**District Control Plan Sheet 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.

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| --- | --- | --- | --- |
| **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. Text size on all plots must be at least .06 inch (Engineering Font)
5. Graphic files are in current format; text files are in Microsoft Word
6. Control meets the TxDOT’s [level of accuracy](https://ftp.txdot.gov/pub/txdot/row/surveyor-toolkit/tsla.pdf)

## Control Index Sheet Requirements

1. Table containing primary survey control monument information include:
   1. Control Point Name
   2. Northing and Easting coordinates
   3. Latitude and Longitude (at the State Project Manager or District Survey Coordinator’s discretion)
   4. Elevation
   5. Station and Offset (at the State Project Manager or District Survey Coordinator’s discretion)
   6. Description of monument (eg. 5/8” REBAR WITH 3 ¼” ALUMINUM CAP IN CONCRETE stamped “TEXAS DEPT OF TRANSPORTATION CONTROL MARK”) [Monument Specifications](https://ftp.txdot.gov/pub/txdot/row/surveyor-toolkit/monument-specifications.pdf)
   7. Monuments described for size, material and stamp. Be specific.
2. Layout shows side streets with street names

1. Control points:
   1. Use “▲” symbol for primary control points
   2. Use “△” symbol for secondary control points
   3. Use “🞥” symbol for panel points
   4. Label control point names near symbols
   5. Show offsite control points in relation to project
2. Layout shows all county lines and city limit lines with labels
3. Line work from planimetric (optional)
4. All coordinates have commas and two decimal places
5. All latitudes and longitudes are in DMS and have four decimal places
6. Insets showing reference ties to each survey control monument (optional)
7. North arrow shown in upper right corner
8. Layout scale shown or N.T.S. (under North arrow)
9. Legend of Symbols and Conventional Signs shown in lower left corner (location optional)
10. Project baseline – Includes:
    1. Baseline bearings and distances or curve data
    2. Baseline equations (as applicable)
    3. Label 500-foot stations
    4. Label PC’s and PT’s along baseline
11. Begin Project and End Project Include:
    1. Stationing
    2. CSJ number
    3. TXDOTCONNECT Project Number
    4. North and East coordinates with commas and two decimal places
    5. Latitude and Longitude are in DMS with four decimal places
12. Title block (lower right corner):
    1. Firm’s name, TBPELS Firm Registration number, address, and phone number
    2. County
    3. Highway designation
    4. CSJ
    5. TXDOTCONNECT Project Number
    6. Federal Road Division Number is 6
    7. State District Number
    8. Federal Aid Project Number is blank
    9. Sheet number #
    10. Most current TxDOT Logo placed in the title block (available in the ORD Workspace)
    11. Copyright “© month/year” (latest amended date)
    12. TEXAS DEPARTMENT OF TRANSPORTATION       DISTRICT
    13. State District Address and Phone Number
13. Signature and seal of Registered Professional Land Surveyor (RPLS) with date (above Revision area)
14. Printed surveyors name and RPLS number under seal
15. Revision area above title block is clear of text and graphics (2”x2” minimum)
16. Revision month/year and description of revision shown for control sheet only (if applicable): most recent revision listed on top
17. Metadata/Notes included:
    1. The basis of bearing shall be “Grid North”
    2. Texas Coordinate System, State Plane Zone. (specify zone used)
    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 survey (last month/day/year of survey field work)
    8. Indicate how the horizontal and vertical control was established
    9. Indicate which TxDOT RRP Station used. If static was done indicate which three TxDOT RRP Stations used.
18. Check old redlines for correction (if applicable)

## Primary Control Data Sheet Requirements

*Note: Secondary Control data sheets may be added at the State Project Manager or District Survey Coordinator’s discretion. The secondary control data sheets shall follow the same criteria as the primary.*

1. Title block (lower right corner) (See Section B 14)
2. Control Monument Sketch:
3. Maximum of nine sketches per sheet
4. Show Reference Ties (minimum of three per sketch) &  label objects being tied
5. North arrow pointing North
6. Scale used or N.T.S.
7. Name of adjacent road(s)
8. Monument described for size, material and stamp. Be specific.
9. Monument name shown next to monument symbol
10. Use “▲” for primary control points
11. N and E coordinates (with commas and two decimal places)
12. Elevation shown to 0.01 foot
13. Ties shown to nearest foot
14. Location Description (along bottom edge of cell) – Brief text describing the general location of the control point in relation to major intersections, and which side of the road the control point can be found.
15. Baseline shown and labeled with stationing, PC’s and PT’s along baseline
16. All coordinates have commas and two decimal places.
17. Any labeled latitudes and longitudes are in DMS with four decimal places. (eg. 01°02’03.1234”)
18. Metadata/Notes: (in upper right margin)
19. The basis of bearing shall be “Grid North”.
20. Texas Coordinate System, State Plane Zone (specify zone used)
21. North American Datum of 1983 (NAD 83), 2011 Adjustment, 2010.0 Epoch
22. North American Vertical Datum 88 (NAVD 88) GEOID\_\_\_\_\_\_ (eg. GEOID18) (if applicable)
23. Indicate surface or grid coordinates and the agreed upon surface adjustment factor for the project (Surface Coord = Grid Coord x S.A.F. of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)
24. Unit of Measure (US Survey Feet)
25. Date of survey (last month/day/year of survey field work)
26. Indicate how the horizontal and vertical control was established
27. Indicate which TxDOT RRP Station used. If static was done indicate which three TxDOT RRP Stations used.
28. Legend under Basis of bearing and coordinates information. Legend should include line style, control monuments, signs etc.
29. Signature and seal of Registered Professional Land Surveyor with date (above Revision area)
30. Printed surveyors name and RPLS number under seal
31. Revision area above title block is clear of text and graphics (2”x2” minimum)
32. Revision month/year and description of revision shown for control sheet only (if applicable): most recent revision listed on top
33. No ownership information shown on Horizontal and Vertical Control Data Sheet
34. Check old redlines for correction (if applicable)
35. Secondary Control and Inverse Data Sheet Requirements

*Note: The Secondary Control and Inverse data may be placed on the Control Index sheet at the State Project Manager or District Survey Coordinator’s discretion.*

1. Title block (lower right corner) (see section B 14)
2. Basis of bearings and coordinates: (in upper right margin)
3. Texas Coordinate System, State Plane Zone (specify zone used)
4. North American Datum of 1983 (NAD 83), 2011 Adjustment Epoch 2010.00
5. North American Vertical Datum 88 (NAVD 88) GEOID\_\_\_\_\_\_ (eg. GEOID18) (if applicable)
6. US Survey Feet
7. Indicate surface to grid combined adjustment factor
8. Indicate how the horizontal and vertical control was established
9. Indicate which TxDOT RRP Station used. If static was done indicate which three TxDOT RRP Stations used.
10. Date of Survey
11. Secondary Control point and or Panel Point Table include:
12. Point Number
13. Northing
14. Easting
15. Elevation
16. Descriptions of Monument
17. Survey Control Inverse Table include: (only intervisible monuments)
18. From Point Number
19. To Point Number
20. Bearing (eg. N 01° 02’ 03” E)
21. Distance (eg. 123.45’)
22. Elevation Difference (eg. 123.45’)
23. Signature and seal of Registered Professional Land Surveyor with date (above Revision area)
24. Printed surveyors name and RPLS number under seal
25. Revision area above title block is clear of text and graphics (2”x2” minimum)
26. Revision month/year and description of revision shown for control sheet only (if applicable): most recent revision listed on top.

## Deliverables

1. General
2. Control Index Sheet
3. Primary Control Data Sheet
4. Secondary Control and or Panel Point Table Sheet
5. Most recent Form [ROW-S-2462](https://www.txdot.gov/txdoteforms/GetForm?formName=/S2462.pdf&appID=/ROW1&status=/reportError.jsp&configFile=WFServletConfig.xml) for each primary control monument
6. Field Data
7. Field Notes/Sketches/Level Loop
8. Photos
9. ASCII or Text file of all control monuments recovered; Surface and Grid (Point, Northing, Easting, Elevation, Code)
10. ASCII or Text file of all control monuments to be set; Surface and Grid (Point, Northing, Easting, Elevation, Code)
11. Office Data
12. TxDOT design software files (project, points database, chains, input & output files). see the Design Survey Checklist
13. RAW files (conventional), GPS observation files, photos, static, network adjustment, digital level loop or other measurement files

**Control Plan Sheet Checklist completed by:**

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

**Additional notes:**