

GENERAL NOTES:

1. All dimensions and elevations shown to existing construction and all existing conditions shall be assumed to be (±) and shall be verified by the Contractor prior to fabrication of material. The Contractor shall visit the site and familiarize himself with all existing conditions prior to bidding the work.
2. All elevations refer to N.A.V.D. (North American Vertical Datum).
3. All excess excavation and unsuitable materials shall be disposed of at locations provided by the Contractor at his expense and at locations inspected that have all necessary comprehensive environmental review process (CERP) approvals and have been approved by the Engineer.
4. All construction operations shall be contained within the easement area or work limits as indicated on the plans.
5. The Contractor shall submit his proposed method of maintaining channel flows to the Engineer for approval prior to beginning construction.
6. The Contractor is reminded to protect and restore at his expense, in accordance with Article 107.20 of the Standard Specifications, any private or public property, including access roads, which may be damaged or destroyed due to construction operations.
7. All utilities affected by the improvement shall be adjusted by others except as noted in the plans. Prior to beginning work in the vicinity of the utilities, the Contractor shall contact the respective owners and he shall schedule his work so as not to interfere with these adjustments.
8. Unless otherwise specified, all utilities shall be protected and not disturbed. All costs of protection shall be considered incidental to Structure Excavation, and no additional compensation will be allowed.
9. All open excavations are to be surrounded with a four feet construction fence during non-working hours. The fence material shall be approved by the Engineer. The cost shall be incidental to Structure Excavation and no additional compensation will be allowed.
10. Contractor is responsible for the design and installation of all temporary construction required for, but not limited to, shoring, underpinning and bracing, for the protection of the existing structures or utilities whether or not shown on the contract drawings. The contractor must provide all measures and precautions necessary to prevent damage and settlement of existing or new construction inside or outside the project limits during excavation. Any damage to new or existing construction inside or outside of the project limits, caused by construction techniques or movements of the soil or structure retention system, is the responsibility of the contractor.
11. Plan Dimensions and Details relating to Existing Structures have been taken from Existing Plans and are subject to Nominal Construction Variations. It shall be The Contractor's responsibility to verify such Dimensions and Details in the Field and make necessary approved adjustments prior to Construction or ordering of Materials. Such variations shall not be cause for additional compensation or a change in the Scope of Work. However The Contractor will be paid for the Quantity actually furnished at the Unit Price for the Work.
12. Design and construction must conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction 2002.
13. The back face of concrete retaining walls and the flood side of flood walls below grade shall be waterproofed according to Article 503.18 of the Standard Specifications.
14. A protective coat shall be applied according to Article 503.19 of the Standard Specifications to all concrete surfaces not in contact with soil.
15. Refer to equipment Manufacturer's drawings for size and location of all openings and miscellaneous embedded items to be incorporated into the work and for verification of all dimensions prior to construction. Any changes shall be brought to the attention of the Engineer and shall be at no additional cost to the owner. All anchor bolts and embedded items shall be stainless steel Type 316 unless otherwise noted.
16. Aluminum in contact with concrete shall be isolated from the concrete with a heavy coating of asphalt or other approved bituminous material.
17. Brace all walls until concrete slabs at top of walls have been in place for minimum 14 days and test cylinders show a minimum strength of 3500 psi or more in compression.
18. (*) - Dimensions noted thus indicate dimensions to be determined by equipment Manufacturer or dimensions to be verified in field based on existing construction.

REINFORCED CONCRETE:

1. Design and construction shall conform to the latest Building Code Requirements for structural concrete of the American Concrete Institute (ACI 318) unless otherwise noted.
2. Arrangement and details of reinforcing steel, including bar supports and spacers, shall be in accordance with the latest A.C.I. Detailing Manual unless otherwise noted.
3. All slab and beam reinforcement shall have a minimum extension into the support in accordance with the latest A.C.I. Code. If such extension is not possible, bars shall terminate in standard hooks.
4. Reinforcing bars shall conform to the requirements of AASHTO M31, or M322 grade 60. All reinforcing bars shall be epoxy coated unless otherwise noted.
5. Unless otherwise shown, the cover for reinforcing steel shall be as follows:
 - concrete cast against and permanently exposed to earth.....3"
 - primary reinforcement in walls and slabs.....2"
 - primary reinforcement in beams and columns.....2 1/2"
 - stirrups, ties, and spirals.....2"
6. Horizontal and vertical construction joints shown or noted on the plans are recommended. Any deviation from those shown must have approval of the Engineer.
7. Class SI concrete shall be used, unless otherwise noted. Concrete shall have a minimum compressive strength of 4000 psi at 28 days unless otherwise noted.
8. All exposed edges of slabs, walls, and curbs must be chamfered 3/4" unless other members are erected flush with them.
9. Any stop in framed concrete work must be made in the center of the span and incorporate an approved keyway. Reinforcement shall extend through these joints if required for continuity.
10. Concrete walls and slabs shall be poured in maximum lengths of 50 feet between construction joints, except where otherwise noted.
11. Allow minimum 72 hours to elapse prior to placing concrete in adjacent wall and slab pours.

STRUCTURAL STEEL

1. Structural steel shall conform to the latest AISC "Specification for the design, fabrication and erection of structural steel for buildings" and the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction 2002.
2. All structural steel must be AASHTO M 183 grade 36.
3. Hollow structural steel tubes (HSS) shall be ASTM A500, grade B, Fy = 46 KSI.
4. Fasteners shall be galvanized high strength bolts M20, 7/8" diameter, unless otherwise noted.
5. Field connections shall be bolted except as otherwise shown or noted.
6. All welding shall conform to the latest specification of the American Welding Society, AWS D1.1 or D1.6 except as otherwise shown or noted. All welded connections shall be made with AWS A5.1 or A5.5 E70xx electrodes or low carbon content electrodes for welding stainless steel to stainless steel or stainless steel to low carbon steel, minimum 70 ksi tensile strength, E309L or E316L. All welding must be continuous unless otherwise noted.
7. Anchor bolts and miscellaneous embedded steel.....ASTM A36 except as otherwise shown or noted.
8. The inorganic zinc rich primer/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be dark gray, munsel No N 3.75, unless otherwise noted.
9. Dissimilar metals shall be separated from each other with approved gaskets or coatings to prevent galvanic corrosion.
10. All equipment, anchor bolt dimensions and locations shall be verified from certified vendor drawings, prior to construction.

FOUNDATIONS:

1. Allowable soil bearing pressure, excavation and backfill for foundations and structures shall be as shown on the contract drawings and specifications.
2. Groundwater information at this location is included in the geotechnical report. All excavation for structures must be kept dewatered during construction operations until backfill is in place and provisions must be made to prevent the bottom of all excavations from freezing or flooding at all times. The Contractor will be responsible for protecting the structure against floatation or uplift during construction.
3. Backfill material, placing and compaction of backfill shall be in accordance with the contract drawings and specifications. Place backfill equally on both sides of foundation walls, sheet piling and structures and/or excavate equally on all sides of existing structures to prevent imposing unbalanced forces on structures.
4. Backfill shall be hand tamped to achieve a degree of compaction greater than or equal to that specified for the levee embankment.

TEMPORARY SHEET PILING AND TEMPORARY SOIL RETENTION SYSTEM:

1. The contractor must design all temporary sheet piling and temporary soil retention systems and submit drawings and design calculations prepared by a structural engineer licensed in the State of Illinois for the Engineer's review according to section 105.04 of the Illinois Department of Transportation Standard Specifications. The submittal must also include the contractor's method of installation and removal of sheeting.
2. Minimum section modulus and estimated tip elevations of temporary sheet piling shall be as shown on the plans. The top of the sheeting must be at least 6 inches above existing pavement, unless otherwise noted.
3. Miner St. Culvert: Stay-in-place lagging is required when construction is switched from stage I to stage II. It is the contractor's responsibility to provide a design for the stay-in-place lagging complete with calculations and drawings, signed and stamped by a structural engineer licensed in the State of Illinois, for the Engineer's review according to Article 105.04 of the Standard Specifications. The cost of designing, furnishing and installing the stay-in-place lagging is included in the cost of Temporary Soil Retention System.
4. The Contractor shall monitor vibration and movement of existing structures and utilities and limit the Pile Hammer size selected considering the relative proximity of existing structures and utilities.

FLOODWALL:

1. Stations and offsets are measured from E Bikepath to the back face (River side) of Flood Wall.
2. All construction joints shall be bonded.
3. The Contractor shall monitor vibration and movement of existing structures and utilities and limit the Pile Hammer size selected considering the relative proximity of existing structures and utilities.
4. The Contractor must be responsible for all temporary bracings required to maintain structural stability until completion of the project. The Contractor is required to provide temporary support of the sheet pile wall and modular concrete retaining wall during construction with supplemental bracing and supports.
5. The contractor may encounter obstructions along sheet pile driving line. Refer to the specifications for driving sheet piles in these situations and coordinate work with the Engineer.
6. All metal sheet piling shall conform to the requirements of ASTM A-328, Grade 50 (AASHTO M202).
7. See specification for waterstop material for sheet pile walls. The Contractor must submit the procedure for installing waterstop material and installation of the sheeting for approval.
8. The Contractor must field verify all utility locations. Sheet piling locations may need to be adjusted, if necessary to avoid utility interference in accordance with specifications and as approved by the Engineer. See Civil drawing for utilities.
9. All welding must be performed by certified welders in accordance with the latest specification of the American Welding Society Standard, AWS D1.1. All welding connections must be made with AWS A5.1 or A5.5 E70xx electrodes.

SUGGESTED FLOODWALL CONSTRUCTION SEQUENCE:

1. As required, clean site in general by removing obstructions from sheet pile driving line.
2. Drive sheet pile wall.
3. Excavate up to bottom of the concrete cap elevation along both sides of the sheet-pile wall. Temporary sheet pile or temporary soil retention system may be required along both sides. Install temporary sheeting as required to enclose portion of floodwall receiving concrete caps. Enclosed area between temporary sheeting and sheet pile wall may need to be dewatered to construct concrete cap. Cost of temporary sheeting and any dewatering, as necessary, will not be measured for payment and is included in Cost of the Steel Sheet Piling.
4. Construct concrete caps along both sides of the sheet pile wall.
5. Backfill up to the elevations shown on the Civil Plans on both sides of the sheet pile Floodwall. Place backfill equally on both sides of sheet piling where backfill exists on both sides.

REVISION	
DATE	DESCRIPTION

SCALE: NONE

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