1.0 PURPOSE:

The purpose of this procedure is to define the process to develop, review and approve Corridor/Project Plans, Specifications & Estimates (PS&E). This process serves as a review for completeness and conformance with NTTA and applicable local, TxDOT and federal requirements, as well as budgetary constraints (planned or unforeseen). This procedure does not supersede the designer's professional obligations required under state statutes, nor does it relieve the designer from implementation of an independent internal QC/QA process prior to each milestone submittal. Milestone submittals are required at 30%, 60%, 90% and 100%-Final completion.

2.0 RESPONSIBILITIES:

2.1 Assistant Executive Director (AED) – The AED shall be responsible for approving all final PS&E submittals

2.2 Director of Project Delivery (DPD) – The DPD shall be responsible for recommending the Final PS&E Submittal to the AED.

2.3 NTTA Design Manager – The NTTA Design Manager shall be responsible for reviewing and recommending the Final PS&E Submittal and forwarding recommendation of its approval to the DPD. Additionally, the NTTA Design Manager is responsible for resolving any escalated disputed comments during the PS&E review process.

2.4 Corridor Manager (CM)/Project Manager – The CM/Project Manager shall be responsible for:

- Oversight of all PS&E development efforts to ensure compliance with NTTA and other applicable local, state and federal requirements
- Approving the detailed design schedule from the DSE to the PD Scheduler in compliance with PC-06, *Schedule Management*
- Ensuring all PS&E submittals are processed using the NTTA's electronic workflow tool (EPDS)
- Coordinating project kick-off meetings and ensuring compliance with corridor scopes
- Receipt, review, verification of necessary components as described in Table 3, and processing of PS&E Design Package milestone submittals by distributing the Design Package to the review disciplines as identified on form FD-01-F8*, Plan Review Distribution – Hard Copy Submittal*
- Collecting all review comments, compiling review comments and organizing a Comment Resolution Meeting with the needed parties by ensuring any duplicated and/or conflicting review comments are resolved internally prior to incorporation in the next milestone submittal
- Verifying final resolutions have been resolved and incorporated into the plans
- Receipt, review and approval of a Level D (30% milestone), Level C (60% milestone), Level B (90% milestone) and Level A (100%-Final milestone) estimate, in compliance with *PC-02*, Cost Estimates
- Delivery of the 60% PS&E construction schedule from the DSE to the PD Scheduler in compliance with PC-06, *Schedule Management*
- Coordination of any external stakeholders participating in the comment review processes (i.e. local or federal funding is involved such as TXDOT or FHWA) as these comments shall also be compiled and addressed prior to transmission to the DSE.

- In cases where comment resolution cannot be reached, issues may be escalated to the NTTA Design Manager for resolution

2.5 Design Section Engineer (DSE) – The DSE shall be responsible for:

- Participation in kick-off and coordination meetings
- Developing a PS&E Design Package consisting of the components listed in Table 3 for 30%, 60%, 90% and 100%-Final levels of design submittals to the CM/Project Manager, all of which are required on or prior to the dates defined in the detailed design project schedule
- Submittal of milestone reviews for each PS&E Design Package using the NTTA's electronic workflow tool (EPDS) to the CM/Project Manager
- Requests for any new or revised Special Specification(s), Special Provision(s), and/or general note(s) in compliance with FD-03, *NTTA Special Specification, Provision and General Note Management,* a minimum of 6 weeks prior to the submission of the 90% milestone submittal
- Requests for any new or revised project standards in compliance with FD-04, *NTTA Standard Development*, a minimum of 6 weeks prior to the submission of the 90% milestone submittal
- Responding to each comment by indicating on FD-01-F5 a "*Response"* and "*Action Plan"*, and re-submission to obtain concurrence. All comments require an entry of "*Agree", "Disagree"*, "*Clarification"*
- Upholding his/her professional obligations in addition to responding to and complying with comments and resolutions made by PD staff and other agencies on design submittals

2.6 PD Design Manager – The PD Design Manager shall be responsible for forwarding the plans to PD Design Staff. The PD Design Manager shall collect all review comments and perform a final compilation and transmission of review comments to the CM/Project Manager. PD Design Staff shall review and provide comments on all design submittals. PD Design Staff shall review re-submittals after response to comments to facilitate approval. The PD Design Manager shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager

2.7 Maintenance Department Liaison - The Maintenance Department Liaison shall be responsible for forwarding the plans to NTTA Maintenance Department staff. The Maintenance Department Liaison shall collect all review comments and perform a final compilation and transmission of review comments to the CM/Project Manager. NTTA Maintenance Department staff shall review and provide comments in accordance with FD-05, Maintenance Design Guidelines, on all design submittals. NTTA Maintenance Department staff shall review re-submittals after response to comments to facilitate approval. The Maintenance Department Liaison shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.8 PD Construction Oversight Manager – The PD Construction Oversight Manager shall be responsible for forwarding the plans to PD Construction Staff. The PD Construction Oversight Manager shall collect all review comments and perform a final compilation and transmission of review comments to the CM/Project Manager. PD Construction Staff shall review and provide comments on all design submittals in accordance

with FD-07, *Constructability Review*. PD Construction Staff shall review re-submittals after response to comments to facilitate approval. The PD Construction Oversight Manager shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.9 ITS Liaison – The ITS Liaison shall be responsible for forwarding the plans to the ITS Staff. The ITS Liaison shall collect all review comments; perform a final compilation and transmission of review comments to the CM/Project Manager. The ITS staff shall review and provide comments on all design submittals. ITS Staff shall review re-submittals after response to comments to facilitate approval. The ITS Liaison shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.10 PD Visual Quality Manager – The PD Visual Quality Manager shall be responsible for forwarding the plans to PD Visual Quality Staff. The PD Visual Quality Manager shall collect all review comments and perform a final compilation and transmission of review comments to the CM/Project Manager. PD Visual Quality Staff shall review and provide comments on all design submittals against the Corridor Specific Visual Quality Management Plan, and NTTA's Design Guidelines. PD Visual Quality Staff shall review re-submittals after response to comments to facilitate approval. The PD Visual Quality Manager shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.11 PD Program Controls Manager – The PD Program Controls Manager shall be responsible for forwarding the submittal to PD Program Controls Staff. The PD Controls Manager shall collect all review comments and perform a final compilation and transmission of review comments to the CM/Project Manager. PD Program Controls Staff shall review and provide comments on all design submittals in accordance with PC-02, *Cost Estimates*. PD Program Controls Staff shall review re-submittals after response to comments to facilitate approval. The PD Construction Oversight Manager shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.12 PD Specifications Manager – The PD Specifications Manager shall be included in the review process at the 60%, 90% and 100%-Final levels. The Specifications Manager shall collect all review comments and perform a final compilation and transmission of review comments to the PD Design Manager. PD Specifications Team shall review and provide comments to identify any new Special Specifications and/or Special Provisions, and review the Proposal Book against the submitted plans. PD Specifications Team shall review re-submittals after response to comments to facilitate approval. The PD Specifications Manager shall also be responsible for ensuring any duplicated and/or conflicting review comments are resolved internally prior to transmission to the CM/Project Manager.

2.13 NTTA System and Incident Management (SIM) Department – The SIM Department shall be responsible for providing the insurance requirements for the project at the 90% review level and verify the requirements at the 100%-Final level.

2.14 NTTA Legal Department (LGL) – The LGL Department shall be responsible for review and comment of the 100%-Final Proposal Book.

2.15 NTTA Business Diversity Department (BDD) – The BDD shall be responsible for providing the BDD goals for the project at the 90% review level, review the goals at the 100%-Final level.

2.16 Reviewers shall be responsible for:

- Review and recording comments on FD-01-F5
- Participation in Comment Resolution Meetings
- Reviewing subsequent milestone submittals for inclusion of prior comments

Table 1 identifies the review parties involved in a typical Design Package Review Process:

Table 1

DEPARTMENT/MANAGER	REVIEW RESPONSIBILITIES
PD Design Manager – (DES)	Specification Management (FD-03), Standard Drawing Development (FD-04), Civil Disciplinary Reviews and Design Criteria (FD-06), Proposal Book Preparation
Maintenance Liaison – (MAINT)	Maintenance Guidelines (FD-05)
Construction Oversight Manager – (CON)	Constructability (FD-07)
ITS Liaison – (ITS)	Toll Gantries, DMS, CCTV in compliance with NTTA policy
Visual Quality Manager – (VQ)	NTTA Design Guidelines compliance and VQMP (SD-06)
Program Controls – (PC)	Estimate and Schedule Management (PC-02 and PC-06)
System and Incident Management (SIM)	Provide the required insurance requirements for the project at the 90% and 100%-Final levels
NTTA Legal Department (LGL)	Review and comment on the 100%-Final proposal book
Business Diversity Department (BDD)	Establishes the diversity participation goals for the project at the 90% and 100%-Final levels

3.0 SCOPE/APPLICABILITY:

This procedure shall apply to all NTTA projects and corridors within the Project Delivery Department.

4.0 REFERENCES:

- NTTA CAD Guidelines
- NTTA PS&E Preparations Manual
- NTTA's and TxDOT's Standard and Special Specifications, and Special Provisions
- NTTA and TxDOT CAD Standards
- NTTA Design Guidelines
- NTTA Maintenance Design Guidelines Manual
- NTTA Roadway Electrical System Manual
- NTTA Sign and Traffic Control Device Guidelines Manual
- NTTA Sign Policy Manual
- NTTA Pavement Manual
- NTTA Master General Notes
- FD-03 NTTA Special Specification, Provision and General Note Management
- FD-04_ NTTA Standards Management
- FD-05 Maintenance Design Guidelines
- FD-06_ Design Criteria
- FD-07 Constructability Review
- PC-02 Cost Estimate procedure
- PC-06 Schedule Management
- QM-10 Corrective and Preventive Action
- SD-06 Visual Quality Management - Design

5.0 DEFINITIONS & ACRONYMS

Comment Resolution Meeting: This meeting serves as a collaborative effort among all reviewers, the CM/Project Manager, and the DSE to discuss and resolve solutions to disputed comments, as documented on FD-01-F5, and to clarify any comments and Action Plans. Comments are provided by reviewers on FD-01-F5. The DSE responds to the comments as follows:

- Comments denoted as *"Agree"* will be incorporated into the next milestone submittal
- Comments denoted as "*Disagree"* will require an "*Action Plan"* entry on FD-01-F5 to justify the response
- Comments denoted as *"Clarification"* shall be followed up immediately by the originator of the comment. This may be done by verbal or electronic communication. A Comment Resolution Meeting may be more

appropriate in cases where joint discussions, exhibits, markups or drawings are needed to convey information

During the meeting, the CM/Project Manager shall discuss each *"Disagree"* and/or *"Clarification"* response by providing a documented and accepted "*Action Plan"* with the agreed upon solution. An updated FD-01-F5 will be provided at or prior to the subsequent submittal.

Enterprise Project Delivery System (EPDS): NTTA's electronic workflow application tool for managing, tracking and review and approval of Project Delivery processes. Reference the Design Packages Process Flow, FD-01-A1, in EPDS for detailed processing requirements of PS&E Design Package submittals. Electronic workflow and distribution in EPDS is not available to external review personnel. All outside agency reviews are conducted via hard copy and email distribution.

Action Plan: A plan of action, as documented on FD-01-F5, which serves as an agreed solution to address a comment that requires clarification or is in disagreement.

6.0 PROCEDURES:

General:

- Corridors/Projects with Federal funding participation shall be reviewed and approved by TxDOT and FHWA. Projects/Corridors with local agency funding participation will be afforded a courtesy review to ensure their comments are appropriately addressed. In accordance with applicable Inter-Local Agreements (ILAs), PS&E development shall be coordinated with these stakeholders.
- All PS&E Design Package submittal processing shall be performed using the NTTA's electronic workflow application tool (EPDS).
- If upon review by the CM/Project Manger or the PD Design Manager, the recurring submission of a PS&E Design Submittal is found to be missing the required components, as indicated in Table 3, the submittal shall be rejected back to the DSE for resubmittal and a Corrective Action Request shall be issued to the DSE in accordance with QMS procedure QM-10.

PS&E Development – The DSE shall develop PS&E in accordance with the Corridor/Project Scope, applicable references of this document and required components as indicated in Table 3.

6.1 Project Kick-Off Meeting – The project kick-off meeting shall:

- Be held after the DSE has completed contract negotiations, the contract has been executed, and an NTP has been issued
- Include the DSE and all sub-consultants (required to attend the meeting).
- Initiated by the CM/Project Manager and is required to communicate information for the DSE to begin work
- The agenda shall include at a minimum the following discussion points:
- Design Criteria

- Project Schedule
- Design Package submittal process and schedule
- Specific design issues
- Distribution of contact information as well as access to all project related requirements
- Provide the DSE with any project specific documentation inclusive of:
  -Items listed on form *FD-01-F6, Project Kick-Off Items* to be furnished by NTTA
  -Electronic copies of all required design files and other applicable design information
- Be an opportunity for the DSE to ask questions, clarify requirements and request additional information

6.2 PS&E Design Package Submittal: The DSE shall deliver hard copies of the required components of the PS&E Design Package to those identified on QMS Form FD-01-F8 after the preliminary review is completed by the CM/Project Manager. In addition, electronic copies shall be submitted using EPDS. The required components of a PS&E Design Package are described in Table 3. If TxDOT or FHWA is required to participate in the review, hard copies of their review component requirements should be provided at this time.

EPDS PS&E file setup: The DSE shall create and attach two (2) compressed "PS&E Design Package" folders using the following naming convention with the content as described in Table 2:

Table 2	
NAMING CONVENTION	**SUBFOLDER CONTENT**
Folder 1: X_Y_Sec#_PS&E_CAD	**Plans -** Microstation and Geopak files (using NTTA CAD Guidelines Manual)
Folder 2: X_Y_Sec#_PS&E_PKG	**Plans** - (pdf format) structured in Volumes
	FD-01-F8 – Hard Copy Distribution
	Checklists - FD-01-F1/F2/F3/F4 *Design Checklists* and FD-07-F1, *Constructability Review Checklist*
	Comments – FD-01-F5, Comment Review Form (Initial and Prior submittals, complete with Responses and PS&E Action Plans)
	Estimates – Level A, B, C or D (PC-02-F2)
	Standards List – Listing of all applicable standards by plan section
	Specification Information – Specifications & Notes
	Draft/Final Proposal Book
	Reports – Any supporting reports provided by the DSE
X = Submittal Level (30, 60, 90, 100) Y = Corridor/Project name # = Section or Segment number	

Table 3

Components of a PS&E Design Package

PS&E COMPONENTS	30%	IDENTIFY NEW STANDARDS, SS, SP, GENERAL NOTES	60%	Pre-90% (Proposal Book Development Only) 5 days prior to 90% Submittal	90%	100%-Final
Plan Distribution (Hard Copies)	FD-01-F8 (30%)	N/A	FD-01-F8 (60%)	N/A	FD-01-F8 (90%)	FD-01-F8 (100%-Final)
Plan Distribution (Electronic)	CAD		CAD	CAD	CAD	CAD
	PDF		PDF	PDF	PDF	PDF
Checklists	FD-01-F1		FD-01-F2	N/A	FD-01-F3	FD-01-F4
	FD-07-F1		FD-07-F1	N/A	FD-07-F1	N/A
	N/A		N/A	N/A	N/A	CA-01-F1
Comments	FD-01-F5 (initial)		FD-01-F5 (30% Comments, complete with Responses and PS&E Action Plan from previous submittal)	N/A	FD-01-F5 (60% Comments, complete with Responses and PS&E Action Plan from previous submittal)	FD-01-F5 (90% Comments, complete with Responses and PS&E Action Plan from previous submittal)
Estimate	PC-02-F2 -Level D		PC-02-F2 -Level C	N/A	PC-02-F2 -Level B	PC-02-F2 -Level A

Table 3

Components of a PS&E Design Package (continued)

PS&E COMPONENTS	30%	IDENTIFY NEW STANDARDS, SS, SP, GENERAL NOTES	60%	Pre-90% (Proposal Book Development Only) 5 days prior to 90% Submittal	90%	100%-Final
Standards Compliance	Standards Checklist – Preliminary - Include all NTTA, TxDOT Standards and modifications (MOD)	Identify any new Project Specific or Systemwide Standards in compliance with FD-04. Minimum 6 weeks prior to 90% Submittal	Include all NTTA, TxDOT Standards and modifications (MOD).	N/A	Standards Checklist – Include all NTTA, TxDOT Standards and modifications (MOD) and *complete* any Project Specific Standards in complicance with FD-04.	Standards Final Checklist - Include all NTTA, TxDOT Standards and (MOD), and any project specific standards on this list.
Proposal Development	Specification List (Preliminary)	Identify any new SS, SP and/or General Notes in accorance with FD-03. Minimum 6 weeks prior to 90% Submittal	Submit a draft version of the Master General Notes. ---------- General Notes - Modify the NTTA Master GN and request any new GNs in accordance with FD-03. Complete the utility owner information in the GN.	Provide the following information to the Spec Team (email): ---------- (1) Total cost of the project (estimate) (2) Completed SP 0.02.1 *ROW & Relocation by Other*s (3) Completed SP 0.03.4 *Mandatory Construction Schedule* (4) Summary Tables consistent with Project Estimate	Draft Proposal Book: Include items in Specification List, General Notes, and contract documents as described in Proposal Document Checklist	Final Proposal: Include items in Specification List, General Notes, and contract documents as described in Proposal Document Checklist
Reports – Pavement, Drainage, Wall, or others as required	Draft Reports – (Pavement, Drainage, Wall, or others as required)	N/A	Final Reports – (Pavement, Drainage, Wall, and/or others as required)	N/A	N/A	N/A – Previous submittal N/A
		←←←← 6 WEEKS MINIMUM →→→→				

6.3 Preliminary Review: The CM/Project Manager receives form FD-01-F8 and hard copies for distribution to those identified in Table 4 (The PD Design Manager shall be responsible for hard copy distribution for NTTA BDD, SIM and Legal departments). Additionally, the electronic submittal is received by email notification containing a link to the Design Package PS&E submittal in EPDS. The CM/Project Manager shall download and view the source files to begin the preliminary review for conformity and completeness. The CM/Project Manager has two (2) working days to complete the preliminary review, and return it to the DSE if it does not meet requirements.

6.4 Create Review Team: The CM/Project Manager shall create a review team composed of the review disciplines identified in FD-01-F8 (reference Table 4) to start the review process. The CM/Project Manager shall also distribute the design checklist associated with the submittal level (30%, 60%, 90% & 100%-Final) and form FD-01-F5 to capture each reviewer's comments.

6.5 Team Review: Each Team Reviewer (discipline) receives an email notification containing a link to the PS&E Design Package submittal in EPDS. Each Team Reviewer then distributes form FD-01-F5 and corresponding hard copies to their staff for review. The review is typically a two week process. All reviewers shall document their comments on form FD-01-F5. The completed comments are then attached to the submittal in EPDS. Each Team Reviewer shall compile all of their staff comments into one file and save it as: **X_Y_Sec#_Comments_Z,** where "Z" corresponds to the review discipline naming convention code. See Table 4 for review discipline name, code abbreviation, level involvement and hard copy distribution responsibilities.

Table 4
PS&E Review Team

Review Discipline Name	Naming Convention Code	Required Submittal Level Involvement	Hard Copy Distribution Responsibility
NTTA BDD	BDD	90% & 100%-Final	Design Manager
NTTA SIM	SIM	90% & 100%-Final	Design Manager
NTTA Legal	LGL	100%-Final	Design Manager
NTTA Project Delivery Technical Lead	TECH	30%, 60%, 90% & 100%-Final	CM/Project Manager
NTTA Design Manager	DM	30%, 60%, 90% & 100%-Final	CM/Project Manager
NTTA Maintenance	MAINT	30%, 60%, 90% & 100%-Final	CM/Project Manager
NTTA ITS	ITS	30%, 60%, 90% & 100%-Final	CM/Project Manager
PD Design Manager (inclusive of Standards & Specifications)	DES	30%, 60%, 90% & 100%-Final	CM/Project Manager
PD Construction Oversight Management	CON	30%, 60%, 90% & 100%-Final	CM/Project Manager
PD Visual Quality	VQ	30%, 60%, 90% & 100%-Final	CM/Project Manager
PD Program Controls	PC	30%, 60%, 90% & 100%-Final	CM/Project Manager
PD Construction Procurement Engineer	CPE	30%, 60%, 90% & 100%-Final	CM/Project Manager

6.6 Compile and Review Comments: When all reviewers have completed the review process in EPDS, the CM/Project Manager receives an email notification containing a link to the PS&E Design Package submittal in EPDS. The CM/Project Manager shall review the comments and compile them into a single worksheet and save as: **X_Y_Sec#_Comments**.

The CM/Project Manager shall negotiate and resolve any conflicting review comments. The CM/Project Manager submits the comments to the DSE for response and action plan generation.

6.7 Response & Action Plan – In accordance with the design schedule, and allowing sufficient time for resolution of disputed comments in advance of the next submission due date, the DSE shall review all comments and select a response from the pre-determined drop-down categories in FD-01-F5. If comments are agreed to, the DSE shall incorporate the comments into the subsequent milestone submittal. For all comments categorized as "Disagree" or "Clarification", the DSE must document a justification and Action Plan on FD-01-F5 and save as: **X_Y_Sec#_ActionPlan.** The DSE shall submit the Response and Action Plans to the CM/Project Manager for review.

6.8 Response & Action Plan Review: The CM/Project Manager shall review the DSE Response and Action Plans to determine if they are complete and acceptable. The CM/Project Manager may elect to schedule a Comment Resolution Meeting with the DSE and the Review Team to resolve "Disagree" or "Clarification" comments. When comments have been resolved, the CM/Project Manager shall update the Action Plans and submit them back to the DSE for review. When the response and action plans are complete and meet all requirements, the CM/Project Manager shall forward it to the DSE and copy the Review Team.

6.9 Incorporate Response & Action Plans: The DSE incorporates all comments and action plans into the PS&E Design Package as requested by the CM/Project Manager, recreates the electronic file folders with the updated documents (reference Table 2) and attaches them to the next milestone PS&E EPDS submittal.

6.10 Submittal Level Determination: The PS&E Design Package submittal process is repeated (steps 6.2-6.9) until the 100%-Final submittal is completed. The 100%-Final PS&E Design Package shall be forwarded to the DPD/AED.

6.11 Final Approval: The 100%-Final PS&E Design Package shall be reviewed by the DPD, and if acceptable, shall recommend approval to the AED. The AED shall review the 100%-Final PS&E Design Package, and if acceptable, shall approve.

6.11.1 If the DPD or AED does not approve the 100%-Final PS&E Design Package submittal, it shall be returned to the CM/Project Manager to compile their comments and send to the DSE for response (return to step 6.6).

6.12 Archive PS&E Design Package: The CM/Project Manager shall copy the approved 100%-Final PS&E Design Package to EPDS Content Management.

7.0 REGULATORY REQUIREMENTS:

N/A

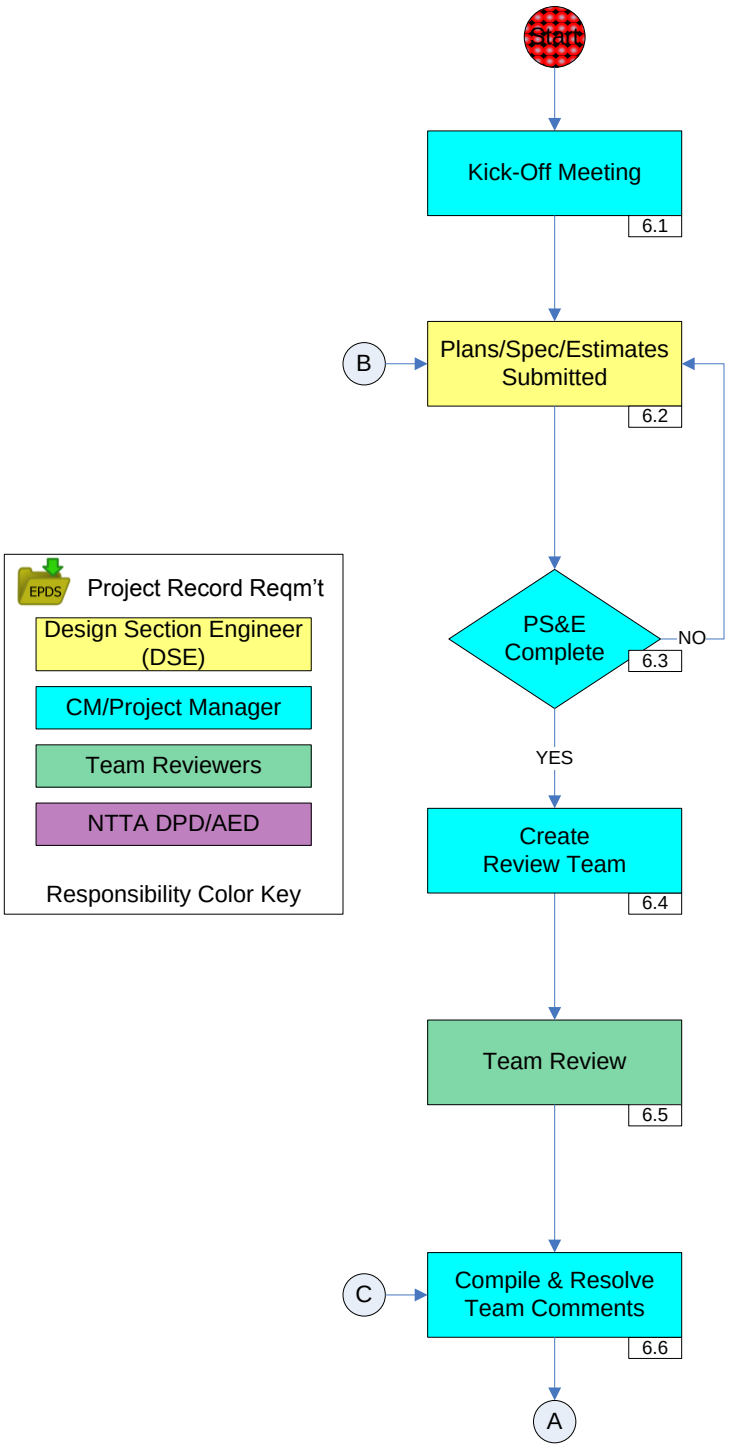
8.0 RELATED BOARD POLICY:

N/A

9.0 COMPONENT DOCUMENTS:

- FD-01-F1, FD-01-F2, FD-01-F3, and FD-01-F4 30/60/90/100% Design Checklists
- FD-01-F5 Comment Review Form
- FD-01-F6 Project Kick-Off Items to be Furnished by NTTA
- FD-07-F1 Constructability Review Checklists
- FD-01-F8 Corridor Plan Review Distribution

10.0 FLOWCHART: PS&E REVIEW PROCESS (ADJUST ZOOM TO ENLARGE FLOWCHART)



CM/Project Manager:
- Coordinates Kick-Off Meeting:
  * Project specific information is provided to DSE
  * DSE and sub-consultants discuss project details

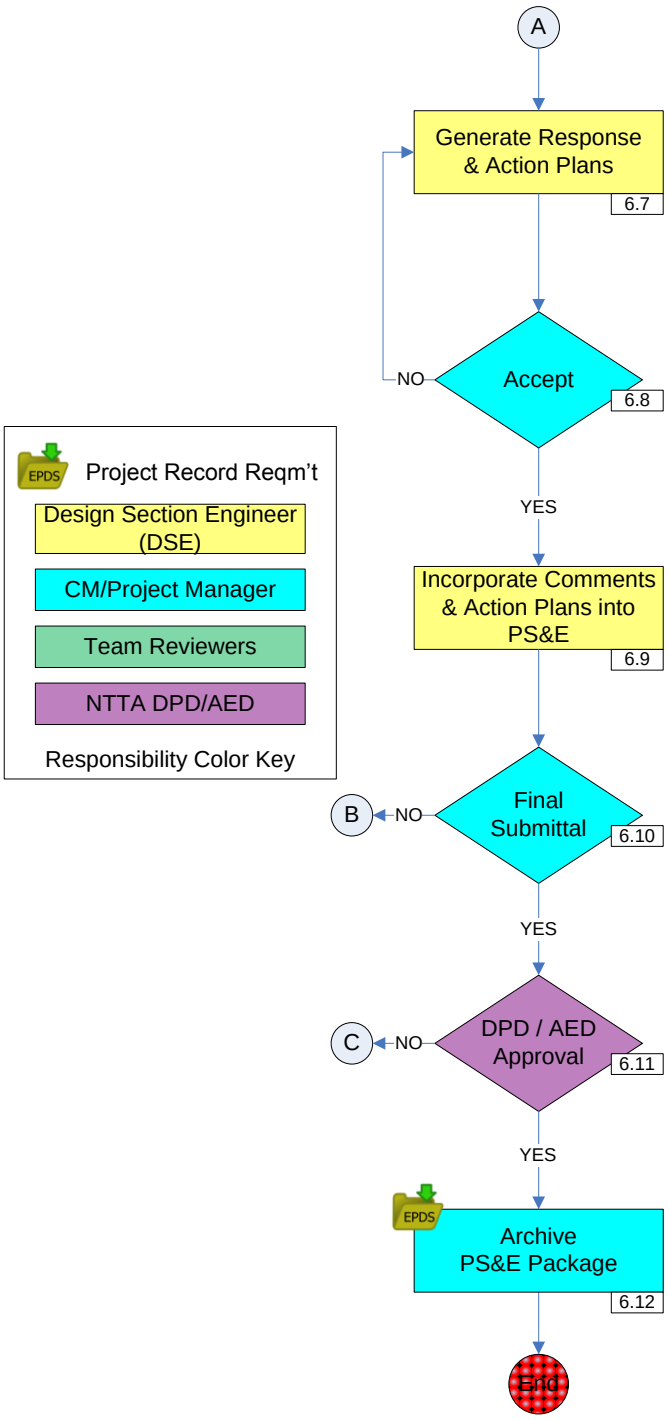
DSE:
- Submit Plans/Specifications/Estimates for review at each submittal milestone
- Attach checklists with each milestone submittal:
  - 30% Checklist (FD-01-F1)
  - 60% Checklist (FD-01-F2)
  - 90% Checklist (FD-01-F3)
  - 100% Checklist (FD-01-F4)

CM/Project Manager:- Performs review and determines if the PS&E submittal has been developed and completed to the desired level (30%, 60%, 90% & 100%)

CM/Project Manager:
- Creates Review Team and distributes PS&E Design Package for review and comment
- Distributes the design checklist associated with the submittal level and form FD-01-F5 for reviewers to record their comments

Review Team:
- Each Team Reviewer distributes the PS&E Package to staff for comments
- All reviewers use FD-01-F5 to record their comments
- Each Team Reviewer compiles their staff comments into one file

CM/Project Manager:
- Reviews and compiles all comments
- Resolves/negotiates any conflicting comments
- Unresolved comments are escalated to the NTTA Design Manager for resolution
- Additional escalation to DPD / AED, if needed



DSE:
- Responds and categorizes each comment using form FD-01-F5 (Agree, Disagree, Clarification)
- Develops responses and justification for comments categorized as "Disagree" or "Clarification"
- If rejected, incorporates revisions per FD-01-F5

CM/Project Manager:
- Reviews response & action plans and determines if all items have been addressed and are complete
- Schedule optional Comment & Resolution Meeting to resolve "Disagree" or "Clarification" comments

DSE:
- Incorporates comments and action plans into PS&E

CM/Project Manager:
- Process is repeated for 30%, 60%, 90% & 100% submittals
- When current submittal level is "Final", submittal is forwarded for final approval

NTTA DPD / AED:
- Approves/disapproves Final PS&E Submittal Package
- If disapproved, submittal is returned back to the CM/ PM to update and compile comments (FD-01-F5)

CM/Project Manager:
- Archives package in Content Management

11.0 REVISION HISTORY:

Revision	Revised by:	Date Issued	DRN NO.	Reason for Revision
0	Dave Clarke	06/05/2008		Original Issue
1	Floyd Martinez	9/18/2008		Significant Rewrite and addition of forms
1	Edie Adams	5/29/2009	10007	Admin Change – Correct manual title
2	Darla Payberah	04/28/2011	10296	Deleted Guiding Principles, Updated roles/responsibilities, Included procedure to detail EPDS submittal, Updated Flowchart.