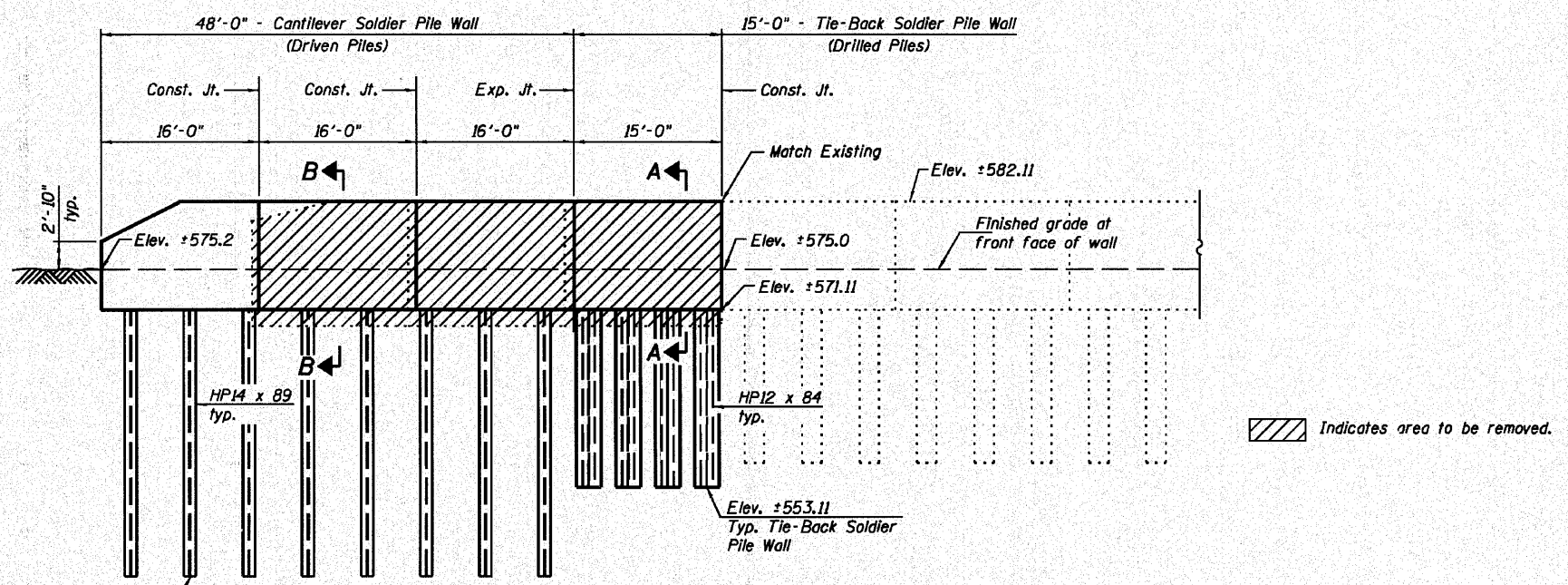


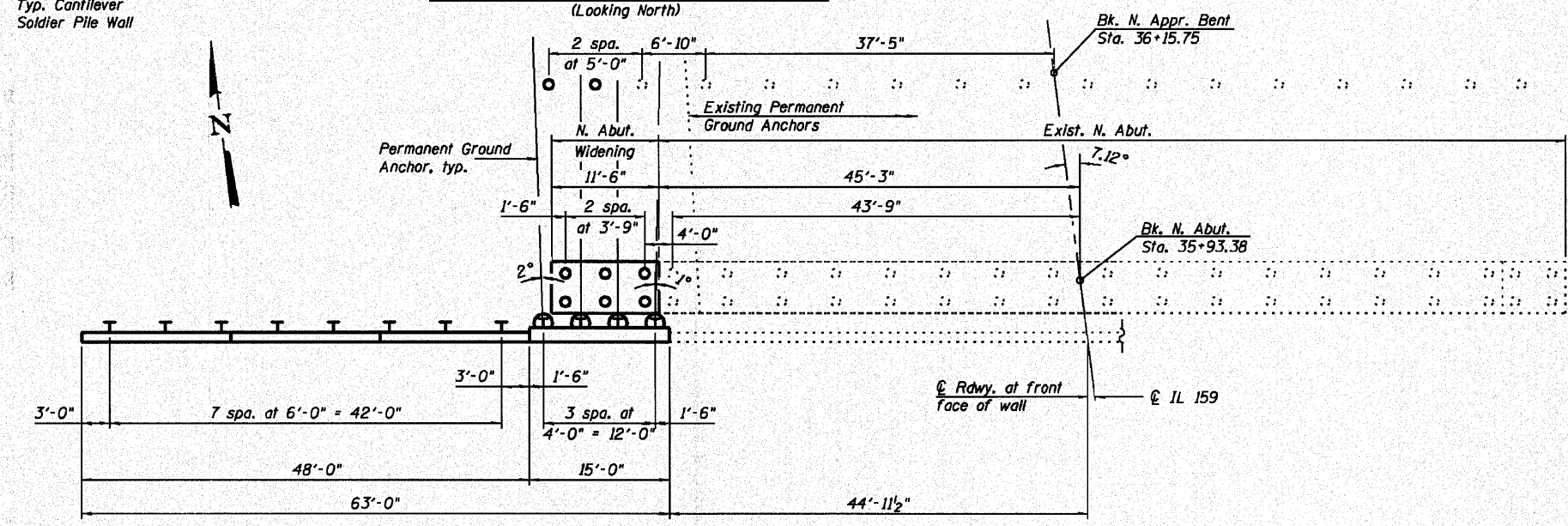
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED SEQUENCE OF CONSTRUCTION FOR DRILLED SOLDIER PILE WALL

1. Drill hole for soldier pile to the tip elevation indicated on the plans.
2. Remove loose material and excess water from hole and set soldier pile in hole, using temporary bracing to maintain correct clearances and position during and after placement of concrete.
3. Place Class SI Concrete Encasement around the soldier pile to the bottom of concrete facing elevation as indicated on the plans.
4. Place Controlled Low Strength Material (CLSM) to the bottom of the abutment footing elevation as indicated on the plans.
5. Repeat steps 1 through 4 until all soldier piles are in place.
6. After concrete has cured, excavate in front of wall to a depth 2 ft. below the indicated anchor elevation in stages no greater than 20 ft. in length. For the South wall, remove only the slope wall, soil and CLSM concrete necessary to place the precast concrete lagging behind the soldier pile flanges. For the North wall, remove only the concrete of the existing L shaped wall and CLSM concrete necessary to place the precast concrete lagging behind the soldier pile flanges.
7. Install the permanent ground anchors at the elevation indicated on the plans. (See Special Provision)
8. Continue removal and installation of the lagging to the bottom of concrete facing elevation indicated and lock off anchors.
9. Repeat steps 6 through 8 until all precast lagging is in place.
10. Install the Geocomposite Wall Drain and pipe underdrain. The Geocomposite Wall Drain shall be constructed according to Article 591 of the Standard Specifications and the Contractor shall ensure that the bottom, sides, and top edges are protected from either wet concrete or soil entering or sealing the drain while placing the pervious fabric side of the drain toward the soil. The drain shall be attached to and completely cover the exposed face of the concrete lagging, insuring the sides, top, bottom and back are covered with non-pervious material to protect it from wet concrete intrusion.
11. Install stud shear connectors to the soldier piles.
12. Construct the concrete facing.



NORTH RETAINING WALL ELEVATION
(Looking North)



NORTH RETAINING WALL PLAN

Notes:

Anchors that encounter existing piling shall be redrilled at an offset 3'-15' horizontally from their initial alignment. Cost of redrilling is included with "Permanent Ground Anchor".

Each tie-back soldier pile shall consist of a HP12x84 section, anchor head assembly, bearing plate and pipe. Soldier piles shall be given one shop coat of organic zinc rich primer. Cost of HP12x84 section, anchor head assembly, bearing plate and pipe shall be included in the cost of "Furnishing Soldier Piles (HP Section)".

The ground anchor tendons shall be high strength low relaxation 7 wire strands Grade 270. The nominal diameter shall be 0.6 in. and the nominal cross sectional area shall be 0.217 in. Three (3) tendons shall be used for each ground anchor.

Any modifications to the details for the anchor bearing plate required to accommodate the anchor shall be submitted by the Contractor for the Engineer's approval. Cost is included with the cost of "Furnishing Soldier Piles (HP Section)".

Concrete Sealer shall be applied to the front face of the proposed concrete facing above the finished grade elevation and to the top of the concrete facing.

Transition Concrete Gutter, Type B and flowline to accommodate the variation in retaining wall thickness.

If required, soldier pile sections may be furnished in two (2) sections due to low vertical clearances at the wall location. The Contractor shall temporarily support the lower section of the soldier pile while splicing the upper section to the pile. The soldier pile sections shall be spliced as shown in the HP Pile Details in the plans, sheet 25 of 34, and in accordance with Section 512 of the Standard Specifications.

For Concrete Removal, see sheet 26 of 34.

Contractor shall furnish a proposed Sequence of Construction for Drilled Soldier Pile Wall to the Engineer for review and approval prior to construction of drill soldier pile wall.

Contractor to provide design for Precast Lagging. See Special Provisions for Drilled Soldier Pile Retaining Wall.

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

WHKS & CO.
ENGINEERING

7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

NORTH RETAINING WALL
STRUCTURE NO. 082-0176

SHEET NO. 22	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	105
34 SHEETS		CONTRACT NO. 76D59			
ILLINOIS FED. AID PROJECT					