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<td>ARTERIAL ROAD INFO SIGN ITC-22D</td>
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<tr>
<td>40-42</td>
<td>CROSS SECTIONS - NORTH &amp; SOUTH APPROACHES</td>
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### HIGHWAY STANDARDS

- **000001-06**: STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- **280001-07**: TEMPORARY EROSION CONTROL SYSTEMS
- **404006**: PAVEMENT CONNECTOR (MAG) FOR BRIDGE APPROACH SLAB
- **510001-03**: NAME PLATE FOR BRIDGES
- **603001-02**: CONCRETE HEADWALL FOR PIPE UNDERGRAINS
- **602001-04**: MANHOLE TYPE A
- **606001-07**: CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- **701001-04**: OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- **703001-04**: LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- **703201-03**: LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
- **703301-06**: URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- **709001-07**: TRAFFIC CONTROL DEVICES
- **720001-02**: SIGN PANELS, EXTRUDED ALUMINUM TYPE
- **720003-01**: TELESCOPING STEEL SIGN SUPPORT
- **730000-01**: BASE FOR TELESCOPING STEEL SIGN SUPPORT

### GENERAL NOTES

- **BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0233 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. 148 HOUR NOTIFICATION IS REQUIRED.**

- **THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGE OF WHISTLE SPRINGS.**

- **THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.**

- **THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MAXIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.**

- **THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS. THIS PROJECT REQUIRES A U.S. ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. ALL CONDITIONS OF THE 404 PERMIT, FOUND IN THE SPECIAL PROVISIONS, MUST BE FOLLOWED. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN (INCLUDING WORK IN WETLANDS) TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNOLOGIES (INCLUDING WORK IN WETLANDS) CAN BE FOUND ON THE USACE WEBSITE. THE USACE DESIGNS AND DETERMINES IN-STREAM WORK WHICH INCLUDES WORK WITHIN WETLANDS. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN INCLUDING WORK WITHIN WETLANDS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BED PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.**

### COMMITMENT

**NO IN-STREAM WORK SHALL BE CONDUCTED FROM APRIL 1ST TO JUNE 15TH**
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<td>STONE RIPRAP, CLASS A5</td>
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<td>28200200</td>
<td>FILTER FABRIC</td>
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**CONSTRUCTION CODE 0048**

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<td>AGGREGATE BASE COURSE, TYPE C</td>
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**CONSTRUCTION CODE 0048**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SUMMARY OF QUANTITIES**

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<th>SHEETS</th>
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**CONSTRUCTION NO. S.N. 016-0539**

**CONSTRUCTION NO. 0028**

**CONSTRUCTION NO. S.N. 016-0539**
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<td>51202305</td>
<td>DRIVING PILES</td>
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<td>TEST PILE STEEL HP4X7S</td>
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<td>51704500</td>
<td>PILE SHOES</td>
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<td>NAME PLATES</td>
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<td>PREFORMED JOINT STRIP SEAL</td>
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<td>CONCRETE HEADWALLS FOR PIPE DRAINS</td>
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<td>60101810</td>
<td>PIPE UNDERDRAINS 4&quot; (SPECIAL)</td>
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<td>60260700</td>
<td>VALVE VAULTS TO BE ADJUSTED</td>
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<tr>
<td>60605000</td>
<td>COMBINATION CONCRETE CURB AND GUTTER, TYPE B, 12&quot;</td>
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<td>62000310</td>
<td>GUARDRAIL REMOVAL</td>
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<td>66500200</td>
<td>NON-SPECIAL WASTE DISPOSAL</td>
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<td>66900450</td>
<td>SPECIAL WASTE PLANS AND REPORTS</td>
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<td>66900550</td>
<td>SOIL DISPOSAL ANALYSIS</td>
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<td>67000400</td>
<td>ENGINEER'S FIELD OFFICE, TYPE A</td>
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<td>70800100</td>
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<td>80500132</td>
<td>DROP GATE</td>
<td>EACH</td>
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**SPECIALTY ITEMS**

- 50300255 CONCRETE SUPERSTRUCTURE
- 50300300 PROTECTIVE COAT
- 50301350 CONCRETE SUPERSTRUCTURE (APPROACH SLAB)
- 50800705 REINFORCEMENT BARS, EPOXY COATED
- 50900170 BICYCLE RAILING
- 51201800 FURNISHING STEEL PILES HP4X7S
- 51202305 DRIVING PILES
- 51203800 TEST PILE STEEL HP4X7S
- 51704500 PILE SHOES
- 51900700 NAME PLATES
- 52000110 PREFORMED JOINT STRIP SEAL
- 58700700 CONCRETE SEALER
- 59000200 EPOXY CRACK INJECTION
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<td>X586010</td>
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<td>X664000</td>
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<td>X664010</td>
<td>CHAIN LINK FENCE TO BE REMOVED AND RE-ERECTED</td>
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<td>X701016</td>
<td>TRAFFIC CONTROL AND PROTECTION (ESPECIAL)</td>
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<td>X720007</td>
<td>REMOVE AND REINSTALL SIGN PANEL</td>
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<td>Z000452</td>
<td>APPROACH SLAB REMOVAL</td>
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<td>Z001254</td>
<td>STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)</td>
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<td>TRAINERS, TRAINING PROGRAM GRADUATE</td>
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EXISTING ROADWAY - OLD WILLOW SPRINGS RD.
STA. 152+03.42 TO STA. 153+02.42
LOOKING NORTHWEST
REMOVAL OF EXISTING STRUCTURE
STA. 153+02.42 TO STA. 156+02.42

EXISTING ROADWAY - OLD WILLOW SPRINGS RD.
STA. 156+02.42 TO STA. 157+59.93
LOOKING NORTHWEST

LEGEND

- REMOVAL ITEMS

TRAFFIC FLOW - NOTE BRIDGE AND POSITION OF ROADWAY SOUTH OF FOREST PRESERVE ENTRANCE IS NOT USED FOR TRUCK VEHICLE TRAFFIC

1. EXISTING EMBANKMENT SLOPE
2. EXISTING HMA SHOULDER
3. EXISTING HMA PAVEMENT (12")
ON EXISTING APPROACH PAVEMENT(14")-SEE EXISTING CONDITION AND REMOVAL PLAN FOR DETAILS

TYPICAL SECTIONS FOR BRIDGE APPROACHES

- VARIES
- Varies
- VARIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ENGINEERING GROUP, LLC.
FAX: (708) 236-0900
PHONE: (708) 236-0901

4415 WEST HARRISON ST.
HILLSIDE, IL 60162
SUITE 231

REVISED - DESIGNED - DRAWN - CHECKED
DATE
PLOT SCALE
PLOT DATE
USER NAME = Ken.drabant

PLOT DATE = 12/7/2017
LEGEND

1. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8" by 8"
2. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10" by 10"
3. TOPSOIL FURNISH AND PLACE, 4"
4. FURNISHED EXCAVATION
5. SEEDING, CLASS 4A
6. AGGREGATE BASE COURSE, TYPE B - 4"
7. COMBINATION CURB AND GUTTER, TYPE B-6.24
8. AGGREGATE SHOULDERS, TYPE B 4"
9. PAINT PAVEMENT MARKING LINE, 4" SOLID BEIGE LINE ALONG CENTERLINE OF BIKE PATH FROM STA 156+75.42 TO STA 156+79.86

HMA MIXTURE TABLE

<table>
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<th>USE</th>
<th>PAY ITEM OR DESCRIPTION</th>
<th>MIXTURE TYPE</th>
<th>% AIR Voids @ N</th>
<th>QUALITY MANAGEMENT PROGRAM (QMP)</th>
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<td>HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8&quot; by 8&quot;</td>
<td>HOT-MIX ASPHALT SURFACE COURSE, Mx &quot;D&quot;, nd: 9.5 mm</td>
<td>4% @ 50 Gyrs.</td>
<td>DC/QA</td>
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<td>HOT-MIX ASPHALT BINDER COURSE, IL-19 mm, nd: 8&quot;</td>
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<td><strong>FOREST PRESERVE ENTRANCE</strong></td>
<td>HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10&quot; by 10&quot;</td>
<td>HOT-MIX ASPHALT SURFACE COURSE, Mx &quot;D&quot;, nd: 9.5 mm</td>
<td>4% @ 50 Gyrs.</td>
<td>DC/QA</td>
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<td>4% @ 50 Gyrs.</td>
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**NOTE:** USE DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA)

The unit weight used to calculate all HMA surface mix quantities is 112 lbs/ft³/34.3 kg/m³. The AC TYPE for polymerized HMA mixtures shall be "SBS/SBR PG 76-22" and for non-polymerized HMA the "AC TYPE" shall be "PG 64-22" unless modified by District One Special Provisions.

For use of recycle materials see District One Special Provisions.

Quality Management Program (QMP) identifies the particular quality control specification that applies to the mixture.

- STA 152+03.42 TO STA 152+86.67
- STA 156+82.35 (30.58 LT) TO STA 157+59.93
- STA 156+75.42 (8.05 LT)

**PROPOSED BIKE PATH - OLD WILLOW SPRINGS RD.**

- STA 152+45.42 TO STA 152+86.67
- PAVEMENT CONNECTOR FOR BRIDGE APPROACH SLAB
- STA 154+45.42 TO STA 154+86.67

**PROPOSED FOREST PRESERVE ENTRANCE - OLD WILLOW SPRINGS RD.**

- STA 156+48.05 (30.58 LT) TO STA 157+49.93

**FOR WIDTH AND CROSS SLOPE SEE FOREST PRESERVE ENTRANCE PLAN ELEVATIONS**
### Schedule of Quantities

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<td>156+27.42</td>
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<td>157+57.84</td>
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### Earthwork Schedule

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<td>SOUTH OF SOUTH ABUTMENT</td>
<td>219</td>
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</table>

### Sign Panel

- Remove and reinstall sign panel.
- Existing posts. Cost of new posts shall be included in the pay item 'remove and reinstall'.
- Timber posts shall be replaced in kind unless the Resident Engineer approves use of the timber posts as channel excavation.
- Excavation in the river (area between existing south and existing north abutment shall be paid for south of south abutment north of back face of existing north abutment in river*).

### Other Notes

- No motor vehicles.
- Steel channel.
- Arrow.
- Trail marker.
- FPD-Centennial Trail.
- FPD-Trail Map.
- FPD-Dogs must be leashed.
- Steel channel.
- Timber posts.
- Bike route.
ALIGNMENT PLAN

STA. 151+454.09 TO STA. 163+00.20

CONTROL POINT #1
STA. 153+07.85
OFFSET 4.20' LT
N (1,846,610.219)
E (1,107,301.698)
ELEV. 600.746
DESCRIPTION: MAGNETIC NAIL
CENTER OF CONCRETE BOLLARD OVER DES PLAINES RIVER

CONTROL POINT #4
STA. 157+55.80
OFFSET 3.30' LT
N (1,846,741.597)
E (1,107,240.208)
ELEV. 598.732
DESCRIPTION: CROSS ON SOUTH SIDE OF RIM OF UTILITY STRUCTURE
NORTH-WEST CORNER OF RETAINING WALL

CONTROL POINT #5
STA. 161+47.65
OFFSET 3.35' LT
N (1,846,862.230)
E (1,107,018.340)
ELEV. 596.812
DESCRIPTION: CUT CROSS ON TOP OF CURB
NORTH-WEST CORNER OF RETAINING WALL

BENCHMARK USGS BM #31E STANDARD COUNTY BRONZE SECTION
27.65'

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ALIGNMENT AND TIE, BENCHMARKS

CONTROL #1
EXIST. ROW

CONTROL #4
EXIST. CB

CONTROL #5
CENTER OF ELECTRIC POLE
EXIST. CB
NOTES
1. EXISTING SURVEY CONTROL POINTS THAT FALL WITHIN THE LIMITS OF THE PAVEMENT REMOval SHALL BE RELOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION ACTIVITIES. SEE ALIGNMENT AND TIES PLAN FOR CONTROL POINT LOCATIONS.
2. CARE SHALL BE TAKEN WHEN EXCAVATING IN THE PROJECT AREA IN ORDER TO PROTECT THE EXISTING CABLE & COMMUNICATION UTILITY LINES. THE CONTRACTOR SHALL VERIFY THAT THE CABLE & COMMUNICATION CABLE EMBEDDED IN THE BRIDGE DECK HAS BEEN REMOVED PRIOR TO BRIDGE DEMOLITION.
3. EXISTING TRAIL LOCKS AND DROP GATES SHALL BE REMOVED, COST INCLUDED IN PAVEMENT REMOVAL.
4. EXIST TEMPORARY ROADWAY COVER STEEL COVER PLATES TO BE REMOVED, COST INCLUDED IN PAVEMENT REMOVAL.
5. REMOVE EXISTING SIGNAGE SUCH AS EXISTING SITE SIGNS THAT CONFLICT WITH CONSTRUCTION ACTIVITIES, SIGNS DAMAGE DURING REMOVAL, REINSTALLATION, HANDLING OR STORAGE SHALL BE REPLACE "IN-KIND" WITH NO ADDITIONAL COST TO THE STATE.
6. MAINTAIN ACCESS TO FOREST PRESERVE ENTRANCE DURING CONSTRUCTION. COST OF CONSTRUCTION ACTIVITIES, SIGNS DAMAGE DURING REMOVAL, REINSTALLATION, HANDLING OR STORAGE SHALL BE REPLACE "IN-KIND" WITH NO ADDITIONAL COST TO THE STATE.
7. FOR REMOVAL OF EXISTING APPROACH SLAB SEE SPECIAL PROVISION "APPROACH SLAB REMOVAL".
8. EXISTING U.S.A.C.E. SURVEY MARKER TO BE RELOCATED BY OTHERS.
9. CONTRACTOR SHALL PROVIDE A FENCE (WITH GATES FOR CONTRACTOR USE ONLY) TO FURTHER ENSURE THAT THE BRIDGE CANNOT BE ACCESSED BY PEDESTRIANS AND BICYCLIST.
10. EXCAVATION IN THE AREA DEFINED BY THE FRONT FACE OF SOUTH ABUTMENT AND WING WALLS AND PROCEEDING NORTH TO FRONT FACE OF THE EXISTING NORTH ABUTMENT AND WING WALLS SHALL BE EARTH EXCAVATION OR STRUCTURAL EXCAVATION, SEE SECTIONS ON SHEET 26 AND 31.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITION AND REMOVAL PLAN

STA. 152+03.42 TO STA 157+59.93

REMOVAL PLAN

STA. 152+03.42 TO STA 157+59.93

LIMITS OF REMOVAL OF EXISTING STRUCTURES
STA. 152+03.42 TO STA 157+59.93

LEGEND

- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- APPROACH SLAB REMOVAL
- SIGN REMOVAL
- TREES
- TEMP. FENCE TO PROTECT TREES
- TTP - TREE TRUNK PROTECTION
- WETLAND
- USE WHITE LETTERS ON OPEN BACKGROUND

COMMUNICATION LINES
- "I" COMED POWER LINE
- LIMITS OF CONSTRUCTION
- "J" SIGN
- "K" TYPE III BARRICADE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITION AND REMOVAL PLAN

STA. 152+03.42 TO STA 157+59.93

REMOVAL PLAN

STA. 152+03.42 TO STA 157+59.93

LIMITS OF REMOVAL OF EXISTING STRUCTURES
STA. 152+03.42 TO STA 157+59.93

LEGEND

- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- APPROACH SLAB REMOVAL
- SIGN REMOVAL
- TREES
- TEMP. FENCE TO PROTECT TREES
- TTP - TREE TRUNK PROTECTION
- WETLAND
- USE WHITE LETTERS ON OPEN BACKGROUND

COMMUNICATION LINES
- "I" COMED POWER LINE
- LIMITS OF CONSTRUCTION
- "J" SIGN
- "K" TYPE III BARRICADE
DROP GATE DETAIL

LEGEND
1. DOUBLE HINGED BOLLARD (DHB) POST
2. DROP GATE
3. ANCHOR BOLT PROVIDED 1-1/2" PROJECTION ABOVE THE CONCRETE PIER
4. CONCRETE FOUNDATIONysts 4" X 18" CONCRETE PIER TO 42" BELOW GRADE
5. ANCHOR BOLT
6. ERGONOMIC HOOP REBAR TIES
7. CONCRETE FOUNDATION
8. BOLLARD BASE
9. FLAT WASHER (TYP)
10. HEX NUT (TYP)
11. CARDBOARD FORM (OPTIONAL)
12. REBAR THRU THE FORM (OPTIONAL) INSTALL #3 HOOP REBAR TIES AT LOCATIONS SHOWN WITH 12" MIN LAP
13. INSTALL FOUR 15" DIA. #3 REBAR HOOP TIES AT LOCATIONS SHOWN WITH 12" MIN LAP

NOTES
1. FOR DETAILS NOT SHOWN SEE SPECIAL PROVISION
2. INSTALL PADLOCKS HERE WHEN DHB POSTS ARE IN DOWN POSITION.
3. DOUBLE LOCKING PIN AND PADLOCKS WILL BE STORED HERE
4. INSTALL MULTI-PURPOSE GREASE TO HINGE OF MULTI-PURPOSE GREASE PROVIDE BY CUSTOMER
5. APPLY A THIN COAT OF SALT PROOF CRETE EPOXY ADHESIVE TO CONCRETE PIER WHEN INSTALLING BOLTS
6. LEVELING BOLT DIA. 1/2" X 1 1/2" HEX HEAD 18-8 SS
7. THREE INCH CLEARANCE LABEL
8. SAFETY LABEL 3" X 12"
9. DIA. 3/4" HEX NUT-18-8 SS
10. DIA. 3/4" X 8" HEX HEAD HINGE BOLT-18-8 SS
11. DOUBLE LOCKING PIN SS316
12. SINGLE LOCKING PIN SS316
13. FOUR 15" DIA. #3 REBAR FOR SUPPORT (TYP)
14. FOUR #4 REBAR
15. CONCRETE CAGE SUPPORT (OPTIONAL)
16. REBAR
17. SUPPORT REBAR TIES AT LOCATIONS SHOWN WITH 12" MIN LAP
18. INSTALL FOUR 15" DIA. #3 REBAR Hoop ties AT LOCATIONS SHOWN WITH 12" MIN LAP

COLLAPSIBLE POST
ANCHOR SYSTEM ASSEMBLY

PLAN SECTION "A-A"

FRONT ELEVATION SECTION

DROP GATE MARKING DETAIL

COLLAPSIBLE POST
ANCHOR SYSTEM ASSEMBLY
NOTES

1. PROVIDE PERIMETER EROSION BARRIER AT LIMITS OF CONSTRUCTION.
2. PROVIDE EROSION CONTROL BLANKET ON THE PORTION OF VEGETATION AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.
3. PROVIDE INLET AND PIPE PROTECTION PER IDOT HIGHWAY STANDARD 280001 FOR DRAINAGE STRUCTURES DISTURBED BY CONSTRUCTION ACTIVITIES.
4. REMOVAL OF EXISTING STRUCTURES WILL REQUIRE THE PARTIAL REMOVAL OF PIER 1, 2, & 4 TO BELOW RIVERBED; THE CONTRACTOR WILL BE REQUIRED TO SUBMIT AN "IN-STREAM" WORK PLAN AS NOTED IN GENERAL NOTES 7 THRU 10.
GENERAL NOTES

1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall verify existing dimensions and details and as needed, obtain necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation. A change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

2. Reinforcement bars designated (E) shall be epoxy coated.

3. Bearing seat surfaces shall be constructed or adjusted to the designated elevations with tolerance of ± 1/16". Adjustment shall be made after grining the surface or by shimming the bearings.

4. Concrete Sealer shall be applied to the designated areas of the pier, abutments and wingwalls.

5. All components of the pedestrian bridge shall use unpainted weathering steel.

6. All structural steel shall be AS900W 270 Grade 50 (except expansion joints which shall be AS900W 270 Grade 50S). The contractor shall submit proposed detailed shop drawings plans that detail equipment type (such as crane boom height) and plans for crane coordination/revised prior to construction activities.

7. The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load testing, Earth Excavation, Channel Excavation, Structural Design of Temporary Soil Retention System and other work applies will not have detrimental effects on the adjacent existing structure or bridge.

8. The ConStructor shall confirm the quality and accuracy of the existing steel structure drawings during construction shall be reviewed by the Contractor at his own cost and as required by IDOT. All repairs shall be reviewed and approved by the Engineer.

9. The Contractor shall ensure that the fabricated, storage, delivery and erection of the steel is under the control of the Pedestrain Truss Superstructure Manufacturer, including all materials handling, welding, forming, concrete deck, expansion joints, all attachments and other steelwork as specified by the Engineer.

10. An existing duct line is embedded in the bottom of the bridge deck, and coordination with the utility owner by IDOT District 7 prior to removal of the line will occur prior to the start of construction. Contractor shall obtain a written agreement that confirms the status of the utility allows for the bridge to be removed prior to bridge demolition.

11. Dimensions shown for the prefabricated bridge units are based on a particular manufacturing product. Actual dimensions of supplied bridge structure may vary depending on supplier chosen from the IDOT approved list. Contractor to verify and adjust substructure dimensions as required, subject to approval of the Engineer.


13. The Contractor shall exercise extreme caution during construction to make certain that construction activities, live load testing, Earth Excavation, Channel Excavation, Structural Design of Temporary Soil Retention System and other work applies will not have detrimental effects on the adjacent existing structure or bridge.

14. The Contractor shall verify the location and orientation axes with the Pedestrain Truss Superstructure Manufacturer prior to construction and placement.

15. The weight of the structural concrete for deck shall be a maximum of 120 pcf. The Contractor shall coordinate permanent mounting of Name Plates on the bridge with the Pedestrain Truss Superstructure Manufacturer.

SCOPE OF WORK:

1. Remove the existing cable TV line (if necessary) prior to Letting (coordinate) at position of deck if coordination determines that the utility line is active.

2. Remove the concrete bridge deck, sidewalks, parapets, railings, deck drain, expansion joints and all other superstructure appurtenances.

3. Remove Piers 1, 2 and 4 to a depth 1' below river bed.

4. Remove the concrete cap of Pier 3. Reconstruct cap to meet new bridge net elevations for a length of 18'-0" with 4'-0" on each side of centerline of bridge. Reconstruct the remaining portions of pier to an elevation 1'-0" above river line.

5. Repair/replace exposed portions of Pier 3 using epoxy crack injection and structural repair of concrete.

6. Construct new north abutment consisting of a split-thru abutment supported on HP-piles behind existing abutment.

7. Remove portions of the existing north abutment and wingwalls as shown on the plans.

8. Repair/replace portions of the south abutment (supra) to a depth of 5'-0" which were found to be unsound. Reconstruct abutment to meet new bridge net elevations for a length of 18'-0" with 4'-0" on each side of centerline of bridge. Reconstruct the remaining portions of abutment to match top of wingwall elevations.


10. Re-grade an area in front of abutments and wingwalls and install riprap at abutments and Pier 3.

11. Install Prefabricated Pedestrain Truss Superstructure, and finishing.


13. Install the 4-1/2" Bicycle Railing along abutments (areas outside bridge limits) and wingwalls.

14. Existing strained steel tendons were taken from the hydraulic report and adjusted by substituting LBD from FEM to fit to the IDOT datum.

15. Existing Name Plates shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

PREFABRICATED TRUSS

1. The superstructure is designed per AS900W LRFD and based on the assumed loads used in the Truss Analysis table.

2. Truss manufacturer shall submit the truss as necessary to provide adequate detail, fabrication.

3. Bridge bearing seat details and bearing locations are subject to revision based on the approved Pedestrain truss superstructure shop drawings. Contractor shall verify all details with dimensions and elevations with the approved shop drawings.

4. Truss manufacturer shall provide the lightweight reinforced concrete deck design. Concrete deck to utilize step-in-place galvanized forms. Contractor shall place the concrete deck after truss is set. The cost of the railing shall be included with "Pedestrain Truss Superstructure". Protective coat shall be paid for under pay item "Protective Coat".

Regrade & Forebay areas:

1. Re-grade area in front of abutments and wingwalls and install riprap at abutments and Pier 3.

2. Install Prefabricated Pedestrain Truss Superstructure, and finishing.

3. Construct approach pavers and approach roadways.

4. Install the 4-1/2" Bicycle Railing along abutments (areas outside bridge limits) and wingwalls.

5. Existing strained steel tendons were taken from the hydraulic report and adjusted by substituting LBD from FEM to fit to the IDOT datum.

6. Existing Name Plates shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

REBUILT 201_ BY:

STATE OF ILLINOIS

CONTRACTOR:

S-23

REVIEWED:

P V C  Sta . 15 3 + 0 0 .0 0

E le v . 6 0 5 .0 0

PROFILE GRADE

L VC = 260.00'

P V I S ta . 15 2 + 2 0 .0 0

E le v . 5 9 9 .5 0

NAME PLATE

Locate Name Plate at the Front Face of

T E L.E  V. 5 9 9 .5 0

STATE OF ILLINOIS

NAME PLATE

LOCATING HS & PEDESTRIAN

STRUCTURE NO. 016-0539

LOADING HS & PEDESTRIAN

STRUCTURE NO. 016-0539

INDEX OF SHEETS

S-01 General Plan and Elevation

S-02 General Notes, Index of Sheets, and Total Bill of Material

S-03 Bridge Sections Details

S-04 Substructure Details

S-05 Existing Structure Removal Plan and Elevation

S-06 Existing Structure Removal Plan (L 1, 2, 3 and 4)

S-07 Existing Structure Removal Plan (L 15 and 16)

S-08 Top of Approach Slabs Elevation/Local and Tables

S-09 Bridge Sections Details

S-10 South Abutment Plan and Elevation

S-11 South Abutment Sections and Details (Sheet 1 of 2)

S-12 South Abutment Sections and Details (Sheet 2 of 2)

S-13 South Abutment Bridge Railing Details

S-14 South Abutment Bridge Railing Details

S-15 North Abutment Plan and Elevation

S-16 North Abutment Sections and Details

S-17 North Abutment Excavation and Backfill

S-18 North Abutment Bridge Railing Plan and Elevation

S-19 North Abutment Bridge Railing Details

S-20 Pedestrain Bridge Railing Details

S-21 HP Rail Details

S-22 Bike Rails 1

S-23 Bike Rails 11

TOTAL BILL OF MATERIAL

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**SUBSTRUCTURE LAYOUT**

**NOTES**

1. A counterflown sheet piling design does not appear to feasible and additional members of other retention systems may be necessary. The contractor shall submit a soil retention system design including plan details and calculations for review and acceptance by the Engineer.

2. For substructures removal details, see Sheets S-05 thru S-07.

3. The Temporary Soil Retention System for the North Abutment East Wingwall construction shall remain in place.

4. The contractor shall exercise extreme caution during construction to make certain that construction activities, such as water, excavation, Structure Excavation, Installation of Temporary Soil Retention System and other tasks deployed will not have detrimental effects on the adjacent existing vaulted abutment of SN 016-0540. Any damage to the existing vaulted abutment during construction shall be repaired by the contractor at his expense at no charge to IDOT.

**BILL OF MATERIAL**

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NOTES:
1. Measure the existing Cable TV line by amensior prior to Letting (Coordinates) at bottom of deck if coordination determines that the utility line is active.

2. Dimensions shown have been taken from historical design drawings and may not represent "as built" conditions. The Contractor must verify all dimensions in the field. Variation in the field dimensions shall not warrant additional compensation for Removal of Existing Structures.

3. For substructure removal details, see Sheets S-06 and S-07.

4. Existing Piers 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

5. Portion of the existing south abutment and pier 3 shall be removed according to Art. 501.05 of the Standard Specifications and as shown in the plans. The partial removal of the south abutment and pier 3 shall be included in Removal of Existing Structures.

6. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

7. For existing approach slabs and pavement removal, see Civil Plans.

8. Bottom of existing footing elevations based on historical documents and survey.

9. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

10. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

11. Existing Piers 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

12. For existing approach slabs and pavement removal, see Civil Plans.

13. Bottom of existing footing elevations based on historical documents and survey.

14. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

15. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

16. Existing Piers 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

17. For existing approach slabs and pavement removal, see Civil Plans.

18. Bottom of existing footing elevations based on historical documents and survey.

19. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

20. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

21. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

22. For existing approach slabs and pavement removal, see Civil Plans.

23. Bottom of existing footing elevations based on historical documents and survey.

24. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

25. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

26. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

27. For existing approach slabs and pavement removal, see Civil Plans.

28. Bottom of existing footing elevations based on historical documents and survey.

29. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

30. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

31. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

32. For existing approach slabs and pavement removal, see Civil Plans.

33. Bottom of existing footing elevations based on historical documents and survey.

34. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

35. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

36. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

37. For existing approach slabs and pavement removal, see Civil Plans.

38. Bottom of existing footing elevations based on historical documents and survey.

39. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

40. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

41. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

42. For existing approach slabs and pavement removal, see Civil Plans.

43. Bottom of existing footing elevations based on historical documents and survey.

44. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

45. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.

46. Existing Pier 1, 2, 4 and the existing North Abutment shall be removed according to Art. 501.04 of the Standard Specifications and included in the cost of Removal of Existing Structures.

47. For existing approach slabs and pavement removal, see Civil Plans.

48. Bottom of existing footing elevations based on historical documents and survey.

49. Contractor's means and methods to remove existing Piers 1, 2 and 4 to the specified limits is included in the cost of Removal of Existing Structures.

50. Existing reinforcement bars shall be cleaned, straightened and incorporated into the new construction. Any damaged reinforcement bar during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Removal of Existing Structures.
EXISTING STRUCTURE REMOVAL - NORTH AND SOUTH ABUTMENTS

NOTES:

1. For additional notes, see Sheet S-05.

2. The existing North Abutment and wingwalls shall be removed as shown after the complete construction of the new North Abutment and wingwalls.

EXISTING CONCRETE TO BE REMOVED

Cost included in Removal of Existing Concrete to be removed

Elev. 591.75

Exist. reinforcement to be reused

Elev. 574.78

Exist. vertical reinforcement to be reused

Elev. 591.75

Exist. vertical reinforcement to be reused

Elev. 586.23

Existing Structures

REMOVED After the complete construction of the New Abutments.

EXISTING CONCRETE TO BE REMOVED

Cost included in Removal of Existing Concrete to be removed

Elev. 591.75

Exist. reinforcement to be reused

Elev. 574.78

Exist. vertical reinforcement to be reused

Elev. 586.23

Existing Structures

REMOVED After the complete construction of the New Abutments.
NOTES:
1. For additional Notes, see Sheet S-05.

LEGEND
- Existing Concrete to be Removed
- Cost included in Removal of Existing Structures
**PLAN**

(South Approach)

- **Approach Footing** along roadway.
- *10 mil. Phenolic coated breaker off steel finish*

**SECTION A-A**

- **Approach Footing**
- **HMA Pavement Connection**
- See Detail A

**SECTION B-B**

- **Approach Footing**
- **Granular Backfill**
- See Detail B

**DETAIL A**

- **E Joint**
- **Top and bottom of Approach Footing**
- See Section B-B

---

**PLAN**

(North Approach)

- **Approach Footing**
- **E Joint**
- **Top and bottom of Approach Footing**
- See Section B-B

**DETAIL B**

- **E Joint**
- **Top and bottom of Approach Footing**
- See Section B-B

---

**NOTES:**

1. Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
2. Approach footing concrete shall be paid for as Concrete Structures.
3. For v22(E) and v22(E) bar details, see Sheets 5-12 and 5-11, respectively.
4. The approach footing maximum applied bearing pressure (Qmax) = 2.0 ksf.
5. Cost of excavation for approach footing included with Concrete Structures.
6. For Granular Backfill for Structures see Sheets 5-12 and 5-11.
NOTE:
1. For Details A Thru D, See Sheet S-14.

BILL OF MATERIAL

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Dimensions are measured along centerline of fence.
NOTES:
1. For anchor bolt layout, see Pedestrian Truss Superstructure sheets prepared by the manufacturer.
2. Space reinforcement to slot anchor bolts.
3. All exposed surfaces of backwalls, bridge seats, wingwalls and front faces of pile caps shall be treated with Concrete Sealer.
4. For NP Pile details, see Sheet 3-21.
5. The abutment seat elements shall be coordinated with the requirements of the Pedestrian Truss Superstructure with approval from the Engineer.
6. For temporary soil retention system, see Sheet S-04.
7. For existing structure removal details, see Sheets S-05 and S-06.
8. The portion of the existing North Abutment and wingwalls to be removed shall be released after the complete construction of the new North Abutment and wingwalls.
9. If the Contractor determines partial removal of structural elements is required for means/methods of construction, a structural analysis/detailed drawings and plans shall be submitted for review and approval by Engineer. The cost shall be included in Removal of Existing Structures.
10. Holes shall be precored through the existing abutment footing for piles which are to be driven past the existing abutment footing according to Article 550.06 of the Standard Specifications. If oversized holes are drilled, the void spaces below the pile shall be filled with dry, loose sand. Cost included in the cost of the Driving Piles.
11. The abutment seat elements shall be coordinated with the requirements of the Pedestrian Truss Superstructure with approval from the Engineer.
12. The portion of the existing North Abutment and wingwalls to be removed shall be released after the complete construction of the new North Abutment and wingwalls.
13. The portion of the existing North Abutment and wingwalls to be removed shall be released after the complete construction of the new North Abutment and wingwalls.
14. The portion of the existing North Abutment and wingwalls to be removed shall be released after the complete construction of the new North Abutment and wingwalls.
15. The portion of the existing North Abutment and wingwalls to be removed shall be released after the complete construction of the new North Abutment and wingwalls.
NOTE:
1. For additional notes, see Sheet S-16.
2. All drainage system components shall extend 2'-0" from the base of the north wingwall except an outlet pipe shall extend until intersecting with the side slopes. The outlet pipe shall drain into concrete headwall. (See Article 601.05 of the Standard Specifications and Highway Standard 601.)

BILL OF MATERIAL

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geo Composite Wall Drain</td>
<td>Sq. Yd.</td>
<td>178</td>
</tr>
<tr>
<td>Geo Composite Wall Drain for Structures</td>
<td>Sq. Yd.</td>
<td>184</td>
</tr>
<tr>
<td>Backfill for Structures</td>
<td>Cu. Yd.</td>
<td>41</td>
</tr>
<tr>
<td>Stone Riprap Class A-5</td>
<td>Cu. Yd.</td>
<td>81</td>
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</table>

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
NORTH ABUTMENT EXCAVATION AND BACKFILL
STRUCTURE NO. 016-0539
CONTRACT NO. 62B99

DESIGNED:
ENGINEERING GROUP, LLC.
HILLSIDE, IL 60162

REvised:
FAX: (708) 236-0901
PHONE: (708) 236-0900

DRAWN:
CHECKED:
DATE:
SHEET OF SHEETS:
NOTE:
S17-NAbutEx&Bfill.dgn
USER NAME:
PLOT DATE:
S-23
12/8/2017
S-17-NAbutEx&Bfill.dgn
6:00 PM
Ken.drabant
12/08/2017
10:36:46 AM

NOTES:

1. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

2. All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 006.460A of the Standard Specifications.

3. Reinforcement shall be spaced to axial anchor bolts.

NOTES:
1. See Pedestrian Truss Superstructure Manufacturer's requirements prior to setting them.
2. Anchor bolt sizes and locations shall be checked against the Pedestrian Truss Superstructure Manufacturer's requirements prior to setting them.
3. Anchor bolt size and locations shall be checked against the pedestrian Truss Superstructure Manufacturer's requirements prior to setting them.
4. All exposed surface areas of new concrete shall be treated with Concrete Sealer.
5. All areas of Structural Repair of Concrete (Depth Greater Than 5") shall be determined in the field by the Engineer.
6. Any areas of Structural Repair of Concrete (Depth Equal to or Less Than 5") shall be determined in the field by the Engineer.
7. The s31(E) and d31(E) bars are to be drilled and epoxy grouted in accordance with section 584 of the Standard Specifications. Drill to miss existing reinforcement. Cost included with Concrete Structures.
8. The pier seat elevations shall be coordinated with the requirements of the pedestrian Truss Superstructure with approval from the Engineer.
9. Superstructure sheets prepared by the manufacturer.
10. For anchor bolts layout, see Pedestrian Truss Superstructure Manufacturer's requirements prior to setting them.
11. Any areas of Structural Repair of Concrete (Depth Equal to or Less Than 5") shall be determined in the field by the Engineer.
12. The pier seat elevations shall be coordinated with the requirements of the pedestrian Truss Superstructure with approval from the Engineer.
WELDED COMMERCIAL SPLICE

- *Typ. along splicer*
- *Typ. along flange edges*

WELDED PLATE FIELD SPLICE

- *Typ. along splicer*
- *Typ. along flange edges*

Note:
- The steel piles shall be according to AASHTO M270 Grade 50.
- Remove portions of backup plates that extend outside the flanges.
- Interrupt welds from end of web and/or each flange.

WELDED COMMERCIAL SPLICE ALTERNATE

- *Typ. along flange edges*
- *Typ. along splicer*

Note:
- The steel piles shall be according to AASHTO M270 Grade 50.
- *Typ. along four edges of flange E*
- *Typ. along flange edges*

HP PILE DETAILS

<table>
<thead>
<tr>
<th>Designation</th>
<th>F</th>
<th>F2</th>
<th>W</th>
<th>W1</th>
<th>W2</th>
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<tbody>
<tr>
<td>HP 14x117</td>
<td>12°</td>
<td>1°</td>
<td>2''</td>
<td>2''</td>
<td>2''</td>
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<tr>
<td>HP 12x84</td>
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<td>1°</td>
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<td>HP 10x57</td>
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<td>1°</td>
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<tr>
<td>HP 8x36</td>
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<td>1°</td>
<td>2''</td>
<td>2''</td>
<td>2''</td>
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</tbody>
</table>

Steel piles shall be according to AASHTO M270 Grade 50. The steel piles shall be according to AASHTO M270 Grade 50.
<table>
<thead>
<tr>
<th>STA</th>
<th>x</th>
<th>C</th>
<th>D</th>
<th>BORING LOGS II</th>
</tr>
</thead>
<tbody>
<tr>
<td>599.6</td>
<td>40</td>
<td></td>
<td></td>
<td>Gray, very dense, broken LIMESTONE.</td>
</tr>
<tr>
<td>184</td>
<td>25</td>
<td></td>
<td></td>
<td>Grey, hard, CLAY LOAM, with sand layers, moist.</td>
</tr>
<tr>
<td>595.8</td>
<td>40</td>
<td></td>
<td></td>
<td>Gray, dense, Silty LOAM to SILT, trace of gravel, moist.</td>
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<tr>
<td>579.6</td>
<td>18</td>
<td></td>
<td></td>
<td>Sample U-2: 2.0' - 4.0' 3&quot; undisturbed tube</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>w = 452</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Qu = 0.628</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>o.d. dry weight: %</td>
</tr>
</tbody>
</table>

**Notes:**
- **STANDARD PENETRATION TEST:**
  - Blows per foot to drive 2 ½" O.D. light steel sampler 1" with 16 oz. hammer. 60" fall.
  - **Unconfined Compression**
    - Type of Soil: 1 = Clayey, 2 = Silty, 3 = Silty, 4 = Sandy, 5 = Gravelly, 6 = Gravel
    - Deformation: 1113
    - **Data:**
      - **Water Content:** Percentage of oven dry weight: %
      - **Sample:** U-2: 2.0' - 4.0' 3" undisturbed tube
      - **w:** 452
      - **Qu:** 0.628
      - **o.d. dry weight:** %
NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.

2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.

3. ERECT SIGN 1 WITH INSTALLED PANEL 2 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.

4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.

5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.

6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.2 SQ. M.)

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.