1.0 PURPOSE:
The purpose of this procedure is to define the utility acquisition process associated with adjustment and/or relocation of existing utilities to accommodate roadway construction.

2.0 RESPONSIBILITIES:
2.1 NTTA Board of Directors – The Board shall be responsible to approve the recommendation of the ED for all Agreement for Adjustment of Utility (AAU) greater than $300,000.

2.2 Executive Director (ED) - The ED shall be responsible to review and approve or reject all AAUs over $100,000 and executing the AAU prior to commencement of work. All AAUs greater than or equal to $300,000 shall be approved by the Board prior to execution.

2.3 Assistant Executive Director of Infrastructure (AEDI) – The AEDI shall be responsible to review and approve or reject all AAUs less than $100,000 and executing the AAU prior to commencement of work.

2.4 Director of Project Delivery (DPD) - The DPD shall be responsible to review and approve or reject all AAUs less than $25,000 and executing the AAU prior to commencement of work.

2.5 Corridor Manager (CM)/Project Manager – The CM or Project Manager shall be responsible for reviewing and recommending approval of utility owner payment requests and for obtaining NTTA funding approval on all AAUs.

2.6 ROW Development Manager - The ROW Development Manager shall be responsible for reviewing and recommending approval of all utility owner payment requests. The ROW Development Manager will review the utility invoices for completeness and accuracy before submitting for payment processing. The ROW Development Manager shall also prepare any necessary NTTA Board documents for AAU’s over $300,000.

2.7 Design Section Engineer (DSE) – The DSE shall be responsible for mapping relocated utilities on project plans, identifying all utilities that are to be relocated on 60% design plans, and reviewing all utility adjustment/relocation designs. The DSE shall incorporate designs of relocated utilities within the roadway into the bid documents at 90% design stage.

2.8 Contract Manager- The Contract Manager is responsible for requesting the AAU Contract numbers for each utility and processing of all contract documents (AAU’s)

2.9 Construction Manager – The Construction Manager shall be responsible for reviewing all utility adjustment/relocation designs, depicting constructed utilities within the roadway right-of-way into the project/section record documents, and assisting the ROW Development Manager in performing utility close-out activities.
2.10 Utility Coordination Consultant (UCC) – The UCC shall be responsible for reviewing and recommending approval of utility owner payment requests and change orders, forwarding copies to the corridor manager for approval, and if approved, forwarding copies to the NTTA. The UCC shall prepare a summary of existing utility adjustments, shall oversee relocation and adjustment of all utilities.

2.11 Utility Owner (UO) – The utility owner shall be responsible for preparing and submitting to the UCC a design with cost estimate and construction schedule for each utility relocation/adjustment eligible for reimbursement by the NTTA and for approving the AAU. Also responsible for submitting utility invoices to the NTTA AEDI as construction work progresses and upon completion of work.

3.0 SCOPE/APPLICABILITY:
This procedure shall apply to all necessary reimbursable utility relocations on NTTA projects and corridors.

4.0 REFERENCES:
- TxDOT Utility Manual, July 2005
- CA-08 Independent Cost Estimate Procedure

5.0 DEFINITIONS & ACRONYMS:
AAU: Agreement for Adjustment of Utility
SUE: Subsurface Utility Exploration

6.0 PROCEDURES:

6.1 Field Verification – Through field verification, plans from utility owners, and the DSEs 30% design submittal, the UCC shall prepare a summary of existing utilities within the project ROW. The utility adjustment summary shall include the utility type, location, conflict description, and utility owner.

6.2 Utility Conflict Identification – The DSE shall identify all utilities that will require relocation on their 60% design plans as "TO BE RELOCATED BY OTHERS". If field verification is required to determine whether adjustment or relocation of the utility is required, the UCC shall coordinate with the utility company and the DSE to expose the utility utilizing SUE equipment if necessary and shall field verify the location to make this determination. The UCC and DSE will investigate all options to minimize or avoid the utility in conflict.

6.3 SUE Data – The DSE shall identify within the design plans the location, alignment, and grade of each public or private utility crossing, including both aerial and underground lines. The utility identification shall be defined by the proposed roadway centerline stations, skew, elevations, utility owner, the type of line
crossed, and all other pertinent data visible in the field or obtainable from local residents, SUE records, and utility representatives.

6.4 Request for Utility Design – The UCC shall issue a formal request for utility relocation design and cost estimate to the responsible Utility Owners for all utility adjustments and relocations eligible for reimbursement. The UCC shall, throughout the project, coordinate construction of utility relocations directly with the responsible utility owners, the Right-of-Way Consultant, and with the Construction Manager, as necessary, to meet established project schedules and to avoid construction conflicts.

6.5 Non-Reimbursable Relocations – The UCC shall oversee the relocation and adjustment of all utilities not eligible for reimbursement, but deemed to be in conflict with the proposed roadway alignment, to minimize impact to the project schedule and shall insure utility installation is in compliance with all applicable codes, ordinances, regulations, and construction standards.

6.6 Utility Plan Submittal – The utility owner shall prepare and submit a utility relocation design with cost and schedule estimates for each of the utility relocations or adjustments which are eligible for reimbursement by the NTTA. The utility owner may include several, or all, of their facilities within a design section in their design and cost estimate submittal to incorporate into an AAU with NTTA.

6.7 Estimate Submittal – All utility owner cost estimates shall be of adequate detail (i.e. – material quantities, unit prices, labor and equipment costs, etc.) to evaluate whether the estimated cost is fair and reasonable. The cost estimates shall identify any salvage items, betterments or extended service life elements, if applicable. Engineering plan and cost estimate submittals by the utility owner shall be forwarded to the UCC and ROW Development Manager for review of the utility adjustment/relocation design and the estimated utility adjustment/relocation cost and schedule. For cost estimates greater than $300,000, approval is required by the NTTA Board prior to authorizing the AAU for construction (see 6.13).

6.8 Design Review – The UCC shall forward 1 copy of the utility adjustment/relocation design to the DSE for review, to verify all conflicts with the proposed roadway elements are eliminated, and to identify any new conflicts with the proposed roadway project created by the Utility Owner’s design.

6.9 Construction Management Review – The UCC shall forward 1 copy of the utility adjustment/relocation design proposal to the Construction Manager for review to verify the utility relocation adjustment clears all construction conflicts, and that the utility installation does not create any new constructability or schedule issues for the roadway contractors.

6.10 AAU Contract Request - The UCC requests an AAU Contract number from the Contract Management department for tracking and budget purposes.
6.11 Agreement Preparation – The ROW Development Manager, with input from the UCC shall investigate all review comments, and if the design and/or cost estimate is unacceptable, shall notify the utility owner and to request a design re-submittal. Upon receipt of approved engineering and estimate, the Contract Manager shall prepare 2 copies of the AAU, draft a letter requesting utility owner agreement signature, send to the Utility Owner for signature and forward to the CM or Project Manager with a recommendation for funding approval.

6.12 Utility Design Within Roadway Plans – If the utility relocation design is approved prior to the DSEs submittal of 90% plan documents for review, the UCC shall forward the approved utility adjustment/relocation design drawings to the DSE for incorporation into the bid documents. The DSE shall modify the design plans to show the proposed utility adjustments and/or relocation(s). If the utility relocation design is approved after completion of the DSEs submittal of 90% plan documents for review, the UCC shall forward the approved utility adjustment/relocation design drawings to the Construction Manager for incorporation into the project/section record documentation.

6.13 The UCC shall prepare an Independent Cost Estimate (ICE) in accordance with CA-08 for any AAU’s exceeding $300,000.

6.14 NTTA Funding Approval – The UCC shall present the proposed AAU to the Contract Manager who shall route the AAU for NTTA approval. If AAU exceeds $300,000 then NTTA Board approval is required. Once funding approval has been attained, 2 original copies of the AAU shall be sent to the utility owner for signature and then returned to the Contract Manager for final execution.

6.15 Utility Final Approval – The Contract Manager shall forward the originals to NTTA Procurement Services to obtain NTTA signature. Once signed, one signed original shall be sent to the utility owner and one retained by the NTTA. The executed AAU and related design plans shall be placed into EPDS.

6.16 Utility Relocation Verification – The UCC will be responsible for preparing and conducting a preconstruction meeting with the utility, assistance with prioritization of utility construction activities, verification that construction concurs with approved plans, and recording locations of new lines with GPS coordinates. The UCC will also assist by providing daily notes, monitor schedules, assist with preparing and submitting any necessary change orders to the Corridor Manager, provide status reports as necessary, assistance with preparing a composite utility map and verification of invoices.

6.17 Utility Billing Verification – Utility owner payment requests shall be forwarded to the UCC for review and recommendation of approval. The UCC shall forward copies of the payment request to the ROW Development Manager and the CM for review and recommendation of approval. After review, the UCC shall forward the payment request to the Invoice Manager with recommendations for processing.
6.18 Utility Change Orders - The ROW Development Manager, with assistance from the UCC shall be responsible for preparing and submitting all utility change orders to the NTTA C5 Committee for review and approval.

6.19 Close-out Activities and As-Built Documentation – The UCC shall coordinate the collection of red-lined drawings, CAD files (if available), SUE data and as-built documentation from the utility owners and forward to the Construction Manager. The Construction Manager shall perform necessary utility relocation contract close-out activities, and shall incorporate the electronic and hard copy “As-Built” utility relocation information into its project/section “Final Record Drawings”.

7.0 REGULATORY REQUIREMENTS:
- 43 Texas Administrative Code; Sections 21.21 - 21.41, Utility Accommodation Rules
- Texas Transportation Code (TTC), Chapter 366.171 – Regional Tollway Authorities

8.0 RELATED BOARD POLICY:
N/A

9.0 COMPONENT DOCUMENTS:
- UC-01-F1 Verizon AAU Template
- UC-01-F2 AT&T AAU Template
- UC-01-F3 Atmos AAU Template
- UC-01-F4 Oncor AAU Template
- UC-01-F5 Garland Power & Light AAU Template
- UC-01-F6 Generic AAU Template
10.0 FLOWCHART:

START

Identify Utilities To Be Relocated / Installed

Utility Coordination Consultant:
- Gather project information
- Field review
- Compile utility records
- Contact utility owners
- Compile utility easement information (existing maps/data)

Utility Coordination Consultant:
- Create conflict spreadsheet
- Prepare relocation estimates
- Prepare utility contact list
- Prepare cash flow analysis

Utility Coordination Consultant:
- Provide utility owners with project data/plans
- Identify magnitude of impact and communicate to DSE/CM

Utility Coordination Consultant:
- Issue Notice to Proceed Letter (NTP) to Utility Owner(s) for designs

Design Section Engineer/Corridor Manager:
- Prepares Subsurface Utility Engineering (SUE) package
- Confirm if utility is in conflict with proposed plans

UTILITY:
- Develops plans, profile and estimates
- Submit plans, profile and estimates to UCC for review
NOTE: Incorporate comments by UCC or DSE / CM

Utility Coordination Consultant:
- Reviews utility design plans, profile and estimates and provides comments to Utility
- Submit utility relocation design plans, profile and estimates to DSE/CM for review

Design Section Engineer/Corridor Manager:
- Reviews utility design plans, profile and estimates and provides documented comments to Utility
- UCC Coordinator to file approved review documentation
- If Utility project is non-reimbursable, go to step 6.16
- If Utility project is reimbursable, go to “B”
Utility Relocation Process

**Utility Coordination Consultant:**
- Requests AAU tracking number from NTTA Contract Management
- Develops/Updates the AAU
- Updates schedule and budget estimates
- Submits the AAU to the PD Program Support Staff for tracking and approval

**PD Program Support Staff:**
- Enters AAU into NTTA Contract tracking system
- Submits AAU to NTTA Contract Management

**UTILITY:**
- Approval and execution of AAU
- AAU includes plans, agreement, schedule, and estimates
- UCC Coordinator to file approved review documentation

**Utility Coordination Consultant:**
- Concurrent Activities
- If agreement is $300K or greater, then NTTA board approval is required

**UTILITY:**
- UCC shall forward the approved utility adjustment/relocation design drawings to the DSE for incorporation into the bid documents

**Utility Coordination Consultant:**
- Prepares Independent Cost Estimate in accordance with CA-08

**Utility Coordination Consultant:**
- If agreement is $300K or greater, then NTTA board approval is required

**NOTE:** Only required for relocation paid by the NTTA

**NTTA Approval:**
- Obtain approvals

**NTTA Board:**
- AAU submitted to Board for approval
- If approved, then go to next step
- If rejected, new/revised plans are needed

**Utility Coordination Consultant:**
- Issue Notice to Proceed Letter (NTP) to Utility Owner(s) to start construction
- Forward AAU to PD Program Support Staff for filing

**Utility Coordination Consultant:**
- Conduct pre-construction meeting to review AAU requirements
**Utility Relocation Process**

**UTILITY:**
- Construction proceeds as planned

**Utility Coordination Consultant:**
- Review project construction phasing for prioritization of inspection locations
- Verifies construction per approved plans
- Capture GIS Data on all utility locations as they become available
- Prepare composite utility maps
- Record Inspection results in Daily Diary

**Utility Coordination Consultant:**
- Review utility owner’s request for approval

**Utility Coordination Consultant:**
- Submits change order requirements for modification

**Utility Coordination Consultant:**
- Use Contract Close Out form UC-01-F7 to document activity
- Perform final inspection of entire utility relocation
- Review and approve relocation invoices
- Submit relocation invoices to Program Support Staff
- Obtain “as-built” documentation from Utility Owners
- Upload project documentation into EPDS
- Provide composite utility map to Construction Management, Maintenance and IT Departments

**NOTE:** New or Betterment relocations are not reimbursed by the NTTA
### Title: Utility Relocation Process

#### 11.0 REVISION HISTORY:

<table>
<thead>
<tr>
<th>Revision</th>
<th>Revised by:</th>
<th>Date Issued</th>
<th>DRN</th>
<th>Reason for Revision</th>
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<tbody>
<tr>
<td>0</td>
<td>Dave Clarke</td>
<td>06/05/2008</td>
<td></td>
<td>Original Issue</td>
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<tr>
<td>1</td>
<td>Dave Clarke</td>
<td>02/19/2010</td>
<td>10104</td>
<td>Added flowchart.</td>
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<td>Added closeout checklist (UC-01-F7).</td>
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<td>Added Franchise Agreements AAU (UC-01-F1/F6).</td>
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<td>Move SUE data from 7.1 to 6.3.</td>
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<td>Added 6.15, Utility Relocation Verification.</td>
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<td>Added reference links.</td>
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<tr>
<td>2</td>
<td>Dave Clarke</td>
<td>04/30/2010</td>
<td>10142</td>
<td>Added Department Director responsibilities to 2.5.</td>
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<td>Added UCC responsibilities to 2.9 and 2.16 for change orders.</td>
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<td>Added Preconstruction Meeting requirement to 6.16.</td>
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<td>Added Department Director responsibilities to 2.5.</td>
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<td>Added change order requirements to 2.9, 6.16.</td>
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<td>Made paragraph number references to flowchart for clarify.</td>
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<tr>
<td>3</td>
<td>Dave Clarke</td>
<td>05/06/2011</td>
<td>10278</td>
<td>Update the current Utility Relocation Procedure to reflect actual NTTA titles and responsibilities for approval of utility relocations.</td>
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<td>4</td>
<td>Dave Clarke</td>
<td>10/11/2011</td>
<td>10361</td>
<td>Change “PMO” to “PD” and “Right-of-Way Acquisition Team (RAT)” to “Right-of-Way (ROW) Team”. Delete “SPOC”.</td>
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<tr>
<td>5</td>
<td>Dave Clarke</td>
<td>12/17/2012</td>
<td>10432</td>
<td>The Utility Relocation process needed to be revised to reflect current roles and responsibilities, adding the role of the change order process and other minor revisions to the utility relocation process. The flowchart was changed to reflect these changes. Obsolete UC-01-F7 and UC-01-F8.</td>
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