**District Right of Way Map Checklist for Submittal Review**

NOTE: EDIT THIS CHECKLIST TO MEET DISTRICT NEEDS. AN EDITABLE VERSION IS AVAILABLE FROM THE ROW DIVISION SURVEY SECTION ON REQUEST FROM DISTRICT SURVEY COORDINATORS.

|  |  |  |  |
| --- | --- | --- | --- |
| **TxDOTCONNECT ROW Project No.:** | | | |
| **RCSJ:** |  | | **Highway:** |
| **CCSJ:** |  | | **County:** |
| **Limits:** | |  | |
| **Date Reviewed:** |  | | **By:** |

## General Requirements

1. All map sheets are legible: no light, dark, faded, or overlapping text
2. All maps plotted on 11”x17” map sheets with half-inch borders
3. All map borders are a minimum of ½” with 1 ½” margin on left
4. Drawings plotted at 1” to 100’ scale on 11”x17” sheets (Alternate scales require prior district approval.)
5. Text size on all plots must be at least .06 inch (Engineering Font)
6. Graphic files are in current format; text files are in Microsoft Word
7. Show zero place holders in bearing for clarity (eg. N 01°02’03”W)
8. The decimal places for the acquisition acreage are:

* Four (4) decimal places for less than one (1) acre
* Three (3) decimal places for greater than one (1) acre up to 10 acres
* Two (2) decimal places for 10 acres and greater

## Metadata/Notes

1. The basis of bearing shall be “Grid North”
2. Texas Coordinate System, State Plane Zone
3. North American Datum of 1983 (NAD 83), 2011 Adjustment, 2010.0 Epoch
4. North American Vertical Datum 88 (NAVD 88) GEOID      (eg. GEOID18) (if applicable)
5. Indicate surface or grid coordinates and the agreed upon surface adjustment factor for the project (Surface Coord = Grid Coord x S.A.F. of      )
6. Unit of Measure (US Survey Feet)
7. Date of abstracting (e.q. From January, 2023 through May, 2023)
8. Date of field surveys (e.q. From January, 2023 through May, 2023)

## Title Sheet Requirements

1. Title and description of project includes:
2. STATE OF TEXAS

DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED

RIGHT OF WAY PROJECT

1. County
2. Highway designation
3. CCSJ
4. RCSJ
5. TxDOTCONNECT ROW Project ID (R#)
6. Project Limits
7. Net length of project in feet (2 decimal places) and miles (3 decimal places)
8. Title block (upper right corner) includes:
9. County
10. Highway designation
11. CCSJ
12. RCSJ
13. TxDOTCONNECT ROW Project ID (R#)
14. Federal Road Division Number is 6
15. State District Number
16. Federal Aid Project Number is blank
17. Sheet number is 1

1. Most current TxDOT Logo placed in the title block (available in the ORD Workspace)
2. Copyright “© month/year” (latest amended date) & copyright is NOT next to TxDOT Logo
3. TEXAS DEPARTMENT OF TRANSPORTATION       DISTRICT
4. State District Address and Phone Number
5. Revision area below title block is clear of text and graphics (2”x2” minimum)
6. Revision month/day/year and description of revision shown for title sheet only (if applicable): most recent revision listed on bottom
7. Metadata included
8. Project Layout Includes:
9. North arrow
10. Begin Project and End Project Include:
    1. Stationing
    2. RCSJ number
    3. TXDOTCONNECT ROW Project Number
    4. North and East coordinates with commas and two decimal places
    5. Latitude and Longitude are in DMS with four decimal places.
11. Parcels lightly shaded between existing and proposed ROW lines (optional)
12. Names of major side streets
13. Scale shown for 11”x17” sheets
14. Vicinity Map Includes:

a.  Vicinity map (with north arrow) shows beginning and ending of project

b.  Vicinity map has heavy line weight to identify project location

c.  Vicinity map shows names of towns and highways

d.  Vicinity map scale shown or show N.T.S.

1. Index of Sheets shown:
2. TITLE SHEET
3. SHEET LAYOUT
4. SURVEY CONTROL INDEX
5. SURVEY CONTROL DATA
6. R.O.W. PLAN SHEETS
7. R.O.W. PARCEL SUMMARY SHEET
8. Any other sheets
9. Legend of Symbols and Conventional Signs shown
10. Signature block (lower right corner) includes:
11. Blank for signature and date recommending acquisition by:
12. District Surveyor or ROW Administrator
13. Area Engineer or Design Engineer
14. Blank for signature and date for final approval by District Engineer
15. Show note: THIS MAP IS AN INTERNAL TxDOT DOCUMENT. ITS CONTENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.
16. Show note: Proposed right-of-way baseline may not match proposed construction baseline or as-built baseline.
17. List baseline equations or show NO EQUATIONS
18. List stationing for right-of-way acquisition exceptions or show NO EXCEPTIONS
19. List baseline stations at centerline of intersecting railroads or show NO RAILROADS
20. Check old redlines for correction (if applicable)

## Index Sheet Requirements

1. Index of Parcels table shown (with parcels listed by sheet number)
2. Layout shows side streets with street names
3. Layout shows parcels lightly shaded between existing and proposed ROW lines.
4. Begin Project and End Project Include:
5. Stationing
6. RCSJ number
7. TXDOTCONNECT ROW Project Number
8. North and East coordinates with two decimal places
9. Latitude and Longitude are in DMS with four decimal places
10. Layout shows individual sheet cutouts (with sheet numbers)
11. Layout shows survey names and abstract numbers, with survey lines labeled
12. Survey names, abstract numbers, and boundaries verified with abstract maps
13. Layout shows all county lines and city limit lines with labels
14. Utility Index table listing name, type and station of all visible utilities shown. (Leave blank for future permit number.) May instead be included on the Parcel Summary Sheet, see section H.
15. Scale of layout shown or N.T.S.
16. North arrow shown in upper right corner (location is optional)
17. Title block (lower right corner) includes:
    1. Firm’s name, TBPELS Firm Registration number, address, and phone number
18. County
19. Highway designation
20. RCSJ
21. TXDOTCONNECT ROW Project Number
22. Federal Road Division Number is 6
23. State District Number
24. Federal Aid Project Number is blank
25. Sheet number #
26. Most current TxDOT Logo placed in the title block (available in the ORD Workspace)
27. Copyright “© month/year” (latest amended date) & copyright is NOT located next to TxDOT Logo
28. TEXAS DEPARTMENT OF TRANSPORTATION       DISTRICT
29. State District Address and Phone Number
30. Revision area above title block is clear of text and graphics (2”x2” minimum)
31. Revision month/day/year and description of revision shown for index sheet only (if applicable): most recent revision listed on top
32. Metadata included
33. Check old redlines for correction (if applicable)

## Control Index Sheet Requirements

1. Table containing primary survey control monument information include:
2. Control Point Name
3. Surface and Grid North and East coordinates
4. Latitude and Longitude
5. Elevation
6. Description of monument (eg. 5/8” REBAR WITH 3 ¼” ALUMINUM CAP IN CONCRETE stamped “TEXAS DEPT OF TRANSPORTATION CONTROL MARK”)
7. Layout scale shown and is the same scale as Index Sheet layout or N.T.S.
8. Layout shows side streets with street names
9. Begin Project and End Project (See Section C 6 b)
10. Layout shows survey control monument locations (including offsite monuments)
11. Layout shows individual sheet cutouts (with sheet numbers)
12. Layout shows survey names and abstract numbers with survey lines labeled
13. Layout shows all county lines and city limit lines with labels
14. Baseline stationing, bearing, and curve data shown (rounded to nearest second):
15. PI station
16. Radius
17. Central (Delta) angle
18. Arc length
19. Tangent length
20. Chord bearing
21. Chord distance
22. PI North and East coordinates
23. Label baseline PC and PT stations on baseline
24. Proposed baseline and proposed right-of-way match approved schematic or as directed
25. All coordinates have commas and two decimal places
26. All latitudes and longitudes are in DMS and have four decimal places
27. Insets showing reference ties to each survey control monument (optional)
28. North arrow shown in upper right corner (location optional)
29. Title block (lower right corner) (See Section D 12):
30. Signature and seal of Registered Professional Land Surveyor with date (above Revision area)
31. Printed surveyors name and RPLS number under seal
32. Revision area above title block is clear of text and graphics (2”x2” minimum)
33. Revision month/year and description of revision shown for control sheet only

(if applicable): most recent revision listed on top

1. Metadata included
2. Check old redlines for correction (if applicable)

## Control Data Sheet Requirements

1. Title block (lower right corner) (See Section D 12)
2. Control Monument Sketch
3. Maximum of nine sketches per sheet
4. Show Reference Ties (minimum of three per sketch)
5. North arrow pointing North, Scale (or N.T.S.)
6. Name of adjacent road(s)
7. Monument described for size and material
8. Monument name shown next to monument symbol
9. N and E coordinates (with commas and two decimal places)
10. Elevation shown to 0.01 foot
11. Ties shown to nearest foot
12. Location description text under each inset
13. All coordinates have commas and two decimal places
14. Any labeled latitudes and longitudes are in DMS with four decimal places (eg. 01°02’03.1234”)
15. Basis of bearings and coordinates: (in upper right margin)
    1. Texas Coordinate System, State Plane Zone (specify zone used)
    2. North American Datum of 1983 (NAD 83), 2011 Adjustment Epoch 2010.00
    3. North American Vertical Datum 88 (NAVD 88)
    4. US Survey Feet
    5. Indicate surface to grid combined adjustment factor
    6. Indicate how the horizontal and vertical control was established
    7. Indicate which TxDOT RRP Station used. If static was done indicate which three TxDOT RRP Stations used.
    8. Indicate Geoid
    9. Date of Survey
16. Legend under Basis of bearing and coordinates information: legend should include line style, control monuments, signs etc.
17. Signature and seal of Registered Professional Land Surveyor with date (above Revision area)
18. Printed surveyors name and RPLS number under seal
19. Revision area above title block is clear of text and graphics (2”x2” minimum)
20. Revision month/year and description of revision shown for control sheet only

(if applicable): most recent revision listed on top

1. No ownership information shown on Horizontal and Vertical Control Data Sheet
2. Check old redlines for correction (if applicable)

## Map Sheet Requirements

1. Graphic (bar) scale shown on all map sheets
2. Text scale: (1” to 100’) for 11”x17” sheets
3. North arrow
4. All title blocks (lower right corner) (See Section D 12)
5. Revision area above title block is clear of text and graphics (2”x2” minimum)
6. Revision month/day/year and description of revision shown per sheet only (if applicable): most recent revision listed on top
7. Notes include month/day/year for abstracting, field surveys, and completed map
8. Metadata included
9. Match line stationing (nearest 100 foot station) shown at beginning and ending of each map sheet
10. Begin Project and End Project (See Section C 6 b)
11. POB must be a monumented corner in the proposed ROW line of the parcel to be acquired
12. POC must be a monumented back property corner of the parent tract. If one is not recoverable, the nearest identifiable monumented property corner located outside of the proposed ROW may be used. A reference corner may be used in place of a POC at a **TxDOT Registered Professional Land Surveyor’s discretion**.
13. POB project coordinates (North and East), POB station, and offset
14. All coordinates have commas and two decimal places
15. Monuments set table includes:
    1. Title “SET RIGHT-OF -WAY MONUMENTATION”
    2. Point No.
    3. Northing and Easting
    4. Station
    5. Offset with Left or Right
    6. Monument Description
16. Survey names and abstract numbers with survey lines labeled as being shown approximately
17. All county and city limit lines, labeled as approximate, with county or city names
18. Subject tract, adjoiners and easements information include:
    1. Current grantee’s name
    2. Called acres
    3. Recording information
       1. Date
       2. Volume and Page or Document Number
       3. Location of record (eg. Deed Records, Official Public Records, Plat Records, Right of Way Records, Surveyor Records, etc.)
19. Parent tract inset include:
    1. TXDOTCONNECT PARCEL ID
    2. POC (describe monument recovered or reference corner)
    3. POB
    4. POC to POB calls
    5. Survey lines
    6. Abutting street names
    7. Scale/N.T.S.
    8. Property line
    9. Land hook symbols (if not entirely contained to scale in body of drawing).
20. Math checked on remainders (do not subtract easement acreages). Show decimal places matching lowest number of decimal places shown in either the acquisition acreage or existing acreage.
21. If no deed or easement information is found, then state NO RECORD INFORMATION FOUND
22. If adjoining road (ie. county road) is included in the parcel, include separate acreage for road.
    1. Show the following note:

1.2345 ACRES

(12,345 SQ. FT.)

IN OCCUPIED RIGHT OF WAY

OF \_\_\_\_\_\_COUNTY ROAD \_\_\_\_

1. Proposed ROW lines
2. Existing ROW lines
3. Property lines
4. Easement lines
5. Building setback lines
6. Land hooks
7. Text leader lines / arrows should not cross ROW lines or other leader lines / arrows
8. Labels can be in a table on same sheet or noted
9. Line Tables or Curve Tables are shown on same sheet
10. Record bearings and distances in parentheses (----------) as needed
11. Subdivision information
12. Subdivision name
13. Lot
14. Block
15. Tract
16. Reserve
17. Recording information
18. Parcel number (number is outlined in / near parcel)
19. Acreage on each page
20. Existing roadway (labeled with name and width)
21. Side street (labeled with name and width)
22. Railroads (labeled with name and width)
23. ROW widths (including recording information)
24. Easement widths (including recording information)
25. All curve data includes:
26. Radius
27. Central (Delta) angle
28. Arc length
29. Chord bearing
30. Chord distance
31. Station and offset (perpendicular to the baseline) for all POBs, PCs, PTs, PIs, and district-specific station monuments on the proposed ROW lines or on the existing ROW lines in areas of no acquisition
32. Existing planimetrics shown in background shaded enough for copies
    1. Visible improvements located within the proposed right-of-way corridor or within 50 feet of a proposed right-of-way line must be shown and identified.
    2. Existing improvements within 3 feet of the proposed ROW line are field located.
    3. Structures are identified by number of stories, type (wood frame/metal/brick), and use (commercial/residential).
    4. Dimension structures, paved parking areas, and signs bisected by proposed ROW lines (use detail drawing if necessary)
    5. Vents and filler caps of underground fuel storage tanks for gas stations are shown when they are within 50 feet of proposed ROW line.
    6. Well locations, historical markers, and grave sites within 50 feet of proposed ROW
    7. All visible utilities, utility signs, and markers
    8. Signs/billboards

## Parcel Summary Sheet

* + 1. Title (center top)
       1. PARCEL SUMMARY TABLE
       2. Highway Designation
    2. Title block (lower right corner) includes (See D 12):
    3. Parcel Summary Table Includes:

1. TXDOTCONNECT PARCEL ID
2. Property Owner
3. Conveyance Volume and Page or Document Number
4. Type of Conveyance
5. Parcel Taking Property Center Line Station (From and To)
6. Deed Acreage
7. Acquisition area Acreage/Square Feet
8. Area in County Road (Acres/Square Feet)
9. Remainder (Left or Right)
   * 1. Utility Index table (may instead be included on the Index Sheet)
10. Utility Type
11. Utility Company
12. Station
13. Phone No.

## Monuments [(Monument Specifications)](https://ftp.txdot.gov/pub/txdot/row/surveyor-toolkit/monument-specifications.pdf)

1. All monuments described for size, material, and stamp: be specific
2. The preferred Standard ROW Monument: TxDOT Type II Monument = 4-inch bronze disk lettered “Texas Department of Transportation R.O.W.” Include setting IE: “Set flush with natural ground in an 8-inch minimum diameter poured concrete post 36 inches depth”. See the [Monument Specifications](https://ftp.dot.state.tx.us/pub/txdot-info/cmd/cserve/standard/roadway/m10.pdf)  document in the Surveyors’ Toolkit.
   1. TxDOT Type II Monument set in proposed ROW line at all PCs, PTs, PIs, intersecting road/street ROW lines and the district-specific interval of       (e.g. 1500 between Type II monuments)
   2. TxDOT Type II Monument set in existing ROW line where no monument exists and where no additional ROW is being acquired at all PCs, PTs, PIs, intersecting road/street ROW lines and the district-specific interval of       feet (e.g. 1500 between Type II monuments).
3. Standard Property Corner Monument: 5/8” rebar with 2-inch aluminum cap stamped “TX DEPT OF TRANSPORTATION PROPERTY CORNER” set in proposed ROW line at property line intersections (excepting locations where a Type II is set, IE: PI, PC, PT, etc)
4. Interim ROW Monument:
   1. The following statement may be incorporated when setting an Interim ROW monument as the original monument instead of the preferred standard Type II monument. This statement's application should be on a case-by-case basis, and **pre-approved by a TxDOT Registered Professional Land Surveyor**.

“\*\*The monument described and set in this call may be replaced with a TxDOT Type II ROW Marker upon the completion of the highway construction project under the supervision of a Registered Professional Land Surveyor either employed by or retained by TxDOT.”

* 1. Monument set is described for size, material and stamp

Examples:

* The District has deliberately chosen to set Type II ROW Markers after completion of the project.
* A Type II ROW Marker cannot be set at a PC, PT, or PI, etc., due to interference or obstruction.
* Lack of permission to enter property or to set a Type II.

1. Each parcel corner on the proposed ROW line **shall** have a survey marker set in the ground to represent that corner. Monument type to be mutually determined by the consultant and a TxDOT Registered Professional Land Surveyor.
2. TXDOT parcels are to be monumented with      .
3. Each State easement corner on the proposed ROW line **shall** have a survey marker in the ground to represent that particular corner. Monument type to be mutually determined by the consultant and a TxDOT Registered Professional Land Surveyor.
4. TXDOT easements to be monumented with      .
5. The beginning, in-between, and end points of an Access Denial Line are monumented and stamped Access Denial Line or ADL.
6. All recovered monuments described completely including size and material
7. All primary survey control monuments shown:
8. Control Point Name
9. Station
10. Offset (LT or RT)
11. North and East coordinates
12. Monument Description

## Baseline

1. Label baseline PC, PT, and 500 foot stations on baseline
2. Show baseline bearing and curve data (rounded to nearest second) on each sheet:
3. PI station
4. Radius
5. Central (Delta) angle
6. Arc length
7. Tangent length
8. Chord bearing
9. Chord distance
10. PI (N and E) coordinates
11. Label at least two baseline stations per page
12. Proposed baseline and proposed right-of-way match approved schematic or as directed

## Access Denial

1. Access Denial Lines (ADL) use proper line type and are labeled “ACCESS DENIAL LINE”
2. All monuments on an ADL are so labeled and stamped (beginning, end, in-between, and direction arrrow).
3. ADL use proper line styles
4. Begin and End of ADL are labeled
5. Passing call distance for ADL and District-Specific Interval station monuments shown

## Deliverables

1. General
   1. TITLE SHEET
   2. SHEET LAYOUT
   3. SURVEY CONTROL INDEX
   4. SURVEY CONTROL DATA
   5. R.O.W. PLAN SHEETS
   6. R.O.W. PARCEL SUMMARY SHEET
   7. Any other sheets
2. Field Data
   1. Field notes
   2. Photos
   3. ASCII or Text file of all monuments recovered; Surface and Grid (Point, Northing, Easting, Elevation, Code)
   4. ASCII or Text file of all monuments to be set; Surface and Grid (Point, Northing, Easting, Elevation, Code)
3. Office Data
   1. TxDOT design software files (project, points database, chains, input & output files): see the Design Survey Checklist
   2. RAW files (conventional), GPS observation files, photos, LIDAR files, or other measurement files
   3. Right of Entry (ROE) Data
      1. Draft ROE Letter and Agreement
      2. Copies of Granted and Denied ROE Letter and Agreement
      3. Other ROE Data (tracking information, excel files, word documents, etc.)
   4. Research Gathered:
      1. Plats
      2. ROW Maps and Deeds
      3. Deeds and Patents

**Right of Way Map Checklist completed by:**

|  |  |
| --- | --- |
| Name: | Date: |

**Additional notes:**