

**TO ESTABLISH GEOMETRIC CONTROL FOR THE CONSTRUCTION OF THIS PROJECT, THE DEPARTMENT HAS PROVIDED THE FOLLOWING INFORMATION:**

- Format \*
- Horizontal Control Plan Sheet
  - Vertical Control Plan Sheet
  - Roadway Alignment Plan Sheet
  - Original Terrain Data \_\_\_\_\_
  - Other: \_\_\_\_\_

\* Specify the information format, i.e., plan sheet, computer disk, computer printout, or other. The information marked is either contained on the plans or is available from the Engineer.

**TYPE OF PROJECT**

- Landscaping
- Signalization
- Safety Improvement
- Asphalt Overlay
- Concrete Overlay
- Minor Widening
- Major Reconstruction
- New Roadway Construction
- Bridge Replacement
- Bridge Widening
- New Bridge
- Other: \_\_\_\_\_

**SURVEY WORK TO BE PERFORMED BY OTHERS:** \_\_\_\_\_

**WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 625:**

- Establish and Maintain Project Centerline or Engineer Approved Offset Line(s)
- Verification and Maintenance of Horizontal and Vertical Control
- Verify or Determine existing grades and alignments
- Verify or Determine existing topography
- GPS/RTS (Global Positioning System/Robotic Total Station) Construction Machine Control
- Clearing and Grubbing Limits (Section 201)
- Removal Limits (Section 202)
- Reset Items (Section 210)
- Excavation and Embankment (Section 203)

- Excavation**
- Unclassified
  - Stripping
  - Muck
  - Rock
  - Borrow
  - Other: \_\_\_\_\_
  - Potholing

- Embankment**
- Site Grading
  - Erosion Control (Perm)
  - Other: \_\_\_\_\_
  - As Staked Earthwork Quantities (See General Notes)

- Landscaping**
- Top Soil (Section 207)
  - Seeding (Section 212)
  - Mulching (Section 213)
  - Planting (Section 214)
  - Herbicide (Section 217)
  - Other: \_\_\_\_\_

- Erosion Control (Section 208)**
- Seeding (Temp)
  - Silt Fence
  - Erosion Bales
  - Erosion Logs
  - Riprap (Temp)
  - Other: \_\_\_\_\_

- Roadway Bases**
- Untreated Subgrade
  - Treated Subgrade
  - Aggregate Base Course (Section 304)
  - Reconditioning
  - PMBB - Plant Mix Bituminous Base
  - Other: Emb. Matl (CIP) (Special)

|            | Slope Staking (Y/N) | Grid (Y/N) | Grade (Y/N) | Special Interval |
|------------|---------------------|------------|-------------|------------------|
| Excavation | YES                 | NO         | YES         | 50 FT            |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |

|            | Slope Staking (Y/N) | Grid (Y/N) | Grade (Y/N) | Special Interval |
|------------|---------------------|------------|-------------|------------------|
| Embankment | YES                 | NO         | YES         | 50 FT            |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |
|            | -                   | -          | -           | -                |

|               | Grid (Y/N) | Grade (Y/N) | Special Interval | Special Offset |
|---------------|------------|-------------|------------------|----------------|
| Roadway Bases | -          | -           | -                | -              |
|               | NO         | YES         | 50 FT            | -              |
|               | -          | -           | -                | -              |
|               | NO         | YES         | 50 FT            | -              |

- Pavements**
- HMA - Hot Mix Asphalt (Section 403)
  - Concrete (Section 412)
  - Heating & Scarifying Treatment
  - Prime Coat, Tack Coat & Rejuvenating Agent (Section 407)
  - Seal Coat or Chip Seal (Section 409)
  - Other: \_\_\_\_\_

|           | Grid (Y/N) | Special Interval | Special Offset |
|-----------|------------|------------------|----------------|
| Pavements | -          | -                | -              |
|           | -          | -                | -              |
|           | -          | -                | -              |
|           | -          | -                | -              |
|           | -          | -                | -              |

- Roadway Elements**
- Curb and Gutter (Section 609)
  - Drop inlets - alignment and grades (Section 604)
  - Retaining Walls
  - Guard Rail (Section 606)
  - Sidewalk (Section 608)
  - Overlay Stationing
  - Other: \_\_\_\_\_

|               | Tangent Interval | Curve Interval | Special Offset |
|---------------|------------------|----------------|----------------|
| Curb & Gutter | -                | -              | -              |
|               | -                | -              | -              |

- Riprap (Perm) (Section 506)
- Slope and Ditch Paving (Section 507)

- Minor Structures**
- Structure Excavation limits (Section 206)
  - Culverts (Section 603)
  - Culverts w/ Headwalls and Wingwalls (Section 601)
  - Concrete Box Culverts w/ Headwalls and Wingwalls
  - Pipes (Section 603)
    - Sanitary Sewer
    - Storm Sewer
    - Water
    - Irrigation
    - Miscellaneous
  - Manholes (Section 604)
  - Inlets (Section 604)
  - Other: \_\_\_\_\_

|            | Left Interval | Center Interval | Right Interval |
|------------|---------------|-----------------|----------------|
| Stationing | -             | -               | -              |
|            | -             | -               | -              |

- Major Structures - Overhead Signs (Section 614), Concrete Box Culverts, Bridges - and all other structures assigned a structure number**

- Structure Excavation limits (Section 206)
- Concrete Box Culverts (Section 603) w/ Headwalls and Wingwalls (Section 601)
- Piling locations and cut off elevations (Section 502)
- Caisson locations and elevations (Section 503)
- Footing locations, alignment, and elevations
- Abutment/Pier locations, alignment, and elevations
- Wingwall skew angles/offsets
- Structural concrete form locations
- Substructure As-constructed survey required for Bridges (Subsection 601 .12) and Overhead signs (S-614-50)
- Bridge expansion joint(s) alignment and grade (longitudinal and transverse)
- Deck grades at Girder 10th or "n" th point locations and elevations
- Slope and Ditch Paving (Section 507)
- Other: \_\_\_\_\_

- Fencing (Section 607)**
- Temporary
  - Permanent
  - Sound Barrier
  - Other: \_\_\_\_\_

- Delineators (Section 612)**
- Temporary
  - Permanent

- Lighting (Section 613) and Traffic Control Devices (Permanent) (Section 614)**
- Signal pole locations and elevations
  - Light pole locations and elevations
  - Sign locations
  - Field verify sign post locations, elevations, and lengths before fabrication.
  - Other: \_\_\_\_\_

- Pavement Marking (Section 627)
  - Stripping (Temp)
  - Stripping (Perm)
  - Symbols
  - Other: \_\_\_\_\_
- Temporary Lighting and Construction Traffic Control Devices (Section 630)
  - Signal pole locations and elevations (Temp)
  - Light pole locations and elevations (Temp)
  - Sign Locations (Temp)
  - Other: \_\_\_\_\_
- All Easements (Temp Staking by P.L.S. Only)
- Right of Way (Temp Staking by P.L.S. Only)

**WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER SECTION 629:**

- Monumentation (Section 629)
  - Control
  - Right of Way
  - Land corners, Aliquot corners
  - Easements
  - Reference the specified existing monuments: \*\* See Survey Control Diagram
  - Replace the specified existing monuments: \*\* 21, 22, 54, 78
  - Locate monuments. It is estimated 4 hours are required.

NOTE: All 629 items shall include adequate research, calculations, and evaluations of evidence for monuments to be set.

\*\* A Tabulation of Survey Monuments may be provided on the plans.

**GENERAL NOTES:**

- Unless indicated otherwise on this Survey Tabulation Sheet, all survey work and staking intervals shall be done in accordance with the latest edition of the CDDT Survey Manual.
- Adequate information for establishing lines, grades, and locations for all work items have been specified on the plans. Any additional information required to stake the item or element shall be generated by the Contractor's surveyor.
- The Contractor's surveyor shall provide an estimate of the man-hours necessary to complete the work items indicated on this sheet. A copy of this sheet, with the estimated man-hours written on the blank line to the left of the specified items, shall be submitted with the Survey Schedule to the Engineer 3 days prior to the Presurvey Conference - Construction Survey.
- Stakes and Monuments which are damaged or destroyed by the progress of construction shall be replaced by the Contractor at no additional cost to the Department.
- The Contractor shall furnish an As Staked (or GPS/RTS Construction Machine Control) Earthwork Quantity report to the Engineer prior to completion of twenty percent (20%) of the planned earthwork in any phase as per the CDDT Survey Manual. A printed copy of the As Staked (or GPS/RTS Construction Machine Control) Earthwork data report and a computer disk with that information on it, in the specified format shall be submitted to the Engineer. The Contractor shall field verify original ground cross sections at a maximum 500 feet intervals.
- Prior to beginning work on any subsequent operation, such as placing base course or paving, the Contractor shall certify in writing to the Engineer that the final grade is within specified tolerance.
- The Contractor's surveyor shall perform all field surveying and calculations necessary to tie plan grades into field grades.
- The Contractor shall coordinate construction staking on the project with any utility work.
- Fieldbooks shall contain daily records of points set and or measurements observed. The information recorded shall contain: date, crew members' names, point no., description, staking information, and sketches. If the survey information is collected electronically, information recorded shall be provided to the Project Engineer in a hard copy format that is intuitive, clear and related to the supplemental information recorded in the field books. All linear surveys, such as slope stakes and blue tops, shall have the station and offset information related to the measured information. Non-linear surveys such as structures staking shall have sketches relating electronic information, such as point numbers, to the sketch.
- The Contractor's surveyor shall submit the following fieldbooks to the Engineer:
  - Horizontal Control (Primary & Secondary)
  - Vertical Control (i.e. Benchmarks)
  - Property Pin Ties
  - Horizontal Alignment
  - Grading
  - Slope Staking
  - Minor Structures
  - Major Structures
  - One fieldbook for each work category shown on this sheet
  - Other Fieldbook(s): \_\_\_\_\_

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 File Name: 14679\_TB-SV001.dgn  
 Horiz. Scale: 1:1      Vert. Scale: As Noted



| Sheet Revisions |          |       |  |
|-----------------|----------|-------|--|
| Date:           | Comments | Init. |  |
|                 |          |       |  |
|                 |          |       |  |
|                 |          |       |  |

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**Region 6**      **RLB**

| As Constructed | SURVEY TABULATION |                        |                       | Project No./Code |
|----------------|-------------------|------------------------|-----------------------|------------------|
| No Revisions:  |                   |                        |                       | ES6 0852-103     |
| Revised:       | Designer: JJW     | Structure Numbers      |                       | 17679            |
| Void:          | Detailer: JJW     | Sheet Subset: SURV TAB | Subset Sheets: 1 of 1 | Sheet Number 27  |