

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
S.A.L. P.A.P. 283	29R-T	McHENRY	88	42
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62202

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of AASHTO M 31M or M 322M Grade 400.
- Plan dimensions and details relative to existing structure 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 for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The Contractor is responsible for the design and performance of the lagging using no less than 75 mm nominal rough-sawn thickness, and timber with a minimum allowable bending stress f_b of 6.9 MPa.
- Stud shear connectors for Soldier Piles shall be field welded.
- All dimensions are in millimeters (mm) except as noted.
- All construction joints shall be bonded.
- Dimensions are measured along front face of the proposed wall unless noted otherwise.
- Prior to driving piles the Existing footing shall be drilled through.

SUGGESTED SEQUENCE OF CONSTRUCTION

- Drive Temporary Sheet Piling and demolish adjacent existing retaining wall and footing where indicated for existing Northwest wall (see sheet SI-5).
- Establish pile locations and drive pile to tip elevation shown on the plans.
- Remove portions of existing retaining wall stem in vertical sections as required.
- Install Tiebacks.
- Complete Untreated Timber Lagging to the depths shown on the plans.
- Remove remaining portions of existing retaining wall sections as required to meet limits indicated.
- Adjust Tiebacks for final position of Soldier piles
- Attach Geocomposite Wall Drain to cover the Untreated Timber Lagging
- Construct Pipe Underdrain for Structures by excavating a trench, lining it with fabric, placing a pipe and aggregate such that the Geocomposite Wall Drain is connected as shown on the plans.
- Attach shear studs on soldier piles, set reinforcement, form and pour C.I.P. Concrete Facing.
- Complete final grading at the base of wall.
- Construct Parapet and Sidewalk Slab.

LEGEND

B.F. - Back Face
F.F. - Front Face
E.F. - Each Face
T & B - Top and Bottom

(W.P.) - Work Point Number
(P.N.) - Concrete Facing Panel Number
(P) - Pile Number
[Hatched] - Concrete Removal

MIN. BAR LAP

#15 = 640
#20 = 790

LOCATION OF CONSTRUCTION & EXPANSION JOINT AND WORK POINT TABLES

NORTH-EAST WALL

PANEL NO.	W.P. NO.	U.S. 14 STATION	OFFSET TO FF OF WALL	TYPE OF JOINT
	301	0+661.140	9.670 m LT	Begin Wall
301	302	0+670.020	9.670 m LT	Wall Bend/Construction Joint
302	303	0+679.020	9.560 m LT	Construction Joint
303	304	0+686.180	9.470 m LT	End Wall

NORTH-WEST WALL

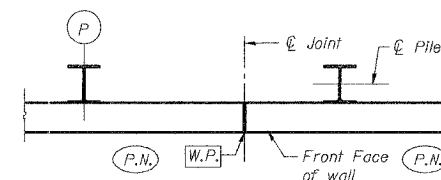
PANEL NO.	W.P. NO.	U.S. 14 STATION	OFFSET TO FF OF WALL	TYPE OF JOINT
	101	0+647.870	15.210 m RT	Begin Wall
101	102	0+654.890	9.180 m RT	Construction Joint
102	103	0+663.890	9.180 m RT	Construction Joint
103	104	0+669.790	9.180 m RT	Wall Bend/Expansion Joint
104	105	0+675.240	9.450 m RT	End Wall

SOUTH-WEST WALL

PANEL NO.	W.P. NO.	U.S. 14 STATION	OFFSET TO FF OF WALL	TYPE OF JOINT
	201	0+874.420	9.390 m RT	Begin Wall
201	202	0+881.290	9.810 m RT	Wall Bend/Expansion Joint
202	203	0+890.279	10.250 m RT	Construction Joint
203	204	0+899.268	10.700 m RT	Construction Joint
204	205	0+908.257	11.145 m RT	Expansion Joint
205	206	0+917.245	11.590 m RT	Construction Joint
206	207	0+926.235	12.035 m RT	Construction Joint
207	208	0+935.224	12.480 m RT	Expansion Joint
208	209	0+941.260	12.780 m RT	Wall Bend/Construction Joint
209	210	0+948.660	12.780 m RT	Culvert Edge/Expansion Joint
Culvert Omission				
210	211	0+964.460	12.780 m RT	Culvert Edge/Expansion Joint
211	212	0+973.620	12.780 m RT	Construction Joint
211	213	0+982.780	12.780 m RT	End Wall

SOUTH-EAST WALL

PANEL NO.	W.P. NO.	U.S. 14 STATION	OFFSET TO FF OF WALL	TYPE OF JOINT
	401	0+874.420	9.410 m LT	Begin Wall
401	402	0+881.490	8.980 m LT	Wall Bend/Expansion Joint
402	403	0+890.490	8.980 m LT	Construction Joint
403	404	0+899.490	8.980 m LT	Construction Joint
404	405	0+908.490	8.980 m LT	Expansion Joint
405	406	0+917.490	8.980 m LT	Construction Joint
406	407	0+926.490	8.980 m LT	Construction Joint
407	408	0+935.490	8.980 m LT	Expansion Joint
408	409	0+944.490	8.980 m LT	Construction Joint
409	410	0+948.660	8.980 m LT	Culvert Edge/Expansion Joint
Culvert Omission				
410	411	0+964.460	8.980 m LT	Culvert Edge/Expansion Joint
410	412	0+973.620	8.980 m LT	Construction Joint
411	413	0+982.780	8.980 m LT	End Wall



TYPICAL WORK POINT LOCATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. m	39.8	169.8	209.6
Protective Coat	Sq. m	692	-	692
Porous Granular Embankment	Cu. m	-	1197	1197
Concrete Structures	Cu. m	-	243	243
Concrete Superstructure	Cu. m	285	-	285
Stud Shear Connectors	Each	-	2277	2277
Reinforcement Bars, Epoxy Coated	kg	20760	19720	40480
Aluminum Railing, Type L	m	272	-	272
Temporary Sheet Piling	Sq. m	-	130	130
Furnishing Soldier Piles (HP Section)	m	-	1033	1033
Driving Soldier Piles	m	-	1033	1033
Untreated Timber Lagging	Sq. m	-	758	758
Geocomposite Wall Drain	Sq. m	-	684	684
Pipe Underdrains for Structures 100mm	m	-	141	141
Formed Concrete Repair (depth less than 125mm)	Sq. m	-	2.6	2.6
Epoxy Crack Sealing	m	-	25	25
Structure Excavation	Cu. m	-	139	139
Furnishing and Erecting Structural Steel	kg	-	25660	25660

* Top of Sidewalk, Front and Top Face of Parapet

INDEX OF SHEETS

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7.	Existing Retaining Wall Removal - South-West Wall
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11.	Soldier Pile Layout - South-East Wall (2 of 2)
12.	Soldier Pile Layout - South-West Wall (1 of 2)
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14.	Drainage & Tieback Details
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28.	Parapet and Sidewalk Slab Details
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GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
U.S. 14 RETAINING WALLS
AT MOKELER CREEK
SECTION 29R-T
McHENRY COUNTY
STA. 0+647.90 TO STA. 0+982.78
AT STRUCTURE NO. 056-0007

Date: February, 2005 Scale: None

DESIGNED	J.S./R.A.
CHECKED	H.T./N.S.
DRAWN	J.S.
CHECKED	H.T./M.R.

Soodan
Soodan & Associates, Inc.
Architects, Engineers & Construction Consultants
500 North LaSalle Street, Suite 3000
Chicago, Illinois 60602
Tel: 312/553-0003 Fax: 312/553-1006
E-Mail: transport@soodan.com