GENERAL NOTES


2. All references to the "department" or "engineer" in the local standard specifications shall be construed to mean the owner or his agent as appropriate.

3. Where section, subsection, subdivision, or property monuments are encountered, the engineer shall notify the owner before such monuments are removed. The contractor shall protect and preserve all property markers until an owner or authorized surveyor has witnessed to the owner's satisfaction.

4. The contractor shall field verify all dimensions and existing conditions prior to construction and notify the engineer of any discrepancy immediately.

5. The contractor shall be responsible for repairs to all utility lines and existing improvements to remain as damaged as a result of the work.

6. All sections, details, and notes shown on the plans are intended to be typical and shall apply to similar situations, unless otherwise shown.

7. All elevations, stations, and offsets shown on the plans shall be field verified by the contractor prior to construction.

8. All existing utilities shall be fully exposed by the owner's authorized agent.

9. The contractor shall be responsible for obtaining all necessary permits.

10. Exposed materials, if not used for other on-site purposes, shall be removed and disposed of as required.

11. The work area shall be positively drained during construction. Final grades shall be protected against damage from erosion, sedimentation, and traffic.

12. Application limits

13. The contractor shall use any on-site material deemed suitable by the engineer before any new fill is brought to the site.

14. The contractor shall be responsible for locating all existing underground utilities prior to excavation.

15. The contractor bidding this project shall visit the site before bidding.

16. Engineers field office

The following sentence is to be placed in all submittals:

"All of the telephone lines provided shall have unpublished numbers.

DISTRICT 4 GENERAL NOTES

D1000 COMMITMENTS

1. Commitments are to be scanned, with the original approval of all parties to which the commitment is made.

2. Ties three (3) inches or greater in diameter at breast height will not be cleared through September 30.

3. Right-of-way assessments for mains will be completed as required as of March 1st.

D2000 ENVIRONMENTAL

Prior to the use of any proposed borrow areas, use areas, temporary access roads, or access roads, the contractor shall provide the required environmental resource request surveys according to section 3 of the standard specifications. These surveys are required in order for the department to conduct cultural and biological resource studies for the proposed site.

The required environmental resource documentation shall include the following:

- Side sheet with cultural and natural resources review of borrow areas
- Side sheet with cultural and natural resources review of use areas

- A location map showing the site limits and impact of the use area
- A color photography depicting the use area
- A location map showing the site limits

- Borrow area and borrow area

Due to any waste material being removed from the construction site the required environmental resource surveys shall be performed and executed. The contractor shall remove any waste material and provide the required environmental resource documentation as required in Section 30 of the standard specifications.

Please note that a minimum of four weeks shall be allowed for the district to obtain the required waste material and environmental surveys and six weeks for the required borrow site environmental clearance.

D5000 TRANSITION PRIMARY METHOD- EARTHWORK CONSTRUCTION

Ten feet (0 ft) in the transitions shall be used to match proposed items of work.

Provide sheets

Such locations may vary from the stations shown on the plans in accordance with directions from the engineer at the time of construction. Such changes may be adjusted in the field to avoid any possible utilities.

UTILITY NOTE

The locations of those buried and abandoned utilities shown are approximate, and are used by contractors and subcontractors to an accurate and complete representation of utilities that may or may not exist on the construction site. The responsibility of the contractor is to locate and verify the existence and location of all utilities. The contractor shall be responsible for the safe excavation of any utilities that are encountered during the course of construction.
<table>
<thead>
<tr>
<th>CODE NO.</th>
<th>ITEM</th>
<th>UNIT</th>
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X = SPECIALTY ITEMS
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**X SPECIALTY ITEMS**
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### Articulated Block Remove Mat Schedule

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### Articulated Block Revetment Mat Schedule

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### Topsoil, Seeding, and Riprap Schedule

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### Earthwork Balance

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<th>CU Yd</th>
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### Earth Excavation

<table>
<thead>
<tr>
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<th>CU Yd</th>
<th>CU Yd</th>
<th>CU Yd</th>
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<td>2,922 -1,841 1,841</td>
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### Temporary Ditch Checks

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### Riprap Schedule

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### DRAINAGE STRUCTURE SCHEDULE

**LOCATION:** STONE RIPRAP, CLASS A3  
**RIPRAPH:** 60100945 Z0064540  
**END SECTIONS:**  
- BRIMFIELD-JUBILEE ROAD

### PIPE STRUCTURE SCHEDULE

<table>
<thead>
<tr>
<th>LOCATION</th>
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<th>DRAINS</th>
<th>SEEPAGE COLLAR</th>
<th>PIPE GLOBE</th>
<th>SLOPE %</th>
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<th>EACH</th>
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<tbody>
<tr>
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<td>P2</td>
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<td>15</td>
<td>583.57</td>
<td>33.3%</td>
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<tr>
<td>P3</td>
<td>S5</td>
<td>573.83</td>
<td>10</td>
<td>573.83</td>
<td>1.0%</td>
<td>10</td>
<td>1</td>
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<tr>
<td>P4</td>
<td>S6</td>
<td>573.16</td>
<td>10</td>
<td>573.16</td>
<td>1.0%</td>
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<td>1</td>
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<tr>
<td><strong>TOTAL</strong></td>
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### PIPE INLET BOX AND PIPE DETAIL

**LOCATION:** BRIMFIELD-JUBILEE ROAD  
**OFFSET:** 12"  
**SOCKET:** 12"  
**EXTINGUISHING GROUNDS:**  
**FILTER FABRIC:**  
**END SECTIONS:**  
- BRIMFIELD-JUBILEE ROAD

### PIPE ELBOW, DRAIN FROM STRUCTURE TO STRUCTURE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>PIPE NUMBER</th>
<th>DRAINS</th>
<th>SEEPAGE COLLAR</th>
<th>PIPE GLOBE</th>
<th>SLOPE %</th>
<th>FOOT</th>
<th>EACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>S1</td>
<td>583.57</td>
<td>15</td>
<td>583.57</td>
<td>33.3%</td>
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<tr>
<td>P2</td>
<td>S2</td>
<td>583.57</td>
<td>15</td>
<td>583.57</td>
<td>33.3%</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>P3</td>
<td>S5</td>
<td>573.83</td>
<td>10</td>
<td>573.83</td>
<td>1.0%</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>P4</td>
<td>S6</td>
<td>573.16</td>
<td>10</td>
<td>573.16</td>
<td>1.0%</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
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</tbody>
</table>

### SEEPAGE COLLAR

- BRIMFIELD-JUBILEE ROAD

### END SECTIONS

- BRIMFIELD-JUBILEE ROAD

### INLET BOX AND PIPE DETAIL

- BRIMFIELD-JUBILEE ROAD

### PIPE ELBOW, DRAIN FROM STRUCTURE TO STRUCTURE

- BRIMFIELD-JUBILEE ROAD

### SEEPAGE COLLAR

- BRIMFIELD-JUBILEE ROAD

### END SECTIONS

- BRIMFIELD-JUBILEE ROAD

### INLET BOX AND PIPE DETAIL

- BRIMFIELD-JUBILEE ROAD
### GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts 9/16 in. or holes 9/16 in. unless otherwise noted.

Calculated weight of Structural Steel, AASHTO M 270 Grade 50W = 39,000 lbs.

All structural steel shall be AASHTO M 270 Grade 50W, unless otherwise noted.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

### INDEX OF SHEETS

1. General Plan
2. General Data
3. Top of Deck Elevations (Sheet 1 of 2)
4. Top of Deck Elevations (Sheet 2 of 2)
5. Top of West Approach Slab Elevations
6. Top of East Approach Slab Elevations
7. Superstructure Plan and Deck Cross Section
8. Superstructure Details
9. Drainage Suburbs, D5-11
10. Integral Abutment and Snapframe Details
11. Bridge Approach Slab Details (Sheet 1 of 2)
12. Bridge Approach Slab Details (Sheet 2 of 2)
13. Structural Steel Framing Plan
14. Structural Steel Details & Fixed Bearing Details
15. West Abutment
16. East Abutment
17. 'L' Type Retaining Wall Wing Extension
18. HP Pile Details
19. Boring Logs

### TOTAL BILL OF MATERIAL

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>SUP.</th>
<th>SUB.</th>
<th>TOTAL</th>
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<td>Filter Fabric</td>
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<td>577</td>
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</tr>
<tr>
<td>Removal of Existing Structures</td>
<td>Each</td>
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<td>-</td>
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</tr>
<tr>
<td>Drainage Scuppers</td>
<td>Cu. Yd.</td>
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<td>192</td>
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<td>Concrete Structures</td>
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<tr>
<td>Reinforcement AASHTO M 270</td>
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<tr>
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<td>197</td>
<td>404</td>
</tr>
<tr>
<td>Concrete Superstructure</td>
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<td>808</td>
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<tr>
<td>Excavation and Filling Structural Steel</td>
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<tr>
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<td>492</td>
<td>984</td>
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<td>Filling Pads</td>
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<td>Reinforce Steel, Upgrades</td>
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<td>6</td>
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<tr>
<td>Name Plates</td>
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<td>-</td>
<td>1</td>
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<tr>
<td>Pre-Cast Blocks</td>
<td>Each</td>
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<td>25</td>
<td>50</td>
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<tr>
<td>Geosynthetic Wall Drain</td>
<td>Cu. Yd.</td>
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<tr>
<td>Reinforcement for Structures</td>
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<tr>
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<td>4</td>
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<tr>
<td>Pipe Underdrains for Structures</td>
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<td>192</td>
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</table>

### LETTERING FOR NAME PLATE

Locate Name Plate at Southwest Corner of Bridge (See Std. 515001).

All drainage system components shall extend to 2'-0'' from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls (See Article 601.05 of the Standard Specifications and Highway Standard 601101).
DEAD LOAD DEFLECTION DIAGRAM

(includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheet 4 of 18.

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheet 4 of 18, minus 8" slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

DIAGRAMMATIC PLAN
### Girder 1

<table>
<thead>
<tr>
<th>Location</th>
<th>Station</th>
<th>Offset</th>
<th>Theoretical Grade Elevations Adjusted For Dead Load Deflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bk. W. Abut.</td>
<td>13+97.67</td>
<td>-13.50</td>
<td>587.43</td>
</tr>
<tr>
<td>E Girder Abut.</td>
<td>13+99.34</td>
<td>-13.50</td>
<td>587.41</td>
</tr>
<tr>
<td>Girder 2 Abut.</td>
<td>13+99.34</td>
<td>-13.50</td>
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### Girder 2

<table>
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</tr>
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<td>587.57</td>
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<tr>
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<td>13+99.34</td>
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<td>587.54</td>
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<tr>
<td>Girder 2 Abut.</td>
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<td>587.54</td>
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### Girder 3

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### Girder 4

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<tbody>
<tr>
<td>Bk. W. Abut.</td>
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<td>6.75</td>
<td>587.54</td>
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<tr>
<td>Girder 2 Abut.</td>
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### Girder 5

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<tr>
<td>Bk. W. Abut.</td>
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<td>E Girder Abut.</td>
<td>13+99.34</td>
<td>13.50</td>
<td>587.41</td>
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</table>

---

**NOTES:**

- Offsets are to Jubilee Road.
- Negative (-) offsets are offset to the left of the § while looking up station.
NOTES:
- Offsets are to the Jubilee Road.
- Negative (-) offsets are offset to the left of the edge while looking upstation.
### Top of East Approach Slab Elevations

#### North Edge of Shoulder

<table>
<thead>
<tr>
<th>Location</th>
<th>Station</th>
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<tr>
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<tr>
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<tr>
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#### North Edge of Pavement

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<tr>
<td>B</td>
<td>15+44.00</td>
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<td>586.41</td>
</tr>
<tr>
<td>Free End of E. Appr.</td>
<td>15+54.00</td>
<td>-11.00</td>
<td>586.40</td>
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</table>

#### South Edge of Pavement

<table>
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<th>Station</th>
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</thead>
<tbody>
<tr>
<td>Abut. End of E. Appr.</td>
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<td>11.00</td>
<td>586.48</td>
</tr>
<tr>
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<td>15+44.00</td>
<td>11.00</td>
<td>586.41</td>
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<tr>
<td>Free End of E. Appr.</td>
<td>15+54.00</td>
<td>11.00</td>
<td>586.40</td>
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#### South Edge of Shoulder

<table>
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<th>Theoretical Grade Elevations</th>
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<td>15+44.00</td>
<td>15.00</td>
<td>586.33</td>
</tr>
<tr>
<td>Free End of E. Appr.</td>
<td>15+54.00</td>
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</tr>
</tbody>
</table>
**SUPERSTRUCTURE PLAN AND DECK CROSS SECTION**

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**STRUCTURE NO. 072-3160**

**MINIMUM BAR LAP**

- #5 bars = 3'-6"

**PLAN**

- 3P-10' Out to Out Deck

**MINIMUM BAR LAP**

- #5 bars = 3'-6"

**CROSS SECTION**

- Looking East

**Notes:**
- See Sheet 8 of 18 for superstructure details and Bill of Materials.
- Bars indicated thus 30 x 6-#5 etc. indicates 30 lines of bars with 6 lengths per line.
- See Sheet 8 of 18 for parapet reinforcement.
- See Sheet 8 of 18 for additional reinforcement around Drainage Scupper.
Drill and tap scupper for 4 1/2" stainless steel hexagon head bolts with lock washers.

Drill and tap 5/8"-13x1/2" DP, for 1/2" Anchor Studs 4 locations.

VANE GRATE DETAIL

BOLT HOLE DETAIL

ANCHOR STUD DETAIL

SECTION A-A

See sheet 8 of 18 for scupper location relative to parapet.

SECTION B-B

Notes:
- All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
- Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
- Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam. As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.30(k) of the Standard Specifications. Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Pipe or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M 211.
- The Contractor shall take appropriate measures to assure that protective coat is not applied to the scupper. Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

The Contractor shall take appropriate measures to assure that protective coat is not applied to the scupper. Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.
DIAPHRAGM AT ABUTMENT

SECTION B-B

PLAN AT ABUTMENT

SECTION A-A

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 18.
Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 18.
For details of bars s (E), s1 (E) and v (E) see sheet 8 of 18.
The approach slab seat shall have a constant slope determined from the control points shown.
For bearing details see sheet 14 of 18.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 18.
For details of bars s (E), s1 (E) and v (E) see sheet 8 of 18.
The approach slab seat shall have a constant slope determined from the control points shown.
For bearing details see sheet 14 of 18.
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For bearing details see sheet 14 of 18.
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Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

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For bearing details see sheet 14 of 18.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 18.
For details of bars s (E), s1 (E) and v (E) see sheet 8 of 18.
The approach slab seat shall have a constant slope determined from the control points shown.
For bearing details see sheet 14 of 18.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

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For details of bars s (E), s1 (E) and v (E) see sheet 8 of 18.
The approach slab seat shall have a constant slope determined from the control points shown.
For bearing details see sheet 14 of 18.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

<table>
<thead>
<tr>
<th></th>
<th>Approach</th>
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<tr>
<td>F</td>
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<td>586.97</td>
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</table>

NOTES:
- See sheet 12 of 18 for Section C-C.
- Top and bottom of Approach Footing. See Sec A-A.
- P. H/F per Article 1053.89.

PLAN

CROSS SECTION

N/A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
BRIOD APPROACH SLAB DETAILS
STRUCTURE NO. 072-3160

(Checked) Drawn

7/28/2020
DEPARTMENT OF TRANSPORTATION
STATE OF ILLINOIS
2020
Copyright Hanson Professional Services Inc.
**Inside Elevation of Parapet and Curb**

- 23 #5 bars at 8" cts.
- Bend last 3 bars to fit taper
- 10-#4 bars. See cross section near abutment

**SECTION A-A**

- 2'-0" Formed joint with bridge
- Force joint closer. Pilot width
- *- 10 mil. Polyethylene bond
- *- 10 mil. Polyethylene bond
- See Detail A

**Detail A**

- * Expansion Joint. See Special Provision "Preformed Expan-
  sion Joint. See Special Provision "Preformed" Joint. See Special Provision "Preformed"
- Pavement Joint Seal. See Notes.
- Run out to out of curb

**VIEW B-B**

**Notes:**

The joint opening shall be adjusted for temperature per Article 520.04 of the
Standard Specifications. However, since this detail is for jointless structures, the
length of bridge used to calculate the adjustment shall be equal to half the total
bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure (Qmax) = 20 ksf.

Cost of excavation for approach footing included with Concrete Structures.

For Granite Backfill for Structures and drainage treatment details, see sheet 3 of 18.
For v(E) bar details, see sheet 8 of 18.
Notes:
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
**Interior Cross Frame CF-1**

**Notes:**
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection nuts and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
- Structural steel for the cross frames shall be: AASHTO M270, Grade 50W - PL Testing Requirement, Zone 2.
- Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection nuts and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
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- Structural steel for the cross frames shall be: AASHTO M270, Grade 50W - PL Testing Requirement, Zone 2.
NOTE:
Pour steps monolithically with cap.

1. Test Piles: 1
   Est. Length: 45 ft.
   Factor Resistance Available: 388 kips
   Nominal Required Bearing: 705 kips
   Type: HP 14x89

2. Anchor Bolt Layout

3. Pile Data
   Type: HP 14x89
   Nominal Required Bearing: 105 kips
   Factored Resistance Available: 388 kips
   Est. Length: 45 ft.
   No. Production Piles: 4
   No. Test Piles: 1

FIELD CUTTING DIAGRAM
Order s3(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face.

SEC THRU ABUT

BILL OF MATERIAL

For details of piles see sheet 17 of 18.
BILL OF MATERIAL
4 WINGWALL EXTENSIONS

**ELEVATION**

**SECTION THRU WALL**

**PLAN**

**FIELD CUTTING DIAGRAM**

Order (NE) full length. Cut as shown and use remainder of bars in opposite face.

---

**BILL OF MATERIAL**

**4 WINGWALL EXTENSIONS**

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<tr>
<td>100</td>
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</tr>
</tbody>
</table>

*Concrete Nails (Flat Head C.S.)

*Cost included with Concrete Structures

---

**Joint Filler**

Premolded 1'' long at 12'' cts. vertical.

Concrete Nails (Flat Head C.S.)

*(See Field Cutting Diagram)*

---

**Concrete Bars**

7-#5 t2(E) bars

7-#5 t1(E) bars

7-#5 h3(E) bars at ±12'' cts. (Top)

7-#5 h3(E) bars at ±12'' cts. (Bottom)

Concrete Bars (Flat end, C.S.)

1'' long at TP, cts. vertical.

*W Preslagged Joint Filler

---

**Reinforcement Bars**

Pound 1250

---

**Department of Transportation**

L' Type Retaining Wall Wing Extension

Structure No. 072-3160

State of Illinois

Copyright Hanson Professional Services Inc.

---

**User Name**

ander00846

**Plot Scale**

0:2.0000 " : 1 in.

**Plot Date**

7/28/2020
### Steel Pile Table

<table>
<thead>
<tr>
<th>Designation</th>
<th>Depth d</th>
<th>Flange width b'</th>
<th>Flange thickness t'</th>
<th>Web and Flange thickness s'</th>
<th>Elevation diameter A</th>
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<td>24°</td>
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<td>3/8&quot;</td>
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<td>18°</td>
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</table>

### WELDED COMMERCIAL SPLICE

- **ELEVATION**
  - H-Pile
  - Commercial splicer
  - Backup plate
  - Pile shoe

- **ISOMETRIC VIEW**
  - H-Pile
  - Commercial splicer
  - Pile shoe

- **DETAIL A**
  - Typ. along splicer
  - Typ. along four edges of flange

- **ISOMETRIC VIEW**
  - Commercial splicer
  - Typ. along splicer

- **DETAIL D**
  - Splice plate
  - + Typ. along four edges of flange &

### WELDED COMMERCIAL SPLICE ALTERNATE

- Interrupt welds 3/4' from end of web and/or each flange.
- Remove portions of backup plates that extend outside the flanges.
- Weld size per pile shoe manufacturer (Ref. Note).

### INDIVIDUAL PILE CONCRETE ENCASEMENT

(Frames for encasement may be omitted when soil conditions permit.)

### WELDED PLATE FIELD SPLICE

- H-Pile
  - Splice plate
  - + Typ. along four edges of flange &

---

**Note:** The steel H-piles shall be according to AASHTO M270 Grade 50.
<table>
<thead>
<tr>
<th>Sheet No.</th>
<th>Station</th>
<th>Depth</th>
<th>Offset</th>
<th>Elevation</th>
<th>Comment</th>
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</tbody>
</table>

**Boring Log Details**

- Station: [Station Values]
- Depth: [Depth Values]
- Offset: [Offset Values]
- Elevation: [Elevation Values]
- Comment: [Comment Values]

**Additional Information**

- **Project:** Ramirez Structural Engineering
- **Location:** Peoria, IL
- **Date:** 7/28/2020
- **Author:** [Author Information]
- **Scale:** 2.0000" / in.
- **Plot Date:** 7/28/2020

**Contact Information**

- **Hanson Professional Services Inc.**
- **Phone:** [Contact Phone]
- **Email:** [Contact Email]
SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL

STEP DEPTH
3 FT. TO 5 FT.

PROPOSED EMBANKMENT

LIMIT FOR EMBANKMENT

EXISTING GROUNDLINE

STEP WIDTH
(SEE NOTE 2)

PROPOSED SIDEHILL TREATMENT
(ARTICLE 205.03)

GENERAL NOTES:

1. Slope Steps will be required for all (2,000) minimum thickness "silver fills" and on all fills with a height of 10 feet or greater.

2. The Step width shall be twice the Step depth but not less than 6 feet.

3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT

IN ACCORDANCE WITH

205 OF THE STANDARD SPECIFICATION.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CASS STD. 20000-04
SLOPE STEPS DETAIL

All dimensions are in inches (millimeters) unless otherwise noted.
CASE 1: WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
TAPER RATES

<table>
<thead>
<tr>
<th>SPECIAL NOTE NUMBER</th>
<th>ELEMENT</th>
<th>MAINLINE INTERSTATES &amp; 4-LANE EXPRESSWAYS</th>
<th>ALL OTHERS</th>
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<tr>
<td>1</td>
<td>BUTT JOINT</td>
<td>1:180</td>
<td>1:240</td>
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<tr>
<td>2</td>
<td>TEMPORARY RAMP</td>
<td>1:80</td>
<td>1:40</td>
</tr>
</tbody>
</table>

Saw cut to the depth of the proposed surface course

Exist, overlay

Existing case

Removal limits

Binder course

Provision for the depth of the proposed surface course

Provision for the depth of the proposed surface course

Provision, overlay thickness

Provision, hot mix asphalt surf., removal (cold milling)

CASE 2: NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.

2. The pavement surface to be removed may be either bituminous or PC concrete, the work shall be performed in accordance with Article 406.04 and the Special Provisions for Butt Joints.

3. The saw cut joints shall be aligned just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

4. The length of butt joint is based on the taper rate. Any changes in cold milling depth within the butt joint pay limits, unless otherwise indicated, are paid for separately and written in the cost of the butt joints.

5. Temporary ramps are paid for separately and not included in the cost of the butt joints.

All dimensions are in inches (millimeters) unless otherwise noted.
CASE 3: HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

Saw cut to the depth of the proposed surface course

Exist, overlay

Temporary ramp taper
Note: see Table A, Special Note 2

Milled surface

Exist, overlay

Exist, pavt, or base case.

DETAIL TEMPORARY RAMP.
CASE 4: SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER
GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL
1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, furnishing, placing and shaping crushed aggregate around and behind Steel Post Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 123000 minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
   A. The crushed aggregate shall be CAI gradation in accordance with Article 1004.01(b) of the Standard Specifications.
   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

TYPICAL SECTION WITH COMBINATION CONCRETE CURB & GUTTER

TYPICAL SECTION WITHOUT EROSION CONTROL CURB

All dimensions are in inches (millimeters) unless otherwise noted.
DETAIL "A"

- Reinforcement bars may be cast in PCC apron and precast inlet box or drilled and anchored with an approved chemical adhesive at 2" spacing.
- Cost of curb and reinforcement are included in the cost of shoulder inlet.

SECTION B-B

TYPICAL SECTION AT INLETS
TYPE E, F, & G (HIGHWAY STANDARD 610001)

SECTION A-A

TYPICAL SECTION WITH BRIDGE APPROACH CURB