,543** |
| | GEC (1%) | **$ 13,219,086** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 6,609,543** |
| | EIS/EA Schematic (1%) | **$ 13,219,086** |
| | PS&E (6%) | **$ 79,314,515** |
| | Surveying (1%) | **$ 13,219,086** |
| | Geotechnical (1%) | **$ 13,219,086** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 26,438,172** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$320,481,905.30** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 6,609,543** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 79,314,515** |
| | Materials Testing (1%) | **$ 13,219,086** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 16,347,050** |
| 6.07 | **Reimbursements (1%)** | **$ 13,219,086** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 630,470,842** |
| **Agency Cost Contingency (20%)** | | **$ 126,094,168** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 756,565,011** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 1,049,282,388** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | | **$ 1,321,908,578** |
| **Total Agency Cost** | | **$ 756,565,011** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | | **$ 2,078,473,589** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | | **$ 1,833,359,156** |
| **Escalated Total Agency Cost** | | **$ 1,049,282,388** |
| **TOTAL PROJECT COST (ESCALATED)** | | **$ 2,882,641,544** |
| | **SAY** | **$ 2,882,642,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | | |
|---|---|---|
| Professional Services | | **$ 66,000,930** |
| Planning | | **$ 44,000,620** |
| Design | | **$ 176,002,479** |
| Right-of-Way | | **$ 544,372,987** |
| Utilities | | **$ 27,206,130** |
| Construction/Installation | | **$ 2,014,058,244** |
| NTTA Internal Costs | | **$ 11,000,155** |
| Maintenance/Warranty | | |
| **TOTAL PROJECT COST** | | **$ 2,882,641,544** |
| | **SAY** | **$ 2,882,642,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | | **$ 1,214,541,064** |
| **Total Agency Cost** | | **$ 751,424,158** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | | **$ 1,965,965,222** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | | **$ 1,684,450,815** |
| **Escalated Total Agency Cost** | | **$ 1,042,152,523** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | | **$ 2,726,603,338** |
| | **SAY** | **$ 2,726,603,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.
4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).
5) Approximate right-of-way needs can be estimated.
6) Approximate ITS elements needs can be identified.
7) Unit costs of similar projects are used to calculate construction cost.
8) Contingencies are applied to the construction cost.
9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 2B INDUSTRIAL BLVD. AT-GRADE**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **MCG** |
| **Date:** | **2/5/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 237,740 | SY | $70 | $16,641,800 |
| 1.01a | Asphalt Shoulders | 73,394 | SY | $50 | $3,669,722 |
| 1.02 | Frontage Road Pavement | 252,250 | SY | $70 | $17,657,500 |
| 1.03 | Ramp Pavement | 15,493 | SY | $70 | $1,084,533 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 119,600 | LF | $3 | $358,800 |
| 1.06 | Pavement Striping (Solid) | 421,270 | LF | $2 | $842,540 |
| 1.07 | Pavement Striping (Broken) | 334,390 | LF | $2 | $668,780 |
| 1.08 | Concrete Traffic Barrier | 99,370 | LF | $38 | $3,776,060 |
| 1.09 | Excavation | 180,200 | CY | $7 | $1,261,400 |
| 1.09a | Excavation (Haul) | 180,200 | CY | $10 | $1,802,000 |
| 1.10 | Embankment | 0 | CY | $7 | $0 |
| 1.10a | Embankment (Haul) | 1,057,460 | CY | $10 | $10,574,600 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 58,337,736** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 679,680 | SF | $60 | $40,780,800 |
| 2.02 | Main Lane Bridge (Special) | 3,091,920 | SF | $95 | $293,732,400 |
| 2.03 | Frontage Road Bridge (Standard) | 0 | SF | $60 | $0 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 380,080 | SF | $60 | $22,804,800 |
| 2.06 | Ramp Bridge (Special) | 817,000 | SF | $95 | $77,615,000 |
| 2.07 | Cross Street Bridge | 0 | SF | $60 | $0 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $34 | $0 |
| 2.09 | Retaining Wall (Fill) | 423,450 | SF | $33 | $13,973,850 |
| 2.10 | Flood Wall | 0 | SF | $50 | $0 |
| 2.11 | Park Access Bridge | 0 | SF | $56 | $0 |
| 2.12 | Pedestrian Park Access Bridge | 0 | SF | $54 | $0 |
| 2.13 | Reunion Pedestrian Platform | 0 | EA | $7,748,810 | $0 |
| 2.14 | Bridge Widening (Standard) | 9,360 | SF | $90 | $842,400 |
| 2.15 | Bridge Widening (Special) | 264,150 | SF | $130 | $34,339,500 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 484,088,750** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 546 | STA | $25,000 | $13,650,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 2 | EA | $271,000 | $542,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 0 | LF | $50 | $0 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 0 | EA | $817,500 | $0 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 32,401 | LF | $100 | $3,240,100 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 27,451 | LF | $200 | $5,490,200 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 13,725 | LF | $390 | $5,352,750 |
| 3.10 | Relocate Small Drainage Lines (<18") | 32,401 | LF | $120 | $3,888,120 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 27,451 | LF | $190 | $5,215,690 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 14,025 | LF | $380 | $5,329,500 |
| 3.13 | Relocate Fiber Optics Line | 27,451 | LF | $250 | $6,862,750 |
| 3.14 | Relocate Trans. Line Tower | 5 | EA | $400,000 | $2,000,000 |
| 3.15 | Adjust Trans. Line Tower | 57 | EA | $200,000 | $11,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 22,501 | LF | $200 | $4,500,200 |
| 3.17 | Relocate Overhead Trans. Line | 10,550 | LF | $210 | $2,215,500 |
| 3.18 | Relocate Eletric Substation | 1 | EA | $350,000 | $350,000 |
| **SUBTOTAL DRAINAGE** | | | | | **$70,036,810** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 0 | EA | $42,000 | $0 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 1 | EA | $65,000 | $65,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 0 | EA | $100,000 | $0 |
| 4.02 | Demolition - Pavement | 289,867 | SY | $5 | $1,449,333 |
| 4.03 | Sodding including Top Soil | 85,660 | SY | $7 | $599,620 |
| 4.04 | Intersection Signalization | 19 | EA | $150,000 | $2,850,000 |
| 4.05 | Signage | 633 | STA | $12,000 | $7,596,000 |
| 4.06 | Lighting | 633 | STA | $10,000 | $6,330,000 |
| 4.07 | Landscape | 9.9 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 633 | STA | $10,000 | $6,330,000 |
| 4.09 | Soundwalls | 70,340 | SF | $18 | $1,266,120 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 154,176 | LF | $30 | $4,625,280 |
| 4.13 | Concrete Sidewalk | 66,444 | SY | $92 | $6,112,889 |
| 4.14 | R.O.W. Prep | 633 | STA | $25,000 | $15,825,000 |
| 4.15 | Traffic Control (Urban) | 633 | STA | $40,000 | $25,320,000 |
| 4.16 | Traffic Control (Floodway) | 0 | STA | $5,000 | $0 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 93,908,402** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 739,736,698** |
| **Mobilization (10%)** | **$ 73,973,670** |
| **Sub-Total Construction** | **$ 813,710,368** |
| **Construction Contingency (20%)** | **$ 162,742,074** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 976,452,441** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,354,244,956** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 976,452,441** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 4,882,262** |
| | Feasibility Studies (0.5%) | **$ 4,882,262** |
| | GEC (1%) | **$ 9,764,524** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 4,882,262** |
| | EIS/EA Schematic (1%) | **$ 9,764,524** |
| | PS&E (6%) | **$ 58,587,146** |
| | Surveying (1%) | **$ 9,764,524** |
| | Geotechnical (1%) | **$ 9,764,524** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 19,529,049** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 289,357,085** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 4,882,262** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 58,587,146** |
| | Materials Testing (1%) | **$ 9,764,524** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 17,325,450** |
| 6.07 | **Reimbursements (1%)** | **$ 9,764,524** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 524,324,072** |
| **Agency Cost Contingency (20%)** | | **$ 104,864,814** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 629,188,886** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 872,624,041** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 976,452,441** |
| **Total Agency Cost** | **$ 629,188,886** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$ 1,605,641,327** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,354,244,956** |
| **Escalated Total Agency Cost** | **$ 872,624,041** |
| **TOTAL PROJECT COST (ESCALATED)** | **$ 2,226,868,996** |
| **SAY** | **$ 2,226,869,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | |
|---|---|
| Professional Services | **$ 48,752,818** |
| Planning | **$ 32,501,879** |
| Design | **$ 130,007,516** |
| Right-of-Way | **$ 489,697,768** |
| Utilities | **$ 28,834,465** |
| Construction/Installation | **$ 1,488,949,080** |
| NTTA Internal Costs | **$ 8,125,470** |
| Maintenance/Warranty | |
| **TOTAL PROJECT COST** | **$ 2,226,868,996** |
| **SAY** | **$ 2,226,869,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 869,084,928** |
| **Total Agency Cost** | **$ 624,048,033** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$ 1,493,132,961** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,205,336,614** |
| **Escalated Total Agency Cost** | **$ 865,494,176** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$ 2,070,830,790** |
| **SAY** | **$ 2,070,831,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.
4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).
5) Approximate right-of-way needs can be estimated.
6) Approximate ITS elements needs can be identified.
7) Unit costs of similar projects are used to calculate construction cost.
8) Contingencies are applied to the construction cost.
9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 3A COMBINED PARKWAY**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **JM/SS** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 445,317 | SY | $70 | $31,172,167 |
| 1.01a | Asphalt Shoulders | 172,384 | SY | $50 | $8,619,222 |
| 1.02 | Frontage Road Pavement | 72,515 | SY | $70 | $5,076,027 |
| 1.03 | Ramp Pavement | 98,629 | SY | $70 | $6,904,022 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 39,160 | LF | $3 | $117,480 |
| 1.06 | Pavement Striping (Solid) | 438,700 | LF | $2 | $877,400 |
| 1.07 | Pavement Striping (Broken) | 320,030 | LF | $2 | $640,060 |
| 1.08 | Concrete Traffic Barrier | 234,160 | LF | $38 | $8,898,080 |
| 1.09 | Excavation | 102,000 | CY | $7 | $714,000 |
| 1.09a | Excavation (Haul) | 102,000 | CY | $10 | $1,020,000 |
| 1.10 | Embankment | 4,146,000 | CY | $7 | $29,022,000 |
| 1.10a | Embankment (Haul) | 0 | CY | $10 | $0 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 93,060,458** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 1,865,040 | SF | $60 | $111,902,400 |
| 2.02 | Main Lane Bridge (Special) | 376,320 | SF | $95 | $35,750,400 |
| 2.03 | Frontage Road Bridge (Standard) | 171,440 | SF | $60 | $10,286,400 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 833,360 | SF | $60 | $50,001,600 |
| 2.06 | Ramp Bridge (Special) | 686,980 | SF | $95 | $65,263,100 |
| 2.07 | Cross Street Bridge | 2,080 | SF | $60 | $124,800 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $34 | $0 |
| 2.09 | Retaining Wall (Fill) | 319,000 | SF | $33 | $10,527,000 |
| 2.10 | Flood Wall | 172,000 | SF | $50 | $8,600,000 |
| 2.11 | Park Access Bridge | 121,600 | SF | $56 | $6,809,600 |
| 2.12 | Pedestrian Park Access Bridge | 132,480 | SF | $54 | $7,153,920 |
| 2.13 | Reunion Pedestrian Platform | 1 | EA | $7,748,810 | $7,748,810 |
| 2.14 | Bridge Widening (Standard) | 368,280 | SF | $90 | $33,145,200 |
| 2.15 | Bridge Widening (Special) | 59,310 | SF | $130 | $7,710,300 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 355,023,530** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 619 | STA | $25,000 | $15,475,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 7 | EA | $271,000 | $1,897,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 9,800 | LF | $50 | $490,000 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 4 | EA | $817,500 | $3,270,000 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 24,000 | LF | $100 | $2,400,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 10,150 | LF | $200 | $2,030,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 5,175 | LF | $390 | $2,018,250 |
| 3.10 | Relocate Small Drainage Lines (<18") | 11,500 | LF | $120 | $1,380,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 5,450 | LF | $190 | $1,035,500 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 2,475 | LF | $380 | $940,500 |
| 3.13 | Relocate Fiber Optics Line | 4,950 | LF | $250 | $1,237,500 |
| 3.14 | Relocate Trans. Line Tower | 11 | EA | $400,000 | $4,400,000 |
| 3.15 | Adjust Trans. Line Tower | 12 | EA | $200,000 | $2,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 4,000 | LF | $200 | $800,000 |
| 3.17 | Relocate Overhead Trans. Line | 0 | LF | $210 | $0 |
| 3.18 | Relocate Eletric Substation | 0 | EA | $350,000 | $0 |
| **SUBTOTAL DRAINAGE** | | | | | **$39,773,750** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 7 | EA | $42,000 | $294,000 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 2 | EA | $65,000 | $130,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 2 | EA | $100,000 | $200,000 |
| 4.02 | Demolition - Pavement | 175,067 | SY | $5 | $875,333 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 24 | EA | $150,000 | $3,600,000 |
| 4.05 | Signage | 649 | STA | $12,000 | $7,788,000 |
| 4.06 | Lighting | 649 | STA | $10,000 | $6,490,000 |
| 4.07 | Landscape | 9.9 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 649 | STA | $10,000 | $6,490,000 |
| 4.09 | Soundwalls | 70,340 | SF | $18 | $1,266,120 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 183,744 | LF | $30 | $5,512,320 |
| 4.13 | Concrete Sidewalk | 21,756 | SY | $92 | $2,001,511 |
| 4.14 | R.O.W. Prep | 633 | STA | $10,000 | $6,330,000 |
| 4.15 | Traffic Control (Urban) | 272 | STA | $20,000 | $5,440,000 |
| 4.16 | Traffic Control (Floodway) | 344 | STA | $5,000 | $1,720,000 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 64,391,074** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 585,613,812** |
| **Mobilization (10%)** | **$ 58,561,381** |
| **Sub-Total Construction** | **$ 644,175,193** |
| **Construction Contingency (20%)** | **$ 128,835,039** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 773,010,232** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,072,090,317** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 773,010,232** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 3,865,051** |
| | Feasibility Studies (0.5%) | **$ 3,865,051** |
| | GEC (1%) | **$ 7,730,102** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 3,865,051** |
| | EIS/EA Schematic (1%) | **$ 7,730,102** |
| | PS&E (6%) | **$ 46,380,614** |
| | Surveying (1%) | **$ 7,730,102** |
| | Geotechnical (1%) | **$ 7,730,102** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 15,460,205** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 74,965,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 3,865,051** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 46,380,614** |
| | Materials Testing (1%) | **$ 7,730,102** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 7,000,000** |
| 6.07 | **Reimbursements (1%)** | **$ 7,730,102** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 254,849,251** |
| **Agency Cost Contingency (20%)** | | **$ 50,969,850** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 305,819,101** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 424,141,472** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | | **$ 773,010,232** |
| **Total Agency Cost** | | **$ 305,819,101** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | | **$ 1,078,829,333** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | | **$ 1,072,090,317** |
| **Escalated Total Agency Cost** | | **$ 424,141,472** |
| **TOTAL PROJECT COST (ESCALATED)** | | **$ 1,496,231,789** |
| | **SAY** | **$ 1,496,232,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | | |
|---|---|---|
| Professional Services | | **$ 38,595,251** |
| Planning | | **$ 25,730,168** |
| Design | | **$ 102,920,670** |
| Right-of-Way | | **$ 131,195,574** |
| Utilities | | **$ 11,649,986** |
| Construction/Installation | | **$ 1,179,707,597** |
| NTTA Internal Costs | | **$ 6,432,542** |
| Maintenance/Warranty | | |
| **TOTAL PROJECT COST** | | **$ 1,496,231,789** |
| | **SAY** | **$ 1,496,232,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | | **$ 665,642,719** |
| **Total Agency Cost** | | **$ 300,678,248** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | | **$ 966,320,967** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | | **$ 923,181,976** |
| **Escalated Total Agency Cost** | | **$ 417,011,606** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | | **$ 1,340,193,582** |
| | **SAY** | **$ 1,340,194,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.
4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).
5) Approximate right-of-way needs can be estimated.
6) Approximate ITS elements needs can be identified.
7) Unit costs of similar projects are used to calculate construction cost.
8) Contingencies are applied to the construction cost.
9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 3B COMBINED PKWY - MODIFIED**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **JM/SS** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 387,627 | SY | $70 | $27,133,867 |
| 1.01a | Asphalt Shoulders | 230,607 | SY | $50 | $11,530,350 |
| 1.02 | Frontage Road Pavement | 50,096 | SY | $70 | $3,506,720 |
| 1.03 | Ramp Pavement | 128,558 | SY | $70 | $8,999,044 |
| 1.04 | Cross Street Pavement | 51,027 | SY | $70 | $3,571,890 |
| 1.05 | Monolithic Curb | 46,420 | LF | $3 | $139,260 |
| 1.06 | Pavement Striping (Solid) | 450,220 | LF | $2 | $900,440 |
| 1.07 | Pavement Striping (Broken) | 332,350 | LF | $2 | $664,700 |
| 1.08 | Concrete Traffic Barrier | 250,220 | LF | $38 | $9,508,360 |
| 1.09 | Excavation | 160,000 | CY | $7 | $1,120,000 |
| 1.09a | Excavation (Haul) | 27,000 | CY | $10 | $270,000 |
| 1.10 | Embankment | 6,565,000 | CY | $7 | $45,955,000 |
| 1.10a | Embankment (Haul) | 626,000 | CY | $10 | $6,260,000 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 119,559,631** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 1,786,200 | SF | $60 | $107,172,000 |
| 2.02 | Main Lane Bridge (Special) | 366,660 | SF | $95 | $34,832,700 |
| 2.03 | Frontage Road Bridge (Standard) | 0 | SF | $60 | $0 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 728,900 | SF | $60 | $43,734,000 |
| 2.06 | Ramp Bridge (Special) | 636,000 | SF | $95 | $60,420,000 |
| 2.07 | Cross Street Bridge | 2,080 | SF | $60 | $124,800 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 319,000 | SF | $45 | $14,355,000 |
| 2.10 | Flood Wall | 172,000 | SF | $50 | $8,600,000 |
| 2.11 | Park Access Bridge | 121,600 | SF | $56 | $6,809,600 |
| 2.12 | Pedestrian Park Access Bridge | 90,090 | SF | $54 | $4,864,860 |
| 2.13 | Reunion Pedestrian Platform | 1 | EA | $7,748,810 | $7,748,810 |
| 2.14 | Bridge Widening (Standard) | 568,530 | SF | $90 | $51,167,700 |
| 2.15 | Bridge Widening (Special) | 103,590 | SF | $130 | $13,466,700 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 353,296,170** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 622 | STA | $25,000 | $15,550,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 7 | EA | $271,000 | $1,897,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 9,800 | LF | $50 | $490,000 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 4 | EA | $817,500 | $3,270,000 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas< | 30,600 | LF | $100 | $3,060,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Ga | 13,250 | LF | $200 | $2,650,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 2 | 9,475 | LF | $390 | $3,695,250 |
| 3.10 | Relocate Small Drainage Lines (<18") | 6,550 | LF | $120 | $786,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 4,575 | LF | $190 | $869,250 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 2,475 | LF | $380 | $940,500 |
| 3.13 | Relocate Fiber Optics Line | 4,950 | LF | $250 | $1,237,500 |
| 3.14 | Relocate Trans. Line Tower | 11 | EA | $400,000 | $4,400,000 |
| 3.15 | Adjust Trans. Line Tower | 12 | EA | $200,000 | $2,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 4,000 | LF | $200 | $800,000 |
| 3.17 | Relocate Overhead Trans. Line | | LF | $210 | $0 |
| 3.18 | Relocate Eletric Substation | | EA | $350,000 | $0 |
| **SUBTOTAL DRAINAGE** | | | | | **$42,045,500** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 7 | EA | $42,000 | $294,000 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 2 | EA | $65,000 | $130,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 1 | EA | $100,000 | $100,000 |
| 4.02 | Demolition - Pavement | 179,667 | SY | $5 | $898,333 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 24 | EA | $150,000 | $3,600,000 |
| 4.05 | Signage | 649 | STA | $12,000 | $7,788,000 |
| 4.06 | Lighting | 649 | STA | $10,000 | $6,490,000 |
| 4.07 | Landscape | 9.9 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 649 | STA | $10,000 | $6,490,000 |
| 4.09 | Soundwalls | 70,340 | SF | $18 | $1,266,120 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 183,744 | LF | $30 | $5,512,320 |
| 4.13 | Concrete Sidewalk | 25,789 | SY | $92 | $2,372,578 |
| 4.14 | R.O.W. Prep | 633 | STA | $10,000 | $6,330,000 |
| 4.15 | Traffic Control (Urban) | 272 | STA | $20,000 | $5,440,000 |
| 4.16 | Traffic Control (Floodway) | 344 | STA | $5,000 | $1,720,000 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 64,685,141** |

INCLUDES MOBILIZ

| | | | | | |
|---|---|---|---|---|---|
| **5.0 GANTRIES and ITS** | | | | | |
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 612,951,442** |
| **Mobilization (10%)** | **$ 61,295,144** |
| **Sub-Total Construction** | **$ 674,246,586** |
| **Construction Contingency (20%)** | **$ 134,849,317** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 809,095,904** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,122,137,649** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 809,095,904** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 4,045,480** |
| | Feasibility Studies (0.5%) | **$ 4,045,480** |
| | GEC (1%) | **$ 8,090,959** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 4,045,480** |
| | EIS/EA Schematic (1%) | **$ 8,090,959** |
| | PS&E (6%) | **$ 48,545,754** |
| | Surveying (1%) | **$ 8,090,959** |
| | Geotechnical (1%) | **$ 8,090,959** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 16,181,918** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 88,471,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 4,045,480** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 48,545,754** |
| | Materials Testing (1%) | **$ 8,090,959** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 7,600,000** |
| 6.07 | **Reimbursements (1%)** | **$ 8,090,959** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 276,894,099** |
| **Agency Cost Contingency (20%)** | | **$ 55,378,820** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 332,272,919** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 460,830,354** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | **$** | **809,095,904** |
| **Total Agency Cost** | **$** | **332,272,919** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$** | **1,141,368,822** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | **$** | **1,122,137,649** |
| **Escalated Total Agency Cost** | **$** | **460,830,354** |
| **TOTAL PROJECT COST (ESCALATED)** | **$** | **1,582,968,002** |
| **SAY** | **$** | **1,582,968,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | | |
|---|---|---|
| Professional Services | **$** | **40,396,955** |
| Planning | **$** | **26,931,304** |
| Design | **$** | **107,725,214** |
| Right-of-Way | **$** | **153,973,675** |
| Utilities | **$** | **12,648,557** |
| Construction/Installation | **$** | **1,234,559,472** |
| NTTA Internal Costs | **$** | **6,732,826** |
| Maintenance/Warranty | | |
| **TOTAL PROJECT COST** | **$** | **1,582,968,002** |
| **SAY** | **$** | **1,582,968,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | | |
|---|---|---|
| **Total Construction Cost** | **$** | **701,728,390** |
| **Total Agency Cost** | **$** | **327,132,066** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$** | **1,028,860,456** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | | |
|---|---|---|
| **Escalated Total Construction Cost** | **$** | **973,229,307** |
| **Escalated Total Agency Cost** | **$** | **453,700,489** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$** | **1,426,929,796** |
| **SAY** | **$** | **1,426,930,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.
4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).
5) Approximate right-of-way needs can be estimated.
6) Approximate ITS elements needs can be identified.
7) Unit costs of similar projects are used to calculate construction cost.
8) Contingencies are applied to the construction cost.
9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**ALT 3C - TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 3C COMBINED PKWY EAST LEVEE (MOD.)**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **SS/JM** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 355,693 | SY | $70 | $24,898,510 |
| 1.01a | Asphalt Shoulders | 188,545 | SY | $50 | $9,427,250 |
| 1.02 | Frontage Road Pavement | 50,093 | SY | $70 | $3,506,510 |
| 1.03 | Ramp Pavement | 58,477 | SY | $70 | $4,093,390 |
| 1.04 | Cross Street Pavement | 51,027 | SY | $70 | $3,571,890 |
| 1.05 | Monolithic Curb | 46,420 | LF | $3 | $139,260 |
| 1.06 | Pavement Striping (Solid) | 431,453 | LF | $2 | $862,906 |
| 1.07 | Pavement Striping (Broken) | 350,759 | LF | $2 | $701,518 |
| 1.08 | Concrete Traffic Barrier | 190,740 | LF | $38 | $7,248,120 |
| 1.09 | Excavation | 28,740 | CY | $7 | $201,180 |
| 1.09a | Excavation (Haul) | 0 | CY | $10 | $0 |
| 1.10 | Embankment | 6,496,000 | CY | $7 | $45,472,000 |
| 1.10a | Embankment (Haul) | 626,000 | CY | $10 | $6,260,000 |
| 1.11 | Embankment (Borrow) | 0 | CY | $14 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 106,382,534** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 2,890,278 | SF | $60 | $173,416,680 |
| 2.02 | Main Lane Bridge (Special) | 662,810 | SF | $95 | $62,966,950 |
| 2.03 | Frontage Road Bridge (Standard) | 0 | SF | $60 | $0 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 981,700 | SF | $60 | $58,902,000 |
| 2.06 | Ramp Bridge (Special) | 625,836 | SF | $95 | $59,454,420 |
| 2.07 | Cross Street Bridge | 2,080 | SF | $60 | $124,800 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 227,700 | SF | $45 | $10,246,500 |
| 2.10 | Flood Wall | 97,700 | SF | $50 | $4,885,000 |
| 2.10a | Diaphragm Wall | 4,580 | LF | $10,000 | $45,800,000 |
| 2.11 | Park Access Bridge | 121,600 | SF | $56 | $6,809,600 |
| 2.12 | Pedestrian Park Access Bridge | 90,090 | SF | $54 | $4,864,860 |
| 2.13 | Reunion Pedestrian Platform | 1 | EA | $7,748,810 | $7,748,810 |
| 2.14 | Bridge Widening (Standard) | 270,180 | SF | $90 | $24,316,200 |
| 2.15 | Bridge Widening (Special) | 27,090 | SF | $130 | $3,521,700 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 463,057,520** |
| **3.0 DRAINAGE & UTILITIES** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 616 | STA | $25,000 | $15,400,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 6 | EA | $263,000 | $1,578,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 9,800 | LF | $50 | $490,000 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 4 | EA | $817,500 | $3,270,000 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 30,600 | LF | $90 | $2,754,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 13,250 | LF | $200 | $2,650,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 9,475 | LF | $390 | $3,695,250 |
| 3.10 | Relocate Small Drainage Lines (<18") | 6,550 | LF | $120 | $786,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 4,575 | LF | $190 | $869,250 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 2,475 | LF | $370 | $915,750 |
| 3.13 | Relocate Fiber Optics Line | 4,950 | LF | $250 | $1,237,500 |
| 3.14 | Relocate Trans. Line Tower | 11 | EA | $400,000 | $4,400,000 |
| 3.15 | Adjust Trans. Line Tower | 12 | EA | $200,000 | $2,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 4,000 | LF | $200 | $800,000 |
| 3.17 | Relocate Overhead Trans. Line | 0 | LF | $210 | $0 |
| 3.18 | Relocate Eletric Substation | 0 | EA | $350,000 | $0 |
| **SUBTOTAL DRAINAGE** | | | | | **$41,245,750** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $15,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 7 | EA | $41,000 | $287,000 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 2 | EA | $95,000 | $190,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 0 | EA | $100,000 | $0 |
| 4.02 | Demolition - Pavement | 163,000 | SY | $5 | $815,000 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 23 | EA | $150,000 | $3,450,000 |
| 4.05 | Signage | 633 | STA | $12,000 | $7,596,000 |
| 4.06 | Lighting | 633 | STA | $10,000 | $6,330,000 |
| 4.07 | Landscape | 7.3 | MI. | $1,000,000 | $7,300,000 |
| 4.08 | SWP3 | 633 | STA | $10,000 | $6,330,000 |
| 4.09 | Soundwalls | 70,340 | SF | $18 | $1,266,120 |
| 4.10 | R.O.W. Fence | 91,700 | LF | $15 | $1,375,500 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 91,700 | LF | $25 | $2,292,500 |
| 4.13 | Concrete Sidewalk | 25,789 | SY | $57 | $1,469,973 |
| 4.14 | R.O.W. Prep | 633 | STA | $10,000 | $6,330,000 |
| 4.15 | Traffic Control (Urban) | 272 | STA | $20,000 | $5,440,000 |
| 4.16 | Traffic Control (Floodway) | 344 | STA | $5,000 | $1,720,000 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 56,977,723** |

| | | | | | |
|---|---|---|---|---|---|
| **5.0 GANTRIES and ITS** | | | | | |
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 701,028,527** |
| **Mobilization (10%)** | **$ 70,102,853** |
| **Sub-Total Construction** | **$ 771,131,380** |
| **Construction Contingency (20%)** | **$ 154,226,276** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 925,357,656** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,283,381,437** |

| | | |
|---|---|---|
| **6.0 AGENCY COSTS (CURRENT COST)** | | |
| **Total Construction Cost (Current Cost)** | | **$ 925,357,656** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 4,626,788** |
| | Feasibility Studies (0.5%) | **$ 4,626,788** |
| | GEC (1%) | **$ 9,253,577** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 4,626,788** |
| | EIS/EA Schematic (1%) | **$ 9,253,577** |
| | PS&E (6%) | **$ 55,521,459** |
| | Surveying (1%) | **$ 9,253,577** |
| | Geotechnical (1%) | **$ 9,253,577** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 18,507,153** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 88,471,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 4,626,788** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 55,521,459** |
| | Materials Testing (1%) | **$ 9,253,577** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 8,837,500** |
| 6.07 | **Reimbursements (1%)** | **$ 9,253,577** |
| 6.08 | **Unique Features (Environmental Mitigation)** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 303,709,184** |
| **Agency Cost Contingency (20%)** | | **$ 60,741,837** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 364,451,021** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 505,458,265** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 925,357,656** |
| **Total Agency Cost** | **$ 364,451,021** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$ 1,289,808,677** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,283,381,437** |
| **Escalated Total Agency Cost** | **$ 505,458,265** |
| **TOTAL PROJECT COST (ESCALATED)** | **$ 1,788,839,702** |
| **SAY** | **$ 1,788,840,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | |
|---|---|
| Professional Services | **$ 46,201,732** |
| Planning | **$ 30,801,154** |
| Design | **$ 123,204,618** |
| Right-of-Way | **$ 154,941,138** |
| Utilities | **$ 14,708,108** |
| Construction/Installation | **$ 1,411,282,664** |
| NTTA Internal Costs | **$ 7,700,289** |
| Maintenance/Warranty | |
| **TOTAL PROJECT COST** | **$ 1,788,839,702** |
| **SAY** | **$ 1,788,840,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 817,990,142** |
| **Total Agency Cost** | **$ 359,310,168** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$ 1,177,300,310** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,134,473,096** |
| **Escalated Total Agency Cost** | **$ 498,328,400** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$ 1,632,801,496** |
| **SAY** | **$ 1,632,801,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.
4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).
5) Approximate right-of-way needs can be estimated.
6) Approximate ITS elements needs can be identified.
7) Unit costs of similar projects are used to calculate construction cost.
8) Contingencies are applied to the construction cost.
9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.
10) Costs included raising both levees from DART to Hampton Rd.
11) Costs include Sylvan Road bridge reconstruction.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 4A SPLIT PARKWAY RIVERSIDE**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **JM/SS** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 453,000 | SY | $70 | $31,710,000 |
| 1.01a | Asphalt Shoulders | 184,147 | SY | $50 | $9,207,333 |
| 1.02 | Frontage Road Pavement | 120,707 | SY | $70 | $8,449,513 |
| 1.03 | Ramp Pavement | 118,398 | SY | $70 | $8,287,844 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 53,000 | LF | $3 | $159,000 |
| 1.06 | Pavement Striping (Solid) | 458,000 | LF | $2 | $916,000 |
| 1.07 | Pavement Striping (Broken) | 360,010 | LF | $2 | $720,020 |
| 1.08 | Concrete Traffic Barrier | 251,760 | LF | $38 | $9,566,880 |
| 1.09 | Excavation | 227,000 | CY | $7 | $1,589,000 |
| 1.09a | Excavation (Haul) | 227,000 | CY | $10 | $2,270,000 |
| 1.10 | Embankment | 6,845,000 | CY | $7 | $47,915,000 |
| 1.10a | Embankment (Haul) | 0 | CY | $10 | $0 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 120,790,591** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 1,786,320 | SF | $60 | $107,179,200 |
| 2.02 | Main Lane Bridge (Special) | 879,960 | SF | $95 | $83,596,200 |
| 2.03 | Frontage Road Bridge (Standard) | 179,240 | SF | $60 | $10,754,400 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 830,140 | SF | $60 | $49,808,400 |
| 2.06 | Ramp Bridge (Special) | 300,260 | SF | $95 | $28,524,700 |
| 2.07 | Cross Street Bridge | 2,080 | SF | $60 | $124,800 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 437,000 | SF | $45 | $19,665,000 |
| 2.10 | Flood Wall | 153,000 | SF | $50 | $7,650,000 |
| 2.11 | Park Access Bridge | 195,200 | SF | $56 | $10,931,200 |
| 2.12 | Pedestrian Park Access Bridge | 197,460 | SF | $54 | $10,662,840 |
| 2.13 | Reunion Pedestrian Platform | 1 | EA | $7,748,810 | $7,748,810 |
| 2.14 | Bridge Widening (Standard) | 143,640 | SF | $90 | $12,927,600 |
| 2.15 | Bridge Widening (Special) | 282,420 | SF | $130 | $36,714,600 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 386,287,750** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 783 | STA | $25,000 | $19,575,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 12 | EA | $271,000 | $3,252,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | | LF | $50 | $0 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 5 | EA | $817,500 | $4,087,500 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 24,200 | LF | $100 | $2,420,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 6,900 | LF | $200 | $1,380,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 6,000 | LF | $390 | $2,340,000 |
| 3.10 | Relocate Small Drainage Lines (<18") | 6,450 | LF | $120 | $774,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 6,375 | LF | $190 | $1,211,250 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 800 | LF | $380 | $304,000 |
| 3.13 | Relocate Fiber Optics Line | 4,950 | LF | $250 | $1,237,500 |
| 3.14 | Relocate Trans. Line Tower | 11 | EA | $400,000 | $4,400,000 |
| 3.15 | Adjust Trans. Line Tower | 12 | EA | $200,000 | $2,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 4,000 | LF | $200 | $800,000 |
| **SUBTOTAL DRAINAGE** | | | | | **$44,181,250** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 7 | EA | $42,000 | $294,000 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 1 | EA | $65,000 | $65,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 2 | EA | $100,000 | $200,000 |
| 4.02 | Demolition - Pavement | 209,567 | SY | $5 | $1,047,833 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 24 | EA | $150,000 | $3,600,000 |
| 4.05 | Signage | 783 | STA | $12,000 | $9,396,000 |
| 4.06 | Lighting | 783 | STA | $10,000 | $7,830,000 |
| 4.07 | Landscape | 9.9 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 783 | STA | $10,000 | $7,830,000 |
| 4.09 | Soundwalls | 277,778 | SF | $18 | $5,000,004 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 183,744 | LF | $30 | $5,512,320 |
| 4.13 | Concrete Sidewalk | 29,444 | SY | $92 | $2,708,889 |
| 4.14 | R.O.W. Prep | 783 | STA | $10,000 | $7,830,000 |
| 4.15 | Traffic Control (Urban) | 231 | STA | $20,000 | $4,620,000 |
| 4.16 | Traffic Control (Floodway) | 783 | STA | $5,000 | $3,915,000 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 76,102,836** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 660,727,427** |
| **Mobilization (10%)** | **$ 66,072,743** |
| **Sub-Total Construction** | **$ 726,800,170** |
| **Construction Contingency (20%)** | **$ 145,360,034** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 872,160,204** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,209,601,725** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 872,160,204** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 4,360,801** |
| | Feasibility Studies (0.5%) | **$ 4,360,801** |
| | GEC (1%) | **$ 8,721,602** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 4,360,801** |
| | EIS/EA Schematic (1%) | **$ 8,721,602** |
| | PS&E (6%) | **$ 52,329,612** |
| | Surveying (1%) | **$ 8,721,602** |
| | Geotechnical (1%) | **$ 8,721,602** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 17,443,204** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 80,447,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 4,360,801** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 52,329,612** |
| | Materials Testing (1%) | **$ 8,721,602** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 10,580,000** |
| 6.07 | **Reimbursements (1%)** | **$ 8,721,602** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 285,724,245** |
| **Agency Cost Contingency (20%)** | | **$ 57,144,849** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 342,869,094** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 475,526,223** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 872,160,204** |
| **Total Agency Cost** | **$ 342,869,094** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$ 1,215,029,298** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,209,601,725** |
| **Escalated Total Agency Cost** | **$ 475,526,223** |
| **TOTAL PROJECT COST (ESCALATED)** | **$ 1,685,127,947** |
| **SAY** | **$ 1,685,128,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | |
|---|---|
| Professional Services | **$ 43,545,662** |
| Planning | **$ 29,030,441** |
| Design | **$ 116,121,766** |
| Right-of-Way | **$ 141,144,247** |
| Utilities | **$ 17,608,122** |
| Construction/Installation | **$ 1,330,420,099** |
| NTTA Internal Costs | **$ 7,257,610** |
| Maintenance/Warranty | |
| **TOTAL PROJECT COST** | **$ 1,685,127,947** |
| **SAY** | **$ 1,685,128,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 764,792,691** |
| **Total Agency Cost** | **$ 337,728,241** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$ 1,102,520,932** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,060,693,383** |
| **Escalated Total Agency Cost** | **$ 468,396,357** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$ 1,529,089,741** |
| **SAY** | **$ 1,529,090,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.

4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).

5) Approximate right-of-way needs can be estimated.

6) Approximate ITS elements needs can be identified.

7) Unit costs of similar projects are used to calculate construction cost.

8) Contingencies are applied to the construction cost.

9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 4B SPLIT PARKWAY RIVERSIDE**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **JM/SS** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 410,000 | SY | $70 | $28,700,000 |
| 1.01a | Asphalt Shoulders | 190,000 | SY | $50 | $9,500,000 |
| 1.02 | Frontage Road Pavement | 58,000 | SY | $70 | $4,060,000 |
| 1.03 | Ramp Pavement | 202,000 | SY | $70 | $14,140,000 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 85,000 | LF | $3 | $255,000 |
| 1.06 | Pavement Striping (Solid) | 450,000 | LF | $2 | $900,000 |
| 1.07 | Pavement Striping (Broken) | 340,000 | LF | $2 | $680,000 |
| 1.08 | Concrete Traffic Barrier | 251,760 | LF | $38 | $9,566,880 |
| 1.09 | Excavation | 41,000 | CY | $7 | $287,000 |
| 1.09a | Excavation (Haul) | 41,000 | CY | $10 | $410,000 |
| 1.10 | Embankment | 6,775,000 | CY | $7 | $47,425,000 |
| 1.10a | Embankment (Haul) | | CY | $10 | $0 |
| 1.11 | Embankment (Borrow) | | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 115,923,880** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 2,100,000 | SF | $60 | $126,000,000 |
| 2.02 | Main Lane Bridge (Special) | 1,050,000 | SF | $95 | $99,750,000 |
| 2.03 | Frontage Road Bridge (Standard) | 179,240 | SF | $60 | $10,754,400 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 800,000 | SF | $60 | $48,000,000 |
| 2.06 | Ramp Bridge (Special) | 400,000 | SF | $95 | $38,000,000 |
| 2.07 | Cross Street Bridge | 267,000 | SF | $60 | $16,020,000 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 437,000 | SF | $45 | $19,665,000 |
| 2.10 | Flood Wall | 100,000 | SF | $50 | $5,000,000 |
| 2.10a | Diaphram Wall | 5,980 | LF | $10,000 | $59,800,000 |
| 2.11 | Park Access Bridge | 195,200 | SF | $56 | $10,931,200 |
| 2.12 | Pedestrian Park Access Bridge | 197,460 | SF | $54 | $10,662,840 |
| 2.13 | Reunion Pedestrian Platform | 1 | EA | $7,748,810 | $7,748,810 |
| 2.14 | Bridge Widening (Standard) | 143,640 | SF | $90 | $12,927,600 |
| 2.15 | Bridge Widening (Special) | 282,420 | SF | $130 | $36,714,600 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 501,974,450** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 783 | STA | $25,000 | $19,575,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 12 | EA | $271,000 | $3,252,000 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 0 | LF | $50 | $0 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 5 | EA | $817,500 | $4,087,500 |
| 3.06 | Misc. Water and Wastewater Utilities | 0 | LF | $0 | $0 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 24,200 | LF | $100 | $2,420,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 6,900 | LF | $200 | $1,380,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 6,000 | LF | $390 | $2,340,000 |
| 3.10 | Relocate Small Drainage Lines (<18") | 6,450 | LF | $120 | $774,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 6,375 | LF | $190 | $1,211,250 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 800 | LF | $380 | $304,000 |
| 3.13 | Relocate Fiber Optics Line | 4,980 | LF | $250 | $1,245,000 |
| 3.14 | Relocate Trans. Line Tower | 11 | EA | $400,000 | $4,400,000 |
| 3.15 | Adjust Trans. Line Tower | 12 | EA | $200,000 | $2,400,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 4,000 | LF | $200 | $800,000 |
| **SUBTOTAL DRAINAGE** | | | | | **$44,188,750** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 7 | EA | $42,000 | $294,000 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 2 | EA | $65,000 | $130,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 0 | EA | $100,000 | $0 |
| 4.02 | Demolition - Pavement | 163,000 | SY | $5 | $815,000 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 23 | EA | $150,000 | $3,450,000 |
| 4.05 | Signage | 783 | STA | $12,000 | $9,396,000 |
| 4.06 | Lighting | 783 | STA | $10,000 | $7,830,000 |
| 4.07 | Landscape | 7.3 | MI. | $1,000,000 | $7,300,000 |
| 4.08 | SWP3 | 783 | STA | $10,000 | $7,830,000 |
| 4.09 | Soundwalls | 87,000 | SF | $18 | $1,566,000 |
| 4.10 | R.O.W. Fence | 92,000 | LF | $15 | $1,380,000 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 92,000 | LF | $30 | $2,760,000 |
| 4.13 | Concrete Sidewalk | 26,000 | SY | $92 | $2,392,000 |
| 4.14 | R.O.W. Prep | 783 | STA | $10,000 | $7,830,000 |
| 4.15 | Traffic Control (Urban) | 231 | STA | $20,000 | $4,620,000 |
| 4.16 | Traffic Control (Floodway) | 783 | STA | $5,000 | $3,915,000 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 66,293,630** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 761,745,710** |
| **Mobilization (10%)** | **$ 76,174,571** |
| **Sub-Total Construction** | **$ 837,920,281** |
| **Construction Contingency (20%)** | **$ 167,584,056** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 1,005,504,337** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,394,537,122** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 1,005,504,337** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 5,027,522** |
| | Feasibility Studies (0.5%) | **$ 5,027,522** |
| | GEC (1%) | **$ 10,055,043** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 5,027,522** |
| | EIS/EA Schematic (1%) | **$ 10,055,043** |
| | PS&E (6%) | **$ 60,330,260** |
| | Surveying (1%) | **$ 10,055,043** |
| | Geotechnical (1%) | **$ 10,055,043** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 20,110,087** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 80,447,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 5,027,522** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 60,330,260** |
| | Materials Testing (1%) | **$ 10,055,043** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 10,580,000** |
| 6.07 | **Reimbursements (1%)** | **$ 10,055,043** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 315,059,954** |
| **Agency Cost Contingency (20%)** | | **$ 63,011,991** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 378,071,945** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 524,349,167** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 1,005,504,337** |
| **Total Agency Cost** | **$ 378,071,945** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$ 1,383,576,282** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,394,537,122** |
| **Escalated Total Agency Cost** | **$ 524,349,167** |
| **TOTAL PROJECT COST (ESCALATED)** | **$ 1,918,886,289** |
| **SAY** | **$ 1,918,886,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | |
|---|---|
| Professional Services | **$ 50,203,336** |
| Planning | **$ 33,468,891** |
| Design | **$ 133,875,564** |
| Right-of-Way | **$ 142,253,859** |
| Utilities | **$ 17,608,122** |
| Construction/Installation | **$ 1,533,109,294** |
| NTTA Internal Costs | **$ 8,367,223** |
| Maintenance/Warranty | |
| **TOTAL PROJECT COST** | **$ 1,918,886,289** |
| **SAY** | **$ 1,918,886,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 898,136,824** |
| **Total Agency Cost** | **$ 372,931,092** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$ 1,271,067,916** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,245,628,780** |
| **Escalated Total Agency Cost** | **$ 517,219,302** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$ 1,762,848,082** |
| **SAY** | **$ 1,762,848,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.

4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).

5) Approximate right-of-way needs can be estimated.

6) Approximate ITS elements needs can be identified.

7) Unit costs of similar projects are used to calculate construction cost.

8) Contingencies are applied to the construction cost.

9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

**TOTAL PROJECT COST**
**TRINITY PARKWAY EIS - ALT 5 SPLIT PARKWAY LANDSIDE**
**IH 35E TO US 175 (9.9 MILES) / SIX GP LANES (ULTIMATE SECTION)**
**PRELIMINARY/CONCEPTUAL ESTIMATE OF PROBABLE COSTS OF CONSTRUCTION**
**LEVEL "E" SCHEMATIC PHASE ESTIMATE**

| | |
|---|---|
| **Created By:** | **JM/SS** |
| **Date:** | **7/6/2007** |
| **Checked by:** | **MGC** |
| **Date:** | **8/14/2007** |
| **Official Estimate Date:** | **8/14/2007** |
| **Mid-point of Anticipated Construction:** | **1/1/2013** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **1.0 ROADWAY** | | | | | |
| 1.01 | Mainlane Pavement | 411,230 | SY | $70 | $28,786,100 |
| 1.01a | Asphalt Shoulders | 147,920 | SY | $50 | $7,396,000 |
| 1.02 | Frontage Road Pavement | 129,368 | SY | $70 | $9,055,760 |
| 1.03 | Ramp Pavement | 72,453 | SY | $70 | $5,071,733 |
| 1.04 | Cross Street Pavement | 0 | SY | $70 | $0 |
| 1.05 | Monolithic Curb | 56,220 | LF | $3 | $168,660 |
| 1.06 | Pavement Striping (Solid) | 455,900 | LF | $2 | $911,800 |
| 1.07 | Pavement Striping (Broken) | 364,390 | LF | $2 | $728,780 |
| 1.08 | Concrete Traffic Barrier | 199,260 | LF | $38 | $7,571,880 |
| 1.09 | Excavation | 632,000 | CY | $7 | $4,424,000 |
| 1.09a | Excavation (Haul) | 632,000 | CY | $10 | $6,320,000 |
| 1.10 | Embankment | 0 | CY | $7 | $0 |
| 1.10a | Embankment (Haul) | 5,588,000 | CY | $10 | $55,880,000 |
| 1.11 | Embankment (Borrow) | 0 | CY | $0 | $0 |
| **SUBTOTAL ROADWAY** | | | | | **$ 126,314,713** |
| **2.0 STRUCTURES** | | | | | |
| 2.01 | Main Lane Bridge (Standard) | 1,682,520 | SF | $60 | $100,951,200 |
| 2.02 | Main Lane Bridge (Special) | 984,000 | SF | $95 | $93,480,000 |
| 2.03 | Frontage Road Bridge (Standard) | 226,320 | SF | $60 | $13,579,200 |
| 2.04 | Frontage Road Bridge (Special) | 0 | SF | $95 | $0 |
| 2.05 | Ramp Bridge (Standard) | 884,760 | SF | $60 | $53,085,600 |
| 2.06 | Ramp Bridge (Special) | 950,580 | SF | $95 | $90,305,100 |
| 2.07 | Cross Street Bridge | 0 | SF | $60 | $0 |
| 2.08 | Retaining Wall (Cut) | 0 | SF | $90 | $0 |
| 2.09 | Retaining Wall (Fill) | 680,000 | SF | $45 | $30,600,000 |
| 2.10 | Flood Wall | 0 | SF | $50 | $0 |
| 2.11 | Park Access Bridge | 15,600 | SF | $56 | $873,600 |
| 2.12 | Pedestrian Park Access Bridge | 197,460 | SF | $54 | $10,662,840 |
| 2.13 | Reunion Pedestrian Platform | 0 | EA | $7,748,810 | $0 |
| 2.14 | Bridge Widening (Standard) | 78,660 | SF | $90 | $7,079,400 |
| 2.15 | Bridge Widening (Special) | 453,420 | SF | $130 | $58,944,600 |
| **SUBTOTAL STRUCTURES** | | | | | **$ 459,561,540** |
| **3.0 DRAINAGE** | | | | | |
| 3.01 | Drainage - Mainlanes | 0 | LF | $85 | $0 |
| 3.01a | Trinity Pkwy Drainage (Excluding Lift Station) | 766 | STA | $25,000 | $19,150,000 |
| 3.01b | Trinity Pkwy Storm Drainage Lift Station | 0 | EA | $271,000 | $0 |
| 3.02 | Drainage - Frontage Roads | 0 | LF | $50 | $0 |
| 3.03 | Drainage - Ramps | 9,800 | LF | $50 | $490,000 |
| 3.04 | Drainage - Cross Streets | 0 | LF | $50 | $0 |
| 3.05 | Large Drainage Structures | 0 | EA | $0 | $0 |
| 3.05a | Extend Pump Station/Sewer Outfall | 0 | EA | $817,500 | $0 |
| 3.06 | Misc. Water and Wastewater Utilities | 1 | LS | $35,000,000 | $35,000,000 |
| 3.07 | Relocate Small Utility Lines (Water/Sewer/Gas<8") | 41,300 | LF | $100 | $4,130,000 |
| 3.08 | Relocate Medium Utility Lines (Water/Sewer/Gas 10"-21") | 18,150 | LF | $200 | $3,630,000 |
| 3.09 | Relocate Large Utility Lines (Water/Sewer/Gas 24"-42") | 24,800 | LF | $390 | $9,672,000 |
| 3.10 | Relocate Small Drainage Lines (<18") | 11,400 | LF | $120 | $1,368,000 |
| 3.11 | Relocate Medium Drainage Lines (21"-42") | 9,550 | LF | $190 | $1,814,500 |
| 3.12 | Relocate Large Drainage Lines (48"-72") | 6,875 | LF | $380 | $2,612,500 |
| 3.13 | Relocate Fiber Optics Line | 7,350 | LF | $250 | $1,837,500 |
| 3.14 | Relocate Trans. Line Tower | 55 | EA | $400,000 | $22,000,000 |
| 3.15 | Adjust Trans. Line Tower | 18 | EA | $200,000 | $3,600,000 |
| 3.16 | Relocate U/G Elec. Distribution Line | 40,800 | LF | $200 | $8,160,000 |
| 3.17 | Relocate Overhead Trans. Line | 0 | LF | $210 | $0 |
| 3.18 | Relocate Eletric Substation | 0 | EA | $350,000 | $0 |
| **SUBTOTAL DRAINAGE** | | | | | **$113,464,500** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|
| **4.0 MISCELLANEOUS** | | | | | |
| 4.01 | Demolition - Structures | 0 | EA | $2,700 | $0 |
| 4.01a | Demolition - Bridge Structure (0-99) | 0 | EA | $17,000 | $0 |
| 4.01b | Demolition - Bridge Structure (100-499) | 0 | EA | $42,000 | $0 |
| 4.01c | Demoltion - Bridge Structure (500-999) | 1 | EA | $65,000 | $65,000 |
| 4.01d | Demoltion - Bridge Structure (>999) | 4 | EA | $100,000 | $400,000 |
| 4.02 | Demolition - Pavement | 234,167 | SY | $5 | $1,170,833 |
| 4.03 | Sodding including Top Soil | 102,090 | SY | $7 | $714,630 |
| 4.04 | Intersection Signalization | 24 | EA | $150,000 | $3,600,000 |
| 4.05 | Signage | 670 | STA | $12,000 | $8,040,000 |
| 4.06 | Lighting | 670 | STA | $10,000 | $6,700,000 |
| 4.07 | Landscape | 10 | MI. | $1,000,000 | $9,900,000 |
| 4.08 | SWP3 | 670 | STA | $10,000 | $6,700,000 |
| 4.09 | Soundwalls | 277,778 | SF | $18 | $5,000,004 |
| 4.10 | R.O.W. Fence | 104,544 | LF | $15 | $1,568,160 |
| 4.11 | Environmental Mitigation | 1 | LS | $4,071,000 | $4,071,000 |
| 4.12 | Mow Strip | 183,744 | LF | $30 | $5,512,320 |
| 4.13 | Concrete Sidewalk | 31,233 | SY | $92 | $2,873,467 |
| 4.14 | R.O.W. Prep | 670 | STA | $10,000 | $6,700,000 |
| 4.15 | Traffic Control (Urban) | 670 | STA | $20,000 | $13,400,000 |
| 4.16 | Traffic Control (Floodway) | 0 | STA | $5,000 | $0 |
| **SUBTOTAL MISCELLANEOUS** | | | | | **$ 76,415,414** |

**5.0 GANTRIES and ITS**

| | | | | | |
|---|---|---|---|---|---|
| 5.01 | Mainlane Gantry | 12 | Lane | $900,000 | $ 10,800,000 |
| 5.02 | Mainlane Gantry Operation Building | 1 | Each | $5,000,000 | $ 5,000,000 |
| 5.03 | Ramp Gantry | 22 | Lane | $625,000 | $ 13,750,000 |
| 5.04 | CCTV | 20 | Each | $50,000 | $ 1,000,000 |
| 5.05 | Dynamic Messaging Sign | 4 | Each | $160,000 | $ 640,000 |
| 5.06 | Fiber Optic (2 Operational Conduits) | 8.7 | Mile | $250,000 | $ 2,175,000 |
| 5.07 | Pavement Sensors | 2 | Each | $30,000 | $60,000 |
| 5.08 | Traffic Sensors | 20 | Each | $20,000 | $400,000 |
| 5.09 | Speed Map | 4 | Each | $20,000 | $80,000 |
| 5.10 | Gantry Signage | 34 | Lane | $50,000 | $ 1,700,000 |
| **SUBTOTAL GANTRIES and ITS** | | | | | **$ 33,365,000** |

**CONSTRUCTION COST SUMMARY**

| | |
|---|---|
| **SUBTOTAL CONSTRUCTION** | **$ 809,121,167** |
| **Mobilization (10%)** | **$ 80,912,117** |
| **Sub-Total Construction** | **$ 890,033,284** |
| **Construction Contingency (20%)** | **$ 178,006,657** |
| **TOTAL CONSTRUCTION COST (CURRENT DOLLARS)** | **$ 1,068,039,941** |
| **ESCALATED TOTAL CONSTRUCTION COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | **$ 1,481,267,947** |

**6.0 AGENCY COSTS (CURRENT COST)**

| | | |
|---|---|---|
| **Total Construction Cost (Current Cost)** | | **$ 1,068,039,941** |
| 6.01 | **Administrative** | |
| | NTTA Personnel (0.5%) | **$ 5,340,200** |
| | Feasibility Studies (0.5%) | **$ 5,340,200** |
| | GEC (1%) | **$ 10,680,399** |
| 6.02 | **Engineering/Architectural** | |
| | Advanced Planning (0.5%) | **$ 5,340,200** |
| | EIS/EA Schematic (1%) | **$ 10,680,399** |
| | PS&E (6%) | **$ 64,082,396** |
| | Surveying (1%) | **$ 10,680,399** |
| | Geotechnical (1%) | **$ 10,680,399** |
| 6.03 | **Legal Consulting Fees (2%)** | **$ 21,360,799** |
| 6.00 | **Electronic Tolling Equipment** | |
| | Mainlane Gantry Tolling Equipment ($83,000 per Lane) | **$ 996,000** |
| | Ramp Gantry Tolling Equipment ($83,000 per Lane) | **$ 1,826,000** |
| 6.04 | **R.O.W.** | |
| | Land and Displacement | **$ 89,769,000** |
| | R.O.W. Acquisiton Consultant (0.5%) | **$ 5,340,200** |
| 6.05 | **Construction Support** | |
| | Construction Management (6%) | **$ 64,082,396** |
| | Materials Testing (1%) | **$ 10,680,399** |
| 6.06 | **Utility Relocations - Franchise (See Franchise Utility Tab for Details)** | **$ 14,860,000** |
| 6.07 | **Reimbursements (1%)** | **$ 10,680,399** |
| 6.08 | **Unique Features** | **$ -** |
| **Sub-Total Agency Cost** | | **$ 342,419,787** |
| **Agency Cost Contingency (20%)** | | **$ 68,483,957** |
| **TOTAL AGENCY COST (CURRENT DOLLARS)** | | **$ 410,903,744** |
| **ESCALATED TOTAL AGENCY COST TO 1ST CONSTRUCTION YEAR (ENR CCI PROJECTION)** | | **$ 569,883,693** |

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | UNIT COST | SUBTOTAL COST |
|---|---|---|---|---|---|

**TOTAL PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 1,068,039,941** |
| **Total Agency Cost** | **$ 410,903,744** |
| **TOTAL PROJECT COST (CURRENT DOLLARS)** | **$ 1,478,943,685** |

**TOTAL PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,481,267,947** |
| **Escalated Total Agency Cost** | **$ 569,883,693** |
| **TOTAL PROJECT COST (ESCALATED)** | **$ 2,051,151,639** |
| **SAY** | **$ 2,051,152,000** |

**CAPITALSOFT COST DISTRIBUTION**

| | |
|---|---|
| Professional Services | **$ 53,325,646** |
| Planning | **$ 35,550,431** |
| Design | **$ 142,201,723** |
| Right-of-Way | **$ 158,288,697** |
| Utilities | **$ 24,731,257** |
| Construction/Installation | **$ 1,628,166,278** |
| NTTA Internal Costs | **$ 8,887,608** |
| Maintenance/Warranty | |
| **TOTAL PROJECT COST** | **$ 2,051,151,639** |
| **SAY** | **$ 2,051,152,000** |

**POSSIBLE PROJECT DEDUCTIONS FROM OTHER PROJECTS OR AGENCIES**

| | |
|---|---|
| City of Dallas Bond Contribution | **$84,000,000** |
| Levee Improvements (U.S. Army Corps of Engineers) | **$23,367,513** |
| **Total Construction Costs (Including Mobilization)** | **$107,367,513** |
| **Total Possible Savings to Agency Cost** | **$5,140,853** |
| **TOTAL POSSIBLE PROJECT DEDUCTIONS** | **$112,508,366** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (CURRENT DOLLARS)**

| | |
|---|---|
| **Total Construction Cost** | **$ 960,672,427** |
| **Total Agency Cost** | **$ 405,762,891** |
| **TOTAL POSSIBLE NET PROJECT COST (CURRENT DOLLARS)** | **$ 1,366,435,319** |

**TOTAL POSSIBLE NET PROJECT COST SUMMARY (ESCALATED)**

| | |
|---|---|
| **Escalated Total Construction Cost** | **$ 1,332,359,605** |
| **Escalated Total Agency Cost** | **$ 562,753,828** |
| **TOTAL POSSIBLE NET PROJECT COST (ESCALATED)** | **$ 1,895,113,433** |
| **SAY** | **$ 1,895,113,000** |

Notes:

1) The unit costs to construct this facility are based on the unit prices of recently constructed similar facilities and/or the latest average unit prices of TxDOT projects (Dallas District January 2007).

2) Prelminary horizontal and vertical alignments are developed. Approximate quantities of major roadway and structure elements can be calculated.

3) Proposed drainage and utilities designs have not been developed so quantities are calculated as a general, all inclusive unit rate.

4) Major above surface utility relocations could be identified (i.e. electric transmition lines, etc).

5) Approximate right-of-way needs can be estimated.

6) Approximate ITS elements needs can be identified.

7) Unit costs of similar projects are used to calculate construction cost.

8) Contingencies are applied to the construction cost.

9) The proposed Jefferson Street Bridge replacement is a TxDOT project and therefore not included in this cost estimate.

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX E

# USACE GUIDANCE DOCUMENTS

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX E - CONTENTS LIST

## USACE GUIDANCE DOCUMENTS


| Item | Topic | Date | Page |
|---|---|---|---|
| USACE | Criteria for Construction | October 31, 2003 | 1 - 10 |
| USACE | Record of Decision | April 29, 1988 | 11 - 16 |
| USACE | Memo for Major Subordinate Commands | October 23, 2006 | 17 - 20 |

THIS PAGE INTENTIONALLY LEFT BLANK

**DEPARTMENT OF THE ARMY** **SWFP 1150-2-1**
**U.S Army Corps of Engineers, Fort Worth District**
**P.O. Box 17300**
**Fort Worth, Texas 76102-0300**

Pamphlet
No. 1150-2-1 31 October 2003

---

Local Cooperation
CRITERIA FOR CONSTRUCTION WITHIN THE LIMITS
OF EXISTING FEDERAL FLOOD PROTECTION PROJECTS

**1. Pamphlet Purpose.** This pamphlet provides guidance to individuals, developers, architect-engineering firms, local project sponsors, and local governmental agencies for the construction of new facilities or the modification of existing facilities within the limits of an existing Federal flood protection project constructed by the U.S. Army Corps of Engineers, Fort Worth District (CESWF) and for which local project sponsors and/or local governmental agencies have the responsibilities for operation and maintenance. The CESWF, in accordance with Title 33 CFR, Section 208.10, retains the right of review and approval on all proposed improvements and/or modifications that are passed over, under, or through the walls, levees, improved channels, or floodways of such projects. The guidance contained in this pamphlet applies to the activities described herein in most cases; however CESWF reserves the right to reconsider this guidance at any time due to unknown or unforeseen circumstances, technological advances, additional information, etc.

**2. Applicability**. This pamphlet applies to all Federal flood protection projects constructed by CESWF, and for which a letter of assurance agreeing to the operation and maintenance of the flood protection project has been furnished CESWF by the project's local sponsor.

**3. Project Purpose**. A Federal flood control project is designed to safely carry floodwater within the project and through a developed area. As such, any proposed developments within the project must keep the safe passage of floodwater as the first priority. The roles of the CESWF and the project local sponsor are to maintain the integrity of the project while preventing negative impacts to the passage of the project design flood. The CESWF will not allow the safety of the project to be compromised or the required design carrying capacity of the project reduced.

**4. General Criteria for Construction Within a Floodway.**

a. As early as possible during the planning process, discuss preliminary proposals with the CESWF and the local sponsor to avoid major revisions or project delay. The local sponsor may make any requirements of this Pamphlet more stringent than those contained herein. Concept proposals may be submitted for review. Submit the proposed construction starting date and the detailed project construction schedule, including sequence of construction prior to initiation of work.

b. Construction may not start until final written contract drawings and plans have been reviewed and approved in writing by both the CESWF and the local sponsor.

c. Furnish five (5) sets of plans and specifications for the proposed work to the CESWF, Operations Division, ATTN: CESWF-OD-M, via the local sponsor sufficiently in advance of proposed construction to allow adequate time for review and approval. A vicinity map shall be included in the plans showing the right-of-way boundaries of the flood protection project with specific levee toe and channel slope limits in the portion of the project being crossed, if applicable.

This pamphlet supersedes SWFP 1150-2-1 dated 15 October 1985.

d. If boring, jacking, or tunneling operations are planned; detailed designs, calculations, and construction procedures must be provided for review. See subsequent paragraphs for additional details and required procedures.

e. Practice approved construction methods and best management practices to minimize erosion at the construction site. All work shall be performed in such a manner as to be as environmentally friendly as possible. This includes making every effort to reduce the turbidity of the water at the site, such as by limiting the amount of time construction equipment is in the water. A storm water pollution prevention plan (SWPPP) must be included in the final project submittal.

f. When construction work is in progress in a project located downstream of a Federal dam, a request from the contractor for changes in regulated releases will be considered on individual cases only. Normally, regulated releases from upstream lakes for evacuation of floodwaters, water supply, recreation, or other purposes considered to be in the best interest of the public will have first consideration. A flood event could occur at any time during construction activities and could affect these activities.

g. Construction equipment, spoil material, supplies, forms, buildings for inspectors, labs, or equipment and supply storage buildings, etc., shall not be placed or stored in the floodway during construction activities. Any item that may be transported by flood flows shall not be stored within the project. Locations of construction trailers and stockpile areas shall be included on project plans and approved by the CESWF and the local sponsor.

h. In addition to other requirements set forth in this Pamphlet, permits may be required under Section 10 and Section 404 for the desired work. These permits require a minimum of 90 days to process. It is recommended that contact with the CESWF Regulatory Branch be initiated in the early planning stages to prevent delays.

i. Repair or replace any maintenance and operation roads disturbed during construction to a condition equal to or better than their condition before construction. All roads must be inspected by the local sponsor prior to completion of the project.

j. Compact all fill and backfill in 6-inch lifts as specified in job specifications approved by the CESWF. Compaction shall be to at least 95 percent of modified density as specified in ASTM D-1557. All backfill shall consist of impervious materials. Reestablish vegetation to its original condition or better. Remove all excess material from the limits of the floodway.

k. Provide scour protection consisting of articulating revetment system protection capable of being re-vegetated at the outfall of stilling basins designed according to the issuing jet velocity. If approved by the local sponsor, riprap, gabions, or concrete paving may be substituted for the revetments.

l. The crown or crest of the levee referred to in this pamphlet is the original or design levee crest elevation. This may or may not be the same as the current levee crest elevation. All modifications shall be based on the higher of the two elevations.

m. Upon request, the CESWF Hydrology and Hydraulics Section may provide applicable hydraulic models to be used for design.

n. Any permanent disturbance of existing recreation facilities must be mitigated.

o. Sump areas adjacent to federal projects are considered an integral part of the federal project and any modifications to them will be reviewed and approved in accordance with this Pamphlet.

**5. Crossing Over Existing Levees At Grade.**

a. The local sponsor may decide to not allow any proposed crossing over existing levees at grade.

b. No excavation or notching will be performed into or on the levee, or within the levee template.

c. Strip topsoil from the levee and place the line up and over the levee template slopes at grade. This will require rather abrupt line grade changes at the levee crest. Cover the new line by placing new fill uniformly on the slopes and top of the levee to slope away from the line and parallel to the longitudinal axis of the levee. Provide a minimum of 2 feet of cover over the new line. The slope of the fill shall be 1 vertical on 20 horizontal or flatter. Replace the topsoil, reestablish grass on all disturbed areas, and restore any roadways.

d. All valves located within 15 feet of either side of the projected toe of the levee shall be provided in a concrete box enclosure with a manhole type cover. Valve boxes located within the floodway shall be underground and flush with the surface. If the valve box is placed in the levee crest, the bottom of the excavation shall be not lower than one foot above the design water surface elevation. Fill shall be uniformly placed to slope away from the top of the valve box. If possible all valves shall be placed on the landside of levees a minimum of 15 feet from the projected levee toe.

e. Provide water-tight sealed manhole covers for all manholes within the floodway having tops below design water surface elevation. Fasten manhole covers to the manhole structures.

**6. Crossing Under Levees with Open Excavation.**

a. Provide a temporary ring levee (cofferdam) on the riverside of the existing levee at the location of the subject crossing to the same top elevation as the existing levee. This ring levee shall have a minimum crest width of 10 feet and sides slopes of 1 vertical on 3 horizontal or flatter. Construct the levee of impervious materials according to the provisions specified in Paragraph 4j.

b. When the temporary ring levee is complete, excavate through the existing levee using one vertical on three horizontal cut slopes. The toe of the levee and ring levee shall be a minimum of 20 feet (measured horizontally) from the top edge of the excavation.

c. Generally, sources for borrow materials shall not be located within the limits of the floodway right-of-ways. In addition, depending on the type of soil and whether or not pervious materials or unstable materials exist in the foundation of the existing levee, it may be desirable to limit the depth of excavation or specify a minimum distance from the land-side toe of the levee. All excavated slopes shall be properly designed and the drawings sealed by a registered professional engineer.

d. After the line has been placed, the open excavation will be compacted in accordance with Paragraph 4j. When backfill operations are completed, the entire foundation area to be occupied by the replaced levee fill shall be scarified, plowed, and/or harrowed to a depth of 6 inches, and then compacted by at least 16 complete passes of the tamping roller or 95 percent modified density, whichever is more rigorous.

e. Accomplish levee replacement by placing fill in 6-inch lifts and compacting by not less than eight complete passes of a tamping roller or at least 95 percent modified density. After compaction, the moisture content shall be within the limits of 3 percentage points above optimum to 2 percentage points below optimum moisture content.

f. Determine the in-place moisture content and density of the levee fill on a frequency of about one sample for each 2500 cubic yards of backfill placed in the levee.

g. When the breached levee has been reconstructed to its original grade, remove the temporary ring levee and dress and turf the surface areas of the plugged section.

h. Provide water-tight sealed manhole covers for all manholes within the flood protection project having tops below design water surface elevation. Fasten manhole covers to the manhole structures.

i. For pipelines, install a positive cut-off structure to prevent water from the riverside flowing through the pipeline to the landside. If located on the riverside of a levee, extend the cut-off structure to the levee crown elevation by bridge. This structure must be accessible no matter what flood condition may exist. The closure device must be operational by manpower, if necessary.

j. Provide gravity storm drains discharging into the floodway with automatic flap gate(s) at the discharge end of the line and energy dissipaters, as required. The owner or local sponsor, as per written agreement, shall be responsible for inspection and maintenance to ensure proper operation of the flap gates.

k. Use monolithic conduits or conduits with water-tight joints under the levee and levee template.

**7. Crossing Under Levees with Boring or Jacking of Sleeves.** The sequence of work shall be as follows:

a. Excavate the boring and jacking pit (must be on the land side outside the projected toe of the levee template slope).

b. Bore and jack the sleeve to a point beyond the projected riverside toe of the levee template slope.

c. If the difference in the diameters of the bore and sleeve exceeds 3 inches, the annular space shall be pressure grouted with bentonite slurry.

d. Place the product line in the sleeve.

e. Pressure grout the product line in sleeve with bentonite slurry.

f. Excavate the pit on the riverside and construct a manhole with gate valve placed on inside face of manhole away from channel. Tie line from sleeve under levee into manhole with gate valve.

g. Tie line from sleeve under levee into a manhole on landside.

h. During work on items a through h, a plug will be required to be placed and braced at the open end of the sleeve and pipe located in the jacking pit at the close of work each day. This plug must remain in place until the gate valve is installed and connections made to ensure protection from flooding from the river.

**8. Horizontal Directional Drilling Under Levees and Channels.**

a. Detailed contractual drawings, plans, procedures, and engineering calculations shall be provided to CESWF for review. These must include all the requirements of Paragraph 4 above and the following additional items:

(1) Inside diameter of the final bore hole and outside diameter of the product casing.

(2) Detailed description of construction and horizontal boring methods to be utilized.

(3) If the difference in the diameters of the final bore and product casing exceeds 3 inches, provide the method of pressure grouting the annular space between the outside of the product casing and the inside of the bore to prevent seepage under the levee template during maximum river stages.

(4) A profile of the proposed line showing alignment (including location of the river and levees).

(5) Location of entry and exit points, location, elevations and proposed clearances for all utility crossings and structures

(6) Right-of-way lines, property, and other utility right-of-way or easement lines

(7) Depth under the base of the levee, depth of the line under the river channel, and location of both ends of the string. If the proposed depth of the string directly below the base of the levee is less than 30 feet, then detailed engineering calculations sealed by a registered professional engineer shall be provided for review. These calculations must show a minimum 1.5 factor of safety against hydro-fracturing to be acceptable.

b. Develop and provide a quality control plan for the project that includes the maximum allowable drilling pressure, gage calibration method, and responsibility for assuring that the pressure is not exceeded.

c. The minimum clearance distance from the top of the pipe encasement to the original design river bottom elevation shall be 7 feet. Should the existing channel bottom elevation be lower than original design grade, the new line shall be the discussed depth below the existing bottom elevation.

d. Develop and provide a quality control plan for the project that includes the maximum allowable drilling pressure, gage calibration method, and specific responsibility for assuring that the pressure is not exceeded. During the drilling process, the pressure in the borehole must be monitored to ensure that the operational drilling pressures remain within the safe limits to prevent soil fracturing. The name of the party responsible for monitoring the work must be specified.

**9. Bridges Crossing Levees.**

a. The bottom of low steel of the bridge shall be above the design crest elevation of the levee. No notching into the levee will be allowed.

b. All bents should be located to minimize the number of bents located within the template of the levee. Driving of piles within the template of the levee will not be allowed. Bents at these locations should only be designed as drilled piers.

c. Bridges will not be located where their construction will block maintenance access roads presently located within the floodway.

d. All storm water runoff from bridge decks must be piped to grade to prevent erosion within the floodway.

e. Re-vegetated mat type slope protection must be provided from the top of the levee to the floodway bottom under the shadowline of the bridge.

f. The bridge must be designed to minimize the number of pier bents. If the new bridge is within 500 feet of an existing bridge the new pier bents must be in alignment with the adjacent bridge.

**10. Buried Lines Parallel to Levees and Channels.**

a. Buried lines parallel with a levee (either on the river side or land side) will not be allowed where the buried lines final location will be within the extended template of the levee. For example, a line buried 5 feet deep must be at least 15 feet away from the toe of a levee with a 1 vertical on 3 horizontal slope.

b. Sumps, ditches, swales, or other project features crossed by the buried line shall be restored to their pre construction condition.

c. Buried lines parallel with the channel bank must be at least 25 feet from the projected river channel slope template.

d. When a buried line crosses a discharge channel, place the line on piers with the piers aligned so as to provide minimal obstruction to flow in the discharge channel and designed so as to catch minimal debris. The preferred alternative would be to place the line under the discharge channel and encase it with concrete. Extend the encasement a minimum of 5 feet beyond the top of the channel side slopes.

**11. River and Channel Crossing Criteria.**

a. Crossings Under Rivers and Channels by Open Excavation:

(1) Bury the line a minimum of 7 feet below the original design river bottom elevation. Should the existing channel bottom elevation be lower than original design grade, the new line shall be the discussed depth below the existing bottom elevation.

(2) Sufficiently anchor or encase the line to prevent floatation.

(3) Backfill the excavation with material similar to that excavated. If soil is excavated, backfill with compacted impervious fill material and if rock is excavated, backfill with concrete.

(4) No cofferdam fill type crossings shall be allowed in water greater than six (6) feet in depth, and will then only be allowed if geotechnical and structural designs prove that sheet piling would not be a viable method.

b. Crossings Over Rivers and Channels.

(1) Provide a minimum freeboard between the low point of the crossing and the design water surface elevation of three feet or to the top of any levee, whichever is higher.

(2) The obstruction caused by the supporting bridge and its piers shall not significantly reduce the carrying capacity of the floodway. No longitudinal cross bracing will be used.

(3) Submit final plans and hydraulic computations to indicate that the proposed project would not reduce the floodway capacity.

(4) Projects crossing navigable waterways (Trinity River downstream from Riverside Drive in Fort Worth, Texas) shall require a United States Coast Guard permit. Clearances and requirements shall be as directed by the Coast Guard.

**12. Roadway or Railroad Crossings.**

a. The low steel of a bridge shall have an elevation not lower than the crown of the levee or top of bank or 3 feet above the design water surface, whichever is higher. Contact CESWF for the current design water surface at the location of the proposed roadway crossing. Additional clearances shall be required for fixed spans over navigable waterways.

b. Submit final plans and hydraulic computations to indicate the proposed roadway or bridge would not reduce flows or project capacity. Projects will not be approved that reduce the carrying capacity of the project.

c. Any roadway over a navigable waterway will require a permit from the United States Coast Guard.

d. See Paragraph 9 for special requirements for crossing levees.

e. Hold temporary roadway fill to a minimum to prevent increasing the water surface elevation should a flood occur during the construction period. Construct all temporary ramps from levees going in a downstream direction. This will prevent flows from being directed into the face of the levees.

**13. Headwall, Chutes, Gate Valves, Flap (Automatic) Gates, etc.**

a. Install headwall, gate valve structures, flap (automatic) gates, and other types of outfall structures in such a manner to prevent obstruction of flow or creation of scouring conditions within the project. All headwalls must transition with the slope and flow discharge points must be at an elevation equal to the bottom of the slope or at the normal water surface. Chutes will not be allowed unless they are the only viable alternative.

b. All structures shall be installed in such a manner so as to not create maintenance problems.

**14. Pump Discharge Pipelines Over Levees.**

a. The invert of the discharge shall be at the toe of the protective works (levee) and shall be free-vented at the highest point. For very large lines deviation from this criteria may be considered, but under no condition shall excavation be permitted into the levee. See Paragraph 5 for requirements for crossing over a levee on grade.

b. Flap (automatic) gates are not required at the outfall of the discharge lines.

**15. Electrical and Telephone Criteria for Overhead Wire Crossings.**

a. The local sponsor may require directional boring under the levee as opposed to an overhead crossing.

b. No structure (poles or otherwise) shall be located closer than 15 feet from the toe of any levee.

c. No structure (poles or otherwise) shall be located closer than 15 feet from the top of any channel slope.

d. Provide a minimum vertical clearance of 28 feet between the crown of the levee and the low wire at the low point of the wire at the levee crossing computed under the most adverse conditions (temperature, wind, load, etc.).

e. Provide a minimum vertical clearance of 28 feet between the natural ground and the low wire at the low point of the sag in the area of the project channel, or three feet above the project design water surface level, whichever is higher. (Check Electrical Code for minimum clearance of high voltage lines.)

f. Locate guy wires and anchors in such a manner that they do not interfere with the operation and/or maintenance of the channel, levees, or related structures. No anchors may be placed on the levee.

**16. Low Dams or Diversion of Flows.**

a. Submit plans, hydraulic and structural computations, and specifications for low dams or other obstructions for review and comments prior to the construction of any type dam structure in a project area. These plans will be reviewed to determine if adverse hydraulic or structural effects would occur within the project as a result of the proposed construction. Prior to an extensive engineering study for any type of water barrier in a project, the CESWF and the local sponsor will review the concept plan, proposed location, and purpose.

b. Diversion of flows into or out of a project area shall be reviewed as to possible adverse hydraulic or structural effects.

**17. Process for Abandoning Existing Pipelines.**

a. Requests to abandon existing buried pipelines within a project shall be submitted in writing to CESWF and the local sponsor. No buried line within a floodway may be abandoned without the review and approval of CESWF and the local sponsor.

b. As a minimum, the portion of the abandoned pipeline under a levee shall be completely filled with concrete or grout to prevent seepage through the abandoned line during flood conditions.

c. Abandoned buried pipelines that are located on floodway property, but are not located under a levee shall be plugged at each end with concrete or grout.

d. Any structures associated with abandoned buried pipelines, for example, manholes, shall be removed and the resulting hole filled and compacted in accordance with the provisions in paragraph 4j.

e. Above-ground abandoned pipelines shall be removed from floodway right-of-way, including any associated structures.

**18. Construction of Recreation Facilities.** Submit plans to the CESWF for review and approval on any proposed recreation type facilities to be constructed in an existing or approved Federal project area. Each plan shall include hydraulic computations and will be reviewed for individual and cumulative effects to determine if the proposed construction would produce adverse effects on an existing or approved project area. If adverse effects on the carrying capacity of the project are determined, the project will be disapproved. The local sponsor may construct minor recreation improvements as needed so long as final as-built plans are provided to CESWF.

**19. Planting of Trees Within a Floodway.**

a. The purpose of a Federal flood protection project is to carry floodwater through an urban area. Anything in the floodway that restricts flow or can catch floating debris will reduce the carrying capacity below its design limits and will not be allowed. The local sponsor is directed to remove all trees on the

levees or adjacent to the channel and also as many other trees and obstructions within the floodway as reasonably possible.

b. Planting of trees on the levees will not be allowed nor approved.

c. Planting of additional trees within existing flood protection projects or adjacent to channels is not encouraged and will be evaluated only on a case-by-case basis. Only trees with deep-type root systems and high canopies may be planted in selected areas of existing flood protection projects. The plantings shall be a minimum of 50 feet away from the toe of the levee or the top of the channel bank. Trees may be placed no closer than at an average spacing of 100 feet, center-to-center. Prune trees to permit mowing immediately adjacent with tractor type mowers. No bush or vine type plants will be permitted. Minimum application of ground cover plants for slope protection will be allowed, subject to approval by the local sponsor.

d. Submit a coordinated planting plan with hydraulic computations for review and approval. This plan must also show all existing trees within 1000 feet of the proposed new trees.

CESWF-EC-DG

CAROL J. SHEAD
Publications Control Officer

DISTRIBUTION:

**THIS PAGE INTENTIONALLY LEFT BLANK**

**RECORD OF DECISION**
**REGIONAL ENVIRONMENTAL IMPACT STATEMENT**
**TRINITY RIVER AND TRIBUTARIES**

## I. Introduction

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce and reduce flood hazards. An important part of its mission today is the protection of the nation's waterways through the administration of the Regulatory Program. The Corps is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition, or capacity of navigable waters of the United States. Section 9 (33 USC 401) directs the Corps to regulate the construction of any dam or dike across a navigable water of the United States. The intent of these laws is to protect the navigable capacity of waters important to interstate commerce.

Additionally, the Corps is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including adjacent wetlands. The intent of this law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution, and to restore and maintain their chemical, physical, and biological integrity. Because the District Engineer's decision to issue or deny a permit under these laws is a significant Federal Action, various other statutes, principally Public Law 91-190 (the National Environmental Policy Act, or NEPA) come into play. Among other things, NEPA requires the consideration of the direct, indirect, and cumulative impacts of an action (40 CFR 1508.25(C)).

Late in 1984 and early in 1985, it became apparent that numerous unrelated development projects were being proposed along the Trinity River and its tributaries in Dallas, Denton, and Tarrant Counties, Texas. Most involved modification of the river channel and/or flood plain in some form or another, and most required a Corps of Engineers permit as a result. Because, individually or cumulatively, these projects were felt to have the potential to compromise the existing protection afforded to flood plain residents, because of perceived impacts to wetlands and other natural resources, and because of competing public demands for other uses of the river channel and flood plain, the District Engineer determined that it was necessary to develop a regional perspective in order to properly evaluate the impacts of individual permit decisions in accordance with the spirit and intent of NEPA and other applicable laws.

The Draft Regional Environmental Impact Statement (EIS), published in May 1986, analyzed a number of scenarios which were specifically designed to identify possible, significant cumulative impacts associated with different permitting strategies for the Trinity River flood plain. In addition to developing a baseline condition, it examined three groups of conditions based on a) maximizing environmental quality, b) ultimate implementation of the

Federal Emergency Management Agency's (FEMA) minimum criteria for the flood insurance program, and c) maximizing economic development.

The results of the Draft Regional ElS indicated strongly that there are potential cumulative impacts associated with individual flood plain development projects which are both measurable and significant. Additionally, the Draft Regional EIS indicated that the permitting approach adopted by the Corps of Engineers had the potential to have significantly different impacts on a number of regional parameters, especially flood hazards. Even though the analyses were not complete, and the public comment on the Draft Regional EIS indicated that there was much work to follow, the implications to the ongoing Regulatory Program could not be overlooked. In response to this, the Corps formulated a set of interim criteria to be in effect until the Record of Decision was rendered.

Many of the comments received on the Draft Regional EIS indicated that the slate of alternatives analyzed did not represent a realistic approach to regulatory strategies. In many cases, the predicted results were publicly unacceptable. Two important examples include the overtopping of the Dallas Floodway levees under two of the scenarios, and a substantial downstream shift in the Dissolved Oxygen "sag" resulting in noncompliance with State Water Quality Standards in the reach below the Trinidad gage. After careful analysis of the public and agency input, several new scenarios were formulated for analysis in the Final Regional EIS.

In addition to updating the baseline, three scenarios, representing the same three broad categories that had been previously addressed, were developed. Many people suggested that the Maximum Development scenarios analyzed in the Draft Regional EIS were too extreme, either because they conflicted with an ongoing project, or because levees were physically impractical in some portions of the flood plain. In response to this criticism, we agreed to replace them with a "Composite Future" scenario. Each city was tasked to provide the North Central Texas Council of Governments (NCTCOG) a delineation of the "most likely" limits of maximum encroachment within their jurisdiction. NCTCOG compiled each city's individual prediction and presented the resultant set of maps to local staffs and local elected officials before providing them to the Corps for analysis.

The Modified Floodway scenario of the Final Regional EIS replaced the floodway-based scenarios of the Draft Regional EIS as a representative compromise between maximum (realistic) development and maximum (realistic) environmental quality. In this scenario, the Corps defined the geographic limits of a drainageway incorporating the FEMA concept with significant technical variations. For the third scenario, the Corps revised and represented a Maximum Environmental Quality scenario, hydraulically identical to the revised baseline because it incorporated no additional flood plain projects except water quality, recreation, and wildlife enhancements. Of the scenarios, or alternatives, examined in the Final Regional EIS, this is the environmentally preferred alternative.

The extensive coordination and public involvement characteristic of the Regional EIS process continued during the comment period on the Final Regional EIS, which extended from its release on October 22, 1987, through January 31, 1988. During this period, I held a public meeting at Lamar High School at

which eleven people submitted statements. My staff attended in excess of twenty meetings with local government staffs, public agencies, and citizen groups. In addition, sixty-six written comments on the Final Regional EIS were received.

**II. Discussion of Issues and Factors**

Most of the formal public comment and discussion with local governments centered on three general issues: the appropriate level of flood protection (100-year vs. SPF), the level of accuracy of the hydraulic and hydrologic analyses displayed in the Regional EIS, and the issue of equity as it pertains to governmental regulation. "Benefits" and "Costs" of an action, whether it be a proposed project or a proposed regulation, do not always occur to the same group of people, let alone in the same order of magnitude. The definition of the "public interest" which is at the heart of the Regional EIS calls for an assessment of the tradeoffs inherent between public demands for enhanced environmental quality in the river corridor and for its use for needed public facilities, and economic development and the rights of private landowners.

A major consensus achieved through the review of the Final Regional EIS is that additional regional increases in flood hazards for either the 100-year or Standard Project Flood are undesirable, and that the thrust of flood plain management, in the short term, should be to stabilize the flood hazard at existing levels through regulation. Future efforts on the part of both the Corps and local organizations may be required to reduce flood hazard over the long term.

The Regional EIS is probably the most comprehensive such study done in the United States. It has highlighted the need for planning for the region and cooperation among the governmental entities along the Trinity River corridor to achieve quality development. The document was developed for the sole purpose of establishing a permitting strategy for the Trinity River and its tributaries. It does not contain a technical baseline that will remain current over time and is not to be used as a design document. Design decisions requiring water surface predictions based on critical storm centerings, and which are sensitive to valley storage computations, must be based on detailed site-specific engineering analyses. Other site-specific public or private flood control management decisions should likewise be based on current technical analyses. Further, flood insurance data must be obtained from the FEMA and not from the Regional EIS.

Neither the Regional EIS nor this Record of Decision encroaches upon the responsibility of design engineers or the authority of local governments. The Regional EIS, its public review, and this Record of Decision serve only to establish and document the "best overall public interest" as it applies to the Trinity River and its tributaries. It remains the responsibility of design engineers to perform competent work in accordance with professional design practices. Permit applicants which proposed flood plain modifications and/or site-specific flood control structures will need to satisfy review agencies as to the reasonableness of design assumptions.

Throughout the development of this Record of Decision, the Corps has worked closely with the NCTCOG to insure consistency with their COMMON VISION program. The criteria listed below for the West Fork, Elm Fork, and Main Stem are consistent with the Statement of Principles for Common Permit Criteria sub-

mitted by the Steering Committee of local government officials. Because of the massiveness of this undertaking and the importance of its impact on future growth, the comments from the cities and other governmental entities have been carefully considered.

**III. Decision**

Based on my consideration of the data developed and presented in both the Draft and Final Regional EIS's and my careful consideration of all public input, I have determined that, for the purposes of the Regional EIS study area, my Regulatory Program will be henceforth based on the following criteria. The baseline to be used in analyzing permit applications will be the most current hydraulic and hydrologic model of the specific site in question. The burden of proof of compliance with these criteria rests with the permit applicant. Variance from the criteria would be made only if public interest factors not accounted for in the Regional EIS overwhelmingly indicate that the "best overall public interest" is served by allowing such variance.

A. Hydraulic Impacts--Projects within the SPF Flood Plain of the Elm Fork, West Fork, and Main Stem. The following maximum allowable hydraulic impacts will be satisfied, using reasonable judgment based on the degree of accuracy of the evaluation, and using cross sections and land elevations which are representative of the reaches under consideration:

1. No rise in the 100-year or SPF elevation for the proposed condition will be allowed.
2. The maximum allowable loss in storage capacity for 100-year and SPF discharges will be 0% and 5% respectively.

3. Alterations of the flood plain may not create or increase an erosive water velocity on-or off-site.
4. The flood plain may be altered only to the extent permitted by equal conveyance reduction on both sides of the channel.

B. Hydraulic Impacts--Tributary Projects. For tributaries with drainage areas less then 10 square miles, valley storage reductions of up to 15% and 20% for the 100-year and Standard Project Floods, respectively, will be allowed. For tributaries with intermediately-sized drainage areas (10 square miles to 100 square miles), the maximum valley storage reduction allowed will fall between 0% and 15% for the 100-year flood and 5% and 20% for the Standard project Flood. Increases in water surface elevations for the 100-year flood will be limited to approximately zero feet. Increases in water surface elevations for the Standard Project Flood will be limited to those which do not cause significant additional flooding or damage to others. Projects involving tributary streams with drainage areas in excess of 100 square miles will be required to meet the same criteria as main stem projects (see "A" above).

C. Cumulative Impacts. The upstream, adjacent, and downstream effects of the applicant's proposal will be considered. The proposal will be reviewed on the assumption that adjacent projects will be allowed to have an equitable chance to be built, such that the cumulative impacts of both will not exceed the common criteria.

D. Design Level of Flood Protection. The engineering analysis will include the effects of the applicant's proposal on the 100-year and Standard

Project Floods and should demonstrate meeting FEMA, Texas Water Commission, and local criteria, as well as Corps, for both flood events.

1. For levees protecting urban development, the minimum design criterion for the top of levee is the SPF plus 4.0, unless a relief system can be designed which will prevent catastrophic failure of the levee system.

2. For fills, the minimum design criterion is the 100-year elevation, see above, plus one foot.

E. Borrow Areas. The excavation of "borrow" areas to elevations lower than the bottom elevation of the stream is generally hydrologically undesirable. The volume of such excavations, above the elevation to which the area can be kept drained, can be considered in hydrologic storage computations.

F. Preservation of Adjacent Project Storage. The applicant will be required to respect the valley storage provided by adjacent projects by ensuring that their hydraulic connection to the river is maintained. If the project blocks the hydraulic connection of the adjacent project, then the applicant will be required to provide additional valley storage to offset the loss caused by the blockage of the hydraulic connection.

G. Special Aquatic Sites. Value-for-value replacement of special aquatic sites (i.e. wetlands, pool and riffle complexes, mud flats, etc.) impacted by non-water dependent proposals will be required.

These criteria will be used by the Corps for the express purpose of evaluating new permit applications received subsequent to the effective data. They will not be used to reevaluate any flood plain project already constructed or permitted. They apply to permit applications from public agencies as well as private sector applications. In addition to the criteria discussed above, the following guidelines will be used by my staff in evaluating permit applications:

A. Runoff. Site drainage systems should minimize potential erosion and sedimentation problems both on site and in receiving water bodies.

B. Habitat Mitigation. A standardized, habitat-based evaluation method should be used to evaluate the impacts of the applicant's proposal to fish and wildlife resources. Guidelines for the quality and quantity of mitigation are as follows:

1. Category 2 resources--habitat of high value which is scarce, or is becoming scarce in the ecoregion--no net loss of habitat value. Category 2 resources in the study area include vegetated shallows, riffle and pool complexes, and riparian forests, as well as wetlands (see above for mitigation of wetlands). A buffer strip of natural vegetation 100' feet wide on each side of the channel for main area projects, and 50' feet for tributaries, should be maintained.

2. Category 3 resources--habitat of medium-to-high value that is relatively abundant in the ecoregion--no net loss of habitat value while minimizing the loss of the habitat type. (This means to reduce the loss of the habitat and compensate the remainder of loss of habitat value by creation or improvement of other Category 2 or 3 resources.) Category 3 resources in the study area include deep water, native rangeland, upland forests, and upland

shrubland.

3. Category 4 resources--habitat of low-to-medium value--mitigation should be to minimize the loss of habitat value, which can be accomplished by avoidance or improving other habitat types. Category 4 resources in the study area include cropland and improved pasture.

C. Cultural Resources. Cultural resources, including prehistoric and historic sites, will be identified and evaluated according to National Register of Historic Placer Criteria. Identification procedures may involve literature review, pedestrian survey, and excavation to identify buried cultural materials. Sites which are eligible for inclusion in the National Register of Historic Places will be treated by measures which range from avoidance, to preservation in place, to mitigation through excavation.

D. Other Regional Needs and Plans. Consideration will be given when evaluating permit applications of the proposal's impact on regional facilities which have been identified as important through the Regional EIS process. These include, but are not limited to, a linear hike/bike system linking large flood plain parks throughout the Metroplex, the Trinity Tollway, and sites for regional stormwater detention basins. (Specific locations and plans for these facilities will continue to evolve through coordination with NCTCOG and local governments.) Applicants will be urged to design projects which do not preclude future implementation of these regional assets.

It is my conclusion that the criteria and guidelines set forth above represent the best available definition of the "overall public interest," taking into account the rights of individual landowners and the direct, indirect, and cumulative impacts of individual actions under by purview. Further, I conclude that these policies represent all the practical means known to me to avoid or minimize environmental harm within that framework. This document will therefore provide the specific framework within which we will operate the Fort Worth District's Regulatory Program within the Regional EIS study area.

*/Signed/*

JOHN E. SCHAUFELBERGER
Colonel, Corps of Engineers
District Engineer

Date: *April 29, 1988*

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET NW
WASHINGTON, D.C. 20314-1000

CECW-PB

OCT 2 3 2006

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS

SUBJECT: Policy and Procedural Guidance for the Approval of Modification and Alteration of Corps of Engineer Projects

1. REFERENCES:
   a. ER 1165-2-119, dated 20 September 1982, Modifications to Completed Projects
   b. 33 CFR 208.10, Local flood protection works; maintenance and operation of structures and facilities
   c. 33 USC 408, Taking possession of, use of, or injury to harbor and river improvements
   d. 33 CFR 320.4, General policies for evaluating permit applications
   e. Section 404 of the Clean Water Act
   f. Section 10 of the River and Harbors Act of 1899

2. PURPOSE. Recent events have demonstrated the need to provide clarification and additional guidance on the policy and procedures for dealing with proposals to modify or alter completed Corps of Engineers projects that are either locally or federally maintained. Often requests for modifications to Corps projects come up in the context of Section 404 permitting actions or for modifications to existing Corps projects for the purposes of O&M. This memorandum addresses the use of the appropriate authority and the proper level of approval for such proposals.

3. BACKGROUND.

a. ER 1165-2-119 provides policy and guidance on the modification of completed Corps of Engineers projects, and describes the specific circumstances under which modifications can be approved and accomplished. In general, proposed significant modification of a completed project, involving new Federal construction or real estate acquisition, and any proposed modification that would make the project serve new purposes, or increase the scope of services to authorized purposes beyond that intended at the time of construction, or to extend services to new beneficiaries (areas), requires authorization by Congress. There may be instances where reporting officers find that proposed significant changes to a completed project may be desirable, in which case investigations may be undertaken to document the need for and the feasibility of such project modifications. To the extent practicable, such changes should be accomplished under existing authorities. However, the circumstances under which such modifications can be approved and made are limited, as discussed in the ER, and are briefly summarized below.

b. For projects constructed, operated and maintained by the Corps, the Corps may, as part of its operations and maintenance efforts, make reasonable changes and additions needed to

properly operate the project or minimize maintenance. In addition, multiple purpose projects operated and maintained by the Corps may be modified within existing authorities for dam safety assurance, changes in water control plans, addition of water supply, changes to meet water quality needs, and recreation and fish and wildlife enhancement, as discussed in the ER. The Chief of Engineers also has limited discretion to modify navigation projects. For Corps-constructed projects operated and maintained by local interests, any proposed Federal work at these projects usually requires congressional authorization, with the exception of work required to correct a design deficiency.

c. Guidance on the responsibilities for the operation and maintenance of local protection projects is found in 33 CFR 208.10. This regulation describes local sponsors' responsibilities for operating and maintaining the structural soundness and functionality of the project in order to assure that the project meets its authorized purposes. Specifically, 33 CFR 208.10 a (5) requires that "no improvement shall be passed over, under, or through the walls, levees, improved channels or floodways, nor shall any excavation or construction be permitted within the limits of the project right-of-way, nor shall any change be made in any feature of the works without prior determination by the District Engineer" that such changes will not adversely affect the functioning of the protective facilities. The types of changes that can be considered and approved by a District Engineer under 33 CFR 208.10 are relatively minor, low impact modifications, such as pipes or pipelines proposed to pass over or through a Federal work, or a road or similar type of infrastructure improvement proposed to pass over a Federal levee. Such minor proposed modifications are considered part of a District Engineer's responsibilities related to normal O&M of such facilities. Any proposed modification of a Federal work, such as a levee or channel, which would involve significant changes to the authorized project's scope, project purpose, or functioning, cannot be approved by the District Engineer, but instead must be forwarded through the Division Commander for the approval of the Chief of Engineers, as explained hereinafter. That is, any proposed change to a Federal work exceeding the level of ordinary District O&M responsibilities for a project must be sent through the Division Commander to the Chief of Engineers for approval, as discussed in the following paragraphs.

d. Any proposed modification to an existing Corps projects (either federally or locally maintained) that go beyond those modifications required for normal O&M require approval under 33 USC 408. 33 USC 408 states that there shall be no temporary or permanent alteration, occupation or use of any public works including but not limited to levees, sea walls, bulkheads, jetties and dikes for any purpose without the permission of the Secretary of the Army. Under the terms of 33 USC 408, any proposed modification requires a determination by the Secretary that such proposed alteration or permanent occupation or use of a Federal project is not injurious to the public interest <u>and</u> will not impair the usefulness of such work. The authority to make this determination and to approve modifications to Federal works under 33 USC 408 has been delegated to the Chief of Engineers.

4. POLICY.

Any significant alteration or modification to either a locally or federally maintained Corps of Engineers project must be approved by the Chief of Engineers under 33 USC 408 unless covered by ER 1165-2-119. Modifications to a Corps projects beyond those necessary to properly operate the project or to minimize maintenance costs as well as any significant alteration or modification requested by any non-Federal interest for their own benefit also requires the Chief's approval under 33 USC 408.

5. PROCEDURES.

a. The following information will be provided with any request for the approval of significant modifications or alterations to a locally or federally maintained Corps project requiring the Chief of Engineers approval under 33 USC 408.

1. A written request by the non-Federal interests for approval of the project modification/alteration.
2. A physical and functional description of the existing project
3. A detailed description of the proposed modification
4. The purpose/need for the modification
5. A description of any related, ongoing Corps studies/efforts in the watershed
6. A Public Interest Determination
7. Appropriate NEPA documentation
8. Any Administrative Record
9. A discussion of indirect effects
10. A discussion of E.O. 11988 Considerations
11. Technical Analysis
    - Technical adequacy of the design
    - Changes in water surface profiles and flow distribution
    - Assessment of anticipated local and system-wide resultant impacts, i.e., impacts on system integrity
    - Upstream and downstream impacts of the proposed alterations, including potential impacts to existing floodplain management and water control management plans of Federal projects within the basin
    - A discussion of residual risk

b. If there is an associated Section 404/10 permit action, the required public interest and technical evaluations under 33 USC 408 can be done concurrently with that action. Upon completion of the public interest determination and of the technical analyses regarding the impact of the proposed modification on the usefulness of the project, the District Engineer will make a recommendation (with supporting documentation) through the Division Commander to

the Chief of Engineers (Attn: Appropriate RIT) for his consideration and approval under 33 USC 408. The District Engineer will make the final Section 404/10 permit decisions following the Chief of Engineers decision under 33 USC 408. A minimum of 30 days must be allowed for HQUSACE review.

c. For locally operated and maintained Corps projects, the operations and maintenance for any approved project modifications or alterations will be the responsibility of the non-Federal sponsor and the Project Cooperation Agreement or other appropriate document must be updated to address non-Federal sponsor responsibilities for the approved modifications.

6. If the desired modifications cannot be suitably pursued or approved under any of the preceding approaches, additional congressional authorization may be required. Section 216 of the Flood Control Act of 1970 is the appropriate authority to use to consider such modifications.

7. Consideration will be given to further delegation of the approval authority to a lower level as we gain more experience with the types of changes that are proposed for approval under 33 USC 408.

FOR THE COMMANDER:

for DON T. RILEY
Major General, USA
Director of Civil Works

# APPENDIX F

# HYDROLOGIC AND HYDRAULIC MODELING

THIS PAGE INTENTIONALLY LEFT BLANK

**APPENDIX F - CONTENTS LIST**

**HYDROLOGIC AND HYDRAULIC MODELING**


| Item | Page |
|---|---|
| 100-Year Hydraulic Analysis Comparison Table (for Floodway Alternatives 3A, 3B, 3C, 4A and 4B) | 1 |
| Standard Project Flood Hydraulic Analysis Comparison Table (for Floodway Alternatives 3A, 3B, 3C, 4A, and 4B) | 2 |
| Valley Storage Methodology | 3-4 |
| Trinity Parkway Alternative Descriptions | 5-7 |
| Valley Storage Calculations - 100 Year and Standard Project Flood (SPF) | 8-9 |
| Valley Storage Calculation Limits – 100 Year and Standard Project Flood (SPF) | 10-11 |
| Alternative 3A (Combined Parkway) – Comparative Cross-sections between Revised Existing Conditions and Alternative 3A | 12-13 |
| Alternative 3B (Combined Parkway) – Comparative Cross-sections between Revised Existing Conditions and Alternative 3B | 14-15 |
| Alternative 3C (Combined Parkway) – Comparative Cross-sections between Revised Existing Conditions and Alternative 3C | 16-17 |
| Alternative 4A (Split Parkway) – Comparative Cross-sections between Revised Existing Conditions and Alternative 4A | 18-19 |
| Alternative 4B (Split Parkway) – Comparative Cross-sections between Revised Existing Conditions and Alternative 4B | 20-21 |
| Hydraulic Work Group Meeting Minutes | 22-29 |


**Note:** For hydraulic modeling purposes the following assumptions were made:

- Atchison, Topeka, and Santa Fe Bridge remains in place except for the portion of the bridge that would require removal if the proposed roadway alternative were constructed.
- Proposed work associated with Moore Park and the Santa Fe Trail was not included in the models.
- Woodall Rodgers (Margaret Hunt Hill) Bridge is built.
- New Sylvan Bridge is not constructed and the old bridges remain unless they are impacted by the proposed alternatives.
- New Hampton Road Bridge is built.
- Alignments avoid cutting into the existing levees except for Alternative 4A.

THIS PAGE INTENTIONALLY LEFT BLANK

## 100 Year Hydraulic Analysis Comparison Table At Structures

### Main Stem

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) |
| Confluence Elm Fork/West Fork | | 423.41 | 5.26 | 153511 | 423.1 | 5.39 | 1532.33 | -0.31 | 423.23 | 5.34 | 153824.1 | -0.18 | 423.27 | 6.13 | 154328.4 | -0.14 | 423.36 | 5.28 | 153801.9 | -0.05 | 423.91 | 5.85 | 154495.7 | 0.5 |
| Westmoreland | | 421.76 | 6.28 | 146281.3 | 421.57 | 5.26 | 145649.1 | -0.19 | 421.75 | 5.2 | 146167.3 | -0.01 | 421.49 | 6.42 | 146380.7 | -0.27 | 421.93 | 5.14 | 146068.7 | 0.17 | 422.37 | 5.98 | 146174.4 | 0.61 |
| Hampton Rd | | 420.55 | 5.71 | 140332.9 | 420.29 | 6.5 | 139511.3 | -0.26 | 420.45 | 6.38 | 139986.9 | -0.1 | 420.79 | 5.67 | 139419.4 | 0.24 | 420.57 | 6.4 | 139969 | 0.02 | 421.72 | 5.71 | 138969.2 | 1.17 |
| Sylvan - River Bridge | | 419.23 | 5.3 | 133256.1 | 418.45 | 6.05 | 133454 | -0.78 | 418.71 | 5.92 | 133768.2 | -0.52 | 419.16 | 5.77 | 132923.3 | -0.07 | 418.71 | 6.27 | 133878.7 | -0.52 | 420.03 | 5.88 | 132731.6 | 0.8 |
| Continental Ave. | | 418.11 | 6 | 128511.3 | 417.3 | 5.37 | 129143.8 | -0.81 | 417.61 | 5.59 | 129378.3 | -0.5 | 417.75 | 5.93 | 128784.8 | -0.36 | 417.57 | 5.58 | 129609.1 | -0.54 | 418.66 | 5.84 | 128641.4 | 0.55 |
| Woodall Rodgers | | 417.72 | 6.66 | 128255.5 | 417.23 | 5.22 | 128851.2 | -0.49 | 417.28 | 5.86 | 129075.4 | -0.44 | 417.69 | 5.51 | 128516.9 | -0.03 | 417.33 | 5.46 | 129301 | -0.39 | 417.96 | 5.51 | 128371.5 | 0.24 |
| U.P. R.R. | | 417.49 | 6.38 | 127503.1 | 416.89 | 5.2 | 128018.2 | -0.6 | 417.06 | 5.63 | 128213.6 | -0.43 | 417.35 | 5.09 | 127687.3 | -0.14 | 417.12 | 5.73 | 128421.9 | -0.37 | 417.68 | 5.29 | 127560.3 | 0.19 |
| Commerce Street | | 417.04 | 7.14 | 126848.7 | 416.61 | 6.07 | 127283.8 | -0.43 | 416.72 | 6.75 | 127442.2 | -0.32 | 417.1 | 5.31 | 126911.9 | 0.06 | 416.79 | 6.61 | 127651.3 | -0.25 | 417.43 | 5.4 | 126811.9 | 0.39 |
| I.H. 30 | | 416.32 | 6.45 | 125299.5 | 416.28 | 5.75 | 125453.3 | -0.04 | 416.31 | 6.39 | 125537 | -0.01 | 416.63 | 6.18 | 125163.1 | 0.31 | 416.35 | 5.46 | 125739.7 | 0.03 | 416.93 | 6.32 | 125120.4 | 0.61 |
| Houston Street | | 415.47 | 6.51 | 123466.8 | 415.5 | 6.26 | 123490.7 | 0.03 | 415.48 | 6.62 | 123520.7 | 0.01 | 415.82 | 6.36 | 123310.9 | 0.35 | 415.61 | 6.29 | 123672.5 | 0.14 | 416.15 | 6.33 | 123326.5 | 0.68 |
| Jefferson Blvd | | 415.3 | 6.79 | 123105.5 | 415.33 | 6.32 | 123105.5 | 0.03 | 415.33 | 6.62 | 123134 | 0.03 | 415.56 | 6.98 | 122960.3 | 0.26 | 415.49 | 6.3 | 123258.1 | 0.19 | 415.87 | 7.05 | 122984.8 | 0.57 |
| I.H. 35E S. | | 415.1 | 6.14 | 122181.8 | 415.16 | 5.76 | 122134.8 | 0.06 | 415.17 | 6.05 | 122165.3 | 0.07 | 415.31 | 6.55 | 122088.5 | 0.21 | 415.33 | 5.8 | 122229.8 | 0.23 | 415.61 | 6.64 | 122124.5 | 0.51 |
| I.H. 35E N./Cadiz | | 414.92 | 7.06 | 121906.1 | 415.08 | 6.03 | 121845.7 | 0.16 | 415.06 | 6.44 | 121883.8 | 0.14 | 415.17 | 6.92 | 121832.7 | 0.25 | 415.23 | 5.98 | 121917 | 0.31 | 415.33 | 7.02 | 121869.4 | 0.41 |
| Corinth Street | | 414.28 | 5.7 | 118411.7 | 414.42 | 5.89 | 118129.8 | 0.14 | 414.38 | 5.88 | 118171.8 | 0.1 | 414.31 | 5.83 | 118208.3 | 0.03 | 414.38 | 5.97 | 118121.2 | 0.1 | 414.41 | 5.96 | 118165.4 | 0.13 |
| DART | | 413.97 | 6.39 | 116692.3 | 414.03 | 6.89 | 116535.9 | 0.06 | 414.02 | 6.71 | 116569.7 | 0.05 | 413.91 | 6.84 | 116640.5 | -0.06 | 413.98 | 6.91 | 116562.9 | 0.01 | 413.98 | 7.09 | 116627.1 | 0.01 |
| ATSF | | 413.7 | 7.14 | 116597.8 | 413.7 | 7.74 | 116448.9 | 0 | 413.71 | 7.51 | 116480.2 | 0.01 | 413.58 | 7.73 | 116553 | -0.12 | 413.64 | 7.76 | 116476.4 | -0.06 | 413.63 | 7.95 | 116542.6 | -0.07 |
| MLK Jr. Blvd | | 412.25 | 8.15 | 113594.2 | 412.24 | 8.21 | 113593.9 | -0.01 | 412.23 | 8.33 | 113593.2 | -0.02 | 412.23 | 7.88 | 113594.3 | -0.02 | 412.25 | 8.15 | 113594.2 | 0 | 412.24 | 7.84 | 113594.3 | -0.01 |
| BNSF | | 411.65 | 5.85 | 111753 | 411.65 | 5.85 | 111753 | 0 | 411.65 | 5.85 | 111753 | 0 | 411.65 | 5.85 | 111753 | 0 | 411.65 | 5.85 | 111753 | 0 | 411.65 | 5.85 | 111753 | 0 |
| S.H. 310/Cental | | 407.43 | 6.18 | 101848.8 | 407.43 | 6.18 | 101848.8 | 0 | 407.43 | 6.18 | 101848.8 | 0 | 407.43 | 6.18 | 101848.8 | 0 | 407.43 | 6.18 | 101848.8 | 0 | 407.43 | 6.18 | 101848.8 | 0 |
| U.P. R.R. | | 406.86 | 4.26 | 100848.1 | 406.86 | 4.26 | 100848.1 | 0 | 406.86 | 4.26 | 100848.1 | 0 | 406.86 | 4.26 | 100848.1 | 0 | 406.86 | 4.26 | 100848.1 | 0 | 406.86 | 4.26 | 100848.1 | 0 |
| Loop 12 | (Main Stem) | 403.37 | 7.62 | 73732.59 | 403.37 | 7.62 | 73732.59 | 0 | 403.37 | 7.62 | 73732.59 | 0 | 403.37 | 7.62 | 73732.59 | 0 | 403.37 | 7.62 | 73732.59 | 0 | 403.37 | 7.62 | 73732.59 | 0 |

### Elm Fork

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) |
| Valley View Lane | (Elm Fork) | 435.89 | 7.95 | 38011.1 | 435.89 | 7.96 | 37587.93 | 0 | 435.89 | 7.96 | 37759.35 | 0 | 435.9 | 7.95 | 38046.49 | 0.01 | 435.89 | 7.95 | 37943.84 | 0 | 435.92 | 7.93 | 38935.18 | 0.03 |
| I.H. 635/LBJ Freeway W. Bound | (Elm Fork) | 434.36 | 5.49 | 37136.25 | 434.35 | 5.5 | 36714.11 | -0.01 | 434.35 | 5.49 | 36885.17 | -0.01 | 434.36 | 5.48 | 37171.49 | 0 | 434.36 | 5.49 | 37069.17 | 0 | 434.4 | 5.46 | 38057.66 | 0.04 |
| I.H. 635/LBJ Freeway E. Bound | (Elm Fork) | 434.11 | 5.68 | 37068.02 | 434.09 | 5.69 | 36646.02 | -0.02 | 434.1 | 5.68 | 36817.02 | -0.01 | 434.11 | 5.67 | 37103.24 | 0 | 434.1 | 5.68 | 37000.96 | -0.01 | 434.15 | 5.64 | 37989.07 | 0.04 |
| Royal Lane | (Elm Fork) | 433.08 | 6.68 | 33337.41 | 433.06 | 6.7 | 32919.49 | -0.02 | 433.07 | 6.69 | 33089.03 | -0.01 | 433.08 | 6.68 | 33372.05 | 0 | 433.08 | 6.68 | 33271.05 | 0 | 433.14 | 6.65 | 34247.79 | 0.06 |
| S.H. 348/Northwest Highway | (Elm Fork) | 430.92 | 3.17 | 26616.26 | 430.88 | 3.19 | 26224.08 | -0.04 | 430.9 | 3.18 | 26384.33 | -0.02 | 430.93 | 3.17 | 26647.21 | 0.01 | 430.92 | 3.17 | 26554.35 | 0 | 431.04 | 3.11 | 27460.13 | 0.12 |
| California Crossing | (Elm Fork) | 429.35 | 3.56 | 24868.09 | 429.27 | 3.59 | 24486.31 | -0.08 | 429.3 | 3.58 | 24642.34 | -0.05 | 429.36 | 3.55 | 24897.66 | 0.01 | 429.34 | 3.56 | 24807.85 | -0.01 | 429.53 | 3.48 | 25687.29 | 0.18 |
| Burlington Northern Railroad | (Elm Fork) | 428.73 | 3.22 | 23039 | 428.63 | 3.24 | 22670.79 | -0.1 | 428.67 | 3.23 | 22821.3 | -0.06 | 428.74 | 3.21 | 23066.8 | 0.01 | 428.71 | 3.22 | 22980.94 | -0.02 | 428.94 | 3.16 | 23826.74 | 0.21 |
| Wildwood Drive | (Elm Fork) | 427.86 | 3.04 | 21980.09 | 427.74 | 3.1 | 21621.52 | -0.12 | 427.79 | 3.07 | 21768.1 | -0.07 | 427.87 | 3.03 | 22006.63 | 0.01 | 427.84 | 3.05 | 21923.57 | -0.02 | 428.12 | 2.92 | 22745.64 | 0.26 |
| Loop 12 | (Elm Fork) | 427.07 | 3.51 | 18781.31 | 426.93 | 3.55 | 18458.96 | -0.14 | 426.99 | 3.54 | 18590.74 | -0.08 | 427.09 | 3.51 | 18803.12 | 0.02 | 427.05 | 3.52 | 18730.54 | -0.02 | 427.39 | 3.42 | 19464.88 | 0.32 |
| S.H. 482/ Story Lane | (Elm Fork) | 425.68 | 2.95 | 15009.74 | 425.48 | 3.01 | 14753.51 | -0.2 | 425.57 | 2.99 | 14858.25 | -0.11 | 425.71 | 2.95 | 15022.99 | 0.03 | 425.65 | 2.96 | 14969.42 | -0.03 | 426.12 | 2.84 | 15544.6 | 0.44 |
| S.H. 183/John Carpenter Frwy | (Elm Fork) | 424.94 | 3.94 | 8570.15 | 424.7 | 4 | 8410.69 | -0.24 | 424.8 | 3.97 | 8475.63 | -0.14 | 424.97 | 3.93 | 8571 | 0.03 | 424.9 | 3.95 | 8545.01 | -0.04 | 425.44 | 3.81 | 8895.32 | 0.5 |
| C.R.I.P. R. R. | (Elm Fork) | 424.13 | 3.05 | 4378.08 | 423.85 | 3.11 | 4291.95 | -0.28 | 423.96 | 3.09 | 4326.95 | -0.17 | 424.16 | 3.04 | 4369.48 | 0.03 | 424.08 | 3.06 | 4364.51 | -0.05 | 424.71 | 2.91 | 4544.69 | 0.58 |
| S.H. 356 Blvd | (Elm Fork) | 424.06 | 2.54 | 3473.07 | 423.79 | 2.59 | 3404.3 | -0.27 | 423.9 | 2.57 | 3432.26 | -0.16 | 424.1 | 2.54 | 3462.23 | 0.04 | 424.02 | 2.55 | 3462.24 | -0.04 | 424.65 | 2.44 | 3602.32 | 0.59 |
| Shady Grove Rd | (Elm Fork) | 424 | 2.19 | 2452.52 | 423.72 | 2.24 | 2401.52 | -0.28 | 423.84 | 2.22 | 2422.26 | -0.16 | 424.04 | 2.19 | 2439.39 | 0.04 | 423.96 | 2.2 | 2444.5 | -0.04 | 424.6 | 2.11 | 2543.57 | 0.6 |

### West Fork

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) |
| MacArthur Blvd | (West Fork) | 436.1 | 4.77 | 19524.24 | 436.1 | 4.77 | 19335.56 | 0 | 436.1 | 4.77 | 19411.24 | 0 | 436.1 | 4.77 | 19534.31 | 0 | 436.1 | 4.77 | 19493.95 | 0 | 436.11 | 4.77 | 19940.51 | 0.01 |
| Loop 12 | (West Fork) | 426.68 | 5.49 | 7191.61 | 426.54 | 5.56 | 7076.66 | -0.14 | 426.59 | 5.53 | 7123.02 | -0.09 | 426.69 | 5.49 | 7194.01 | 0.01 | 426.65 | 5.5 | 7173.3 | -0.03 | 426.99 | 5.35 | 7434.98 | 0.31 |

Notes:
* This column reflects the difference in water surface elevation between Alternative (to left) and existing conditions.
** Cumulative volume in the reach of the river between the confluence of the Elm Fork and West Fork and the structure listed.

## Standard Project Flood Hydraulic Analysis Comparison Table at Structures

### Main Stem

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume (Acre-ft) | WSEL (ft) |
| Confluence Elm Fork/West Fork | | 435.56 | 6.13 | 257793.2 | 435.05 | 6.27 | 256326.3 | -0.51 | 435.31 | 6.19 | 257460.8 | -0.25 | 435.4 | 7.31 | 257810.9 | -0.16 | 435.48 | 6.15 | 257871.8 | -0.08 | 436.01 | 7.13 | 257288.7 | 0.45 |
| Westmoreland | | 434.17 | 7.03 | 244587.7 | 433.68 | 6.59 | 242874 | -0.49 | 433.99 | 6.52 | 243866.7 | -0.18 | 433.8 | 7.14 | 243898 | -0.37 | 434.18 | 6.47 | 244188.1 | 0.01 | 434.53 | 6.92 | 243043.8 | 0.36 |
| Hampton Rd | | 433.08 | 6.45 | 233908 | 432.43 | 7.13 | 232283.2 | -0.65 | 432.78 | 6.27 | 233154.3 | -0.3 | 433.04 | 6.55 | 232321.1 | -0.04 | 432.92 | 6.46 | 233515.2 | -0.16 | 433.75 | 6.79 | 231334.9 | 0.67 |
| Sylvan - River Bridge | | 431.72 | 6.8 | 221726.2 | 430.67 | 7.36 | 221439.3 | -1.05 | 431.11 | 7.12 | 222014.4 | -0.61 | 431.31 | 7.35 | 221035 | -0.41 | 431.23 | 7.5 | 222330.1 | -0.49 | 431.81 | 7.85 | 220604.3 | 0.09 |
| Continental Ave. | | 430.35 | 8.17 | 213815.6 | 429.23 | 7.57 | 214179.8 | -1.12 | 429.78 | 7.84 | 214604.7 | -0.57 | 429.63 | 7.74 | 214084.1 | -0.72 | 429.94 | 7.68 | 214910.6 | -0.41 | 430 | 7.89 | 213912.3 | -0.35 |
| Woodall Rodgers | | 429.96 | 8.8 | 213390.8 | 429.15 | 7.46 | 213716.3 | -0.81 | 429.38 | 8.28 | 214127.8 | -0.58 | 429.55 | 7.66 | 213639.9 | -0.41 | 429.65 | 7.72 | 214424.8 | -0.31 | 429.73 | 7.67 | 213471.1 | -0.23 |
| U.P. R.R. | | 429.68 | 8.3 | 212140.8 | 428.81 | 6.97 | 212398.7 | -0.87 | 429.1 | 7.67 | 212760.3 | -0.58 | 429.22 | 6.93 | 212296 | -0.46 | 429.38 | 7.59 | 213039.8 | -0.3 | 429.42 | 6.96 | 212145.3 | -0.26 |
| Commerce Street | | 429.1 | 9.31 | 211039.2 | 428.39 | 8.22 | 211200.3 | -0.71 | 428.57 | 9.07 | 211534.1 | -0.53 | 428.89 | 7.51 | 211062.9 | -0.21 | 428.98 | 8.91 | 211783.9 | -0.12 | 429.07 | 7.46 | 210914.3 | -0.03 |
| I.H. 30 | | 428.39 | 8.55 | 208441.3 | 427.96 | 7.78 | 208331.9 | -0.43 | 427.99 | 8.88 | 208584.7 | -0.4 | 428.23 | 8.38 | 208260.4 | -0.16 | 428.22 | 7.74 | 208792.1 | -0.17 | 428.41 | 8.44 | 208150.5 | 0.02 |
| Houston Street | | 427.31 | 9.06 | 205455.8 | 426.94 | 8.56 | 205169.7 | -0.37 | 427 | 9.04 | 205307 | -0.31 | 427.34 | 8.15 | 205137.7 | 0.03 | 427.24 | 8.67 | 205485.1 | -0.07 | 427.47 | 8.37 | 205112 | 0.16 |
| Jefferson Blvd | | 426.95 | 9.42 | 204771.2 | 426.63 | 8.83 | 204546.9 | -0.32 | 426.72 | 8.95 | 204675.3 | -0.23 | 426.93 | 9.12 | 204519.8 | -0.02 | 426.97 | 8.84 | 204813.3 | 0.02 | 427.01 | 9.49 | 204501.7 | 0.06 |
| I.H. 35E S. | | 426.65 | 8.74 | 203272.4 | 426.4 | 8.05 | 203022.5 | -0.25 | 426.47 | 8.45 | 203117 | -0.18 | 426.55 | 8.99 | 203028.5 | -0.1 | 426.74 | 8.14 | 203195.1 | 0.09 | 426.65 | 9.11 | 203026.6 | 0 |
| I.H. 35E N./Cadiz | | 426.4 | 9.8 | 202826.8 | 426.25 | 8.42 | 202551 | -0.15 | 426.33 | 8.75 | 202647.8 | -0.07 | 426.32 | 9.53 | 202587.8 | -0.08 | 426.59 | 8.49 | 202698.2 | 0.19 | 426.33 | 9.65 | 202586.5 | -0.07 |
| Corinth Street | | 425.46 | 7.99 | 197218.8 | 425.15 | 8.08 | 196830.5 | -0.31 | 425.34 | 7.86 | 196897.1 | -0.12 | 425.29 | 7.75 | 196961.4 | -0.17 | 425.38 | 7.96 | 196880 | -0.08 | 425.25 | 8.01 | 196884.6 | -0.21 |
| DART | | 425.23 | 7.85 | 194410.1 | 424.86 | 7.96 | 194177.3 | -0.37 | 425.05 | 7.85 | 194220.7 | -0.18 | 424.93 | 8.25 | 194319.8 | -0.3 | 425.04 | 8.16 | 194231 | -0.19 | 424.87 | 8.44 | 194317 | -0.36 |
| ATSF | | 424.64 | 10.3 | 194246.6 | 423.83 | 10.57 | 194025.5 | -0.81 | 424.02 | 10.49 | 194065.6 | -0.62 | 423.74 | 11.09 | 194168.3 | -0.9 | 423.89 | 10.96 | 194080 | -0.75 | 423.68 | 11.08 | 194169.5 | -0.96 |
| MLK Jr. Blvd | | 422.75 | 9.87 | 189249.2 | 422.73 | 10.05 | 189248.7 | -0.02 | 422.71 | 10.28 | 189247.5 | -0.04 | 422.64 | 9.76 | 189246.8 | -0.11 | 422.75 | 9.87 | 189249.2 | 0 | 422.68 | 9.42 | 189249.5 | -0.07 |
| BNSF | | 421.71 | 7.91 | 186245.7 | 421.71 | 7.91 | 186245.7 | 0 | 421.71 | 7.91 | 186245.7 | 0 | 421.71 | 7.91 | 186245.7 | 0 | 421.71 | 7.91 | 186245.7 | 0 | 421.71 | 7.91 | 186245.7 | 0 |
| S.H. 310/Cental | | 417.09 | 7.54 | 168448.1 | 417.09 | 7.54 | 168448.1 | 0 | 417.09 | 7.54 | 168448.1 | 0 | 417.09 | 7.54 | 168448.1 | 0 | 417.09 | 7.54 | 168448.1 | 0 | 417.09 | 7.54 | 168448.1 | 0 |
| U.P. R.R. | | 416.18 | 5.38 | 166777.3 | 416.18 | 5.38 | 166777.3 | 0 | 416.18 | 5.38 | 166777.3 | 0 | 416.18 | 5.38 | 166777.3 | 0 | 416.18 | 5.38 | 166777.3 | 0 | 416.18 | 5.38 | 166777.3 | 0 |
| Loop 12 | (Main Stem) | 412.07 | 10.73 | 119178.5 | 412.07 | 10.73 | 119178.5 | 0 | 412.07 | 10.73 | 119178.5 | 0 | 412.07 | 10.73 | 119178.5 | 0 | 412.07 | 10.73 | 119178.5 | 0 | 412.07 | 10.73 | 119178.5 | 0 |

### Elm Fork

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) |
| I.H. 35E Access Road S. Bound | (Elm Fork) | 453.28 | 9.92 | 125579.09 | 453.27 | 9.93 | 123960.19 | -0.01 | 453.28 | 9.93 | 124780.44 | 0 | 453.28 | 9.92 | 125778.6 | 0 | 453.28 | 9.92 | 125327.82 | 0 | 453.29 | 9.91 | 127669.77 | 0.01 |
| Sandy Lake Road | (Elm Fork) | 449.53 | 5.61 | 111527.4 | 449.48 | 5.67 | 109973.87 | -0.05 | 449.51 | 5.64 | 110762.89 | -0.02 | 449.54 | 5.6 | 111718.14 | 0.01 | 449.52 | 5.62 | 111286.17 | -0.01 | 449.6 | 5.53 | 113530.34 | 0.07 |
| Southern Pacific Railroad | (Elm Fork) | 448.54 | 5.97 | 102876.74 | 448.48 | 6 | 101375.45 | -0.06 | 448.51 | 5.98 | 102139.49 | -0.03 | 448.55 | 5.96 | 103060.41 | 0.01 | 448.53 | 5.97 | 102643.49 | -0.01 | 448.63 | 5.93 | 104810.23 | 0.09 |
| Belt Line | (Elm Fork) | 447.75 | 8.88 | 102825.76 | 447.67 | 8.94 | 101324.7 | -0.08 | 447.71 | 8.91 | 102088.63 | -0.04 | 447.76 | 8.87 | 103009.4 | 0.01 | 447.74 | 8.88 | 102592.55 | -0.01 | 447.85 | 8.8 | 104758.95 | 0.1 |
| Valley View Lane | (Elm Fork) | 444.04 | 7.6 | 85909.86 | 443.9 | 7.69 | 84517.25 | -0.14 | 443.96 | 7.64 | 85229.47 | -0.08 | 444.05 | 7.59 | 86078.63 | 0.01 | 444.01 | 7.61 | 85693.19 | -0.03 | 444.22 | 7.5 | 87699.23 | 0.18 |
| I.H. 635/LBJ Freeway W. Bound | (Elm Fork) | 442.29 | 5.41 | 84278.71 | 442.13 | 5.48 | 82901.1 | -0.16 | 442.21 | 5.44 | 83606.06 | -0.08 | 442.31 | 5.41 | 84445.37 | 0.02 | 442.26 | 5.42 | 84064.38 | -0.03 | 442.51 | 5.33 | 86047.85 | 0.22 |
| I.H. 635/LBJ Freeway E. Bound | (Elm Fork) | 442.14 | 5.47 | 84140.17 | 441.97 | 5.54 | 82764.01 | -0.17 | 442.06 | 5.51 | 83468.24 | -0.08 | 442.16 | 5.47 | 84306.63 | 0.02 | 442.11 | 5.49 | 83926.07 | -0.03 | 442.36 | 5.39 | 85907.34 | 0.22 |
| Royal Lane | (Elm Fork) | 441.51 | 5.93 | 75903.3 | 441.31 | 6.09 | 74639.9 | -0.2 | 441.41 | 6.01 | 75287.1 | -0.1 | 441.54 | 5.91 | 76053.67 | 0.03 | 441.48 | 5.96 | 75707.23 | -0.03 | 441.77 | 5.73 | 77516.34 | 0.26 |
| S.H. 348/Northwest Highway | (Elm Fork) | 440.87 | 2.89 | 58606.47 | 440.64 | 2.95 | 57582.63 | -0.23 | 440.76 | 2.92 | 58108.24 | -0.11 | 440.9 | 2.88 | 58723.15 | 0.03 | 440.83 | 2.89 | 58448.38 | -0.04 | 441.18 | 2.8 | 59899.37 | 0.31 |
| California CrossingRoad | (Elm Fork) | 440.15 | 3.67 | 54398.94 | 439.88 | 3.74 | 53439.21 | -0.27 | 440.02 | 3.7 | 53932.18 | -0.13 | 440.19 | 3.66 | 54506.66 | 0.04 | 440.11 | 3.68 | 54250.96 | -0.04 | 440.51 | 3.57 | 55607.06 | 0.36 |
| Burlington Northern Railroad | (Elm Fork) | 439.75 | 3.89 | 50153.19 | 439.45 | 4 | 49265.74 | -0.3 | 439.61 | 3.94 | 49721.89 | -0.14 | 439.79 | 3.87 | 50250.83 | 0.04 | 439.7 | 3.9 | 50016.59 | -0.05 | 440.14 | 3.75 | 51265.81 | 0.39 |
| Wildwood Drive | (Elm Fork) | 439.19 | 2.23 | 47224.16 | 438.86 | 2.28 | 46393 | -0.33 | 439.03 | 2.25 | 46820.35 | -0.16 | 439.23 | 2.22 | 47313.99 | 0.04 | 439.14 | 2.24 | 47096.37 | -0.05 | 439.61 | 2.16 | 48264.29 | 0.42 |
| Loop 12 | (Elm Fork) | 438.84 | 4.07 | 38123.79 | 438.48 | 4.19 | 37459.02 | -0.36 | 438.66 | 4.13 | 37801.19 | -0.18 | 438.89 | 4.05 | 38190.63 | 0.05 | 438.78 | 4.09 | 38022.03 | -0.06 | 439.29 | 3.92 | 38951 | 0.45 |
| S.H. 482/ Story Lane | (Elm Fork) | 438.28 | 3.5 | 28358.17 | 437.89 | 3.6 | 27877.63 | -0.39 | 438.09 | 3.55 | 28125.1 | -0.19 | 438.33 | 3.49 | 28399.56 | 0.05 | 438.22 | 3.52 | 28284.68 | -0.06 | 438.76 | 3.39 | 28951.33 | 0.48 |
| S.H. 183/John Carpenter Frwy | (Elm Fork) | 437.43 | 5.11 | 16124.5 | 437.01 | 5.2 | 15831.42 | -0.42 | 437.23 | 5.16 | 15982.46 | -0.2 | 437.49 | 5.1 | 16140.08 | 0.06 | 437.36 | 5.13 | 16079.73 | -0.07 | 437.96 | 5.01 | 16480.6 | 0.53 |
| C.R.I.P. R. R. | (Elm Fork) | 436.5 | 5.29 | 8091.35 | 436.03 | 5.41 | 7941.24 | -0.47 | 436.27 | 5.35 | 8018.67 | -0.23 | 436.57 | 5.28 | 8087.32 | 0.07 | 436.43 | 5.31 | 8068.45 | -0.07 | 437.1 | 5.15 | 8262.55 | 0.6 |
| S.H. 356 Blvd | (Elm Fork) | 436.34 | 4.9 | 6392.49 | 435.86 | 5 | 6273.12 | -0.48 | 436.11 | 4.95 | 6334.7 | -0.23 | 436.4 | 4.89 | 6384.26 | 0.06 | 436.26 | 4.92 | 6374.29 | -0.08 | 436.95 | 4.78 | 6524.16 | 0.61 |
| Shady Grove Rd | (Elm Fork) | 436.15 | 4.29 | 4568.86 | 435.67 | 4.38 | 4480.24 | -0.48 | 435.91 | 4.34 | 4525.97 | -0.24 | 436.21 | 4.28 | 4556.42 | 0.06 | 436.07 | 4.31 | 4555.35 | -0.08 | 436.76 | 4.19 | 4661.02 | 0.61 |

### West Fork

| Structure | | Existing Conditions | | | Alternative 3A | | | Difference* | Alternative 3B | | | Difference* | Alternative 3C | | | Difference* | Alternative 4A | | | Difference* | Alternative 4B | | | Difference* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) | WSEL (ft) | Vel Chnl (ft/sec) | Cumulative Volume** (Acre-ft) | WSEL (ft) |
| Roy Orr Blvd./N.W. 19th Street | (West Fork) | 459.4 | 15.58 | 101459.92 | 459.4 | 15.58 | 100403.71 | 0 | 459.4 | 15.58 | 101069.39 | 0 | 459.4 | 15.58 | 101459.86 | 0 | 459.4 | 15.58 | 101334.92 | 0 | 459.4 | 15.57 | 102571.42 | 0 |
| Belt Line Road | (West Fork) | 448.73 | 7.2 | 75270.3 | 448.71 | 7.23 | 74241.36 | -0.02 | 448.72 | 7.2 | 74885.35 | -0.01 | 448.73 | 7.2 | 75269.99 | 0 | 448.72 | 7.2 | 75148.23 | -0.01 | 448.83 | 7.04 | 76237.63 | 0.1 |
| MacArthur Blvd | (West Fork) | 444.16 | 7.9 | 40787.1 | 443.88 | 8.07 | 40179.32 | -0.28 | 444.1 | 7.93 | 40491.07 | -0.06 | 444.16 | 7.9 | 40784.89 | 0 | 444.14 | 7.91 | 40693.37 | -0.02 | 444.32 | 7.8 | 41519.34 | 0.16 |
| Loop 12 | (West Fork) | 438.26 | 6.12 | 14535.37 | 437.91 | 6.24 | 14269.5 | -0.35 | 438.09 | 6.18 | 14406.19 | -0.17 | 438.27 | 6.12 | 14529.51 | 0.01 | 438.21 | 6.14 | 14494.57 | -0.05 | 438.68 | 6.17 | 14847.63 | 0.42 |

Notes:
* This column reflects the difference in water surface elevation between Alternative (to left) and existing conditions.
** Cumulative volume in the reach of the river between the confluence of the Elm Fork and West Fork and the structure listed.

## Methodology Used for Determining Impacts to Valley Storage

The following paragraphs describe the steps used to calculate potential impacts to valley storage by the five Build Alternatives (3A, 3B, 3C, 4A, and 4B) in the Dallas Floodway. The results of hydraulic modeling for each of these alternatives are summarized in the tables on the following two pages for the 100-year flood and the Standard Project Flood (SPF).

1. The ROD hydraulic criteria require that valley storage changes be expressed in terms of percentage but do not outline a specific methodology for computing valley storage loss. The valley storage comparison methods used in this analysis are based on discussions with and guidance from Fort Worth District Corps of Engineers Hydrology and Hydraulics personnel. In order to express the valley storage gain or loss as a percent, a pre-project or on-site amount of storage must be computed, typically over a defined project footprint. The interpretation of on-site (pre-project) valley storage for these alternatives differs somewhat from the typical project in that all of the floodplain on both sides of the river channel from the projects most upstream limits to the downstream limits has been included as part of the project footprint. This includes areas in the floodway where alteration due to the Trinity Parkway alternatives does not occur. For the typical project, the on-site valley storage is interpreted as the actual pre-project valley storage that exists directly above the permit applicant's proposed development or all contiguous land areas in which the applicant has controlling interest This strict interpretation allows adjacent undeveloped lands (usually other landowners) the same opportunity for development with the same allowance for valley storage loss. This project is unique in that there is a single controlling entity within the project reach of the river floodplain and all future proposed floodplain modifications will be intertwined with the proposed project. Since it will be extremely difficult to hydraulically separate this proposed project from future proposed projects within this project reach for comparison to the ROD criteria in the traditional way, future projects proposed for construction within the same onsite valley storage area will be evaluated in terms of the cumulative impact for comparison to the ROD criteria and will use the same existing conditions hydraulic model as a baseline comparison.
2. Tables of valley storage volume (acre-feet) were developed from the results of the HEC-RAS hydraulic model for existing conditions and for each of the floodway Build Alternatives. This model processes the primary input of hydrologic flow, cross sectional geometry, and ground cover characteristics to estimate the velocity and water surface elevation at specified cross sections (generally 200 feet apart) for the river channel. The combination of cross section area and water surface elevation allow the calculation of valley storage at peak flood stages. While the HEC-RAS model provided data on valley storage for each cross section, the attached tables report the cumulative valley storage over entire river segments.
3. In the attached Table A for each flood event, the volume shown for the Main Stem of the Trinity River represents the total cumulative volume in acre-feet for the entire river between the confluence of the Elm/West Forks and the beginning of the model (a point approximately 1.4 miles downstream of Dowdy Ferry Road). The second line in this table shows the amount of valley storage from the upstream face of the Burlington Northern Santa Fe Railroad Bridge and the same beginning point downstream noted above.
4. The "Project Area Volume" for existing conditions and each of the Build Alternatives was calculated in Table A from the difference between the two locations specified. The "Volume Change Compared to Existing" reflects the difference between the Project Area Volume for each of the Build Alternatives and the valley storage volume determined for existing conditions. Losses in valley storage are preceded by a minus sign.
5. For each of the Trinity River's branches (Table B for Elm Fork, and Table C for West Fork), the "Cumulative Volume" represents the total valley storage volume in each branch between the confluence of the branches with the Main Stem and a point upstream where the predicted impacts to water surface elevations returned to zero for more than one cross-section; the "Station" (noted in terms of feet upstream from the confluence) at which zero impacts was reached is noted in each of the tables. For each of Tables B and C, the amount of valley storage at the confluence is zero, as that is the point from which valley storage upstream was computed for the 100-year and SPF flood events.

6. Similar to the procedure for the Main Stem, for the lower halves of Tables B and C the “Elm Fork Volume” and “West Fork Volume” were calculated from the difference between the two locations specified. “Volume Change Compared to Existing” was determined based on the difference (gain or loss) in volume between the Build Alternatives and model results for existing conditions.
7. In Table D for each flood event modeled, the term “Within Project Study Area” refers to that area of the project between the Burlington Northern Santa Fe Railroad Bridge and the Main Stem’s confluence with the Elm Fork and West Fork. Therefore, the “Difference in Project Volume” for each of the Build Alternatives in Table D is taken from the “Volume Change Compared to Existing” for the Main Stem in Table A.
8. The “Total Including Upstream Reaches” in Table D refers to the project area (between the Burlington Northern Santa Fe Railroad Bridge and the Main Stem’s confluence with the Elm/West Forks) plus the area of expected impacts upstream in both the Elm Fork and West Fork. The “Difference in Project Volume” for each of the Build Alternatives is determined by adding all the “Volume Change Compared to Existing” values in Tables A, B, and C; this yields a cumulative predicted impact to valley storage of each Build Alternative for the combined river reaches (i.e., Main Stem, Elm Fork, and West Fork).
9. The “Percent Change in Project Volume” was determined by dividing the “Difference in Project Volume” by the “Existing Project Area Volume” to calculate a percentage of change within the project area or in the combined project area plus the upstream reaches.

## Trinity Parkway Alternative Descriptions

The following is a brief description of each of the Trinity Parkway Alternatives modeled using HEC-RAS 4.0 Beta. Each model was based on the Existing Conditions Corridor Development Certificate (CDC) Model for the Trinity River, obtained from the U.S. Army Corps of Engineers (USACE) in May 2007. This model includes the Dallas Floodway Extension project (under construction) including the proposed Lamar (East) Levee from the end of the current Dallas Floodway to State Highway 310. The future Woodall Rodgers Bridge is also included.

- **Alternative 3A:** This alternative is a Combined Parkway alternative which reflects a roadway along the East Levee from just north of Martin Luther King, Jr. Boulevard to Westmoreland Road with toll gantries located inside the levees. Mannings roughness (n value) in the area of the roadway was set to 0.02. Proposed ramps and bridges associated with the parkway were placed into the model using blocked obstructions. A portion of the abandoned Atchison, Topeka and Santa Fe (AT&SF) trestle was removed from the model where the proposed roadway cuts through the bridge. Channel 'n' values were not altered from those in the existing conditions model. For the most part, overbank 'n' values remained consistent to those in the existing conditions model (0.055) except where proposed trees (0.075) would be planted in order to offset valley storage losses and impacts to water surface elevations. The model also contains the proposed excavation for the future City of Dallas Balanced Vision Plan (BVP) lakes and proposed relocated channel. The Sylvan Avenue East Bridge was removed from the model at Trinity Parkway due to conflicts with the proposed roadway. The new Hampton/Inwood Road Bridge was placed into the model based on plans. Please refer to the main body of the EIS report for more detailed information and exhibits for Alt. 3A.

- **Alternative 3B:** This alternative is a Combined Parkway alternative which reflects a roadway along the East Levee from just north of Martin Luther King, Jr. Boulevard to Westmoreland Road with toll gantries located outside of the Dallas Floodway levees. Mannings roughness (n value) in the area of the roadway was set to 0.02. Proposed ramps and bridges associated with the parkway were placed into the model using blocked obstructions. A portion of the abandoned AT&SF trestle was removed from the model where the proposed roadway cuts through the bridge. Channel 'n' values were not altered from those in the existing conditions model. For the most part, overbank 'n' values remained consistent to those in the existing conditions model (0.055) except where proposed trees (0.075) would be planted in order to offset valley storage losses and impacts to water surface elevations. The model also contains the proposed excavation for the future BVP lakes and proposed relocated channel. The Sylvan Avenue East Bridge was removed from the model at Trinity Parkway due to conflicts with the proposed roadway. The new Hampton/Inwood Road Bridge was placed into the model based on plans. Please refer to the main body of the EIS report for more detailed information and exhibits for Alt. 3B.

- **Alternative 4A:** This alternative is a Split Parkway alternative which reflects a roadway along the East Levee from just north of Martin Luther King, Jr. Boulevard to just north of Corinth. From here the roadway splits and the north bound lanes follow along the East Levee, while the south bound lanes cross over the river then follow the West Levee until just north of Hampton Road Bridge. At this location, the south bound lanes cross back over the Trinity River and rejoin the north bound lanes before crossing the levee out of the Dallas Floodway. Mannings roughness (n value) in the area of the roadways was set to 0.02. Proposed ramps and bridges associated with the parkway were placed into

the model using blocked obstructions. A portion of the abandoned AT&SF trestle was removed from the model where the proposed roadway cuts through the bridge. Channel 'n' values were not altered from those in the existing conditions model. For the most part, overbank 'n' values remained consistent to those in the existing conditions model (0.055) except where proposed trees (0.075) would be planted in order to offset valley storage losses and impacts to water surface elevations. The model also contains the proposed excavation for the future BVP lakes and proposed relocated channel. The Sylvan Avenue East Bridge and West Bridge were removed from the model due to the proposed roadway impacts. The new Hampton/Inwood Road Bridge was placed into the model based on plans. Due to the skewed alignment of the south bound bridge crossing at the southern end of the floodway, only the bridge piers were modeled using blocked obstructions. At the north end, the south bound bridge was modeled using the bridge routine in HEC-RAS. Please refer to the main body of the EIS report for more detailed information and exhibits for Alt. 4A.

Early in the EIS process, Alternatives 3A, 3B, and 4A were the only alternatives inside the Dallas Floodway being modeled to evaluate hydrologic and hydraulic impacts. However, comments were received from the USACE voicing concerns over possible impacts from these alternatives to the integrity of the levees and floodway operations and maintenance. In response to the comments on Alternatives 3A, 3B and 4A received from the USACE, two new alternatives were developed (Alternatives 3C and 4B). Whereas Alternatives 3A, 3B, and 4A require retaining walls to be placed on the levee-side of the roadways at depressed locations in the vicinity of downtown Dallas, Alternatives 3C and 4B avoid the need for levee-side retaining walls by moving the roadway slightly away from the levee toward the Trinity River. Other roadway layout changes are summarized in **Section 2.3.9**. USACE has indicated in its consultation that it considers Alternatives 3A, 3B, and 4A unviable due to adverse impacts on the floodway and levees. Therefore, no further refinements have been made in the SDEIS to the hydraulic evaluation of these alternatives. The following describes the H&H model input for Alternatives 3C and 4B, developed in consultation with USACE.

- **Alternative 3C:** This alternative is a Combined Parkway alternative similar to Alternative 3B except the roadway has been shifted off the levee somewhat. The roadway crosses over the levee at the southern end of the floodway just north of the Burlington Northern Santa Fe Railroad and follows the East Levee until just north of Hampton/Inwood Road Bridge where it crosses back over the levee. Mannings roughness (n values) in the area of the roadway was set to 0.02. Proposed ramps and bridges associated with the parkway and park access were placed into the model using the lid option, with 'n' values in the vicinity of the proposed Trinity Parkway bridge structures adjusted to 0.07 to reflect the impacts of piers on flood flows under these structures. A portion of the abandoned AT&SF trestle was removed from the model where the proposed roadway cuts through the bridge. The AT&SF Bridge was also changed from a normal opening analysis to a multiple opening analysis since the area where the bridge will be removed will act more like an open channel (conveyance type of opening) than a bridge. Channel 'n' values were not altered from those in the existing conditions model. For the most part, overbank 'n' values remained consistent to those in the existing conditions model (0.055) except where proposed trees (0.075) would be planted to offset valley storage losses due to flood elevation reductions. The model also contains the proposed excavation associated with the future BVP lakes along with channelization from just upstream of Corinth to downstream of Jefferson. Bottom widths of the channelization range from 100 ft. to 150 ft. with 4:1 side slopes. Benches in some locations were also added. A swale in the area between Corinth and IH-35E was also

added. The model further reflects wetlands and reforestation between Hampton and Westmoreland. Wetlands were also included downstream of Hampton to near the Baker Pump Station Outfall. The Sylvan Avenue East Bridge was removed from the model due to the proposed roadway impacts. The new Hampton/Inwood Road Bridge was placed into the model based on plans. Please refer to the main body of the EIS report for more detailed information and exhibits for Alt. 3C.

- **Alternative 4B:** This alternative is a Split parkway alternative similar to Alternative 4A except the roadway has been shifted more off the levee somewhat. The roadway crosses over the levee at the southern end of the floodway just north of the Burlington Northern Santa Fe Railroad and follows the East Levee until just north of Corinth. From here the roadway splits and the north bound lanes follow along the East Levee with the south bound lanes crossing over the river, then following the West Levee. Just north of Hampton Road Bridge, the roadway crosses back over the Trinity to rejoin with the north bound lanes before crossing the levee out of the floodway. Mannings roughness (n value) in the area of the roadway was set to 0.02. Proposed ramps and bridges associated with the parkway and park access were placed into the model using the lid option, with 'n' values in the vicinity of the proposed Trinity Parkway bridge structures adjusted to 0.07 to reflect the impacts of piers on flood flows under these structures. A portion of the abandoned AT&SF trestle was removed from the model where the proposed roadway cuts through the bridge. The AT&SF Bridge was also changed from a normal opening analysis to a multiple opening analysis since the portion of the bridge removed acts more like an open channel (conveyance type of opening) than a bridge. Channel 'n' values were not altered from those in the existing conditions model. For the most part, overbank 'n' values remained consistent to those in the existing conditions model (0.055) except where proposed trees (0.075) would be planted in order to offset valley storage losses due to flood elevation reductions. The model also contains the proposed excavation associated with the future BVP lakes, along with channelization from just upstream of Corinth to downstream of Jefferson. Bottom widths of the channelization range from 100 ft. to 150 ft. with 4:1 side slopes. Benches were also added in some locations. A swale in the area between Corinth and IH-35E was added. The model further reflects wetlands and reforestation between Hampton and Westmoreland. Wetlands were also included downstream of Hampton to a location near the Baker Pump Station Outfall. The Sylvan Avenue East Bridge and West Bridge was removed from the model at the proposed parkway due to conflicts with the proposed roadway. The new Hampton/Inwood Road Bridge was placed into the model based on plans. Due to the skewed alignment of the south bound bridge crossing at the southern end of the floodway, only the bridge piers were modeled using blocked obstructions. At the north end, the south bound bridge was modeled using the bridge routine in HEC-RAS. Please refer to the main body of the EIS report for more detailed information and exhibits for Alt. 4B.

THIS PAGE INTENTIONALLY LEFT BLANK

## Valley Storage Calculations (100-Year)

### Table A. Main Stem Trinity River

| Location | Existing Volume (acre-ft) | Alt. 3A* Volume (acre-ft) | Alt. 3B* Volume (acre-ft) | Alt. 3C Volume (acre-ft) | Alt. 4A* Volume (acre-ft) | Alt. 4B Volume (acre-ft) |
|---|---|---|---|---|---|---|
| Confluence of Elm Fork/West Fork (XS 148136)[1] | 153511 | 153233.0 | 153824.1 | 154328.4 | 153801.9 | 154495.7 |
| U/S Face of BNSF RR Bridge (XS 103533) | 111753 | 111753 | 111753 | 111753 | 111753 | 111753 |
| Project Area Volume | 41758 | 41480 | 42071.1 | 42575.4 | 42048.9 | 42742.7 |
| Volume Change Compared to Existing | | -278 | 313.1 | 817.4 | 290.9 | 984.7 |

### Table B. Elm Fork

| Location | Station | Existing Cum.Volume (acre-ft) | Alt. 3A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3B* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3C Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4B Cum.Volume (acre-ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Varies[2] | 78187 | 44094.73 | 43661.44 | 71682 | 41682.8 | 41425.1 | 49916 | 27131.4 | 27162.7 | 54233 | 32609.4 | 32541.5 | 87541 | 48436.0 | 49389.7 |
| Confluence of Elm Fork/West Fork | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 |
| Elm Fork Volume | | 44094.73 | 43661.44 | | 41682.8 | 41425.1 | | 27131.4 | 27162.7 | | 32609.4 | 32541.5 | | 48436.0 | 49389.7 |
| Volume Change Compared to Existing | | | -433.29 | | | -257.7 | | | 31.3 | | | -67.89 | | | 953.69 |

### Table C. West Fork

| Location | Station | Existing Cum.Volume (acre-ft) | Alt. 3A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3B* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3C Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4B Cum.Volume (acre-ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Varies[2] | 25434 | 17855.4 | 17667.3 | 25434 | 17855.4 | 17742.8 | 15780 | 12638.0 | 12646.7 | 17516 | 13592.5 | 13563.5 | 38059 | 35224.2 | 35651.3 |
| Confluence of Elm Fork/West Fork | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 |
| West Fork Volume | | 17855.4 | 17667.3 | | 17855.4 | 17742.8 | | 12638.0 | 12646.7 | | 13592.5 | 13563.5 | | 35224.2 | 35651.3 |
| Volume Change Compared to Existing | | | -188.1 | | | -112.7 | | | 8.6 | | | -29.0 | | | 427.1 |

### Table D. Percent Gain/Loss Calculations Based on Project Volume

| | Existing Project Area Volume (acre-ft) | Difference in Project Volume (acre-ft)[4] | | | | | Percent Change in Project Volume[5] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alt. 3A* | Alt. 3B* | Alt. 3C | Alt. 4A* | Alt. 4B | Alt. 3A* | Alt. 3B* | Alt. 3C | Alt. 4A* | Alt. 4B |
| Within Project Study Area | 41758 | -278 | 313.1 | 817.4 | 290.9 | 984.7 | -0.7% | 0.7% | 2.0% | 0.7% | 2.4% |
| Total Including Upstream Reaches | 41758 | -899.39 | -57.2 | 857.3 | 194.0 | 2365.5 | -2.2% | -0.1% | 2.1% | 0.5% | 5.7% |

**Notes:**

* = denotes for the reader that Alternatives 3A, 3B, and 4A are not considered feasible by the USACE due to concerns detailed in **Volume 1, Chapter 2, Section 2.3.9**.

1. XS = cross section
2. The point where water surface elevations returned to zero for more than one cross-section on both the Elm Fork and West Fork dictated the point where valley storage computations were ended for each build alternative.
3. The hydraulic model was built using the confluence as starting point for stationing up each of the branches (Elm Fork and West Fork), therefore, Main Stem XS 148136 equals Station 0 for each branch.
4. Gain or loss in volume (acre-ft) in the Trinity Parkway Build Alternatives compared to the existing project area volume.
5. Percent Change in Project Volume is equal to the Difference in Project Volume divided by the Existing Project Area Volume times 100.

## Valley Storage Calculations (SPF)

### Table A. Main Stem Trinity River

| Location | Existing Volume (acre-ft) | Alt. 3A* Volume (acre-ft) | Alt. 3B* Volume (acre-ft) | Alt. 3C Volume (acre-ft) | Alt. 4A* Volume (acre-ft) | Alt. 4B Volume (acre-ft) |
|---|---|---|---|---|---|---|
| Confluence of Elm Fork/West Fork (XS 148136)[1] | 257793.2 | 256326.3 | 257460.8 | 257810.9 | 257871.8 | 257288.7 |
| U/S Face of BNSF RR Bridge (XS 103533) | 186245.7 | 186245.7 | 186245.7 | 186245.7 | 186245.7 | 186245.7 |
| Project Area Volume | 71547.5 | 70080.6 | 71215.1 | 71565.2 | 71626.1 | 71043 |
| Volume Change Compared to Existing | | -1466.9 | -332.4 | 17.7 | 78.6 | -504.5 |

### Table B. Elm Fork

| Location | Station | Existing Cum.Volume (acre-ft) | Alt. 3A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3B* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3C Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4B Cum.Volume (acre-ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Varies[2] | 111934 | 126220.28 | 124599.01 | 110435 | 125759.3 | 124959.6 | 98884 | 118354.5 | 118550.7 | 105167 | 123024.5 | 122773.9 | 112617 | 126676.3 | 128770.3 |
| Confluence of Elm Fork/West Fork | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 |
| Elm Fork Volume | | 126220.28 | 124599.01 | | 125759.3 | 124959.6 | | 118354.5 | 118550.7 | | 123024.5 | 122773.9 | | 126676.3 | 128770.3 |
| Volume Change Compared to Existing | | | -1621.27 | | | -799.7 | | | 196.2 | | | -250.57 | | | 2093.99 |

### Table C. West Fork

| Location | Station | Existing Cum.Volume (acre-ft) | Alt. 3A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3B* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 3C Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4A* Cum.Volume (acre-ft) | Station | Existing Cum.Volume (acre-ft) | Alt. 4B Cum.Volume (acre-ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Varies[2] | 55761 | 96221.03 | 95164.74 | 44427 | 75565.2 | 75179.8 | 5788 | 8728.7 | 8721.8 | 44427 | 75565.2 | 75443.0 | 61238 | 101606.6 | 102719.1 |
| Confluence of Elm Fork/West Fork | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 | 0[3] | 0 | 0 |
| West Fork Volume | | 96221.03 | 95164.74 | | 75565.2 | 75179.8 | | 8728.7 | 8721.8 | | 75565.2 | 75443.0 | | 101606.6 | 102719.1 |
| Volume Change Compared to Existing | | | -1056.29 | | | -385.4 | | | -6.9 | | | -122.2 | | | 1112.5 |

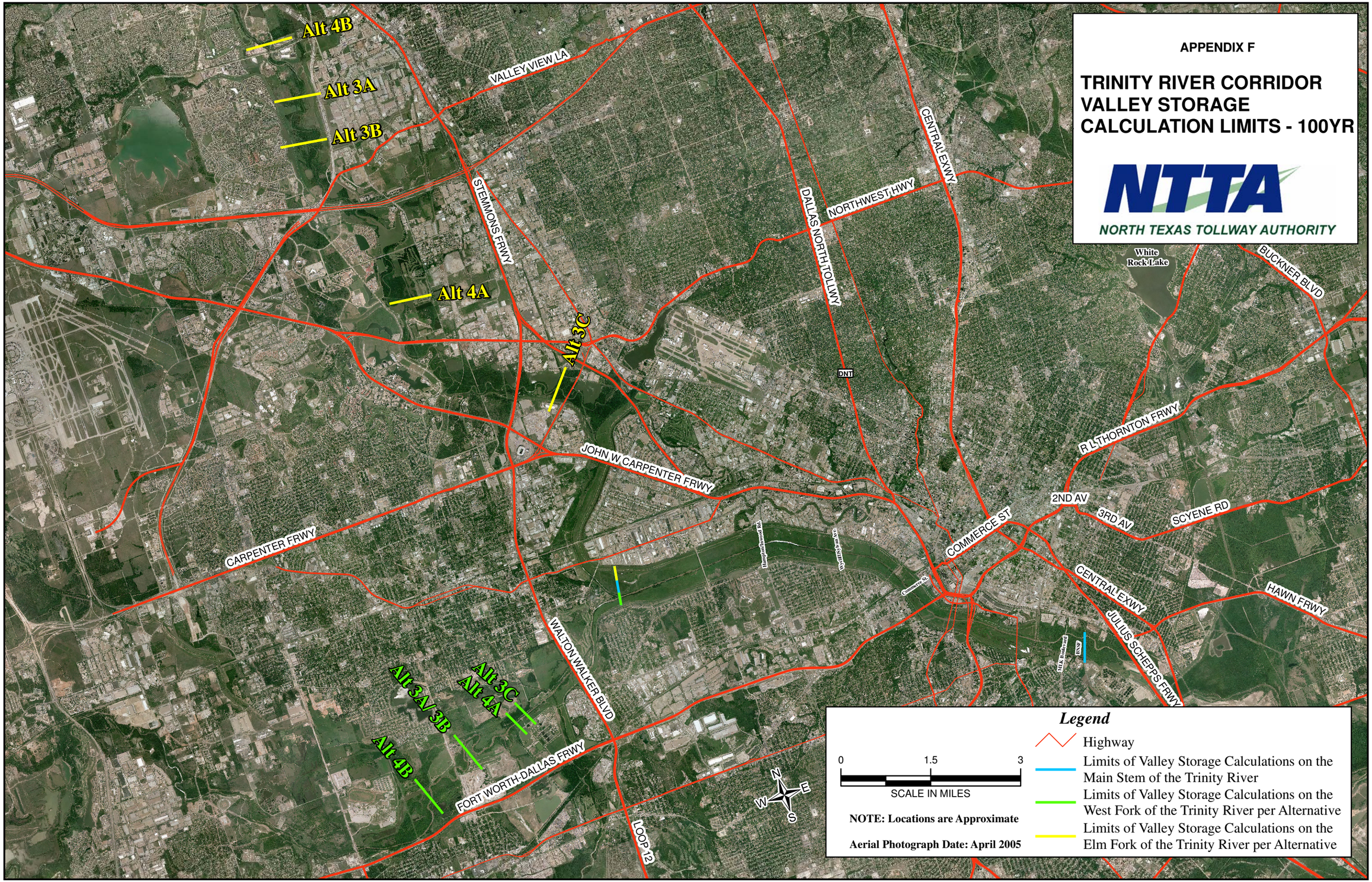
### Table D. Percent Gain/Loss Calculations Based on Project Volume

| | Existing Project Area Volume (acre-ft) | Difference in Project Volume (acre-ft)[4] | | | | | Percent Change in Project Volume[5] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Alt. 3A* | Alt. 3B* | Alt. 3C | Alt. 4A* | Alt. 4B | Alt. 3A* | Alt. 3B* | Alt. 3C | Alt. 4A* | Alt. 4B |
| Within Project Study Area | 71547.5 | -1466.9 | -332.4 | 17.7 | 78.6 | -504.5 | -2.1% | -0.5% | 0.0% | 0.1% | -0.7% |
| Total Including Upstream Reaches | 71547.5 | -4144.46 | -1517.5 | 207.0 | -294.2 | 2702.0 | -5.8% | -2.1% | 0.3% | -0.4% | 3.8% |

**Notes:**

* = denotes for the reader that Alternatives 3A, 3B, and 4A are not considered feasible by the USACE due to concerns detailed in **Volume 1, Chapter 2, Section 2.3.9**.

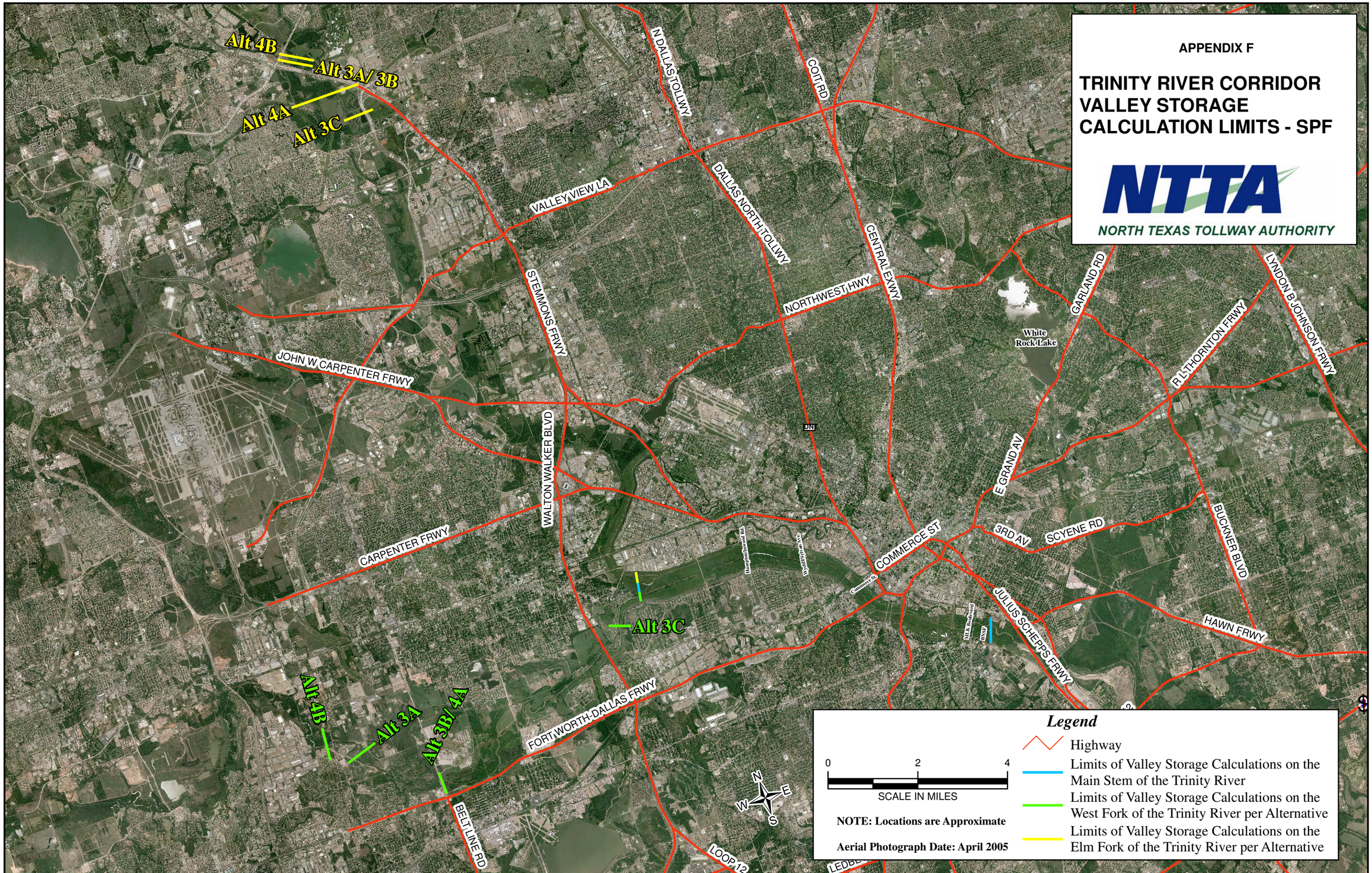
1. XS = cross section
2. The point where water surface elevations returned to zero for more than one cross-section on both the Elm Fork and West Fork dictated the point where valley storage computations were ended for each build alternative.
3. The hydraulic model was built using the confluence as starting point for stationing up each of the branches (Elm Fork and West Fork), therefore, Main Stem XS 148136 equals Station 0 for each branch.
4. Gain or loss in volume (acre-ft) in the Trinity Parkway Build Alternatives compared to the existing project area volume.
5. Percent Change in Project Volume is equal to the Difference in Project Volume divided by the Existing Project Area Volume times 100.


APPENDIX F
TRINITY RIVER CORRIDOR
VALLEY STORAGE
CALCULATION LIMITS - 100YR
NTTA
NORTH TEXAS TOLLWAY AUTHORITY
Alt 4B
Alt 3A
Alt 3B
Alt 4A
Alt 3C
Alt 3A/ 3B
Alt 3C
Alt 4A
Alt 4B
VALLEY VIEW LA
STEMMONS FRWY
DALLAS NORTH TOLLWAY
NORTHWEST HWY
CENTRAL EXWY
White Rock Lake
BUCKNER BLVD
R L THORNTON FRWY
JOHN W CARPENTER FRWY
CARPENTER FRWY
2ND AV
3RD AV
SCYENE RD
COMMERCE ST
CENTRAL EXWY
HAWN FRWY
JULIUS SCHEPPS FRWY
WALTON WALKER BLVD
FORT WORTH-DALLAS FRWY
LOOP 12
DNT
Legend
Highway
Limits of Valley Storage Calculations on the Main Stem of the Trinity River
Limits of Valley Storage Calculations on the West Fork of the Trinity River per Alternative
Limits of Valley Storage Calculations on the Elm Fork of the Trinity River per Alternative
0
1.5
3
SCALE IN MILES
NOTE: Locations are Approximate
Aerial Photograph Date: April 2005
N
E
S
W

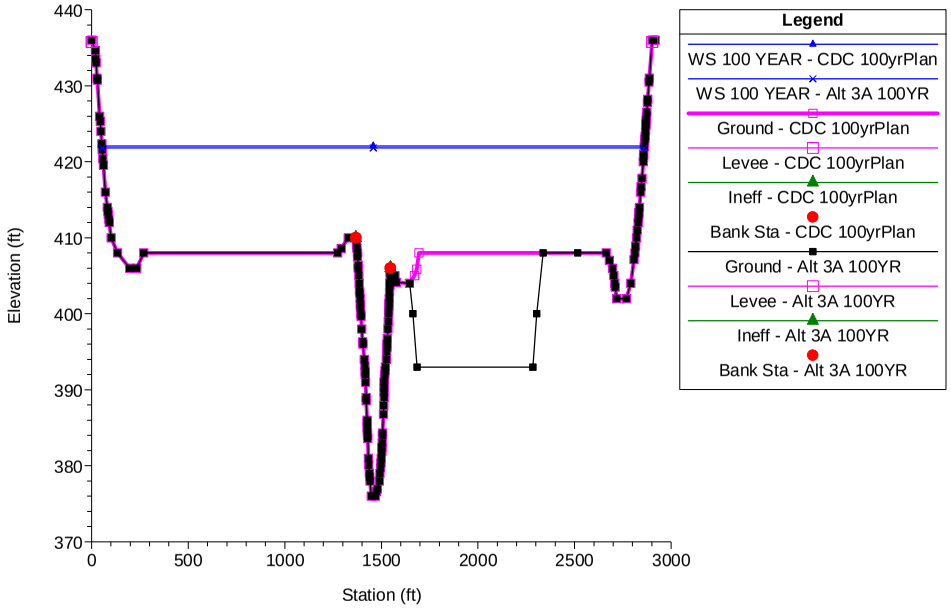
APPENDIX F

# TRINITY RIVER CORRIDOR VALLEY STORAGE CALCULATION LIMITS - SPF

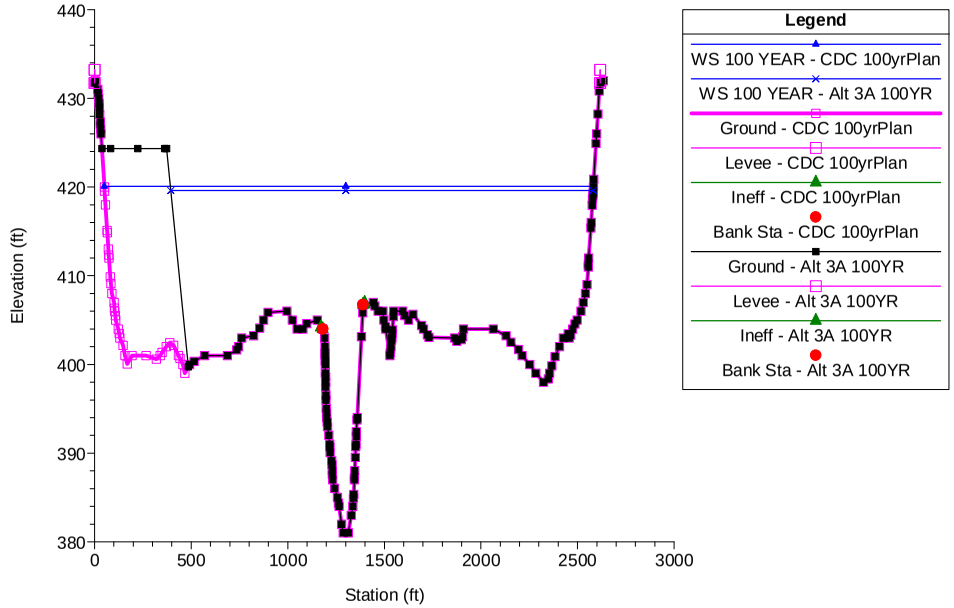
NTTA
NORTH TEXAS TOLLWAY AUTHORITY



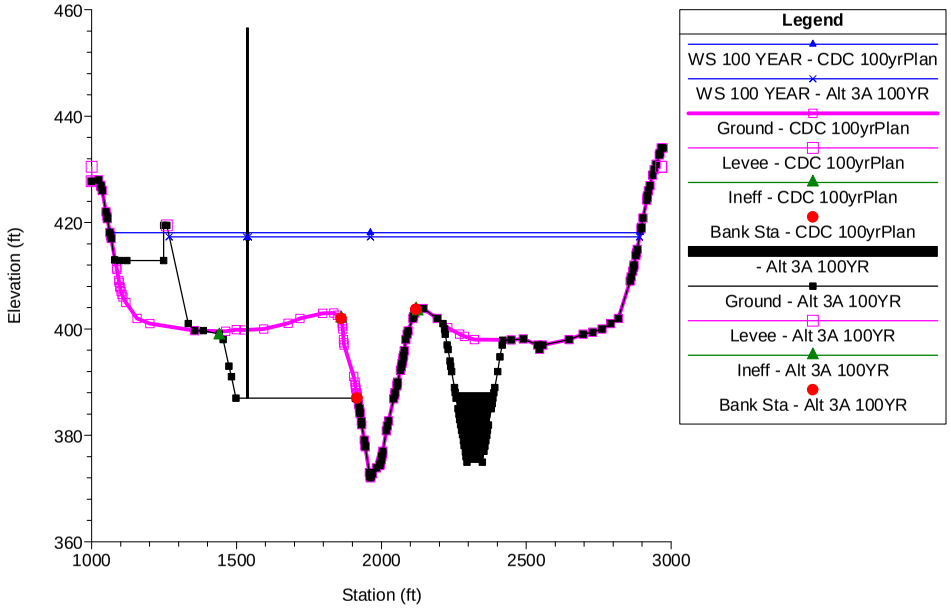
Trinity River Model Plan: 1) Alt 3A 100YR 2) CDC 100yrPlan
Geom: Alternative 3A 1-YR to 100-YR
River = Main Stem Reach = ms RS = 142004.



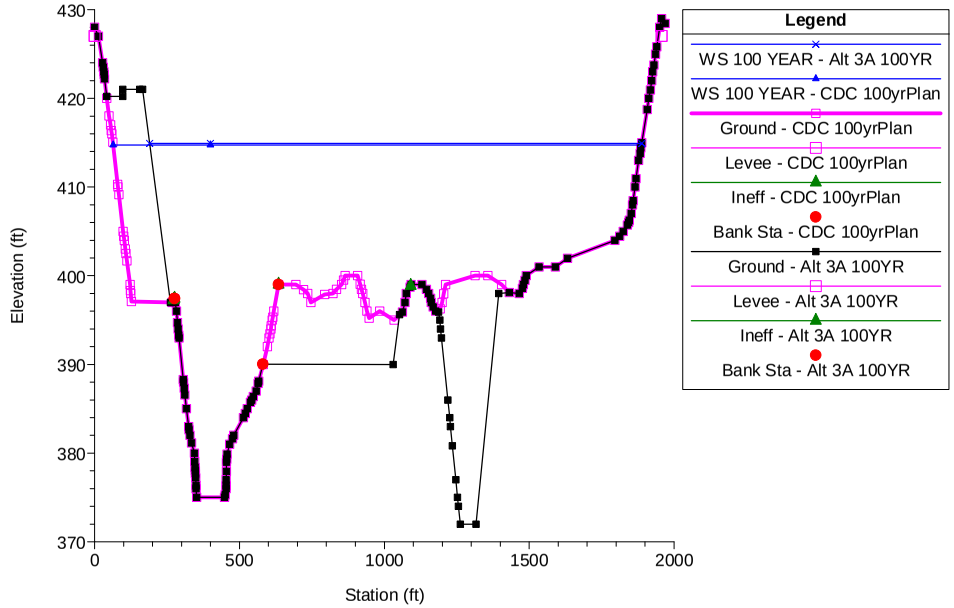

Trinity River Model Plan: 1) Alt 3A 100YR 2) CDC 100yrPlan
Geom: Alternative 3A 1-YR to 100-YR
River = Main Stem Reach = ms RS = 132417.



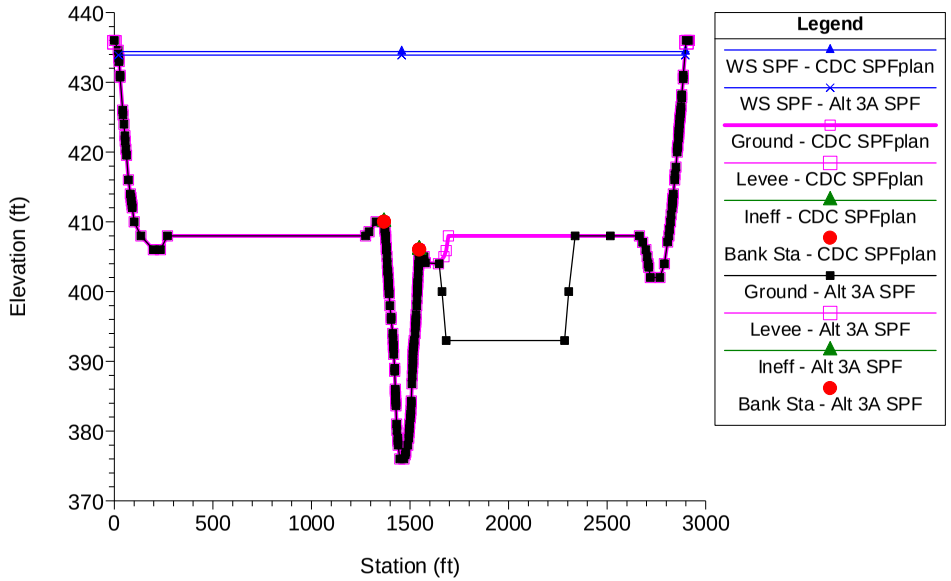

Trinity River Model Plan: 1) Alt 3A 100YR 2) CDC 100yrPlan
Geom: Alternative 3A 1-YR to 100-YR
River = Main Stem Reach = ms RS = 122886.



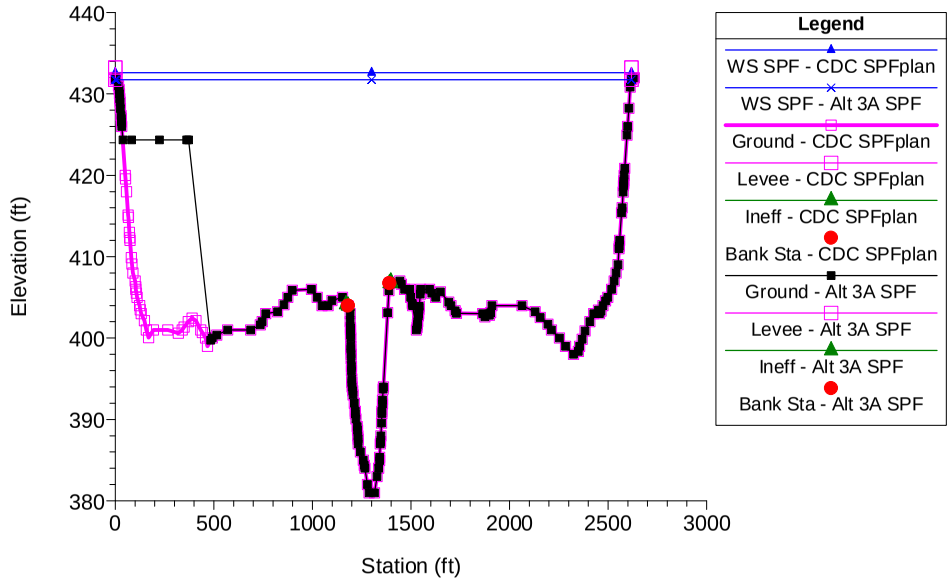

Trinity River Model Plan: 1) Alt 3A 100YR 2) CDC 100yrPlan
Geom: Alternative 3A 1-YR to 100-YR
River = Main Stem Reach = ms RS = 113405.



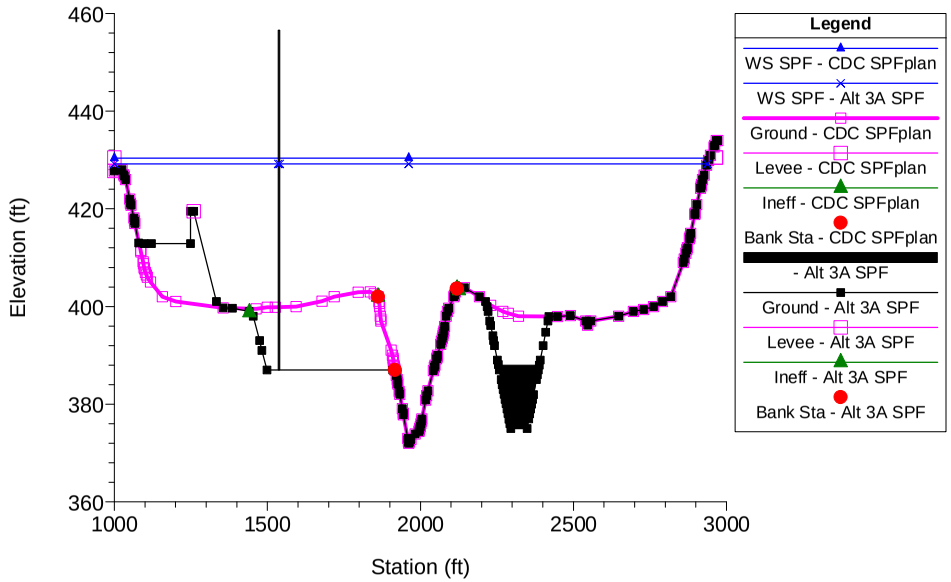
Trinity River Model Plan: 1) Alt 3A SPF 2) CDC SPFplan
Geom: Alternative 3A 500-YR to SPF
River = Main Stem Reach = ms RS = 142004.



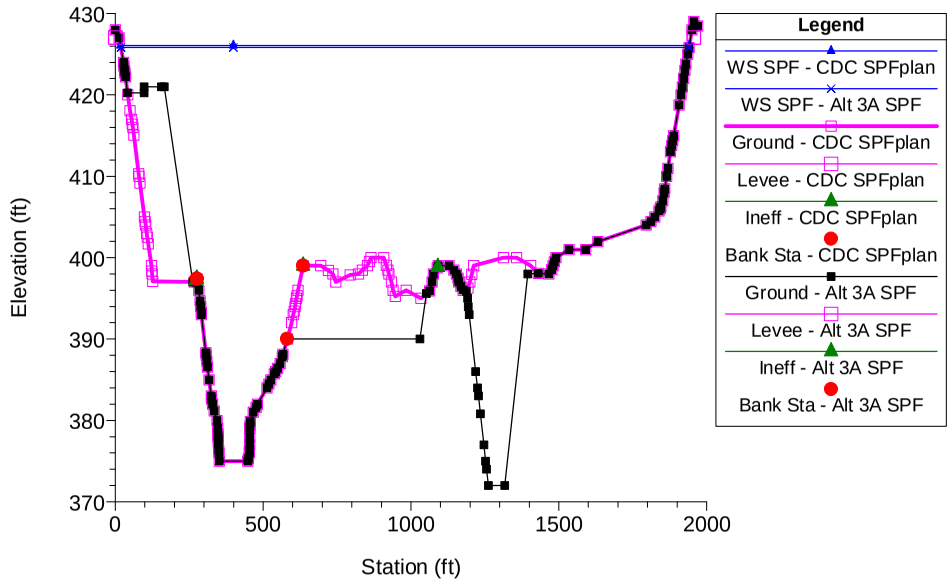

Trinity River Model Plan: 1) Alt 3A SPF 2) CDC SPFplan
Geom: Alternative 3A 500-YR to SPF
River = Main Stem Reach = ms RS = 132417.



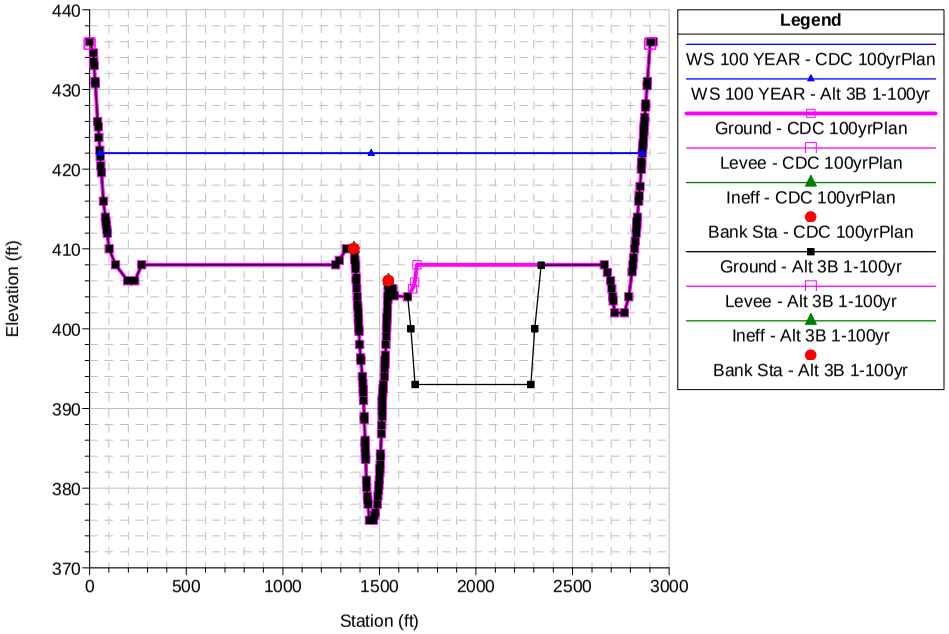

Trinity River Model Plan: 1) Alt 3A SPF 2) CDC SPFplan
Geom: Alternative 3A 500-YR to SPF
River = Main Stem Reach = ms RS = 122886.



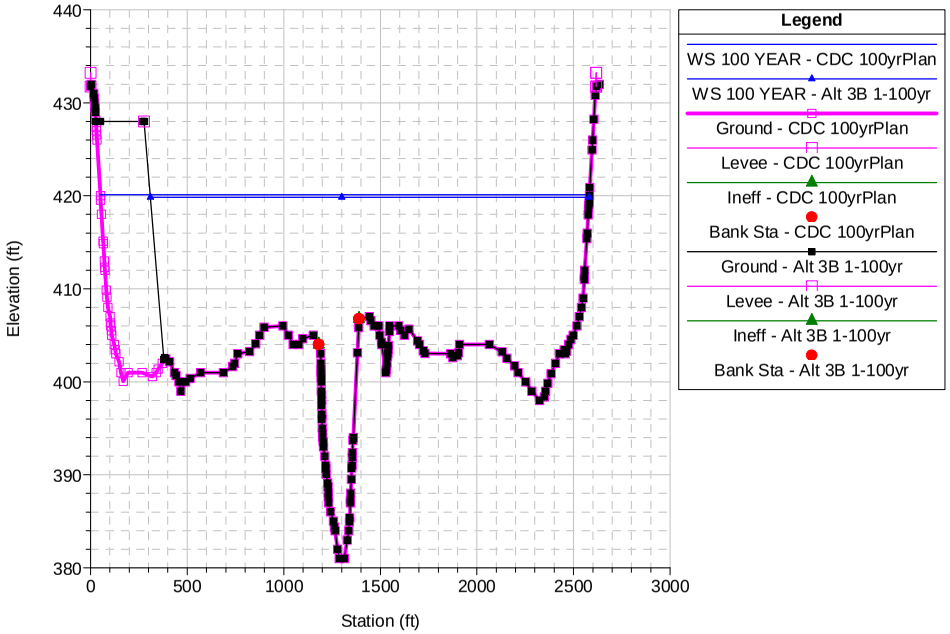

Trinity River Model Plan: 1) Alt 3A SPF 2) CDC SPFplan
Geom: Alternative 3A 500-YR to SPF
River = Main Stem Reach = ms RS = 113405.



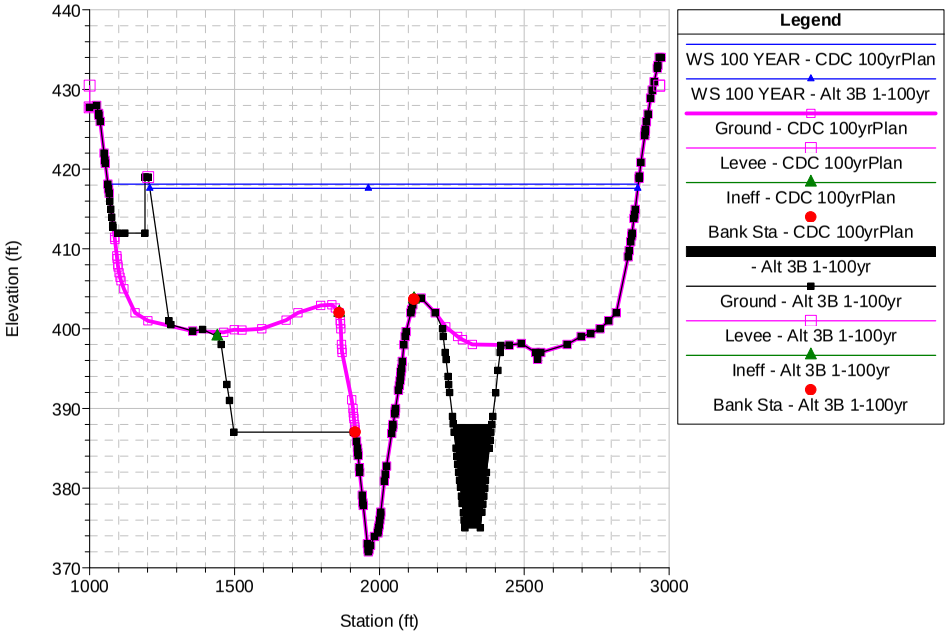
Trinity River Model Plan: 1) Alt 3B 1-100yr 2) CDC 100yrPlan
RS = 142004.



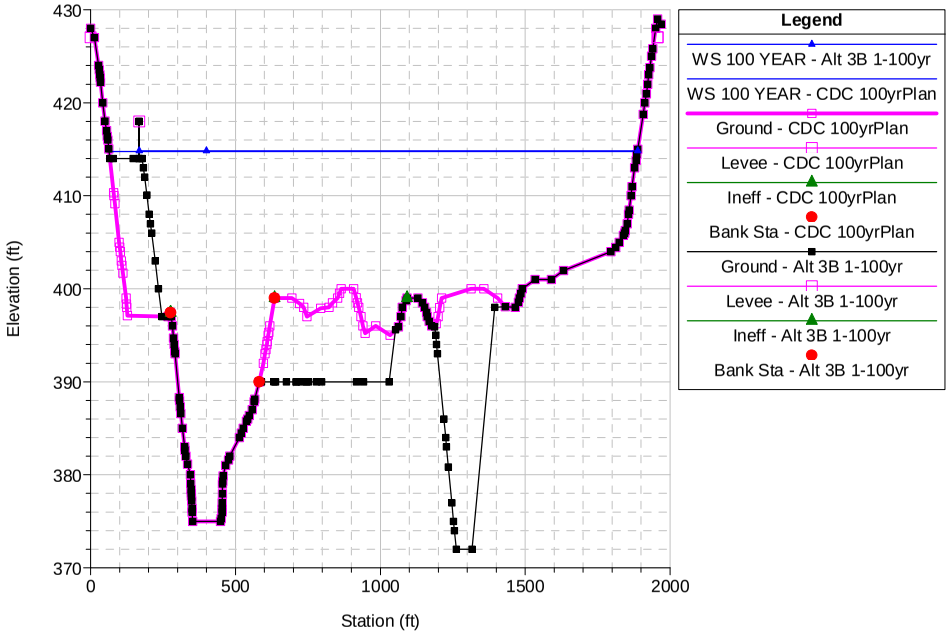

Trinity River Model Plan: 1) Alt 3B 1-100yr 2) CDC 100yrPlan
RS = 132417.



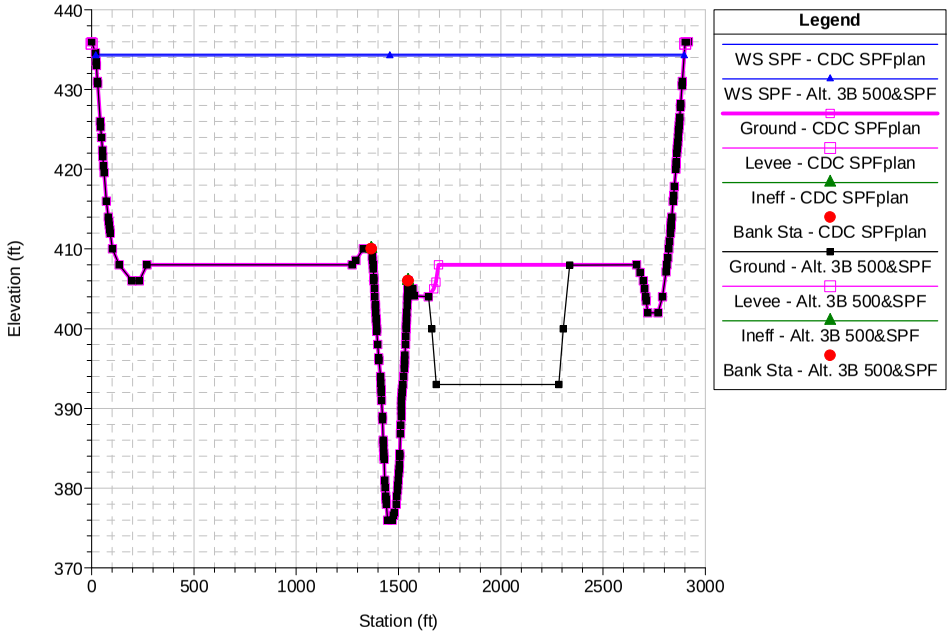

Trinity River Model Plan: 1) Alt 3B 1-100yr 2) CDC 100yrPlan
RS = 122886.



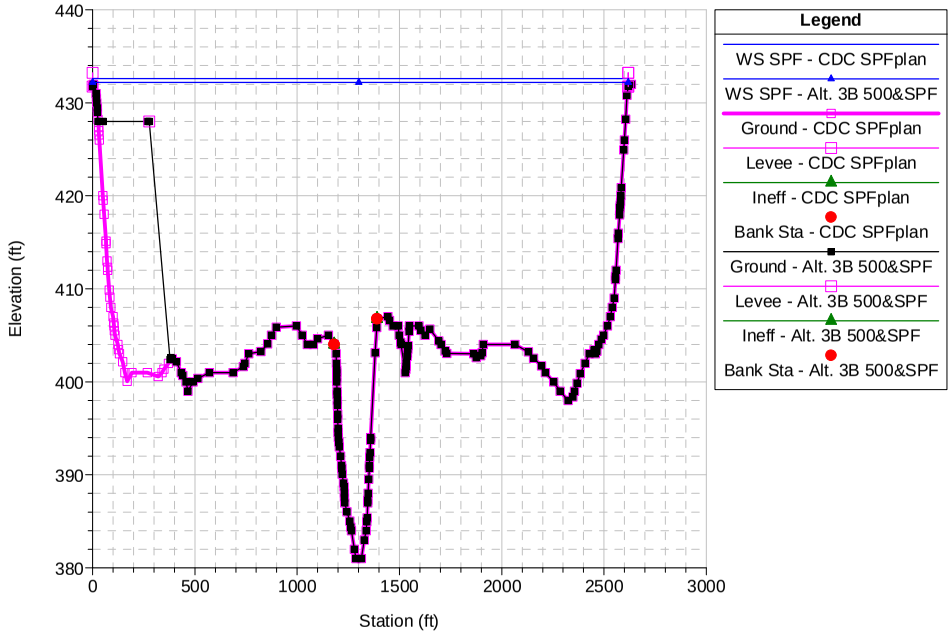

Trinity River Model Plan: 1) Alt 3B 1-100yr 2) CDC 100yrPlan
RS = 113405.



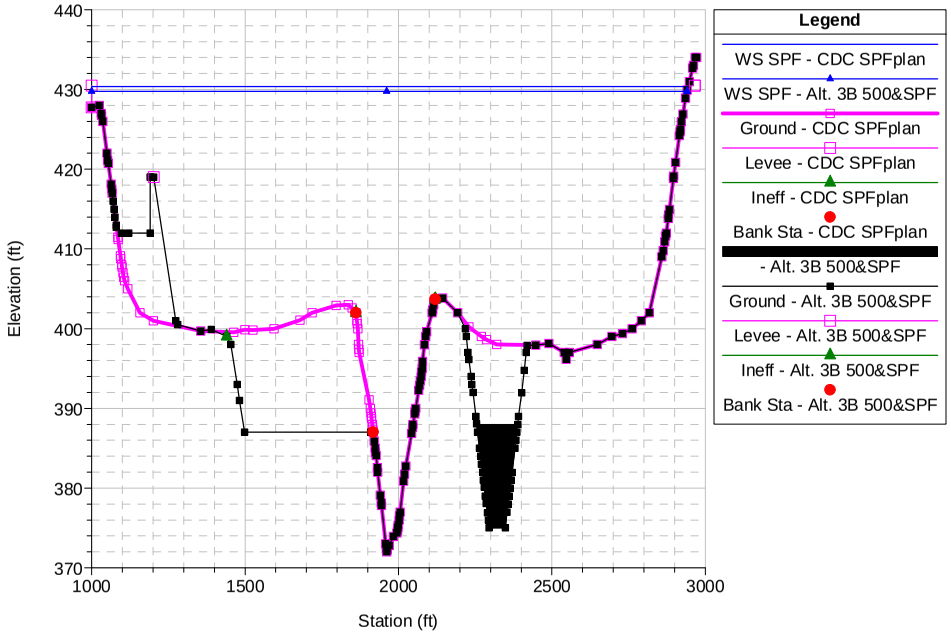
Trinity River Model Plan: 1) Alt. 3B 500&SPF 2) CDC SPFplan
RS = 142004.



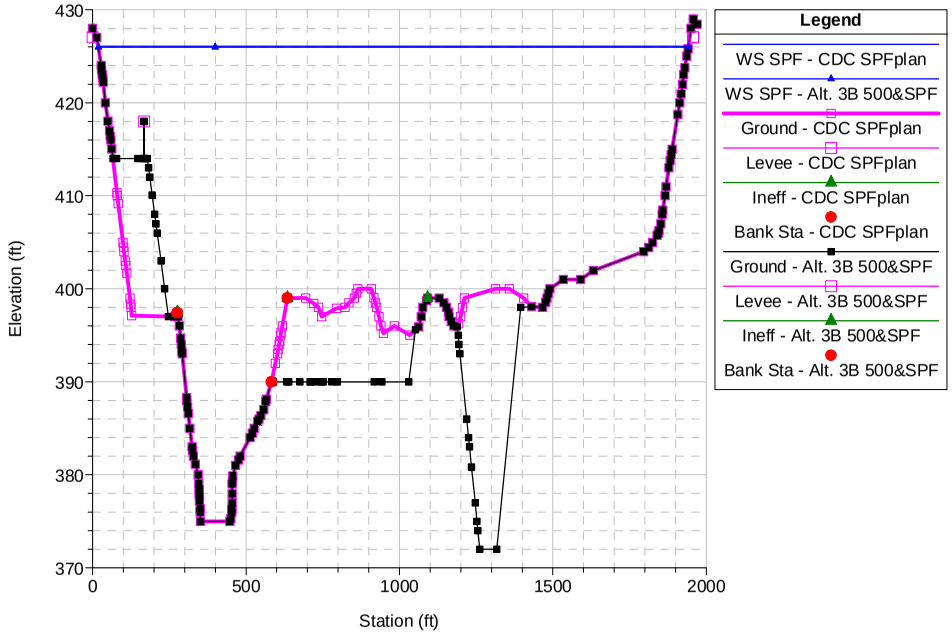

Trinity River Model Plan: 1) Alt. 3B 500&SPF 2) CDC SPFplan
RS = 132417.




Trinity River Model Plan: 1) Alt. 3B 500&SPF 2) CDC SPFplan
RS = 122886.

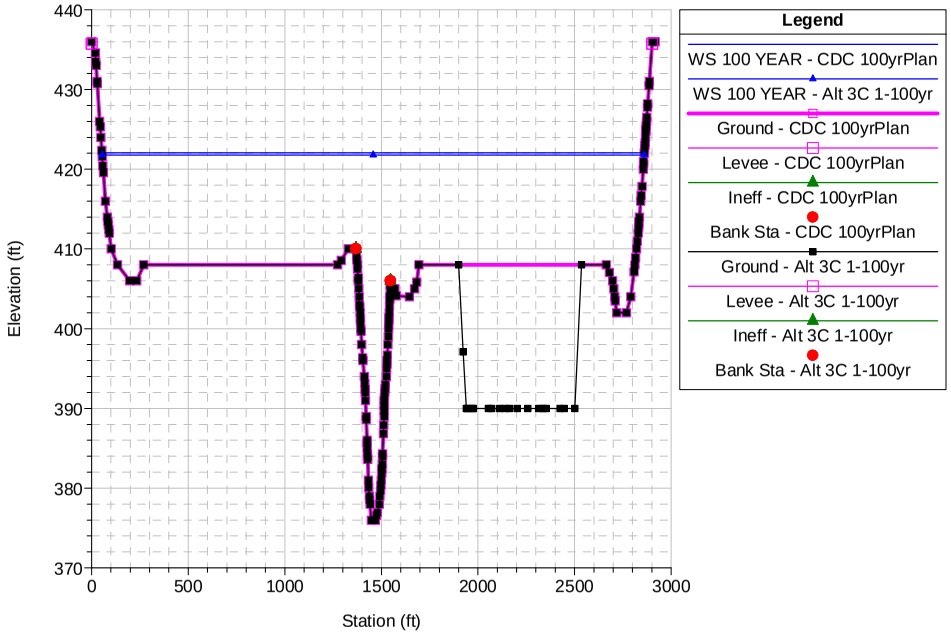



Trinity River Model Plan: 1) Alt. 3B 500&SPF 2) CDC SPFplan
RS = 113405.



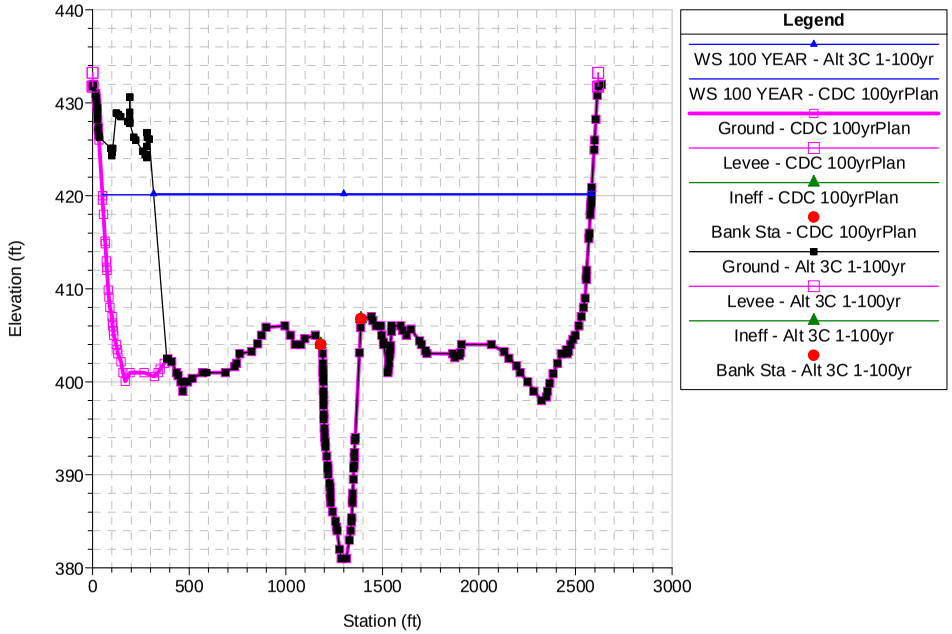
Trinity Model Final Alignments 04/25/08 Plan: 1) Alt 3C 1-100yr 2) CDC 100yrPlan

RS = 142004.



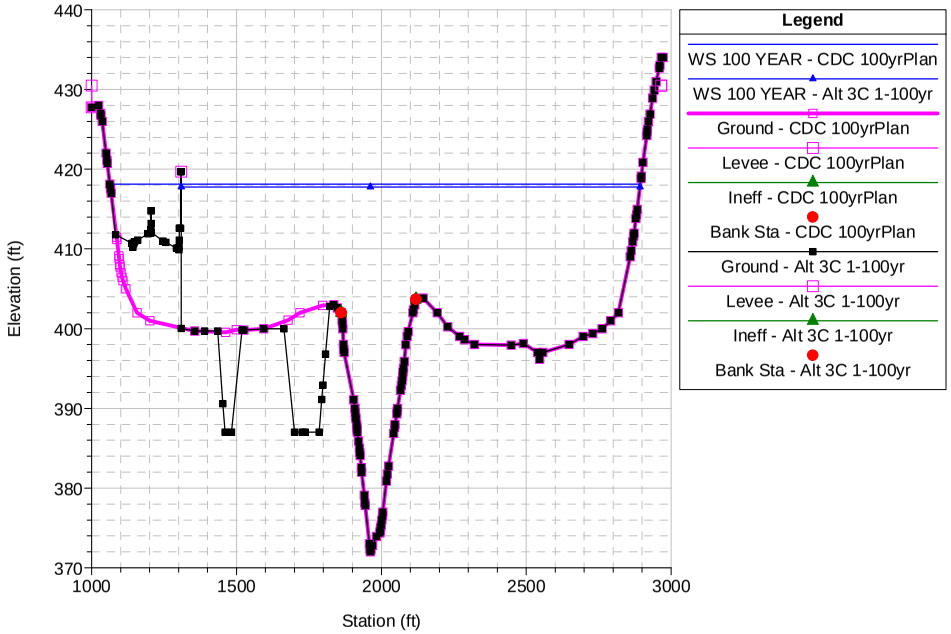

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt 3C 1-100yr 2) CDC 100yrPlan

RS = 132417.



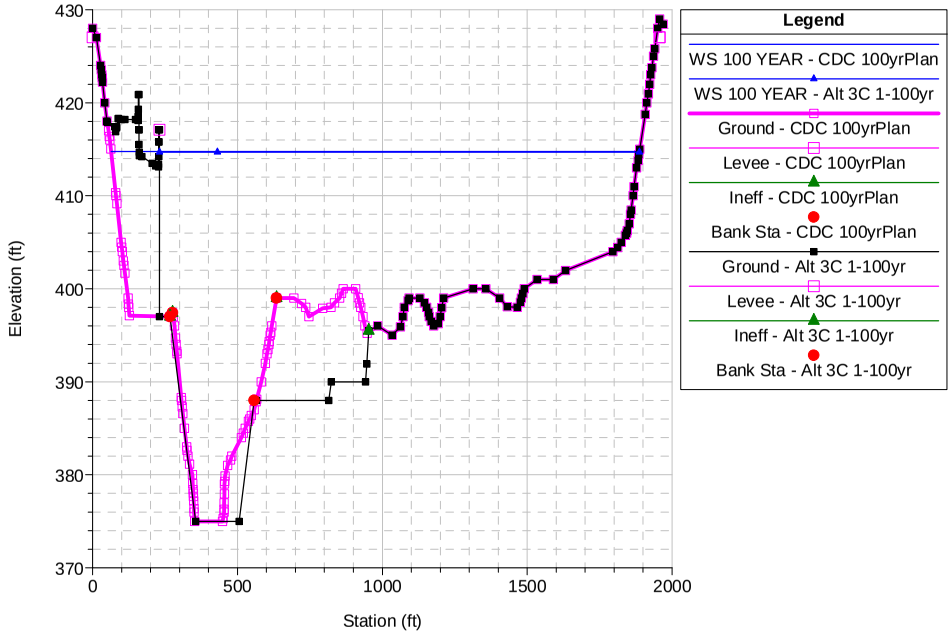

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt 3C 1-100yr 2) CDC 100yrPlan

RS = 122886.



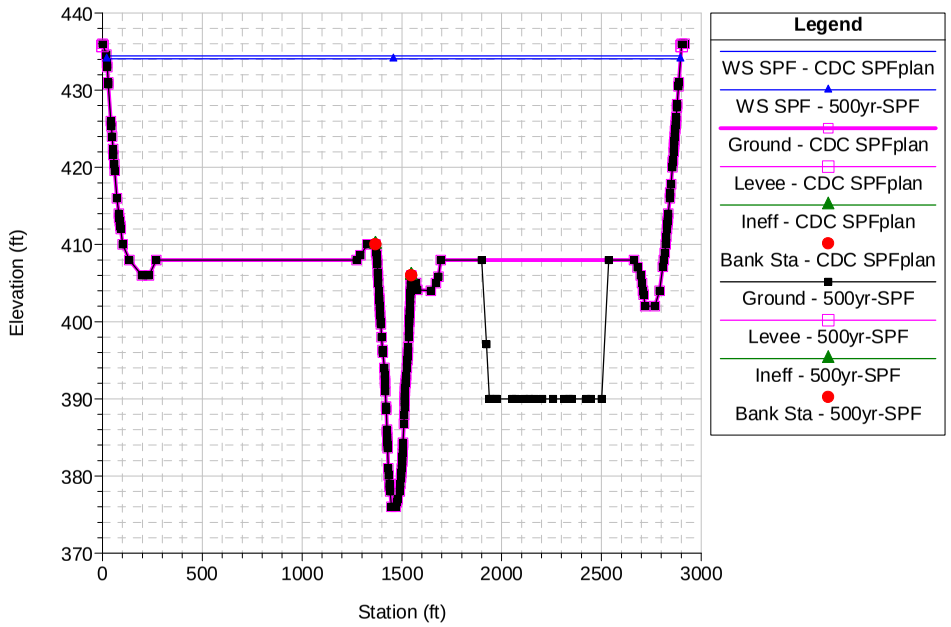

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt 3C 1-100yr 2) CDC 100yrPlan

RS = 113405.



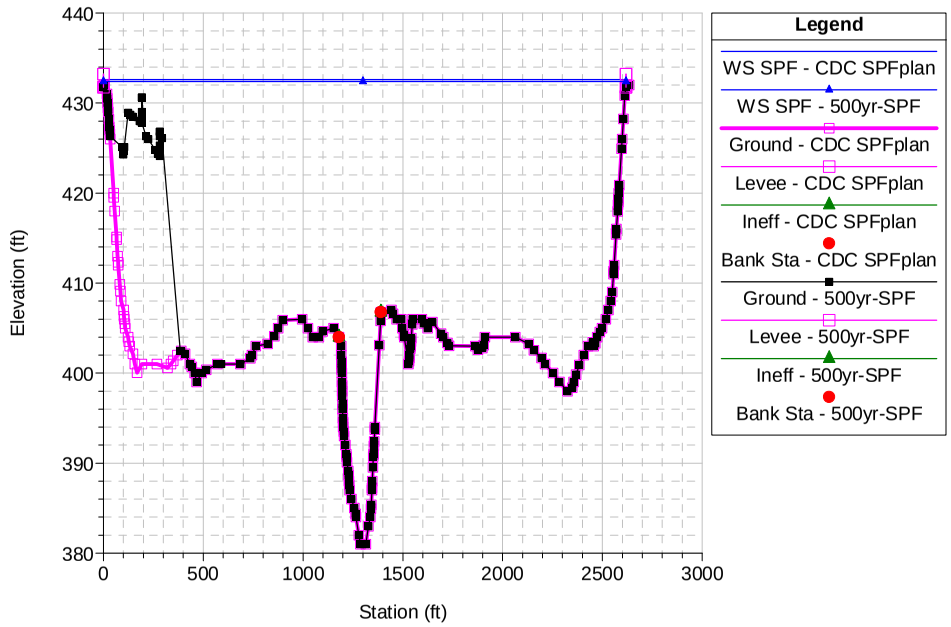
Trinity Model Final Alignments 04/25/08 Plan: 1) 500yr-SPF 2) CDC SPFplan

RS = 142004.



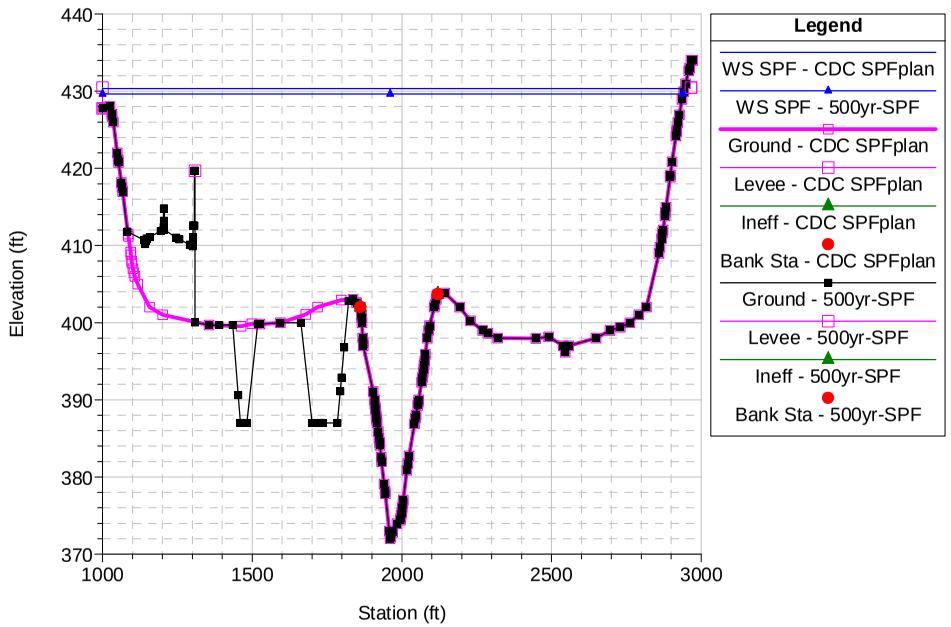

Trinity Model Final Alignments 04/25/08 Plan: 1) 500yr-SPF 2) CDC SPFplan

RS = 132417.



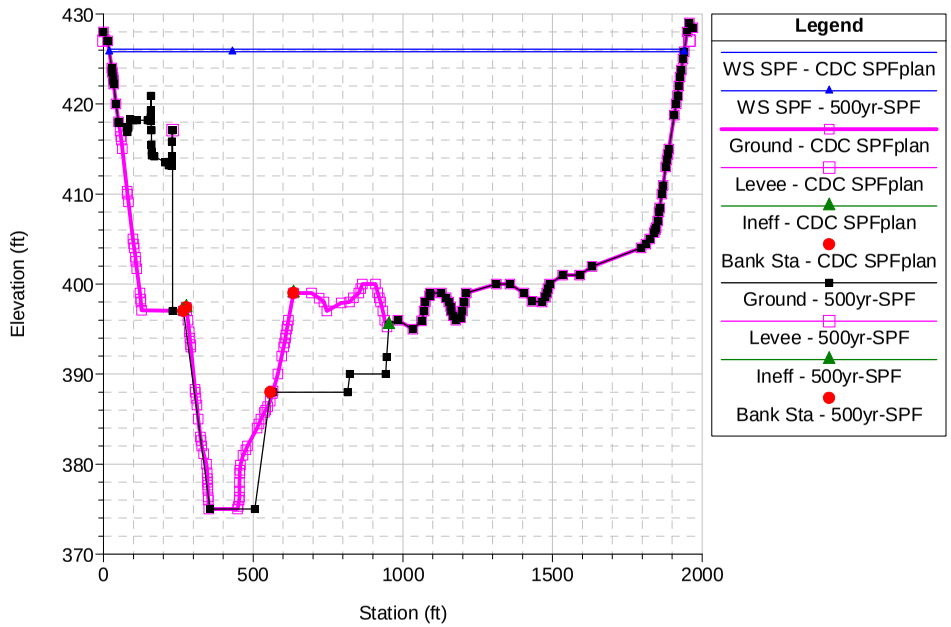

Trinity Model Final Alignments 04/25/08 Plan: 1) 500yr-SPF 2) CDC SPFplan

RS = 122886.




Trinity Model Final Alignments 04/25/08 Plan: 1) 500yr-SPF 2) CDC SPFplan

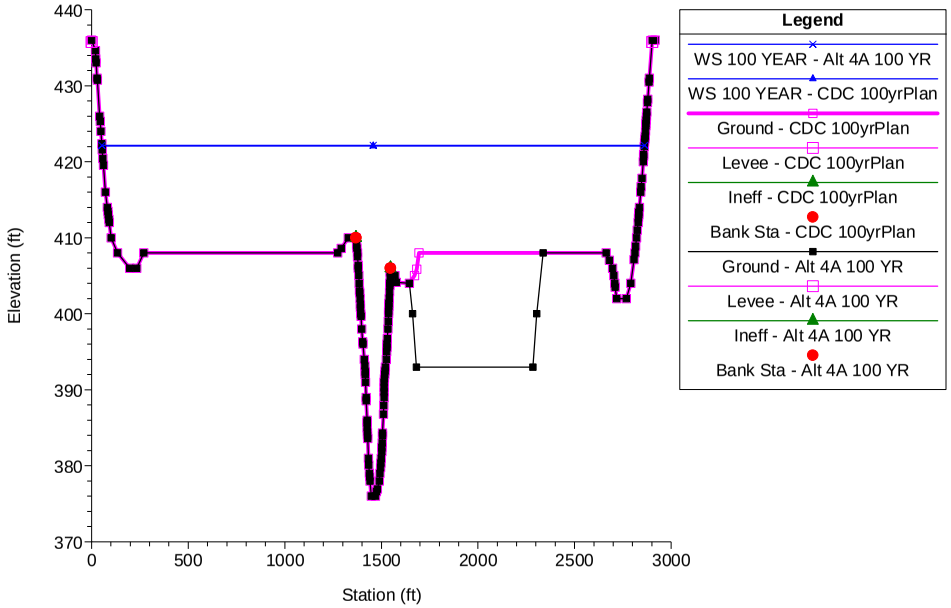
RS = 113405.



Trinity River Model Plan: 1) Alt 4A 100 YR 2) CDC 100yrPlan

Geom: Alternative 4A 1-YR to 100-YR

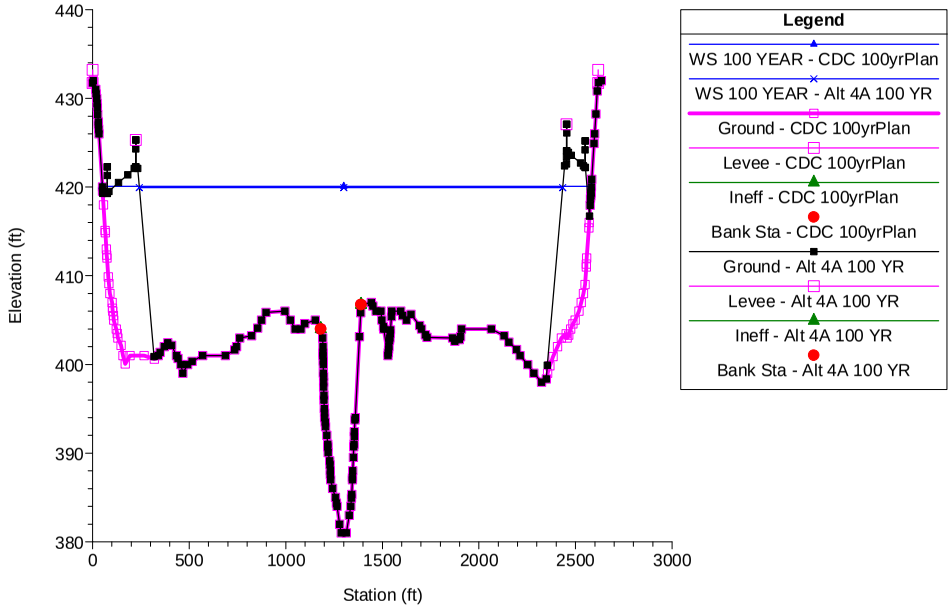
River = Main Stem Reach = ms RS = 142004.




Trinity River Model Plan: 1) Alt 4A 100 YR 2) CDC 100yrPlan

Geom: Alternative 4A 1-YR to 100-YR

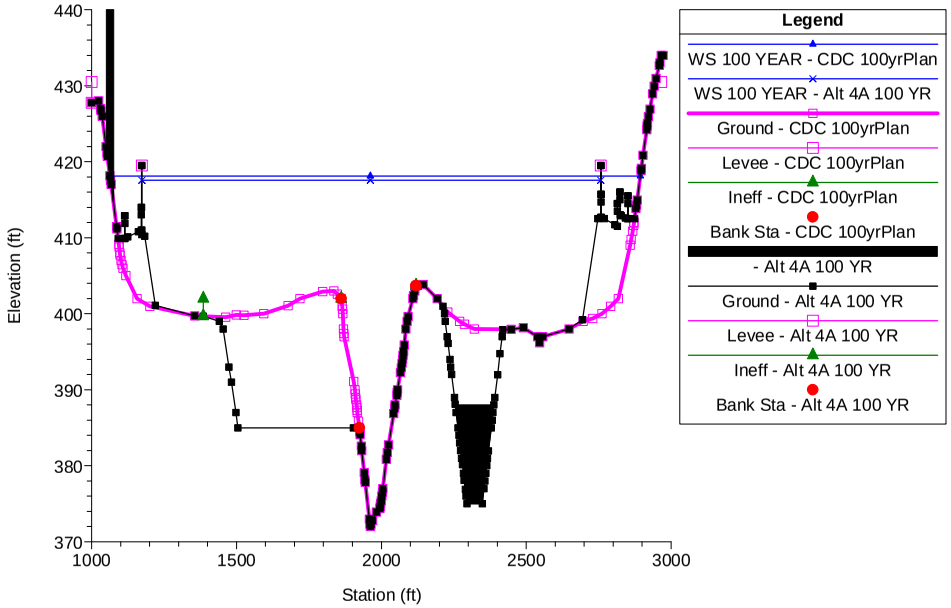
River = Main Stem Reach = ms RS = 132417.




Trinity River Model Plan: 1) Alt 4A 100 YR 2) CDC 100yrPlan

Geom: Alternative 4A 1-YR to 100-YR

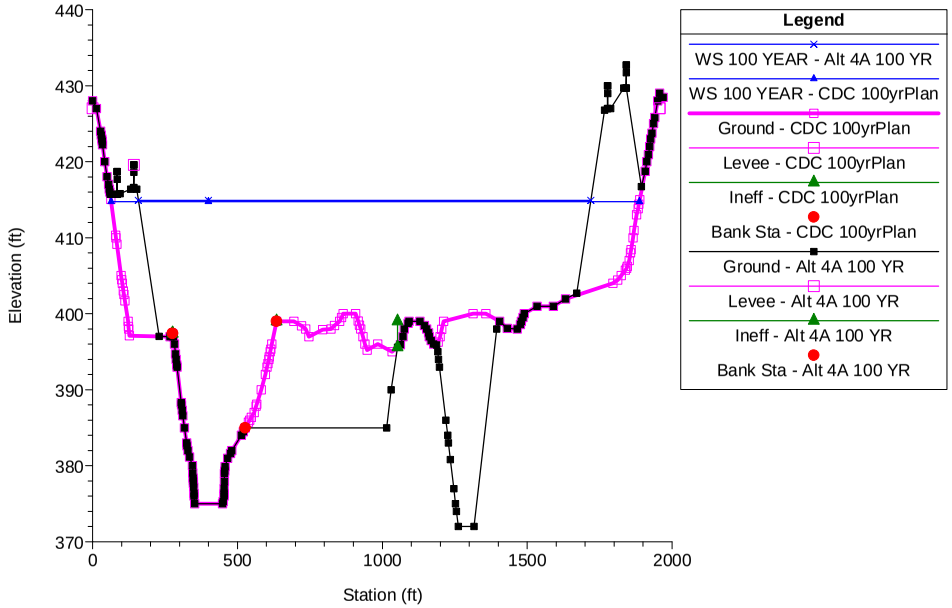
River = Main Stem Reach = ms RS = 122886.




Trinity River Model Plan: 1) Alt 4A 100 YR 2) CDC 100yrPlan

Geom: Alternative 4A 1-YR to 100-YR

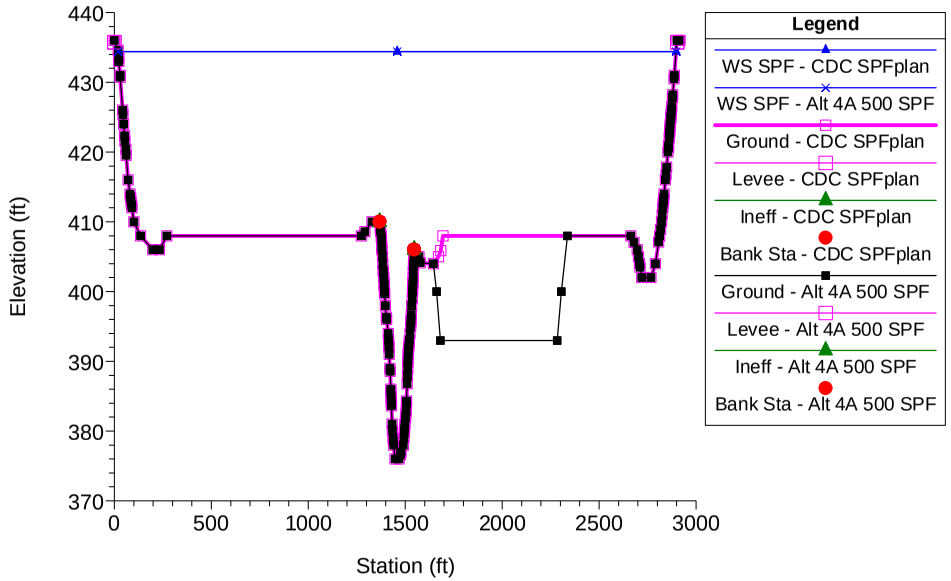
River = Main Stem Reach = ms RS = 113405.



Trinity River Model Plan: 1) Alt 4A 500 SPF 2) CDC SPFplan

Geom: Alternative 4A 500-YR to SPF

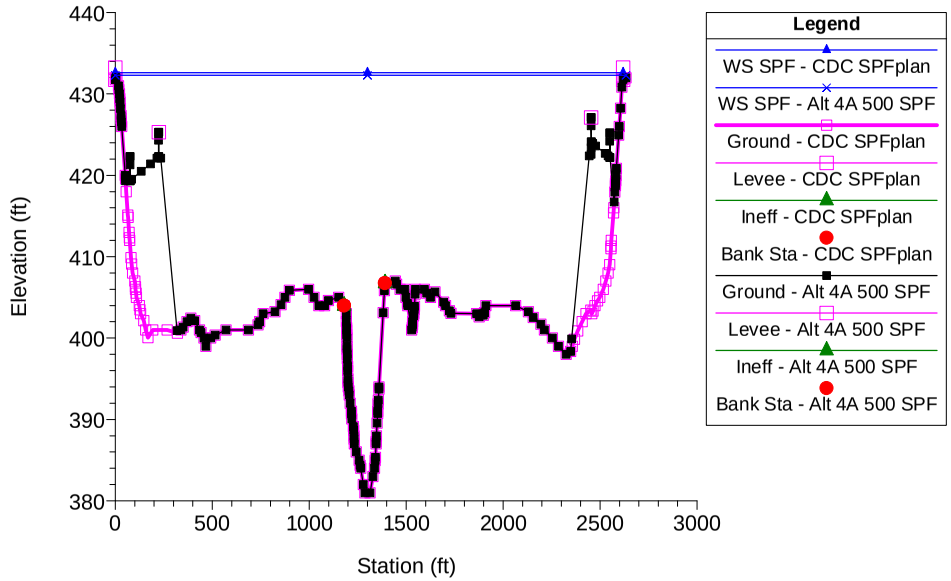
River = Main Stem Reach = ms RS = 142004.




Trinity River Model Plan: 1) Alt 4A 500 SPF 2) CDC SPFplan

Geom: Alternative 4A 500-YR to SPF

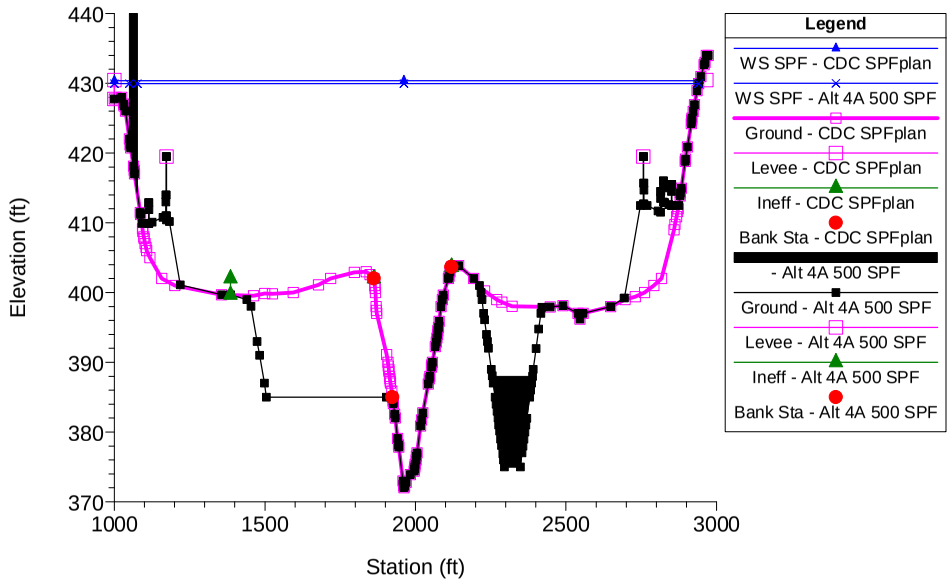
River = Main Stem Reach = ms RS = 132417.




Trinity River Model Plan: 1) Alt 4A 500 SPF 2) CDC SPFplan

Geom: Alternative 4A 500-YR to SPF

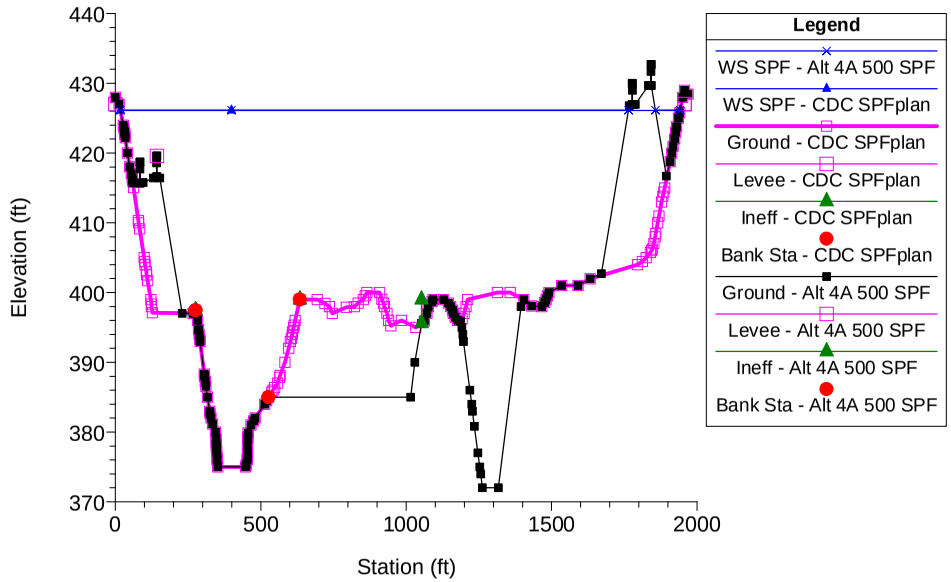
River = Main Stem Reach = ms RS = 122886.




Trinity River Model Plan: 1) Alt 4A 500 SPF 2) CDC SPFplan

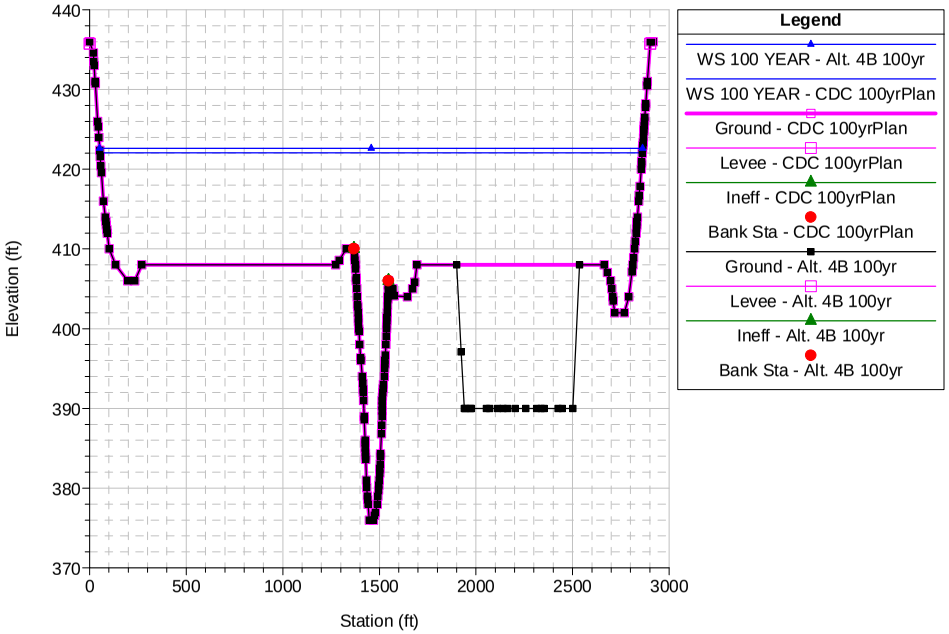
Geom: Alternative 4A 500-YR to SPF

River = Main Stem Reach = ms RS = 113405.



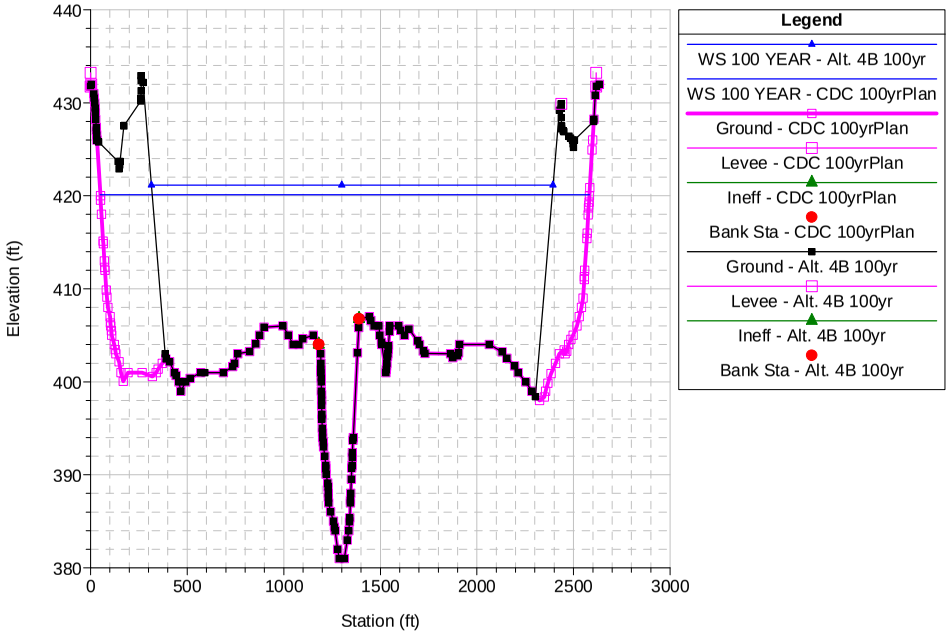
Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 100yr 2) CDC 100yrPlan

RS = 142004.



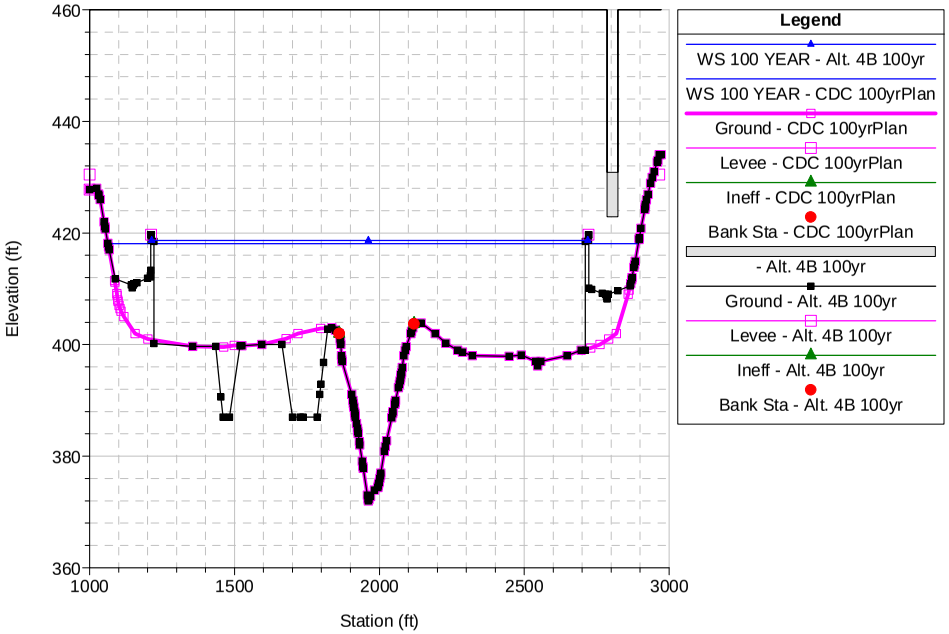

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 100yr 2) CDC 100yrPlan

RS = 132417.



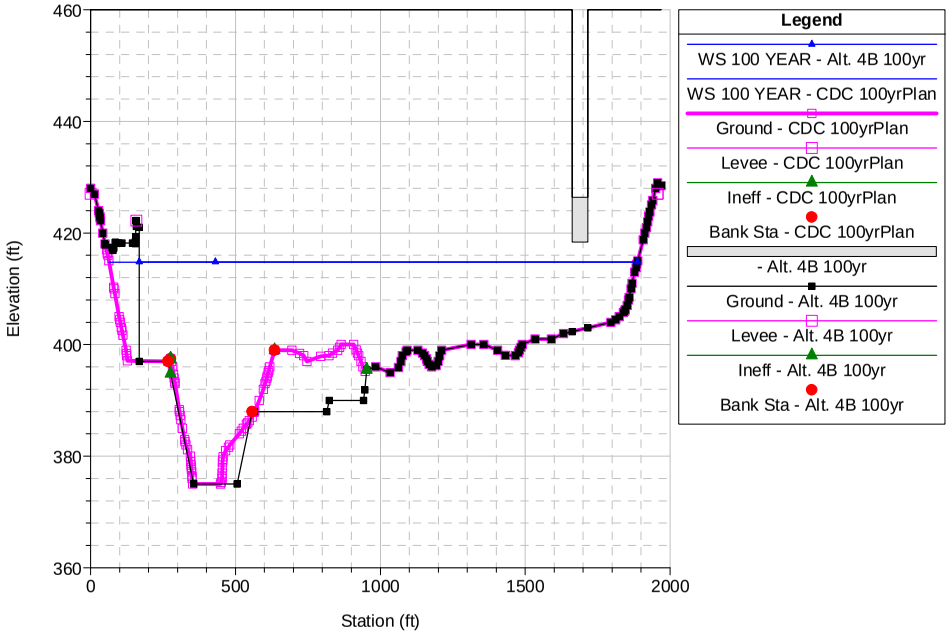

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 100yr 2) CDC 100yrPlan

RS = 122886. xxx



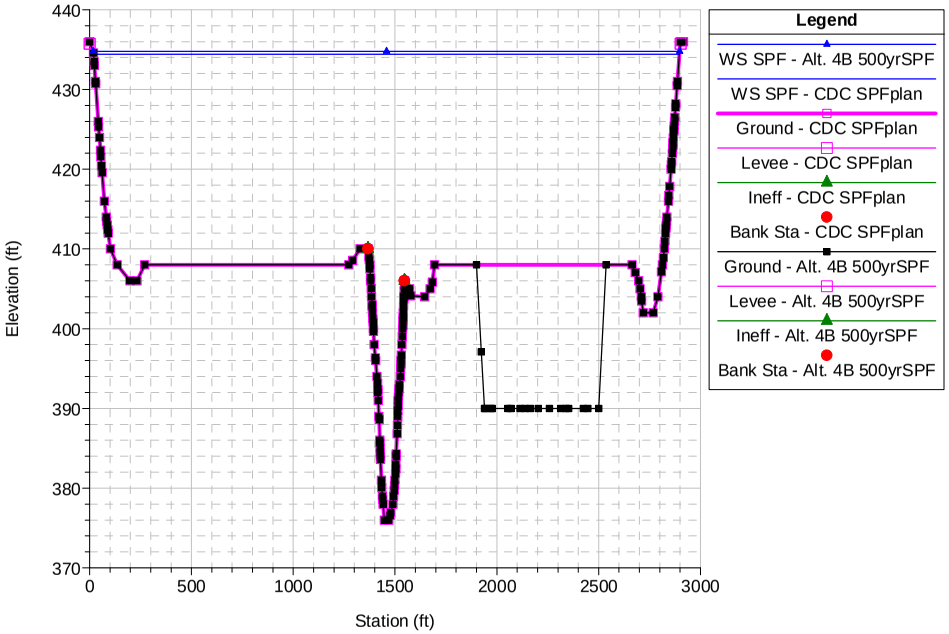

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 100yr 2) CDC 100yrPlan

RS = 113405. xxx



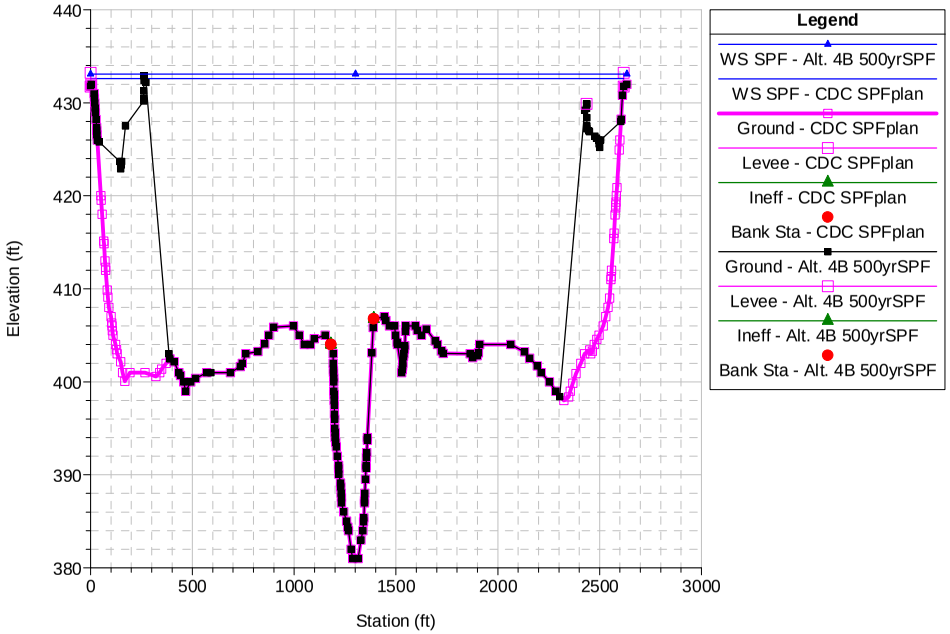
Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 500yrSPF 2) CDC SPFplan

RS = 142004.



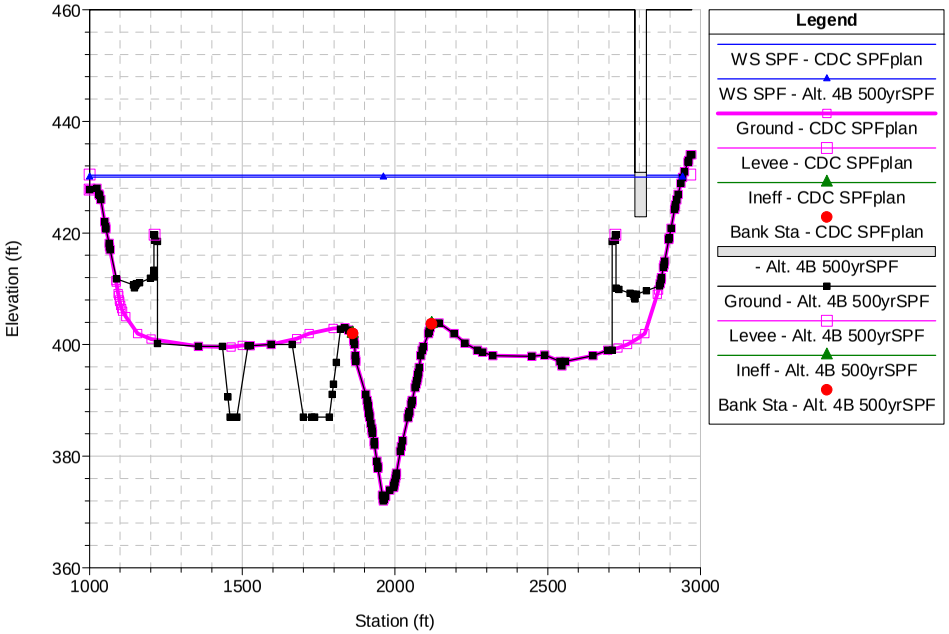

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 500yrSPF 2) CDC SPFplan

RS = 132417.



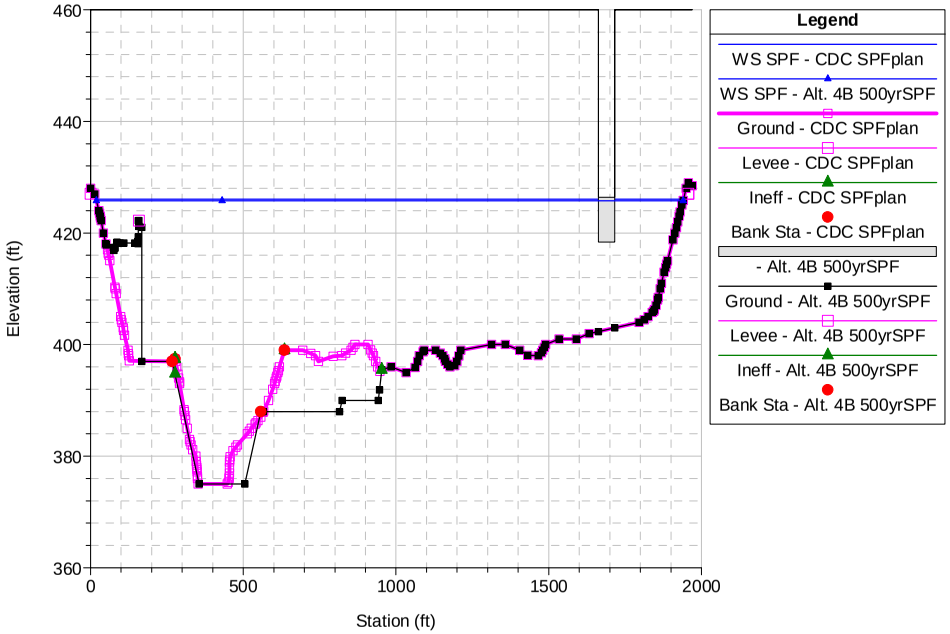

Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 500yrSPF 2) CDC SPFplan

RS = 122886. xxx




Trinity Model Final Alignments 04/25/08 Plan: 1) Alt. 4B 500yrSPF 2) CDC SPFplan

RS = 113405. xxx



Halff Associates

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

# MEETING MINUTES

**To:** All Attendees

**From:** Matt Craig, Halff Associates, Inc.

**Subject:** Trinity Parkway: Hydraulics Work Group Coordination Meeting

**Meeting Date:** May 30, 2007

**Location:** Teleconference

**Minutes Date:** June 5, 2007

**AVO No.** 17826 / WO29

**Attendees:**

USACE – David Wilson
Dallas – Greg Ajemian
LGG – Doug Guinn
LGG – Richard Carson
LGG - Phillip
Halff – Matt Craig
Halff – Walter Skipwith
Halff – Russell Erskine
Halff – Todd Milburn

| Item | Description |
|---|---|
| | This meeting was held to coordinate hydraulic modeling efforts for the proposed Trinity Parkway, City of Dallas Lakes and USACE's flood fighting capabilities.<br>Topics for discussion:<br>1. Previous HECRAS model<br>2. New model runs for Trinity Parkway Alternatives 3C and 4B<br>3. Revisions needed for the River Relocation and latest Lake Design<br>4. Coordination between Modelers<br>5. Schedule<br>6. Next Meeting time |

1. **Previous Models**

The last hydraulic models for the Trinity Parkway were run on July 2006. USACE noted that the CDC model has since been updated for BNSF Railroad bridge, 1990's channel excavation and levee embankment additions using new cross sections from updated survey work. The Model was also updated to HECRAS Version 4.0. USACE did not expect to do any more updates or tweaks to the CDC model. David Wilson will provide a copy of the latest CDC model to Halff and LopezGarcia Group (LGG).

2. **New Model Development**

Halff is completing the geometric layouts for the new Trinity Parkway Alternative 3C for NTTA, and will be ready to develop HECRAS cross sections in about a week. LGG is working with CH2M Hill on the proposed lake layout and river realignment geometry for the City of Dallas. Halff will also be developing the geometry for the new Parkway Alternative 4B.

USACE asked if the levee crossings of the Parkway had been settled with the Geotech Work Group. Halff noted that the geometry of the Parkway had been settled with the Geotech Group using diaphragm walls at the crossings. However, the Hampton Rd area crossing has yet to be finalized, and the size and depth of the West Dallas Lake (west overbank between Hampton

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

and Westmoreland Rd) may vary based on the needs to balance the earthwork borrow requirements. Halff will send the layout of the Parkway Alternative 3C plan to USACE.

Halff will be generating the new HECRAS cross sections for the Parkway, and asked LGG for a TIN file (3D CADD file) of the proposed lakes and river relocation. This TIN file would be used with the roadway TIN file to cut new sections to import into HECRAS.

3. **Model Versions**

The group discussed which scenarios should be modeled. Work will start with the latest USACE CDC model. Halff will then model the "Excavation Plan" which represents the dry excavation of the lakes and the dry part of the river relocation from DART bridge to Sylvan Ave. Dallas asked that the full excavation of the river be included in this model, since they would like to fully excavate the channel first. USACE stated this may be acceptable if there was not a big time difference between the river excavation and the lake excavations for the Parkway. Team members will investigate if this can be done together.

USACE is studying the levee raises without the Parkway and lake excavations to show its impacts as a stand alone project, although borrow sites would be in general location with the proposed lakes. They will then do a model with the Parkway and lake excavations. USACE will also model the ATSF railroad bridge removal as part of the Federal project and not as a stand alone project. Halff noted that the hydraulic model for the ATSF Trestle Trail was modeled with neutral impacts, only taking out a short 20' to 40' section of the ATSF bridge by the truss section. USACE work would account for the full ATSF bridge removal.

4. **Coordination of Model Production**

LGG will develop the TIN file for the lakes and river relocations, and provide to Halff. Halff will cut the full HECRAS sections which include the road, lakes and river. Dallas noted that they are studying the river cross section for low flows in the channel. Dallas is meeting with the interior drainage consultant next week (~June 5) to determine the channel cross section, and will provide results to LGG for their work.

5. **Schedule**

LGG expected development of the lakes and river TIN file generation to take about two weeks. Halff asked for results by June 8 since the Parkway has a deadline for completion of the internal SDEIS draft by July 31, and needs about 10 weeks to complete the hydraulic modeling. LGG is working with CH2M Hill on the channel location refinement to meet the USACE need for the river (and other excavations) to be at least 200' from the toe of the proposed levees. Lake design team will be meeting with Dallas early next week to resolve lake/river location issues.

**The Hydraulics Work Group plans to hold a second teleconference meeting at 11 a.m. on June 6, 2007.**

---

*This concludes the Meeting Minutes. Our goal is to provide a complete and accurate summary of the proceedings of the subject meeting in these minutes. If you feel that any of the items listed above are not correct, or that any information is missing or incomplete, please contact Halff Associates so that the matter can be resolved, and a correction issued if necessary. These minutes will be assumed to be correct and accepted if we do not hear from you within ten (10) calendar days from your receipt.*

Halff Associates

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

# MEETING MINUTES

**To:** All Attendees

**From:** Matt Craig, Halff Associates, Inc.

**Subject:** Trinity Parkway: Hydraulics Work Group Coordination Meeting

**Meeting Date:** June 6, 2007

**Location:** Teleconference

**Minutes Date:** June 18, 2007

**AVO No.** 17826 / WO29

**Attendees:**

USACE – Darlene Prochaska
NTTA – Chris Anderson
Dallas – Greg Ajemian
LGG – Bernie Hietbrink
Halff – Matt Craig
Halff – Dick Westsmith
Halff – Russell Erskine
Halff – Todd Milburn
Halff – Joe Novoa

| Item | Description |
|---|---|
| | This meeting was held to continue coordination on hydraulic modeling efforts for the proposed Trinity Parkway, City of Dallas Lakes and USACE's flood fighting capabilities. |

Topics for discussion followed the minutes of the May 30, 2007 Hydraulics Group Meeting:
1. Previous HECRAS model
2. New model runs for Trinity Parkway Alternatives 3C and 4B
3. Revisions needed for the River Relocation and latest Lake Design
4. Coordination between Modelers
5. Schedule
6. Next Meeting time

1. **Previous Models**

Halff received a copy of the latest CDC model from the USACE.

2. **New Model Development**

Halff is completing the geometric layouts for the new Trinity Parkway Alternative 3C for NTTA. LGG submitted revised lake layout and river realignment geometry to CH2M Hill on June 5. CH2M Hill will use that information to develop a TIN file (3D CADD file) of the proposed lakes and river relocation, and submit to Halff early in the week of June 11. Halff will use the TIN file with the roadway TIN file to cut new sections to import into HECRAS. Halff will generate the new HECRAS cross sections for the Parkway and have initial results of HECRAS within about three weeks from receipt of the lake/river TIN file. Initial results will be shared with the hydraulics work group.

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

3. **Model Versions**

The group discussed which scenarios should be modeled. The team confirmed that work will start with the latest CDC model as provided by USACE. Halff will then model the "Excavation Plan" which represents the dry excavation of the lakes and the dry part of the river relocation from DART bridge to Sylvan Ave. The Trinity Parkway Supplemental DEIS (SEIS) will only publish the results of the "Excavation Plan" with the Trinity Parkway "Build" alternatives following the river alignment (3A, 3B, 3C, 4A, 4B and maybe 5). The Final EIS (FEIS) would report the final results of the modeling needed for the final alternative selected for the Parkway. NTTA noted that the modeling by the Parkway team will only cover that needed for its permitting. Dallas asked that the full excavation of the river be included in the "Excavation Plan" model, since they would like to fully excavate the channel first. A separate meeting will be conducted for the team members to discuss the construction sequencing and permitting requirements.

The City is also working with their interior drainage consultant on the low flow volumes and channel cross section of the Trinity River. The total flow of 20,000 cfs comprises the 13,000 cfs target releases in the channel, plus 7,000 cfs from the floodway outfalls discharging a 100 year/ 24 hour rainfall. Dallas will be meeting with their consultant to decide on channel cross section to carry this flow. The team agreed that if the Excavation Plan lowers the water surface of this low flow (approx. 2 year storm), then it would not be considered a negative impact.

USACE is studying the levee raises without the Parkway and lake excavations to show its impacts as a stand alone project, although borrow sites would be in the general location of the proposed lakes. Results of their efforts are expected in August.

4. **Coordination of Model Production**

Discussed in previous section.

5. **Schedule**

The general schedule for hydraulic modeling is as follows:
- One week for river/lake geometry by LGG/CH2M to Halff
- Then two weeks after that for HECRAS model development for Alt. 3C
- Results of Trinity Pky Alt. 3C – July 31 (to be included in SDEIS internal draft due July 31)
- Results of Trinity Pky Alternative 4B – August
- Results of USACE Levee Raise – August 15

6. **Next Meeting**

The Hydraulics Work Group plans to hold a third teleconference meeting at 1:30 p.m. on June 20, 2007.

---

*This concludes the Meeting Minutes. Our goal is to provide a complete and accurate summary of the proceedings of the subject meeting in these minutes. If you feel that any of the items listed above are not correct, or that any information is missing or incomplete, please contact Halff Associates so that the matter can be resolved, and a correction issued if necessary. These minutes will be assumed to be correct and accepted if we do not hear from you within ten (10) calendar days from your receipt.*

Halff Associates

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

# MEETING MINUTES

**To:** All Attendees

**From:** Matt Craig, Halff Associates, Inc.

**Subject:** Trinity Parkway: Hydraulics Work Group Coordination Meeting

**Meeting Date:** June 20, 2007

**Location:** Teleconference

**Minutes Date:** July 9, 2007

**AVO No.** 17826 / WO29

**Attendees:**

USACE – David Wilson
USACE – Gene Rice
USACE – Darlene Prochaska
NTTA – Chris Anderson
Dallas – Greg Ajemian
LGG – Bernie Hietbrink
LGG – Richard Carson
Halff – Matt Craig
Halff – Russell Erskine
Halff – Todd Milburn

| Item | Description |
|---|---|
| | This meeting was held to continue coordination on hydraulic modeling efforts for the proposed Trinity Parkway, City of Dallas Lakes and USACE's flood fighting capabilities. |

Topics for discussion followed the minutes of the June 20, 2007 Hydraulics Group Meeting:
1. Previous HECRAS model
2. New model runs for Trinity Parkway Alternatives 3C and 4B
3. Revisions needed for the River Relocation and latest Lake Design
4. Coordination between Modelers
5. Schedule
6. Next Meeting time

1. **Previous Meeting Minutes**

No comments on the June 6, 2007 meeting minutes.

2. **New Model Development**

Halff is refining the geometric layouts for the new Trinity Parkway Alternative 3C for NTTA. CH2M Hill provided a TIN file (3D CADD file) of the proposed lakes and river relocation during the week of June 11. Halff needs to edit the TIN file for the excavation work of the roadway ("Excavation Only" plan). They will then add in the roadway TIN file to cut new sections to import into HECRAS. Halff will generate the new HECRAS cross sections for the Parkway and have initial results of HECRAS within about three weeks from receipt of the lake/river TIN file. Initial results will be shared with the hydraulics work group.

3. **Model Versions**

The group discussed which scenarios should be modeled. The team confirmed that work will

8616 Northwest Plaza Drive
Dallas, Texas 75225-4292
(214) 346-6200
Fax (214) 739-0095

start with the latest CDC model as provided by USACE. Halff will then model the "Excavation Plan" which represents the dry excavation of the lakes and the dry part of the river relocation from DART bridge to Sylvan Ave. The Trinity Parkway Supplemental DEIS (SEIS) will only publish the results of the "Excavation Plan" with the Trinity Parkway "Build" alternatives following the river alignment (3A, 3B, 3C, 4A, 4B and maybe 5). The Final EIS (FEIS) would report the final results of the modeling needed for the final alternative selected for the Parkway. NTTA noted that the projects need to maintain independent utility as a stand-alone project. USACE will schedule a meeting during the week of July 4 with Presley Hatcher and others at the Corps to discuss the permitting issues. Models to be run include:

1) Alt. 3C Excavation Only Plan - Halff - model creation due early July, results by July 31
2) Alt. 4B Excavation Only Plan - Halff – results in August
3) Alt. 3A/3B Excavation Only Plan - Halff - results in August
4) Alt. 4A Excavation Only Plan - Halff - results in August
5) Levee Raise Only – USACE- results in August, plan formulation in Sept.
6) Ultimate Plan, with road, lakes, levee raise and channel meander - Dallas

All runs will include the 100 year and SPF flows.

The City is also working with CH2M Hill on low flows and sediment loading that may change the channel cross section.

NTTA asked that the USACE and team come to consensus on basic policy issues that go into the model, such as permitting excavation within the floodway. USACE noted that their HQ office would need to make the final decision. NTTA asked about the CDC criteria in the 1988 ROD. USACE noted that each project will be evaluated based on its individual impacts.

4. **Schedule**

The general schedule for hydraulic modeling is as follows:
- Two weeks after that for HECRAS model development for Alt. 3C
- Results of Trinity Pky Alt. 3C – July 31 (to be included in SDEIS internal draft due July 31)
- Results of Trinity Pky Alternative 4B – August
- Results of USACE Levee Raise – September

5. **Next Meeting**

The Hydraulics Work Group plans to hold a fourth teleconference meeting at 1:30 p.m. on July 9, 2007.

---

*This concludes the Meeting Minutes. Our goal is to provide a complete and accurate summary of the proceedings of the subject meeting in these minutes. If you feel that any of the items listed above are not correct, or that any information is missing or incomplete, please contact Halff Associates so that the matter can be resolved, and a correction issued if necessary. These minutes will be assumed to be correct and accepted if we do not hear from you within ten (10) calendar days from your receipt.*

1201 North Bowser Road
Richardson, Texas 75081
(214) 346-6200
Fax (214) 739-0095

# MEETING MINUTES

**To:** All Attendees

**From:** Matt Craig, Halff Associates, Inc.

**Subject:** Trinity Parkway: Hydraulics Work Group Coordination Meeting

**Meeting Date:** July 9, 2007

**Location:** Teleconference

**Minutes Date:** July 9, 2007

**AVO No.** 17826 / WO29

**Attendees:**

USACE – David Wilson
USACE – Gene Rice
NTTA – Chris Anderson
LGG – Bernie Hietbrink
LGG – Richard Carson
Halff – Matt Craig
Halff – Russell Erskine
Halff – Todd Milburn
Halff – Walter Skipwith
FHWA – Ruth Rentch (by phone)
FHWA – Joe Krolak (by phone)

| Item | Description |
|---|---|
| | This meeting was held to continue coordination on hydraulic modeling efforts for the proposed Trinity Parkway, City of Dallas Lakes and USACE's flood fighting capabilities. |

1. **Previous Meeting Minutes**

   No comments on the June 20, 2007 meeting minutes.

2. **New Model Development**

   Halff is refining the new HECRAS cross sections for the Parkway Alt. 3C and will have initial results of HECRAS within about two to three weeks. Initial results will be shared with the hydraulics work group. Halff noted that the embankment against the Trinity Parkway floodwall may need to be removed for hydraulic conveyance. LGG will coordinate with the Lake Design team on this potential. Halff also noted that as a result of the interagency meeting on July 3 regarding permitting and processing, the Alt. 3C model ("Excavation Only Plan") will not include the Trinity River channel relocation. The channel relocation will be part of the City of Dallas Lakes design work, hydraulic modeling and permitting.

   The USACE is continuing its model development for the levee raise as a stand-alone condition. USACE will provide the status of their modeling at the next meeting. USACE asked that the other modelers be sure to use the latest CDC model with the recent changes. Halff stated they were using the CDC model recently provided by USACE as the baseline condition. NTTA asked that the USACE and team come to consensus on basic policy issues that go into the model, such as permitting excavation within the floodway.

1201 North Bowser Road
Richardson, Texas 75081
(214) 346-6200
Fax (214) 739-0095

3. **Model Versions** (not part of this meeting, but included for future reference)

The work will start with the latest CDC model as provided by USACE. Halff will then model the "Excavation Plan" which represents the dry excavation of the lakes. The Trinity Parkway Supplemental DEIS (SEIS) will only publish the results of the "Excavation Plan" with the Trinity Parkway "Build" alternatives following the river alignment (3A, 3B, 3C, 4A, 4B and maybe 5). The Final EIS (FEIS) would report the final results of the modeling needed for the final alternative selected for the Parkway. Consensus of the team was that each project needs to maintain independent utility (i.e. to work as stand-alone projects.) Models to be run include:

1) Alt. 3C Excavation Only Plan - Halff
2) Alt. 4B Excavation Only Plan - Halff
3) Alt. 3A/3B Excavation Only Plan - Halff
4) Alt. 4A Excavation Only Plan - Halff
5) Levee Raise Only – USACE
6) Ultimate Plan, with road, lakes, levee raise and channel meander - Dallas

All runs will include the 100 year and SPF flows.

The City is also working with CH2M Hill on low flows and sediment loading that may change the channel cross section.

4. **Next Meeting**

The Hydraulics Work Group planned to hold a fifth teleconference meeting before the July 26, 2007 Lake Design monthly meeting. **[Meeting was postponed until September 18]**

---

*This concludes the Meeting Minutes. Our goal is to provide a complete and accurate summary of the proceedings of the subject meeting in these minutes. If you feel that any of the items listed above are not correct, or that any information is missing or incomplete, please contact Halff Associates so that the matter can be resolved, and a correction issued if necessary. These minutes will be assumed to be correct and accepted if we do not hear from you within ten (10) calendar days from your receipt.*

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX G

# PUBLIC AND AGENCY INVOLVEMENT DOCUMENTATION

THIS PAGE INTENTIONALLY LEFT BLANK

# Appendix G. Public and Agency Involvement Documentation

## TABLE OF CONTENTS

**APPENDIX G-1. Public Hearing Summary and Analysis / Certification**

- Summary report of public hearing, comments received, and responses; certification statement

**APPENDIX G-2. Comments and Responses**

- List of statements, list of topics/subtopics, comments and responses

**APPENDIX G-3. Public Hearing Materials**

- Public hearing notices, delivery of copies, handout materials, slides, photos

**APPENDIX G-4. Public Hearing Transcript and Verbal Statements Received**

- Verbatim public hearing transcript and verbal statements, with index

**APPENDIX G-5. Written Statements Received**

- Copies of all written statements, with index

**APPENDIX G-6. Correspondence**

- Supplements Appendix A-1---adds to table of agency correspondence and copies of documents sent and received

**APPENDIX G-7. Agency and Public Participation Events**

- Supplements Appendix A-2---adds to listing of agency and public participation events

**APPENDIX G-8. Speaking Events, Public Debates, and Media Coverage Leading up to November 6, 2007 Special Election**

**Note:** The Public Hearing documentation included in **Appendix G-1** through **G-5** pertains to the Draft Environmental Impact Statement (DEIS) published in February 2005.

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX G-1

# PUBLIC HEARING SUMMARY AND ANALYSIS / CERTIFICATION

THIS PAGE INTENTIONALLY LEFT BLANK

**APPENDIX G-1. Public Hearing Summary and Analysis / Certification**

**DISTRICT / COUNTY:** Dallas District / Dallas County

**HIGHWAY / LIMITS:** IH-35E / SH-183 Interchange to US-175 / SH-310 Interchange

**CSJ / PROJECT NUMBERS:** 0918-45-121

**PROPOSED IMPROVEMENTS:**
The proposed action is the construction of a limited-access toll facility from the IH-35E/SH-183 interchange (north terminus) to the US-175/SH-310 interchange (south terminus), a distance of approximately nine miles, in the City of Dallas, Dallas County, Texas. The Trinity Parkway would consist of four to six mixed-flow main lanes, local street interchanges, and freeway-to-freeway interchanges at the north terminus, south terminus, Woodall Rodgers Freeway, and IH-45. Additional interchange connections are included, but vary between each of the Build Alternatives considered in the DEIS. Access roads would be added along the parkway route to restore property access where it currently exists, subject to agency justification and approval due to cost, engineering considerations, or other impacts. Toll collection facilities would comprise main lane plazas, ramp plazas, and ancillary facilities.

**NEED AND PURPOSE**:
The transportation needs in the Trinity Parkway study area stem from insufficient transportation capacity (freeway lanes, city streets, transit, etc.) in the Canyon/Mixmaster area near downtown Dallas to carry needed trips flowing north-south (generally along IH-35E) and east-west (generally along IH-30). The traffic problems in the Canyon and Mixmaster are made worse by the layout of main lanes, service roads, ramps, and surface streets in the area, which fail to properly provide for the routes and destinations of the traveling public. The types of secondary problems include forced lane changes, abrupt and unexpected merges, weaves, and exits, missing connections for direct freeway-to-freeway movements, high accident rates, and poor access for emergency response. The purpose of the Trinity Parkway is to manage congestion on IH-35E, IH-30, and other major transportation facilities within the Trinity Parkway study area in order to improve mobility, safety, and increase accessibility to businesses and public facilities.

**ENVIRONMENTAL DOCUMENT APPROVAL:**
The Federal Highway Administration (FHWA) approved the DEIS document for circulation on January 28, 2005.

**NOTICES AND ARTICLES:**
Prior to the public hearing a variety of notices were provided to inform members of the community about the proposed project, the public hearing, and the opportunity to provide comments. Notices were published in the legal notice sections of four area newspapers as outlined in **Table G-1**, and notices were mailed to community leaders, agencies, interested groups, potential affected property owners, and other persons on the project mailing list. The content of the legal notice and the materials mailed to property owners is provided in **Appendix G-3**, as is a listing of the locations where copies of the DEIS were made available to the public for review. In addition to legal notices, the hearing was publicized by news releases distributed to area broadcast media. The DEIS was also posted on the NTTA's website prior to the public hearing.

**Table G-1. Publication of Notices of the Public Hearing**

| Publication | 1st Notice | 2nd Notice | 3rd Notice | 4th Notice |
|---|---|---|---|---|
| Dallas Morning News | 25 Feb 2005 | 4 March 2005 | 11 March 2005 | 20 March 2005 |
| Al Dia (Spanish) | 25 Feb 2005 | 4 March 2005 | 11 March 2005 | 19 March 2005 |
| Dallas Weekly | 23 Feb 2005 | 2 March 2005 | 9 March 2005 | 23 March 2005 |
| El Sol de Texas (Spanish) | 25 Feb 2005 | 4 March 2005 | 11 March 2005 | 18 March 2005 |

**PUBLIC HEARING DATE AND PLACE:**

A public hearing and open house were held on Tuesday, March 29, 2005 at the Dallas Convention Center Arena. An open house was held from 2:00 p.m. to 6:00 p.m. and allowed members of the public to view exhibits detailing aspects of the No-Build Alternative (Alternative 1) and six Build Alternatives (Alternatives 2A, 2B, 3A, 3B, 4, and 5) under consideration and summarized important findings of the DEIS and Section 4(f) Evaluation. During the formal presentation for the hearing, which began at 6:00 p.m., the NTTA provided information on the proposed construction of the Trinity Parkway reliever route in the City of Dallas.

**ATTENDANCE:**

Attendance of 159 people was recorded for the open house and public hearing; this number includes one elected official from the City of Dallas and 13 public officials representing the EPA (2), USACE (1), NWRS (1), NCTCOG (6), and the City of Dallas (3). In addition, at least 20 people representing the FHWA, TxDOT, and NTTA were on hand during the open house and public hearing to explain the proposed project and answer questions.

**CONDUCTED BY:**

Mr. Christopher Anderson, P.E., Planning Director for the NTTA.

**EXHIBITS:** The following stations were available for attendees to visit: (1) registration; (2) right-of-way acquisition and relocation assistance; (3) copies of the DEIS; (4) poster exhibits depicting various aspects of the project and its alternatives; and, (5) design schematics for each alternative. Staff members were available at each of these stations to answer questions about the proposed project. A listing of the exhibits displayed and several photographs of the open house and public hearing are in **Appendix G-3**; this appendix also contains a copy of welcome packet of materials handed to each person who registered, which included the following: the meeting agenda, copies of slides used during the formal presentation, a summary of characteristics and impacts for each of the alternatives under consideration, instructions as to where copies of the DEIS could be reviewed, and instructions and forms regarding making verbal and written comments on the DEIS.

**COMMENTS FROM ELECTED / PUBLIC OFFICIALS:**

**Verbal:** One verbal statement was made by an elected official representing the City of Dallas, who indicated his support for the proposed project.

**Written:** Written statements were submitted by two public officials at the public hearing, both of whom expressed their support for the proposed project on behalf of the NCTCOG.

**COMMENTS FROM THE PUBLIC:**

**Verbal:** Interested citizens provided 21 verbal statements during the public hearing. Of these, seven expressed support for the project, seven expressed opposition to the project, and seven made statements that were neutral as to whether the proposed project should be built.

**Written:** The formal comment period began on February 10, 2005 and closed on April 8, 2005. During this period, 57 written statements were received from members of the public. The DEIS was also distributed to all federal, state, and local government agencies with potential interest in the proposed project; 10 written statements (in addition to the two written statements noted above) were received from government agencies.

**SUMMARY OF HOW MAJOR COMMENTS / ISSUES WERE ADDRESSED:**

A total of 22 commenters spoke or wrote in support of the proposed project, and 16 commenters spoke or wrote against the project. The majority of the oral and written comments from citizens favored the project, and particularly Alternative 3B. Most of the citizens that expressed opposition to the proposed project said they did not want to see a highway within the Dallas Floodway. The opposition of these citizens centered on the negative affect that the new roadway would have on the existing human and natural environment. Major concerns expressed involved the following environmental issues: relocations and displacements, floodplains, wetlands, and wildlife habitat.

The SDEIS incorporates additional information and corrections, primarily hydraulic modeling of Build Alternatives in the Dallas Floodway, construction criteria and intended roadway operations within the Dallas Floodway, analysis of impacts to vegetation and waters of the United States (U.S.), including wetlands, cumulative impacts analysis, historic properties analysis, and flood emergency response planning. The DEIS addresses potential impacts regarding an area over which the USACE, a cooperating agency, has regulatory jurisdiction. The additional information in the SDEIS will also help the FHWA in identifying a preferred alternative that best avoids, minimizes, or mitigates the environmental, social, and economic impacts of the proposed project.

In general, responses to comments fell into one of three basic types. First, commenters that asked questions or requested information received an explanatory response, often with a citation to information in the DEIS, SDEIS, or other sources for further reference. Second, some comments that expressed an opinion but did not appear to be seeking a response have been noted and considered. Third, responses to comments that warrant a modification of the DEIS indicate the nature of the change that will be made in the FEIS.

Individual responses frequently cite to supplemental information, particularly regarding the topics of project design and operations, floodplains, wetlands, wildlife habitat, air quality, cultural resources, and cumulative effects. The following is a summary overview of key issues and concerns from the comments received, and the FHWA's responses for each topic area. Detailed FHWA responses to the issues and concerns of public officials and citizens can be found in **Appendix G-2** of this document.

**1. Purpose and Need.**

Summary of Comments: The proposed project is not justified in terms of anticipated traffic demands, and the DEIS should have examined more closely the alternatives to a roadway, such as rail mass or bus transit, as well as greater use of existing roadways and HOV lanes.

Summary of Responses: The proposed project is an element of a multi-governmental plan that addresses the transportation needs for the North Central Texas Region. This regional plan forecasts future travel demands and seeks to timely meet those demands after considering all available tools (e.g., mass transit, sustainable land use, and roadway construction). Within this planning process, and after considering a myriad of methods to address transportation needs, participants in the regional planning process have identified the Trinity Parkway project as an important component of the region's long-range transportation plan.

**2. Alternatives.**

Summary of Comments: This topic summarizes the preferences of commenters in terms of general support or opposition to the proposed project. In addition, some commenters provided additional details in support of their preferences for the Build Alternatives or the No-Build Alternative, and were generally advisory in nature.

Summary of Responses: Generally, the comments in this topic were noted and considered as they bear on the ultimate decision to select a preferred alternative. Where specific matters of concern were raised as to a particular alternative, the FHWA provided additional details as to the design features or other aspects of the Build Alternatives in question.

**3. Project Design.**

Summary of Comments: Commenters raised a variety of questions on specific aspects of the proposed project's design, and many made suggestions as to design strategies that should be considered as the project is developed further.

Summary of Responses: Most design suggestions were noted and will be considered further as the project progresses. Responses to several comments raising specific questions included citations to relevant portions of the DEIS and additional explanatory material.

**4. Costs.**

Summary of Comments: Several commenters either requested additional information as to items that were included in cost estimates in the DEIS, or made suggestions as to how to better present cost data.

Summary of Responses: Explanatory material was provided for specific inquiries as to cost information, and suggestions that were made were noted and considered.

**5. Regulatory Process.**

Summary of Comments: The comments on this topic were received primarily from the USACE and raised questions regarding the regulatory processes that would be involved with the construction of any of the floodway Build Alternatives. For example, several comments included a request to clarify the DEIS as to the relevance and aspects of the 1988 USACE Record of Decision (ROD) that imposed limitations on developments within Trinity River floodplains.

Summary of Responses: The FHWA agreed to make the revisions recommended by the USACE to clarify the regulatory process in the DEIS and by adding information in the SDEIS, particularly as it relates to the role of the USACE in the ROD and Corridor Development Certificate processes, and in issuing permits under Section 404 of the Clean Water Act.

**6. Public Involvement.**

Summary of Comments: Several commenters requested explanations as to the steps taken to involve the public, and some requested additional meetings. Several commenters expressed appreciation for the extensive public involvement efforts for the project prior to and at the public hearing. 15 commenters requested an extension of time to submit comments.

Summary of Responses: The FHWA explained specific public involvement steps as they related to subtopics such as the community advisory workgroup and distribution of copies of the DEIS. As for the requests for an extension of time, an outline of the regulatory requirements for public involvement was provided in addition to a summary of data indicating compliance with those requirements.

**7. USACE Coordination.**

Summary of Comments: Nearly all comments under this topic came from the USACE, and requested changes in the DEIS to clarify the role of the USACE with respect to the proposed project.

Summary of Responses: The FHWA indicated that most of the requested changes have been made in the SDEIS, and otherwise provided explanatory responses to questions that had been raised.

**8. Adequacy of Investigation.**

Summary of Comments: Comments received principally from the USACE, and a few private citizens, requested a greater degree of detail in describing anticipated impacts of the proposed project, as well as in the discussion of mitigation measures.

Summary of Responses: The FHWA agreed to address most concerns raised by completing a SDEIS, as augmented by significant new data and analyses, and then seeking additional agency and public comment on the new document.

**9. Air Quality.**

Summary of Comments: Several commenters requested that the DEIS include air quality sampling and quantification of expected air pollutants for the various Build Alternatives, as this would bear on the area's nonattainment status for ozone. One commenter asked that the DEIS include a particulate matter study, an analysis of highway proximity and health effects, and a discussion of diesel carcinogens.

Summary of Responses: An explanation was provided as to the process for modeling ozone, and that the management of ozone pollution is performed at the regional level. Additional explanation was given as to the EPA and State of Texas process for using area-wide mobility plans (that incorporate the proposed project and other existing and planned transportation facilities) as a primary basis for regulating ozone pollution. Detailed responses were provided to the commenter on particulate matter, highway proximity and health effects, and diesel carcinogens, which discussed many of the references cited by the commenter.

**10. Economic Impacts.**

Summary of Comments: Several commenters asked questions about the anticipated effects of the proposed project on the economy of several local areas.

Summary of Responses: An explanation was provided about the relation of the proposed project to economic growth in general, as well as impacts on specific locations mentioned by commenters.

**11. Environmental Justice.**

Summary of Comments: One commenter indicated that several low-income and minority communities would be affected by the proposed project, a second challenged the equity of a toll road, and a third expressed concern that spin off commercial development would displace residential areas.

Summary of Responses: Explanations were provided that pointed out that impact to low-income and minority neighborhoods would be unavoidable because the purpose for the project could only be met by locating the roadway where it would be able to provide the traffic relief needed. An explanation as to why there would not be any disproportionate impacts to low-income or minority populations from a toll road was also provided. Concerns about urban growth management would be expected to be addressed through the local government planning process.

**12. Floodplains.**

Summary of Comments: Many of the comments were from the USACE, and raised concerns about the level of detail in the DEIS for estimating the relative impacts on flood hydraulics of the Build Alternatives in the Dallas Floodway. The USACE and other commenters also raised concerns as to whether a roadway within the floodway would be able to comply with various regulatory and design standards.

Summary of Responses: The FHWA indicated that a substantial portion of the information in the SDEIS includes detailed hydrologic and hydraulic analyses of floodway Build Alternatives. Several responses provided an explanation about relevant floodplain regulations to address the questions about regulatory compliance.

**13. Cultural Resources.**

Summary of Comments: There were several comments that raised concerns that Build Alternatives in the floodway would interfere with archaeological sites and historic bridges.

Summary of Responses: An explanation of the process for studying impacts to historic structures and effecting coordination with the State Historic Preservation Officer was provided. Concerns about impacts to archaeological sites were addressed by reviewing key points from the archaeological study, and subsequent coordination of it with the Texas Historic Commission.

**14. Noise.**

Summary of Comments: Several commenters expressed concern that there were no apparent noise abatement measures planned for floodway Build Alternatives.

Summary of Responses: Explanations were provided of the TxDOT and FHWA criteria for assessing noise impacts, with emphasis on how these criteria applied to areas of infrequent human use.

**15. Parklands.**

Summary of Comments: Several commenters had concerns about impacts on areas within the Dallas Floodway that could be developed for outdoor recreation.

Summary of Responses: The FHWA explained that it is working cooperatively with the City of Dallas in developing the proposed project, and that roadway access to recreation amenities and transportation improvements are part of an overall City of Dallas multiple use management plan for the floodway.

**16. Visual Resources.**

Summary of Comments: One commenter encouraged the FHWA to include a discussion of the view shed from the tops of the levees. Another commenter remarked that building a roadway within the floodway would enhance the preservation of natural resources by generating greater exposure of them to view.

Summary of Responses: The FHWA agreed with the comment about views from levee tops, and indicated that one-third of the observation points used in the analysis of visual resources in the DEIS were from levee tops. The FHWA also concurred with the observations of the second commenter.

**17. Water Quality.**

Summary of Comments: Several commenters expressed concern about impacts on water quality and the effectiveness of mitigation measures, particularly if the roadway is placed within the floodway.

Summary of Responses: The FHWA noted that each of the Build Alternatives, whether or not located in the floodway, would have comparable potential water quality impacts on the Trinity River. Specific concerns about mitigation measures were addressed by further discussing the regulatory processes to prevent water quality degradation from highway construction and operations.

**18. Waters of the U.S., Including Wetlands.**

Summary of Comments: Most of the comments on wetland impacts were received from the USACE, and expressed concern with the level of detail for wetland information in the DEIS.

Summary of Responses: The FHWA indicated that the SDEIS greatly expands the level of information about wetlands, including data about wetland delineations and a draft mitigation plan. The SDEIS also includes much of the information that would be required for a USACE permit to place dredged or fill material in wetlands.

**19. Wildlife Habitat.**

Summary of Comments: Comments focused primarily on the potential for the floodway alternatives to degrade existing habitat, and the lack of specific mitigation plans.

Summary of Responses: Highlights of the discussion of habitat mitigation measures in the DEIS were reiterated. In addition, modifications to the habitat materials in the SDEIS, based on commenter input, were pointed out (e.g., discussion of habitat functions, and the description of grassland mowing plans). The FHWA indicated that greater mitigation planning details will accompany the discussion of the preferred alternative in the Final EIS.

**20. Other Impacts.**

Summary of Comments: Several commenters raised concerns about impacts (e.g., energy requirements, utility relocation, farmlands, and hazardous materials) that did not fit into the other impact topics.

Summary of Responses: Additional explanatory information was provided and, where appropriate, commenters were directed to relevant sections of the DEIS.

**21. Cumulative Impacts.**

Summary of Comments: Most comments on this topic were received from the USACE, and requested additional analysis or data.

Summary of Responses: The list of foreseeable projects in the region has been updated as requested, and several modifications to the analytical report have been made in the SDEIS that address most concerns raised. Additional explanatory information was provided in response to comments that did not result in a modification of the DEIS.

**RECOMMENDATION:**

All comments have been satisfactorily addressed by the preparation of this SDEIS and the project is recommended for further development and preparation of a Final EIS.

# PUBLIC HEARING CERTIFICATION

| | |
|---|---|
| CSJ: | 0918-45-121 |
| Project No.: | STP ( ) |
| Trinity Parkway: | From IH 35E / SH 183 |
| | To US 175 / SH 310 |

Dallas County

This is to certify that:

1. A public hearing was held on March 29, 2005 covering the project's location and design.

2. Consideration has been given to the economic, social and environmental effects of the project's location and design.

3. The statutory provisions of the Civil Rights Act of 1964 and the Civil Rights Restoration Act of 1987 have also been considered in determining the economic, social and environmental effects.

4. The project's consistency with the goals and objectives of such urban planning as has been promulgated by the community has been considered.

Brian R. Barth

For William L. Hale, PE
Dallas District Engineer

7-23-07
Date

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX G-2

# COMMENTS AND RESPONSES

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX G-2
# COMMENTS AND RESPONSES
# INDEX TO TOPICS


1. Purpose and Need ..... 9
2. Alternatives ..... 15
3. Project Design ..... 22
4. Costs ..... 28
5. Regulatory Process ..... 30
6. Public Involvement ..... 34
7. USACE Coordination ..... 38
8. Adequacy of Investigation ..... 41
9. Air Quality ..... 46
10. Economic Impacts ..... 57
11. Environmental Justice ..... 59
12. Floodplains ..... 61
13. Cultural Resources ..... 68
14. Noise ..... 70
15. Parklands ..... 73
16. Visual Resources ..... 75
17. Water Quality ..... 76
18. Wetlands ..... 79
19. Wildlife Habitat ..... 84
20. Other Impacts ..... 88
21. Cumulative Impacts ..... 90


==========

**INTRODUCTORY NOTE:** Due to the overlap and repetition of some comments, similar comments were consolidated and paraphrased to reduce duplication. As a result, the comments that appear in this report are often not the precise words found in the commenter's written or verbal statement. This has been done to reduce duplication of similar comments that elicited a common response and in no way was intended to obscure the substance of a comment. Similarly, some lengthy comments containing redundant information have been condensed to achieve brevity and focus attention on the principal points made by the commenter. The reader may locate the original text of all statements in **Appendices G-4** (verbal statements, with alphabetic index) and **G-5** (written statements, with alphabetic index).

==========

## Section A. Statements and Associated Comments

All of the verbal and written statements received from members of the public (within the comment period ending on April 8, 2005) and from government agencies were assigned the statement numbers as indicated in **Table G-2**. The list of statements in **Table G-2** is alphabetical by the last name of the person who signed each written statement or who provided a verbal statement. The table also indicates whether a statement was made on behalf of an organization. Specific comments contained in the statements were extracted and organized by topic and subtopic, and responses have been prepared for each subtopic in Section C of this appendix. Statements made on behalf of an organization that is a governmental agency are noted with a parenthetical "**Agency**." A verbatim transcript of each verbal statement is in **Appendix G-4** (see index of verbal commenters at the beginning of the appendix); written statements are arranged in alphabetical order in **Appendix G-5**.

**TABLE G-2. LIST OF STATEMENTS AND COMMENTS/RESPONSES**

| State-ment # | Name (Last, First) - City | Statement Type* | Organization | Refer to Comment & Response # |
|---|---|---|---|---|
| 1 | Allen, Charles – Dallas | Verbal | Trinity River Expeditions and Save Open Space of Dallas County | 1-5, 2-1, 2-3, 2-4, 6-9, 8-1, 9-1, 12-4, 12-9, 15-1, 17-1 |
| 2 | Allen, Charles – Dallas | Written | | 6-9 |
| 3 | Allen, Charles – Dallas | Written | Trinity River Expeditions | 1-1, 1-2, 1-5, 2-1, 2-4, 2-5, 3-2, 3-13, 4-1, 6-1, 6-2, 6-3, 8-1, 8-8, 8-9, 11-2, 12-4, 12-6, 12-10, 12-13, 12-19, 12-20, 13-1, 13-2, 14-2, 15-5, 16-1, 17-3, 17-4, 17-7, 18-1, 18-2, 18-3, 19-1, 19-3, 19-4, 19-5, 19-8, 19-10, 19-11, 20-1, 20-4, 20-5, 20-6, 21-8 |
| 4 | Arbetter, Gail | Written | | 6-9 |
| 5 | Aten, Stan | Written | | 1-1, 1-3, 2-1, 9-1, 12-9 |
| 6 | Baker, Holly – Dallas | Written | | 1-1, 2-1, 2-14, 12-9, 13-3, 15-1 |
| 7 | Blackburn, James – Houston | Written | League of Women Voters of Dallas and Texas Committee on Natural Resources | 9-10, 9-11, 9-12, 12-4, 12-6, 12-7, 12-8, 12-12, 12-14, 12-16 |
| 8 | Blanks, Leron – Dallas | Written | Blanks Printing & Imaging, Inc. | 2-3, 2-19 |
| 9 | Braganza, Bonnie – Dallas | Written | Environmental Protection Agency, Region 6 **(Agency)** | 2-3, 8-3, 9-5, 9-6, 9-7, 9-8, 12-26, 18-10, 18-11, 18-12, 18-13 |
| 10 | Brewer, Bryon – Arlington | Written | | 2-3, 15-1 |
| 11 | Briner, Charles – Dallas | Written | | 14-2, 14-3 |
| 12 | Briner, Charles – Dallas | Written | | 14-1, 14-2, 14-4, 14-5 |
| 13 | Butler, Larry – Temple | Written | Natural Resource Conservation Service **(Agency)** | 20-3 |
| 14 | Campbell, Christopher – Dallas | Written | | 1-7, 2-2, 2-3, 2-10, 2-20, 6-5 |
| 15 | Carr, Barbara – Cedar Hill | Written | | 8-10 |
| 16 | Clark, John – Irving | Written | | 2-21, 3-1, 3-3, 15-2 |

## TABLE G-2. LIST OF STATEMENTS AND COMMENTS/RESPONSES

| State-ment # | Name (Last, First) - City | Statement Type* | Organization | Refer to Comment & Response # |
|---|---|---|---|---|
| 17 | Czigan, Nora – Dallas | Written | | 1-3, 2-1 |
| 18 | Dalbey, Tim – Dallas | Verbal | | 2-1, 2-6, 2-4, 3-4, 3-20, 8-9 |
| 19 | Dalbey, Tim – Dallas | Written | | 6-9 |
| 20 | Davis, Carolyn – Dallas | Verbal | Alliance of the South Dallas Fair Park Area | 6-4 |
| 21 | Davis, Carolyn – Dallas | Written | Connectional Alliance Neighbors Together | 2-3, 3-5, 6-4, 10-1, 11-1 |
| 22 | Erickson, Evelyn – Austin | Written | | 2-1, 2-15 |
| 23 | Flood, James – Dallas | Written | | 6-9 |
| 24 | Flood, Jim – Dallas | Verbal | | 2-1, 6-9, 15-1 |
| 25 | Flood, Jim – Dallas | Written | | 2-1, 6-9, 15-1 |
| 26 | Francis, Denise – Austin | Written | Office of the Governor, State of Texas **(Agency)** | |
| 27 | Fritz, Edward – Dallas | Written | Texas Committee on Natural Resources | 2-3, 15-1 |
| 28 | Garrett, Candice – Austin | Written | Texas Commission on Environmental Quality **(Agency)** | 9-9 |
| 29 | Goddard, Jim – Dallas | Written | | 1-6, 2-1, 2-3, 2-9 |
| 30 | Goddard, Shannon – Dallas | Written | | 2-3, 2-20, 3-6, 6-5 |
| 31 | Goldberg, Robert – Dallas | Verbal | | 2-3, 2-17 |
| 32 | Goldberg, Bob – Dallas | Written | Gold Metal Recyclers, Ltd. | 2-3, 2-17 |
| 33 | Gray, David – Dallas | Verbal | | 1-5, 1-6, 2-1, 6-9, 15-1 |
| 34 | Gray, David – Dallas | Written | | 6-9, 6-10 |
| 35 | Greenwood, Mike – Dallas | Written | Atmos Energy | 20-2 |
| 36 | Halstead, Donna – Dallas | Written | Dallas Citizens Council | 1-7, 2-2, 2-3, 2-18 |
| 37 | Hardin, Karen – Austin | Written | Texas Parks and Wildlife Department **(Agency)** | 2-3, 2-12, 19-12, 19-13, 19-14, 19-15, 19-16 |
| 38 | Hatchell, Jack – Arlington | Written | Regional Transportation Council, NCTCOG **(Agency)** | 1-7, 2-2 |
| See # 8 | Heyerdahl, Douglas – Dallas | Written | Blanks Printing & Imaging, Inc. | Co-signer of Statement 8 |
| 39 | Johnson, Charles – Dallas | Verbal | | 2-2, 2-3, 2-21 |
| 40 | Johnson, Lucille – Arlington | Written | North Central Texas Council of Governments (NCTCOG) **(Agency)** | |
| 41 | Jordan, Jill – Dallas | Written | City of Dallas **(Agency)** | 6-9 |
| 42 | Koesling, Michael – Dallas | Written | Woodbine Development Corp. | 2-2, 2-3, 3-1, 3-6, 3-10, 3-19, 6-7 |
| 43 | Kriehn, Thomas – Dallas | Written | | 1-4, 1-8, 2-1 |
| 44 | Kutner, Mike – Dallas | Verbal | Friends of the Old Trinity Trail | 3-7 |
| 45 | Kutner, Mike – Dallas | Written | Friends of the Old Trinity Trail | 3-7 |
| 46 | Lakhani, Mehmood – Dallas | Written | Kwick Stop Center | 2-2, 2-3, 2-20 |
| 47 | Letteer, Jeri – Dallas | Written | | 2-3, 2-17 |
| 48 | Lunceford, Michael – Dallas | Written | Mary Kay, Inc. | 1-7, 2-2, 2-3, 2-18, 10-4 |
| 49 | Mason, Richard – Dallas | Written | | 2-2, 2-3, 3-3 |
| 50 | McGowan, David – Dallas | Written | | 2-3, 2-17 |
| 51 | Meckfessel, Robert - Dallas | Verbal | Trinity Commons Foundation | 2-2, 2-3, 2-18 |
| 52 | Mills, Larry – Dallas | Written | | 8-1 |
| 53 | Mocek, Michael – Fort Worth | Written | U.S. Army Corps of Engineers, Fort Worth District **(Agency)** | 8-2 |
| 54 | Morgan, Rich – Dallas | Verbal | | 2-2, 2-3, 8-4, 16-2 |
| 55 | Morris, Michael – Arlington | Written | Regional Transportation Council (NCTCOG) **(Agency)** | 1-7, 2-2, 2-3, 6-6 |

## TABLE G-2. LIST OF STATEMENTS AND COMMENTS/RESPONSES

| State-ment # | Name (Last, First) - City | Statement Type* | Organization | Refer to Comment & Response # |
|---|---|---|---|---|
| 56 | Muncy, Jay – Dallas | Written | | 2-1, 2-3, 2-8 |
| --- | Neal, Jeffrey – Arlington | Verbal | Note: Read letters into record. | See Statements 38 and 55 |
| 57 | Norris, Gina – Dallas | Verbal | Crow Holdings | 1-7, 2-2, 2-3, 9-3 |
| 58 | Oakley, Ed – Dallas | Verbal | City of Dallas Mayor and Dallas City Council **(Agency)** | 2-2, 2-3, 6-7, 10-4 |
| 59 | Oznick, Lauren – Dallas | Verbal | | 2-1, 2-3, 2-8, 6-8 |
| 60 | Oznick, Lauren – Dallas | Written | | 2-1, 2-3, 2-8, 6-8 |
| 61 | Pace, Carolina – Dallas | Written | | 3-1, 12-6 |
| 62 | Pace, John – Dallas | Written | | 3-1 |
| 63 | Paris, James – Dallas | Verbal | | 3-8 |
| 64 | Paris, James – Dallas | Written | | 3-8 |
| 65 | Patton, R.S. – Dallas | Written | | 2-3 |
| 66 | Petrasek, Al – Plano | Verbal | | 2-2, 2-3, 2-19, 6-7 |
| 67 | Powell, Elmer – Dallas | Written | | 2-3, 2-17 |
| 68 | Powell, Elmer – Dallas | Written | | 2-1 |
| 69 | Powell, Elmer – Dallas | Written | | 12-9 |
| 70 | Rachofsky, Morton – Dallas | Written | | 2-3, 2-19 |
| 71 | Ragsdale, Diane | Verbal | | 2-3, 2-17, 3-9, 10-2 |
| 72 | Read, Campbell – Dallas | Verbal | Texas Committee on Natural Resources | 1-6, 2-1, 2-14, 4-5, 5-12, 6-9, 12-4 |
| 73 | Read, Campbell – Dallas | Written | Texas Committee on Natural Resources | 1-6, 2-1, 2-14, 4-5, 5-12, 6-9, 9-4, 12-4, 15-1 |
| 74 | Reeves, Robert – Dallas | Written | Gold Metal Recyclers, Ltd. | 2-3, 2-11 |
| 75 | Reiser, Jim – Irving | Written | | 1-7, 2-2 |
| 76 | Rice, Gene – Fort Worth | Written | U.S. Army Corps of Engineers, Fort Worth District **(Agency)** | 2-13, 3-11, 3-12, 3-14, 3-15, 3-18, 4-1, 4-2, 4-3, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 7-1, 7-2, 7-3, 7-4, 7-6, 7-7, 7-8, 7-9, 7-10, 8-5, 8-6, 8-7, 8-11, 8-12, 8-13, 8-14, 12-1, 12-2, 12-3, 12-5, 12-11, 12-17, 12-21, 12-22, 12-23, 12-24, 12-25, 13-4, 14-6, 14-7, 15-3, 17-5, 18-4, 18-5, 18-6, 18-7, 18-8, 18-9, 18-14, 18-15, 18-16, 18-17, 18-18, 18-19, 18-20, 18-21, 19-2, 19-6, 19-7, 19-9, 21-1, 21-2, 21-3, 21-4, 21-5, 21-6, 21-7 |
| 77 | Rutherford, Warren – Dallas | Verbal | Methodist Health System | 2-2, 2-3, 2-7, 3-10 |
| 78 | Schumacher, Richard – Dallas | Verbal | | 2-2, 2-3, 2-16, 5-11, 8-15 |
| 79 | Shafer, George – Irving | Written | Industrial Properties Corp. | 1-7, 2-2, 2-3, 2-18, 10-4 |
| 80 | Spear, Robert – Somers, NY | Written | Pepsico | 10-3 |
| 81 | Taylor, Willie – Washington, DC | Written | U.S. Dept. of the Interior, Office of the Secretary **(Agency)** | 1-8, 2-3, 2-12, 2-16, 4-4, 6-6, 7-5, 12-9, 15-6, 17-1, 17-2, 17-8 |
| 82 | Vinson, Jonathan – Dallas | Written | Cargill, Inc. | 10-3 |
| 83 | Walz, Karen | Verbal | Trinity Trust | 1-7, 2-2, 2-3, 2-18 |
| 84 | Webb, H.E. – Dallas | Written | | 2-2 |

**TABLE G-2. LIST OF STATEMENTS AND COMMENTS/RESPONSES**

| State-ment # | Name (Last, First) - City | Statement Type* | Organization | Refer to Comment & Response # |
|---|---|---|---|---|
| 85 | Wells, Joe – Grand Prairie | Verbal | Dallas Sierra Club | 1-9, 2-1, 2-14, 4-5, 6-9, 9-4, 9-11, 11-1, 12-4, 17-6, 17-8 |
| 86 | Wells, Joe – Grand Prairie | Written | Dallas Sierra Club | 1-9, 2-1, 2-14, 4-5, 5-12, 6-9, 8-16, 9-4, 9-11, 11-1, 11-2, 11-3, 12-4, 15-1, 15-4, 17-6, 17-8 |
| 87 | Wells, Joe – Grand Prairie | Written | Dallas Sierra Club | 6-3, 6-9 |
| 88 | Wolf, J. Mark – Dallas | Written | Save Open Space | 1-5, 2-1, 2-3, 2-21, 3-16, 9-2, 12-9, 12-18, 15-4 |
| 89 | Wood, Marcus – Dallas | Written | Mixmaster Business Association | 2-2, 2-3, 3-1, 3-17 |
| 90 | Wright, S.M. – Dallas | Verbal | People's Baptist Church | 2-3, 2-11 |
| 91 | Zindanl, Karim – Dallas | Written | | 2-2, 2-3, 2-20 |

## Section B. Topics and Subtopics

Each comment received has been grouped into one of 21 major topics and a subtopic; a total of 226 subtopics were identified. Comments that essentially addressed the same subtopic were consolidated. The responses were prepared for each subtopic and are presented with summarized comments in Section C of this appendix.

**TABLE G-3. LIST OF TOPICS AND SUBTOPICS**

| Topic / Subtopic | Topic / Subtopic | Topic / Subtopic |
|---|---|---|
| **1. Purpose and Need**<br>1-1. Traffic demand is insufficient<br>1-2. Sufficiency of alternatives<br>1-3. Focus on rail mass transit<br>1-4. Project intended to finance local park<br>1-5. Pegasus Project is sufficient<br>1-6. Greater use of existing roadways<br>1-7. Project needed as reliever route<br>1-8. Explore HOV and bus options<br>1-9. Consider new urban approaches | **2. Alternatives**<br>2-1. General opposition to project<br>2-2. General approval of project<br>2-3. Preference for specific Build Alt.<br>2-4. Lack of a preferred alternative<br>2-5. Name of project<br>2-6. Lamar Street in all alternatives<br>2-7. Set traffic level for expansion<br>2-8. Impacts to income-producing property<br>2-9. Avoiding impacts to Oak Cliff<br>2-10. Alternatives outside floodway<br>2-11. South alignment ending<br>2-12. No-Build & habitat/water quality<br>2-13. No-Build and traffic congestion<br>2-14. Excessive impacts for Build Alt.<br>2-15. Ignores City of Dallas project<br>2-16. Preference for Non-Floodway Alternatives<br>2-17. Disadvantages of Alt. 2A/2B<br>2-18 Alternative 3B achieves Balanced Vision<br>2-19 Multi-use benefits of Alt. 3B<br>2-20. Benefits of Alternatives 3A/3B<br>2-21. Benefits of Alternative 4 | **3. Project Design**<br>3-1. Initial number of lanes<br>3-2. Reduce right-of-way requirements<br>3-3. Oak Cliff access concerns<br>3-4. Avoid bifurcating the city<br>3-5. Design ideas for South Dallas / Fair Park area<br>3-6. Coordination on other projects<br>3-7. Access to trails<br>3-8. Avoid 100 Parkhouse<br>3-9. Urban design to mitigate impacts<br>3-10. Direct connection to IH-35E<br>3-11. Lamar levee<br>3-12. Excavation and fill<br>3-13. Location of borrow pits<br>3-14. Property donation reference<br>3-15. Stand-alone project<br>3-16. Sumps and bridges<br>3-17. Access in Mixmaster area<br>3-18. Crossings of waters of the U.S., including wetlands<br>3-19. Reunion Boulevard Portal<br>3-20. Include Corps' (=USACE) plans |

## TABLE G-3. LIST OF TOPICS AND SUBTOPICS

| Topic / Subtopic | Topic / Subtopic | Topic / Subtopic |
|---|---|---|
| **4. Costs**<br>4-1. Cost estimates for mitigation<br>4-2. Right-of-way costs<br>4-3. Levee improvements<br>4-4. Questioned No-Build costs<br>4-5. Evaluate all costs | **5. Regulatory Process**<br>5-1. CDC process<br>5-2. ROD requirements<br>5-3. Outline of ROD criteria<br>5-4. Reference to ROD criteria<br>5-5. Valley storage and ROD criteria<br>5-6. Relocation of facilities<br>5-7. Potential USACE permits<br>5-8. Section 404 permit application<br>5-9. References to Sec. 404 permits<br>5-10. Mitigation guidance documents<br>5-11. National Environmental Policy Act (NEPA) (timeframe<br>5-12. Segment. from Dallas Floodway Extension (DFE) project | **6. Public Involvement**<br>6-1. Process for scoping of issues<br>6-2. Community Advisory Work Grp.<br>6-3. Cost /distribution of DEIS copies<br>6-4. Additional meeting on South Dallas / Fair Park<br>6-5. Approval of public meeting<br>6-6. Agency and public coordination<br>6-7. Extensive public coordination<br>6-8. Lengthy involvement<br>6-9. Request for extension of time<br>6-10. Time allotted was less than usual |
| **7. USACE Coordination**<br>7-1. Not joint development with DFE<br>7-2. Court order and DFE<br>7-3. DFE modifications<br>7-4. DFE Authorized Plan<br>7-5. Habitat and DFE overlaps<br>7-6. Use of excavated materials and the DFE<br>7-7. Wetland and levee construction<br>7-8. Road on levee top<br>7-9. Dallas Floodway EIS<br>7-10. Project integration process | **8. Adequacy of Investigation**<br>8-1. Insufficient detail<br>8-2. General USACE concerns<br>8-3. EPA finding of sufficiency<br>8-4. Thorough/objective evaluation<br>8-5. Use of conclusory terms<br>8-6. Analysis of alternatives<br>8-7. Deferral of impact analysis<br>8-8. Mitigation oversight /monitoring<br>8-9. Prof experience and integrity<br>8-10. Information on Bexar section<br>8-11. Detailed mitigation plans<br>8-12. Amount of urban landscape<br>8-13. Indirect impacts<br>8-14. Description of impacts<br>8-15. Assumed cost of fuel<br>8-16. Overemphasis of floodway benefits | **9. Air Quality**<br>9-1. Negative impacts<br>9-2. Relation to non-attainment status<br>9-3. Traffic stalls and air quality<br>9-4. Quantification of air impacts<br>9-5. Air toxics discussion<br>9-6. Update conformity<br>9-7. Ozone and construction emissions<br>9-8. Congestion reduction impacts<br>9-9. Sufficiency of air quality analysis<br>9-10. Insufficient particulate matter analysis<br>9-11. Highway proximity and health effects<br>9-12. Diesel carcinogens |

## TABLE G-3. LIST OF TOPICS AND SUBTOPICS

| Topic / Subtopic | Topic / Subtopic | Topic / Subtopic |
|---|---|---|
| **10. Economic Impacts**<br>10-1. South Dallas/Fair Park area<br>10-2. Permanent jobs<br>10-3. Rail access<br>10-4. Relation to economic growth | **11. Environmental Justice**<br>11-1. Impacts to specific communities<br>11-2. Inequity of a toll road<br>11-3. Competing development | **12. Floodplains**<br>12-1. Adherence to ROD criteria<br>12-2. Modeling for all alternatives<br>12-3. Quantification of impacts<br>12-4. Additional analysis needed<br>12-5. 100-year plus 2-feet flooding<br>12-6. Impacts on Standard Project Flood, floodplains, & levees<br>12-7. Analysis of bridges<br>12-8. Analysis of lakes<br>12-9. Potential impacts on flooding<br>12-10. Disputed flood elevation<br>12-11. Relation to 100-yr floodplain<br>12-12. Impacts on levees<br>12-13. Analysis of drainage patterns up/down gradient<br>12-14. Flooding damage to highway<br>12-15. Mitigation measures<br>12-16. Cost estimates for mitigation<br>12-17. City lakes and mitigation<br>12-18. Floodway precedent<br>12-19. Compliance with federal regs<br>12-20. Compliance with FHWA drainage criteria<br>12-21. Design criteria for floodwalls<br>12-22. Movement of levee<br>12-23. Impacts to storage sumps<br>12-24. Impacts to Sump 7E<br>12-25. Levee project history<br>12-26. Costs clarification |
| **13. Cultural Resources**<br>13-1. Archeological sites<br>13-2. Historic bridge remains<br>13-3. Views of bridges<br>13-4. Private land development | **14. Noise**<br>14-1. Value for quiet<br>14-2. Baseline noise studies<br>14-3. Noise impact chart<br>14-4. Predicted impacts on parks<br>14-5. Decibel limits for parks<br>14-6. Reevaluation of noise analysis<br>14-7. Impact on natural environment | **15. Parklands**<br>15-1. Negative impacts on recreation<br>15-2. Positive impacts on recreation<br>15-3. Potential versus actual impacts<br>15-4. Lack of details on impacts<br>15-5. Lack of compensatory plan<br>15-6. Land and Water Conservation Fund Act of 1965 (L&WCF)-funded park |

## TABLE G-3. LIST OF TOPICS AND SUBTOPICS

| Topic / Subtopic | Topic / Subtopic | Topic / Subtopic |
|---|---|---|
| **16. Visual Resources**<br>16-1. Impacts on views from levees<br>16-2. Greater exposure to natural views | **17. Water Quality**<br>17-1. Short- and long-term impacts<br>17-2. Preserving fish populations<br>17-3. Best management practices<br>17-4. Mitigation with pesticides and fertilizers<br>17-5. Mitigation measures<br>17-6. Accidental spill response<br>17-7. Water quality surveys of wetlands<br>17-8. Comparisons between alternatives | **18. Wetlands**<br>18-1. Temporary and long-term impacts<br>18-2. Inadequacy of investigation<br>18-3. Candidates for study<br>18-4. Nomenclature clarification<br>18-5. Ongoing mapping review<br>18-6. Delineation subject to approval<br>18-7. Quality of aquatic resources<br>18-8. Functional values and locations<br>18-9. Wetland delineation project number<br>18-10. Significant wildlife resources<br>18-11. Irregular bottom contour<br>18-12. Staging and borrow areas<br>18-13. EPA input on Sec. 404 permit<br>18-14. Conversion of emergent wetlands<br>18-15. Mitigation plan<br>18-16. Mitigation banking on USACE lands<br>18-17. Mitigation bank locations<br>18-18. New seasonal wetlands<br>18-19. Precautions to avoid wetlands<br>18-20. Waters of U.S. clarification<br>18-21. Definition of waters of the U.S., including wetlands |
| **19. Wildlife Habitat**<br>19-1. Grassland habitat impacts<br>19-2. Impacts from DART to MLK<br>19-3. Impacts to wildlife beyond habitat loss<br>19-4. Vegetation ordinance<br>19-5. Wildlife lists<br>19-6. Grassland mowing<br>19-7. Habitat functions in wetlands<br>19-8. Mitigation policy clarification<br>19-9. Planting of trees<br>19-10. Tree replacement program<br>19-11. Tree enhancement plan<br>19-12. Upland, bottomland, and riparian habitats<br>19-13. Reseeding with native grasses<br>19-14. Mitigation measures<br>19-15. Special habitat mitigation funding<br>19-16. Cooperative mitigation planning | **20. Other Impacts**<br>20-1. Energy and resource requirements<br>20-2. Natural gas line relocation<br>20-3. No farmland impacts<br>20-4. Heat island effects<br>20-5. Hazardous waste sites<br>20-6. Demolition of structures | **21. Cumulative Impacts**<br>21-1. Project by project analysis<br>21-2. Regulated mitigation strategies<br>21-3. Single EIS for all regional projects<br>21-4. Conclusory statements<br>21-5. Lack of supporting data<br>21-6. Assumed compliance<br>21-7. Need to identify impacts<br>21-8. Include other studies |

## Section C. Comments and Responses

This section contains responses for each of the subtopics outlined in the previous section. In general, responses to comments fall into one of three basic types. First, commenters that asked questions or requested information received an explanatory response, often citing to information in the Draft Environmental Impact Statement (DEIS), Supplemental Draft Environmental Impact Statement (SDEIS), or other sources for further reference. Second, some comments that expressed an opinion but did not appear to be seeking a response have been noted and considered. Third, responses to comments that warrant a modification of the DEIS indicate the nature of the change made in this SDEIS, and some responses quote or reference the revision made in this SDEIS. It should be noted that quoted revisions may require future editing based on future agency or public comments on the SDEIS, the results of further analyses, or future developments that may affect the proposed project.

Please note that statements received from government agencies are followed by the name of the agency in parentheses. Otherwise, the identity of individual commenters may be found in Section A of this appendix.

# 1. Purpose and Need

**Purpose and Need 1-1. Traffic demand is insufficient**

Statement # 3, 5 / Summary of Comment: The proposed project is not justified on the basis of traffic patterns and transportation requirements. For example, DART (Dallas Area Rapid Transit) and TxDOT (Texas Department of Transportation) concluded that there was insufficient traffic on Highway 175 to justify HOV lanes. Anticipated traffic will be inadequate to fund the highway. With the increasing cost of gasoline, traffic demand will have declined even further by the time the highway is completed.
Statement # 6 / Summary of Comment: The cost-benefit ratio for the proposed project is not supported in terms of traffic reduction in the Mixmaster.

**Response:** As indicated in **Section 1.4** of the Draft Environmental Impact Statement (DEIS), the North Central Texas Council of Governments (NCTCOG) serves as the Metropolitan Planning Organization (MPO) for transportation in the DFW area. Since the early 1970s, MPOs have had the responsibility of developing and maintaining a Metropolitan Transportation Plan (MTP). The MTP is federally mandated; it serves to identify transportation needs, and guides federal, state, and local transportation expenditures. The current MTP (*Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Area*) presents a system of transportation improvements needed to maintain mobility in the DFW area over the next 22 years and serves as a guide for the expenditure of state and federal funds for the region. Its development was coordinated among local governments, transit authorities, North Texas Tollway Authority (NTTA), and TxDOT. The plan was formulated through a process of forecasting future travel demand, evaluating system alternatives, and selecting options which best meet the mobility needs of the region.

The freeway and tollway system evaluation in the MTP recommends the construction of the Trinity Parkway as a new staged tollway facility between the proposed termini locations of IH-35/SH-183 and US-175/SH-310. The Trinity Parkway is a substantial and long-standing component of the region's long-range transportation plan. It would provide a needed reliever route around the Dallas Central Business District (CBD), balancing programmed capacity improvements on the radial freeways IH-35E, IH-45, SH - 183, SH-114, and IH-30. The inclusion of the Trinity Parkway in the MTP also indicates regional support. Various municipalities and agencies such as NCTCOG, TxDOT, DART, Dallas County, and the City of Dallas have demonstrated long-term support for the project.

Cost benefit ratios are not provided in the SDEIS. However, Figures 1-3 through 1-4 indicate the savings (benefit) in annual cost of congestion from implementing the MTP recommendations. The SDEIS provides estimated total implementation costs for each alternative in Table 2-7. Other benefits, such as improvements in air quality and access for economic development, are not as directly quantifiable. A positive cost-benefit ratio might be implied from the intended implementation of Trinity Parkway as a tollroad. In effect, each user of the road is making a cost-benefit decision, weighing the cost of using the road against the time savings, reliability or other perceived benefits of the road.

**Section 2.1.3** of the SDEIS describes other on-going transportation improvements within the Trinity Parkway study area and includes a discussion concerning their potential to assist in accomplishing the Trinity Parkway's purpose and need. These other improvements represent a continuing effort by local, state, and federal agencies to address the travel needs of this growing region (see **Section 1.8.5** of the DEIS for regional population and employment growth information). A variety of improvements are currently underway and others are planned for future years, including improvements to existing roadways and several traffic congestion management programs, policies, and projects (e.g., Transportation System Management/Travel Demand Management (TSM/TDM), Intelligent Transportation Systems (ITS), public transportation, and bicycle/pedestrian improvements). Refer to **Table 1-9** in **Chapter 1** of the SDEIS for a list of individual operational improvement projects within the study area. However, as indicated in **Section 2.1.3** of the SDEIS, these supporting transportation improvements cannot separately or collectively satisfy the purpose of and need for the Trinity Parkway project.

Additional information concerning transportation system impacts are provided in **Section 4.4** of the SDEIS. As shown in **Table 4-14** (Existing and Projected Traffic Volumes and LOS) in the SDEIS, the

Trinity Parkway provides congestion relief benefits within the study area where traffic, mobility, and access issues are most acute. When compared to the No-Build Alternative, the Trinity Parkway provides congestion reduction for major north-south roadways in the study area.

Regarding the reduction in traffic demand due to the future cost of gasoline, this is not an expected outcome. At some hypothetical cost, travel demand may be substantially reduced or redirected to other modes. However, a more likely outcome would be a transition to more fuel-efficient vehicles or the use of different fuels.

**Purpose and Need 1-2. Sufficiency of alternatives**

Statement # 3 / Summary of Comment: What are the reasonable alternatives to the Trinity Parkway project?

**Response: Chapter 2** of the SDEIS presents and describes the alternatives considered for meeting the purpose and need for the Trinity Parkway, including those eliminated from further analysis. **Sections 2.1 and 2.2** provide a summary of alternatives analyzed during the Major Transportation Investment Study (MTIS) for the Trinity Parkway, published by TxDOT in 1998. In addition to an assessment of traditional approaches to increasing capacity, congestion management strategies and public transportation alternatives have been considered as part of the planning process for the proposed Trinity Parkway. Based on the alternatives analysis process and public and agency coordination undertaken for the MTIS, the following plan of action was recommended, subject to appropriate environmental and engineering processing and clearances:

1. Enhanced work trip reduction measures;
2. Bicycle and pedestrian facilities;
3. Enhanced transportation facility management;
4. Improvements to the Canyon, Mixmaster, and Lower Stemmons Freeway;
5. Extension of Woodall Rodgers Freeway and improvements to Beckley Avenue;
6. A continuous HOV system through the Canyon, Mixmaster, and Lower Stemmons Corridors; and
7. A Trinity Parkway reliever route (proposed action).

As indicated in **Chapter 2** of the SDEIS, work on Items 1 through 6 is ongoing, but these improvements cannot separately or collectively satisfy the purpose of and need for the Trinity Parkway project. The eight Build Alternatives, plus No-Build, in the SDEIS provide a reasonable range of alternatives to the proposed action. Six of these alternatives have been subject to public input during the DEIS scoping process, as well as input from citizens and elected officials in Dallas during the past five years, notably resulting in the addition of Alternative 3B in 2003 and Alternatives 3C and 4B in 2006. The two new Build Alternatives developed as part of the SDEIS will also be subject to public input.

**Purpose and Need 1-3. Focus on rail mass transit**

Statement # 5 / Summary of Comment: The project is not needed because proposed and future rail corridors will move more people and save more energy than the proposed project.

Statement # 17 / Summary of Comment: This project is not “forward thinking.” As we head toward a burst in the cheap oil bubble and tough economic times we should be concentrating our efforts to expand mass transit and preserve our natural environment, not building bigger and better highways.

**Response:** See Comment/Response 1-1 and 9-4. The Trinity Parkway project is part of a multimodal transportation plan developed and endorsed by the Regional Transportation Council. At the regional level, the current MTP (*Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Area*) proposes a combined 40 percent of the overall $71 billion regional transportation budget be spent on the categories (i) Rail and Bus Transit, (ii) HOV Facilities and (iii) CMP strategies. It should also be noted that the average 2006 weekday ridership on the entire DART rail transit system was approximately 51,000 passenger trips. This can be compared to projected traffic of ~100,000 vehicles per day (vpd) (125,000 daily passenger trips) on Trinity Parkway and ~250,000 vpd (313,000 daily passenger trips) on Stemmons Freeway north of the DNT.

**Purpose and Need 1-4. Project intended to finance local park**

Statement # 43 / Summary of Comment: This project is the combination of a lucrative, but locally unwanted, land use plus a desired land use; the need is for a cash cow to finance the Trinity River Park.

**Response:** The proceeds from toll collection on the Trinity Parkway are proposed to entirely be used for debt service, operations and maintenance of the tollway facility. Surplus revenue in future years may be used for other NTTA projects, subject to bond covenants and other agency considerations. The Trinity Parkway and the Trinity River Park are independent projects, and neither project depends on the other for its independent utility or design. There is no commitment of funding for the Trinity River Park from proceeds of Trinity Parkway.

**Purpose and Need 1-5. Pegasus Project is sufficient**

Statement # 1, 3, 33 / Summary of Comment: The Pegasus Project would be able to handle all of the transportation improvements sought by this project, and the Trinity Parkway is not needed to support Pegasus. The proposed project is not needed to build the Pegasus Project. The Central Expressway was completed without a reliever, and currently the high-five is being completed without any kind of reliever.

Statement # 88 / Summary of Comment: Is any Trinity Parkway reliever route within or on the levees truly cost-justified when taking the benefits of Project Pegasus into consideration?

**Response:** The statements first question the basic need for Trinity Parkway, arguing that Project Pegasus (the Canyon-Mixmaster improvement) is sufficient to handle traffic. Secondly, the statements question the need for Trinity Parkway as a detour route during construction of Project Pegasus.

Regarding the basic need for the Parkway, this issue is addressed in Comment Response 1-1. The Parkway is a needed reliever route around the Dallas Central Business District (CBD), balancing programmed capacity improvements on the radial freeways IH-35E, IH-45, SH -183, SH-114, and IH-30. As illustrated in the pie chart in SDEIS Figure 2.1, the Parkway and Project Pegasus are <u>both</u> needed to provide needed transportation capacity improvements in the area of downtown Dallas. Both projects provide a substantial share of the needed capacity.

In regard to the detour route issue, it is true that Project Pegasus could be constructed without Trinity Parkway in place. Construction of Pegasus without a detour route would add substantial costs, both capital costs in the more difficult logistics of staging the construction and individual costs in the delay for motorists traveling through the construction zone. The statement regarding the Central Expressway reconstruction is not correct. The Central Expressway construction was aided by the presence of Dallas North Tollway several miles to the west, which carried substantial amounts of diverted traffic during the construction. Additionally, the City of Dallas and TxDOT implemented lane marking and signal changes along Gaston Ave., Greenville Ave. and other parallel arterial streets to aid in detouring traffic. See also the discussion of the need for a reliever route in **Section 1.7** of the SDEIS.

**Purpose and Need 1-6. Greater use of existing roadways**

Statement # 29 / Summary of Comment: Building more roadways flies in the face of the realities of future availability/price of petroleum products. Get on with the job of developing solutions to move people and products more efficiently using the existing roadways.

Statement # 33 / Summary of Comment: We should be investing in mass transit and parks and making the city an attractive place to live, inviting people to live here in the city and not drive by at high speeds going somewhere else. This is the wrong kind of solution because, as the DEIS shows, it is going to reduce the average speed from 35 miles an hour to 33 miles an hour. Many of us have traveled along these side streets, Industrial in particular, during rush hour and had no trouble getting through to our destination. A high-speed toll road is unnecessary, too expensive, too destructive, and unfriendly to a vibrant downtown and will further divide our city. A win-win situation would be a low-speed parkway, which is not available in this DEIS.

Statement # 72, 73 / Summary of Comment: NTTA requires the construction of six to eight lanes of toll road in or by the Dallas Floodway. NTTA should examine the transportation improvements for the lesser

scale that can encourage development by preserving neighborhood improvement or green space, alternatives such as widening and beautifying Industrial Boulevard, for example, four lanes or median cross-over strips and evaluating costs for such an alternative the DEIS has been restricted. NTTA has consistently refused to consider this option. Was the option that elevates Industrial Boulevard picked as the sole Boulevard-oriented option in order to be so costly as to be rejected?

**Response:** The Trinity Parkway project is part of a multi-modal transportation plan developed by TxDOT during the Trinity Parkway Corridor (TPC) Major Transportation Investment Study (MTIS) (see **Section 2.1.2** of the SDEIS) and affirmed in the current MTP. Regarding the "realities of future availability/price of petroleum products," the regional planning used in the SDEIS recognizes the historic growth of population and vehicle miles of travel in the region (see **Section 1.7** of the SDEIS). However, in future years Single-Occupancy Vehicle or Single-Occupant Vehicle (SOV) use is assumed to be reduced through funding of multimodal transportation alternatives and actions to make the transportation system more efficient. As noted in **Section 1.7.8** of the SDEIS, the current year vehicle occupancies in the region are increased to 1.25 in the year 2030 travel models. Also, as stated Comment/Response 1-3, the current MTP (*Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Area*) proposes a combined 40 percent of the overall $71 billion regional transportation budget be spent on the categories (i) Rail and Bus Transit, (ii) HOV facilities and (iii) CMP strategies. Whereas increasing gasoline prices may serve to discourage some portion of the travel demand over time, a transition to more fuel-efficient vehicles may overcome this effect.

Regarding use of a "low speed parkway," the MTIS recommended a 45 mph 8-lane parkway. However, as described in **Section 1.5.2** of the SDEIS, the operating speed of the facility has been changed from 45 mph to 55 mph to support toll funding. The speed change is required to allow a more attractive travel time advantage on the toll road compared to other available toll-free (tax supported) roads in the corridor.

Regarding, the statement that the Trinity Parkway is "six to eight lanes of toll road in or by the Dallas Floodway," the statement is incorrect. The parkway is proposed to be six main lanes at full build-out.

Regarding neighborhood preservation and other transportation alternatives, the recommendations of the MTP (*Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Area*) reflect the continued recognition of quality-of-life issues and the relationship between community development and transportation in its sustainable development initiatives, which began in *Mobility 2025.* Promoting sustainable development is a specific objective of the MTP because of the direct link between land use, transportation, and air quality. The key at the regional level to maintaining a sustainable pattern of development is to allow cities the option to present a variety of land use, zoning, mobility, and service packages to the development market and residents. Denser, multi-use land development leads to reduced vehicles miles traveled (VMT) and favors alternative modes of travel.

At the local level, the City of Dallas' Balanced Vision Plan (BVP) best represents the city's commitment to addressing the type of quality-of-life issues described above. The BVP offers an appropriate balance among the five inter-related issues of (1) flood protection, (2) environmental restoration and management, (3) parks and recreation, (4) transportation, and (5) community and economic development.

In regards to transportation, the BVP includes a concept for transportation referred to as the "Balanced Transportation Concept." This concept has four inter-related components: (1) the Trinity Parkway (proposed action); (2) Industrial Boulevard improvements, serving as a collector/distributor to access downtown Dallas; (3) An Oak Cliff levee-top road; and (4) vehicular and pedestrian access to planned parks and lakes.

The community and economic development component encourages new large-scale development at locations with enhanced access to recreation and transportation. The goal is for these public investments to lead to revitalization and redevelopment that support existing communities, create new businesses, and mixed use areas (see **Section 3.1.1.1** of the DEIS for additional information concerning the City of Dallas BVP).

**Purpose and Need 1-7. Project needed as reliever route**

Statement # 14, 75 / Summary of Comment: The proposed project is important not only for its inherent benefits but also to create a reliever route needed for Project Pegasus.

Statement # 36, 48, 57, 79 / Summary of Comment: The need for this reliever route is apparent. Anyone who regularly drives on Stemmons knows that rush hour is several hours long. Rush hour is defined as an average speed of 20 miles per hour or less. The traffic stalls on lower Stemmons has become a real hindrance. In the foreseeable future, rush hour will be eight hours long.

Statement # 38 and 55 (both NCTCOG) / Summary of Comment: The design for the proposed project is consistent with the design concept and scope assumed in the current conforming Metropolitan Transportation Plan. This concept has been shown to have substantial mobility benefits for not just the City of Dallas and the Dallas Central Business District, but for the entire Dallas-Fort Worth region as many other corridor improvements are contingent on the construction of the proposed project. NCTCOG's Regional Transportation Council supports the continued development and expedited implementation of this project.

Statement # 83 / Summary of Comment: During the Trinity River Urban Design and Transportation Study that resulted in the BVP, many prior studies were reviewed, and a team of local and national experts conducted an intensive effort to create a plan that meets the area's transportation needs, as well as other community objectives. That review made it clear that additional transportation capacity is needed in this area and that it cannot be provided without some kind of additional roadway in the Trinity Corridor.

**Response:** Comments noted and considered.

**Purpose and Need 1-8. Explore HOV and bus options**

Statement # 43 / Summary of Comment: The project is not needed and greater use should be made of carpools, vanpools, and bus pools within existing roads. These could be formed by both computer matching of drivers and riders, as well as hitchhiking at transit centers' kiss-and-ride areas. If pick-up areas were labeled by zip code, then people looking to hitch a ride could be matched up with a driver going to that destination. Greater use of HOV/HOT lanes on otherwise non-toll highways (e.g., SH-183, IH-35E, IH-30, IH-45, and US-175) with overhead TollTag detectors would give incentive to maximize vehicle passenger capacity.

Statement # 43 / Summary of Comment: With diminishing returns to extending DART lines and some community opposition to them, greater use should be made of bus rapid transit (BRT) along IH-635 and SH-190/161. Simply placing buses on HOV/HOT lanes will not allow BRT because of the requirement for frequent stops (every 1-3 miles); there is also the problem of buses being rear-ended by carpool or vanpool vehicles. The use of freeway shoulder stops, as is done in Los Angeles, would not work in Texas because of the extensive use of service roads and the real estate development along them. The BRT that has been implemented in Bogota, Columbia is a better model for Dallas. Bogota BRT uses four busway lanes along the freeway median, two lanes in each direction; the inside two lanes are reserved for stop-and-go local buses and the outer lane on each side is reserved for non-stop express buses. Use of overhead TollTag detectors and surveillance cameras would enable the busway to be shared by carpools and vanpools. Placing Bogota-style mid-freeway busways along SH-183, IH-35E, IH-30, IH-45, and US-175 would also work.

Statement # 81 Department of Interior (DOI) / Summary of Comment: An advantage of the No-Build Alternative is the potential to fund other transportation projects. While the No-Build Alternative does not immediately address projected growth and congestion, the funding of other projects could include appropriate planning to reduce the volume of traffic in the area. Developing incentives for motorists to utilize public transportation and HOV should not be overlooked as a long term solution.

**Response:** See Comment/Response 1-1, 1-3, and 1-6.

**Purpose and Need 1-9. Consider new urban approaches**

Statement # 85, 86 / Summary of Comment: The DEIS lacks consideration of approaches citizens have been suggesting for the past ten years that are economically affordable, environmentally sustainable alternative land use strategies, transit alternatives, and smaller scale enhancements for traffic flow along existing roadways, particularly Industrial and Lamar Boulevards, which would provide cost effective transportation relievers while fostering mixed use development, preserve affordable housing and

neighborhoods, and promote high quality growth and development for central and southern Dallas. Public interest goals such as preservation of open space, improvement of air and water quality, establishment of a high quality recreational greenway along the Trinity River have all been secondary considerations to high speed toll roads within the floodway. What is needed is top quality new urban and mixed use development that would actually reduce the need for broader use of 80,000 to 100,000 vehicle trips per day. We think that's the direction that Dallas wants to take, not a 1950s freeway and certainly not one in a floodway. The project promoters have used the threat of a toll road taking of adjacent neighborhoods and business in west Dallas and along Industrial Boulevard as a means of coercing support for the floodway location. By defining the new level of traffic capacity as a requirement of this study, the promoters have defined the problem and solution before planning can get underway. No alternatives of any lesser scale transportation improvements outside of the floodway were ever considered.

Dallas needs to consider New Urbanism approaches to reduce SOV trips, traffic congestion, and air pollution, rather than increase it. Consensus proposals that should be considered include: focus on creating a world class greenway; scale back highway and bridge construction; enhance access and economic redevelopment in downtown and southern Dallas rather than limiting access and encouraging suburban sprawl; use non-structured flood control (e.g., buyout of Cadillac Heights) rather than levees; do not damage the floodway's recreational value with a roadway; enhance adjacent economic development and access to greenway parks and recreation assets; develop Industrial and Lamar Boulevards as a smart growth corridor with mixed land use, multi-model transportation (expanded traffic lanes and improved signalization and turn lanes, landscaped median, and bike/pedestrian features that connect to floodway access points, DART, and Trinity Trolley). The DEIS does not consider land use planning as a growth management strategy to reduce dependence on automobiles, such as removing highway barriers within the downtown area to enhance pedestrian and transit access.

**Response:** See Comment/Response 1-1, 1-3, and 1-6.

## 2. Alternatives

**Alternatives 2-1. General opposition to project**

Statement #s 1, 3, 5, 6, 17, 18, 22, 24, 25, 29, 33, 43, 56, 59, 60, 68, 72, 73, 85, 86, 88 /Summary of Comment: A total of 16 commenters expressed general opposition to the proposed project. Note that although 21 statements were submitted, five of the commenters each made two statements expressing opposition.

**Response:** Comments noted and considered. Note that "Alternatives 2-1" is intended to gather into one group all of the statements which express general opposition to the project. However, any specific comments or questions included in these statements are addressed separately in Appendix G-2 based on the topic raised.

**Alternatives 2-2. General approval of project**

Statement #s 14, 36, 38 (NCTCOG), 39, 42, 46, 48, 49, 51, 54, 55 (NCTCOG), 57, 58 (City of Dallas), 66, 75, 77, 78, 79, 83, 84, 89, 91 / Summary of Comment: A total of 22 commenters expressed general approval of the proposed project (two of the commenters did so on behalf of NCTCOG).

**Response:** Comments noted and considered.

**Alternatives 2-3. Preference for specific Build Alternative(s)**

Statement #s 1, 8, 9 (EPA), 10, 14, 21, 27, 29, 30, 31, 32, 36, 37 Texas Parks and Wildlife Department (TPWD), 39, 42, 46, 47, 48, 49, 50, 51, 54, 55 (NCTCOG), 56, 57, 58 (City of Dallas), 59, 60, 65, 66, 67, 70, 71, 74, 77, 78, 79, 81 (DOI), 83, 88, 89, 90, 91 / Summary of Comment: A total of 43 commenters expressed a preference for one or more of the project Build Alternatives studied, either as their primary or secondary choice. Note that in expressing a preference for a Build Alternative, many commenters did not also clearly express general approval or opposition to the project; therefore, some commenters were not included in Comment/Response 2-1 or 2-2.

A. Commenters in favor of alignments outside the floodway (Alternative 2A, 2B, and/or 5).
   1. Commenter in favor of Alternative 2B: Statement # 78.
   2. Commenter in favor of either Alternative 2A or 2B: Statement #s 10, 14.
   3. Commenter in favor of Alternative 2A, 2B, or 5: Statement # 9 (EPA).
   4. Other Commenters against Floodway Alternatives:
      - Commenter against all Floodway Alternatives: Statement # 27.
      - Commenter against Alternatives 3A, 3B, 4, and 5: Statement # 88.
      - Commenters in favor of Alternatives 2A, 2B, 5, and No-Build: Statement #s 37 (TPWD), 81 (DOI).

B. Commenters in favor of alignments in the floodway (Alternative 3A, 3B, and/or 4).
   1. Commenters in favor of Alternative 3B only: Statement #s 8, 36, 42, 48, 49, 51, 54, 55 (NCTCOG), 57, 58 (City of Dallas), 66, 70, 77, 79, 83.
   2. Commenters in favor of either Alternative 3A or 3B: Statement #s 30, 46, 91.
   3. Commenters in favor of Alternative 4: Statement #s 21, 32, 39, 50, 71, 74, 89, 90.
   4. Commenter in favor of Alternatives 3A, 3B, or 4: Statement # 47.

C. Other preferences with respect to specific alternatives:
   - Commenters against Alternatives 2A and 2B: Statement #s 31, 65.
   - Commenter against Alternative 2A: Statement # 67.

D. Commenters in favor of the No-Build Alternative, who expressed a preference for a Build Alternative as a second choice:
   - Commenter's second choice is Alternative 2A or 2B: Statement # 1.
   - Commenter is against the highway in floodway on Oak Cliff side of the river: Statement # 29.
   - Commenters' second choice is Alternative 4: Statement #s 56, 59, 60.

**Response:** Comments noted and considered.

**Alternatives 2-4. Lack of a preferred alternative**

Statement # 1, 3, 18 / Summary of Comment: The DEIS did not indicate a preferred alternative, which suggests it was published too early in the process. A spokesman for the City of Dallas stated in early April that the City prefers Alternative 3B. Publication of the DEIS should have been postponed until a preferred alternative had been selected so that the actual impacts of and required mitigation for the preferred alternative could be made available.

**Response:** As noted in **Section 2.3.11** of the DEIS, a preferred alternative was not identified in the DEIS to encourage governmental agencies and the public to provide comments on all six alternatives, and to allow the project's sponsors to then make a recommendation for a preferred alternative after agency/public comments had been received and considered.

**Alternatives 2-5. Name of project**

Statement # 3 / Summary of Comment: Why has the name of the roadway been selected as the "Trinity Parkway" project? This selection would appear to prejudice the selection of alternatives.

**Response:** The name "Trinity Parkway" has been used since at least 1995 when TxDOT initiated the Trinity Parkway / Santa Fe Bypass Corridor Major Transportation Investment Study. The name Trinity Parkway applies equally to all Build Alternatives that are in proximity to the Trinity River.

**Alternatives 2-6. Lamar Street in all alternatives**

Statement # 18 / Summary of Comment: Some people do not prefer Alternative 2A or 2B because they do not want the project to go down Lamar Street. All of these plans go down Lamar Street.

**Response:** Comment noted and considered. As stated on DEIS page 2-16, second paragraph, Alternatives 2A and 2B both follow Lamar Street south of Corinth Street, whereas Alternatives 3A, 3B, 4, and 5 follow the east or west levee of the proposed Dallas Floodway Extension. The Lamar alignment was chosen in this segment because it continues the same concept as used in the northern part of the corridor along Irving/Industrial Boulevard (double-deck above an arterial street). The DEIS allows that the southern ends of Alternatives 2A and 2B could follow the same southern segment route as used for Alternatives 3A, 3B, 4, and 5.

**Alternatives 2-7. Set traffic level for expansion**

Statement # 77 / Summary of Comment: Commenter favors Alternative 3B but seeks assurance that the 6/4 alignment will accommodate the anticipated interim added volume expected during the time that Pegasus is being constructed. Also, there should be a predetermined level of traffic that, when it is reached, NTTA will initiate expansion activity that will add the two additional lanes. That is, rather than wait until 2025 or some other date, the roadway should be expanded whenever traffic volume justifies it.

**Response:** Roadways are not typically designed to handle temporary increases in traffic due to construction, but the Trinity Parkway may serve as an alternate route during reconstruction of IH 35E/IH 30 proposed in Project Pegasus (see also **Section 2.5.4** of the DEIS).

**Alternatives 2-8. Impacts to income-producing property**

Statement # 56, 59, 60 / Summary of Comment: Commenter favored the No-Build Alternative to avoid impacts to family income-producing property on Industrial Boulevard. Second choice was Alternative 4.
Statement # 68 / Summary of Comment: Commenter is opposed to any alternative that goes through his building at 3130 Commonwealth.

**Response:** Comments noted and considered. Commenter should note that the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and its associated appraisal procedures, would be used for commercial property acquisitions. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 provides important protections and assistance for people affected by Federally funded projects. This law was enacted by Congress to ensure that people whose real property is acquired, or who move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy.

**Alternatives 2-9. Avoiding impacts to Oak Cliff**

Statement # 29 / Summary of Comment: If the proposed project is built in the floodway, keep it on the downtown side of the river. The Oak Cliff side has large numbers of residents who will be negatively impacted by the proximity of the Parkway; it also has the greatest potential for new residential/mixed use development, but this would be discouraged by the Parkway.

**Response:** Comments noted and considered.

**Alternatives 2-10. Alternatives outside floodway**

Statement # 14 / Summary of Comment: A facility down Industrial Boulevard might not be a bad idea to clear up a lower income corridor and possibly create redevelopment.

**Response:** Comment noted and considered. Note that the acquisition of property for any of the alternatives would be restricted to the needs of the roadway only. Redevelopment may subsequently occur as an indirect effect of the roadway construction, but would be subject to a variety of ordinances, plans, and regulations that the City of Dallas would apply to manage growth within its jurisdiction. One such directive, EO 12898, is fundamental to environmental justice and mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of the programs on minority and low-income populations. Disproportionately high and adverse effects on minority or low-income populations means an adverse effect that is predominantly borne by a minority or low-income population or would be suffered by a minority or low-income population, and is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by a non-minority or low-income population. Concepts of environmental justice further ensure the full and fair participation by all potentially affected communities in the transportation decision-making process and preventing the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

**Alternatives 2-11. South alignment ending**

Statement # 74 / Summary of Comment: Commenter (a business at 4305 S. Lamar) requests adoption of the Riverside – South Alignment for the Trinity Tollway – Alternative Ending Option (see plans provided by Commenter). This option would go along the levee and not have as great an impact on adjacent properties as the Industrial – South Alignment, which is opposed by Commenter. The latter alignment would displace homes, churches and businesses. An elevated highway next to single-family homes will cause noise issues and will be a major visual intrusion into the neighborhood.

Statement # 90 / Summary of Comment: Commenter preferred the “south riverside alignment” because this would mean more economic growth in that corridor area, provided that access roads are adequate. Specifically, the intersections of the Parkway with SH 175, SH 310, and S.M. Wright Freeway need to be at grade. If the Parkway is elevated in this area, it will divide the community, but with easy access to these roads it will ensure economic development in the area.

**Response:** Comments noted and considered.

**Alternatives 2-12. No-Build and habitat/water quality**

Statement # 37 (TPWD) / Summary of Comment: TPWD favors the No-Build Alternative or the other alternatives outside the floodway. Floodplains and the riparian vegetation and wetlands they support act as natural buffers to floods and aid in water quality maintenance and groundwater recharge. These benefits can be lost through clearing of vegetation, filling, and excavation activities associated with development. These areas also provide foraging and nesting habitat to fish and wildlife. TPWD feels as if reducing the vegetated area within the floodway by increasing impervious surfaces may have a negative effect on water quality maintenance within the floodway. With alternatives available that would reduce impacts to the floodplain and associated ecological functions, TPWD cannot support alternatives that may adversely impact or reduce the 100-year floodplain. TPWD requests that the proposed development of a wetland mitigation plan be coordinated with the TPWD staff, in addition to the United States Army Corps of Engineers (USACE) and United States Fish and Wildlife Service (USFWS) staff.

Statement # 81 (DOI) / Summary of Comment: The Department of the Interior (DOI) favors the No-Build Alternative or the other alternatives outside the floodway. Noting the absence of a preferred alternative, DOI recommended selection be based on the least amount of overall impacts to the environment and benefits to the affected community. The evaluation of benefits to the affected community should not be limited to transportation benefits, since not all persons within the affected area are motorist that would utilize an improved transportation route. However, everyone within the affected area would likely benefit from better and water quality in the long term. While air quality is not likely to vary between alternatives, several alternatives could substantially affect water quality. Therefore, those alternatives that are determined to have the least overall potential impacts to long-term water quality should be considered a substantial benefit to the entire community.

**Response:** Comments noted and considered. Discussions of specific issues noted in these comments are found in the responses to comments under specific topics, such as: 12. Floodplains; 17. Water Quality; 18. Wetlands; and 19. Wildlife Habitat.

**Alternatives 2-13. No-Build and traffic congestion**

Statement # 76 (USACE) / Summary of Comment: The fourth paragraph on page 4-8 of the DEIS states, ". . .the No-Build Alternative would contribute to increased traffic congestion as well as both human and air quality impacts." How does the No-Build Alternative contribute to increased traffic congestion as well as both human and air quality impacts? It may not decrease the congestion, but it, in and of itself, cannot contribute to the congestion.

**Response:** The referenced sentence in **Section 4.2.2** will be deleted in the SDEIS.

**Alternatives 2-14. Excessive impacts for Build Alternatives**

Statement # 6 / Summary of Comment: The proposed project will disturb too much area, especially linkages to the highway via cloverleaves.

Statement # 72, 73 / Summary of Comment: The alternatives in the DEIS induce urban sprawl, favor pollution of the air and water near downtown Dallas and in the proposed park in the floodway, increase the risk of flooding, reduce natural areas, open space, and oxygen-producing trees, and waste taxpayers' money.

Statement # 85, 86 / Summary of Comment: Commenter is opposed to construction of high-speed limited access toll roads within the floodway. The Trinity River Parkway alternatives as proposed in the EIS are sprawl inducing, air and water polluting, flood increasing, forest, park, and neighborhood destroying, taxpayer money wasting, 1950s approaches to addressing 21st century transportation and development challenges. The preservation of open space improving air quality and water quality establishing a high quality recreational greenway along the Trinity River have all been secondary to creating this 100,000 capacity vehicle freeway within a floodway.

**Response:** Comments noted and considered. Discussions of specific issues noted in these comments are found in the responses to comments under specific topics, such as: 12. Floodplains; 17. Water Quality; 18. Wetlands; and 19. Wildlife Habitat.

**Alternatives 2-15. Ignores City of Dallas project**

Statement # 22 / Summary of Comment: It seems the proposed project is ignoring the City of Dallas project. The City's proposal respects the wetlands, the water quality, noise quality, the single family residences and businesses, plus the floodplains, flood control, and the planned recreational features which would improve the living standards for those that live in the community. The proposed project would upset or destroy the wildlife, waterfowl refuges, and even some historic sites, as well as the careful long-term planning of the City of Dallas over the past ten years.

**Response:** Coordination on this study with the City of Dallas has been continuous, on-going and extensive. One of the Build Alternatives (3B) was added as a direct request by the City of Dallas as part of the City's Balanced Vision Plan.

**Alternatives 2-16. Preference for Non-Floodway Alternatives**

Statement # 78 / Summary of Comment: Industrial Boulevard Alternative 2B is the alternative which is most compatible with the development of the Trinity River Park and does the most to enhance the quality of life in and around Central Dallas. The commercial displacement for this alternative is of benefit because they would remove sources of air pollution downtown, and as pointed out, cleans up a number of hazardous material sites. Alternatives 3, 4 and 5 all send a clear message that we are not serious about developing the Trinity River Park because those alternatives would diminish the value of this project. This project is worth building, and we want to have the enjoyable park.

Statement # 81 (DOI) / Summary of Comment: While we understand that the purpose of the proposed action is to address long-term transportation problems, we believe that Alternatives 3A, 3B, and 4 may have long-term impacts to fish and wildlife resources, water quality, and flood control. The floodway should be utilized to improve water quality, provide habitat for wildlife, and decrease flood damage by managing the existing emergent wetlands, grasslands, and riparian corridor. These irreplaceable ecological functions provided by the floodplain would benefit the entire community in the long term far beyond the relief of traffic congestion. For these reasons, Alternatives 2A, 2B, or 5 should be selected among the Build Alternatives, and further consideration should made of the No-Build Alternative.

**Response:** Comments noted and considered. Discussions of specific issues noted in these comments are found in the responses to comments under specific topics, such as: 12. Floodplains; 17. Water Quality; 18. Wetlands; and 19. Wildlife Habitat.

**Alternatives 2-17. Disadvantages of Alternatives 2A and 2B**

Statement # 31, 32 / Summary of Comment: Alternatives 2A and 2B are much more costly than the other alternatives. These alternatives would displace a lot of homes, churches, and businesses, whereas the Floodway Alternatives would be less costly and would impact far fewer property owners. An elevated highway along Lamar Street would be a problem for homeowners because of the noise and because it would open these properties to view from the highway.

Statement # 47 / Summary of Comment: Alternatives 2A and 2B should not be considered for this project because of the combined detriment to the property owners along Industrial Boulevard plus the considerable additional cost. Additionally, these two alternatives would present considerable procurement issues in addition to issues with Commerce Street. Alternatives 3A, 3B, or 4 are much more desirable plans to accomplish the stated goals of this project.

Statement # 50 / Summary of Comment: Alternatives 2A and 2B will render my property on Industrial and Irving Boulevards worthless. My family has owned businesses on Industrial Boulevard for over 60 years and these alternatives will so disrupt business that “mom and pop” businesses will fail.

Statement # 67 / Summary of Comment: Commenter is opposed to the Irving/Industrial Boulevards alternative (2A) because it will create a tunnel effect and will be counterproductive to the open concept of the Parkway.

Statement # 71 / Summary of Comment: Commenter is opposed to the Industrial Boulevard Alternative because it will divide the community and is elevated (i.e., Alternative 2A).

**Response:** Comments noted and considered. Commenters should note that an EIS must consider all reasonable alternatives to a comparable level of detail. Specific to Statement # 50, as stated in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, “If the acquisition of only a portion of a property would leave the owner with an uneconomic remnant, the head of the Federal Agency concerned shall offer to acquire that remnant. For the purpose of this Act, an uneconomic remnant is a parcel of real property in which the owner is left with an interest after the partial acquisition of the owner’s property and which the head of the Federal agency concerned has determined has little or no value or utility to the owner” (Title III, § 301 (9)).

**Alternatives 2-18. Alternative 3B achieves Balanced Vision**

Statement # 36, 48, 79 / Summary of Comment: The Trinity River Project has three main components: flood protection, recreation, and traffic improvements. The Balanced Vision Plan outlines steps to be taken to make these three components compatible. The 3B alignment is consistent with this Plan and is necessary if we are going to implement the Plan. The completion of this plan is vital to downtown Dallas. The floodway protection and reliever route are critical to our tax base and the economic health of

downtown. Dallas citizens have committed substantial local funds (i.e., $84 million in 1998 for design, construction, and right-of-way) to this project because they clearly understand the importance of this project to the whole community. The development of the reliever route is a critical element of this project and we urge you to approve the alignment supported by the majority of the citizens of Dallas, the 3B alignment.

Statement # 51 / Summary of Comment: Alternative 3B is an integral part of the City's Balanced Vision Plan. This Plan enjoys broad support both within the city and with the community at large, and we applaud it for that reason. We also support the design for four lanes from downtown to Highway 175 for the future increase to six lanes should the traffic justify it.

Statement # 83 / Summary of Comment: We believe that the DEIS Alternative 3B provides that needed capacity in a way that also supports the important objectives of economic and environmental restoration, community and economic development, recreation and open space provision, and flood control. The Trinity Parkway is one necessary component in the revitalization of the Trinity Corridor Area of Dallas. Located and designed appropriately, it should support the community's other objectives, as well as transportation. We believe the concepts presented in the Balanced Vision Plan, which are represented in this DEIS by Alternative 3B achieves all those objectives. It's our support for this vision that makes the Trinity Trust willing to take on the challenge of raising private funding for enhancements that complement public improvements. It is essential that we move forward with this vision.

**Response:** Comments noted and considered.

**Alternatives 2-19. Multi-use benefits of Alternative 3B**

Statement # 8 / Summary of Comment: Commenter is in favor of Alternative 3B, and against Alternatives 4 and 5, as these will cause Commenter to relocate the extensive improvements to his business property.

Statement # 66 / Summary of Comment: The proposed project is the linchpin of the Trinity River Corridor planning efforts that have been ongoing for many years. Without this transportation component, the overall program in the City will suffer. This is the most important public works program in the history of Dallas and will shape our city for the rest of this century. This is not just a roadway, but a multi-use corridor and the selection of the correct alignment will have long-range impacts. Alternative 3B is the best alignment for Dallas and the region as it provides improved regional transportation that will help solve problems. This alternative enhances economic development on both sides of the Trinity. It also provides construction of wetlands in the floodway, which are key environmental assets. It creates opportunities for recreational facilities, strengthens the levee system of Dallas and improves flood protection for the city.

Statement # 70 / Summary of Comment: Commenter favors Alternative 3B because it leaves property of interest at Cadiz and Industrial intact.

**Response:** Comments noted and considered.

**Alternatives 2-20. Benefits of Alternatives 3A and 3B**

Statement # 14 / Summary of Comment: It seems as though cost and right-of-way impact are differentiated enough to drive a choice for Alternative 3A or 3B versus 2A or 2B.

Statement # 30 / Summary of Comment: Alternative 3A or 3B accomplish NTTA's goal while having less negative impact on the environmental and are less threatening to businesses and existing close-in neighborhoods. These alternatives might even enhance the environmental, residential, and commercial areas in proximity to the Parkway. These alternatives are also less costly than the others.

Statement # 46, 91 / Summary of Comment: The only plan that is good for the city is Alternative 3A or 3B. This plan would cost less than half of some other alternatives, would displace fewer residential and commercial properties, and would look great along the Trinity River. Based on experience with elevated subway systems in New York and Chicago, elevated transportation systems are ugly and more costly to build and maintain.

**Response:** Comments noted and considered.

**Alternatives 2-21. Benefits of Alternative 4**

Statement # 16, 39 / Summary of Comment: When you have a split parkway both levees are reinforced. A split parkway provides protection to both sides of the river, and is likely to attract businesses to the area. It will provide access to the park system as well as flood protection.

Statement # 88 / Summary of Comment: Commenter preferred Alternative 4 because of its better access to and from adjoining streets and neighborhoods. This would provide the best alternative for economic development for both sides of the river corridor.

**Response:** Comments noted and considered.

## 3. Project Design

**Project Design 3-1. Initial number of lanes**

Statement # 16 / Summary of Comment: On the combined plan, reducing through lanes from three to two will be a major mistake from an economic standpoint and will create a major traffic jam when the tollway is used as a by-pass while Pegasus (Canyon) is under construction.

Statement # 42 / Summary of Comment: Under Alternative 3B, the number of initially constructed lanes will reduce from six to four as the proposed project parallels downtown. Although this design was at the request of the City of Dallas as provided for in its Balanced Vision Plan, the result of adding the additional two lanes at a later time will more than double the cost of construction for that section. The cost savings in doing all six lanes with the initial construction (on new alignment, without traffic) certainly justifies and warrants its inclusion, notwithstanding the delays, congestion, and construction impact Parkway patrons would otherwise experience.

Statement # 61, 62 / Summary of Comment: Any parkway needs to be at least eight lanes with simple ways to reach downtown: no U-turns, reduced lanes, or "hampered" exits or entrances. The highway should be four lanes in each direction with entrance and exit lanes headed downtown without need to wind, turn, or "find" downtown. Do not strangle with inadequate lanes or access points.

Statement # 89 / Summary of Comment: There must be three initial Parkway lanes open in each direction south of Continental before any of the Project Pegasus right-of-way utility relocation or roadway construction begins. Without these lanes, travelers will experience greatly increased congestion and delays on the highways in the area, particularly those heading south in the afternoon rush hours who must merge from three lanes to only two lanes.

**Response:** As noted in **Section 2.5.4** of the DEIS, "The staging allows NTTA to better match the initial cost and scope of the facility to the traffic demand expected in the early years of operation. Additional capacity may be added as traffic demand and conditions warrant, and subject to funding availability and other agency considerations." Roadways are not typically designed to handle temporary increases in traffic due to construction, but the Trinity Parkway can serve as an alternate route during reconstruction of IH 35E/IH 30 proposed in Project Pegasus.

**Project Design 3-2. Reduce right-of-way requirements**

Statement # 3 / Summary of Comment: The design of the alternatives along Irving and Industrial Boulevards occupies a wider right-of-way than necessary, especially near the planned toll plazas. Could not the design of these alternatives use features such as elevated or depressed traffic lanes and cantilevered construction to reduce right-of-way requirements? Are there no innovative design features that would reduce the right-of-way requirements for toll plazas (e.g., replace toll plazas with toll booths at entrance and exit ramps)?

**Response:** The roadway's cross sectional elements are of comparable width for all Build Alternatives. Alternative 2A incorporates an elevated design, which allows reduction in overall right-of-way width due to double-decking over the existing arterial streets and removal of grassed side slopes. A depressed design is not considered feasible due to drainage conflicts. Cantilevered construction would not reduce the right-of-way width because adjacent development would not be allowed under the structure. With regard to toll plazas, at this time the project sponsor is considering electronic toll collection, which could reduce the right-of-way requirements for toll collection facilities.

**Project Design 3-3. Oak Cliff access concerns**

Statement # 16 / Summary of Comment: Economic development follows highway access. A road on the top of the levee on the Oak Cliff side would be of some help, but there is nothing in place to fund it. The same is true for Industrial Boulevard. Design plans fail to provide a direct connection from the tollway to north/south traffic on I-35; this makes no sense in light of the north/south traffic flow during peak travel. Direct access is necessary for traffic flow, accessibility, and economic development. It is unclear as to how people will cross over the river from Oak Cliff side to get to lakes and how downtown people will cross 30 lanes of traffic to use the amenities.

Statement # 49 / Summary of Comment: Funding should be added to the proposed project for the Oak Cliff "Gateway" route adjacent to the west levee from Woodall Rodgers Bridge to Interstate 35.

**Response:** Comments noted and considered. The Oak Cliff top-of-levee road is a City of Dallas proposal and is not part of the Trinity Parkway project. See also Comment/Response 3-10 regarding IH-35E access.

**Project Design 3-4. Avoid bifurcating the city**

Statement # 18 / Summary of Comment: This project is going to bifurcate the city much like Boston would have been without the $15 billion big dig. As an alternative, you could put DART rail to hook it up to the TRE down from 310 all the way and hook up to the Trinity Railway Express (TRE). You could also think about putting the 2A, 2B alignments sub-grade instead of building them at-grade. It's going to be quite a visual, bad visual scene there. So you could look at possibly going to sub-surface on Lamar like they did for Central Expressway.

**Response:** The Trinity Parkway Corridor MTIS included multimodal improvements within the corridor, including the use of light rail along the Northwest Corridor Rail Line. These improvements are now part of the current DART system plan. Constructing the Trinity Parkway alternatives "sub-grade" or as a depressed section was not considered feasible due to the large, shallow drainage structures along the alignments.

**Project Design 3-5. Design ideas for South Dallas/Fair Park area**

Statement # 21 / Summary of Comment: To minimize impacts of the proposed project on the South Dallas/Fair Park area several design changes are encouraged. Construct the project as an at-grade roadway from south of Martin Luther King to US-175. Depress the Parkway's lanes as they cross Lamar Street to reduce visibility of the road from the adjacent neighborhood and reduce noise impacts. A mitigation and enhancement plan should be conducted to make certain that the highest level of urban design, and not NTTA's minimum standards for enhancements, go into the design and construction of the road south of Martin Luther King; the study must be conducted with extensive public involvement from the South Dallas/Fair Park community. Conduct upgrades and enhancements to nearby transportation corridors at the same time of the proposed project construction to reduce the impact of another new roadway. Conduct further study to ensure better road access for the community than that proposed by NTTA.

**Response:** Comment noted and considered. See also Comment/Response 11-1 regarding enhancements in the southern terminus area and community outreach regarding this plan. Community outreach for Trinity Parkway would continue as the project is further developed. Commenter should also note that the City of Dallas and other local elected officials have expressed interest in a downgrade of SM Wright Freeway between CF Hawn Freeway and IH-45 to an at-grade landscaped boulevard. This project is independent of Trinity Parkway, but would be facilitated by the redirection of traffic flow directly onto IH-45 by the various Parkway alternatives at the southern terminus. This project is referred to on DEIS page 3-41 under the discussion of the City's Balanced Vision Plan.

**Project Design 3-6. Coordination on other projects**

Statement # 30 / Summary of Comment: Commenter was concerned about whether NTTA is working with TxDOT to achieve maximum synergy between the proposed project and TxDOT's Interstate 30 Mixmaster improvements.

Statement # 42 / Summary of Comment: Key elements of the design for Alternative 3B rely on improvements to be made as part of other projects. For example, the Woodall Rogers/Industrial Boulevard improvements are significant to the proposed project and close coordination with the City of Dallas and TxDOT will be needed to ensure that these improvements are also provided on a timely basis so they are available once the proposed project is ready to open. It is critical that the proposed project be timed and coordinated with these and other improvements to ensure that the there is a full directional interchange in place at Woodall Rogers/Industrial Boulevard when the proposed project opens. This is because the construction planned for the Pegasus Project will reduce the number of access and exit ramps in the downtown area and thereby increase the importance of a full-directional interchange in the area of the signature bridge.

**Response:** Timely coordination is essential on projects that interface with the Trinity Parkway, and this coordination is ongoing. These efforts are facilitated by TxDOT's involvement as a sponsoring agent on the proposed project. The City of Dallas is also a key participant in the development of this project and coordinating efforts with the City are ongoing as well.

**Project Design 3-7. Access to trails**

Statement # 44, 45 / Summary of Comment: Commenter requested three design aspects to ensure access to trails in the project area: (1) with regard to the Stemmons Corridor area, there should be easy access from outside the levees for pedestrians and trail (Old Trinity Trail) users; (2) pedestrian access decks are needed like the decks presented by Michael Morris to the City Council in 2004 (see Old Trinity Trail master plan, page 41); (3) the levee-top trails should remain after the tollway is built.

**Response:** Comment noted and considered. Regarding the first and second items, the schematic plans in **Plates 2-1** through **2-6** of the DEIS show pedestrian and trail linkages. Regarding the third item, the levee top trails do not conflict with the Parkway alternatives, but they are a City of Dallas responsibility.

Note: Statement # 45 included a copy of the Old Trinity Trail Master Plan. Due to space limitations, this attachment has not been included with the written statement in **Appendix G-5** of the SDEIS, but is on file at NTTA.

**Project Design 3-8. Avoid 100 Parkhouse**

Statement # 63, 64 / Summary of Comment: Alternative 3B should be modified to avoid or minimize the taking of property at 100 Parkhouse. Commenter's property at this location can be preserved by reworking the on/off ramps at Continental for Alternative 3B. The NTTA revised Alternative 3A to do away with looped on-ramps at Continental at the City's request, and should be able to modify Alternative 3B for a property owner to avoid taking property. In addition, since only about 40 feet of Commenter's property (including the building) is planned for taking, then Commenter requests that the project not take all of it. This would allow the remaining portion of the property to be used as a parking lot, given that parking in the Design District is scarce.

**Response:** Comment noted and considered. The ramps and roadways shown for Alternative 3B meet established design standards and comply with the city request regarding the ramping. In the event Alternative 3B is identified as the preferred alternative, the right of way needs will be re-checked when more detailed design is underway.

**Project Design 3-9. Urban design to mitigate impacts**

Statement # 71 / Summary of Comment: The highest level of urban design should be applied to help mitigate some of the adverse effects, such as noise and intrusion. Any ending option for the proposed project should be entirely at grade. The SM Wright Freeway should be at grade as far as with respect to the construction of the proposed project. We want easy access to enter and to exit the Parkway as well.

**Response:** Comment noted and considered. Improvements such as noise walls and pedestrian access improvements are proposed to be included in the Parkway project, and would be considered in the area of the southern terminus at Lamar St and SH 310. The NTTA's System-wide Design Guidelines provide an overview of the types of urban design treatments that would be implemented. DEIS **Plate 4-23** shows a conceptual enhancement plan for the southern terminus area at Lamar/SH310. DEIS **Section 4.15** discusses noise impacts of the project and concludes noise walls would be reasonable and feasible in the southern terminus area.

The southern terminus connection is "at-grade" with respect to the main lanes of US 175. However, it is not possible to cross Lamar St. at grade, and all the DEIS roadway alternatives show an overpass of Lamar Street. In order to meet the required clearance over Lamar, the current Trinity Parkway design reconstructs approximately 1600' of Lamar St. and relocates the road approximately 100' to the west. The profile for this segment of Lamar remained at existing grade, and retained its access to adjacent properties.

NTTA has reviewed the possibility of depressing the Trinity Parkway main lanes under Lamar St. However, the Parkway cannot be lowered more than about ten feet (10') because the main lanes could not be drained except by pumps. The limited ability to depress the main lanes means that Lamar St. must be raised approximately 15' to create the needed vertical clearance. This would necessitate reconstruction of approximately 1600' of Lamar, of which about 1200' would be above existing grade. The connecting frontage roads between Lamar St. and SH 310 would also need to be raised to match Lamar. Raising Lamar St. in this area may restrict access from six adjacent businesses due to the large grade differences. The grade differences may also restrict access to Colonial Ave. as it intersects the short piece of frontage road between Lamar and SH 310. A 66" DWU water transmission main under Colonial Ave. would also need to be lowered. A benefit of this option may be to reduce visibility of the Parkway main lanes from adjacent residences, and possibly reduce noise impacts from the Parkway main lanes. However, this revision was not incorporated due to the drainage concerns, the impacts to adjacent businesses on Lamar, and the extra cost to lower the 66" water main in Colonial Ave.

In regard to SM Wright Freeway, the Trinity Parkway is anticipated to substantially reduce traffic on SM Wright between IH 45 and the SH 310 intersection. With the benefit of reduced traffic, the stakeholders in this area have expressed an interest in reducing the "dividing" effect of SM Wright in this area. The NTTA developed initial concepts for improving the urban design of SM Wright by converting it into a boulevard with a wide median, pedestrian improvements and landscaping. Since this segment of SM Wright is in the jurisdiction of TxDOT, further development of this urban design concept would be considered as a separate project by TxDOT. The City of Dallas has also expressed an interest in this concept.

Finally, in regard to ramp access, DEIS **Plate 2-11** shows two options for orientation of ramps in the area of the southern terminus. Around mid-year 2006, NTTA received direction from City staff that ramp Option 1 is preferred in this area.

**Project Design 3-10. Direct connection to IH-35E**

Statement # 42 / Summary of Comment: The full diamond interchange planned at Houston Street/Jefferson Boulevard is a critical element of this plan and is vital in assuring downtown and Oak Cliff the ability to access and exit the Parkway. This interchange must be built concurrent with the proposed project as it is the primary point of access to and from the Parkway for the downtown community and a significant part of Oak Cliff. Any change in the timing of this interchange construction which might cause its opening not to occur concurrent with the opening of the proposed project would be highly detrimental to the project and totally unsatisfactory to the community at large.

Statement # 77 / Summary of Comment: It is of critical importance for there to be a direct connection between the Tollroad and IH-35. To continue development within the southern sector, this connection is critically necessary.

**Response:** Comments noted and considered. In Alternatives 3A, 3B, 3C, 4A, 4B, and 5, access to IH-35E (South R.L. Thornton Freeway) is provided via Colorado Boulevard and diamond ramps from the Houston-Jefferson bridges to the Parkway. This access would be built concurrent with the proposed project. Similar access could not be provided for Alternatives 2A and 2B.

**Project Design 3-11. Lamar levee**

Statement # 76 (USACE) / Summary of Comment: As the DFE Lamar Levee is not a joint project; all impacts of Lamar Levee should not be counted toward impacts of the parkway. And impacts of the parkway construction between the DART Bridge and SH-175 need to be quantified.

**Response:** This issue is covered in **Section 1.11.2** of the SDEIS.

**Project Design 3-12. Excavation and fill**

Statement # 76 (USACE) / Summary of Comment: **Table 4-49** (Estimates of Excavation and Fill Quantities) on page 4-157 of the DEIS is unclear as to what it is trying to show. Please explain.

**Response:** The table provides earthworks calculations for the roadway. The "Excavation" quantities are fairly minor cuts, occurring primarily in sags under bridges. The "Embankment" quantities are fills, calculated without the effect of shrinkage. The embankment volumes are also calculated assuming the adjacent floodway levees are widened and raised by others (e.g., USACE/City). The table points out the project has a deficit in fill material, which must be made up from other sources such as the proposed City of Dallas lakes.

**Project Design 3-13. Location of borrow pits**

Statement # 3 / Summary of Comment: Explain why the locations of borrow pits necessary for road construction not included in the DEIS. If the locations of borrow pits are known, where are they?

**Response:** Greater detail on this point has been included in the **Section 4.20.8** of the SDEIS, and **Plate 4-26** provides a map of the potential borrow sites. See also Comment/Response 3-15.

**Project Design 3-14. Property donation reference**

Statement # 76 (USACE) / Summary of Comment: The second paragraph on page 4-195 of the DEIS makes reference to **Section 2.3.11** as the section discussing the donation of property to the City of Dallas by Industrial Properties Corporation. This section is actually "Identification of Preferred Alternative," please correct this reference.

**Response:** The Cumulative Effects discussion has been substantially revised in the SDEIS, and the section reference has been removed.

**Project Design 3-15. Stand-alone project**

Statement # 76 (USACE) / Summary of Comment: The DEIS indicates that it will balance the floodplain cut/fill impacts from alternative 3A, 3B, and 4 through joint cooperation with other floodplain development projects. However, what happens if other alternatives for the joint projects are selected that do not benefit the needs of the Trinity Parkway project (i.e., a USACE floodwall alternative versus expansion of the existing levee) or these other joint project are terminated? The Trinity Parkway project should be considered a stand-alone project so that the impacts can still be addressed.

**Response:** Agreed. NTTA provided the USACE an "excavation only" plan in a May 10, 2005 letter to Mr. Michael Mocek of the Fort Worth District (see **Appendix G-6** in the SDEIS). In this plan, the embankments for the Parkway are created by "dry" excavation areas, matching the outlines of the proposed City of Dallas lakes and meanders. Thus the Parkway project could proceed independent of the city project. The Parkway embankments are offset from the adjacent levee(s) anticipating a future raise in the levees. In the event the USACE chooses not to program a levee raise, the offset could be removed from the Parkway plans.

**Project Design 3-16. Sumps and bridges**

Statement # 88 / Summary of Comment: How will a roadway configuration within the floodway be viable (relative to cost and design standards) with respect to existing sump facilities and bridges (that remain)? Is pedestrian cross-access further complicated?

**Response:** The Trinity Parkway alignments within the floodway (Alternatives 3A, 3B, 3C, 4A, and 4B) are designed to bridge over existing sump outfalls and underpass existing bridges. Pedestrian and trail access points are shown on the schematic plans (**Plates 2-3** through **2-5** and **Plates 2-7** and **2-8** of the SDEIS). Additional design information has also been included in **Sections 2.4.6** through **2.4.9** of the SDEIS.

**Project Design 3-17. Access in Mixmaster area**

Statement # 89 / Summary of Comment: Commenter indicated Alternative 3B as a second choice after Alternative 4, but expressed concerns that have not been fully addressed. The roadway design and funding for the needed improvements to Industrial Boulevard have not been completed. Also, there is concern that the lack of access for southbound traffic on the Parkway at every entry point may hurt not only the Mixmaster area, but southern communities as well.

**Response:** Comment noted and considered. In regard to Industrial Boulevard, the Trinity Parkway project is assumed to include intersection improvements in the area of Corinth Street as shown in orange shading on Plate 2-4B in the DEIS. It is understood the City of Dallas will pursue design and funding for other improvements to Industrial Boulevard northwest of this point. In regard to access for southbound traffic, Alternative 3B is designed to reduce ramp access in the segment from Continental to Houston Street. This was done at the request of the City of Dallas to reduce ramp intrusion in the area of the proposed Floodway Lakes. For Alternative 3B, traffic is intended to access the general area of the CBD using improved ramps at Woodall Rodgers Freeway and in the area of Corinth Street.

**Project Design 3-18. Crossings of waters of the U.S., including wetlands**

Statement # 76 (USACE) / Summary of Comment: In designing crossings of waters of the U.S., we encourage you to consider the following:

a. Culverts and bridges should be designed to maintain channel geometry and minimize disturbance to waters of the U.S. and riparian areas to the maximum extent practicable;
b. All crossings, particularly culvert crossing should be designed in ways that avoid the need for channel widening to convey high flows. To achieve conveyance of high flows without altering channel geometry, crossings should be designed to employ the use of such approaches as a single culvert to convey the frequent flows with additional culverts placed at a higher elevation to convey less frequent events;
c. Crossings should be designed in order to minimize the need for future maintenance activities, such as regular mowing or sediment removal in waters of the U.S. Such maintenance frequently results in long-term financial commitments and prolonged adverse impacts on the aquatic environment; and
d. Stabilization activities along waters of the U.S. should be designed to avoid the use of concrete, gabions, and similar hard structures. In areas requiring stream vegetation, where practicable.

**Response:** These factors will be considered in the design of structures that cross waters of the U.S., including wetlands.

**Project Design 3-19. Reunion Boulevard Portal**

Statement # 42 / Summary of Comment: The proposed Reunion Boulevard Portal is highly significant as the primary access way from/to downtown Dallas and the planned Trinity Lake and Park. Although not part of this study, it should be emphasized that its proper design and development is of paramount importance.

**Response:** Comment noted and considered.

**Project Design 3-20. Include Corps' plans**

Statement # 18 / Summary of Comment: You have left out all the Corps' plans for all your maps; these should be included because of the sumps and the levees that are going to be built.

**Response:** It is assumed that the comment has reference to the "Corps' plans" rather than "floor plans" as recorded in the Public Hearing transcript. The proposed project does not include any plans to build sumps, but it is fully coordinated with ongoing USACE/City of Dallas plans to improve the Dallas Floodway levees. The project sponsors will endeavor to get specific details on the Lamar Levee and include these on schematic plans in the FEIS.

## 4. Costs

**Costs 4-1. Cost estimates for mitigation**

Statement # 3 / Summary of Comment: The cost estimates for all environmental mitigation are shown as $5 million for all six Build Alternatives. Explain the lack of variation between cost estimates for alternatives that vary widely in terms of location and impacts to the environment (e.g., acres of wetland impacts varies from 10 to over 150 acres, depending on the alternative).

Statement # 76 (USACE) / Summary of Comment: The total costs in the DEIS include mitigation costs, but the amounts are not broken out by resource.

Statement # 76 (USACE) / Summary of Comment: **Table 6-1** (Estimate of Probable Cost) on page 6-4 of the DEIS indicates that costs for Environmental Mitigation (Noise, HazMat, Wetlands) are the same for each alternative ($5,000,000). These costs should be better defined, based on alignment and impacts to areas and resources and not given a blanket number.

**Response:** The SDEIS provides considerable additional details regarding wetlands mitigation in **Section 4.8** and **Appendices H** and **J**. Additionally, the cost estimates in **Chapter 6** of the SDEIS have been revised to differentiate mitigation costs between the various alternatives.

**Costs 4-2. Right-of-way costs**

Statement # 76 (USACE) / Summary of Comment: The right-of-way costs for Alternatives 3A, 3B, 4, and 5 are overstated. **Table 6-1** (Estimate of Probable Cost) on page 6-4 of the DEIS includes costs for Right-of-Way Acquisition / Relocation Assistance. Costs should not include acquisition of property associated with either the Dallas Floodway or Dallas Floodway Extension.

**Response:** The Parkway cost estimates assume nominal right-of-way cost in the area of the existing Dallas Floodway. In the area of the Dallas Floodway extension, **Section 1.11.2** states, "Due to uncertainties in the timing of construction of the USACE project, the cost estimates for earthwork, land acquisition, and related items shown in this DEIS do not rely on the USACE project being in place prior to the proposed Trinity Parkway. This is done to keep the estimates conservative…" These costs may be removed from the estimate in the FEIS once interagency cost apportionments have been clarified.

**Costs 4-3. Levee improvements**

Statement # 76 (USACE) / Summary of Comment: **Table 6-1** (Estimate of Probable Cost) on page 6-4 of the DEIS includes the item "Possible Contribution from USACE (Levee Improvements)." This line should be either removed or have no costs included.

**Response:** For Alternatives 3A, 3B, 4 and 5, the "Earthwork" costs at the top line of the table include both the roadway embankment(s) from Westmoreland to DART bridge, as well as the levee widening and raising. The costs for the levee widening and raising therefore have to be backed out in the "Possible Contribution" line, assuming a cost share or reimbursement from the USACE and the City of Dallas.

**Costs 4-4. Questioned No-Build costs**

Statement # 81 (DOI) / Summary of Comment: Pages 2-13 and 2-14 in **Section 2.3.1** of the DEIS describes the costs associated with the No-Build Alternative. Two of the bullets in this description include ". . . monetary value of time lost by motorists due to lower operating speeds . . ." and ". . . intangible costs associated with the . . . annoyance for average motorists . . ." These costs may not be appropriate to include in the EIS since they cannot be measured nor directly attributed to maintaining the current conditions. Alternatively, this section could include the costs associated with an incentive based campaign targeted at motorists to reduce the average volume of vehicular traffic in the area. Motorists should be made aware of the substantial benefits public transportation and High Occupancy Vehicles have on air quality, water quality, and traffic conditions.

**Response:** Comment noted and considered. The discussion of the No-Build Alternative does not assign monetary values to the listed costs. However, **Section 1.8.9** of the DEIS provides an estimated "Annual Cost of Congestion" for the No-Build and Build Alternatives which could be used to determine a monetary value for time lost by motorists due to lower operating speeds. The commenter asks to consider an

"incentive-based campaign… to reduce the average volume of vehicular traffic." The description of the No-Build Alternative on DEIS page 2-13 states that other transportation improvements in the Metropolitan Transportation Plan, such as roadway and transit system improvements, bicycle/pedestrian improvements, and other measures (i.e., intelligent transportation systems, transportation systems management, and transportation demand management) are included in the baseline condition of the No-Build Alternative. These various initiatives include efforts to reduce vehicular traffic volumes and to encourage alternative transportation modes.

**Costs 4-5. Evaluate all costs**

Statement # 72, 73 / Summary of Comment: The DEIS failed to evaluate all the economic costs for the various toll alternatives. Why are only one or two portal ramp access points to the floodway park and conveyance lakes proposed? How much do they cost? How much will the related Calatrava Bridges cost? Raise the same question regarding levee embankment construction, storm water pollution prevention, toll plazas, and thoroughfare interchanges. Taxpayers should see what all the costs are for the proposed project, but also for the related projects mentioned.

Statement # 85, 86 / Summary of Comment: All connected components of Trinity Parkway should be fully evaluated with respect to cost and environmental impacts. For example, the DEIS defers hydraulic analysis of the effectiveness of conveyance basin lakes and therefore fails to adequately compare costs and impacts of all alternatives equally. This study should fully evaluate all economic costs (construction and maintenance costs) of the projects as proposed so taxpayers will know what they are getting for their money. The DEIS fails to fully identify all the costs associated with NTTA toll roads by omitting connected cost items including Calatrava Suspension Bridges, floodway conveyance lakes, levee embankment construction, planned ramps and pedestrian access, storm water pollution prevention, thoroughfare interchanges, and toll plazas. The DEIS is vague with respect to what is included in proposed project cost estimates and what is left out. Throughout the DEIS are references to undefined cooperative jointly funded construction portions of the project are referenced as possibilities, under the theory some entity other than NTTA will fund them. These connected components of the proposed project should be fully evaluated with respect to cost and social and environmental impacts in this DEIS and not in some future Supplemental or FEIS as is suggested in the DEIS. Cost effectiveness of the alternatives needs to be better defined and evaluated, particularly in light of the reference in the DEIS to the proposed project resulting in, for those who can afford the $1 per trip toll, a 2 miles per hour increase in average motorist driving speed at the cost of nearly $1 billion. If one purpose of the DEIS is to allow for comparison and selection of a preferred alternative, then decision makers should compare all the costs and impacts of each alternative studied as well as alternatives that have been rejected. Note that the Federal Highway regulations and NEPA (National Environmental Policy Act) require that one EIS consider all the impacts for the alternatives.

**Response:** Comments noted and considered. The DEIS presents a comparison of costs among the reasonable alternatives sufficient for the purposes of selecting an alternative that best meets the purpose and need of the project. See also Comment/Response 3-7 and 15-4 regarding the provision of vehicular and pedestrian access points. The DEIS cost estimates include all known component costs for the completion of the project as described in the alternatives discussion. The "Calatrava Suspension Bridges" are not part of the Trinity Parkway project. Appendix D provides breakdowns of the cost estimates for the various alternatives showing costs for ramps, toll gantries, embankments, access ramps, etc. Other park-related work proposed by the City of Dallas in the Dallas Floodway is not part of this project.

## 5. Regulatory Process

**Regulatory Process 5-1. CDC process**

Statement # 76 (USACE) / Summary of Comment: The Corridor Development Certificate (CDC) process is not a federal permitting process, the Fort Worth District, U.S. Army Corps of Engineers, acts only as the technical reviewer for these certificates. **Table 4-50** on page 4-158 of the DEIS shows the USACE as being involved in issuing a permit or approval for the "Trinity River Corridor CDC Process." This is not a Corps of Engineers process; it is a local government process.

**Response:** The line in the table labeled "Trinity River Corridor CDC Process . . . ," with reference to the USACE, has been revised in the SDEIS.

**Regulatory Process 5-2. ROD requirements**

Statement # 76 (USACE) / Summary of Comment: The Fort Worth District Record of Decision (ROD) requirements for actions within the Dallas Floodway were not discussed in the DEIS. The ROD criteria for activities within the floodway need to be included in this document in various locations.

**Response:** Agreed. A description of the ROD criteria has been included in **Section 3.5.6.4** of the SDEIS. References to the ROD criteria have been included in additional places, including **Table 4-50** (in the context of the list of permits or approvals for which the USACE has responsibility) and in **Section 4.24.2** as noted in Comment/Response 5-3. A copy of the 1988 ROD has been added to **Appendix E** USACE Guidance Documents.

**Regulatory Process 5-3. Outline of ROD Criteria**

Statement # 76 (USACE) / Summary of Comment: A discussion of the ROD criteria should be inserted after the fourth paragraph on page 4-184 of the DEIS.

**Response:** A discussion of the ROD criteria has been added to **Section 3.5.6.4** and **Section 4.24.2** of the SDEIS.

**Regulatory Process 5-4. Reference to ROD criteria**

Statement # 76 (USACE) / Summary of Comment: **Table 4-50** on page 4-158 of the DEIS should list the "ROD Criteria for the Trinity River" under the Corps of Engineers.

**Response:** The referenced table has been revised in the SDEIS.

**Regulatory Process 5-5. Valley storage and ROD criteria**

Statement # 76 (USACE) / Summary of Comment: Paragraph 7d on page 7-31 of the DEIS states, "Any construction in the floodplain would be required to preserve existing valley storage and a detailed hydraulic analysis, fill permits and CDC review would take place by FEMA, City of Dallas, NCTCOG, and USACE." This statement should include the ROD as required criteria.

**Response:** The referenced sentence has been revised in the SDEIS to emphasize the ROD criteria.

**Regulatory Process 5-6. Relocation of facilities**

Statement # 76 (USACE) / Summary of Comment: The lands associated with the existing Dallas Floodway and Dallas Floodway Extension will not be purchased for the parkway, instead the construction of the project will be treated like any other action crossing the project lands, it will be subject to the requirements that if future operations by the United States require its removal, relocation, or their alteration, the action will take place without expense to the United States.

**Response**: The NTTA will seek to cooperatively develop an operations and maintenance agreement with the USACE and/or the City of Dallas detailing the rights and responsibilities of each party during construction, normal operation, as well as during emergency operation. For a riverside tollway alternative, the NTTA may take maintenance responsibility for an agreed area and zone of activity, as described in **Section 2.4.8** of the SDEIS. The NTTA uses revenue bonds to finance its projects; the USACE's (or any other party's) retention of the unlimited right to remove, relocate, or alter the roadway would be incompatible with NTTA's (or any similar authority's) bond covenants and would likely bar the financing and construction of the toll road. Fortunately, the interests and needs of all parties can and will be fully reconciled. Since the flood control and transportation functions both serve a national interest, an agreement would be sought that lays out specific rights and responsibilities, preserving the long-term integrity of both functions. In regard to "purchase of lands," an easement or other protective agreement would be sought that includes permanent rights to ensure the long-term operation of the toll road.

**Regulatory Process 5-7. Potential USACE permits**

Statement # 76 (USACE) / Summary of Comment: Under Section 404 of the Clean Water Act, the USACE regulates the discharge of dredged and fill material into waters of the United States, including wetlands. The USACE responsibility under Section 10 of the Rivers and Harbors Act of 1899 is to regulate any work in, or affecting, navigable waters of the United States. Any such discharge or work requires Department of Army Authorization in form of a permit. The third paragraph in **Section 4.9.2.1** (page 4-102) of the DEIS describes the need for a permit under Section 404 of the Clean Water Act. You should also describe in this paragraph that a permit under Section 10 of the Rivers and Harbors Act would most likely be required as well.

**Response:** An application for a Section 404 permit is expected to be submitted to the USACE after publication of the SDEIS and once a preferred alternative is identified. Also, if a floodway Build Alternative is the preferred alternative, an application for a Section 10 permit is also expected. In the SDEIS, the first sentence in the first paragraph of **Section 4.9.2.1** has been replaced with the following: "*The proposed project would require coordination and permitting with the USACE under Section 404 of the Clean Water Act and possibly under Section 10 of the Rivers and Harbors Act.*" Additionally, the SDEIS provides new details on wetlands in **Sections 3.4.6** and **4.8**, and in **Appendices H** and **J**.

**Regulatory Process 5-8. Section 404 permit application**

Statement # 76 (USACE) / Summary of Comment: Based on the information submitted, it appears that a Department of Army Standard Individual Permit would be required to authorize five of the six Build Alternatives considered. When more detailed information about the project is available, it will be necessary to provide the USACE with suitable maps of the proposed project area showing the location of proposed discharges, the type and amount of material (temporary or permanent), if any, to be discharged, and plan and cross-section views of the proposed project. The application should follow the USACE guidance and checklists for Section 404 permit applications. Note that it is unlawful to start work without a Department of the Army permit if one is required. You should avoid and minimize adverse impacts to streams, wetlands, and other waters of the United States in planning this project.

**Response:** Any application for an Individual Permit under Section 404 of the Clean Water Act would follow the appropriate USACE guidance. As for mitigation measures, in accordance with NTTA's May 10, 2005 letter to the USACE (included in **Appendix G-6** of the SDEIS), compensation for vegetation and wetlands losses due to the Parkway would occur by developing mitigation areas within the Dallas Floodway (see **Appendix J** of the SDEIS). Work on the proposed project would not start without first having the required the USACE permit(s) in place. For additional information about mitigation strategies, see Comment/Response 18-15 through 18-19.

**Regulatory Process 5-9. References to Section 404 permits**

Statement # 76 (USACE) / Summary of Comment: In the paragraph titled "Section 404 Permit Requirements" of **Section 4.12.1** of the DEIS, please revise sentence one to include the following sentence: "The USACE regulates activities that would result in the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act." In addition, you should include a section referencing the need for a permit under Section 10 of the Rivers and Harbors Act.

**Response:** The referenced paragraph has been revised in the SDEIS as follows: *"**Section 404 and Section 10 Permit Requirements** -- The USACE regulates activities that would result in the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Given the proposed extent of fill for the Build Alternatives and potential impacts to floodplains, the proposed action would require a Section 404 individual permit. The USACE regulates activities in, or affecting, navigable waters of the U.S. under Section 10 of the Rivers and Harbors Act. Given the potential impacts of Build Alternatives 3A, 3B, 3C, 4A, 4B, and 5 on the pilot channel of the Trinity River, the proposed action would possibly require a Section 10 permit. Additional details regarding permitting and compliance requirements that may be required for the proposed action are provided in **Chapter 7 Mitigation Measures and Commitments**."*

**Regulatory Process 5-10. Mitigation guidance documents**

Statement # 76 (USACE) / Summary of Comment: In **Section 7.4** on page 7-15 of the DEIS, you should note that the mitigation plan for the project should be developed using the Regulatory Guidance Letter 02-2 titled "Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the River and Harbors Act of 1899" dated December 24, 2002 (enclosed). We recommend also that you consider the Fort Worth District Draft USACE Mitigation Guidelines dated December 24, 2003 (enclosed), in developing the mitigation plan.

**Response:** The Guidance Letter and Mitigation Guidelines have been utilized in developing the mitigation plan (see preliminary plan in **Appendix J** of the SDEIS) as part of any Section 404 Individual Permit if the preferred alternative is in the floodway.

**Regulatory Process 5-11. NEPA timeframe**

Statement # 78 / Summary of Comment: How long would it take to prepare the NEPA document?

**Response:** The DEIS was prepared in early 2005. Following the circulation of the SDEIS, it is anticipated that the FEIS would be prepared in late 2009. The schedule is affected by various review times and the extent of agency and public comment. Assuming a favorable outcome, the completion of the NEPA process would probably involve FHWA approval of the FEIS and issuance of a Record of Decision.

**Regulatory Process 5-12. Segmentation from DFE project**

Statement # 72, 73 / Summary of Comment: Both NEPA and Federal Highway Administration regulations require NTTA to evaluate all connected project components in a single EIS. This DEIS is part of the overall failure of governmental entities, including the City of Dallas, as well as NTTA and TxDOT, to do just that. The most glaring example of this failure was the approval of the Dallas extension downstream from the floodway in 1998, part of an effort to fragment connected project components of what is clearly a single project. That project excluded examination of transportation alternatives in the Dallas Floodway, confining itself in that context to a limited review of conveyance lakes. That project was successfully segmented geographically, and this project seeks to fragment floodway analysis environmentally. This has led to the DEIS under review here, one that fails to examine more sustainable and ecologically beneficial alternatives than the 6-to-8-lane, 80,000-vehicles-per-day Trinity Parkway.

Statement # 86 / Summary of Comment: The approval of the DFE EIS prior to the DEIS was part of an effort to segment connected project components so as to minimize environmental impacts and economic costs by separately evaluating components of a single project. Without the DFE in place it would not have been possible to claim in the DEIS no hydraulic impacts from Floodway Alternatives. The DEIS makes this claim without the benefit of full hydraulic analysis. By segmentation of project components this DEIS fails to accomplish NEPA required identification and analysis of all impacts and costs associated with project alternatives and has not adequately allowed for consideration of more environmentally sustainable, and economically cost effective, and beneficial alternatives.

**Response:** The Trinity Parkway project is independent of and proceeding on a separate timeline from local USACE projects. Note that the issue of connection between projects was reviewed in U.S. Federal Court, where the finding was that the Trinity Parkway and the DFE are not connected projects (see, Texas Committee on Natural Resources v. Van Winkle, 197 F. Supp. 2d 586 (N.D. Tex. 2002)). The geographic proximity to those projects, however, has required close coordination with the USACE as a cooperating agency. These relationships and processes are in line with NEPA regulations (see 40 Code of Federal Regulations (CFR) § 1501.6).

## 6. Public Involvement

**Public Involvement 6-1. Process for scoping of issues**

Statement # 3 / Summary of Comment: The scoping process was inadequate and did not serve to identify important issues that should have been addressed in the DEIS, particularly with respect to grasslands, specific adverse impacts to wetlands, and details of required mitigation. Describe what issues were identified during scoping and how they were addressed in the DEIS. How was public involvement encouraged in the process?

**Response: Chapter 10** of the DEIS outlines the scoping process and summarizes the initial scoping meeting on July 8, 1999. Minutes of that meeting are included in **Appendix A-2** of the DEIS. Attendance in the meeting was encouraged by mailing invitation letters to property owners near the proposed project, to elected officials, and through advertisements in daily newspapers. Approximately 130 people attended the meeting. The minutes of the meeting indicate that, after receiving a detailed briefing about the proposed project, attendees raised concerns about the loss of trees, impacts to wildlife, and other impacts associated with possibility of placing a roadway between the levees of the Trinity Floodway. The issues raised during the scoping process, which also included other meetings with the public and the Citizens Advisory Work Group (also summarized in **Chapter 10** and **Appendix A** of the DEIS), have been addressed in **Chapters 3**, **4**, and **7** of the DEIS, as supplemented in the SDEIS.

**Public Involvement 6-2. Community Advisory Work Group**

Statement # 3 / Summary of Comment: Explain how the members of the Community Advisory Work Group were chosen. The DEIS is ambiguous on this point, saying only that some people were chosen to represent different groups and interests. Indicate who made the selections, and the criteria for selection. Explain why Charles Allen, owner of the only business that makes commercial recreational use of the Trinity River in the project area and who has extensive knowledge and interest in the project, was not invited to participate in the work group.

**Response:** The composition of the Community Advisory Work Group (CAWG) is described in Section 10-1 of the DEIS, along with a description of the process used to identify neighborhood representatives. Generally, the identification of representatives from environmental, business, and civic groups was by direct contact with these groups, asking for specific nominations. The CAWG was structured in an effort to reach representative members of the community while keeping the size of the meetings manageable. There were eight individual businesses in the CAWG, all of which had substantial landholdings in the corridor. The CAWG also included all known chambers of commerce in the corridor, and several business interest groups, such as Central Dallas Association and Stemmons Corridor Business Association. Mr. Allen's small business was not directly included, but was assumed to be represented by both the business groups in the CAWG and the environmental/recreational groups. All of the CAWG meetings were open to the public, as the effort to disseminate information about the project and solicit input was not exclusive to CAWG membership.

**Public Involvement 6-3. Cost and distribution of DEIS copies**

Statement # 3 / Summary of Comment: Explain why copies of the DEIS were provided free of charge to Chambers of Commerce but other persons and organizations had to pay $80 plus shipping costs. Explain the criteria used to provide some organizations a free copy but to charge others. Who received free copies of the DEIS and how many people or groups had to pay? It is unfair to make access to the DEIS easy for some but prohibitively expensive to others, especially interested people who may be expected to oppose the project. The CD-ROM version of the DEIS is awkward to use and is not suitable for detailed study within the time constraints of the comment period.

Statement # 87 / Summary of Comment: Commenter had difficulty in timely obtaining a paper copy of the DEIS because copies were not provided to environmental organizations. Paper copies of the DEIS were distributed to project proponent business organizations free of charge.

**Response:** The fee for documents is charged to recover printing costs only. Compact discs that contain the text and reference materials for the DEIS are available in Portable Document Format (PDF) for $5.00. The DEIS has also been available on NTTA's website for downloading at no cost. Electronic versions of

the DEIS may be printed to reproduce a paper copy that is equivalent to the copy that was prepared by NTTA. Copies of the DEIS were provided to federal, state, and local agencies to comply with regulatory requirements to coordinate the DEIS with agencies of special expertise or interest. Over 20 copies of the DEIS were provided to city and county public offices, libraries, chambers of commerce, and other community centers to make the DEIS available to the public throughout the study area. The distribution list for these copies may be found in **Appendix G-3** of the SDEIS. While the costs of duplicating paper copies of these documents precludes making them available to everybody that requests a copy, a substantial number of free copies were made available in public facilities so that interested citizens could review and evaluate the DEIS without incurring the cost of purchasing a copy.

**Public Involvement 6-4. Additional meeting on South Dallas/Fair Park**

Statement # 20, 21 / Summary of Comment: Request that the NTTA immediately begin a series of public meetings in the South Dallas/Fair Park community to provide information to residents and solicit more input on the project. Residents must receive notice of these meetings, which should be held in various locations in the community. The community needs to be more involved in the impact of the neighborhood, especially SM Wright Freeway. I think the community needs a more visualized impact of how this could look. We talked about job creation down at TR Hoover, but we never did get an update on any type of job creation that this highway, roadway, or tollway could impact the neighborhood. We started talking about the six lanes to four lanes. The neighborhood needs a better understanding of the impact of the six lane, four lanes in the South Dallas Fair Park neighborhood. We talked about the tollway. We would like to see the tollway as it crosses over Lamar, either accessibility to the on and off ramp of the roadway. We would like a high level of urban design to go into the road south of Martin Luther King. We would like an urban design planner to ensure that economic impact would benefit the tollway to South Lamar corridor. We need another meeting set up to talk about the 3B. We also need some more information on displacement on the Lamar Corridor. We need to have some more information on the EIS impact on SM Wright plus the Lamar area.

**Response: Chapter 10** and **Appendix A** of the DEIS, as supplemented by the SDEIS (see **Appendix G**), summarize the open, proactive, participatory public and agency involvement process used throughout the process of analyzing potential environmental and community impacts. Public meetings have been held at a variety of locations throughout the study area, and sought to both inform citizens about the proposed project as well as solicit their input. The efforts to include members of the community in the planning process also led to the creation of a Community Advisory Work Group (CAWG), which met on numerous occasions from 1999 through 2004 to give and receive information about the project. Several community representatives from the South Dallas/Fair Park area were members of the CAWG and, along with members of the public, were afforded the opportunity to participate in the CAWG meetings. The public hearing on March 29, 2005 was the culmination of ongoing efforts to inform and involve members of the community in this process. The project sponsors intend to provide continuing dialog with the affected communities as this project moves forward, including in the period after the NEPA (formal environmental) process is complete. Upcoming events, include an additional public hearing to be held in connection with the publication of the SDEIS.

In regard to specific design-related comments:

(i) The Trinity Parkway study team has provided local and state elected officials from the South Dallas Fair Park area two concept sketches for possible future enhancement of SM Wright Freeway. The project sponsors have suggested concepts only, because the subject improvements are not part of the Parkway project, but would be separately developed by TxDOT and the City.

(ii) A concept plan has been provided to the City of Dallas for an underpass of Lamar Blvd. Drainage issues at the underpass force Lamar to be raised as much as 15 feet above existing grade. The resulting impacts to businesses along Lamar was judged to be undesirable.

(iii) The DEIS proposes staged construction of four lanes in the southern segments of the Parkway. Assuming this implementation, the project sponsors would expand the road to six lanes at a future

date based on traffic demand. With this understanding, the staged construction is not judged to be detrimental to the local community.

(viii) The "urban design" would be based on the principles of context sensitive design and the published "System Wide Design Guidelines" for NTTA facilities. Plate 4-23 in the DEIS shows a conceptual enhancement of the roadway in the area of the Southern Terminus. The City of Dallas also intends to retain its own consultant team to (among other assignments) develop concepts for the urban design of Trinity Parkway.

**Public Involvement 6-5. Approval of public meeting**

Statement # 14, 30 / Summary of Comment: The open house, public hearing, handouts, and CD were informative in educating the citizens of Dallas about the proposed project.

**Response:** Comments noted and considered.

**Public Involvement 6-6. Agency and public coordination**

Statement # 55 (NCTCOG) / Summary of Comment: This critical project is growing closer to implementation due to the continued cooperation of all of the agencies and local governments. The development of support for a preferred alternative (Alternative 3B) is the result of an extensive public involvement and agency coordination effort. Commenter strongly encouraged a continuation of these efforts in the subsequent final EIS process as well as in the detailed design and engineering phases.

Statement # 81 (DOI) / Summary of Comment: We recognize and appreciate the extent of public and agency participation conducted with affected parties on this project including Native American groups. We encourage you to continue consultation with these groups and the Texas State Historic Preservation Office throughout the remainder of the project, as appropriate.

**Response:** Comments noted and considered.

**Public Involvement 6-7. Extensive public coordination**

Statement # 42 / Summary of Comment: NTTA has done an excellent job in coordinating the proposed project and DEIS. Commenter indicated that, as a member of the Community Advisory Work Group since its inception many years ago, he has found the process to be inclusive and straight forward while affording opportunities for review and critique.

Statement # 58 (Dallas City) / Summary of Comment: This project has had hundreds of meetings and many thousands of hours. The City of Dallas's Council Trinity Committee was appointed by the Mayor and is made up of half of the Dallas City Council members. The Committee meets twice a month and seeks input from citizens on projects like this.

Statement # 66 / Summary of Comment: The proposed project is part of planning efforts for the Trinity River Corridor that have been underway for decades. Hundreds of citizen volunteers have participated in numerous meetings and have invested tens of thousands of personal hours in the Trinity. In 1989 the proposed project became part of the program that consisted of flood protection, transportation, recreation, economic development, and environmental stewardship. The proposed project has been the subject of the most extensive public participation program in our history, and that is very appropriate, considering the impact of the Trinity on the city. Much discussion has revolved around the alignment of the Parkway, and the pros and cons of each alignment, but it is critical that we realize the selected alignment must support the multi-use needs listed above.

**Response:** Comments noted and considered. In regard to Statement #66, note that flood protection, recreation, economic development, and environmental stewardship are actions separate from the Trinity Parkway, but are taken into consideration in the development of the project proposal.

**Public Involvement 6-8. Lengthy involvement**

Statement # 59, 60 / Summary of Comment: Commenter indicated that she has been coming to meetings since the first set of them at the Bronco Bowl over eight years ago. Commenter indicated she did not believe she had been listened to until this point, and hoped that placing her opinions on the record would have some impact.

**Response:** Each comment has been carefully read and considered in the process of developing the project. Note that Statements #59 (verbal) and 60 (written) are from the same individual. Other points raised by this commenter are addressed in Comments/Responses 2-1, 2-3, and 2-8.

**Public Involvement 6-9. Request for extension of time**

Statement # 1, 2, 4, 19, 23, 24, 25, 33, 34, 41 (City of Dallas), 72, 73, 85, 86, 87 / Summary of Comment: The DEIS is very lengthy and there was insufficient time to adequately review it before the end of the comment period and prepare comments. An extension of time to submit comments was requested. A thorough review of the DEIS by all interested parties is an integral part of this process.

**Response:** A thorough review by the public is important to this planning process, and the FHWA has complied with the requirements that provide the public the opportunity to submit comments on the DEIS. According to 23 Code of Federal Regulations Section 771.123(i), the DEIS must be available during a comment period that is a minimum of 45 days. The notice of availability of the DEIS was published in the Federal Register on February 18, 2005, and indicated that the 45-day comment period would end April 4, 2005. The period of availability was actually longer than this because the first of four notices of availability was published in local newspapers on February 11, 2005. In addition, the comment period extended for ten days past the date of the public hearing (March 29, 2005) to April 8, 2005. Consequently, the period that the DEIS was available to the public and during which comments could be received was from February 11 through April 8, 2005, or a total of 56 days.

**Public Involvement 6-10. Time allotted was less than usual**

Statement # 34 / Summary of Comment: The time allotted for the public review of the DEIS was less than usual.

**Response:** As noted in the response to Comment/Response 6-9, the time allotted for public review of the DEIS was 11 days longer than required by regulations applicable at the time of publication.

## 7. USACE Coordination

**USACE Coordination 7-1. Not joint development with DFE**

Statement # 76 (USACE) / Summary of Comment: Multiple references and statements are made that the on-going Dallas Floodway Extension Project is a potential joint development project. The Dallas Floodway Project (DFE) is not and has never been considered for joint development with any other project. Remove all references to DFE as a potential joint development project.

**Response:** Agreed. This has been corrected in the SDEIS by deleting references to joint development projects with the USACE. Additionally, **Section 3.1.1.4** has been replaced in the SDEIS to reflect that the proposed project does not include any joint development projects.

**USACE Coordination 7-2. Court order and DFE**

Statement # 76 (USACE) / Summary of Comment: Regarding the third paragraph on page 3-117 of the DEIS, the Court did not order the Corps to prepare a supplement. The Court enjoined construction of the DFE project until an adequate analysis of the cumulative impacts of other projects in the same geographic area was prepared. The Corps chose the option of doing a Supplemental EIS as a means to comply with the Court order.

**Response:** The referenced paragraph has been eliminated from the SDEIS in **Section 3.5.6.3** and from the **Executive Summary.**

**USACE Coordination 7-3. DFE modifications**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 3-116 of the DEIS indicates that the Dallas Floodway Extension actually has two modifications to the 1965 authorization. The modification not listed is a flood control credit for advanced construction costs for comparable portions of previously constructed non-Federal levees (Rochester Park and Central Wastewater Treatment Plant), was authorized in accordance with Section 351 of the Water Resources Development Act of 1996 (P.L. 104-303). . .[§ 351, Water Resource Development Act (WRDA) 1996 (Project Modification - Added two Non-Federal Levees and provided Construction Credit) - Rochester Park Levee and Central Waste Water Treatment Plant (CWWTP) Levee].

**Response:** The referenced paragraph has been revised in the SDEIS to replace the last sentence with the following: "*Additionally, a flood control credit for advanced construction costs for comparable portions of previously constructed non-Federal levees (Rochester Park and Central Wastewater Treatment Plant), was authorized in accordance with Section 351 of the Water Resources Development Act of 1996 (P.L. 104-303).* ***Plate 3-6*** *shows the major features of the DFE Authorized Plan."*

**USACE Coordination 7-4. DFE Authorized Plan**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 3-116 of the DEIS states, "**Plate 3-5** shows the major features of the DFE Recommended Plan." Actually, the plan / project is authorized and under construction.

**Response:** See Comment/Response 7-3.

**USACE Coordination 7-5. Habitat and DFE overlaps**

Statement # 81 (DOI) / Summary of Comment: We (DOI) understand that the proposed action would be coordinated with the proposed DFE. The study area for the proposed action overlaps portions of the DFE project area, and we have concerns that impacts to this area may preclude mitigation options for the DFE, depending on the timing of implementation of both projects. We encourage close coordination with the DFE project team for the purpose of ensuring the enhancement of fish and wildlife resources.

**Response:** The FHWA is working closely with the USACE to ensure the proposed project dovetails with work on the DFE. As noted in **Section 1.11.2** (pages 1-44 and 1-45) of the DEIS, design features outlined for the DFE were assumed to exist, for planning purposes. Close coordination and cooperation with the USACE will continue throughout this project to minimize impacts to fish and wildlife resources that may be affected by the project.

**USACE Coordination 7-6. Use of excavated materials and the DFE**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 3-117 of the DEIS states: "Excavated material from the wetlands may be utilized for construction of the levees, potentially for the construction of the Trinity Parkway (proposed action)." This statement should be removed because the excavated material will be used during the construction of the DFE by the Corps to construct the levees and it will not be used for the Trinity Parkway. Additionally, the DFE project will provided ecosystem restoration / mitigation, but not for the Trinity Parkway construction impacts. The DFE project will provide recreation facilities.

**Response:** In the SDEIS, the referenced sentence beginning with, "Excavated material from the wetlands . . ." has been deleted. In addition, and to address the concerns about the scope of DFE ecosystem restoration / mitigation, the subsequent sentence beginning with, "The project would provide environmental . . . ," has also been deleted.

**USACE Coordination 7-7. Wetland and levee construction**

Statement # 76 (USACE) / Summary of Comment: The second paragraph on page 3-117 of the DEIS indicates that the Chain of Wetlands, and the Lamar and Cadillac Heights levees will not be completed by the end of 2008.

**Response:** The referenced paragraph has been revised in the SDEIS to replace the last sentence in the paragraph with the following: "*Construction of portions of the "Chain of Wetlands" project has commenced. Other portions of the project, including the Lamar Street and Cadillac Heights levees will be scheduled in future years based on availability of federal funding."*

**USACE Coordination 7-8. Road on levee top**

Statement # 76 (USACE) / Summary of Comment: **Plates 2-9B** and **2-10C** of the DEIS show a road on top of the West Levee from upstream of Houston Street to IH-35E. This placement of a road on top of the levee has not been coordinated with or approved by the Corps Engineers and is not acceptable.

**Response:** The Oak Cliff Levee Road was shown at the request of the City of Dallas (based on the 2003 Urban Vision Plan). The road is shown in dashed lines on **Plates 2-4B**, **2-10A**, **2-10C**, and **2-15B** all of which pertain to Alternative 3B, Combined Parkway Modified. The road is marked on the plates "by others," and is shown for convenience of the City of Dallas to show compatibility of the Parkway with this road in the event that it is implemented. The Oak Cliff levee road is not part of the Trinity Parkway project.

**USACE Coordination 7-9. Dallas Floodway EIS**

Statement # 76 (USACE) / Summary of Comment: The last paragraph on page 3-11 of the DEIS states, "The USACE" anticipates completion of the Dallas Floodway EIS in the winter of 2005." This is not likely since we were awaiting the details from the Trinity Parkway study and those details are not in the DEIS. It should read, "The USACE anticipates completion of the Draft Dallas Floodway EIS in the winter of 2005."

**Response:** In the SDEIS, any reference to the date that the USACE anticipates completion of the Draft Dallas Floodway EIS has been removed.

**USACE Coordination 7-10. Project integration process**

Statement # 76 (USACE) / Summary of Comment: With reference to paragraph 4.2.7 on page 4-17 of the DEIS, it is not possible to meet the full disclosure requirements of NEPA if the degree of integration and the cumulative impacts of the various alternatives within the Dallas Floodway are not discussed in the EIS.

**Response:** As indicated in Comment/Response 7-1, references to potential joint development projects have been deleted in the SDEIS. Efforts to achieve coordinated planning of independent projects affecting the study area are ongoing and summarized in **Section 3.1.1.4** of the SDEIS. The impacts of other projects are included in the discussion of cumulative impacts, which has also been revised in the SDEIS.

## 8. Adequacy of Investigation

**Adequacy of Investigation 8-1. Insufficient detail**

Statement # 1, 3, 52 / Summary of Comment: The DEIS lacks sufficient detail in its description of effects on the environment and required mitigation measures are not listed. Explain whether all scientific and other sources of information relied upon for conclusions in the DEIS have been referenced in it.

**Response:** Comments noted and considered. References to all material sources of scientific and other information relied upon in preparing the analyses for the proposed project were placed in the Bibliography of the DEIS (**Chapter 13**). As part of the public involvement process for the DEIS, responses have been prepared and additional analyses have been performed based on specific suggestions received from the public and government agencies. The SDEIS adds substantial information on several topics including floodplains and wetlands.

**Adequacy of Investigation 8-2. General USACE concerns**

Statement # 53 (USACE) / Summary of Comment: The U.S. Army Corps of Engineers (USACE), Fort Worth District, has serious concerns regarding the adequacy of the DEIS to meet the requirements of both the National Environmental Policy Act and the USACE's Trinity River and Tributaries EIS Record of Decision, dated April 29, 1988. We would like to meet with you as soon as possible to discuss our concerns and reach a satisfactory resolution to these concerns.

**Response:** The USACE provided extensive detailed comments on the DEIS, with reference to matters within the USACE's area of jurisdiction, that have been addressed by the preparation of a SDEIS and will be revised in the FEIS. Since April, 2005, project sponsors have been working with the USACE to gather additional input on the preparation of the SDEIS and application for a permit under Section 404 of the Clean Water Act. In October, 2005, the USACE agreed to become a cooperating agency to fulfill a regulatory requirement and to ensure its continued and close involvement in addressing areas within its jurisdiction.

**Adequacy of Investigation 8-3. EPA finding of sufficiency**

Statement # 9 (EPA) / Summary of Comment: The EPA, Region 6, as part of its responsibilities under federal law and as a cooperating agency indicated its lack of any objection to the DEIS. The DEIS identifies and evaluates the potential environmental impacts associated with the Build and No-Action Alternatives.

**Response:** Comment noted and considered.

**Adequacy of Investigation 8-4. Thorough and objective evaluation**

Statement # 54 / Summary of Comment: The DEIS is a very thorough and objective evaluation of the facts and the data.

**Response:** Comment noted and considered.

**Adequacy of Investigation 8-5. Use of conclusory terms**

Statement # 76 (USACE) / Summary of Comment: The purpose of NEPA's procedures is to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 CFR Section 1500.1 (b) (2002). 40 CFR Section 1502.1 states that "[t]he primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government." It does not appear that the EIS meets these goals. There are no detailed discussions of the environmental impacts of the proposed alternatives for the roadway. Therefore the EIS fails to make environmental information available to either public officials or citizens prior to the action being taken or that the EIS insures that the policy and goals of NEPA are met. Rather than discussing the environmental impacts on wetlands, water quality, water resources, vegetation, wildlife, and other environmental concerns the EIS in rather conclusory terms states that the effects will be mitigated

through compliance with executive order, statute, or regulations. Such statements do not comply with the environmental analysis required under NEPA.

**Response:** The Trinity Parkway DEIS has been supplemented in the SDEIS with additional data and analyses in response to specific concerns raised by the USACE regarding areas within its area of jurisdiction. In particular, additional information on a number of topics has been added in the SDEIS, particularly information on floodplains and wetlands, cumulative effects, and expanded discussions of mitigation measures. Numerous other changes requested by the USACE, including the use of more specific terms, has been made in the SDEIS.

**Adequacy of Investigation 8-6. Analysis of alternatives**

Statement # 76 (USACE) / Summary of Comment: With reference to paragraph 4.2.6 on page 4-11 of the DEIS, NEPA does not allow deferral of the consideration of potential environmental impacts. They should be considered for each alternative prior to the preferred alternative being selected. Under NEPA an agency is required to engage in rigorous environmental analysis of the selected alternatives before making its ultimate decisions. The DEIS does not appear to meet this criterion.

**Response:** The preparation of a SDEIS was partially in response to the USACE's concerns about the adequacy of information available in the DEIS for the analysis of alternatives for the proposed project, particularly with reference to matters within the USACE's area of jurisdiction (see Comment/Response 8-5).

**Adequacy of Investigation 8-7. Deferral of impact analysis**

Statement # 76 (USACE) / Summary of Comment: With regard to the fourth paragraph on page 4-18 of the DEIS, the environmental consequences from 3A, 3B, 4, and 5 must be disclosed within the EIS along with cumulative impacts. The discussion of their impacts cannot be deferred. With regard to the second paragraph on page 4-19 of the DEIS, deferral of a description of the environmental impacts of the roadway to a subsequent document does not meet NEPA full disclosure requirement.

**Response:** In the SDEIS the section that includes the referenced paragraph (i.e., **Section 4.2**, dealing with the impacts of potential joint development actions) has been deleted because the proposed project is independent of any other projects. See also **Section 3.1.1.4** of the SDEIS, and Comment/Response 7-1 and 7-10. With regard to cumulative impacts, the analysis of cumulative effects has been expanded in the SDEIS (see **Section 4.24.2**).

**Adequacy of Investigation 8-8. Mitigation oversight and monitoring**

Statement # 3 / Summary of Comment: Page 7-28 of the DEIS indicates that NTTA would develop a construction oversight and environmental monitoring program for the Trinity Parkway project that is similar to the program applied to the President George Bush Turnpike (Segment IV). Describe the referenced program. Explain why that program: (1) failed to prevent the destruction of the state champion little walnut tree; (2) received so much negative feedback from environmental agencies on NTTA's mitigation plans; (3) was delayed and made more expensive by its inadequate mitigation plans. Why should a failed environmental oversight program serve as the model for the Trinity Parkway project?

**Response:** Comment noted and considered. The project sponsor will develop a program to oversee and monitor mitigation measures during construction. The details of the program will be developed during the final design phase of the project, and will be worked out in consultation with interested environmental regulatory agencies (e.g., EPA, USFWS, and USACE), as was done for President George Bush Turnpike (PGBT) Segment IV. The oversight and monitoring program will be structured to ensure compliance with all applicable federal, state, and local environmental criteria. While the approach taken for the Segment IV project provides a framework for this project, the details of the program will be determined as final design requirements are developed. All indications have been that the oversight and monitoring program for the Segment IV project was successful, as that project was completed cooperatively with regulatory agencies and in full compliance with environmental legal requirements. Agency records have been reviewed regarding commenter's statements (1), (2) and (3), and no basis for these statements has been found.

**Adequacy of Investigation 8-9. Professional experience and integrity**

Statement # 3 / Summary of Comment: Can the public be assured of the professional and scientific integrity of the discussions and analyses published in the DEIS, and what is the basis of this assurance? Have any of those who prepared the DEIS ever prepared an EIS in the past? Would it not seem prudent to contract the preparation of the DEIS with a company with prior experience in EIS preparation? There also seems to be a conflict of interest in contracting with a company to prepare an EIS that contracts on a regular basis to expedite transportation projects. Describe whether Halff Associates will benefit financially if the project is implemented.

Statement # 18 / Summary of Comment: The use of MIS and MIP money and vested interest in this project is sort of a conflict of interest for them to be doing this project and writing the DEIS.

**Response:** Comments noted and considered. North Texas Tollway Authority (NTTA) selected a consultant firm with extensive experience in transportation planning and related NEPA work. The preparation of an EIS is an interdisciplinary process and there is synergy inherent with a consultant that has decades of experience in a wide range of disciplines relevant to the project. No conflict of interest is evidenced by virtue of having preliminary transportation design planning and environmental analysis managed by the same firm. This arrangement facilitates efficient sharing of design and impact data and fosters development of design strategies that accomplish the transportation purposes of the project while avoiding or mitigating the environmental effects. In choosing a company to perform environmental studies, NTTA relied on the quality of NEPA studies performed in the past and the education and experience of the individual members of the environmental team. The contract with Halff Associates covers the preparation of preliminary design work and completion of necessary environmental documentation. If the project is implemented, Halff Associates will be considered with other firms for the oversight of follow-on design and construction actions. These arrangements are common in transportation projects and, in over nine years of working on the project, nothing has been encountered that would suggest any conflict of interest. Also, note that the ultimate work product, the FEIS, is subject to close scrutiny by other government agencies and by the general public.

**Adequacy of Investigation 8-10. Information on Bexar section**

Statement # 15 / Summary of Comment: More information is needed on the Bexar section.

**Response:** This comment presumably refers to the two options identified for tying in the proposed project with US 175 at its southeastern end. This discussion is found on page 2-38 and **Plate 2-11** of the DEIS. Either access option is compatible with all of the Build Alternatives for the project, and neither access option affects the environmental impact analysis.

**Adequacy of Investigation 8-11. Detailed mitigation plans**

Statement # 76 (USACE) / Summary of Comment: The DEIS fails to identify and disclose detailed mitigation plans (i.e., quantities, locations, measures) for impacts to natural resources from the Build Alternatives. Therefore, it is hard to determine the true effects of each alternative and if mitigation areas will have any adverse impacts to environmental resources.

**Response:** Additional information on preliminary mitigation measures for wetlands is in **Appendices H (Preliminary § 404(b)(1) Guidelines Analysis)** and **J (Preliminary § 404 Mitigation Plan)** of the SDEIS. NTTA will seek to be in compliance with the NEPA 404 merger process and a greater level of mitigation detail will be provided in the FEIS once a preferred alternative has been identified.

**Adequacy of Investigation 8-12. Amount of urban landscape**

Statement # 76 (USACE) / Summary of Comment: Page 3-75 and **Table 4-34** of the DEIS identify 1,420 acres (67%) of urban landscape communities within the study area. What does this consist of? Seems high considering the bulk of the study area is within the floodway.

**Response: Section 3.4.3** of the DEIS states that "urban landscape communities comprise 67 percent (4,144 acres) of the study area." The urban landscape area represents urban development outside the floodway and within the study area. The floodway/floodplain comprises the remaining 33 percent of the study area with the majority of that consisting of floodplain grasslands.

**Adequacy of Investigation 8-13. Indirect impacts**

Statement # 76 (USACE) / Summary of Comment: The DEIS indicates that new development near the Trinity Parkway would be a likely indirect impact to the study area. What are the quantitative effects on wetlands, forests, grasslands, water quality, etc.? Will zoning change?

**Response:** While new development near the proposed project is likely, it can only be generally evaluated as there are currently no known specific development projects. Such development would be subject to a variety of ordinances, plans, and regulations that the City of Dallas would apply to manage growth within its jurisdiction. As discussed in **Section 4.1.3** of the DEIS, indirect effects that may follow the proposed project would be subject to environmental, zoning, and other requirements to ensure the orderly growth of Dallas communities. Any such development, the specifics of which are conjectural at this point, would occur subject to the application of these local government controls that would also consider environmental effects of those developments. The SDEIS provides an updated Indirect Impacts discussion in **Section 4.24.1**.

**Adequacy of Investigation 8-14. Description of impacts**

Statement # 76 (USACE) / Summary of Comment: Subpart 4.9 on page 4-100 of the DEIS describes impacts in general terms and does not identify specific direct or cumulative impacts. **Table 4-37** only provides a direct tabulation of acres and not the effects of the direct or cumulative impacts on these acres.

**Response:** The preparation of a SDEIS is partially in response to USACE's concerns about the adequacy of information available in the DEIS for the analysis of environmental impacts for the Build Alternatives (see Comment/Response 8-5), particularly as those concerns relate to areas within USACE's area of jurisdiction. Additional consultation with USACE has occurred since the preparation of the DEIS as well as additional field work and analysis on the subject of Water Body Modification: Vegetation and Wildlife Impacts. Substantial additional detail on this issue has been added to the SDEIS (i.e., regarding vegetation cover and waters of the U.S., including wetlands). With regard to cumulative effects, SDEIS **Section 4.24.2** has been substantially revised and provides new information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS.

**Adequacy of Investigation 8-15. Assumed cost of fuel**

Statement # 78 / Summary of Comment: Does your analysis include the effects of more expensive vehicle fuel for 2025?

**Response:** The regional transportation model used in the DEIS analysis includes an inflation factor for the expected increase in the cost of vehicle fuel.

**Adequacy of Investigation 8-16. Overemphasis of floodway benefits**

Statement # 86 / Summary of Comment: The entire MTIS and EIS for the proposed project have exhibited a tendency toward marketing floodway high-speed roadways as the only way to address transportation needs. Consistently throughout the MTIS and DEIS the costs and impacts of the Floodway Alternatives are minimized while overstating the benefits of its synergy with various parks, flood control projects planned and funded by others. This is an effort to avoid identification and analysis of the project's full and cumulative costs and impacts and fails to conform to NEPA requirements. This is deceptive for both decision makers and the public since it fails to fully document all project connected costs and to evaluate all project impacts.

**Response:** The Major Transportation Investment Study (MTIS) is summarized in the **Sections 1.5** and **2.1.1** of the DEIS, and the MTIS plan of action is listed in **Section 2.1.2**. The MTIS plan of action lists seven steps, only one of which is a roadway in the floodway. Additionally, the MTIS considered and set aside multiple additional alternatives during the course of the study, including large additions of capacity to Stemmons Freeway, demographic changes (moving additional projected regional employment into the Southern Sector of Dallas), and several arterial street improvements in the corridor. The MTIS made an

initial recommendation for a low speed (45 mph) parkway within the Dallas Floodway. As described in DEIS **Section 2.1**, the DEIS is more narrowly focused on Action Item 7 from the MTIS, which is the Trinity Parkway Reliever Route. As described in **Section 1.5.2** (last paragraph) of the DEIS the operating speed of the Parkway considered in the DEIS has been increased to 55 mph due to the conversion of the road to a toll facility. The design and construction costs of the Parkway alternatives have been developed using consistent and standard methods of cost estimation, and are believed to support fair comparison of alternatives without bias. The potential synergy of the Parkway with proposed parks in the Dallas Floodway is discussed in the second paragraph of **Section 1.11.4**, which accurately describes the potential use of excess excavated earth from the proposed floodway lakes to build the Parkway embankments. This applies primarily to those alternatives located in the floodway, since the alternatives located outside the floodway require relatively little earth fill for embankments. Within the floodway, an alternative plan to build Parkway embankments with imported earth fill would violate regional criteria for valley storage preservation. The movement of material from the lakes to the Parkway embankments is an obvious and synergistic solution. The comment also contends that there is more widespread overstatement of synergies and understatement of impacts in the DEIS. This is not supported by any examples, and is not believed to exist in the document.

## 9. Air Quality

**Air Quality 9-1. Negative impacts**

Statement # 1, 5 / Summary of Comment: The project will have a negative impact on air quality. It will increase air pollution in a region that cannot meet current air quality standards.

**Response:** Six pollutants are of primary concern with regards to air quality in urban areas. These include: ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards for these identified air pollutants. These standards represent exposure levels where potential threats to human health may occur. The health risk from air pollutants is generally determined on a regional basis with the EPA designating areas where the potential for threat to human health exists as a non-attainment area for specific air pollutants. The EPA-designated nine-county Dallas-Fort Worth area (including Dallas County) is in non-attainment only for ozone.

The regional emissions analysis conducted by the North Central Texas Council of Governments (NCTCOG) addresses the regional effects of ozone. Ozone is not modeled on a project specific level. The proposed project design concept and scope and project cost are not yet consistent with the conforming MTP (*Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Area*) and the *2008-2011 TIP*, as revised, as proposed by the NCTCOG, and measures are being taken to address the issue. Prior to FHWA taking final action on the proposed project, it will be consistent with a conforming MTP and TIP/STIP. The U.S. Department of Transportation (FHWA/FTA) found the MTP to conform to the State Implementation Plan (SIP) on June 12, 2007 and the *2008-2011 TIP* was found to conform on October 31, 2007. All projects in the NCTCOG's TIP that are proposed for federal or state funds were initiated in a manner consistent with federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR. Energy, environment, air quality, cost and mobility considerations are addressed in the programming of the TIP.

**Air Quality 9-2. Relation to non-attainment status**

Statement # 88 / Summary of Comment: Is there any convincing justification for a reliever route at this location relative to the recurring air quality issue (non-attainment status) for North Texas?

**Response:** The decision to consider a reliever route at the locations described in the DEIS is based primarily on transportation needs. Air pollution from mobile sources is generally evaluated and addressed on a regional basis and is not part of the process for locating the various Build Alternatives. See also Comment/Response 9-1 and 9-4.

**Air Quality 9-3. Traffic stalls and air quality**

Statement # 57 / Summary of Comment: Thorny traffic stalls on roads such as the lower Stemmons have become a problem for air quality for a several-county area.

**Response:** Comment noted and considered. This comment is consistent with the description of traffic conditions in the area provided in DEIS Section 1.8.6. Also, as noted in Comment/Response 9-1 above, the proposed project would be required to be in conformity with the Clean Air Act Amendments of 1990 before final action is taken by FHWA.

**Air Quality 9-4. Quantification of air impacts**

Statement # 73 / Summary of Comment: The DEIS needs to state what amount of air pollution adding to the air quality non-attainment in our region will be generated by traffic on the toll road, but it does not. Vague assurances that increases here will be offset by decreases there are insufficient. The benefits arising from an expanded regional mass transit operation (e.g., DART) include improved air quality, but are not considered in the DEIS; they should be promoted.

Statement # 85, 86 / Summary of Comment: The DEIS includes no analysis of the proposed project's air quality impacts except to note that it is listed within a regional air quality conformity plan. There needs to be a project specific analysis of air emission impacts. The amount of increased Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx) which will be contributed to the region's air quality

nonattainment problem as a result of this project needs to be delineated, despite vague assurances that whatever is emitted would be offset by decreases elsewhere in the region. It should be possible to perform these analyses with the vehicle trips and speeds already projected.

**Response:** The primary pollutants from motor vehicles are volatile organic compounds (VOCs), carbon monoxide (CO), and nitrogen oxides (NOx). Volatile organic compounds and nitrogen oxides can combine under the right conditions in a series of photochemical reactions to form ozone ($O_3$). Because these reactions take place over a period of several hours, maximum concentrations of ozone are often found far downwind of the precursor sources. Thus, ozone is a regional problem and not a localized condition.

The modeling procedures of ozone require long term meteorological data and detailed area wide emission rates for all potential sources (industry, business, and transportation) and are normally too complex to be performed within the scope of an environmental analysis for an individual highway project. Accordingly, concentrations of ozone for this purpose of comparing the results of the National Ambient Air Quality Standards are modeled by the regional air quality planning agency for the State Implementation Plan. However, concentrations for carbon monoxide are readily modeled for highway projects and are required by federal regulations. Local concentrations of carbon monoxide are not expected to exceed federal standards at any time.

In devising strategies for congestion mitigation, one set of recommendations addresses the demand side of travel behavior. These strategies attempt to reduce the demand for drive-alone (single-occupant vehicle) travel on roadways by offering alternatives to driving alone. Low-cost quick-implementation strategies include ride-sharing, park and ride facilities, vanpool programs, and employer trip reduction programs. More cost-intensive and complex strategies include mass transit systems, high-occupancy vehicle (HOV) lanes, and bicycle routes.

The Metropolitan Transportation Plan (Mobility 2030 Plan) includes both long-range and short-range strategies and actions that lead to the development of an integrated intermodal transportation system in the Dallas / Fort Worth Metropolitan Area. Nearly $4 billion of fixed-guide way transit (i.e., light/commuter rail or bus ways) improvements were included for Dallas Area Rapid Transit in the Metropolitan Transportation Plan. Along with the existing network, this fixed-guide way network was encompassed within “principal transit corridors,” specially designated areas that would feature frequent service and transit-supportive infrastructure and land use. These corridors generally emanate from the Dallas Central Business District (CBD) and radiate in all directions out to the suburban communities surrounding the city.

Although extensive, the public transportation network assumed for the Dallas / Fort Worth metropolitan area in 2030 was not capable of removing the need for roadway improvements. The travel demand analysis conducted by North Central Texas Council of Governments for the long-range Mobility Transportation Plan still showed a need for road improvements in the study area to serve as a reliever route for existing downtown Dallas congestion. There are several reasons why public transportation is not able to meet the need and purpose of the proposed project. First, public transportation accounts for a relatively low percentage of trips, and the long-range Mobility Transportation Plan generally assumes the continuation of current travel behavior, which relies heavily on privately owned vehicles. Second, public transportation has difficulty in cost-effectively serving lower density suburban and rural areas, as opposed to more densely developed urban areas. Third, the long-range transit plan for the Dallas metropolitan area is a radial system centered on improved access to the Dallas CBD. Although beneficial, the existing and proposed fixed-guide way transit system is not designed to correct the mobility deficiencies within the suburban and rural areas in the area. If implemented in the future, mass transit would have a positive influence by increasing mobility and decreasing congestion. However, this would not satisfy the existing need for improved mobility and decreased congestion in the study area.

**Air Quality 9-5. Air toxics discussion**

Statement # 9 (EPA) / Summary of Comment: The EPA Region 6 stated that the DEIS contains a robust description of the modeling process used to determine air quality impacts. Also included was a section

on urban air toxics. As this is an area of increasing public concern, commenter is glad the FHWA is beginning to incorporate this discussion into NEPA documents.

**Response:** Comment noted and considered.

**Air Quality 9-6. Update conformity**

Statement # 9 (EPA) / Summary of Comment: As NCTCOG is in the process of completing a new conformity analysis (to be completed by June 15, 2005), the references in the DEIS should be updated to reflect inclusion of the proposed project in the latest State Implementation Plan.

**Response:** In the SDEIS, revisions have been made to **Section 4.14.1** (formerly **Section 4.14.3** in the DEIS) to reference the current conformity scenario. See also the discussion of this in Comment/Response 9-1.

**Air Quality 9-7. Ozone and construction emissions**

Statement # 9 (EPA) / Summary of Comment: In **Figure 3-5**, page 3-123 of the DEIS, the graph should be clarified to show that it represents the 1-hour ozone trends in the DFW area. For **Section 4.20.3**, Commenter suggests the following sentence be deleted from the second paragraph in this section: "Because the variables affecting construction emissions (e.g., type of construction vehicles, timing and phasing of construction activities, haul routes, etc.) cannot be determined until the project is ready for construction, no estimate of construction emissions can be undertaken." This sentence is incorrect and, in fact, other federal agencies are routinely required to make such estimates of construction emissions during the environmental documentation/general conformity process. In addition, for the reason just stated, **Section 7.8.2**, page 7-23, should delete the third sentence beginning with "Because the variable affecting construction emissions . . . ."

**Response:** In the SDEIS, **Figure 3-5** from the DEIS has been removed. A graph showing the 8-hour ozone trend (see **Figure 3-4** of the SDEIS) has been inserted, and the referenced sentences from **Sections 4.20.3** and **7.8.2** have been replaced with the following: "*The impact of construction emissions on air quality is difficult to predict and depends on many variables such as the type of construction vehicles and the timing and phasing of construction activities."*

**Air Quality 9-8. Congestion reduction impacts**

Statement # 9 (EPA) / Summary of Comment: The second paragraph on page 4-191 of the DEIS should be deleted in its entirety, beginning with "As previously discussed in this DEIS . . . . beneficial impact on air quality." While congestion reduction is typically assumed to be beneficial to air quality, this is not always the case and project-level impacts on ozone formation are difficult to model. VOC reductions are certainly seen with an increase in speed, but this could be offset by a resultant increase in NOx emissions. For this reason, and because ozone is a regional problem, the SIP sets area-wide emissions budgets (not project-level budgets) so that the impact of the entire transportation system is considered.

**Response:** The subject paragraph has been deleted in the SDEIS.

**Air Quality 9-9. Sufficiency of air quality analysis**

Statement # 28 Texas Commission on Environmental Quality (TCEQ) / Summary of Comment: The Air Quality Planning and Implementation Division of the Texas Commission on Environmental Quality commented that the air quality analysis in the DEIS was detailed and complete and found to be sufficient.

**Response:** Comment noted and considered.

**Air Quality 9-10. Insufficient particulate matter analysis**

Statement # 7 / Summary of Comment: The DEIS does not include an analysis of the impact of increased traffic created by the proposed project on particulate matter (PM) air pollution. Recent studies have shown that PM air pollution is one of the most important pollutants from a health effects standpoint, and PM has therefore become more strictly regulated. Simply because the study area is in compliance with air quality standards for $PM_{10}$ and $PM_{2.5}$ is not an excuse to avoid investigating the expected impact of the proposed project on ambient PM levels. The health effects data regarding PM is significant, as indicated by two documents included that describe the health effects of PM. A third document is a report that examined the expected increase in $PM_{2.5}$ levels for the SH 121 highway project in Fort Worth, and demonstrates that $PM_{2.5}$ can be meaningfully analyzed. As it is important to inform the public as to the potential for the proposed project to worsen air quality, even if regulatory standards are not exceeded, a PM analysis should be included in this environmental study.

**Response:** The Environmental Protection Agency (EPA) has set a health-based standard for both short-term and long-term exposure to $PM_{2.5.}$ Section 109 of the federal Clean Air Act (42 United States Code (U.S.C.) § 7409) directs the EPA Administrator to propose and promulgate ''primary'' and ''secondary'' National Ambient Air Quality Standards (NAAQS) for pollutants identified under section 108 of the Act. Section 109(b)(1) of the Act defines a primary standard as one ''the attainment and maintenance of which in the judgment of the Administrator, based on [the] criteria and allowing an adequate margin of safety, are requisite to protect the public health.'' The margin of safety requirement was intended to address uncertainties associated with inconclusive scientific and technical information available at the time of standard setting, as well as to provide a reasonable degree of protection against hazards that research has not yet identified. Both kinds of uncertainties are components of the risk associated with pollution at levels below those at which human health effects can be said to occur with reasonable scientific certainty. Thus, by selecting primary standards that provide an adequate margin of safety, the Administrator is seeking not only to prevent pollution levels that have been demonstrated to be harmful but also to prevent lower pollutant levels that may be found to pose an unacceptable risk of harm, even if the risk is not precisely identified as to nature or degree. The Act does not require the Administrator to establish a primary NAAQS at a zero-risk level, but rather at a level that reduces risk sufficiently so as to protect public health with an adequate margin of safety. The selection of any particular approach to providing an adequate margin of safety is a policy choice left specifically to the Administrator's judgment.

Particulate matter includes both "primary" PM, which is directly emitted into the air, and "secondary" PM, which forms indirectly from fuel combustion and other sources. Generally, coarse PM is made up of primary particles, while fine PM is dominated by secondary particles. Primary PM consists of carbon emitted from such sources as cars, trucks, heavy equipment, forest fires, and burning waste. Secondary PM forms in the atmosphere from gases. Some of these reactions require sunlight and/or water vapor. Secondary PM includes: (1) sulfates formed from sulfur dioxide emissions from power plants and industrial facilities; (2) nitrates formed from nitrogen oxide emissions from cars, trucks, and power plants; and (3) carbon formed from reactive organic gas emissions from cars, trucks, industrial facilities, forest fires, and biogenic sources such as trees. For further reference see EPA's "The Particle Pollution Report: Current Understanding of Air Quality and Emissions through 2003."

The EPA determined that during a short-term period (24-hour average), $PM_{2.5}$ concentrations should not exceed 65 $\mu g/m^3$ [Federal Register July 18$^{th}$, 1997, (Vol. 62, No.138 pp. 38651-38760)]. The long-term standard is based on an annual average where PM concentrations should not exceed 15 $\mu g/m^3$.

The EPA required states to conduct three years of extensive area-wide $PM_{2.5}$ monitoring before formal designations could occur. Texas completed this effort in 2002 and submitted the required information to

the EPA for its use in determining $PM_{2.5}$ nonattainment areas (February 13, 2004 letter from Governor Rick Perry to the EPA Region 6 Administrator Richard Greene). After a thorough review of this information the EPA concurred that the entire State of Texas was in compliance with $PM_{2.5}$ standards (June 28, 2004 letter from Richard Greene to Governor Rick Perry). Final $PM_{2.5}$ designations were published in the January 5, 2005 issue of the Federal Register.

In September 2006, the EPA revised the 1997 PM standards. The revised standards tighten the 24-hour fine particle standard ($PM_{2.5}$) from 65 µg/m$^3$ to 35 µg/m$^3$, and retain the current annual standard at 15 µg/m$^3$. The EPA decided to retain the existing 24-hour $PM_{10}$ standard of 150 µg/m$^3$. Due to the lack of evidence linking health problems to long-term exposure to coarse particle pollution, the annual $PM_{10}$ standard was revoked.

The TCEQ currently operates numerous $PM_{2.5}$ monitors throughout the DFW area. Current monitoring data from TCEQ indicates that all monitors in the DFW area continue to remain in compliance with the $PM_{2.5}$ standard. More detailed information about the location and data from the individual sites in the DFW area or across the state can be found on the TCEQ website at http://www.tceq.state.tx.us/subject/subject_air.html.

The EPA's "The Particle Pollution Report: Current Understanding of Air Quality and Emissions through 2003" discusses the continuing downward trend of emissions of both $PM_{10}$ and $PM_{2.5}$. $PM_{2.5}$ levels in 2003 were the lowest they have been since nationwide $PM_{2.5}$ monitoring began in 1999. Programs such as the EPA's Acid Rain Program have contributed to these reductions. As federal diesel fuel and engine standards continue to be implemented, this downward trend in PM emissions is expected to continue.

The commenter attached a portion of the EPA's Air Quality Criteria for Particulate Matter (Third External Review Draft, April 2002), Volume II, Chapter 8: Epidemiology of Human Health Effects from Ambient Particulate Matter. The commenter indicated this material was included because it concludes that both PM10 and $PM_{2.5}$ represent substantial health threats. The EPA report is extensive and concludes that PM emissions can be harmful to human health. The report, however, does not indicate that PM emissions are steadily increasing in urban areas in the United States. In fact there are other published studies that report PM emissions are decreasing. The EPA's own "Air Quality Trends" reports on PM and the EPA's "The Particle Pollution Report" both indicate improvements in PM levels across the U.S.

The commenter also included a report prepared by Sonoma Technology, Inc. entitled Assessment of Health Benefits of Improving Air Quality in Houston, Texas. The commenter indicated this report concluded that health effects of $PM_{2.5}$ may result in nearly $3 billion per year for the City of Houston. This study is based on data collected from the late 1990s. The report concludes that there are substantial health benefits of reducing PM emissions. One of the strategies the report recommends pursuing is the use of cleaner diesel fuel. The EPA, since the study, has promulgated rules (noted above) improving on- and off-road diesel fuel and applying equally stringent emission standards for on- and off-highway diesel-powered equipment. The EPA rules would be in effect for vehicles utilizing the proposed project.

The commenter included a third report in support of the request for project-specific PM analyses, and indicated that the report showed how to conduct a $PM_{2.5}$ analysis for a transportation project. The report evaluated the expected impacts of SH 121 in Fort Worth on $PM_{2.5}$ levels and concluded that the project would result in significant increases in the 1-hour $PM_{2.5}$ average. The report studied short-term and long-term $PM_{2.5}$ concentrations, and the commenter recommended the report as a blueprint for performing fine particle dispersion modeling for a local transportation project. The model referenced by the commenter as being able to measure $PM_{2.5}$ on a project-level basis is CALPUFF. The EPA, however, has determined that: "…CALPUFF in its current configuration is suitable for regulatory use [only] for long range transport, and on a case-by-case basis for complex wind situations" (see Federal Register Vol. 68, No. 72 pp. 18441, April 15, 2003). It would not be appropriate to use CALPUFF for evaluating potential impact on nearby neighborhoods, when the EPA recommends CALPUFF's use for "…sulfur dioxide and particulate matter ambient air quality standards and PSD (Prevention of Significant Deterioration) incremental impact analysis involving…transport greater than 50km from one or several closely spaced

sources…" According to the EPA, this model is useful for modeling emissions from distant point sources, but not for modeling linear transportation sources.

It must be noted that the Dallas/Fort Worth (DFW) area has not been designated as a nonattainment area for PM. The Federal Highway Administration regulations do not require evaluation of the potential impacts of $PM_{2.5}$ for this project.

Note: Commenter included copies of the studies discussed above as Attachments B, C, and D to his statement. The commenter's citation to these studies and summaries of them are included in the written comment section of the SDEIS (**Appendix G-5**), but copies of studies referenced are not included because of space limitations. These attachments are on file at NTTA.

**Air Quality 9-11. Highway proximity and health effects**

Statement # 7, 86 / Summary of Comment: The DEIS should have evaluated and reported information from the epidemiological literature that associates proximity to highways with negative health effects. There is an abundance of literature demonstrating the statistical association between health effects and proximity to highways. The included report prepared by Dr. Michael T. Kleinman concludes that heart disease, as well as respiratory diseases, are causally related to exposure to proximity to urban highways. The DEIS should evaluate reports like the one prepared by Dr. Kleinman, as well as similar studies, such as an additional 18 studies that were summarized and included.

Statement # 85, 86 / Summary of Comment: An analysis of the impacts of air toxics on residents along the various alternatives should be performed; this is particularly true with respect to the southern terminus of the proposed project where three major highways already intersect the neighborhood.

**Response:** Mobile Source Air Toxics (MSATs) is an evolving field of interest and research related to highway transportation. In accordance with FHWA guidance, a quantitative MSATs analysis has been included in the **SDEIS Section 4.14.5**. This analysis includes a survey of sensitive air receptors (e.g., schools and day care facilities) near the proposed alignments.

Dr. Kleinman's report was considered and all of the published studies cited therein as summarized below. These studies were reviewed in the following three contexts, and individual responses are set out below.

First, when the Trinity Parkway is completed, the technology of the vehicular mix utilizing the highway facility would be substantially different than it was at the time of the studies cited by the commenter, and substantially different than the technology today. Therefore, it can be anticipated that emissions would be cleaner in the future.

Second, the vehicular fuels utilized at the time of the studies cited by the commenter are substantially different from those in use today, and substantially different from the mix that would be in use when the proposed project is completed. The EPA has identified certain air pollutants or air toxics as mobile source air toxics or MSATs. While the Clean Air Act identified 188 air toxics, also known as hazardous air pollutants, the agency selected 21 that it considered primary MSATs. From that group the EPA then selected six as the priority group of MSATs. These include benzene, formaldehyde, acetaldehyde, 1,3-butadiene, acrolein, and diesel particulate/diesel exhaust organic gases. The EPA issued its final rule on Control of Emissions of Hazardous Air Pollutants from Mobile Sources in March 2001 (66 FR 17230, March 29, 2001). While the EPA has identified the MSATs, the agency has still not proposed to establish ambient standards for any of these pollutants. Therefore, there is no baseline from which to judge any of these emissions from a linear transportation project. In its 2001 MSAT rule, the EPA projected that the reductions in MSAT emissions via several existing and new control program and technology-oriented vehicle standards will be considerable. The EPA also stated that there will be a 67 to 76 percent drop in benzene, acetaldehyde and 1,3-butadiene between 1990 and 2020. For highway-related diesel particulate matter, EPA projects a 90 percent reduction by 2020.

Third, with regard to the studies from other countries, the emissions profile and gasoline/diesel mix of the vehicular fleet in the United States is today, and likely would continue to be in the future, substantially different differ from any other place in the world.

With respect to the report by Dr. Michael Kleinman cited by the commenter, the author reports that there is an association between adverse health effects and living near roadways with heavy traffic. The studies cited by Dr. Kleinman, however, all look to historical trends that do not reflect current circumstances. These studies do not speculate on what effect long-term downward trends in PM and air toxic emissions in the United States may have on future populations. EPA, in contrast, does attempt to quantify the level of decreased cancer risk and other acute and chronic impacts anticipated emissions decreases might have on a future U.S. population. EPA finds almost universally positive benefits on future urban populations. See Regulatory Impact Analysis for Tier II, HDDV standards, Off-road proposed standards; Regulatory Impact Analysis (Chapter II: Health and Welfare Concerns and Emissions Benefits from Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements EPA420-R-00-026 January 2001); Regulatory Impact Analysis from Control of Air Pollution from New Motor Vehicles: Tier II/Gasoline Sulfur EPA 420-R-99-023, December 22, 1999, National Air Quality and Trends Report; and Texas Commission on Environmental Quality VMT offset SIP, 1997.

The following are observations regarding the 18 additional studies cited by the commenter that address the health effects associated with living near areas with heavy traffic.

1. Brunekreef, et al. This study was conducted in the Netherlands during 1995. The differences between the fuel used for motor transport between the United States and Western Europe are substantial. The European fleet uses substantially more diesel fuel and the U.S. vehicle fleet includes substantially more gasoline-powered vehicles. The U.S. Department of Energy (DOE) statistics for the output of refined products by country provides a rough estimate of the differences. In 2000, the United States used diesel fuel for about 33 percent of its surface transportation needs. Western Europe, in contrast, used about 60 percent diesel fuel for its surface transportation needs or roughly twice as much. The Netherlands specifically used 57 percent diesel fuel for surface transportation. As another indicator of the relative popularity of diesel power in Europe, the Diesel Technology Forum estimated that just light-duty diesel sales in Europe were 14 percent of the light-duty market in 1990; those sales climbed to 22 percent in 1995, and today represent 33 percent. The U.S. market for light-duty diesels is less than one percent of total vehicle sales. See Demand for Diesels the European Experience, The Diesel Technology Forum 2001. Thus, the relevance of the study to the proposed project is problematic.

2. Buckeridge, et al. This study looked at hospital admissions between 1990 and 1992 in Southeast Toronto, Canada. Although Canada has automotive technology similar to the United States, Canada does not completely match the stringency of U.S. standards. The usefulness of the study is limited, moreover, because of the time the data was collected, where it was collected, and the differences in technologies and fuel used in Canada in early 1990s versus what would be used in the United States after 2010.

3. Mukala, et al. This study looked at traffic-related health impacts to school children in Helsinki, Finland during 1991. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

4. Steerenberg, et al. The authors evaluated the impact of traffic-related pollutants (nitric oxide, nitrogen dioxide, carbon monoxide and black smoke) on respiratory symptoms in Germany based on data collected during the late 1990s. The study is not reflective of what emissions may be seen along a future roadway in the United States, with a heavily-regulated U.S. fleet of cars and trucks and the low sulfur U.S. gasoline and diesel fuel that would be in use.

5. Vliet, et al. This study was also study conducted in Western Europe (the Netherlands) in the 1990s. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

6. Wjst, et al. This study was conducted in Munich, Germany in the late 1980s and early 1990s. Germany's diesel fuel use is on average higher than that of other Western European countries, with roughly two-thirds of its surface transportation fleet fueled by diesel. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

7. Dejmek et al. This study was conducted in Northern Bohemia based on data collected during the years 1994-1998. Emissions of particulates, and other pollutants were assumed to come from "chemical industry, surface mining, and large coal power plants." The study is not relevant to the Trinity Parkway, because the species of PM emissions studied (coal plant emissions, industrial emissions, and crustal material from mining operations) are substantially different from potential emissions from mobile sources. The levels of PM emissions experienced by this population were considerably higher, and of much longer term, than would be anticipated for a future population living near a modern highway in the United States.

8. Dejmek et al. This was a follow-up to the previous study of the same population looking more closely at poly cyclicaromatic hydrocarbons sometimes found in association with particulate matter. Again, this study suffers from the same deficiencies as the previous study with regard to its predictive power in determining the health effects on a future U.S. vehicle and fuel mix.

9. Ritz, et al. This study was conducted in California between 1987 and 1993. The study concludes that "…certain fetal heart phenotypes may be susceptible to the adverse effects of two ambient pollutants, carbon monoxide and ozone." The analysis regarding the Trinity Parkway specifically concluded there would be no violations of the carbon monoxide or ozone NAAQS.

10. Edwards, et al. This study was conducted in Birmingham, England based on data collected between 1988 and 1991. The study looked at the relationship between proximity to major roadways and hospital admissions for asthma in children younger than five years. As discussed above, the differences between the fuel used for motor transport between the United States and Western Europe were, and are likely to remain, substantially different. The United States uses substantially more gasoline-fueled vehicles than Europe, where they use substantially more diesel fuel. The DOE statistics for the output of refined products by country provide a rough estimate of the differences. In 2000, the United States used diesel fuel for about 33 percent of its surface transportation needs. Western Europe, in contrast, used about 60 percent diesel fuel for its surface transportation needs or roughly twice as much. The United Kingdom specifically used 50 percent diesel fuel for surface transportation. Regarding asthma, the American Lung Association reported in March of 2003 for the U.S., the "…mortality and hospital discharge estimates [for asthma] continue to decline. The number of deaths due to asthma in 2000 was approximately four percent lower than the number of deaths seen in 1999. The hospital discharge rate has declined 14 percent since it peaked…in 1995". This study is not relevant to the proposed project.

11. Guo, et al. This study was conducted in Taiwan, China in the 1990s. Asia/Oceania is very similar to Western Europe in its vehicle/fuel mix. Sixty percent to two-thirds of surface transportation uses diesel fuel. In Taiwan specifically, about 50 percent of the fuel used for transportation is diesel fuel. The U.S. uses less, at about one-third of all surface transportation. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Asia/Oceania vehicle and fuel mix.

12. Studnicka, et al. This four-year study was conducted in Lower Austria in the early 1990s regarding asthma and other respiratory symptoms. The study does not reflect a comparable traffic mix (gasoline versus diesel vehicles) or an appropriate vehicle mix (U.S.-certified technologies), nor does the study mirror the fuels that would be used in the United States. All of these factors make this study of little utility in considering potential impacts associated with a future Trinity Parkway.

13. Wyler, et al. This study was conducted in Basel, Switzerland in the late 1990s. The study concludes: "These results suggest that living on busy roads is associated with a higher risk for a sensitization to pollen and could possibly be interpreted as an indication for interactions between pollen

and air pollutants". As a study primarily of the effects of pollen, it is of limited utility is assessing the health impacts of PM emissions. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

14. A la Tertre, et al. This study looked at hospital admissions in Barcelona, Spain, Birmingham and London, England, Milan, Italy, Amsterdam, Netherlands, Paris, France, Rome, Italy, and Stockholm, Sweden in the 1990s. The study concludes that cardiac conditions may be associated with exposure to diesel exhaust. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

15. Hoek, et al. This study was conducted in the Netherlands in 1986. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

16. Knox, et al. This study looked at childhood cancers in Great Britain between 1953 and 1980. Great Britain used very large amounts of coal in the years after the Second World War. These coal-sourced PM emissions are somewhat different than those produced by a modern gasoline and diesel-powered vehicle fleet. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western Europe vehicle and fuel mix.

17. Pearson, et al. This study was conducted in Denver in 1980 and looked at exposure to benzene. Since the 1990 Clean Air Act Amendments, benzene reduction from mobile sources has achieved remarkable success in the United States, especially in reformulated gasoline (RFG) areas like Houston where RFG has been in use since 1995. The EPA in their Air Quality Trends Report on air toxics indicates that: "Measurements (of benzene) taken at these sites show, on average, a 47 percent drop in benzene levels from 1994 to 2000. During this period, EPA phased in new (so-called "Tier 1") car emission standards; required many cities to begin using cleaner burning gasoline; and set standards that required substantial reductions in benzene and other pollutants emitted from oil refineries and chemical processes. The EPA estimates that, nationwide, benzene emissions from all sources dropped 20 percent from 1990 to 1996." With Tier II standards and the EPA's new on-road HDDV standards, this reduction trend in ambient levels of benzene is expected to continue. Thus, the relevance of the study to Trinity Parkway is problematic.

18. Raaschou-Nielsen, et al. This study was conducted in Denmark based on data collected between 1968 and 1991. As in the studies considered above, it is inherently problematic to assess the potential impacts to a future U.S. population on the basis of data regarding an early 1990s Western European vehicle and fuel mix.

The FHWA has been monitoring scientific research in the area of health effects of emissions from mobile sources and has performed, or is currently managing, several research projects many of which are based on an Air Toxics Research Workplan that provides a roadmap for agency research efforts. These efforts include the following:

1. Air Toxics Supersite Study (Traffic and Ambient Concentration Study). This study is designed to determine whether the contribution of vehicle-emitted air toxic compound concentrations to ambient air concentrations can be measured. The study is being conducted in conjunction with a particulate matter study to determine whether air toxic compounds (and PM) are local air quality impacts or regional concerns.

2. Air Toxics Monitoring and Modeling Study. This study is designed to determine the reliability of emission models in predicting ambient measured air toxic concentrations. This is an important component of air toxics research since models are typically used for developing emission inventories and

the resulting mitigation programs designed to limit emissions. Accurate forecasting of future emissions is essential to programs implemented to reduce toxic emissions.

3. Kansas City Study. This study is designed to determine the distribution of PM emissions in a randomly selected fleet as well as identify the percent of high emitters in the fleet. The Kansas City Study was initiated to conduct exhaust emissions testing on 480 light-duty, gasoline vehicles in the Kansas City Metropolitan Area (KCMA). This project will also characterize gaseous and PM toxics exhaust emissions from a portion of these light-duty vehicles. Data obtained from this program will be used to evaluate and update emission models, evaluate existing emission inventories, and assess the relevance of previous emissions studies.

4. Detroit Exposure Aerosol Research Study (DEARS). This study is designed to improve the ambient air-monitoring network to elucidate the extent to which air toxics are a potential human health concern. Detroit was selected based on the presence of major industrial and mobile sources. Homes within the study will be selected to evaluate the impact of these sources on exposures and to determine high-end exposure. These data will be used to further evaluate and refine human exposure models that characterize the magnitude of exposure along with its uncertainty and variability. In addition, the methods developed and applied in this study can be used as a prototype for other community-based air toxic programs.

5. Multiple Air Toxics Exposure Study Science and Uncertainty Review (MATES-II). This study is designed to evaluate the scientific techniques of a Southern California study to determine whether these techniques would be appropriate for use today, and the scientific uncertainties associated with the 1998 study. There are two phases to the study. The first examines the transportation side (activity, emissions and concentrations), while the second looks at the toxicity and exposure assessments conducted as part of MATES-II. The FHWA wants to better understand how the results were obtained and how relevant they are to transportation planning.

6. Knowledge Gaps and Research Needs in Linking Mobile Source Air Toxics (MSAT) to Potential Public Health Risks. This study, being conducted by the independent Health Effects Institute (HEI), is designed to better understand the fundamental science and relationships between transportation vehicle emissions, potential and actual human health impacts, determine the technical strength of published studies, and identify data quality gaps and data gaps. The final study report will summarize concentration and dose-response relationships, toxic effects, and their relation to actual human health impacts that could result from real-world exposures to the extent possible. Researchers will be asked to evaluate the quality of study findings for use in risk assessments and the quality of such data on risk assessment numerical findings. Research cooperators can then synthesize their technical findings to identify knowledge gaps and research needed to determine the strength of linkages between mobile source air toxics, potential public health risks as expressed in epidemiology or risk assessment studies, and frank health effects with clearly definable cause and effect relationships. Researchers will be asked to identify the chemical and physical composition of MSAT, identify variability in MSAT, and identify the strength of relationships between MSAT related pollutants and their potential health effects.

Additional FHWA research regarding air quality is ongoing. A quantitative MSAT analysis in accordance with TxDOT/FHWA guidance has been included in this SDEIS in **Section 4.14.5**.

Note: One commenter (Statement # 7) included copies of the studies discussed above as Attachments E and F to his statement. The commenter's citation to the articles and summaries of them are included in the written comment section of the SDEIS (**Appendix G-5**), but copies of studies referenced are not included because of space limitations. These attachments are on file at NTTA.

**Air Quality 9-12. Diesel carcinogens**

Statement # 7 / Summary of Comment: The DEIS does not discuss the health effects of diesel carcinogens, even though EPA has determined this in its report “Health Assessment Document for Diesel Exhaust” (submitted with the statement). The DEIS should include a detailed discussion of diesel pollution as it would be affected by the proposed project. The discussion should describe the effects of highway design on diesel emissions, as well as the mitigation proposed to address these emissions.

**Response:** The EPA report submitted by the commenter was based on a review of outmoded technology: "The assessment's health hazard conclusions are based on exposure to exhaust from diesel engines built prior to the mid-1990s." The report elaborates: "As new diesel engines with cleaner exhaust emission replace existing engines, the applicability of the conclusions in this Heath Assessment Document will need to be reevaluated." The study further articulates its own limitations: "A notable uncertainty of this assessment is whether the health hazards identified from studies using emissions from older engines can be applied to present-day environmental emissions...” or the future Trinity Parkway vehicle and fuel mix “...as some physical and chemical characteristics of the emissions from certain sources have changed over time." As the study’s authors suggest, the study might have very little relevance at the time the Trinity Parkway is completed.

One of the conclusions of this study was: "The assessment concludes that long-term (i.e. chronic) inhalation exposure is likely to pose a lung cancer hazard to humans...." However, the study does not consider whether levels of exposure in the future, anticipated to be lower than today’s levels, would produce the same effects. The study, moreover, found toxic effects at levels higher and in some cases much higher than actual exposure levels near freeways: “...the national average diesel exhaust exposure from on-road engines.... 0.5 to 0.8 micrograms per cubic meter of inhaled air in many rural and urban areas... For localized urban areas...may range up to 4.0 micrograms per cubic meter..." One reference exposure level looked at for chronic effects in the study were 5.0 micrograms per cubic meter. These authors, however, had to employ higher exposure levels, in some cases 10 times higher, in order to find long-term health impacts, and cautioned that: "Other uncertainties include the assumptions that health effects observed at high doses may be applicable to low doses, and that toxicological findings in laboratory animals generally are predictive of human responses." The study was based upon outmoded technology and the relevance of the study to the Trinity Parkway is problematic.

Note: Commenter included a copy of the EPA report discussed above as Attachment G to his statement. The commenter’s citation to the EPA report and summary of it are included in the written comment section of the SDEIS (**Appendix G-5**), but a copy of the EPA report referenced is not included because of space limitations. This attachment is on file at NTTA.

## 10. Economic Impacts

**Economic Impacts 10-1. South Dallas/Fair Park area**

Statement # 21 / Summary of Comment: To ensure the community benefits from the project, take steps to facilitate that South Dallas/Fair Park residents receive the training to be included in the road's construction, and provided a fair share of the construction jobs generated by the project. Request that NTTA survey transportation providers nationwide for model employment and training agreements, and share those agreements with you. Evaluate the impact of 6 lanes north of Continental and 4 lanes south to US-175 on future congestion and economic development opportunities for South Dallas communities.

**Response:** The South Dallas/Fair Park area is known to have a high percentage of residents from minority groups. Assuming the Trinity Parkway project comes to fruition, it is expected that NTTA would construct the project by competitive bidding to private sector contractors. Associated with its bidding procedures, NTTA has established goals in the 15% to 20% range for minority subcontracting depending on the nature of the construction project. Such goals are subject to adjustment from time to time by the NTTA. The minority participation goal would apply to the construction of Trinity Parkway, and would encourage jobs for minority groups. In addition, NTTA would make construction job opportunities known in corridor neighborhoods (including the South Dallas/Fair Park neighborhood) and will cooperate with local agencies to assist in this outreach.

It should be noted that construction work, by its nature, generates income and jobs in the local community through the spending of the contractors and workers. Additionally, the proposed Parkway would provide long-term benefit to the local economy by increasing mobility and decreasing congestion. Assuming favorable economic conditions, the Parkway may also enhance economic development opportunities, through attraction of businesses that thrive on tollway access and visibility. Finally, the long-term operation of the Parkway would involve generation of new jobs at a range of levels in operations, maintenance, and toll collection.

If the Trinity Parkway is not constructed, travel delay costs associated with the existing and anticipated congestion on area roads would be borne by roadway users and businesses dependent on area roadways for employment and commerce activities. The absence of the Parkway may also have a limiting effect on economic growth within the study area as residential and commercial developers choose to locate their projects in areas with superior transportation infrastructure.

**Economic Impacts 10-2. Permanent jobs**

Statement # 71 / Summary of Comment: We are looking at temporary and permanent jobs. Other places have done it too; in essence, leave the jobs there on a permanent level.

**Response:** Comment noted and considered. See also Comment/Response 10-1.

**Economic Impacts 10-3. Rail access**

Statement # 80, 82 / Summary of Comment: Commenters are PEPSICO, a customer of the Cargill, Inc. warehouse and distribution facility located at 3196 Quebec Street in Dallas, and counsel for Cargill, Inc. Union Pacific rail access from the south to the warehouse will likely be interrupted due to construction of the proposed project. Cargill's ability to receive and distribute goods from this facility is extremely important to PEPSICO's business, and needs to be made whole so it can continue to serve its customers. This would require either some form of alternative rail access, probably from the north via a spur from the Union Pacific Mockingbird Yard, or some other form of economic compensation and/or relocation assistance. The economic impact of loss of access would affect PEPSICO as a customer. There should be a feasible economic solution for Cargill so it can continue to serve this marketplace at its current price structure.

**Response:** The subject rail line is a branch line located alongside the east toe of the east Dallas Floodway levee. The line originates at the UP Railroad main line south of Continental St. and travels north alongside the levee to a terminus north of Westmoreland Ave. The Cargill facility is located at the northern terminus, and is believed to be the only active rail customer on the branch line. The impact of

the Parkway on the rail line varies depending on the alternative ultimately chosen. Assuming an alternative is selected which directly impacts the line and causes its closure, the sponsors would negotiate with UP Railroad for closure of the line based on the procedures prescribed under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S. Code Sections 4601-4655, see also Texas Property Code Chapter 21). The settlement for the closure would be subject to the actual economic circumstances at the time of negotiation, but could consider costs for establishment of a new rail spur from the north, costs for relocation of the Cargill facility, or other alternative resolution judged to be in the best interest of the parties.

**Economic Impacts 10-4. Relation to economic growth**

Statement # 48, 79 / Summary of Comment: The Trinity River is the focal point for Dallas. The proposed project presents a marvelous opportunity for economic development, particularly on the Oak Cliff side of the river. It will also help ensure flood control, something so vital to the Stemmons Corridor area and downtown.

Statement # 58 (Dallas City) / Summary of Comment: The economic and developmental funding is an exciting part of the Trinity River Corridor Project. But it will not happen if we do not make some transportation progress. When it is time for a new business to form or for existing businesses to grow or relocate, the transportation situation figures into the decisions of where we set up shop. Interest has already been generated along the Corridor for the development of this roadway, and it is definitely a catalyst. We need to move forward with this EIS now because we have a deadline of March 2007 to complete it. If that deadline is missed, the EIS has to be redone, delaying not only this project, but future transportation projects like Pegasus and our Trinity Lakes, the Southern Gateway, and many other projects. The proposed project is absolutely vital to promoting continued growth in Dallas neighborhoods and businesses. It is critical that the project get started now.

**Response:** Comments noted and considered.

## 11. Environmental Justice

**Environmental Justice 11-1. Impacts to specific communities**

Statement # 21 / Summary of Comment: Regardless of the route of the road in the central part of the corridor, the South Dallas/Fair Park community will bear a disproportionate share of the adverse impacts of the project. Some of the potential impacts include noise impacts, visual intrusion, and the relocation of residents and businesses. These adverse effects will occur in a community already burdened with a disproportionate share of road facilities that have generated negative economic and environmental impacts.

Statement # 85, 86 / Summary of Comment: The Ideal Neighborhood near the southern terminus of the proposed project will suffer significant adverse impacts which include the following: home values; increasing noise; air toxics; reducing residents' safety and pedestrian accessibility within the neighborhood; and increasing visual and physical barriers. This will further divide a neighborhood that already has more highways intersecting it than any other Dallas neighborhood.

**Response:** To achieve the purpose and need of the project, a reliever route in the downtown Dallas area is necessary. This means that existing communities adjacent to any reliever route will be unavoidably affected. **Section 4.3.3** of the DEIS contains an extensive discussion of the various Build Alternatives in terms of impacts on low-income and minority populations in the study area. The detailed treatment of environmental justice issues in the DEIS is pursuant to governing federal guidelines. This analysis found that all of the Build Alternatives (particularly Alternatives 4 and 5) would have potential disproportionate impacts on minority populations in the area. In compliance with the Executive Order that contains much of the federal policy on environmental justice, the discussion in the DEIS outlines the non-discriminatory purpose for choosing all of the alignments for the Build Alternatives.

While geographic proximity to the alternative alignments for the proposed project necessarily affects predominately minority areas of South Dallas, there are also mitigating aspects of the project. The project may benefit the local economy by increasing mobility and decreasing congestion on roads in the study area. A direct benefit for the South Dallas area is that access to the proposed project at its eastern terminus would not require payment of a toll. Various other mitigating measures and offsetting benefits are outlined in the DEIS (see pages 4-43 to 4-46).

**Plate 4-23** in **Chapter 4** of the DEIS shows proposed enhancements in the area of the southern terminus, including service road connections, noise walls and landscaping. Additionally, the project sponsor has performed extensive outreach to Southern Terminus neighborhoods, including meetings with the St. Phillips Neighborhood Development Corporation, the Clean South Dallas Joint Neighborhood Associations, the New Hope Baptist Church, the TR Hoover Neighborhood Association, as well as elected officials representing this area. (**Appendix A-2** in the DEIS and **Appendix G-7** in the SDEIS list Agency and Public Participation events attended by the project sponsors.) The outreach effort has helped shape the enhancement and mitigation effort in this area.

**Environmental Justice 11-2. Inequity of a toll road**

Statement # 3 / Summary of Comment: The project will only provide improved transportation to those who can afford to pay the $1.00 to $1.50 toll. This cost, coupled with fuel costs, will make use of the highway prohibitively expensive for less-affluent taxpayers. It is wrong to require those who cannot afford to use the toll road to bear the brunt of the impacts of construction. It is inequitable to use public funds for a transportation project that does not provide equal transportation improvements for all taxpayers.

Statement # 86 / Summary of Comment: The proposed project will be a toll road with a projected $1 trip toll and the possibility of requiring toll tags to reduce the size of toll collection facilities would be highly discriminatory in serving the needs of citizens who can afford the luxury of paying the tolls. This is a highway for the wealthy whose costs and impacts would be borne primarily by low income and minority residents of neighborhoods adjacent to the project. Suburban commuters save a few minutes of commuting time while urban residents suffer more pollution, noise, and visual impacts in their neighborhoods and public recreation parks.

**Response:** Comments noted and considered. As explained more fully in **Section 2.5.1** of the DEIS, the proposed project is being developed as a toll road to allow it to be implemented on an accelerated basis by reducing its demand on limited gas tax revenue. The comments to the effect that only affluent people would use a toll road are not believed to be true. The use of a tollroad is a voluntary act, with each driver making a value judgment as to whether the cost of the toll is outweighed by the services delivered. The use of tollroads by a wide spectrum of income groups is particularly evident in the high volumes of commuter traffic on toll roads in the region. Hundreds of thousands of commuters every day choose to use the region's toll roads, and value the time savings, safety, reliability and other benefits delivered.

Even for low income groups who may choose not to use a Trinity Parkway because of cost, there would be accrued benefits. The Parkway would improve mobility through the general area of downtown Dallas, benefiting all drivers to some extent, regardless of whether or not they choose to pay tolls. The network of non-toll roads in the area would be less congested after completion of the proposed project, and would offer improved mobility to all users. The Parkway would also provide a potential new route for bus transit and vanpool use. Finally, the Parkway project provides non-tolled connectivity in the area of the southern terminus. The connection between US-175 and IH-45 would be toll free, unloading substantial traffic off SM Wright Freeway in a segment which runs through a low-income residential neighborhood.

**Environmental Justice 11-3. Competing development**

Statement # 86 / Summary of Comment: The adverse effects of competing commercial development, which the City of Dallas projects as a result of construction will destabilize and replace residential neighborhoods with affordable housing with upscale commercial development. Tax value increases may cause further stresses on fixed income senior citizens who have resided in these neighborhoods for a long time and who will have difficulty finding comparable affordable housing in Dallas.

**Response:** Regardless of which alternative is identified as the preferred alternative, the City of Dallas has a variety of ordinances, plans, and regulations at its disposal to manage growth within its jurisdiction. As discussed in **Section 4.1.3** of the DEIS, indirect effects that may follow the proposed project would be subject to environmental, zoning, and other requirements to ensure the orderly growth of Dallas communities. Any such development, the specifics of which are conjectural at this point, would occur subject to the application of these local government controls. The SDEIS provides an updated Indirect Impacts discussion in **Section 4.24.1**.

## 12. Floodplains

**Floodplains 12-1. Adherence to ROD criteria**

Statement # 76 (USACE) / Summary of Comment: With reference to the Summary of Hydraulic Design on page 4-115 of the DEIS, while it may be true that the parkway alternatives do not violate FEMA floodplain regulations, the controlling criteria are the USACE ROD criteria (see Comment/Response 5-2). It has not been shown that any of the alternatives considered meet the criteria for the ROD. Until an adequate hydraulic analysis and information is presented to show how each alternative impacts the operation of the floodway and meets the ROD criteria, the analysis of alternatives is incomplete. A table should be developed similar to the following, based on hydraulic analyses. The table should include at minimum water surface elevation and valley storage for each alternative at each site identified. If channel and overbank velocities would assist in determination if erosive velocities would require additional bank protection. Suggested column headings for the table are: Loop 12 (Elm Fork); Loop 12 (West Fork); Confluence; Commerce Street; DART Bridge; Martin Luther King) (MLK) Boulevard; IH-45 Bridge; Loop 12 (Main Stem). Row headings should be as follows: Existing Condition; Future Without; Alternative 1 (followed by rows labeled for Alternatives 2A-5).

**Response:** Agreed. Hydraulic models of the floodway reflecting the riverside Alternatives 3A, 3B, 3C, 4A, and 4B have been prepared and the results are reported in **Section 4.13** of the SDEIS in the format suggested in the comment. The hydraulic modeling was performed in accordance with the USACE criteria, and the results have been fully coordinated with the USACE. The analysis in the SDEIS includes a discussion of the USACE ROD criteria.

**Floodplains 12-2. Modeling for all alternatives**

Statement # 76 (USACE) / Summary of Comment: The second paragraph on page 4-117 of the DEIS states, . . ."This project does not constitute a significant risk of increased flooding since the adverse consequences associated with the probability of flooding attributable to the project are negligible. There would be no increase in flood heights at any existing structure." There is no hydraulic modeling information presented to backup this statement. The levees upstream, adjacent to, and downstream are structures and flood level impacts should be shown in tabular form for all alternatives.

**Response:** The tabular hydraulic information is provided in the SDEIS as described in Comment/Response 12-1. The referenced text is revised in **Section 4.13.5 Flooding Risk** of the SDEIS as follows: *"None of the Trinity Parkway's Dallas Floodway Build Alternatives constitute a substantial risk of increased flooding since any adverse impacts associated with the probability of flooding are mitigated through compensating hydraulic design."*

**Floodplains 12-3. Quantification of impacts**

Statement # 76 (USACE) / Summary of Comment: The second paragraph on page 4-120 of the DEIS states, . . . "It would not noticeably increase that base flood elevation or flood risk to property or to human life. In order to prevent a substantial adverse impact on natural and beneficial floodplain values, appropriate mitigation measures would be incorporated into the project." The impacts to the environment of each alternative has not been quantified, nor has the appropriate mitigation, therefore, a real comparison of the alternatives cannot be made at this time.

**Response:** Agreed. Additional information on environmental effects and a discussion of mitigation measures has been included in the SDEIS to support comparison of roadway alternatives by the public (see **Section 4.8**, Impacts to Waters of the United States, including Wetlands, and **Section 4.13**, Floodplain Impacts; see also **Appendices H** and **J**).

**Floodplains 12-4. Additional analysis needed**

Statement # 1, 3, 7 / Summary of Comment: There are major differences in the hydraulic scenarios between alternatives but the DEIS contains no hydrologic or hydraulic analyses for any of the alternatives, so reviewers are unable to evaluate them in terms of impacts on flooding and drainage. If hydraulic information is added, it will only be provided for a single alternative. Does the reference on page 7-31 of the DEIS a "hydraulic analysis" suggest that any such analysis was available for inclusion in

the DEIS? Page 4-114 of the DEIS states that potential floodplain impacts were evaluated by using hydraulic model studies with the Hydrologic Engineering Center – River Analysis System (HEC-RAS) program, but the DEIS does not include specific model results or state assumptions made.

Statement # 7 / Summary of Comment: Previous hydraulic modeling of the Trinity River by the USACE (DFE project) and TxDOT (TPC MTIS) showed some adverse impacts on flood levels along levees as a result of the various Parkway alternatives evaluated. Explain why similar hydraulic studies were not included in the DEIS so as to allow reviewers to compare and evaluate the impacts of the alternatives.

Statement # 7 / Summary of Comment: Page 4-115 of the DEIS indicates that preliminary hydraulic analyses conducted during the TPC MTIS/DEIS showed that the proposed project would not increase the base flood elevation to a level that would violate FEMA floodplain regulations. The DEIS does not indicate whether there would be any increase in the base flood elevation for any other flood event as a result of the Build Alternatives in the floodway. Placing fill within the floodway has major implications to the floodplains and floodway, especially along stretches protected by federal levees. Federal regulations prohibit impacts to flood protection afforded by federal flood control projects up to and including the design flood, which is generally the Standard Project Flood.

Statement # 72, 73 / Summary of Comment: There is no detailed analysis of the effect on flooding risks of construction of any of the alternative roadway options. It is insufficient to attempt to rectify this by performing an analysis only for the preferred alternative. Reviewers cannot adequately make a fully-informed choice without this crucial data being presented for every option. Effects on flooding risks, including costs and impacts, should be evaluated for every option before a preferred alternative is selected.

Statement # 85, 86 / Summary of Comment: No hydraulic analysis of Floodway Alternatives is provided in the DEIS. The approach of deferring this analysis until and unless a preferred alternative is chosen in the floodway avoids consideration of comparison of significant costs and impacts between all the alternatives.

**Response:** Hydraulic models of the floodway reflecting the riverside Alternatives 3A, 3B, 3C, 4A, and 4B have been included in the SDEIS, as described in Comment/Response 12-1.

**Floodplains 12-5. 100-year plus 2-feet flooding**

Statement # 76 (USACE) / Summary of Comment: No information was provided in the DEIS to discuss the potential impacts/cost/problems to the public that could occur with the 100-year plus 2.0 foot flood event occurs. The DEIS says that a detailed hydraulic study will be conducted upon identification of a preferred alternative.

**Response:** Agreed. A detailed hydraulic study has been conducted as described in Comment/Response 12-1. The 100-year flood level plus two feet proposed flood protection criterion meets or exceeds the published criteria of the NTTA, TxDOT and FHWA for protecting freeway and tollway main lanes. Additionally, a discussion of an emergency response plan has been added to the SDEIS (see **Section 2.4.9**).

**Floodplains 12-6. Impacts on Standard Project Flood, floodplains, and levees**

Statement # 3 / Summary of Comment: The DEIS does not describe specific mitigation measures to offset impacts to floodplains. What is the basis for the conclusion that impacts will be adequately mitigated?

Statement # 7 / Summary of Comment: As there is no discussion in the DEIS about potential impacts to the Standard Project Flood (SPF) as a result of the Build Alternatives, it is unclear whether hydraulic studies were performed to assess impacts on the SPF. Appropriate mitigation would have to be incorporated into the design of any proposed project to prevent adversely affecting the SPF for the Trinity River in the study area.

Statement # 61 / Summary of Comment: The proposed project should ensure there is adequate flood protection for the real estate and businesses in the western part of downtown Dallas.

**Response:** Hydraulic models that include the SPF event profiles of the floodway reflecting the riverside Alternatives 3A, 3B, 3C, 4A, and 4B have been prepared as described in Comment/Response 12-1.

Hydrologic and hydraulic modeling demonstrates that none of the proposed Floodway Alternatives would have a significant impact on floodplains or levees.

**Floodplains 12-7. Analysis of bridges**

Statement # 7 / Summary of Comment: Page 4-116 of the DEIS states that bridges associated with roadway alternatives that cross the Trinity River would be designed to avoid the base floodplain. These bridges would also need to be elevated above the SPF to avoid an adverse impact to the area protected by federal levees. The DEIS does not present an analysis that demonstrates no impacts by the various alternatives or the mitigation that would have to accompany each alternative to avoid impacts on flooding.

**Response:** The hydraulic modeling analysis in the SDEIS (discussed in Comment/Response 12-1) incorporates information about existing bridges.

**Floodplains 12-8. Analysis of lakes**

Statement # 7 / Summary of Comment: At the outset of the proposed project, a second Notice of Intent (NOI) indicated that the DEIS would include an analysis of potential lakes to be created in the floodway. The DEIS does not discuss these potential lakes that presumably would be used to offset the impacts to flooding expected by adding material associated with the proposed project.

**Response:** The hydraulic modeling analysis in the SDEIS (discussed in Comment/Response 12-1) includes the excavated forms of the proposed City of Dallas lakes. Modeling of hydraulic impacts from filled lakes will be addressed in environmental studies the USACE has undertaken. The relationship between the Trinity Parkway and floodway studies being undertaken by the USACE for the City of Dallas is discussed in the **Foreword**, **Executive Summary**, and **Sections 1.12.5 and 3.1.1.4** of the SDEIS.

**Floodplains 12-9. Potential impacts on flooding**

Statement # 1, 5 / Summary of Comment: The project will increase the threat of flooding in the Central Business District and in Central Dallas by taking flood protection benefits of the Dallas Floodway for granted.

Statement # 6 / Summary of Comment: A project of this magnitude should not be built in a known floodway. Piers would be required to cross sump access points and maintenance costs for storm water regulation would be astronomical. The proposed project would decrease flood water conveyances in an area that already has been shown to breach existing levees during periods of intense rainfall.

Statement # 69 / Summary of Comment: Road construction in the floodplain will reduce the flow of water and has a potential to create flooding in heavy rain periods. The river bed should be dug out 10-20 feet throughout the entire Trinity River floodplain if any road beds are built inside the levees.

Statement # 81 (DOI) / Summary of Comment: The primary purpose of the floodway is flood damage reduction. Placement of a roadway and related appurtenances in areas reserved for floodwaters would appear to undermine this purpose. We are concerned that some of the available flood storage volume within the floodway may be permanently lost. Floodway Alternatives would also replace the existing permeable surfaces with impervious roadway, which may create adverse flooding conditions for communities downstream. Severe flooding occurred in the City of Dallas in 1989 and 1991 downstream of the existing levees prompting the current proposal for the DFE project. The combination of less flood storage volume, increased area of impermeable surfaces, and the DFE could result in shifting of future flooding problems downstream of the Dallas area.

Statement # 88 / Summary of Comment: Do engineering studies to date conclude that a roadway located within the floodway will not increase the potential for flooding? If yes, what are the mitigating features within the overall floodway design? Do engineering studies to date conclude that a roadway located within the floodway will not increase the velocity of floodwater (and therefore damage) to the Great Trinity Forest?

**Response:** Past and recent river hydraulic studies have indicated that there are no significant impacts on flooding or flood protection due to any of the proposed Trinity Parkway Alternatives (see Comment/Response 12-1). **Section 4.13** of the SDEIS provides full hydraulic information about the design alternatives in the floodway, including information on conveyance, valley storage, stream flow velocity, and water surface elevation.

**Floodplains 12-10. Disputed flood elevation**

Statement # 3 / Summary of Comment: Page 4-120 of the DEIS states that the highway within the floodway would not be overtopped by the 100-year flood, yet within the last 15 years a high water event determined to be a 35-year flood came within two feet of over-topping floodway levees. Explain the discrepancy between the DEIS assertion and recent documented high water events.

**Response:** A review of the river elevation data for the United States Geological Survey (USGS) gauging station at Commerce Street indicates that the highest water surface elevation since construction of the Dallas levees (over 40 years ago) was experienced on May 3, 1990. The water surface elevation peaked at 415.1 feet during that event. As the elevation for the top of the east and west levees at Commerce Street is 429 feet, there was nearly 14 feet of elevation difference between the top of the levees and the peak water surface elevation.

**Floodplains 12-11. Relation to 100-year floodplain**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 4-12 of the DEIS states, . . ."In addition, the potential for loss of property and life during a 100-year flood event would be virtually eliminated outside the floodway levees." Where will there be improvement in 100-year flood protection due to the Trinity Parkway project?

**Response:** The quoted sentence has been deleted in its entirety. A substantial change in 100-year flood protection (i.e., increase or decrease) is not expected due to the Trinity Parkway. The SDEIS provides additional hydraulic modeling results and discussion on floodplain issues.

**Floodplains 12-12. Impacts on levees**

Statement # 7 / Summary of Comment: The USACE proposal for raising the floodway levees indicates that fill material will come from shallow excavations near the toe of existing levees. The project's alternatives in the floodway would be located on top of and adjacent to the toe of existing levees. It is unclear what impact the location of the highway will have on the USACE's project (e.g., flood levels, mitigation, and levee stability). The DEIS does not address the safety issues raised by building a highway inside and upon federal flood control levees.

**Response:** Embankment material would come from excavation in the floodway. The proposed roadway would be protected from the 100-year flood event, a recognized standard for roads and highways throughout the U.S. (see Comment/Response 12-1). Additional information regarding the construction of roadway embankments adjacent to the levees is provided in **Section 2.4.6** of the SDEIS. Safety issues are addressed in **Section 2.4.9** of the SDEIS.

**Floodplains 12-13. Analysis of drainage patterns up/down gradient**

Statement # 3 / Summary of Comment: Page 7-17 of the DEIS states that little or no change to historic drainage patterns down gradient of the study area. Describe changes expected up gradient from the study area.

**Response:** The proposed project would not affect drainage patterns either up or down gradient of the study area.

**Floodplains 12-14. Flooding damage to highway**

Statement # 7 / Summary of Comment: Constructing the proposed project in the floodway exposes it to potential damage by floods that would inundate it (i.e., flood events higher than the 100-year flood, such as the SPF). Previous studies discussing the project have indicated a need for erosion protection along the edges of the roadway due to the high velocities that would occur along the surface of the road. The DEIS does not discuss this issue or provide for the necessary mitigation.

**Response:** Based on hydraulic modeling (as described in Comment/Response 12-1), there are no expected areas of substantial erosion along the proposed roadway. Typical areas of erosion concern such as drainage outfalls will be protected by standard methods. Information regarding emergency response to flood events is provided in **Section 2.4.9** of the SDEIS.

**Floodplains 12-15. Mitigation measures**

Statement # 76 (USACE) / Summary of Comment: The last paragraph on page 4-183 of the DEIS states, "Practical measures to minimize harm to floodplains are incorporated into the preliminary design of the Trinity Parkway Build Alternatives, which directly affect the Dallas Floodway." This is good news, but what are the measures incorporated in the designs?

**Response:** In the SDEIS the following sentence has been inserted after the referenced sentence: *"These measures include alignment of the road parallel to the flood flow, avoidance of impacts to sumps and sump outfall structures, and avoidance of flood impeding vegetation and structures on top of the road embankment."*

**Floodplains 12-16. Cost estimates for mitigation**

Statement # 7 / Summary of Comment: It is unclear whether the cost estimates in the DEIS for the various alternatives contain the costs for providing appropriate mitigation to prevent adverse impacts on flood levels resulting from factors such as bridge heights, creation of lakes, and roadway erosion protection. A failure to include the relative mitigation costs for each alternative would bias the comparison of alternatives.

**Response:** Preliminary estimates of costs associated with mitigation measures due to flood level impacts were included in **Table 6.1** of the DEIS. The primary means of mitigating the effects of the Trinity Parkway embankments or conveyance is the compensating excavation of borrow material from within the floodway. As stated in **Section 4.2.3** of the DEIS, this borrow material is expected to be obtained from the proposed City of Dallas lake excavation. The cost estimates in **Table 6.1** of the DEIS correctly reflected the cost of this mitigation under the item "Earthwork."

**Floodplains 12-17. City lakes and mitigation**

Statement # 76 (USACE) / Summary of Comment: Pages 1-46 and 1-47 of the DEIS indicate that the proposed city lakes do not "mitigate the effects of the parkway embankments on floodway conveyance and . . .offset the effects of embankments on valley storage." The excavation for the parkway embankments performs this function. The lakes are a proposed feature by the City of Dallas.

**Response:** In the SDEIS the referenced sentence has been replaced with the following: *"Furthermore, for Alternatives 3A, 3B, 3C, 4A, 4B and 5, the excavation of embankment material from the lake areas would serve to mitigate the effects of the embankments on Dallas Floodway conveyance and to some extent would offset the effect of embankments on valley storage."*

**Floodplains 12-18. Floodway precedent**

Statement # 88 / Summary of Comment: Is there a precedent to create a public roadway in a floodway that captures and handles storm water to federal Clean Water Act standards? Is this technically and economically feasible?

**Response:** All public roadways are characterized by stormwater discharges during wet weather. All stormwater discharges in Dallas County ultimately end up in the Trinity River. The Trinity Parkway or any alternative roadway alignment will be subject to the same federal Clean Water Act standards no matter where it is located. The location of the roadway within the Dallas Floodway does not create any technical or cost feasibility issues over any other location of the roadway.

**Floodplains 12-19. Compliance with federal regulations**

Statement # 3 / Summary of Comment: How can Build Alternatives with the Dallas Floodway comply with Executive Orders which mandate the avoidance of construction projects within floodplains?

**Response:** The requirements of floodplain regulations and Executive Order 11988 regulate development in floodplains but do not prohibit it. These matters are addressed in the DEIS on pages 4-119 and 4-120.

**Floodplains 12-20. Compliance with FHWA drainage criteria**

Statement # 3 / Summary of Comment: Page 7-17 of the DEIS indicates that final designs "may" adhere to FHWA drainage criteria for hydraulic structures. Does the use of the word "may" imply that some FHWA criteria may not be followed? If so, in what ways might NTTA not meet the FHWA criteria?

**Response:** The project design would, at a minimum, adhere to the FHWA drainage criteria. The cited reference has been changed to "would" in the SDEIS (see **Section 7.5**).

**Floodplains 12-21. Design criteria for floodwalls**

Statement # 76 (USACE) / Summary of Comment: If a floodwall / levee constructed is within the Dallas Floodway or Dallas Floodway Extension projects, it must be designed to meet the FEMA certification criteria for 100-year flood protection (levee or floodwall). If the parkway is placed on fill within the Dallas Floodway or Dallas Floodway Extension projects the fill must be at least one foot above the future 100-year flood elevation (based on the Corridor Development Certificate hydraulic model) 100-year flood.

**Response:** The intent of the Parkway design regarding flood protection is reflected on the diagrammatic plans and focuses on protecting the Parkway from flood events; the hydraulic analysis outlined in Comment/Response 12-1 evaluates the potential impacts of the Floodway Alternative on floodplains. In the Dallas Floodway, the floodwalls are proposed to provide two feet of freeboard above the 100-year flood. The roadway segments on embankments are also raised sufficiently for the road surface to provide two feet of freeboard above the 100-year flood. It is the project sponsors' understanding that FEMA certification for the roadway floodwalls does not apply because the floodwalls are not protecting homes or commercial buildings.

**Floodplains 12-22. Movement of levee**

Statement # 76 (USACE) / Summary of Comment: The last paragraph on page 4-101 of the DEIS states, "... Detailed information concerning the proposed design and construction of Alternatives 3A, 3B, 4, and 5 within and adjacent to the Dallas Floodway is presented in **Chapter 2** Alternatives Considered." While many details of the designs are discussed, the detail of the plan to move the lower portion of the East Levee, between Corinth Street and the DART Bridge, further east impacting Sump 7E, is not fully disclosed. It is only shown on **Plate 2-9B**, in a note on the drawing. This movement of the levee has not been prior coordinated with or approved by the USACE. We recommend that you initiate coordination with us on this proposed modification to the levee as lacking full detail of how that modification would be completed while maintaining the current level of flood damage reduction benefits we find that proposed change currently unacceptable. In addition, modification to the levee to accommodate the alternative tollroad alignments would require the project proponent to identify and provide hydraulic and environmental mitigation for any impacts to those resources.

**Response:** The schematics have been revised to move the roadway away from the levee and to raise the profile to eliminate any cut-in to the levee. This new geometry has been provided to the USACE in digital terrain models and subsequently incorporated in the USACE "Future Conditions" floodway hydraulic model. The Parkway SDEIS reflects the new roadway geometry.

**Floodplains 12-23. Impacts to storage sumps**

Statement # 76 (USACE) / Summary of Comment: The portion of **Table 4-48** on page 4-150 of the DEIS pertaining to "Storm Drainage - Storage Sumps" (see **Plate 3-20**) shows impacts to Sumps 2E, 4E, 6E, 7E, 1W, 2W, 3W, & 4W. The possible mitigation or recovery to the impacted storage needs to be identified.

**Response:** The impacts listed are primarily scored against Alternative 5, Split Parkway Landside. The roadway in this alternative conflicts with Pump Stations A, B, and C, requiring rebuilding the pump stations further away from the levees, potentially displacing some volume of sump storage at each site. Additionally, ramps to and from major streets would impact the sump storage through bridge pier displacements. The cost estimates for Alternative 5 include pump station relocation costs and costs of extensive retaining walls required to prevent the road embankment spilling into the adjacent sumps. The intent is to maintain existing storage volumes at each sump. Due to the modification of the roadway

geometry at Sump 7E (referred to as Sump 3E in this SDEIS) (see Comment/Response 12-22), the impact of Alternative 3B on the sump has been changed from "I" to "N" in **Table 4-48**. This means that Alternatives 3A, 3B, 3C, 4A, and 4B will have no impacts to any of the sumps. Any impact (loss of stormwater storage) to the interior drainage sumps would be compensated by an equal volume of sump system excavation within the sump system in order to have no impact to sump storage.

**Floodplains 12-24. Impacts to Sump 7E**

Statement # 76 (USACE) / Summary of Comment: Page 4-151 of the DEIS states, with regard to storm drainage, ". . . Alternatives 2A, 2B, and 3B would impact Sump 7E." The possible mitigation or recovery to the impacted storage needs to be identified.

**Response:** The impacts originally reported to Sump 7E (referred to as Sump 3E in the SDEIS) for Alternatives 2A and 2B pertained to bridge crossings over the sump. Pier displacements, if any, would be mitigated by compensating excavation in the area of the bridges. Reported impacts to the sump by Alternatives 2A, 2B, and 3B have been removed (see Comment/Response 12-22).

**Floodplains 12-25. Levee project history**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 3-112 of the DEIS states, "Several USACE projects, undertaken from 1939 to the present, have reinforced the levees and improved the floodway." The U.S. Army Corps of Engineers did not undertake a project to modify the existing floodway until 1953.

**Response:** In the SDEIS, the year in the referenced sentence has been replaced with 1953, and the sentence is the second in the referenced paragraph.

**Floodplains 12-26. Costs clarification**

Statement # 9 (EPA) / Summary of Comment: From a cost perspective, the Floodway Alternatives are depicted as being the least costly. The EIS should clarify whether these costs included any related costs for future floodplain management and mitigation that would be required for hydraulic impact to the floodway as a result of the proposed project.

**Response:** The cost estimates in **Section 6.4** of the DEIS focus on anticipated expenses connected with construction of the roadway, including mitigation measures required to offset hydraulic impacts and secure environmental permits. The costs of future floodplain management will be absorbed in the maintenance operations of NTTA and the City of Dallas. **Section 2.4.8** of the SDEIS provides additional details on this subject.

## 13. Cultural Resources

**Cultural Resources 13-1. Archeological sites**

Statement # 3 / Summary of Comment: Pages 4-80 and 4-81 of the DEIS indicate that the Texas Historical Commission has concluded that the area within floodway levees has little potential for containing preserved prehistoric archeological deposits. Explain whether this conclusion is based solely on the work of Dr. Skinner, and whether there is evidence to call his credibility into question. Within the past five years, Native American skeletal remains have been found on shell lens sites along the Trinity River in Dallas, and such areas may be expected to be numerous and can yield important cultural resources. Sizeable excavations such as are contemplated in the floodplain area are expected to encounter prehistoric cultural resources.

**Response:** The conclusion that the area within the floodway is unlikely to contain archeological deposits is based on investigations of this area to date and the dramatic alteration of the landscape that went into the creation of the floodway. As indicated in **Section 4.7.1** of the DEIS, the sites where prehistoric archeological deposits are considered most likely to be encountered are associated with the old natural channel of the Trinity River. Closer examination of such areas would need to occur if a Build Alternative is identified as the preferred alternative. The conclusions in the DEIS are based upon the investigations of Dr. Skinner, including field reconnaissance and literature reviews, and have been reviewed and approved by the Texas Historical Commission. There is no apparent basis for questioning the quality of his report in relation to the proposed project. The results of additional archeological investigations based on ongoing field excavations have been included in the SDEIS.

**Cultural Resources 13-2. Historic bridge remains**

Statement # 3 / Summary of Comment: The DEIS inadequately documents the remains of historic bridges which crossed the Trinity River within the study area. Why are visible bridge remains, as well as less obvious remains, not accounted for in the DEIS?

**Response:** This comment presumably refers to the remnants of the Cadiz Street Viaduct that was built in 1932. For purposes of the National Historic Preservation Act, the architectural character of this bridge was modified by the construction of IH-35E northbound on top of it. Consequently, it was not treated as a historic structure in the review by the Texas Historical Commission, nor is it discussed as such in the DEIS. All known bridge remains in the study area that are eligible for historical protection have been included in the discussion on historical properties (**Section 4.7.2**).

**Cultural Resources 13-3. Views of bridges**

Statement # 6 / Summary of Comment: The proposed project will interfere with views of bridges.

**Response:** Presumably this comment is with reference to the historic bridges in the study area that are listed in **Tables 4-29** and **4-31** of the DEIS. The Build Alternatives for the proposed project will pass near, under, or over these structures. After a preferred alternative has been identified, additional investigations may be required. The type and amount of work required, if any, would be coordinated with the State Historic Preservation Officer (SHPO) in compliance with Section 106 of the National Historic Preservation Act, as well as the Texas Antiquities Code. Potential adverse impacts to cultural resources (archeological/ historical) would be assessed, in consultation with the SHPO, for the proposed action during review of the FEIS. This may include refinement of the project design to further avoid and minimize impacts to historic resources. In addition, Section 4(f) evaluations (i.e., under 49 U.S. Code § 303) will be undertaken as needed in order to further assess the avoidance or minimization of adverse effects to historic properties. **Chapter 5** of the SDEIS contains a draft Section 4(f) evaluation, and the FEIS will include a final Section 4(f) evaluation. The mitigation commitments in **Section 7.10** of the DEIS include steps that may be taken to minimize visual impacts to historic bridges. These steps emphasize avoiding any design that would obscure views, and adopting designs that complement historic bridge structures.

**Cultural Resources 13-4. Private land development**

Statement # 76 (USACE) / Summary of Comment: The DEIS indicates that cumulative impacts to cultural resources is likely due to new development on private lands. However, we do not have an idea of what those impacts could/would be.

**Response:** SDEIS **Section 4.24.2** has been substantially revised, and provides new information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS.

## 14. Noise

**Noise 14-1. Value for quiet**

Statement #: 12 / Summary of Comment: The effects of the levees and trees make those portions of the floodway that are away from bridges extraordinarily quiet. The floodway is one of the most peaceful places in the city if one is not near the existing bridges, and should be listed in category A ("land where quiet is of extraordinary value") as shown in **Table 4-43** of the DEIS.

**Response:** TxDOT's Guidelines for Analysis and Abatement of Highway Traffic Noise define a Category A Land Use Activity Area as follows: "Lands on which serenity and quiet are of extraordinary significance and serve a public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose." The guidelines further state, "An example of a Category A land would be an amphitheater where a quite environment is of extreme importance. Few properties qualify as a Category A area." For the purpose of Land Use Activity Area classification, the Trinity River Greenbelt Park is classified as Category B, "Public areas, recreational areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals." The proposed uses of the floodway land under the City of Dallas Urban Vision Plan fall under public areas, recreational areas, active sports areas, and parks.

**Noise 14-2. Baseline noise studies**

Statement # 3, 11, 12 / Summary of Comment: Describe any noise studies conducted, especially within the floodway levee system. As this area is planned for further recreation and environmental restoration purposes, increased highway noise will have serious negative impacts on these valuable resources now and in the future. Measured baseline noise data should be in the DEIS, especially for areas that are distant from existing bridges. If one were to measure the noise level near the river channel and 2000 feet away from any existing bridge, certainly the noise level is much lower now than it would be if a road were built inside the levee within 500 to 1000 feet of that same spot. A comprehensive baseline noise study should be made, and should include complete cross-sectional noise readings every few thousand feet along the whole corridor. This would allow determination of where along the road noise barriers would be needed and how high they would need to provide mitigation.

**Response:** The noise analysis for the Trinity Parkway DEIS was accomplished in accordance with the TxDOT's (FHWA approved) Guidelines for Analysis and Abatement of Highway Traffic Noise. The FHWA's traffic noise modeling software was used to calculate existing and predicted traffic noise levels at receiver locations that represent the land use activity areas adjacent to the proposed project that might be affected by traffic noise and that may potentially benefit from feasible and reasonable noise abatement. A noise receiver location is defined as a specific location of an outdoor area where frequent human activity occurs. The Trinity River Greenbelt Park (Trinity Park within the limits of the Dallas Floodway) has a designated primary use as floodplain and flood control, with a secondary use as park and open space. Currently, human recreational activity within the levees is sporadic and generally consists of the occasional hiker, bird watcher, or canoeist.

Alternatives 3A, 3B, 3C, 4A, and 4B are benched (elevated) on the riverside of the levee. Based on the noise analysis, the predicted noise level at the riverside toe of the roadway embankment was typically 62 decibels, and diminished with distance away from the proposed roadway. This does not approach, equal, or exceed the FHWA Noise Abatement Criterion of 67 decibels for residential and park receiver locations. Where the proposed roadway dips down to go under existing bridges, there would be a floodwall constructed adjacent to and on the river side of the roadway. The floodwall would act as a noise wall, further reducing traffic noise levels in the floodway

At the time of the final NEPA documentation (FEIS/ROD), recreational facilities determined to be "planned, designed, and programmed" within the Trinity River Greenbelt Park, would be included in the noise analysis and receive full consideration for project noise abatement if a noise impact is identified. Additionally, proposed future recreational facilities or other development within the Trinity River Greenbelt Park would be planned concurrently with the roadway project. Concurrent planning allows officials responsible for planning recreational facilities in the floodway to ensure, to the maximum extent possible,

that new activities within Trinity Park floodway are planned or constructed with the predicted noise environment in mind.

**Noise 14-3. Noise impact chart**

Statement # 11 / Summary of Comment: The statement in the chart on page 4-134 of the DEIS that Trinity Park will have no noise impact is not true; this would only be true if present noise levels were only increased by 10 decibels.

**Response:** The comment is incorrect. The FHWA defines a noise impact as occurring at a receiver location when either the Absolute or Relative criterion is met:

Absolute criterion: the predicted noise level at a receiver approaches, equals or exceeds the FHWA Noise Abatement Criteria. "Approach" is defined as one decibel below the Noise Abatement Criteria. For example, a noise impact would occur at a Category B (residential or park) receiver if the noise level is predicted to be 66 decibel or above.

Relative criterion: the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the Noise Abatement Criteria. “Substantially exceeds” is defined as more than 10 decibels.

As stated in Comment/Response 14-2, the predicted noise level at the riverside toe of the roadway embankment was typically 62 decibels, and diminished with distance away from the proposed roadway. This does not approach, equal or exceed the FHWA Absolute Criterion for residential and park uses. The Relative Criterion of a greater than 10 decibels increase over existing noise levels does not apply to lands that are currently undeveloped or where there are no existing areas of frequent human activity; areas within the floodway fall under this description.

**Noise 14-4. Predicted impacts in parks**

Statement # 12 / Summary of Comment: **Table 4-45** of the DEIS indicates that there is no predicted noise impact in almost all of the parks listed and in other parks in the study area. That does not appear accurate.

**Response: Table 4-45** describes the existing and predicted future noise levels at nearby parks and amenities and discusses the potential traffic noise impact of the proposed project to these parks based on Absolute and Relative Criteria (see Comment/Response 14-3). The table accurately describes the existing noise levels and the predicted future noise levels at these parks if Alternatives 2A, 2B, 3A, 3B, 3C, 4A, 4B, or 5 were constructed.

**Noise 14-5. Decibel limits for parks**

Statement # 12 / Summary of Comment: Where the existing noise level is 42 decibels (page 3-128 of the DEIS) it should be preserved for the benefit of future park users. Certainly, the noise should in no case be increased relatively by more than 10 decibels throughout the whole parkland and not more than 56 decibels on an absolute criterion basis, except where it is already higher than that.

**Response:** Comment noted and considered. Refer to Comment/Response 14-2 regarding future noise analysis to be concurrently planned with the Trinity River Greenbelt Park.

**Noise 14-6. Reevaluation of noise analysis**

Statement # 76 (USACE) / Summary of Comment: **Table 4-45** on page 4-134 of the DEIS states, with reference to the Trinity River Greenbelt Park, . . .”a project’s noise analysis should evaluate noise levels where frequent human activity occurs. Because of infrequent human use, there are no noise impacts to the Trinity Park.” Additionally, it is stated. . .”To avoid noise impacts that may result from future development of activities adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent possible, that new activities within Trinity Park are planned or constructed with the following predicted noise environment in mind.” The noise effect analysis presented gives the impression that should the tollroad come first, the future uses of the floodway should be modified to be compatible with the noise the tollroad would generate. However, an effect assessment should be based upon a comparison to future conditions. As the City of Dallas has spent significant

investment of time and funds into designing an expansion and creative use of the floodway for recreation, the noise effect analysis should be discussed in light of the proposed future adjacent land uses.

**Response:** TxDOT's Guidelines for Analysis and Abatement of Highway Traffic Noise, as approved by FHWA, state that existing undeveloped land for which development is "planned, designed, and programmed" may be re-categorized accordingly (e.g., Category D - undeveloped lands to Category B - residential or park) and evaluated for noise impacts and mitigation. This guidance document also indicates that a definite commitment must have been made to develop the land before it may be re-categorized. At the time of the final NEPA documentation (FEIS/ROD), recreational facilities determined to be "planned, designed, and programmed" within the Trinity River Greenbelt Park, would be included in the document noise analysis and receive full consideration for project noise abatement if a noise impact is identified.

**Noise 14-7. Impact on natural environment**

Statement # 76 (USACE) / Summary of Comment: The increase in noise could also have a significant impact to the natural environment, so this increase in noise should be evaluated to determine its impacts on the existing ecosystem. Additionally, this point has been understated to the Public and is not evident in the Executive Summary.

**Response:** According to FHWA approved TxDOT Guidelines for Analysis and Abatement of Highway Traffic Noise, a project's noise analysis should evaluate noise levels where frequent outdoor human activity occurs. Currently, there are no established federal criteria for evaluating the effects of highway traffic noise on the natural environment.

## 15. Parklands

**Parklands 15-1. Negative impacts on recreation**

Statement # 1, 6, 10, 24, 25, 27, 33 / Summary of Comment: The proposed project will have a negative impact on the recreation potential of the Trinity River Greenbelt. Having the Parkway inside the levees will keep the green space from becoming a world class asset; it will interfere with walking and with animal life, would reduce the available plants and trees; and increase noise and air pollution.

Statement # 33 / Summary of Comment: The river area is the only natural feature in Dallas, and provides open space with the potential for trails and recreation of all types. The citizens of Dallas want to see the river area developed for its open space and recreational values such as the City of Fort Worth has done; a freeway along the river is a disgrace to the river. We should be investing in livable communities and attracting local new development with the City of Dallas. Nobody wants a tollway in a floodway.

Statement # 73 / Summary of Comment: Throughout the development of the DEIS, preservation of natural areas and the promotion of a natural greenway along the Trinity River Corridor have been relegated to a secondary status by public officials. Since taxpayers' money will be expended on the preferred alternative, air and water quality improvements as well as preservation of natural areas are public interest goals which should be as high a priority as transportation.

Statement # 86 / Summary of Comment: Noise impacts on floodway park users would be very significant as would visual impacts, thus reducing the value of the floodway for park and recreation uses.

**Response:** Comments noted and considered. The natural resources within the floodway are valuable to the community and should be preserved and developed. The floodway has achieved its original purpose so well that it is now viewed by many for its potential as a resource for recreation and habitat. The floodway alignments for the proposed project would also use a portion of this area to achieve the public purpose of enhanced traffic mobility. As discussed in **Section 3.1.1.1** of the DEIS, the proposed Parkway has been closely coordinated with recreation and ecosystem restoration proposals in the City of Dallas Balanced Vision Plan. The action by the Dallas City Council to support Alternative 3B, after reviewing community input, is an indication that local leaders value the multi-use development of the floodway. If the decision is made to build the Trinity Parkway within the floodway, the FHWA will continue to work cooperatively with the City of Dallas and USACE to ensure that environmental impacts are minimized. In addition, building a Floodway Alternative could assist the City of Dallas toward creating the lakes envisioned in the Balanced Vision Plan (e.g., by excavating the soil necessary for the roadway from the area identified for the lakes). This sort of close coordination of floodway projects would showcase the resources of the floodway to people who travel along the Parkway and would facilitate greater access for recreational users.

**Parklands 15-2. Positive impacts on recreation**

Statement # 16 / Summary of Comment: If the highway is located within the floodway, people using the tollway will provide a form of security for park users.

**Response:** Comment noted and considered.

**Parklands 15-3. Potential versus actual impacts**

Statement # 76 (USACE) / Summary of Comment: Page 4-90 of the DEIS says the "City of Dallas Park and Recreation Department (PARD) indicates no negative impacts to any existing parks/recreational areas," but in **Table 4-32** negative impacts are listed.

**Response:** Comment noted and considered. **Table 4-32** lists the parks and recreation areas that may be subject to "potential" impacts. The City of Dallas PARD has performed an independent review of the parks in the study area and provided a finding of "no expected negative impacts."

**Parklands 15-4. Lack of details on access**

Statement # 86 / Summary of Comment: The floodway toll road alternatives significantly adversely affect access to planned parks and lakes. The DEIS suggests only one or two pedestrian access ramps on the east side of the floodway may be initially constructed. Costs of these ramps are estimated from $6 million to over $12 million, but the DEIS does not detail the source of funding for them. The DEIS

indicates some intersections and connecting highway ramps would be elevated above the floodway, but does not provide specifics as to the placement of these ramps.

Statement # 88 / Summary of Comment: Has public access (pedestrian and other non-motorized) to the proposed parks and lakes been conclusively shown to be feasible, or is the roadway configuration realistically a continuous obstacle?

**Response: Section 4.7.3.2** of the DEIS provides current details of programmed vehicular access ramp improvements into the floodway area in **Table 4-33** (page 4-95), and programmed neighborhood pedestrian access improvements in **Table 4-34** (page 4-96). The statement regarding "one or two pedestrian access ramps" is not correct. The costs for these improvements is included in the cost estimates provided in the DEIS, and would be funded with the initial stage of the project. The specific placement of all of the access points is shown on the schematic plans (see **Plates 2-1** through **2-8** in **Chapter 2** of the DEIS).

**Parklands 15-5. Lack of compensatory plan**

Statement # 3 / Summary of Comment: Page 7-21 of the DEIS states that a plan for compensatory replacement of park properties will be presented in the FEIS. An initial compensatory plan should be in the DEIS.

**Response:** Comment noted and considered. The level of detail necessary to compare the environmental impacts of various Build Alternatives is present in the DEIS and SDEIS. It is in keeping with accepted NEPA practices to defer the preparation of more-detailed mitigation plans until after a preferred alternative is identified and additional design work is prepared.

**Parklands 15-6. Land and Water Conservation Fund Act of 1965 (L&WCF)-funded park**

Statement # 81 (DOI) / Summary of Comment: In reviewing the proposed project in relation to possible conflicts with the Land and Water Conservation Fund (L&WCF) and the Urban Park and Recreation Recovery programs, there is a possibility that L&WCF Project 48-00134 (Trinity River Greenbelt) could be adversely affected. You should consult directly with the L&WCF official for Texas to determine any potential conflicts with Section 6(f)(3) of the L&WCF Act (Public Law 88-578, as amended). This section requires Secretary of the Interior approval before any property acquired or developed with assistance from the L&WCF may be converted to other than public outdoor recreation uses.

**Response:** TPWD, the agency that administers the L&WCF in Texas, was contacted regarding the L&WCF project identified in the comment, and TPWD advised that the project is located west of Bachman Lake Park. This places the L&WCF project approximately two miles northwest of the northern terminus of the proposed Trinity Parkway.

## 16. Visual Resources

**Visual Resources 16-1. Impacts on views from levees**

Statement # 3 / Summary of Comment: Page 3-129 of the DEIS indicates that the only topographical relief in the study area is associated with the flood control levees, but there is no discussion about the relative impacts of the different Build Alternatives on the views from the levees. The views from the levee tops offer the best viewing position for wildlife and the diversity of vegetation types (particularly wildflowers in the Spring) along the floodway, and the DEIS did not acknowledge this. The DEIS should characterize the view shed associated with the levee system, as well as the visual impacts of the Build Alternatives within the levee system.

**Response:** The importance of the levees as visual vantage points is recognized in the DEIS beyond the excerpt in the comment. For example, the discussion of visual resources included several photographs taken from levees. Most importantly, the visual assessment of the Trinity Parkway study area included 27 key observation points that are located throughout the study area and are representative of land use types, including transportation corridors. The selection of these observation points was based on citizen input from the Citizen Advisory Work Group and represent the best visual vantage points in the study area. Notably, nine of these observation points were located on the tops of floodway levees (see **Plate 4-20** of the DEIS). The Visual Impact Analysis is summarized in **DEIS Section 4-16**. As shown in the SDEIS Visual Impact Assessment **Table 4-46**, the Floodway Alternatives (3A, 3B, 3C, 4A, 4B, and 5) have impacts on levee top vantage points ranging from moderate to strong. While the roadway can be effectively screened from view of a park user (in the floodplain), the view of Alternatives 3A, 3B, 3C, 4A, 4B, and 5 would be impractical to screen from a viewer on top of the adjacent levee. The viewer could see over the road, but nevertheless the road would remain in the foreground.

**Visual Resources 16-2. Greater exposure to natural views**

Statement # 54 / Summary of Comment: Alternative 3B should also be evaluated in terms of its role in helping citizens to relate to the riverine environment. The criteria used by the Urban Design Study in recommending Alternative 3B used a criterion that placed value on the ability of drivers and passengers to see and experience forests, wetlands, lakes, and parks in the floodway. By experiencing these resources on a daily basis, citizens develop a greater caring for those facilities and environment. As a result, in the long run, the environmental effects will be enhanced by greater caring and concern by citizens for the river, the wildlife habitat, and other visible resources.

**Response:** The advantage of a floodway Build Alternative would be greater exposure of the public to the Trinity River Corridor, an area the City of Dallas has undertaken to further develop for its recreation and aesthetic resources.

## 17. Water Quality

**Water Quality 17-1. Short- and long-term impacts**

Statement # 1 / Summary of Comment: The project will have a negative impact on water quality.

Statement # 81 (DOI) / Summary of Comment: The placement of new roadway within the floodway may adversely affect water quality within the Trinity River, both short and long term. Short-term impacts include soil disturbance from construction that accelerates erosion and increases sediment load in runoff entering the river. Sediment entering waterways through runoff is a primary source of impairment to surface waters. Long-term effects include contaminants in runoff associated with vehicle traffic and road maintenance (e.g., petroleum products, pesticides, and fertilizers) directly entering the floodplain. The existing levee system would exacerbate these effects by shunting runoff directly to the river. Additionally, a portion of the existing wetlands and vegetation within the floodway that currently filters pollutants would be replaced with roadway and related fixtures, increasing the potential adverse effects to water quality.

**Response:** The expected impacts of the proposed project on water quality are described in **Section 4.12.3** of the DEIS. Short and long term mitigation measures are discussed in **Section 7.2** of the DEIS. Road construction and operations require mitigation measures to prevent short-term and long-term degradation of water quality in surface waters. The principal water quality impacts associated with the construction of the project are those caused by soil erosion, sedimentation, and siltation. Other possible impacts include accidental fuel and oil spills and release of waste from the construction site. These potential impacts would be minimized by implementation of erosion control and spill prevention strategies during the construction phase in accordance with the Texas Commission on Environmental Quality – Texas Pollutant Discharge Elimination System General Permit for Construction Activity.

Regarding long-term effects, during roadway operations, the major water quality issue is pollutant deposition on the roadway and other surfaces and subsequent flushing by runoff. The FHWA is committed to implementing storm water management practices to control the discharge of pollutants to the maximum extent practicable, as required by the Clean Water Act and the federal and state storm water regulations. Proposed measures to minimize impacts to water quality include compliance with Section 401 and Section 404 permit requirements, Texas Pollutant Discharge Elimination System requirements, and the preparation and implementation of a Storm Water Pollution Prevention Plan. Moreover, efforts would be made to prevent long-term water pollution by reducing fertilizer and pesticide use during the installation and maintenance of landscaping.

**Water Quality 17-2. Preserving fish populations**

Statement # 81 (DOI) / Summary of Comment: The evaluation of water quality associated with the Trinity River on pages 3-99 to 3-105 in **Section 3.5.5** of the DEIS is generally accurate, noting it is contaminated by discharges of effluent and urban runoff. While the contamination of the Trinity is evident and has extended to the fish community, a recent study by the USFWS has found a resilient fish assemblage within the portion of the river traversing the floodway. A fish survey conducted in 2004 resulted in a high Index of Biological Integrity rating for the river in Dallas. This would indicate that the fish community within the river may be recovering from a history of severe water quality problems and emphasizes the need to protect and improve surface water quality. An important aspect of the proposed project should be to ensure that anticipated effects do not degrade the water quality within the Trinity River.

**Response:** As noted in Comment/Response 17-1, the FHWA is committed to carrying out the measures necessary to prevent degradation of the Trinity River. This would include taking steps to ensure that runoff from the roadway will be handled such as to support the apparent positive trend in aquatic biodiversity in the flood channel.

**Water Quality 17-3. Best management practices**

Statement # 3 / Summary of Comment: Repeated references to best management practices (BMPs) to prevent soil erosion and protect water quality is misleading. BMPs are not effectively implemented or maintained (e.g., silt fences are consistently broken and unrepaired). Describe how BMPs will be monitored to ensure proper installation and prompt repair.

**Response:** The FHWA is committed to implementing management practices to control the discharge of pollutants to the maximum extent practicable, as required by the Clean Water Act and the federal and state storm water regulations. Such regulations include the inspection and maintenance of all applicable BMPs, such as those BMPs outlined in **Section 7.2** of the DEIS.

**Water Quality 17-4. Mitigation with pesticides and fertilizers**

Statement # 3 / Summary of Comment: Page 4-112 of the DEIS indicates that appropriate application of pesticides and fertilizers will help minimize impacts to water quality. Describe the appropriate uses and types of pesticides and fertilizers for the proposed project.

**Response:** Pesticides and fertilizers potentially play a role in improving water quality by encouraging the rapid growth of soil stabilizing plants (and removal of less-desirable plants, in terms of preventing soil erosion). The types/amounts of pesticides and fertilizers that may be used for a given site vary according to evolving industry products and recommended practices. The term "appropriate use" would mean site-specific applications of pesticides and fertilizers in quantities to prevent excessive applications of either.

**Water Quality 17-5. Mitigation measures**

Statement # 76 (USACE) / Summary of Comment: Mitigation measures and locations to address long-term impacts to water quality are not disclosed. Will the project have long-term runoff/debris/pollutant abatement measures?

**Response:** The discussion of roadway runoff impacts and abatement measures is included in **Sections 4.12.3** and **7.2** of the DEIS. Additional information on preliminary mitigation measures affecting water quality is in **Appendices H (Preliminary § 404(b)(1) Guidelines Analysis)** and **J (Preliminary § 404 Mitigation Plan)** of the SDEIS. Specific abatement measures will be incorporated in the preferred alternative, in accordance with National Pollutant Discharge Elimination System/Texas Pollutant Discharge Elimination System (NPDES/TPDES) and Section 404 permit requirements, in the FEIS. The project will have long-term runoff/debris/pollutant abatement measures (e.g., street sweeping, debris-capturing grates), and the form of these measures will be determined in connection with the preparation of more detailed designs for the preferred alternative.

**Water Quality 17-6. Accidental spill response**

Statement # 85, 86 / Summary of Comment: The DEIS is not sufficiently specific on how toxics released from accidental spills will be contained, as well as what pollution prevention measures will assure the non point roadway pollutants will not adversely affect water quality.

**Response:** The spill prevention and containment techniques of local emergency and rescue services would be utilized in accordance with all federal, state, and local regulations during incidents. Note that on page 4-118 of the DEIS (bottom full paragraph), it is pointed out that the final design of the facility would incorporate features to help minimize the risk of contamination of water from an accident involving hazardous or toxic spills. A prohibition on the use of the roadway by heavy trucks is also being considered in this regard.

**Water Quality 17-7. Water quality surveys of wetlands**

Statement # 3 / Summary of Comment: Describe any water quality surveys for any of the extensive wetlands in the study area, and particularly within the floodway. If not studied, explain how existing water quality conditions can be characterized if these highly regulated and valuable water features are not evaluated.

**Response:** The State of Texas, through the Texas Commission on Environmental Quality, is responsible for monitoring and regulating water quality of all major water bodies in the state. As stated in **Section 3.4.6** of the DEIS (see top of page 3-86), wetlands in the study area are primarily shallow depressions that seasonally flood and then dry out. No water quality data is available and no detailed water quality study is planned for these features. The tables on page 3-104 of the DEIS contain the latest available water quality data for the Trinity River. The DEIS examines reasonably available information at a sufficient level of detail to assess relative impacts of the various alternatives studied.

**Water Quality 17-8. Comparisons between alternatives**

Statement # 81 (DOI) / Summary of Comment: Pages 4-108 to 4-112 in **Section 4.12.2** of the DEIS identifies direct impacts to water quality in the form of pollutants carried by storm water runoff for the various alternatives. While the assertion that impacts would be nonexistent from the No-Build Alternative is evident, each of the Build Alternative is generalized to have the potential to contribute contamination from roadway runoff constituents. The DEIS neglects to make comparisons between Build Alternative outside the floodway levees (Alternatives 2A, 2B, and 5) and Build Alternatives inside the floodway levees (Alternatives 3A, 3B, and 4) which could reveal each alternative's potential to impact water quality from runoff pollution. We recommend that the FEIS make a full comparison of each Build Alternative's potential for introduction of pollutants into the floodplain and affecting water quality within the Trinity River.

Statement # 81 (DOI) / Summary of Comment: The discussion of secondary impacts on page 4-160 (**Section 4.24.1**) of the DEIS fails to differentiate anticipated impacts to water quality and fish and wildlife resources between the Build Alternatives. This difference may be important, especially between those alternatives that are proposed within the floodway. In order for an informed decision to be made regarding impacts to these resources, the potential secondary impacts between all Build Alternatives should be evaluated.

Statement # 85, 86 / Summary of Comment: The DEIS fails to provide detailed analysis of methods of control, estimates of impacts and mitigation measures, and fails to specify the costs associated with the Floodway Alternatives related to water pollution impacts, control, and mitigation.

**Response:** The Build Alternatives outside the floodway levees discharge to the Trinity River via existing drainage outfall systems operated by the City of Dallas. The Build Alternatives within the floodway would also discharge to the Trinity River via outfalls constructed as part of this project. All of the Build Alternatives are expected to generate similar runoff characteristics. It is expected that mitigation measures and costs will also be similar, considering the level of design detail at this stage of the process. In contrast, socio-economic impacts that are more difficult and costly to mitigate, such as displacements of residences and businesses, and are believed to play a more central role in differentiating between the Build Alternatives. Control of contaminants from storm water runoff during construction of a roadway and after the roadway is in operation is highly regulated at the state and federal levels. There is very little basis upon which to differentiate the Build Alternatives in terms of water quality impacts. Any differences become further obscured when viewed in relation to other transportation, industrial, and land developments in the CBD and the region that are expected to affect the Trinity River Basin.

## 18. Wetlands

**Wetlands 18-1. Temporary and long-term impacts**

Statement # 3 / Summary of Comment: Explain the basis for the statement on page 4-118 of the DEIS indicating that the long-term beneficial effects of new wetlands in floodplains would offset temporary adverse impacts resulting from the taking of wetlands. It is usually impossible to replace the functions, habitat, and all other values inherent in naturally occurring wetlands. This is a particular concern with regard to the loss of habitat for migratory birds in a region that is already at carrying capacity. Describe how migratory birds will survive the loss of habitat while new wetland habitat areas are established. Simply replacing wetlands acre-for-acre does not take into consideration the difference in quality of the habitat provided.

**Response:** The full discussion of impacts to wetlands is in **Section 4.8** of the DEIS, rather than the referenced page 4-118 which is a discussion of floodplain encroachment. Additionally, the SDEIS provides new information on wetlands in **Section 3.4.6**. The requirements of Section 404 of the Clean Water Act for wetland mitigation will be satisfied by focusing on replacing wetlands on the basis of functions and value, rather than on a strict acreage basis (see the materials in **Appendices H** and **J** of the SDEIS). As many of the wetlands in the study area were either created by or have recovered from sand/gravel mining operations or excavations linked with the construction of the Trinity Floodway, there is a substantial basis for expecting that mitigation will be successful.

**Wetlands 18-2. Inadequacy of investigation**

Statement # 3 / Summary of Comment: Wetlands to be disturbed by the project are not described adequately, and actual mitigation measures to be used are not in the DEIS. The DEIS should have included a wetlands mitigation plan.

**Response:** Additional information on wetlands mitigation has been included in **Appendices H** and **J** of the SDEIS.

**Wetlands 18-3. Candidates for study**

Statement # 3 / Summary of Comment: Explain the basis for the following statement on page 4-118 of the DEIS: "The wetland areas proposed to be taken by this project are not likely candidates for scientific study." Wetlands in the study area support highly diverse vegetation and animal life and are proximate to local schools and universities, so they should be candidates for study.

**Response:** The referenced statement was meant to reflect that, from a historical perspective, many wetlands within the study area are not naturally occurring (see Comment/Response 18-1).

**Wetlands 18-4. Nomenclature clarification**

Statement # 76 (USACE) / Summary of Comment: **Plate 3-16** of the DEIS should be re-titled to "Waters of the United States." The legend should be clarified to identify items that are waters of the United States.

**Response:** The plate title and legend have been clarified in the SDEIS as requested.

**Wetlands 18-5. Ongoing mapping review**

Statement # 76 (USACE) / Summary of Comment: The USACE – Regulatory Branch is still in the process of verifying the jurisdictional determination for waters of the U.S. and wetlands. Therefore the information in the DEIS may not be accurate, depending on Regulatory Branch comments.

**Response:** A revised jurisdictional waters delineation that was approved by the USACE is included in **Section 3.4.6** of the SDEIS.

**Wetlands 18-6. Delineation subject to approval**

Statement # 76 (USACE) / Summary of Comment: **Section 4.8** of the DEIS describes the impacts that may result from the construction and operation of the proposed alternatives. Please clarify in the introduction to this section that the applicant is still in the process of finalizing the delineation and

determination of waters of the United States and that the information used in the DEIS is provided solely for comparison purposes.

**Response: Section 4.8** in the SDEIS indicates that a revised delineation of waters of the U.S., including wetlands, was approved by the USACE and included in **Section 3.4.6** of the SDEIS.

**Wetlands 18-7. Quality of aquatic resources**

Statement # 76 (USACE) / Summary of Comment: Based on the preliminary data provided in **Section 4.8** of the DEIS, it appears that Alternatives 2A, 2B, and 5 would result in fewer impacts to waters of the U.S. than Alternatives 3A, 3B, and 4. It would be beneficial to provide additional qualitative details regarding the potential impacts of each alternative aside from total area of impact. It would be helpful to include substantive information on the quality of the aquatic resources and the method of determination of quality to help the reader judge which alternative would have the least adverse overall effect on the aquatic environment.

**Response:** The requested details have been provided in **Section 3.4.6** of the SDEIS, and the impacts analysis in **Section 4.8** of the SDEIS incorporates the new information (see Comment/Response 18-1).

**Wetlands 18-8. Functional values and locations**

Statement # 76 (USACE) / Summary of Comment: No functional values/locations for mitigation are included. Levels of impact are disclosed, but levels/significance of mitigation are not disclosed.

**Response:** The revised delineation of wetlands includes an analysis of functions and values in the materials referenced in Comment/Response 18-1.

**Wetlands 18-9. Wetland delineation project number**

Statement # 76 (USACE) / Summary of Comment: With reference to the third paragraph on page 3-85 of the DEIS, the USACE project number should be changed to 200000308.

**Response:** This has been changed from 20000308 to SWF-2000-00308 according to the new USACE regulatory program project number format.

**Wetlands 18-10. Significant wildlife resources**

Statement # 9 (EPA) / Summary of Comment: Commenter has observed that a great diversity of bird species make use of the floodway. During a site visit, it appeared there was a significant acreage of wetlands that was not listed in the wetland delineation for the DEIS. Commenter noted an understanding that wetland delineations were being revised and that these revisions may adjust the acreage figures in **Table 4-35** (page 4-98 of the DEIS). Commenter agreed that the medium quality wetlands, which make up 80% of all wetlands in the study area, have significant functions that include wildlife habitat, water quality enhancement, and flood storage. A Floodway Alternative (e.g., Alternative 3B) may be chosen, provided that the significant unavoidable wetland impacts are offset by compensatory mitigation. Such mitigation could likely be done within the floodway where there are large areas from which wetlands could be created. The elevations of the existing wetlands are known from the wetland delineation and could be used to plan created wetlands. If the correct elevations are chosen, there is a good chance for success.

**Response:** The FHWA concurs with the points in the comment. The delineation of wetlands has been approved by the USACE and a detailed mitigation plan will be part of the Section 404 permit from the USACE (see Comment/Response 18-1). Wetland mitigation under the Section 404 permit process is expected to be based on the elevations of existing wetlands.

**Wetlands 18-11. Irregular bottom contour**

Statement # 9 (EPA) / Summary of Comment: In creating mitigation wetlands, it is important to create an irregular bottom so there is good interspersion of plants and open shallow water. Wetlands plants from impacted areas can be used to as seed source or transplant stock. Desirable wetland plants found in the project area include crow-foot sedge (*Carex crus-corvi*) and other caric sedges, flatsedge (*Cyperus*

species), smartweed (*Polygonum* species), spikerush (*Eleocharis* species), switchgrass (*Panicum virgatum*), and water primrose (*Ludwigia peploides*).

**Response:** The FHWA agrees with the points in the comment, and would follow such guidelines in the creation of wetlands, should a Floodway Alternative be identified as the preferred alternative. Specific information on wetland mitigation may be found in **Appendices H** and **J** of the SDEIS.

**Wetlands 18-12. Staging and borrow areas**

Statement # 9 (EPA) / Summary of Comment: To avoid unnecessary wetland impacts during construction, staging areas and borrow areas should avoid wetlands were practicable. Heavy equipment should avoid all wetlands not permitted for impact. These recommendations should be added to the list of best management practices on page 7-16 of the DEIS.

**Response:** Agreed. In the SDEIS, the points in the comment have been added to the referenced section. Coordination is ongoing with the USACE as to locations for borrow areas (see Letter dated May 10, 2005 in **Appendix G-6** of the SDEIS). Several staging areas located outside of the floodway are being considered.

**Wetlands 18-13. EPA input on Section 404 permit**

Statement # 9 (EPA) / Summary of Comment: EPA noted that its comments are consistent with the regulations governing impacts to wetlands under Section 404 of the Clean Water Act. Assuming a Section 404 permit will be required, EPA indicated that it would review the application and make further comments, as necessary, to ensure that the least environmentally damaging "practicable" alternative is selected.

**Response:** EPA's involvement on the Section 404 permit application process would be welcomed.

**Wetlands 18-14. Conversion of emergent wetlands**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 4-104 of the DEIS states, "The riverside alignments (Alternatives 3A, 3B, and 4) would potentially convert a large amount of emergent wetlands to un-vegetated open water, which would result in some loss of habitat quality. However, these habitat types are relatively abundant throughout the floodway and are relatively easy to re-establish." This statement is technically correct, but wetland impacts should be considered within the eco-region, where there has been an overall loss. Additionally, with the changes to hydraulics and structure within the floodway, re-establishment of these wetlands may be more difficult and costly than implied.

**Response:** The DEIS addresses impacts to wetlands both on local and regional levels. While the DEIS makes the point that the wetland types impacted are abundant in the floodway, it does not attempt to refute that the eco-region has sustained impacts to wetlands. Details as to the historical trends in the creation of wetlands within the floodway are provided in **Section 4.24.2.8** of the DEIS (see, in particular paragraph 2a) and elsewhere in the cumulative impacts analysis. This analysis also considers the development and status of wetlands within the Blackland Prairie eco-region (see page 4-196). Given that these wetlands are gradual depressions or in some instances excavations, it is anticipated that recreating these features should be practical in a flat floodplain that experiences, and should continue to experience, frequent overbank flooding.

**Wetlands 18-15. Mitigation plan**

Statement # 76 (USACE) / Summary of Comment: **Section 6** on page 7-31 of the DEIS states: ". . . A wetland mitigation plan would be prepared prior to project construction. This plan would be developed in collaboration with the USACE and the USFWS. Location of replacement wetlands and methods to restore impacted wetlands would be included in the mitigation plan. The wetland mitigation plan would document the impacts of the proposed Trinity Parkway and its mitigation requirements." The impacts and required mitigation of each alternative should be developed now for all alternatives to give the public and agencies the whole picture of the impacts, mitigation required, and location of the mitigation for the project. Without this information, the evaluation of the alternatives is incomplete.

**Response:** **Section 4.8** and **Appendices H** and **J** of the SDEIS contain additional information about impacts to wetlands and mitigation implications for Alternatives 3A, 3B, 3C, 4A, and 4B. The delineation of wetlands has been approved by the Fort Worth District of the USACE since the DEIS was prepared, and this will serve as the baseline for comparing the relative impacts of the Floodway Alternatives. The FHWA continues to work cooperatively with the USACE to identify appropriate mitigation measures, including the number of acres of wetlands that require mitigation and the location of potential sites for creating wetlands either within the floodway or elsewhere.

**Wetlands 18-16. Mitigation banking on USACE lands**

Statement # 76 (USACE) / Summary of Comment: The fourth paragraph on page 4-13 of the DEIS states, "…Wetland mitigation banking may also be considered for compensation to impacted wetland resources." That may be true for the transportation projects, but it is not true for the Corps of Engineers projects. Wetland mitigation will be done on project lands.

**Response:** The section in which the quoted sentence occurs (**Section 4.2**) has been removed from the SDEIS. The preliminary wetland mitigation plan in **Appendix J** of the SDEIS clearly focuses mitigation efforts on creating wetland areas within the study area. Wetland mitigation banking, however, may also be considered for compensation to wetland resources impacted by the Parkway project.

**Wetlands 18-17. Mitigation bank locations**

Statement # 76 (USACE) / Summary of Comment: The DEIS suggests potential use of mitigation banking to address wetland and vegetation impacts, but does not identify where the banks are located.

**Response:** Mitigation banking is mentioned as a possible strategy for mitigation of wetland losses in DEIS **Sections 4.2.6** and **7.3**. The mitigation banking strategy is listed among several available strategies, and the final determination as to strategy will be made in consultation with the USACE regulatory staff.

At this time and in accordance with NTTA's May 10, 2005 letter to the USACE (included in **Appendix G-6** of the SDEIS), compensation for vegetation and wetlands losses would be accomplished by developing mitigation areas within the Dallas Floodway as outlined in **Appendix J** of the SDEIS. If additional mitigation is required, existing wetland mitigation banks may be considered. Candidate sites could be existing and proposed wetland banks available in the Dallas-Fort Worth service area, such as the Trinity River Mitigation Bank.

**Wetlands 18-18. New seasonal wetlands**

Statement # 76 (USACE) / Summary of Comment: The DEIS indicates that seasonal wetlands would be converted to open-water habitat. Would similar or higher quality seasonal wetlands be created elsewhere?

**Response:** The City of Dallas Balanced Vision Plan for the Trinity River Corridor proposes to create open water lakes and constructed wetlands. The proposed wetlands would be of similar function and value to existing wetlands, and would be located in the overbank areas of the Dallas Floodway, generally between Commerce St. and Westmoreland Road. Subsequent to the DEIS, the FHWA has proposed to the USACE (i.e., in a letter from NTTA dated May 10, 2005) to re-create wetlands in a specified area on the east overbank between Hampton Road and Westmoreland Road. NTTA would have responsibility for creating this wetland area, which would be compatible with the overall Balanced Vision Plan for the City of Dallas.

**Wetlands 18-19. Precautions to avoid wetlands**

Statement # 76 (USACE) / Summary of Comment: Paragraph 4.82 on page 4-97 of the DEIS states precautions would be taken to avoid unnecessary impacts to wetland and aquatic areas without identifying the types of precautions which would be taken.

**Response:** The SDEIS (**Section 3.4.6**) provides detailed mapping of wetland areas in the project corridor and compilations of affected wetlands areas for each Build Alternative. See Comment/Response 18-15 through 18-18 for further responses regarding wetland mitigation. Precautions regarding unnecessary impacts to indirectly-affected wetlands (outside of the road embankment footprint) have been developed in consultation with the USACE Regulatory Branch as part of the Section 404 Permit Application and SDEIS (see **Appendices H** and **J**). In concept, bridges would be used to span open water bodies, such as the sump drainage outfalls, and appropriate best management practices ("BMPs") would be used for construction in locations where piers or culverts directly impact wetlands or open water.

**Wetlands 18-20. Waters of the U.S., including wetlands, clarification**

Statement # 76 (USACE) / Summary of Comment: **Sections 3.4.6**, **4.8**, and **7.4** of the DEIS should be re-titled to "Waters of the U.S., including Wetlands." This revision would provide clarification that wetlands are a type of waters of the United States.

**Response:** The **Section 3.4.6** title has been revised as, "Waters of the U.S., including Wetlands." The **Section 4.8** title has been revised as, "Impacts to Waters of the U.S., including Wetlands." The **Section 7.4** title has been revised as, "Measures to Minimize Impacts to Waters of the U.S., including Wetlands."

**Wetlands 18-21. Definition of waters of the U.S., including wetlands**

Statement # 76 (USACE) / Summary of Comment: The first and second paragraphs of **Section 3.4.6** of the DEIS should be replaced with the following: "The USACE regulates certain activities in waters of the U.S. For the purposes of Section 404 of the Clean Water Act, waters of the U.S. are defined at 33 CFR 328.3 as:

a. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
b. All interstate waters including interstate wetlands;
c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters;
    1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    3) Which are used or could be used for industrial purposed by industries in interstate commerce;
d. All impoundments of waters otherwise defined as waters of the United States under the definition;
e. Tributaries of waters identified in paragraphs 1-4 above;
f. The territorial seas;
g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1-6 above." Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the U.S.

**Response:** The requested change has been added to the third paragraph of **Section 3.4.6**, after the first sentence, as shown in the SDEIS. The remainder of the third paragraph has been deleted from the SDEIS.

## 19. Wildlife Habitat

**Wildlife Habitat 19-1. Grassland habitat impacts**

Statement # 3 / Summary of Comment: The sheer size of grasslands (over 2000 acres) within the floodway makes this habitat type of great importance to local wildlife. Grasslands, particularly prairies, are even more threatened as a habitat type than are bottomland hardwood forests. The floodway contains an incomparable amount of open grassland in a heavily urbanized area that support a wide variety of bird, mammal, and pollinating insect species. Loss of grasslands will result in a proportionate loss of animals that rely on grasslands to support their life cycles. Overemphasis on riparian and upland woodlands and aquatic habitats ignores the overwhelming majority of existing wildlife habitat in the project area. Explain what the project will do to mitigate impacts to this valuable habitat type. Describe any studies connected to this project to actually survey the grasslands of the floodway to evaluate their function, values, and species composition. Provide an estimate of the acreage of grasslands that would be destroyed by the alternatives within the levees.

**Response:** As described in **Section 3.4.3** of the DEIS, the majority of lands within the floodway are composed of the Floodplain Grasslands habitat type, consisting of upland grasses, scattered wetland depressions, with trees common along portions of the river channel and scattered throughout the floodway. The City of Dallas conducts semi-annual mowing and other maintenance activity within the floodway to preserve its flood control function (see **Section 3.4.3** of the DEIS). Other areas are subject to periodic mowing, but generally of less frequent nature. Because this area is continuously disturbed from mowing as part of regular floodway maintenance, it is not considered to be a sensitive habitat for plant or wildlife species.

This habitat type is important within the floodway primarily because of its abundance. Its quality as habitat for wildlife is compromised because of mowing activity as described above, and because it consists mostly of non-native grasses (i.e., Bermuda grass and Johnsongrass). Remnants of prairie vegetation in the floodway are nearly nonexistent because upland areas, prior to construction of the floodway, had been cultivated for crop production. Impacts to this vegetation type from the proposed Build Alternatives are quantified in **Section 4.9.2.2** of the SDEIS. While most of the impact acreages would become impervious surfaces, landscaping of the adjacent areas within the right-of-way would be re-vegetated with a mix of native grasses and native forbs. Areas thus treated will improve the plant biodiversity and habitat quality, even though the mowing regimen will remain. Note that under the Memorandum of Understanding between TxDOT and TPWD regarding wildlife habitat, the sort of grassland that exists in the floodway is not considered an “unusual” or “special” habitat feature that would require mitigation. Nevertheless, during project development, the FHWA would design, use, and promote construction practices that minimize adverse affects on unregulated wildlife habitat such as floodway grasslands.

**Wildlife Habitat 19-2. Impacts from DART to MLK**

Statement # 76 (USACE) / Summary of Comment: The DEIS indicated that 7.0 acres of forested habitat would be impacted by Build Alternatives within the project area. The riverside levee alternatives (especially alternatives 3A and 3B) could impact additional forested and floodplain resources within the DART RR/ (Atchison, Topeka and Santa Fe) AT&SF to MLK reach.

**Response:** The impacts to vegetation resources have been reevaluated for each of the Trinity Parkway Build Alternatives, based on the most current right-of-way footprints. The revised acreage figures are in **Section 4.9** of the SDEIS.

**Wildlife Habitat 19-3. Impacts to wildlife beyond habitat loss**

Statement # 3 / Summary of Comment: The impacts to wildlife beyond disturbance of vegetated habitat needs to be addressed in the DEIS. For example, the DEIS does not discuss the impacts to wildlife of the following toll road aspects: lighting during the hours of darkness; noise; vibration; water pollution from highway runoff. Wildlife is a major attraction of the floodplain area and maintaining viable habitat for wildlife will become even more valuable in the future.

**Response:** Comment noted and considered. The DEIS notes the types of indirect impacts mentioned in the comment in the discussion of vegetation and wildlife habitat in **Section 4.9.2.1**. The relative magnitude of these impacts is reflected in the acreage of habitat expected to be lost to support the various Build Alternatives. Acreage of habitat affected by a project is also linked to indirect impacts, as such impacts attenuate as distance from the source of light/noise/vibration increases. Water quality impacts are addressed in Comment/Response 17-1.

**Wildlife Habitat 19-4. Vegetation ordinance**

Statement # 3 / Summary of Comment: Page 7-30 of the DEIS refers to a City of Dallas Vegetation Ordinance. Explain what Dallas City Code is being referenced and the particulars of the code.

**Response:** This has reference to the tree preservation provisions in Division 51A-10.130 of the City of Dallas Ordinances. This ordinance defines the size and species for protected trees and prescribes the process for obtaining a tree removal permit and the requirements for replacement of protected trees.

**Wildlife Habitat 19-5. Wildlife lists**

Statement # 3 / Summary of Comment: Explain why lists of wildlife are based on reference material which is over 30 years old. Is the reference for **Table 3-16** on page 3-78 of the DEIS accurate, and is this the true source of information? Have the preparers of the DEIS actually physically surveyed the study area to verify the presence or absence of wildlife species?

**Response:** The referenced lists of wildlife in the DEIS were coordinated with state and federal agencies with wildlife expertise. There is no reason to question the reliability of information used to characterize the types of wildlife that may be considered "common" to the study area. Additional surveys were not warranted for the purpose of confirming the presence of these common wildlife species, and impact assessments in the DEIS presumed that these species occupy their preferred habitat in the study area.

**Wildlife Habitat 19-6. Grassland mowing**

Statement # 76 (USACE) / Summary of Comment: The last paragraph on page 3-75 of the DEIS states the following with reference to grassland in the floodplains, "The majority of the lands within the Dallas Floodway are composed of this habitat type, consisting of upland grasses, scattered wetland depressions, with trees common along portions of the river channel and scattered throughout the floodway." A better distinction would be to identify there are areas that are subject to intensive mowing on a frequent schedule, for example the levees and the 50 foot toe on either side, and the native grasslands that lie within the floodplain that are subject to periodic mowing, but generally of less frequent nature. These less disturbed grasslands have significantly more value to wildlife resources that utilize the river, wetlands and the riparian corridor composed of trees that line the banks of the existing channel and additional scatter riparian trees within the floodway.

**Response:** In the SDEIS the following sentences has been inserted after the above-quoted sentence: *"The City of Dallas conducts mowing and other maintenance activities within the Dallas Floodway and on the levees to preserve its flood control function. Typically, the levees and adjacent 50-foot strips are subject to mowing on a frequent schedule. Other areas are subject to periodic mowing, but generally of less frequent nature."* The remainder of the paragraph begins with, *"The mowing program prevents the gradual succession . . ."* and continues unchanged to the end of the paragraph.

**Wildlife Habitat 19-7. Habitat functions in wetlands**

Statement # 76 (USACE) / Summary of Comment: Page 4-99 of the DEIS states that "wetland surface storage is likely the primary function lost under alternatives 3A, 3B, and 4." What about the wildlife habitat values that would be lost?

**Response:** The FHWA agrees that the wetlands provide wildlife habitat. As part of the approval of the wetland delineation, a functional analysis was prepared. **Section 3.4.6** of the SDEIS includes an analysis of habitat functions, and **Table 4-35** in the SDEIS provides additional information on impacts to wetlands.

**Wildlife Habitat 19-8. Mitigation policy clarification**

Statement # 3 / Summary of Comment: Page 7-14 of the DEIS states: "Areas of known habitat would be denoted on the construction plans, and may be replaced if impacted." Why is the word "may" used? Does this mean it may or may not be replaced, and what determines whether or not there will be a replacement?

**Response:** The referenced paragraph has been modified in the SDEIS to clarify that the project sponsor would replace areas of lost habitat, if practicable. As greater detail on the precise impacts of the proposed project is acquired, necessary and appropriate mitigation for habitat losses will be worked out cooperatively between the FHWA and TPWD.

**Wildlife Habitat 19-9. Planting of trees**

Statement # 76 (USACE) / Summary of Comment: Paragraph 2g on page 7-29 of the DEIS ("Mitigation Measures") includes the following statement: ". . , the planting of trees associated within the Dallas Floodway would be determined after considering input from USACE and the desires of the City of Dallas." The statement should read as follows: ". . . considering requirements from USACE and the desires . . ."

**Response:** In the SDEIS, the referenced sentence has been removed.

**Wildlife Habitat 19-10. Tree replacement program**

Statement # 3 / Summary of Comment: Page 7-29 of the DEIS uses the phrase "trees associated within the Dallas Floodway" with reference to a tree replacement program. Explain what is meant by "associated within" the floodway (i.e., associated with what?).

**Response:** In the SDEIS, the referenced sentence has been removed as noted in Comment/Response 19-9. The Dallas Floodway has a primary purpose of flood conveyance. The discussion acknowledges that any mitigation within the floodway would need to be coordinated with the agencies (the USACE and the City of Dallas) responsible for maintaining its flood conveyance capacity.

**Wildlife Habitat 19-11. Tree enhancement plan**

Statement # 3 / Summary of Comment: Page 7-29 of the DEIS states: "Depending on which alternative is identified as the preferred alternative, a tree enhancement plan would be developed . . ." Explain how the selection of an alternative will affect this plan.

**Response:** The DEIS reports the impacts on forested acreage for the various alternatives in **Section 4.9.2.2**. The sponsor's intent is to mitigate tree losses through a replacement program coordinated with the local community and the agencies involved, including TPWD. The selection of a preferred alternative would affect this plan through the designation of tree planting locations. The expectation is that some portion of the tree planting would be located along the selected alignment.

**Wildlife Habitat 19-12. Upland, bottomland, and riparian habitats**

Statement # 37 (TPWD) / Summary of Comment: Under a Memorandum of Understanding between TxDOT and the Texas Parks and Wildlife Department (TPWD), bottomland hardwood habitat is considered a "special habitat feature" and riparian vegetation constitutes "unusual vegetation." Non-regulatory mitigation for loss of these habitats should be mitigated by the proposed project on a one-to-one ratio. Although the hackberry-elm vegetation series is a secure habitat globally and with Texas, the upland woodland and riparian habitats within this urban setting are valuable resources for wildlife providing a natural refuge in an area that has been dramatically altered by development. Loss of wooded habitat will potentially impact wildlife at a local level. The re-vegetation plan committed to in the DEIS mentions the special provisions to plant similar species of the impacted riparian habitat within the study area along the Trinity River. Upland woodlands, riparian habitats, and bottomland hardwood areas need to be included in the calculation of the area of wildlife habitat affected, and TPWD would like to be

involved in the development of the re-vegetation plan. Planting a variety of mast-producing tree and shrub species beneficial to wildlife is encouraged.

**Response:** The impacts to bottomland hardwoods and riparian vegetation have been recalculated in the SDEIS, based on the most current right-of-way footprints (see **Section 4.9**). The FHWA agrees with the comment and expects to work cooperatively with TPWD as it develops site-specific mitigation plans for loss of any significant habitat resources.

**Wildlife Habitat 19-13. Reseeding with native grasses**

Statement # 37 (TPWD) / Summary of Comment: To enhance native grasses available to wildlife in the project area, Bermuda grass and other non-native species should be avoided to the extent possible in reseeding efforts within the right-of-way, though it is understood that certain grasses may be required on slopes to control erosion.

**Response:** The FHWA agrees with the comment and anticipates use of native grasses and forbs to accomplish re-vegetation projects, where appropriate (see page 7-14 of the DEIS).

**Wildlife Habitat 19-14. Mitigation measures**

Statement # 37 (TPWD) / Summary of Comment: The mitigation measures mentioned in **Section 7.3** of the DEIS should be followed to the extent feasible to address habitat fragmentation and reduction in wildlife habitat connectivity.

**Response:** The FHWA agrees with the comment.

**Wildlife Habitat 19-15. Special habitat mitigation funding**

Statement # 37 (TPWD) / Summary of Comment: The DEIS mentions potential mitigation that may be eligible for funding through the U.S. Department of Transportation (USDOT). NTTA should seek funding from the USDOT Transportation Enhancement Program to implement practices that may benefit wildlife, such as wildlife underpasses, landscaping with native vegetation, and acquisition of scenic easements.

**Response:** The project sponsor will inquire as to the availability and constraints of the funding noted in the comment for structures or practices that would benefit wildlife. It should be noted that the Floodway Alternatives (3A, 3B, 3C, 4A, and 4B) incorporate mainlane bridges over various existing drainage outfalls. These bridges will function as wildlife underpasses.

**Wildlife Habitat 19-16. Cooperative mitigation planning**

Statement # 37 (TPWD) / Summary of Comment: TPWD is appreciative of the extensive planning and collaboration with local, state, and federal agencies to design a facility that can be incorporated into a multi-use environment. TPWD looks forward to the results of a re-vegetation plan that will offset the loss of wildlife habitat in an urban setting. This effort is commendable and hopefully other TxDOT districts will follow this example.

**Response:** Comment noted and considered.

## 20. Other Impacts

**Other Impacts 20-1. Energy and resource requirements**

Statement # 3 / Summary of Comment: Where in the DEIS are there descriptions of the energy and natural resource requirements and conservation potential of the alternatives and mitigation measures?

**Response:** **Section 4.19** of the DEIS provides a discussion of energy and natural resource requirements and impacts of the proposed project.

**Other Impacts 20-2. Natural gas line relocation**

Statement # 35 / Summary of Comment: There will be substantial costs for all Build Alternatives to relocate and reestablish natural gas service. The gas company and its customers should not bear the expense to accommodate the proposed project. The costs for the proposed project should include adequate funding to relocate utilities impacted by the proposed project.

**Response:** The costs associated with the relocation of utilities have been included in the cost estimates in **Table 6-1** of the DEIS. The figures in the table reflect expenses to relocate utilities that are currently located within their own right-of-way. Utilities that are currently located within an existing road right-of-way may bear their own costs of relocation, in keeping with customary practice.

**Other Impacts 20-3. No farmland impacts**

Statement # 13 National Resources Conservation Service (NRCS) / Summary of Comment: Commenter (NRCS) concurs with the statements on page 3-88 of the DEIS concerning Prime and Unique Farmland. The soils of the project area are not classified as Important Farmland because the area is considered as previously converted to urban land or on floodplains. In addition, the implementing regulations for the Farmland Protection Policy Act exclude from the definition of “Farmland” areas that contain over 30 structures per 40 acres.

**Response:** Comment noted and considered.

**Other Impacts 20-4. Heat island effects**

Statement # 3 / Summary of Comment: Pages 4-105 and 4-106 of the DEIS contain a cursory discussion of the effects of the project on microclimate. The use of albedo values to determine whether local ambient temperatures would be affected by the toll road does not fully explain the interaction of solar energy with different materials, surfaces, and vegetation. Vegetation is darker in color but has a moderating effect on local ground and air temperatures, whereas paved surfaces act as heat sinks by absorbing heat during the day and releasing it at night. This heat island effect has already raised ambient local temperatures in the area, and has contributed to the formation of low altitude ozone. Describe any studies undertaken to make comparative measurements of ground and air temperatures at representative sites in the study area in order to assess the impacts to microclimates and the existing heat island effect.

**Response:** As previously in **Section 4.10** of the DEIS, the influence of urbanization, including roadway construction, on climate (local or global) is difficult to predict for many reasons. As a result, a detailed microclimate study was not completed. **Section 4.10** provides general information concerning typical urban surface albedo values because the proposed action would be an urban structure (i.e., paved facility) situated in a major pre-existing urban environment. As a result, the Trinity Parkway would absorb and reflect solar energy similar to other urban-type structures located throughout the study area and beyond. When combined with existing conditions, the Trinity Parkway is believed to have no perceivable impact to microclimate.

**Other Impacts 20-5. Hazardous waste sites**

Statement # 3 / Summary of Comment: Page 7-21 of the DEIS states that hazardous waste site assessments would be carried out as necessary to ascertain levels of contamination, remediation options, and associated costs. Have any assessments, however preliminary, been carried out, and are there any estimates of remediation? Explain why this information was not in the DEIS.

**Response: Section 4.17** of the DEIS provides an initial analysis of hazardous waste/material sites potentially affected by the Build Alternatives. This analysis involved the identification of sites within or adjacent to right-of-way for each alternative that have a greater likelihood of potential contamination. During the preliminary design stage for each of the Build Alternatives, the project engineers attempted to minimize the total amount of right-of-way crossing the various landfills and other hazardous/regulated materials sites, thereby reducing the degree of impacts to these areas. Hazardous/regulated material sites were identified along or within the right-of-way of the Build Alternatives, and relative abundance of these sites was used as a basis for comparing the Build Alternatives. At this stage in the environmental review process, detailed estimates of remediation were not prepared on an individual site basis. However, general remediation costs are included in the cost estimate tables of **Appendix D**. When the preferred alternative is identified and prior to right-of-way acquisition, it is expected that a Phase I Environmental Site Assessment [in accordance with the most current American Society for Testing and Materials (ASTM) standards] will be performed for right-of-way acquisitions and associated sites and/or facilities that have known or potential occurrences of hazardous materials. Based on the results of the Phase I Environmental Site Assessment, sampling and analysis activities and potential remedial activities can be evaluated in more detail for the preferred alternative.

**Other Impacts 20-6. Demolition of structures**

Statement # 3 / Summary of Comment: Page 7-22 of the DEIS refers to the demolition of structures. Describe the structures referred to and their location.

**Response:** The DEIS refers to structures that would be removed from the right-of-way for the selected alternative. A discussion of displacements relative to each of the Build Alternatives is in **Section 4.5** of the DEIS, which includes the numbers, types, and locations of displaced structures.

## 21. Cumulative Impacts

**Cumulative Impacts 21-1. Project by project analysis**

Statement # 76 (USACE) / Summary of Comment: **Section 4.24.2** of the DEIS on "Cumulative Impacts" does a good job of listing the projects within the geographic area, but does not attempt to quantify or qualify the impacts (positive or negative) of each listed activity. In order to understand the overall cumulative impacts of the projects, a project by project analysis / listing of the areas impacted and the effects need to be put together and displayed in the section of the report.

**Response:** SDEIS **Section 4.24.2** has been substantially revised and provides new information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS. The revised analysis includes discussion and data tables that seek to quantify, were possible from available information, cumulative impacts by focusing on specific indicators of resource condition. The analysis follows the TxDOT guidance which uses an eight-step analysis to evaluate the combined effects of direct and indirect impacts of the Trinity Parkway Build Alternatives and foreseeable transportation and land/resource development that are independent of the Trinity Parkway.

**Cumulative Impacts 21-2. Regulated mitigation strategies**

Statement # 76 (USACE) / Summary of Comment: The third paragraph on page 4-196 of the DEIS states, . . . "Other planned transportation system improvements, flood control projects, and development projects (see **Tables 4-53** and **4-54**) would also be subject to the requirements of the above federal and/or state regulations ensuring their impacts were mitigated to insignificance, thereby reducing the cumulative effect of these projects." This argument was rejected by the Federal Court in the DFE lawsuit as being "conclusory . . . and fails to meet NEPA's requirement that an agency take a "hard look" at the environmental consequences, including cumulative impacts that a project will have."

Statement # 76 (USACE) / Summary of Comment: With regard to Subpart 4.24.2 on page 4-162 of the DEIS, the cumulative effects analysis is very general and does not consider the specific impacts of the alternatives along with other reasonable foreseeable projects. The cumulative impact regulation requires the incremental impact of the action be assessed, when added to other past, present and reasonably foreseeable action. 40 CFR 1508.7. The cumulative impacts analysis is primarily conclusory remarks. Conclusory remarks do not equip a decision maker to make an informed decision about alternative course of action and do not meet the requirements of NEPA.

**Response:** The cumulative effects section has been substantially rewritten utilizing TxDOT's latest guidance in this area. The analysis presents specific data and discussion about direct and indirect impacts, and combines this with available data relating to foreseeable transportation and land/resource development projects. Cumulative impacts are reported as potential or unmitigated impacts, and followed by a discussion of expected mitigation processes and measures. Any new projects that are reasonably foreseeable have been reviewed and updated in the SDEIS (see **Appendix L-4**).

**Cumulative Impacts 21-3. Single EIS for all regional projects**

Statement # 76 (USACE) / Summary of Comment: Kleppe v. Sierra Club, 427 U.S. 390 (1976) is one of the leading cases involving cumulative impacts. It is the first time that the U.S. Supreme Court considered whether an EIS could be deficient for failure to take a "hard look" at cumulative impacts. Kleppe stated that "when several proposals for coal-related actions that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together." It appears from reading the EIS that a number of interrelated road and bridge projects are being constructed in the same vicinity as the Trinity Parkway. Further these projects connect the Trinity Parkway. Under the rationale of Kleppe, these projects in the same geographic region which are pending before USDOT FHA should be considered in a single EIS.

**Response:** Comment noted and considered. FHWA, as lead federal agency, disagrees with the assertion that other road and bridge projects in the vicinity of Trinity Parkway are interrelated and should be considered in a single EIS. The Parkway project has logical termini and independent utility from other

transportation projects in the corridor, such as Project Pegasus (Canyon-Mixmaster), Southern Gateway (South R.L. Thornton), and Woodall Rodgers Extension. There is no need or precedent for including these independent projects in a single EIS. This decision is in keeping with the decision in Kleppe, which held that the agency was not required to prepare a regional EIS unless the agency was reviewing a proposal for actions that were regional in scope. The Supreme Court in that case noted also that ". . . practical considerations of feasibility might well necessitate restricting the scope of comprehensive statements" (427 U.S. 390, 414). While the Trinity Parkway is part of a regional plan to address transportation needs in the Dallas Fort Worth (DFW) area, the project nevertheless has independent utility, and is independent in terms of its purpose and need, timing, sponsorship, funding, and location, among other factors. Consequently, the Parkway DEIS evaluates its relation to other independent transportation projects under **Section 4.24** of the DEIS. See also page 1-4 of the DEIS for a discussion of FHWA's general criteria for the selection of logical termini for a transportation project under 23 CFR Section 771.111(f).

**Cumulative Impacts 21-4. Conclusory statements**

Statement # 76 (USACE) / Summary of Comment: Page 4-182 addresses wetlands and states that other planned transportation system improvements would be subject to executive order and applicable regulations insuring the impacts are mitigated. Such broad sweeping conclusory statements do not provide the type of cumulative impacts analysis required under NEPA. The same type of conclusory statements are included for floodplains on page 4-184, water quality on page 4-188, air quality on page 4-191.

**Response:** The discussion of cumulative impacts (**SDEIS Section 4.24.2**) has been substantially revised and provides detailed information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS. This analysis outlines the potential impacts of the Trinity Parkway project as well as other foreseeable projects; this information is reported initially without reference to mitigation (see **Table 4-60**). This reporting of possible "unmitigated" impacts is an indication of potential, or possibly temporary, impacts to resources, and forms the basis for subsequent discussion of reasonably expected mitigation. An essential element of this discussion is the identification of regulatory controls that necessarily mitigate many of the impacts of proposed activities on a variety of resources including waters of the U.S., including wetlands, air quality, water quality, and floodplains. The cumulative effects analysis includes a survey of expected impacts of the Trinity Parkway within the context of expected impacts from numerous other foreseeable future projects within the Trinity River Corridor area. This analysis follows CEQ and TxDOT guidance on cumulative impacts analysis, which requires a realistic review of impacts as well as mitigation (i.e., "net impacts") when assessing cumulative effects of a project. That is, it is reasonable and requisite to consider the regulatory programs that are in place, and to assume that regulatory agencies will perform the duties outlined by legislative and executive authorities.

**Cumulative Impacts 21-5. Lack of supporting data**

Statement # 76 (USACE) / Summary of Comment: The last two paragraphs on page 4-197 of the DEIS are conclusory without data to support the conclusions. There appears to be no cumulative impacts analysis.

**Response:** The discussion of cumulative impacts (**SDEIS Section 4.24.2**) has been substantially revised and provides detailed information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS.

**Cumulative Impacts 21-6. Assumed compliance**

Statement # 76 (USACE) / Summary of Comment: The first paragraph on page 4-198 of the DEIS states that impact to biological resources would be avoided or minimized in compliance with existing federal statues. Leaving the avoidance of impacts to compliance with existing statues does not meet NEPA criteria.

**Response:** The discussion of cumulative impacts (**SDEIS Section 4.24.2**) has been substantially revised and provides detailed information and analysis regarding cumulative impacts in response to USACE's

concerns about the adequacy of information available in the DEIS. See also the response to Comment 21-4 above.

**Cumulative Impacts 21-7. Need to identify impacts**

Statement # 76 (USACE) / Summary of Comment: **Section 4.24.2.10** on page 234 states that the magnitude and significance of negative impacts are expected to be limited and controllable. This statement does not identify the impacts, it does not identify the environmental effects of the impacts or identify how the impacts will be limited or controlled. It fails to meet NEPA disclosure criteria.

**Response:** The discussion of cumulative impacts (**SDEIS Section 4.24.2**) has been substantially revised and provides detailed information and analysis regarding cumulative impacts in response to USACE's concerns about the adequacy of information available in the DEIS.

**Cumulative Impacts 21-8. Include other studies**

Statement # 3 / Summary of Comment: What other environmental studies are being prepared that are related to the Trinity Parkway project but are outside the scope of the DEIS? Why would not other proposals, especially those that would affect the floodway's hydraulic functioning, be included in the DEIS?

**Response:** Other known projects within the region that may combine with the proposed project to produce cumulative environmental impacts are described and analyzed in **Section 4.24** of the DEIS, as updated in the same section in the SDEIS. Known existing or planned and designed projects within the study area that would affect the floodway's hydraulic functioning have been incorporated into the analysis.

# APPENDIX G-3

# PUBLIC HEARING MATERIALS

THIS PAGE INTENTIONALLY LEFT BLANK

## APPENDIX G-3. Public Hearing Materials

This section contains written materials that were used in connection with the public hearing on March 29, 2005. The listing in **Table G-4** outlines the items included in this appendix, and explains how the item was used to either announce the public hearing, or inform the public about the DEIS.

**Table G-4. Description of Public Hearing Materials**

| Item | App. G-3 Page # | Remarks on Use of Item |
|---|---|---|
| NTTA Newsletter and Notice of Public Hearing | 2 | Item was mailed to public officials and property owners potentially affected by the proposed Trinity Parkway project |
| Receipt of Delivery | 8 | Record of DEIS delivery to public locations to enable members of the community to review the DEIS |
| Public Hearing Agenda and Information Packet | 11 | These materials were handed to all members of the community that attended the public hearing |
| Public Hearing Presentation Slides | 23 | A copy of the slide presentation was given to those who attended the public hearing |
| Public Hearing Photographs | 41 | Representative displays that were available during open house and public hearing |

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

# TRINITY PARKWAY NEWS

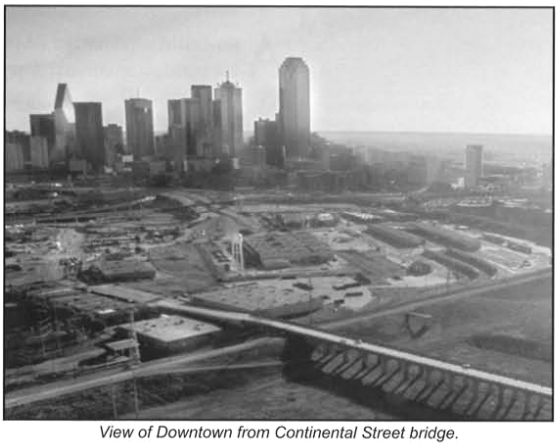
North Texas Tollway Authority February 2005

## Inside this Issue:

*Public Hearing Set for March 29* 1
*About Trinity Parkway* 1
*Description of Alternatives* 2
*Let Us Know Your Opinions* 2
*Environmental Documents Now Available* 3
*To Obtain a Personal Copy of the DEIS* 3
*Public Hearing Location Map* 4

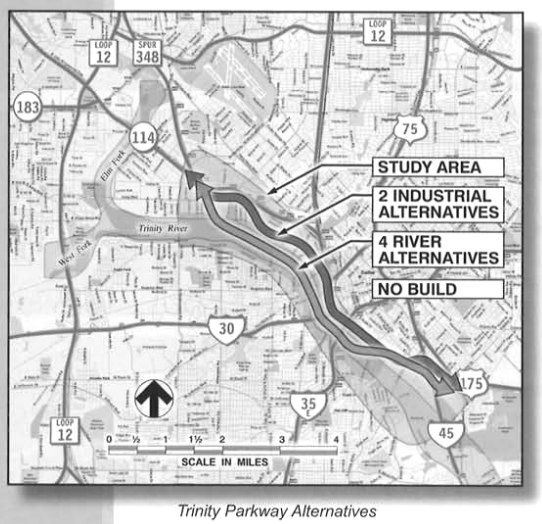
## Public Hearing Set for March 29th

The North Texas Tollway Authority (NTTA), in cooperation with the Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHWA), will conduct a Public Hearing on **Tuesday, March 29, 2005, at 6:00 p.m.** at the *Dallas Convention Center Arena, located at 650 S. Griffin Street, Dallas, 75202*. The Hearing will discuss the proposed construction of the Trinity Parkway reliever route from the IH 35E/SH 183 interchange to US 175/SH 310 interchange in the City of Dallas, Dallas County, Texas. An Open House will be held prior to the Public Hearing starting at 2:00 p.m., at the same location, to allow for questions and review of project exhibits. NTTA and TxDOT staff will be present to answer questions regarding the proposed project at the Open House. The formal Public Hearing will begin at 6:00 p.m., including a public comment period.



*View of Downtown from Continental Street bridge.*

## About Trinity Parkway




*Trinity Parkway Alternatives*

The proposed Trinity Parkway project involves the construction of a four- to six-lane controlled access tollway. The project corridor is approximately 9 miles long and includes the Dallas Floodway portion of the Trinity River located on the west side of downtown Dallas.

This project would assist in reducing local, regional, and national traffic congestion on IH 35E and IH 30 in the City of Dallas and improve mobility in the North Central Texas region.

The proposed action has the potential to impact land use, single-family residents, businesses, socio-economic conditions, wetlands and jurisdictional waters of the U.S., floodplains, water quality, air quality, noise conditions, cultural resources, and hazardous/regulated materials. The Parkway project is potentially related to lakes, flood control and recreational features proposed in the same project corridor by the City of Dallas.

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

## Let us know YOUR OPINIONS

*All interested parties are invited to attend the Open House and Public Hearing. Both oral and written comments may be presented at this event. Written comments may also be submitted to NTTA, P.O. Box 260729, Plano, Texas 75026, Attn: Mr. Christopher Anderson. (Note that emailed comments are not accepted.)* ***Comments must be received no later than 10 days following the Public Hearing in order to be included in the Public Hearing record. The hand-delivery or post-marked deadline for comment submittal is April 8, 2005.***

*Persons with disabilities planning to attend the Public Hearing who require auxiliary aids or services, such as interpreters for the hearing impaired, readers, or Braille should contact Mr. John Hoffman at (214) 346-6394 at least three working days prior to the hearing so that appropriate arrangements can be made. Reasonable accommodations will be made to meet these needs. The Public Hearing will be conducted in English, with simultaneous translation for Spanish-speaking attendees.*

# DESCRIPTION OF ALTERNATIVES

A no-build alternative (Alternative 1) and six build alternatives (Alternatives 2A, 2B, 3A, 3B, 4, and 5) are evaluated in the Draft Environmental Impact Statement (DEIS).

Alternatives 2A through 5 are approximately 9 miles long and begin at IH 35E/SH 183 and end at US 175/SH 310. Alternatives 2A and 2B generally follow existing Irving/Industrial Boulevards. Alternatives 3A, 3B, 4, and 5 generally follow the east and/or west Dallas Floodway levees.

The DEIS provides a review of environmental impacts, including information on floodplain and wetland impacts, as well as work undertaken to comply with Section 106 of the National Historic Preservation Act. The Section 106 process identifies historic properties, assesses their eligibility for listing in the National Register of Historic Places, evaluates impacts of each alternative under consideration on eligible or listed properties, and considers alternatives to avoid or minimize any adverse effects.

The Section 4(f) Evaluation included in the DEIS describes potential impacts to resources such as significant publicly-owned parks, recreational areas, wildlife and waterfowl refuges, or significant historic sites.

Right-of-way requirements for Alternatives 2A through 5 range from approximately 252 to 495 acres. Potential displacements for the build alternatives vary from 8 to 24 single-family residences and from 23 to 281 commercial properties. Information concerning the NTTA Relocation and Assistance Program will be presented at the Public Hearing. The benefits and services for displacees, as well as information about a tentative schedule for right-of-way acquisition and construction, may be obtained from the NTTA.

2A - Industrial Elevated

2B - Industrial At - Grade

3A - Combined Parkway - Original

3B - Combined Parkway - Modified

4 - Split Parkway Riverside

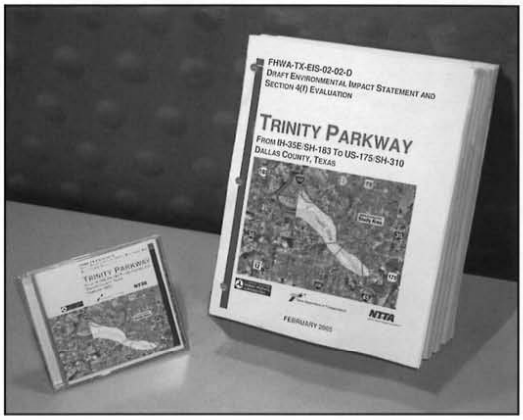
5 - Split Parkway Landside

*Six Build Alternatives under Consideration*

# Environmental Documents Now Available

The Draft Environmental Impact Statement (DEIS) will be available to citizens as of February 11, 2005. There are many ways that interested citizens may obtain or review the document.

The DEIS and other project-related information will be displayed at the Open House and Public Hearing. In addition, the DEIS will be on file and available for public inspection and review at the following locations:




*Copies of the DEIS are available for review at listed locations.*

Government Locations:

- NTTA Offices, 5900 West Plano Parkway, Suite 100, Plano 75093
- TxDOT Dallas District Library, 4777 E. Highway 80, Mesquite 75150
- City of Dallas, 1500 Marilla Street, Room 6B-S, Dallas 75201
- Dallas County, 411 Elm, 4th Floor, Dallas 75202
- NCTCOG Headquarters, Center Point Two, 2nd Floor, 616 Six Flags Drive, Arlington 76011

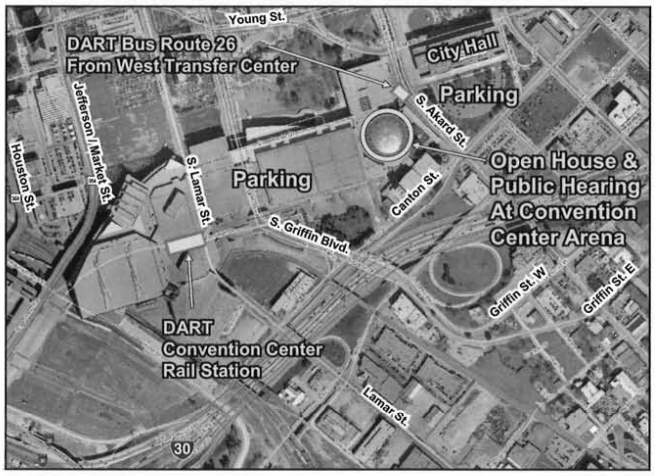
Community Locations:

- J. Erik Jonsson Central Library, 1515 Young Street, Dallas 75201
- Martin L. King Jr. Branch Library, 2922 Martin Luther King Blvd., Dallas 75215
- Dallas West Branch Library, 2332 Singleton Blvd., Dallas 75212
- North Oak Cliff Branch Library, 302 W. Tenth Street, Dallas 75208
- Oak Lawn Branch Library, 4100 Cedar Springs Road, Dallas 75219
- Pleasant Grove Branch Library, 1125 S. Buckner Blvd., Dallas 75217
- Greater Dallas Chamber of Commerce, 700 North Pearl Street, Suite 1200, Dallas 75201
- Oak Cliff Chamber of Commerce, 660 South Zang Blvd., Dallas 75208
- West Dallas Chamber of Commerce, 2424 North Westmoreland Road, Dallas 75212
- Dallas Black Chamber of Commerce, 2838 Martin L. King Jr. Blvd., Dallas 75215
- Greater Dallas Hispanic Chamber of Commerce, 4622 Maple Avenue, Suite 207, Dallas 75219
- Greater Dallas Asian American Chamber of Commerce, 11171 Harry Hines Blvd, Suite 115, Dallas 75229
- Central Dallas Association, 1412 Main Street, Suite 2500, Dallas 75202
- Clean South Dallas, Inc., 2809 Birmingham Avenue, Dallas 75215
- West Dallas Multipurpose Center, 2828 Fish Trap Road, Dallas 75212
- TR Hoover Development Corp., 5106 Bexar Street, Dallas 75215
- New Hope Baptist Church, 5002 South Central Expressway, Dallas 75215
- St. Philips Neighborhood Development Corporation, 1622 Panama Place, Dallas 75215
- Kingbridge Crossing Community Center, 3131 Kingbridge Road, Dallas 75212

**To Obtain a Personal Copy of the DEIS:**

A bound copy of the DEIS may be purchased for $80.00 per copy, plus $7.00 for shipping and handling. A CD-ROM version of the document in Adobe Acrobat format may be purchased for $5.00, plus $2.00 shipping and handling. To request a copy of the DEIS, please contact Mr. John Hoffman at *(214) 346-6394*. These items may also be picked up in person to avoid shipping and handling charges. Additionally, CD-ROM copies of the documents will be available for sale at the Open House and Public Hearing.

# Open House and Public Hearing Location Map




**Open House :**
**Tuesday, March 29, 2005**
**2:00 p.m. to 6:00 p.m.**

**Public Hearing:**
**Tuesday, March 29, 2005**
**6:00 p.m.**

***Dallas Convention Center Arena,***
***650 S. Griffin Street, Dallas, 75202***

Parking: Convention Center Basement Garage on S. Griffin St. (Bring your parking ticket to the NTTA Check-In desk for free validation). Additional parking at City Hall surface lot. (Meters are free after 5:00 p.m.)

Public Transportation: The site is also served by DART Rail and Bus Service.

## Comments from NTTA

* The design, funding and construction of a tollway is a long and complicated process. Ultimate funding and construction is dependent upon many factors not in the control of the NTTA or other governmental entities. A substantial amount of information must be obtained and many decisions must be made by NTTA Board of Directors and other entities before the project could go forward. No one should rely upon the statements made in this newsletter regarding the status of the project or statements made regarding other projects as a basis for making a financial decision.

* The North Texas Tollway Authority (NTTA), a political subdivision of the State of Texas, is authorized to acquire, construct, maintain, repair and operate turnpike projects in the North Texas region. The NTTA serves the four-county area of Collin, Dallas, Denton, and Tarrant Counties and is responsible for the Dallas North Tollway System, consisting of the Dallas North Tollway, President George Bush Turnpike, Addison Airport Toll Tunnel and the Mountain Creek Lake Bridge project in the City of Grand Prairie.

Thank you for your support as we strive to improve the quality of life, mobility and regional economy of North Texas by providing fiscally sound toll facilities.



NTTA
NORTH TEXAS TOLLWAY AUTHORITY

# TRINITY PARKWAY *News*

NTTA
PO Box 260729
Plano, Texas 75026
Tel: (214) 461-2000
Fax : 214-528-4826

**Directors**
David D. Blair, Jr.,
Dallas County, Chairman
Jack Miller,
Denton County, Vice Chairman
Donald D. Dillard,
Collin County
William W. Meadows,
Tarrant County
Alan E. Sims,
Dallas County
Paul N. Wageman,
Collin County
Kay Walls,
Governor Bush Appointee

*We're on the Web!*
http://www.ntta.org

© 2005

# PUBLIC NOTICE
## TRINITY PARKWAY DRAFT ENVIRONMENTAL IMPACT STATEMENT
## NOTICE OF AVAILABILITY AND NOTICE OF PUBLIC HEARING

### AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT STATEMENT

This is to advise the public of the availability of the approved Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation for the proposed construction of the Trinity Parkway reliever route from the IH-35E/SH-183 interchange to US-175/SH-310 interchange in the City of Dallas, Dallas County, Texas. The proposed project is being developed jointly by the Federal Highway Administration (FHWA), the Texas Department of Transportation (TxDOT) and the North Texas Tollway Authority (NTTA). The DEIS provides descriptions of the environmental conditions, in and around the project study area, the potential environmental impacts (beneficial and/or adverse) of the improvements associated with each alternative, mitigation measures to address potential impacts, and other information required by federal and state environmental laws.

The DEIS will be available for review and comment until April 8, 2005. A bound copy of the DEIS may be purchased for $80.00 (plus $7.00 for shipping and handling) or a CD-ROM of the document in Adobe Acrobat format for $5.00 (plus $2.00 for shipping and handling). The DEIS is also available on the NTTA web site at www.ntta.org. Copies of the DEIS will be available for review at the locations listed below.

**Dallas:** J. Erik Jonsson Central Library, 1515 Young St.
Martin L. King Jr. Branch Library, 2922 Martin Luther King Blvd.
Dallas West Branch Library, 2332 Singleton Blvd.
Dallas Chamber of Commerce, 700 North Pearl St.
Oak Cliff Chamber of Commerce, 660 South Zang Blvd.
Hispanic Chamber of Commerce, 4622 Maple Ave., Suite 207
Asian American Chamber of Commerce, 11171 Harry Hines Blvd., Ste. 115
TR Hoover Development Corporation, 5106 Bexar St.
Clean South Dallas, Inc., 2809 Birmingham Ave.
West Dallas Multipurpose Center, 2828 Fish Trap Rd.
Dallas City Hall, 1500 Marilla St., Rm. 6B-S
Dallas County, 411 Elm St., 4th Fl.
North Oak Cliff Branch Library, 302 W. Tenth St.
Oak Lawn Branch Library, 4100 Cedar Springs Rd.
Pleasant Grove Branch Library, 1125 S. Buckner Blvd.
W. Dallas Chamber of Commerce, 2424 N. Westmoreland Rd.
Black Chamber of Commerce, 2838 Martin L. King Jr. Blvd.
Central Dallas Association, 1412 Main St., Suite 2500
New Hope Baptist Church, 5002 South Central Expressway
St. Philips Neighborhood Development Corp., 1622 Panama Pl.
Kingbridge Crossing Community Center, 3131 Kingbridge Rd.
**Plano:** NTTA Offices, 5900 W. Plano Pkwy, Suite 100
**Mesquite:** TxDOT–Dallas District Library, 4777 E. Highway 80
**Arlington:** NCTCOG–Center Point Two, 2nd Fl., 616 Six Flags Dr.

### NOTICE OF PUBLIC HEARING

A formal Public Hearing will be conducted to discuss the proposed construction of the Trinity Parkway reliever route and receive public testimony. The Public Hearing will include a presentation that summarizes the project alternatives presented in the DEIS and their associated comparative impacts. An Open House will be held prior to the Public Hearing at the same location to allow for questions and review of project exhibits. NTTA and TxDOT staff will be present to answer questions regarding the proposed project at the Open House. The remainder of the session will provide an opportunity for the public to give testimony on the proposed project, project alternatives and the DEIS (see schedule below). The proceedings will be recorded by a stenographer. Both oral statements recorded at the Public Hearing and written statements received or postmarked by Friday, April 8, 2005 will be made part of the official Public Hearing record. Copies of the DEIS and other project-related materials will be available for review throughout the Open House and Public Hearing sessions.

| | | |
|---|---|---|
| **DATE:** | Tuesday, March 29, 2005 | |
| **TIME:** | Open House – Materials Available for Review | 2:00 p.m. to 6:00 p.m. |
| | Presentation<br>(to be followed by continuous public comment period) | 6:00 p.m. |
| **PLACE:** | **Dallas Convention Center Arena**<br>650 S. Griffin Street<br>Dallas, Texas 75202<br>(214) 939-2700 | |

Persons with disabilities planning to attend this Public Hearing who require auxiliary aids or services, such as interpreters for the hearing impaired, readers, or Braille should contact Mr. John Hoffman at (214) 346-6394 at least three working days prior to the hearing so that appropriate arrangements can be made. Reasonable accommodations will be made to meet these needs.

All interested parties are invited to attend this Public Hearing and Open House. Both oral and written comments may be presented at the hearing. Written comments may also be submitted to NTTA, P.O. Box 260729, Plano, Texas 75026, Attn.: Mr. Christopher Anderson. Written comments must be received or postmarked on or before Friday, April 8, 2005. To request a copy of the DEIS, please contact Mr. Hoffman by phone: (214) 346-6394.

# NOTIFICACION PUBLICA
## BORRADOR DE LA DECLARACION DE IMPACTO AMBIENTAL DEL TRINITY PARKWAY
## NOTIFICACION DE DISPONIBILIDAD Y NOTIFICACION DE AUDIENCIA PUBLICA

### DISPONIBILIDAD DEL BORRADOR DE LA DECLARACION DE IMPACTO AMBIENTAL

Se le avisa al público general de la disponibilidad del "Borrador de la Declaración de Impacto Ambiental (DEIS)" aprobado, y de la Sección 4(f) denominada "Evaluación", para la construcción de la ruta de alivio para el tramo desde el cruce de las autopistas IH-35E y SH-183 hasta el cruce de las autopistas US-175 y SH-310, en la Ciudad de Dallas, Condado de Dallas, Texas. El proyecto está siendo desarrollado conjuntamente entre la Administración Federal de Autopistas (FHWA - Federal Highway Administration), el Departamento de Transportación de Texas (TxDOT - Texas Department of Transportation) y la Autoridad del Norte de Texas para Autopistas por Peaje (NTTA - North Texas Tollway Authority). En el documento "Borrador de la Declaración de Impacto Ambiental (DEIS)" se describen las condiciones ambientales existentes dentro y fuera del área bajo estudio, se identifican potenciales impactos ambientales (tanto positivos como adversos) de cada una de las alternativas elaboradas, se presentan diversas medidas para mitigar potenciales impactos ambientales, y además, se compila toda otra información según los requisitos de las leyes federales y estatales.

El documento DEIS estará disponible al público para su revisión y comentario hasta el 8 de abril de 2005. El público podrá adquirir una copia impresa del documento DEIS por $80.00 (más $7.00 por gastos de envío), o de preferir, un CD-ROM del documento en formato Adobe Acrobat por $5.00 (más $2.00 por gastos de envío). El documento DEIS también se encuentra disponible en el sitio web NTTA www.ntta.org. Copias del documento DEIS estarán disponibles al público para su revisión en los siguientes sitios:

**Dallas:** J. Erik Jonsson Central Library, 1515 Young St.
Martin L. King Jr. Branch Library, 2922 Martin Luther King Blvd.
Dallas West Branch Library, 2332 Singleton Blvd.
Dallas Chamber of Commerce, 700 North Pearl St.
Oak Cliff Chamber of Commerce, 660 South Zang Blvd.
Hispanic Chamber of Commerce, 4622 Maple Ave., Suite 207
Asian American Chamber of Commerce, 11171 Harry Hines Blvd., Ste. 115
TR Hoover Development Corporation, 5106 Bexar St.
Clean South Dallas, Inc., 2809 Birmingham Ave.
West Dallas Multipurpose Center, 2828 Fish Trap Rd.
Dallas City Hall, 1500 Marilla St., Rm. 6B-S
Dallas County, 411 Elm St., 4th Fl.
North Oak Cliff Branch Library, 302 W. Tenth St.
Oak Lawn Branch Library, 4100 Cedar Springs Rd.
Pleasant Grove Branch Library, 1125 S. Buckner Blvd.
W. Dallas Chamber of Commerce, 2424 N. Westmoreland Rd.
Black Chamber of Commerce, 2838 Martin L. King Jr. Blvd.
Central Dallas Association, 1412 Main St., Suite 2500
New Hope Baptist Church, 5002 South Central Expressway
St. Philips Neighborhood Development Corp., 1622 Panama Pl.
Kingbridge Crossing Community Center, 3131 Kingbridge Rd.
**Plano:** NTTA Offices, 5900 W. Plano Pkwy, Suite 100
**Mesquite:** TxDOT–Dallas District Library, 4777 E. Highway 80
**Arlington:** NCTCOG–Center Point Two, 2nd Fl., 616 Six Flags Dr.

### NOTIFICACION DE AUDIENCIA PUBLICA

Se llevará a cabo una Audiencia Pública formal con el fin de tratar la construcción de la ruta de alivio Trinity Parkway, como así también obtener testimonio público. Durante la Audiencia Pública, se detallarán las alternativas del proyecto presentadas en el documento DEIS, y a su vez se presentarán comparativamente los impactos asociados a las mismas. Previo al comienzo de la Audiencia Pública, el salón estará abierto al público para la visita de exhibiciones gráficas del proyecto y para contestar preguntas. Representantes de la Autoridad del Norte de Texas para Autopistas por Peaje (NTTA) y del Departamento de Transportación de Texas (TxDOT) estarán presentes para responder a preguntas correspondientes al proyecto. Una vez concluída la etapa de preguntas, el público presente tendrá la oportunidad de proporcionar testimonio en cuanto al proyecto propuesto, de las alternativas del proyecto presentadas y del documento DEIS (ver programa a continuación).

El acto será documentado por un taquígrafo. Tanto las declaraciones verbales documentadas durante la Audiencia Pública, como las declaraciones escritas recibidas o selladas por correo a fecha del viernes 8 de abril de 2005, pasarán a formar parte del archivo del la Audiencia Pública. Durante las sesiones de acceso público y de la Audiencia Pública, estarán a disposición del público copias del documento DEIS y otra información relevante al proyecto.

| | | |
|---|---|---|
| **FECHA:** | Martes, 29 de marzo de 2005 | |
| **HORA:** | Acceso Público – Materiales Disponibles para Revisión | 2:00 p.m. a 6:00 p.m. |
| | Presentación<br>(siguiendo con el período de comentario público ininterrumpido) | 6:00 p.m. |
| **SITIO:** | **Dallas Convention Center Arena**<br>650 S. Griffin Street<br>Dallas, Texas 75202<br>(214) 939-2700 | |

Se les solicita a las personas con disminución física, requiriendo apoyo o servicios auxiliares, como ser intérpretes para personas hipoacúsicas, lectores del sistema Braille, que deseen asistir a la Audiencia Pública, por favor tengan a bien comunicarse con el Sr. John Hoffman al teléfono (214) 346-6394 con tres días laborales de anticipación previo a la Audiencia Pública para la adopción de medidas pertinentes a cada caso. Todas las partes interesadas están invitadas a asistir a la Audiencia Pública y al Acceso Público. Comentarios verbales o escritos pueden ser presentados en la Audiencia. Comentarios escritos pueden ser enviados a la siguiente dirección: NTTA, P.O. Box 260729, Plano, Texas 75026, Attn.: Mr. Christopher Anderson. Comentarios escritos deberán ser recibidos o sellados por correo a no más tardar para el viernes 8 de abril de 2005. Para solicitar una copia del documento DEIS, por favor tenga a bien comunicarse con el Sr. John Hoffman por teléfono al: (214) 346-6394.

## Receipt of Delivery
## Trinity Parkway Draft Environmental Impact Statement

| | | | |
|---|---|---|---|
| Dallas City Hall (Rebecca Dugger)<br>1500 Marilla, Room 6B-S<br>Dallas, Texas 75201<br>(1 hard copy plus 1 CD) | Natalie Wilson | Natalie Wilson | 2-9-05 |
| Dallas County (Donald Holzwarth)<br>411 Elm Street, 4th Floor<br>Dallas, Texas 75202<br>(1 hard copy plus 1 CD) | IRMA HARRELL | Irma Harrell | 2-09-05 |
| TxDOT–Dallas District (Dan Perge)<br>4777 East Highway 80<br>Mesquite, TX 75150<br>(3 hard copies plus 3 CDs) | Dan Perge | DAN PERGE | 2/8/05 |
| J. Erik Jonsson Central Library<br>1515 Young Street<br>Dallas, TX 75201<br>(2 hard copies plus 2 CDs) | Mark Gilman | Mark Gilman | 2-9-05 |
| Martin L. King Jr. Branch Library<br>2922 Martin Luther King Boulevard<br>Dallas, Texas 75215<br>(1 hard copy plus 1 CD) | Melissa Dease | Melissa Dease | 2-9-05 |
| Dallas West Branch Library<br>2332 Singleton Boulevard<br>Dallas, Texas 75212<br>(1 hard copy plus 1 CD) | C. Gibrich | C. Gibrich | 2/9/05 |
| North Oak Cliff Branch Library<br>302 W. Tenth Street<br>Dallas, Texas 75208<br>(1 hard copy plus 1 CD) | Rose Mary Cortez | Rose Mary Cortez | Feb. 9, 2005 |
| Oak Lawn Branch Library<br>4100 Cedar Springs Road<br>Dallas, Texas 75219<br>(1 hard copy plus 1 CD) | Ray Sablack | Ray Sablack | 2/9/05 |

Signature / Name / Date

Page 1 of 3

## Receipt of Delivery
## Trinity Parkway Draft Environmental Impact Statement

| | Signature / Name / Date |
|---|---|
| Pleasant Grove Brach Library<br>1125 S. Buckner Boulevard<br>Dallas, Texas 75217<br>(1 hard copy plus 1 CD) | Signature<br>Ametta Russell<br>Name<br>2/8/05<br>Date |
| Greater Dallas Chamber of Commerce<br>700 North Pearl Street, Suite 1200<br>Dallas, Texas 75201<br>(1 hard copy plus 1 CD) | Signature<br>Esther Gebhardt<br>Name<br>2-9-05<br>Date |
| Oak Cliff Chamber of Commerce<br>660 South Zang Boulevard<br>Dallas, Texas 75208<br>(1 hard copy plus 1 CD) | Signature<br>Brandy R Gill<br>Name<br>2/9/05<br>Date |
| West Dallas Chamber of Commerce<br>2424 North Westmoreland Road<br>Dallas, Texas 75212<br>(1 hard copy plus 1 CD) | Signature<br>E. John Ward<br>Name<br>2/9/2005<br>Date |
| Dallas Black Chamber of Commerce<br>2838 Martin L. King Jr. Boulevard<br>Dallas, Texas 75215<br>(1 hard copy plus 1 CD) | Signature<br>Reginald Gates<br>Name<br>2/8/05<br>Date |
| Greater Dallas Hispanic Chamber of Commerce<br>4622 Maple Avenue, Suite 207<br>Dallas, Texas 75219<br>(1 hard copy plus 1 CD) | Signature<br>Gabrida Tarazo<br>Name<br>02-09-05<br>Date |
| Greater Dallas Asian American Chamber of Commerce<br>11171 Harry Hines Boulevard, Suite 115<br>Dallas, Texas 75229<br>(1 hard copy plus 1 CD) | Signature<br>Yingying Lu<br>Name<br>2/9/05<br>Date |
| Central Dallas Association<br>1412 Main Street, Suite 2500<br>Dallas, Texas 75202<br>(1 hard copy plus 1 CD) | Signature<br>Alice Murray<br>Name<br>Allison Bucu<br>2/9/2005<br>Date |

Page 2 of 3

## Receipt of Delivery
## Trinity Parkway Draft Environmental Impact Statement

Clean South Dallas, Inc.
2809 Birmingham Avenue
Dallas, Texas 75215
(1 hard copy plus 1 CD)

Signature: Kathlyn Gilliam
Name: Kathlyn Gilliam
Date: 2-9-05

West Dallas Multipurpose Center
2828 Fish Trap Road
Dallas, Texas 75212
(1 hard copy plus 1 CD)

Signature: Tozi G. Tijerina
Name: Tozi G. Tijerina
Date: 2/9/05

TR Hoover Development Corporation
5106 Bexar Street
Dallas, Texas 75215
(1 hard copy plus 1 CD)

Signature: Jacqueline Mixon
Name: Jacqueline Mixon
Date: 2-8-05

New Hope Baptist Church
5002 South Central Expressway
Dallas, Texas 75215
(1 hard copy plus 1 CD)

Signature: Heather Gary
Name: Heather Gary
Date: 2/8/05

St. Philips Neighborhood Development Corporation
1622 Panama Place
Dallas, Texas 75215
(1 hard copy plus 1 CD)

Signature: Ann Arnott
Name: ANN ARNOTT
Date: 2/9/05

Kingbridge Crossing Community Center
3131 Kingbridge Road
Dallas, Texas 75212
(1 hard copy plus 1 CD)

Signature: Ruby Daniels
Name: RUBY DANIELS
Date: 2-9-05

NCTCOG Headquarters
Center Point Two, 2nd Floor
616 Six Flags Drive
Arlington, Texas 76011
(1 hard copy plus 1 CD)

Signature: Alice Webster
Name: Alice Webster
Date: 2-9-05

Renner Frankford Branch Library
6400 Frankford Road
Dallas, Texas 75252
(1 hard copy plus 1 CD)

Signature: Sharon Perry-Martin
Name: SHARON PERRY-MARTIN
Date: 2/23/05

Page 3 of 3

# TRINITY PARKWAY
## DRAFT ENVIRONMENTAL IMPACT STATEMENT
## OPEN HOUSE AND PUBLIC HEARING

**MARCH 29, 2005**
**2:00 P.M. TO 6:00 P.M. OPEN HOUSE – 6:00 P.M. PRESENTATION**
**DALLAS CONVENTION CENTER ARENA**
**650 S. GRIFFIN STREET, DALLAS, TEXAS**

# AGENDA

**WELCOME, INTRODUCTION, HISTORY, AND STATUS OF PROJECT**
Christopher Anderson, Planning Director, NTTA

**PROJECT DESIGN**
Martin Molloy, Project Manager, Halff Associates

**ENVIRONMENTAL IMPACTS**
David Morgan, Environmental Manager, Halff Associates

**RIGHT-OF-WAY ACQUISITION AND RELOCATION PROCESS**
Sherri Turner, Asst. General Counsel, NTTA

**INTERMISSION** (20 MINUTES)

**OPPORTUNITY FOR PUBLIC COMMENTS**
SPEAKERS WILL BE LIMITED TO THREE MINUTES

Written comments may be submitted this evening or mailed to the following address: NTTA, P.O. Box 260729, Plano, Texas 75026, Attn: Christopher Anderson. **All written comments must be received or postmarked by April 8, 2005, to be included in the official Public Hearing record.** Please note you will not receive a direct response to verbal or written comments. All verbal or written statements will be addressed in and made part of the Final Environmental Impact Statement for the project.

**Thank you for your interest in the project and for attending the Public Hearing!**

**NORTH TEXAS TOLLWAY AUTHORITY**
P.O. BOX 260729
PLANO, TX 75026

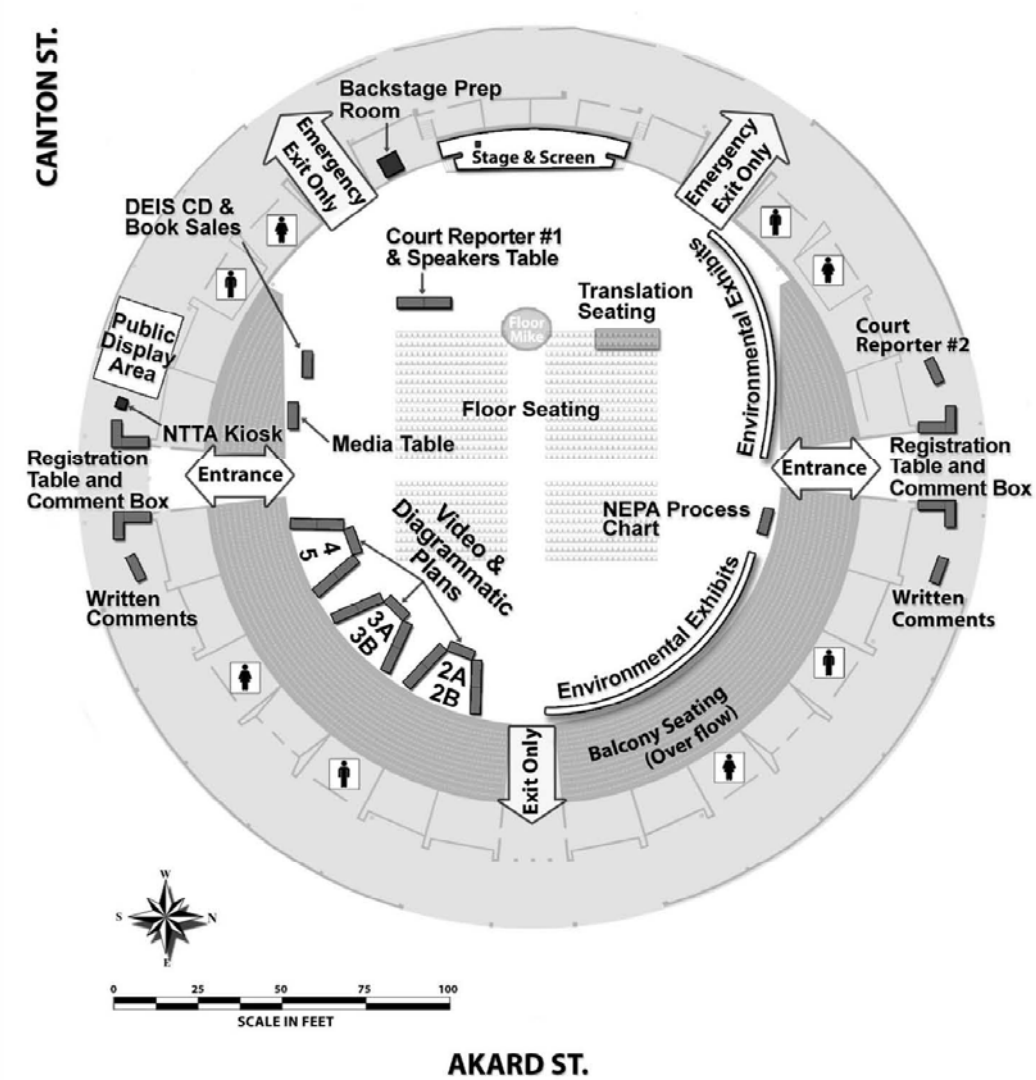
NTTA
NORTH TEXAS TOLLWAY AUTHORITY

# PUBLIC HEARING ROOM LAYOUT

## DALLAS CONVENTION CENTER ARENA

### TRINITY PARKWAY ENVIRONMENTAL IMPACT STATEMENT

### North Texas Tollway Authority



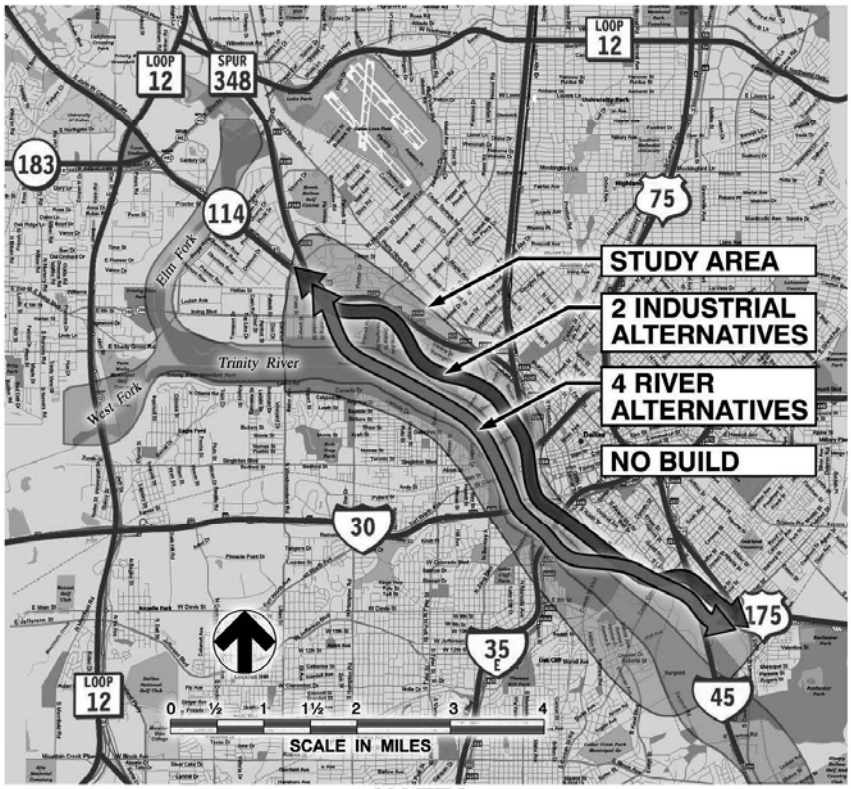

NORTH TEXAS TOLLWAY AUTHORITY
P.O. BOX 260729
PLANO, TX 75026

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

# STUDY AREA MAP

## TRINITY PARKWAY DRAFT ENVIRONMENTAL IMPACT STATEMENT

## North Texas Tollway Authority




**NOTES:**


**NORTH TEXAS TOLLWAY AUTHORITY**
P.O. BOX 260729
PLANO, TX 75026


NTTA
NORTH TEXAS TOLLWAY AUTHORITY

# AVAILABILITY OF DRAFT EIS

## TRINITY PARKWAY DRAFT ENVIRONMENTAL IMPACT STATEMENT

## North Texas Tollway Authority

This is to advise the public of the availability of the approved Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation for the proposed construction of the Trinity Parkway reliever route from the IH-35E/SH-183 interchange to US-175/SH-310 interchange in the City of Dallas, Dallas County, Texas. The proposed project is being developed jointly by the Federal Highway Administration (FHWA), the Texas Department of Transportation (TxDOT) and the North Texas Tollway Authority (NTTA). The DEIS provides descriptions of the environmental conditions, in and around the project study area, the potential environmental impacts (beneficial and/or adverse) of the improvements associated with each alternative, mitigation measures to address potential impacts, and other information required by federal and state environmental laws.

The DEIS is available for review and comment until April 8, 2005. Copies of the DEIS are available for review at the locations listed below.

| | |
|---|---|
| **Dallas:** J. Erik Jonsson Central Library, 1515 Young St. | North Oak Cliff Branch Library, 302 W. Tenth St. |
| Martin L. King Jr. Branch Library, 2922 Martin Luther King Blvd. | Oak Lawn Branch Library, 4100 Cedar Springs Rd. |
| Dallas West Branch Library, 2332 Singleton Blvd. | Pleasant Grove Branch Library, 1125 S. Buckner Blvd. |
| Dallas Chamber of Commerce, 700 North Pearl St. | W. Dallas Chamber of Commerce, 2424 N. Westmoreland Rd. |
| Oak Cliff Chamber of Commerce, 660 South Zang Blvd. | Dallas Black Chamber of Commerce, 2838 Martin L. King Jr. Blvd. |
| Hispanic Chamber of Commerce, 4622 Maple Ave., Suite 207 | Central Dallas Association, 1412 Main St., Suite 2500 |
| Asian American Chamber of Commerce, 11171 Harry Hines Blvd., Ste. 115 | New Hope Baptist Church, 5002 South Central Expressway<br>Renner Frankford Branch Library, 6400 Frankford Road |
| TR Hoover Development Corporation, 5106 Bexar St. | St. Philips Neighborhood Development Corp., 1622 Panama Pl. |
| Clean South Dallas, Inc., 2809 Birmingham Ave. | Kingbridge Crossing Community Center, 3131 Kingbridge Rd. |
| West Dallas Multipurpose Center, 2828 Fish Trap Rd. | **Plano:** NTTA Offices, 5900 W. Plano Pkwy, Suite 100 |
| Dallas City Hall, 1500 Marilla St., Rm. 6B-S | **Mesquite:** TxDOT–Dallas District Library, 4777 E. Highway 80 |
| Dallas County, 411 Elm St., 4th Fl. | **Arlington:** NCTCOG–Center Point Two, 2nd Fl., 616 Six Flags Dr. |

Written comments may be submitted to:

NTTA
P.O. Box 260729
Plano, Texas 75026
Attn.: Mr. Christopher Anderson

**Written comments must be received or postmarked on or before Friday, April 8, 2005**.

A bound copy of the DEIS may be purchased for $80.00 (plus $7.00 for shipping and handling) or a CD-ROM of the document in Adobe Acrobat format for $5.00 (plus $2.00 for shipping and handling). To request a copy of the DEIS, please contact Mr. John Hoffman by phone: (214) 346-6394. The DEIS is also available on the NTTA web site at www.ntta.org.

**NORTH TEXAS TOLLWAY AUTHORITY**
P.O. BOX 260729
PLANO, TX 75026

NTTA
NORTH TEXAS TOLLWAY AUTHORITY

**TRINITY PARKWAY**

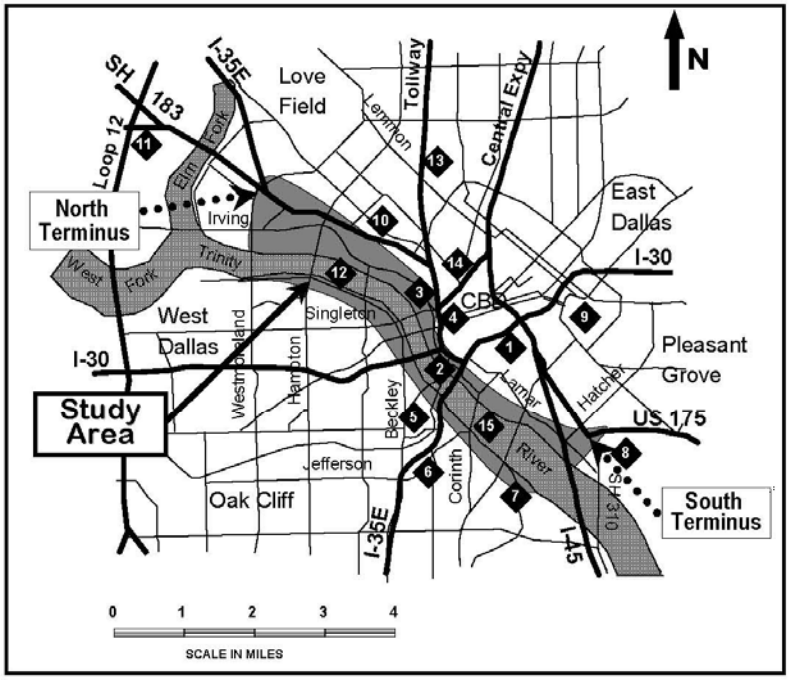
**DRAFT ENVIRONMENTAL IMPACT STATEMENT**

**PUBLIC HEARING**

**MARCH 29, 2005 AT THE DALLAS CONVENTION CENTER**

**SUMMARY TABLES**

**PROJECT VICINITY MAP**




**Places of Interest**

1 – Canyon
2 – Mixmaster
3 – Lower Stemmons
4 – West End and Dealey Plaza
5 – Methodist Medical Center
6 – Dallas Zoo
7 – Cadillac Heights
8 – Rochester Park
9 – Fair Park
10 – Parkland Hospital
11 – Texas Stadium
12 – Dallas Floodway
13 – Dallas North Tollway
14 – Woodall Rodgers Freeway
15 – DART Rail River Crossing

**Notes:**

- IH-35E north of Dallas Central Business District (CBD) is referred to as "Stemmons Freeway."
- IH-35E south of the Dallas CBD is referred to as "South R.L. Thornton Freeway."
- IH-30 west of the Dallas CBD is referred to as the "Tom Landry Freeway."
- IH-30 east of the Dallas CBD is referred to as "East R.L. Thornton Freeway."

## PHYSICAL CHARACTERISTICS OF THE TRINITY PARKWAY ALTERNATIVES

| Characteristics | Trinity Parkway Alternatives | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 (No-Build) | 2A | 2B | 3A | 3B | 4 | 5 |
| **Roadway Design** | | | | | | | |
| Number of Through Lanes | --- | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 | 4-6 |
| Travel Lane Width (feet) | --- | 12 | 12 | 12 | 12 | 12 | 12 |
| Posted Speed Limit (mph) | --- | 55 | 55 | 55 | 55 | 55 | 55 |
| **Trinity Parkway Access** | | | | | | | |
| At IH-35E/SH-183 | --- | Direct connection via ramps | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At Commonwealth | --- | None | None | Half diamond interchange | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| At Westmoreland/ Mockingbird | --- | None | None | Half diamond interchange | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| At Hampton/Inwood | --- | Full diamond interchange | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At Wycliff/Sylvan | --- | Full diamond interchange | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At Woodall Rodgers | --- | Direct connections SB-EB, WB-NB, NB-EB, and WB-SB | Same as Alt. 2A | Same as Alt. 2A | Direct Connections SB-EB and WB-EB | Direct connection via ramps | Same as Alt. 4 |
| At Commerce | --- | None | None | Half diamond interchange | None | Same as Alt. 3A | Same as Alt. 3A |
| At Houston/Jefferson | --- | Half diamond interchange | None | Full diamond interchange | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| At IH-35E | --- | None | None | Direct connections NB-WB and EB-SB | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| At Corinth | --- | Full diamond interchange | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At Martin Luther King Jr. Boulevard (MLK) | --- | Full diamond interchange | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At IH-45 | --- | Direct connection via ramps | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At Lamar | --- | None | None | Half diamond interchange | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| At SH-310 | --- | Half diamond interchange | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| At US-175 | --- | Direct connection via main lanes | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| **Bridges** | | | | | | | |
| Hampton/Inwood Bridge | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| Wycliff/Sylvan Bridge | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |

## PHYSICAL CHARACTERISTICS OF THE TRINITY PARKWAY ALTERNATIVES

| Characteristics | Trinity Parkway Alternatives | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 (No-Build) | 2A | 2B | 3A | 3B | 4 | 5 |
| Continental Viaduct | --- | No Change | No Change | Modified for ramp connections | Modified for ramp connections and main lane passage | Same as Alt. 3A | West end modified for main lane passage |
| Woodall Rodgers Bridge | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| SP Railroad Bridge | --- | No Change | No Change | No Change | No Change | No Change | West end modified for main lane passage |
| Commerce Viaduct | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| Houston/Jefferson Viaducts | --- | Modified for ramp connections | No Change | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| IH-35E Bridges | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| Corinth Viaduct | --- | No Change | No Change | Modified for ramp connections | Same as Alt. 3A | Same as Alt. 3A | Same as Alt. 3A |
| AT&SF Railroad Bridge | --- | East end modified for main lane passage | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 2A |
| IH-45 Bridge | --- | Modified for ramp connections | Same as Alt. 2A | Same as Alt. 2A | Same as Alt. 3A | Same as Alt. 2A | Same as Alt. 2A |

**NB** = Northbound; **SB** = Southbound; **EB** = Eastbound; **WB** = Westbound

## TOTAL LENGTH, RIGHT-OF-WAY, AND ESTIMATED COSTS

| Alternative | Length (Miles) | Right-of-Way (Acres) | Estimated Right-of-Way Cost | Estimated Construction Cost | Estimated Total Cost |
|---|---|---|---|---|---|
| 1 (No-Build) | --- | --- | --- | --- | --- |
| 2A | 8.83 | 252.1 | $224 million | $1,099 million | $1,323 million |
| 2B | 8.83 | 342.3 | $182 million | $770 million | $952 million |
| 3A | 8.67 | 393.1 | $42 million | $626 million | $668 million |
| 3B | 8.67 | 393.5 | $51million | $640 million | $691million |
| 4 | 8.84 | 495.2 | $50 million | $676 million | $726 million |
| 5 | 8.90 | 393.6 | $55 million | $864 million | $919 million |

**Note:** All costs shown in 2003 dollars, rounded to the nearest million. Project costs are expected to increase in future years due to inflation.

## COMPARISON OF DEIS ALTERNATIVES

| Comparison Factors | Unit of Measure | Trinity Parkway Alternatives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 (No-Build) | 2A | 2B | 3A | 3B | 4 | 5 |
| **Roadway Characteristics** | | | | | | | | |
| Total Length | Miles | --- | 8.83 | 8.83 | 8.67 | 8.67 | 8.84 | 8.90 |
| Total Land Converted to Right-of-Way | Acres | --- | 252.1 | 342.3 | 393.1 | 393.5 | 495.2 | 393.6 |
| Total Cost (Construction + Right-of-Way) | 2003 Dollars | --- | $1.323M | $952M | $668M | $691M | $726M | $919M |
| **Traffic Utilization** | | | | | | | | |
| Commonwealth to Hampton/Inwood | Year 2025 ADT | --- | 108,600 | 108,600 | 109,900 | 91,000 | 109,900 | 109,900 |
| Hampton/Inwood to Wycliff/Sylvan | | --- | 95,500 | 95,500 | 98,200 | 97,200 | 98,200 | 98,200 |
| Wycliff/Sylvan to Woodall Rodgers | | --- | 116,000 | 116,000 | 112,700 | 105,700 | 112,700 | 112,700 |
| Woodall Rodgers to Houston/Jefferson | | --- | 114,200 | 114,200 | 109,200 | 82,700 | 109,200 | 109,200 |
| Houston/Jefferson to Corinth | | --- | 93,300 | 93,300 | 102,700 | 93,300 | 102,700 | 102,700 |
| Corinth to MLK | | --- | 110,400 | 110,400 | 98,300 | 89,600 | 98,300 | 98,300 |
| MLK to IH-45 | | --- | 110,300 | 110,300 | 102,800 | 112,500 | 102,800 | 102,800 |
| IH-45 to US-175 | | --- | 130,600 | 130,600 | 127,900 | 130,800 | 127,900 | 127,900 |
| **Measures of Effectiveness** | | | | | | | | |
| Daily VMT | Year 2025 (M) | 15.69 | 16.17 | 16.17 | 16.20 | 16.20 | 16.20 | 16.20 |
| Daily VHT | Year 2025 | 484,959 | 474,644 | 474,644 | 474,619 | 475,878 | 474,619 | 474,619 |
| Average Speed (mph) | Year 2025 | 32.35 | 34.07 | 34.07 | 34.14 | 34.04 | 34.14 | 34.14 |
| Lane Miles | Year 2025 | 2,417 | 2,470 | 2,470 | 2,470 | 2,486 | 2,470 | 2,470 |
| Congestion Delay (Vehicle-Hours) | Year 2025 | 152,804 | 139,328 | 139,328 | 138,652 | 138,652 | 138,652 | 138,652 |
| Percent Lane Miles at LOS E or F | Year 2025 | 42.34 | 38.14 | 38.14 | 38.58 | 38.45 | 38.58 | 38.58 |
| **Socioeconomic** | | | | | | | | |
| Consistent with Regional Plans/Policies | Yes/No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Consistent with Local Plans/Policies (Balanced Vision Plan) | Yes/No | No | No | No | No | Yes | No | No |
| Local Government Support | Yes/No | No | No | No | No | Yes | No | No |
| Potential for Joint Development | Yes/No | No | No | No | Yes | Yes | Yes | Yes |
| Residential Relocations | Number | --- | 13 | 9 | 8 | 8 | 13 | 24 |
| Commercial Displacements | Number | --- | 281 | 234 | 23 | 31 | 26 | 35 |
| Community/Public Facility Displacements[1] | Number | --- | 3 (4) | 4 (7) | --- | --- | --- | 4 (7) |
| Consistent with EJ Order | Yes/No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Parks and Recreational | Acres | --- | --- | --- | 171 | 152 | 205 | 14 |

## COMPARISON OF DEIS ALTERNATIVES

| Comparison Factors | Unit of Measure | Trinity Parkway Alternatives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 (No-Build) | 2A | 2B | 3A | 3B | 4 | 5 |
| Impacts (Trinity River Greenbelt Park) | | | | | | | | |
| **Physical Environment** | | | | | | | | |
| Meets Air Quality Standards | Yes/No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Noise Receivers Impacted | Number | --- | 209 | 202 | 128 | 128 | 166 | 226 |
| Hazardous Material Sites Impacted [2] | Number | --- | 27 | 28 | 15 | 15 | 16 | 20 |
| Water Quality Impacts | Yes/No | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Visual Impacts | Low/Med/High | Low | High | Med | Med | Med | Med | Med |
| **Natural Environment** | | | | | | | | |
| 100-Year (Base) Floodplain Impacts | Acres | --- | 39 | 56 | 345 | 333 | 442 | 324 |
| Wetlands and Waters of the U.S. | Acres | --- | --- | <3 | 155 | 155 | 153 | <6 |
| Threatened/ Endangered Species | Yes/No | No | No | No | No | No | No | No |
| Impacts to High-Quality Wildlife Habitat [3] | Acres | --- | 7 | 7 | 7 | 7 | 7 | 7 |
| Grassland | Acres | --- | --- | --- | 121 | 121 | 220 | --- |
| **Section 4(f) Involvement** | | | | | | | | |
| Potential § 4(f) Properties Involved – NRHP Historic Districts | Number | --- | 1 | 1 | --- | --- | --- | --- |
| Potential § 4(f) Properties Involved – NRHP Historic Bridges | Number | --- | 2 | 1 | 5 | 5 | 5 | 6 |
| Potential § 4(f) Properties Involved – NRHP Historic Properties | Number | --- | 4 | 1 | --- | --- | --- | 1 |

**Notes:** **M** = Millions; **ADT** = Average Daily Traffic; **VMT** = vehicle miles traveled; **VHT** = vehicle hours traveled; **LOS** = Level of Service; **NRHP** = National Register of Historic Places; **EJ** = Environmental Justice; **mph** = miles per hour; **§** = Section; **<** = less than the quantity shown; **---** = no impacts anticipated for this alternative.

1. The first number is the number of facilities where a displacement occurs. The number in parenthesis is the total number of buildings displaced at these facilities.
2. Hazardous waste/material sites within or adjacent to proposed right-of-way.
3. Woodland impacts associated with USACE DFE Lamar Levee construction.

## ANTICIPATED FEDERAL PERMITS AND APPROVALS

| Federal Agency | Regulated Activity | Required Permit or Approval |
|---|---|---|
| U.S. Army Corps of Engineers | Regulates placement of dredged or fill material into waters of the U.S. | Clean Water Act, § 404 |
| | Basic Project Purpose | Clean Water Act, § 404 |
| | Regulates work in navigable waters of the U.S. | Rivers and Harbors Act, § 10 |
| | Trinity River Corridor CDC Process | Corridor Development Certificate (CDC) permit review and commenting authority. Section 404 permit is required for CDC permit approval. |
| | NEPA | Commenting authority |
| | Protection of existing Dallas Floodway and authorized Dallas Floodway Extension project purposes | Review of project features on direct and indirect impacts to USACE projects to include flood conveyance operation and maintenance and environmental restoration and mitigation of project features |
| Advisory Council on Historic Preservation (ACHP)/SHPO | NHPA § 106 | Memorandum of Agreement (MOA)/Programmatic Agreement between FHWA, SHPO, and the ACHP |
| | Section 4(f) | Commenting authority. |
| U.S. Environmental Protection Agency | Clean Water Act | § 404 permit review and veto authority |
| | Clean Air Act | Compliance and enforcement of regulations |
| | NEPA | Commenting authority |
| U.S. Fish and Wildlife Service | Fish and Wildlife Coordination Act | Reviews/comments on federal actions that affect wetlands and other waters, including § 404 permit applications. May prepare Biological Assessment for preferred alternative |
| | NEPA | Commenting authority |
| | Migratory Bird Treat Act (MBTA) | Reviews/comments on federal actions that could harm migratory bird species. |
| U.S. Department of Interior | Land and Water Conservation Fund Act (LWCF) | § 6(f) review authority |
| | NEPA/§ 4(f) | Commenting authority |
| | NHPA § 106 | Commenting authority |
| U.S. Department of Housing and Urban Development | NEPA/§ 4(f) | Commenting authority |
| U.S. Department of Transportation (USDOT) – Federal Highway Administration (FHWA) | NEPA/§4(f) | DEIS, FEIS, § 4(f), and ROD approval |
| | Toll Agreement | Toll Agreement between FHWA, TxDOT, and NTTA |
| | Interstate Access Agreement | Interstate Access Agreement between FHWA, TxDOT, and NTTA |
| | 23 CFR § 650.805 Bridges Not Requiring U.S. Coast Guard (USCG) Permit | Responsible under 23 USC § 144(h) to determine if a USCG permit is not required for bridge construction |
| USDOT – Federal Aviation Administration | Navigable Airspace | Conformance Requirement for Obstruction Marking and Lighting |
| USCG | Regulates navigable waterways of the U.S. | Rivers and Harbors Act, § 9 |
| | General Bridge Act of 1906 | Regulates permitting for bridge construction in and over waters of the U.S. |
| Federal Emergency Management Agency (FEMA) | EO 11988 (Floodplain Management) | Reviews/comments on federal actions that affect floodplains, including § 404 permit applications |
| | National Flood Insurance Act<br>Flood Disaster Protection Act | Changes to FEMA maps require a Conditional Letter of Map Revision (CLOMR) |
| | Trinity River Corridor CDC Process | CDC permit review and commenting authority |
| | City of Dallas Fill Permit | Permit review and commenting authority |

## COMMONLY USED ACRONYMS/ABBREVIATIONS

| | |
|---|---|
| **ACHP** | Advisory Council on Historic Preservation |
| **BVP** | Balanced Vision Plan |
| **CAA** | Clean Air Act |
| **CAWG** | Community Advisory Work Group |
| **CBD** | Central Business District |
| **CDC** | Corridor Development Certificate |
| **CFR** | Code of Federal Regulations |
| **DART** | Dallas Area Rapid Transit |
| **DEIS** | Draft Environmental Impact Statement |
| **DFW** | Dallas-Fort Worth |
| **DISD** | Dallas Independent School District |
| **FEIS** | Final Environmental Impact Statement |
| **FEMA** | Federal Emergency Management Agency |
| **FHWA** | Federal Highway Administration |
| **IH** | Interstate Highway |
| **LOS** | Level of Service |
| **MTIS** | Major Transportation Investment Study |
| **MTP** | Metropolitan Transportation Plan |
| **NCTCOG** | North Central Texas Council of Governments |
| **NTTA** | North Texas Tollway Authority |
| **ROD** | Record of Decision |
| **SDHPT** | State Department of Highways and Public Transportation |
| **SH** | State Highway |
| **SHPO** | State Historic Preservation Officer |
| **TPDES** | Texas Pollutant Discharge Elimination System |
| **TTA** | Texas Turnpike Authority |
| **TxDOT** | Texas Department of Transportation |
| **USCG** | United States Coast Guard |
| **USDOT** | United States Department of Transportation |

**NOTES**