

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	CONSTRUCTION TYPE CODE	
		UNIT	TOTAL
* ^ 20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	127
* ^ 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	72
20101000	TEMPORARY FENCE	FOOT	200
^ 20200100	EARTH EXCAVATION	CU YD	424
20900110	POROUS GRANULAR BACKFILL	CU YD	234
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	195
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	800
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	144
^ 40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	330
^ 40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	180
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	62
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	733
48101200	AGGREGATE SHOULDERS, TYPE B	TON	248
^ 50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1
^ 50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	80
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	77,040
* 50900205	STEEL RAILING, TYPE S1	FOOT	78
51100100	SLOPE WALL 4 INCH	SQ YD	108
51500100	NAME PLATES	EACH	2
52200015	PERMANENT SHEET PILING	SQ FT	1,697
54003000	CONCRETE BOX CULVERTS	CU YD	300.8
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	85
5421D042	PIPE CULVERTS, CLASS D, TYPE 1 42" (TEMPORARY)	FOOT	60
66500105	WOVEN WIRE FENCE, 4'	FOOT	350
67100100	MOBILIZATION	L SUM	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	170
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8
^ X0301852	DEWATERING STRUCTURE NO. 1	EACH	1
^ X0301853	DEWATERING STRUCTURE NO. 2	EACH	1
^ X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	386
^ X2070302	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	390
^ X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5
^ X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
^ Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	463

^ SEE SPECIAL PROVISIONS
* SPECIALTY ITEMS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED APRIL 1, 2016," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THE ROAD SHALL BE CLOSED TO TRAFFIC AT ALL TIMES EXCEPT AS DISCUSSED IN THE SPECIAL PROVISIONS AND TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING COSTRUCTION OF THE PROJECT.
- ALL EXCAVATED MATERIAL FROM THE PROJECT MAY BE USED IN THE PROPOSED EMBANKMENT AT THE APPROVAL OF THE ENGINEER.
- THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. ESTIMATED QUANTITY: SEEDING, CLASS 2 (SPECIAL) = 0.50 ACRES
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:
 STONE RIPRAP 1.75 TON/CU.YD.
 AGGREGATE SURFACE AND BASE COURSE 2.05 TON/CU.YD.
 HOT-MIX ASPHALT 112 LBS/SQ.YD./INCH THICKNESS
 AGGREGATE SHOULDER 2.05 TON/CU.YD.
 RAP 1.6 TON/CU.YD.

BITUMINOUS MATERIAL RATES	
SURFACE TYPE	RESIDUAL RATE
MILLED HMA OR PCC (TACK COAT)	0.05 LB/SQ FT
EXISTING PAVEMENT (TACK COAT)	0.05 LB/SQ FT
BETWEEN LIFTS (TACK COAT)	0.025 LB/SQ FT

- PAVEMENT SHALL BE SAWCUT AT STATIONS 437+25, 438+25, 444+18, & 447+81. COST INCLUDED IN EARTH EXCAVATION.

ROADWAY SCHEDULE

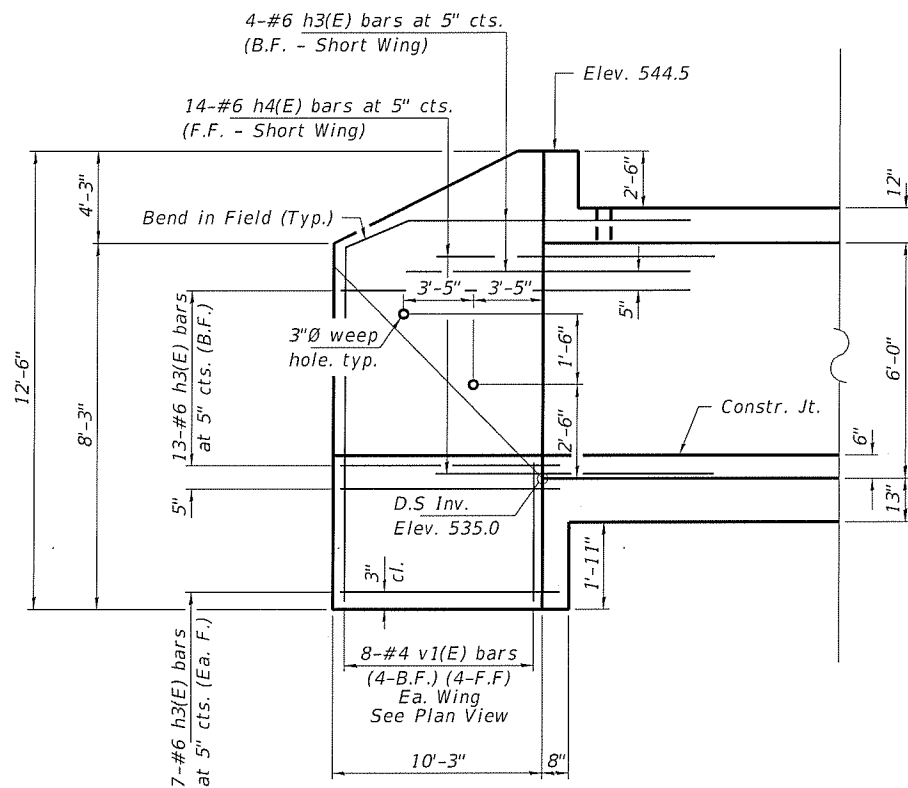
LOCATION	SUB-BASE GRANULAR MATERIAL, TYPE C 4"	AGGREGATE SURFACE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	CLASS D PATCHES, TYPE IV, 9 INCH	LONGITUDINAL JOINT SEALANT	AGGREGATE SHOULDERS, TYPE B (6")
		(2.05 T/CY)	(0.25 LB/SF)	(0.05 LB/SF)	(112 LB/IN/SY)			(2.05 T/CY)
CH 23 / ST. PETER ROAD	31102100	40200800	40600275	40600290	40604052	44201759	Z0033700	48101200
	SQ YD	TON	POUND	POUND	TON	SQ YD	FOOT	TON
STA. 437+25 TO 438+25	267		110	60	21	244.4	100	36
STA. 444+18 TO 447+81	533		220	120	41	488.9	363	212
ENTRANCES		144						
TOTAL	800	144	330	180	62	733	463	248

EARTHWORK SCHEDULE

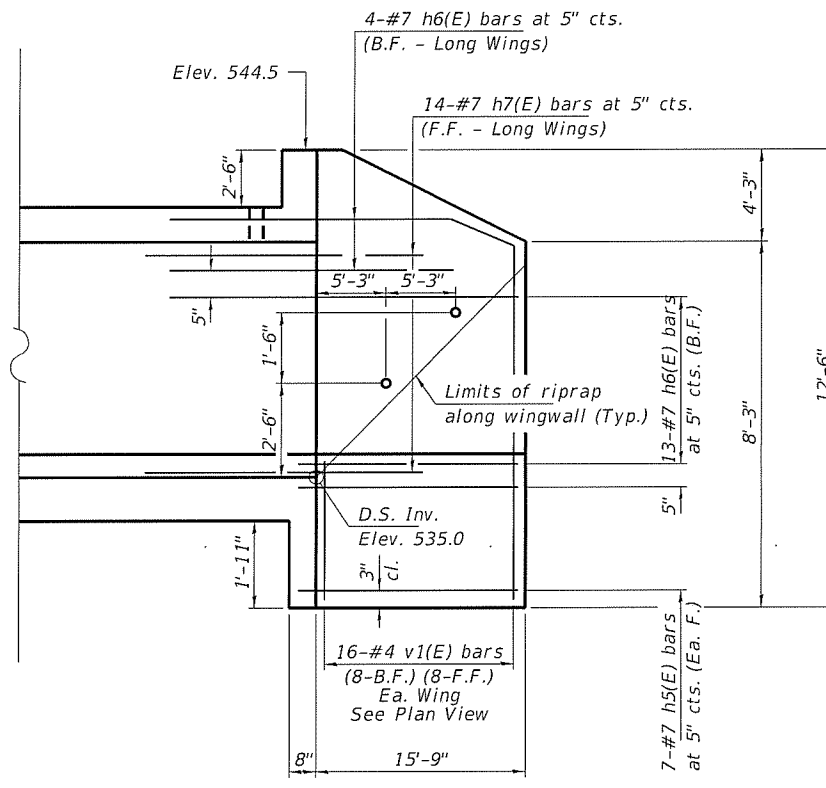
LOCATION	EARTH EXCAVATION	**MISC. EXCAVATION	SHRINKAGE FACTOR	PERCENT USED	EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE
	CU.YD.	CU.YD.					
F.A.S. 717 / C.H. 23 / ST. PETER RD							
STA. 437+25 TO STA. 437+65	173		25.00%	100.00%	130	9	121
STA. 437+65 TO STA. 437+90	90		25.00%	100.00%	68	12	56
STA. 437+90 TO STA. 438+25	45		25.00%	100.00%	33	6	27
STA. 438+25 TO STA. 444+18	0		25.00%	100.00%	0	0	0
STA. 444+18 TO STA. 445+50	71		25.00%	100.00%	53	55	-2
STA. 445+50 TO STA. 446+50	45		25.00%	100.00%	34	33	1
STA. 446+50 TO STA. 447+81	0		25.00%	100.00%	0	0	0
EXCAVATION FOR CULVERT AND PGE**		290	25.00%	100.00%	218	0	218
TOTAL	424	290			536	115	421
USE	424						420

** COST INCLUDED WITH CONCRETE BOX CULVERT

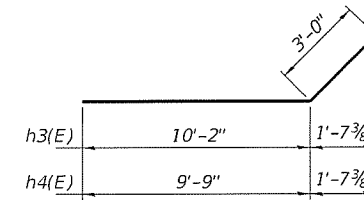
WASTE 420 CU YDS



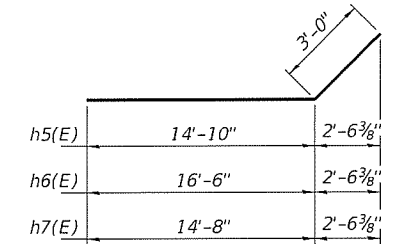
NORTHWEST WINGWALL ELEV. - (SHORT WING)



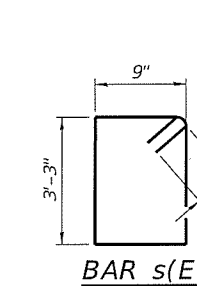
NORTHEAST WINGWALL ELEV. - (LONG WING)



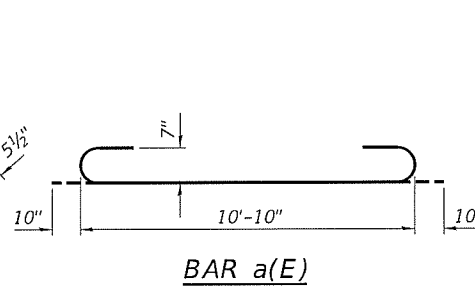
BARS h3(E) & h4(E)



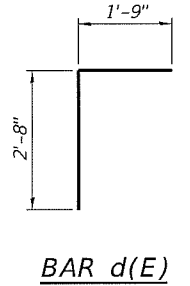
BARS h5(E), h6(E) & h7(E)



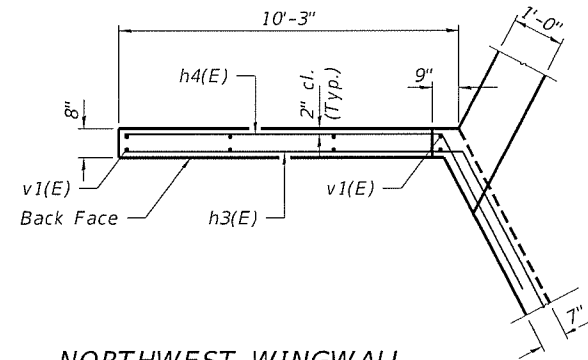
BAR s(E)



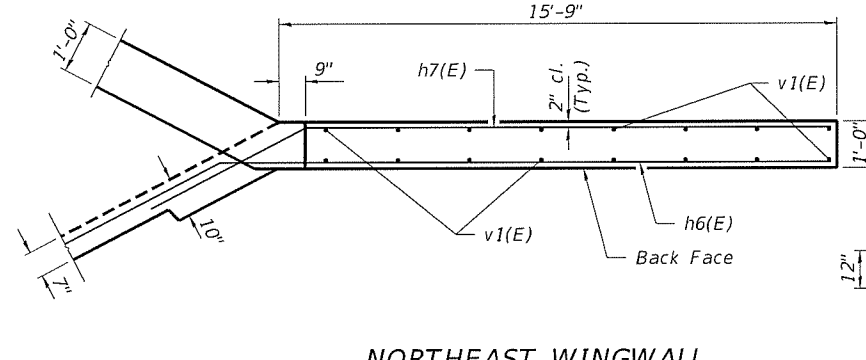
BAR a(E)



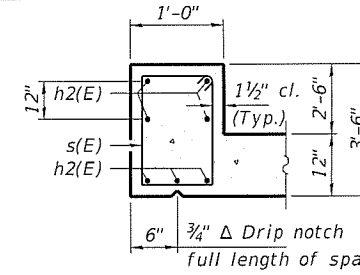
BAR d(E)



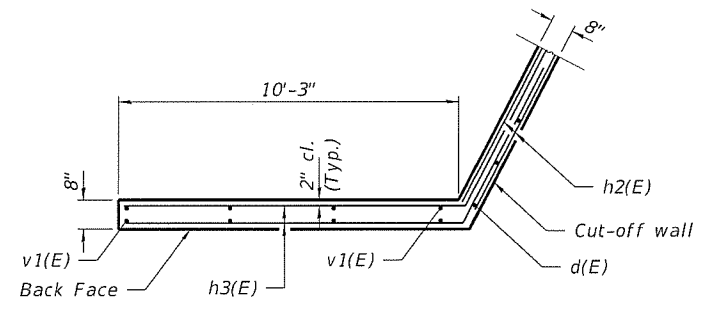
NORTHWEST WINGWALL UPPER PLAN - (SHORT WING)



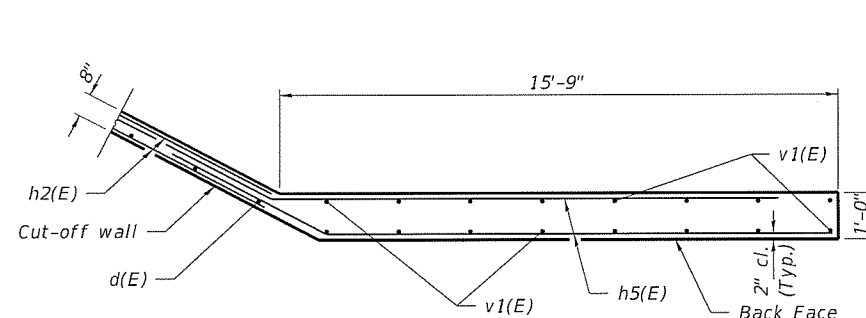
NORTHEAST WINGWALL UPPER PLAN - (LONG WING)



SECTION THRU HEADWALL



NORTHWEST WINGWALL LOWER PLAN - (SHORT WING)



NORTHEAST WINGWALL LOWER PLAN - (LONG WING)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	280	#7	12'-6"	U
a1(E)	164	#6	10'-10"	—
d(E)	11	#4	4'-5"	L
h(E)	132	#6	30'-8"	—
h1(E)	36	#4	29'-0"	—
h2(E)	21	#6	11'-4"	—
h3(E)	31	#6	13'-2"	—
h4(E)	14	#6	12'-9"	—
h5(E)	14	#7	17'-10"	—
h6(E)	17	#7	19'-6"	—
h7(E)	14	#7	17'-8"	—
h8(E)	18	#4	8'-0"	—
h9(E)	17	#4	9'-10"	—
h10(E)	18	#6	8'-0"	—
h11(E)	15	#6	14'-2"	—
h12(E)	5	#4	4'-0"	—
h13(E)	5	#4	35'-6"	—
h14(E)	5	#4	4'-0"	—
h15(E)	24	#4	17'-10"	—
h16(E)	24	#4	14'-0"	—
h17(E)	10	#4	25'-0"	—
s(E)	12	#4	8'-11"	U
s1(E)	12	#4	7'-9"	U
v(E)	285	#5	7'-8"	—
v1(E)	24	#4	12'-2"	—
v2(E)	20	#4	7'-4"	—
Porous Granular Backfill			Ton	50
Stone Dumped Riprap, Class A4			Ton	125
Reinf. Bars, Epoxy Coated			Pound	23,840
Name Plates			Each	1
Concrete Box Culverts			Cu. Yd.	116.6
Membrane Waterproofing System for Buried Struct.			Sq. Yd.	128
Porous Granular Embankment, Special			Ton	250

NOTES

1. B.F. denotes Back Face; F. F. denotes Front Face; Ea. F. denotes Each Face.