

Bench Mark: IDOT Monument Number C0062-1B, Sta. 488+40, Elev. 870.47, 47.5' Rt.
Existing Structure: None

INDEX OF SHEETS

- S1 - General Plan & Elevation
- S2 - Wall Elevations
- S3 - Wall Elevations
- S4 - Retaining Wall Details
- S5 - Soil Borings 1
- S6 - Soil Borings 2
- S7 - Soil Borings 3
- S8 - Soil Borings 4

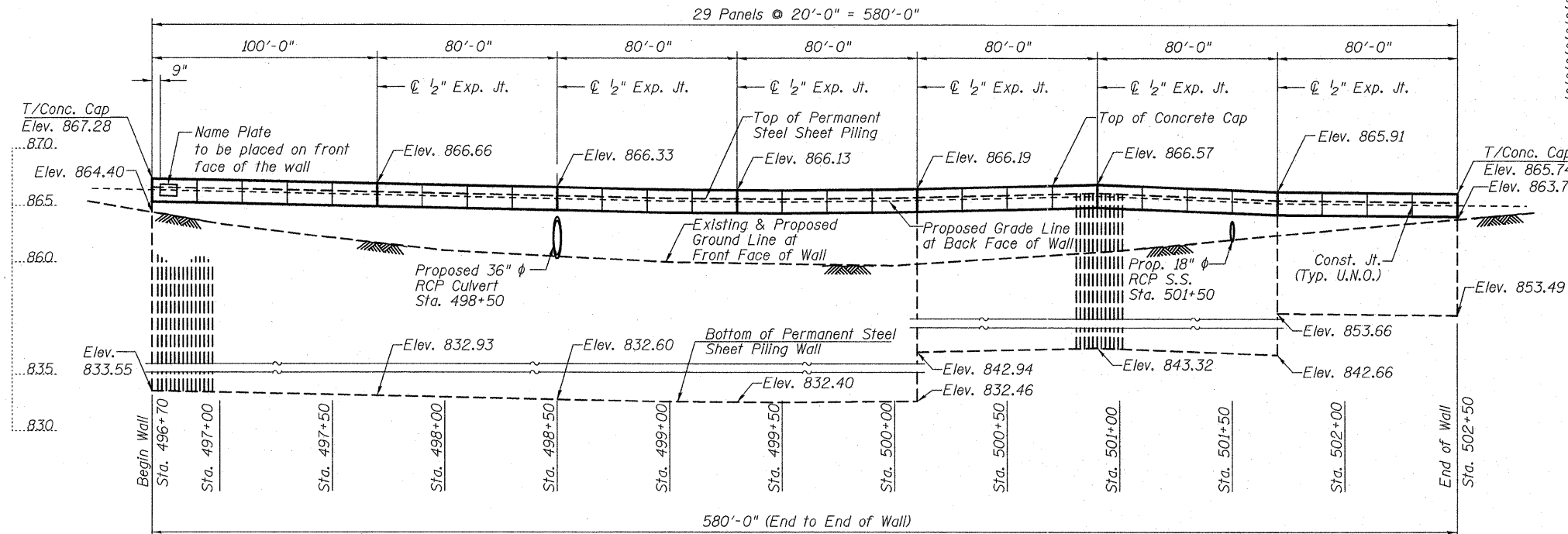
DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications, 17th Edition.

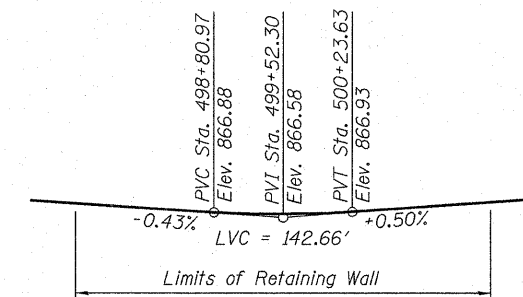
DESIGN STRESSES

Design Soil Equivalent Fluid Pressure = 40 pcf
 $f_y = 38,500$ psi (Steel Sheet Pile)
 $f_y = 60,000$ psi (Reinforcement)
 $f'_c = 3,500$ psi

Permanent Steel Sheet Piling Z Shape
 Minimum Effective Section Modulus = 15.3 in.³/ft. wall



ELEVATION
(Back Face View)



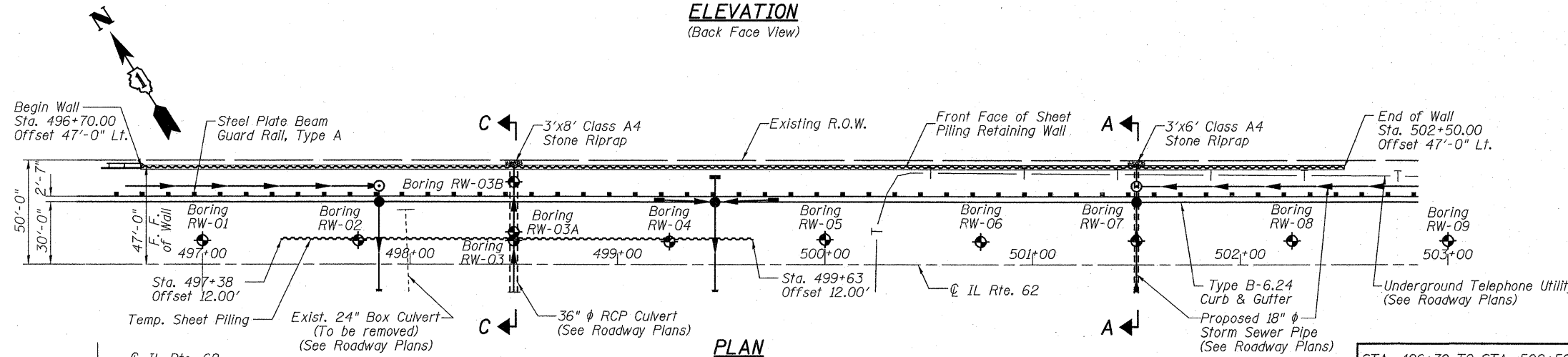
PROFILE GRADE
(Along ϕ IL 62)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Porous Granular Embankment, Special	Cu. Yd.	150
Stone Riprap, Class A4	Sq. Yd.	5
Concrete Structures	Cu. Yd.	75.3
Stud Shear Connectors	Each	640
Reinforcement Bars, Epoxy Coated	Pound	6,610
Name Plates	Each	1
Geocomposite Wall Drain	Sq. Yd.	225
Permanent Steel Sheet Piling	Sq. Ft.	15,879
Temporary Sheet Piling	Sq. Ft.	7,595
Pipe Underdrains for Structures 4"	Foot	580

GENERAL NOTES

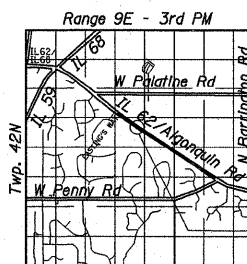
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- It shall be the Contractor's responsibility to verify the location of the existing underground utilities prior to starting construction.
- Backfill shall be in place prior to pouring of Concrete Cap.
- U. N. O. - denotes Unless Noted Otherwise
- See Sheet S4 for Section C-C.



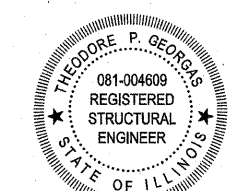
PLAN

STA. 496+70 TO STA. 502+50 (LT)
 BUILT 20L BY
 STATE OF ILLINOIS
 F.A.P. RT. 339
 SEC. 116 Y-1-R-1
 STRUCTURE NO. 016-W994

NAME PLATE
See Std. 515001



LOCATION SKETCH



Theodore P. Georgds 10-21-2011
 Theodore P. Georgds Date
 Licensed Structural Engineer
 State of Illinois 081-4609
 Expires 11/30/2012

RETAINING WALL NO. 1
 STA. 496+70 TO STA. 502+50



USER NAME =	DESIGNED - JPM	REVISED - 10/21/2011 J.P.M.
PLOT SCALE =	CHECKED - JXH	REVISED -
PLOT DATE =	DRAWN - JPM	REVISED -
	CHECKED - JXH/TPG	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 016-W994

SHEET NO. S1 OF S8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
339	116 Y-1-R-1	COOK	122	58
			CONTRACT NO.	60135
ILLINOIS FED. AID PROJECT				