

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	011-2	LASALLE	44	1
ILLINOIS CONTRACT NO. 66F12				

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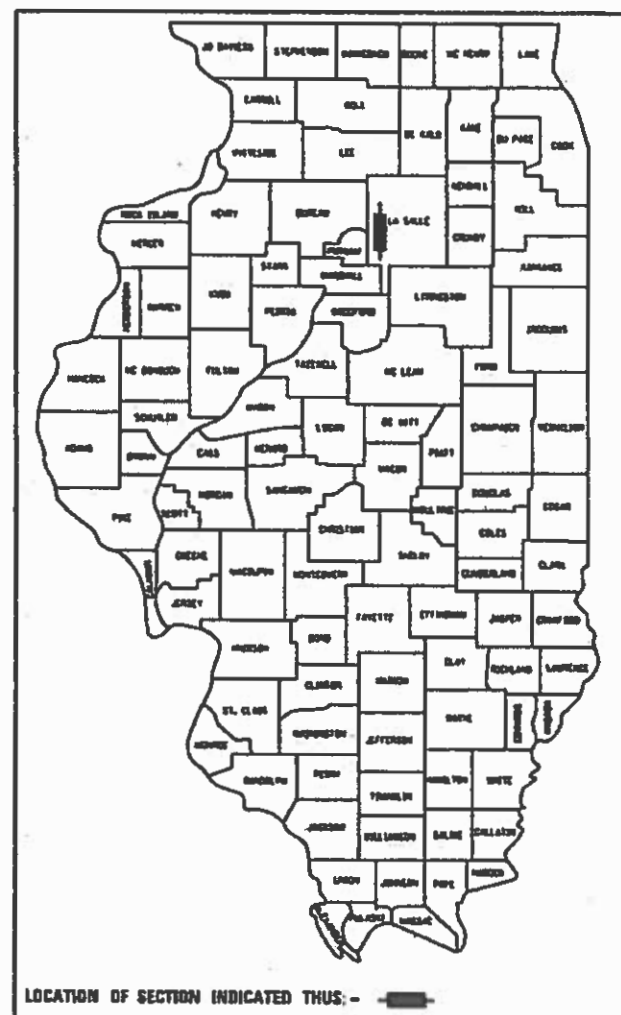
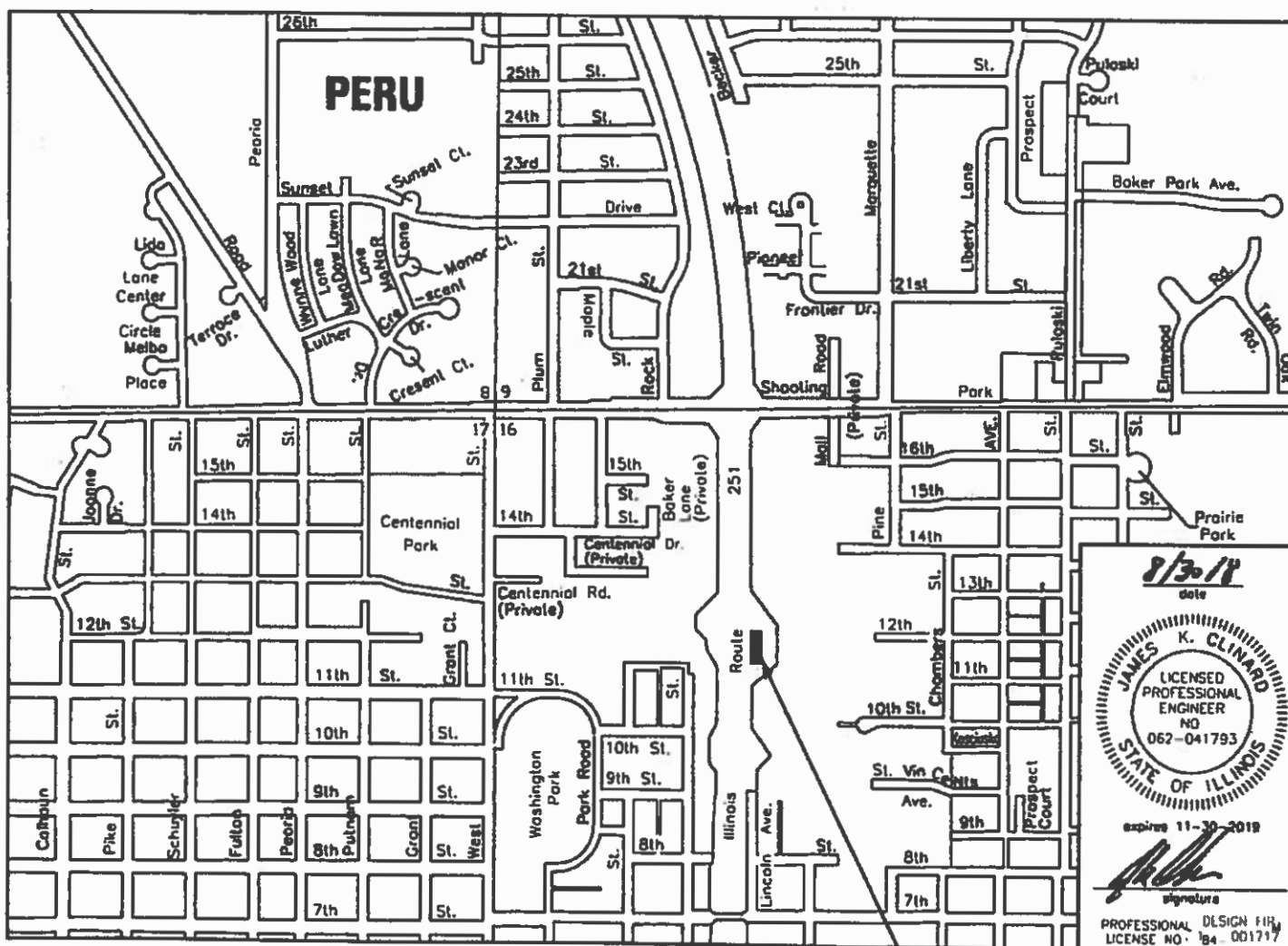
HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEM
- 515001-03 NAME PLATE FOR BRIDGES
- 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 601001-05 PIPE UNDERDRAINS
- 601101-02 CONCRETE HEADWALLS FOR PIPE UNDERDRAINS
- 602306-03 INLET, TYPE B
- 602401-04 PRECAST MANHOLE, TYPE A, 4' (1.22 m) DIAMETER
- 602406-08 PRECAST MANHOLE, TYPE A, 6' (1.83 m) DIAMETER
- 602601-05 PRECAST REINFORCED CONCRETE FLAT SLAB TOP MANHOLE STEPS
- 604001-04 FRAME AND LIDS, TYPE 1
- 604091-03 FRAME AND GRATE TYPE 24
- 606001-07 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 630001-12 STEEL PLATE BEAM GUARDRAIL
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701901-07 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**PROPOSED
HIGHWAY PLANS**

FAP 46 (IL-251)
SECTION: (1)I-2
PROJECT NHPP-8DBB(338)
TYPE OF IMPROVEMENT: SLOPE STABILIZATION
LASALLE COUNTY

C-93-081-18



FUNCTIONAL CLASSIFICATION:
OTHER PRINCIPAL ARTERIAL
2017 10,900 VPD
SU=3% MU=2%



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-8123
OR 811

DISTRICT 3 (815) 434-6131
PROJECT ENGINEER: DAVE ALEXANDER, P.E.
UNIT CHIEF: BRAD DUNCAN, P.E.
TOWNSHIP: PERU
CONTRACT NO. 66F12

8/3/18
date
JAMES K. CLINARD
LICENSED PROFESSIONAL ENGINEER
NO 062-041793
STATE OF ILLINOIS
expire 11-30-2019
signature
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184 001717

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED 08/31 2018
Kevin Henschel (P)
REGIONAL ENGINEER
Oct 5 2018
ENGINEER OF DESIGN AND ENVIRONMENT
Oct 9 2018
DIRECTOR OF HIGHWAYS, PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GROSS LENGTH = 450 FT. = 0.085 MILE
NET LENGTH = 450 FT. = 0.085 MILE

PROJECT LOCATION

GENERAL NOTES

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE II BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF TOPSOIL FURNISH AND PLACE 4"

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

CITY OF PERU - PERU MUNICIPAL ELECTRIC
PO BOX 299
1901 4TH STREET
PERU, IL 61354

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

SHOULD THE CONTRACTOR'S OPERATIONS DAMAGE THE SURFACE OF THE EXISTING PAVEMENT OR SHOULDERS ADJACENT TO THE WORK AREA, THE CONTRACTOR MAY BE REQUIRED TO REPAIR SAID DAMAGE BY MILLING AND RESURFACING THE AREA TO THE SATISFACTION OF THE ENGINEER. (SEE ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS.)

COMMITMENTS

NO TREES SHALL BE REMOVED BETWEEN APRIL 1 AND SEPTEMBER 30.

COORDINATION WILL BE REQUIRED WITH THE CITY OF PERU TO PROVIDE ACCESS (FLAT WORKING AREA) TO THE UTILITY POLE. DISTURBANCE OF THE SOIL SHALL CONFORM TO THE SPECIFICATIONS OUTLINED IN THE REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES SPECIAL PROVISIONS. NO ADDITIONAL COMPENSATION WILL BE INCLUDED IN THIS WORK EXCEPT THAT WORK THAT MAY BE ASSOCIATED WITH THE SPECIAL PROVISION MENTIONED HEREIN.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER /TECHNICIAN

START & END DATES
OF CONSTRUCTION:

INSPECTORS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

REVIEWED BY: *Tom Benik*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-31-18

EXAMINED BY: *Kyle V. ...*
DISTRICT CONSTRUCTION ENGINEER

Wanda A. ...
DISTRICT MATERIALS ENGINEER

Tom ...
DISTRICT OPERATIONS ENGINEER

	FILE NAME = D366F12-shr-gennote.dgn	USER NAME = CHAMLIN	DESIGNED - JKC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2.0000' / 1" =	CHECKED - JKC	REVISED -	46			(11)-2	LASALLE	44	2	
	PLOT DATE = 8/30/2018	DATE - 7/18	REVISED -	CONTRACT NO. 66F12							
							SCALE:	SHEET	OF	SHEETS	STA.

CODE NO.	ITEM	UNIT	NHP	
			FED 80%	STATE 20%
CONSTRUCTION CODE 0044			TOTAL QUANTITY	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	140	
20100500	TREE REMOVAL, ACRES	ACRES	0.25	
20400800	FURNISHED EXCAVATION	CU YD	140	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	503	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1922	
25000300	SEEDING, CLASS 3	ACRE	0.47	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	42	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	42	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	42	
25100630	EROSION CONTROL BLANKET	SQ YD	2282	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	94	
28000400	PERIMETER EROSION BARRIER	FOOT	217	
28000500	INLET AND PIPE PROTECTION	EACH	1	

△ - SPECIAL PROVISION

• - SPECIALTY ITEMS

FILE NAME = 0366F12-shh-S00.dgn
 USER NAME = CHAMLIN
 CHAMLIN ASSOCIATES, INC.

DESIGNED - JKC
 DRAWN - ARR
 PLOT SCALE = 2.0000' / 1" =
 CHECKED - JKC
 PLOT DATE = 8/30/2018
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)1-2	LASALLE	44	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66F12	

CONSTRUCTION CODE 0044			NHPP FED 80% STATE 20%
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
28100107	STONE RIPRAP, CLASS A4	SQ YD	41
28200200	FILTER FABRIC	SQ YD	41
31100910	SUBBASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	210
44004000	PAVED DITCH REMOVAL	FOOT	60
44004250	PAVED SHOULDER REMOVAL	SQ YD	199
48101200	AGGREGATE SHOULDERS, TYPE B	TON	46
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	145
50200100	STRUCTURE EXCAVATION	CU YD	335
50300225	CONCRETE STRUCTURES	CU YD	18.8
50500505	STUD SHEAR CONNECTORS	EACH	14
50800105	REINFORCEMENT BARS	POUND	1100
51500100	NAME PLATES	EACH	2
52200100	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	745
52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	1414

△ - SPECIAL PROVISION

• - SPECIALTY ITEMS

FILE NAME = D366F12.dwg-500.dgn

 CHAMLIN ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 2.0000' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JKC
 DRAWN - ARR
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LASALLE	44	4
CONTRACT NO. 66F12			ILLINOIS FED. AID PROJECT	

CONSTRUCTION CODE 0044			NHPP FED 80% STATE 20%
CODE NO.	ITEM	UNIT	TOTAL QUANTITY
52200205	DRILLING AND SETTING SOLDIER PILES (IN ROCK)	CU FT	251
52200260	PRECAST CONCRETE LAGGING	SQ FT	2177
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	15
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	48
550A0180	STORM SEWERS, CLASS A, TYPE 1 42"	FOOT	198
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	136
55100700	STORM SEWER REMOVAL 15"	FOOT	176
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	226
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1
60108200	PIPE UNDERDRAINS 6" (SPECIAL)	EACH	156
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1

△ - SPECIAL PROVISION

• - SPECIALTY ITEMS

			CONSTRUCTION CODE 0044		NHPP
					FED 80% STATE 20%
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		
60223700	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		
60240328	INLETS, TYPE B, TYPE 24 FRAME AND GRATE	EACH	3		
60608582	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24	FOOT	163		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	150		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1		
△ 63200310	GUARDRAIL REMOVAL	FOOT	200		
△ * 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	2771		
△ * 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1		
△ * 66900530	SOIL DISPOSAL ANALYSIS	EACH	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3		
67100100	MOBILIZATION	L SUM	1		
67201100	SEALING ABANDONED MONITORING WELLS	EACH	3		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	250		

△ - SPECIAL PROVISION
 * - SPECIALTY ITEMS

			CONSTRUCTION CODE 0044		NHPP
					FED 80% STATE 20%
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1		
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	1		
* 78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	2		
△ * X0321809	PERMANENT GROUND ANCHOR	EACH	10		
△ * X0323992	HELICAL GROUND ANCHORS	EACH	31		
△ X3400004	RETAINING WALL REMOVAL	FOOT	91		
△ X6020096	MANHOLES, TYPE A, 6'-DIAMETER, WITH 2 TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE	EACH	1		
△ X6050700	REMOVE INLET BOX	EACH	2		
△ X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	75		
△ Z0013798	CONSTRUCTION LAYOUT	L SUM	1		
△ Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	96		
△ X0900072	SLOPE INCLINOMETER CASING	FOOT	57		
△ * X1400348	GEOTECHNICAL INSTRUMENTATION ADJUSTMENT	EACH	4		

△ - SPECIAL PROVISION

• - SPECIALTY ITEMS

FILE NAME = D366F12.dwg-S00.dgn
CHAMLIN
 ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 2.0000' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JKC
 DRAWN - ARR
 CHECKED - JKC
 DATE - 7/18

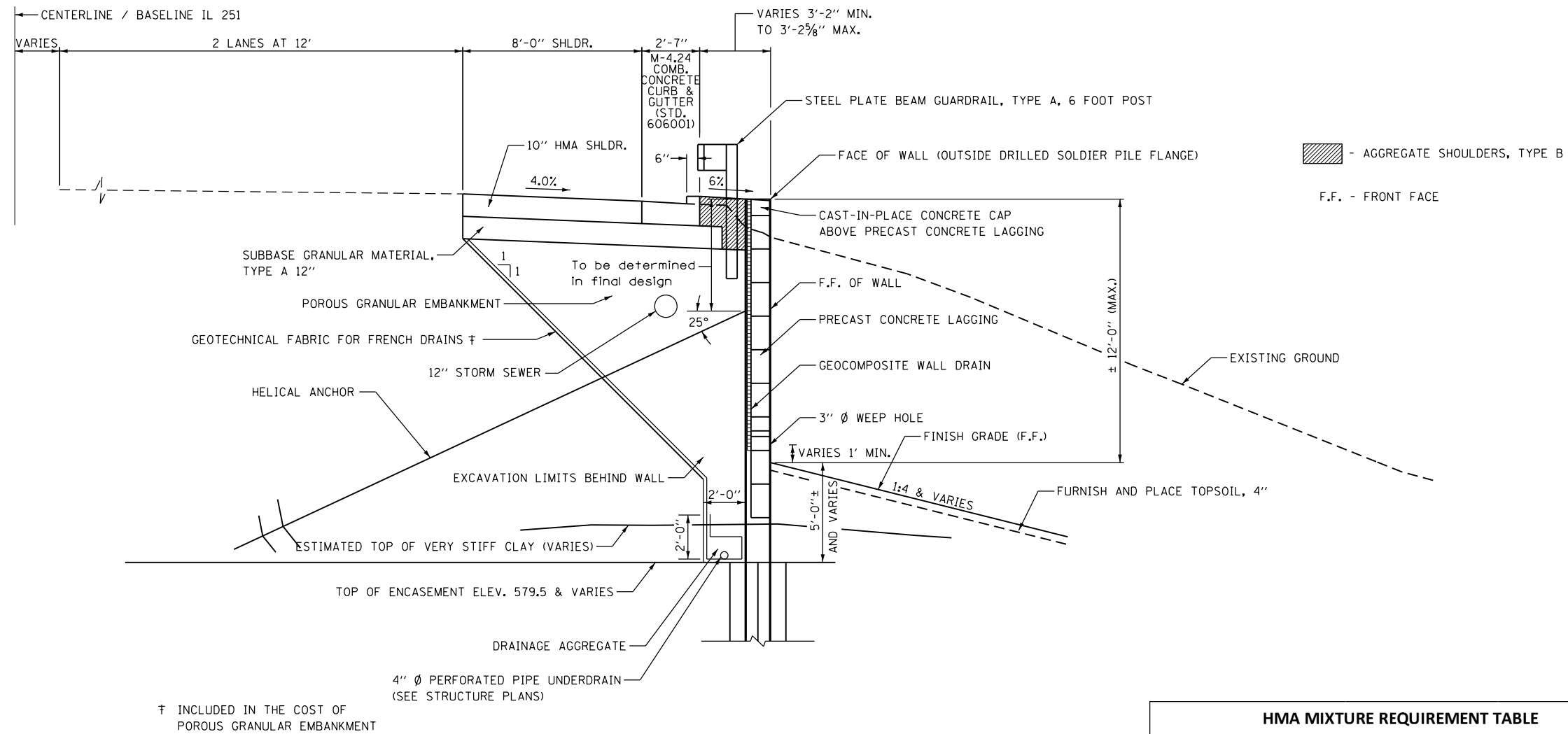
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LASALLE	44	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66F12	

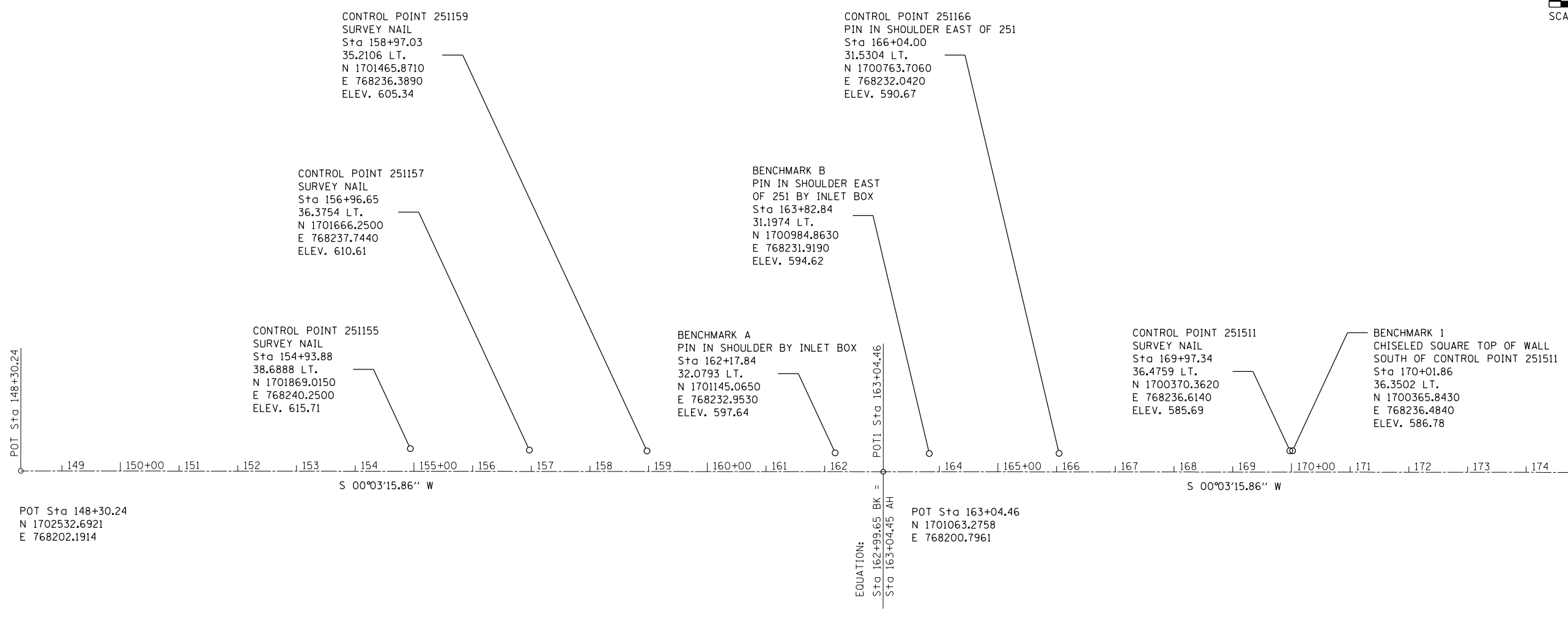
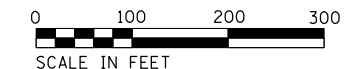


TYPICAL SECTION

STA 162+17.12 TO STA 163+58.05

† INCLUDED IN THE COST OF POROUS GRANULAR EMBANKMENT

HMA MIXTURE REQUIREMENT TABLE		
LOCATION(S):	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	HMA SHOULDER	HMA SHOULDER
	BOTTOM LIFT(S)	TOP LIFT 2"
BINDER GRADE (PG):	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 19.0	IL 9.5 FG
FRICTION AGGREGATE:	NA	NA
MIXTURE WEIGHT:	112.0 LB/SY/IN	112.0 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QCQA	QCQA
SUBLOT SIZE:	NA	NA
DENSITY TEST METHOD:	CORES	% GROWTH CURVE



FILE NAME = D366F12.dwg-ATB.dgn	USER NAME = CHAMLIN	DESIGNED - JKC	REVISED -
		DRAWN - LAG	REVISED -
		CHECKED - JKC	REVISED -
		DATE - 7/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALIGNMENT & TIES			
SCALE: 1"=100'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LASALLE	44	9
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE		
LOCATION	NON-SPECIAL WASTE DISPOSAL CU. YD.	FURNISHED EXCAVATION CU. YD.
LT STA 162+23.20 TO STA 163+64	2771.0	93.0
RT STA 161+56.16 TO STA 162+11.56		47.0
TOTAL	2771	140

*ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM SITE
SEE SPECIAL PROVISIONS.

SEEDING SCHEDULE							
LOCATION	NITROGEN FERTILIZER NUTRIENT POUND	PHOSPHORUS FERTILIZER NUTRIENT POUND	POTASSIUM FERTILIZER NUTRIENT POUND	SEEDING, CLASS 3 ACRE	TOPSOIL FURNISH AND PLACE, 4" SQ YD	EROSION CONTROL BLANKET SQ YD	TEMPORARY EROSION CONTROL SEEDING POUND
LT STA 161+82.8 TO STA 163+69.2	36	36	36	0.40	1914.9	1914.9	79.1
RT STA 161+46.4 TO STA 162+92.3	7	7	7	0.08	7.2	367.3	15.2
TOTAL	42	42	42	0.47	1922	2282	94

TREE REMOVAL SCHEDULE		
LOCATION	TREE REMOVAL (6 TO 15 UNITS DIAMETER) UNIT	TREE REMOVAL, ACRES
161+64.49, 169.7' LT	8	---
161+65.49, 162.6' LT	8	---
161+87.07, 170.6' LT	11	---
161+92.49, 172.0' LT	8	---
161+94.88, 162.8' LT	12	---
161+97.56, 170.5' LT	8	---
161+97.80, 196.4' LT	12	---
161+99.90, 197.6' LT	12	---
162+07.47, 169.7' LT	7	---
162+14.68, 165.9' LT	15	---
162+33.28, 175.8' LT	9	---
162+37.12, 163.8' LT	7	---
162+38.23, 151.4' LT	12	---
162+46.41, 165.0' LT	11	---
161+46.4 TO 162+92.3, RT	---	0.07
TOTAL	140	0.25

EROSION CONTROL SCHEDULE				
LOCATION	PERIMETER EROSION BARRIER FOOT	INLET AND PIPE PROTECTION EACH	STONE RIPRAP, CLASS A4 SQ YD	FILTER FABRIC SQ YD
LT STA 161+74.55 TO STA 161+93.58	23	---	---	---
LT STA 162+12 TO STA 162+45.93	34	---	---	---
LT STA 162+25.37 TO STA 163+50	140	---	---	---
LT STA 162+38.87 TO STA 162+58.76	20	---	---	---
LT STA 165+86.7 TO STA 165+97.2	---	---	8	8
RT STA 162+11.56, 103.72'	---	1	---	---
TOTAL	217	1	8	8

STORM SEWER STRUCTURE SCHEDULE							
LOCATION	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12" EACH	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18" EACH	CONCRETE HEADWALLS FOR PIPE DRAINS	INLETS, TYPE B, TYPE 24 FRAME AND GRATE	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	MANHOLES, TYPE A, 6'-DIAMETER, WITH 2 TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE
127.18' RT STA 161+56.16	---	1	---	---	---	---	---
103.72' RT STA 162+11.56	---	1	---	---	---	---	---
36' LT STA 162+35	---	---	---	1	---	---	---
196' LT STA 162+50	---	---	1	---	---	---	---
50' LT STA 162+90	---	---	---	---	1	---	---
35.4' LT STA 163+25	---	---	---	1	---	---	---
35.2' LT STA 163+80	---	---	---	1	---	---	---
47.4' LT STA 163+81	---	---	---	---	---	1	---
48' LT STA 165+84	---	---	---	---	---	---	1
62.5' LT STA 165+90	1	---	---	---	---	---	---
TOTAL	1	2	1	3	1	1	1

GUARDRAIL SCHEDULE				
LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS FOOT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT FOOT	TERMINAL MARKER DIRECT APPLIED EACH	GUARDRAIL REFLECTORS, TYPE B EACH
STA 162+15.18 TO STA 164+15.18	150	1	1	2
TOTAL	150	1	1	2

STORM SEWER REMOVAL SCHEDULE		
LOCATION	STORM SEWER REMOVAL 15" FOOT	REMOVE INLET BOX EACH
LT STA 162+25.5	125	1
LT STA 162+65.1 TO STA 162+95.7	36	---
LT STA 163+77.5	15	1
---	---	---
TOTAL	176	2

STORM SEWER SCHEDULE					
LOCATION	STORM SEWERS, CLASS A, TYPE 1 12" FOOT	STORM SEWERS, CLASS A, TYPE 1 18" FOOT	STORM SEWERS, CLASS A, TYPE 1 42" FOOT	STORM SEWERS, CLASS A, TYPE 2 12" FOOT	PIPE UNDERDRAINS 6" (SPECIAL) FOOT
RT STA 161+56.16 TO STA 162+11.56	---	48	---	---	---
LT STA 162+35 TO STA 163+25	---	---	---	83	---
LT STA 162+50 TO STA 162+90	---	---	---	---	156
LT STA 163+25 TO STA 163+80	---	---	---	53	---
LT STA 163+80 TO STA 163+81	8	---	---	---	---
LT STA 163+81 TO STA 165+84	---	---	198	---	---
LT STA 165+84 TO STA 165+90	7	---	---	---	---
TOTAL	15	48	198	136	156

SHOULDER SCHEDULE				
LOCATION	PAVED SHOULDER REMOVAL SQ. YD.	SUB-BASE GRAN. MATERIAL, TYPE A 12" SQ. YD.	AGGREGATE SHOULDERS, TYPE B TON	HOT-MIX ASPHALT SHOULDERS, 10" SQ. YD.
LT STA 162+17.12 TO STA 163+85.05	198.7	210.0	45.7	145.0
TOTAL	199	210	46	145

PAVED DITCH REMOVAL SCHEDULE	
LOCATION	PAVED DITCH REMOVAL FOOT
RT STA 161+56 TO STA 162+11	60
TOTAL	60

GUARDRAIL REMOVAL SCHEDULE	
LOCATION	GUARDRAIL REMOVAL FOOT
STA 162+15.18 TO STA 164+15.27	200
TOTAL	200

RETAINING WALL REMOVAL SCHEDULE	
LOCATION	RETAINING WALL REMOVAL FOOT
LT STA 162+12 TO STA 162+95	91
TOTAL	91

GEOTECHNICAL INSTRUMENTATION ADJUSTMENT SCHEDULE	
LOCATION	GEOTECHNICAL INSTRUMENTATION ADJUSTMENT EACH
88' LT STA 162+71	1
132' LT STA 162+35	1
56' LT STA 163+29	1
108' LT STA 162+75	1
TOTAL	4

CONCRETE CURB AND GUTTER SCHEDULE	
LOCATION	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24 FOOT
LT STA 162+17.12 TO STA 163+85.05	163
TOTAL	163

MONITORING WELL SCHEDULE	
LOCATION	SEALING ABANDONED MONITORING WELLS EACH
STA 162+83.96, 46.48' LT	1
STA 162+89.85, 33.71' LT	1
STA 162+93, 157' LT	1
TOTAL	3

FILE NAME = D366F12-01-1-schedule.dgn
 USER NAME = CHAMLIN
 DESIGNED - JKC
 DRAWN - ARR
 CHECKED - JKC
 DATE - 7/18

PLOT SCALE = 2.0000' / 1" / in.
 PLOT DATE = 8/30/2018

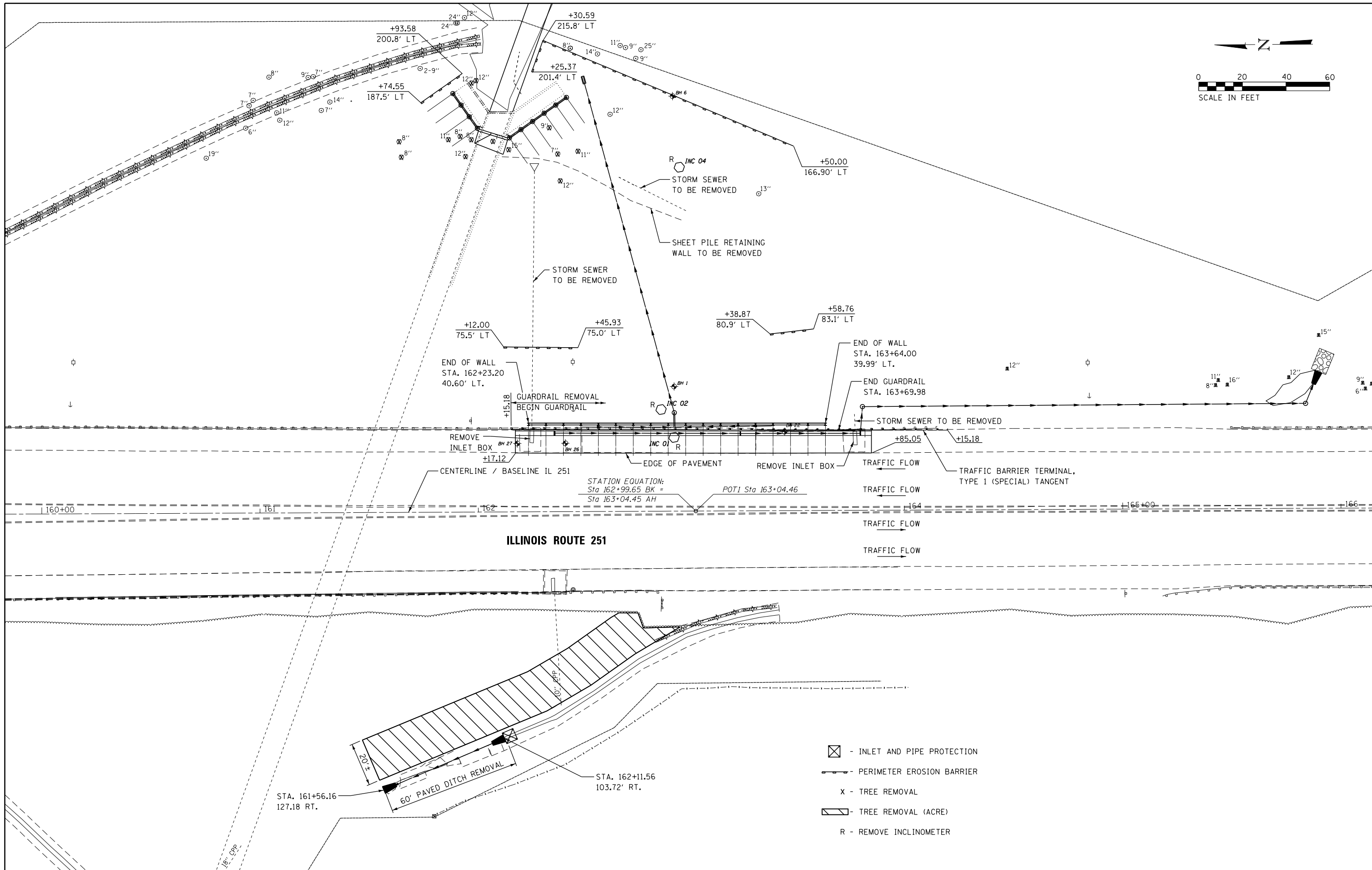
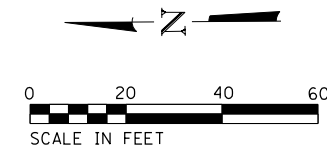
REVISOR -
 REVISION -
 REVISION -
 REVISION -

REVISOR -
 REVISION -
 REVISION -
 REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
 SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
 46 (1)I-2 LASALLE 44 10
 CONTRACT NO. 66F12
 ILLINOIS FED. AID PROJECT



FILE NAME = D366F12-1st-gen-plan.dgn
 USER NAME = CHAMLIN
 CHAMLIN ASSOCIATES, INC.

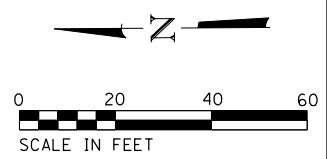
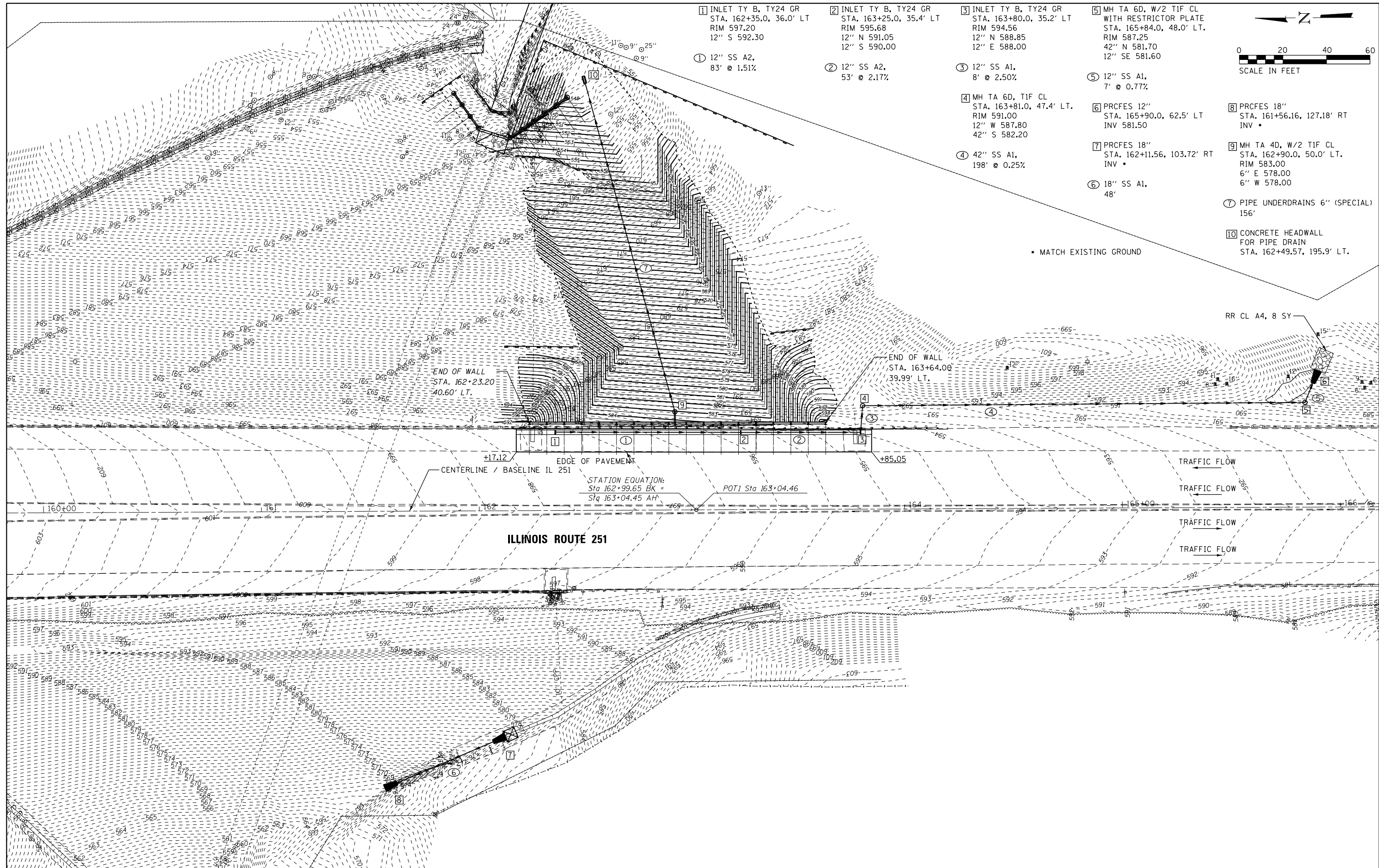
DESIGNED -	REVISED - BDD 09/18/2018
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -
PLOT SCALE = 48.0000' / in.	
PLOT DATE = 9/18/2018	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 160+00 TO STA. 166+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	11
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				



END OF WALL
STA. 162+23.20
40.60' LT.

END OF WALL
STA. 163+64.00
39.99' LT.

ILLINOIS ROUTE 251

CENTERLINE / BASELINE IL 251

STATION EQUATION:
Sta 162+99.65 BK =
Sta 163+04.45 AH

POT1 Sta 163+04.46

TRAFFIC FLOW
TRAFFIC FLOW
TRAFFIC FLOW
TRAFFIC FLOW

FILE NAME = D366F12-111-grading-drawings.dwg
CHAMLIN ASSOCIATES, INC.

USER NAME = CHAMLIN
DESIGNED - JKC
DRAWN - LAG
CHECKED - JKC
DATE - 7/18
PLOT SCALE = 40.0000' / in.
PLOT DATE = 8/30/2018

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING AND DRAINAGE PLAN

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 160+00 TO STA. 166+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	12
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

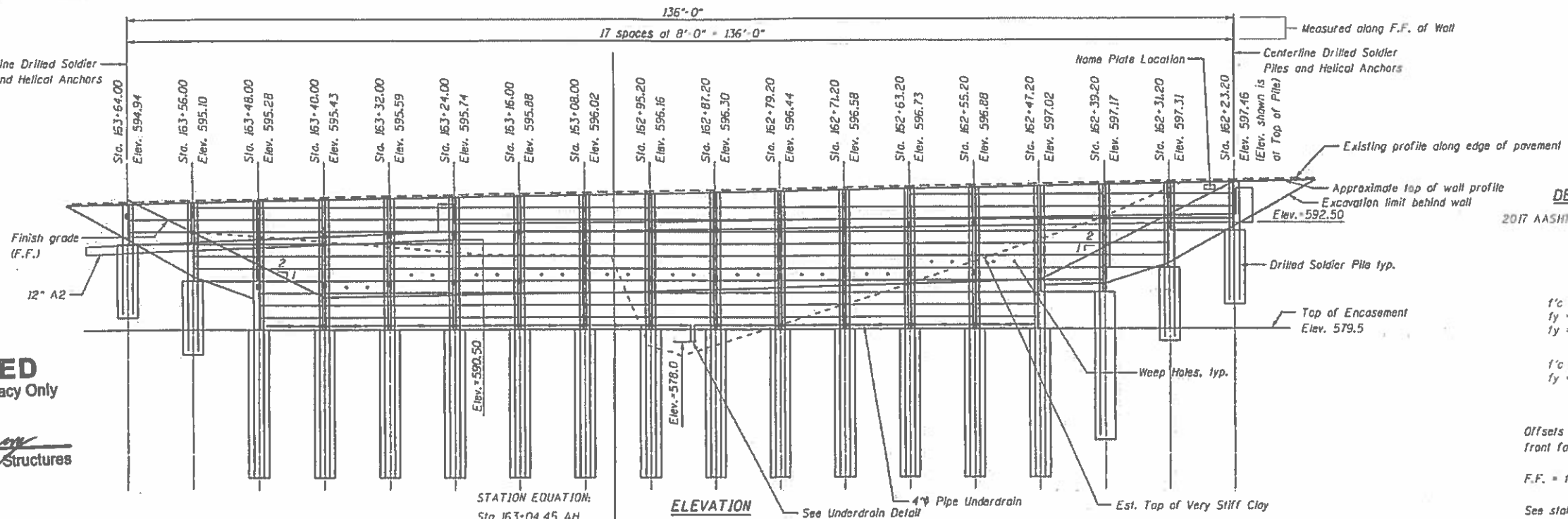
BENCHMARK 1
CHISELED SQUARE TOP OF WALL
SOUTH OF CONTROL POINT 251511
Sta 170+01.86
36.3502 LT.
N 1700365.8430
E 768236.4840
ELEV. 586.78

Existing Structure: None

Traffic Control:
Outside Lane Closure

APPROVED
For Structural Adequacy Only

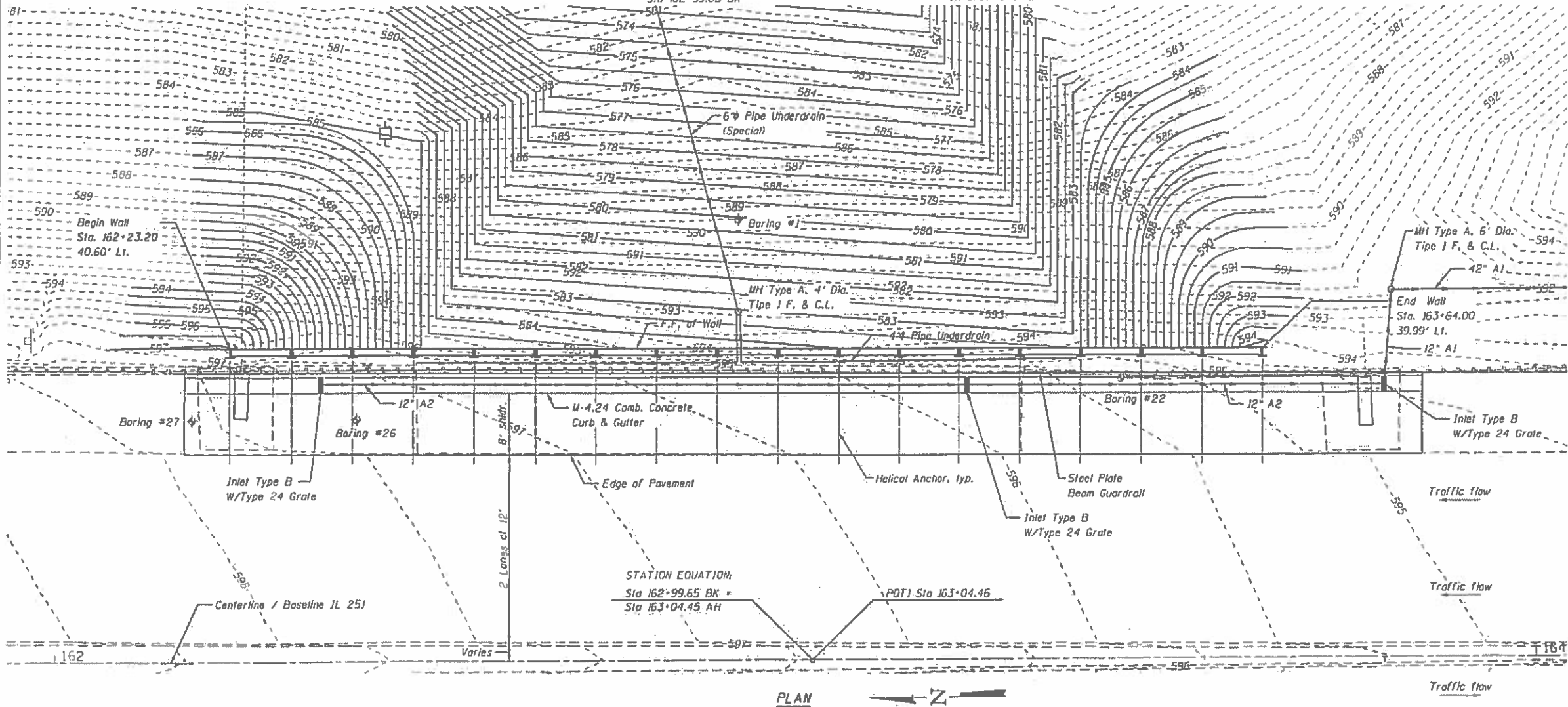
Dr. Carl Ramsey
Engineer of Bridges & Structures



STATION EQUATION:
Sta 163+04.45 AH
Sta 162+99.65 BK =

ELEVATION
(Looking at F.F. of wall)

See Underdrain Detail
on Sheet 5 of 8



PLAN

INDEX OF SHEETS

1	General Plan & Elevation
2	General Notes and Bill of Materials
3	Wall Section
4	Drilled Soldier Pile Schedule
5	Details
6-8	Soil Borings

DESIGN SPECIFICATIONS
2017 AASHTO LRFD Bridge Design Specifications

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (#270 Grade 50)

PRECAST UNITS
f'c = 6,000 psi
fy = 60,000 psi (Reinforcement)

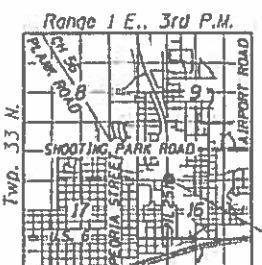
Offsets are measured from Baseline of IL 251 to front face of wall.
F.F. = front face
See station and elevation call outs in Elevation view.

PROFILE GRADE IL 251
(Along Top of Pile)

9/24/18



Professional Design Firm
License No. 184-001717



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL ROUTE 251
F.A.P. 46
SECTION (11)-2
LASALLE COUNTY
STATION 162+23.20 TO 163+64.00
STRUCTURE NO. 050-8801

FILE NAME = 0508801-FG12-001-GPC.dgn USER NAME = CHAMLIN PLOT SCALE = 1/8" = 1'-0" PLOT DATE = 9/24/2018	DESIGNED - JKC DRAWN - LAG CHECKED - JKC DATE - 7/5/18	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: 1"=8' SHEET 1 OF 8 SHEETS STA. 162+23.20 TO STA. 163+64.00	F.A.P. RTE. 46 SECTION (11)-2 COUNTY LaSalle TOTAL SHEETS 44 SHEET NO. 13 CONTRACT NO. 66F12
	ILLINOIS FED. AID PROJECT			

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	431
Structure Excavation	Cu. Yd.	150
Concrete Structures	Cu. Yd.	6.6
Reinforcement Bars	Pound	430
Name Plates	Each	1
Furnishing Soldier Piles (HP Section)	Foot	549
Drilling And Setting Soldier Piles (In Soil)	Cu. Ft.	1414
Precast Concrete Lagging	Sq. Ft.	1617
Geocomposite Wall Drain	Sq. Yd.	180
Helical Ground Anchors	Each	31
Slope Inclinator Casing	Foot	35
Pipe Underdrains for Structure 4"	Foot	96

GENERAL NOTES

1. All soldier pile steel shall be AASHTO M270 Grade 50.
2. The Organic Zinc Rich Primer/Epoxy/Urethane Paint System shall be used for painting new soldier piles. The entire system shall be shop applied. The color shall be Gray, Munshell No. 5b 7/1.
3. The Contractor shall attach a Slope Inclinator Casing to the Soldier Pile at Sta. 162+95.2, unless directed otherwise by the Engineer.

STATION 162+91.20
BUILT BY
STATE OF ILLINOIS
FAP 46 SEC. (1)I-2
LOADING HL-93
STRUCTURE NO. 050-8801

NAME PLATE
See Std. 515001

FILE NAME = 0508801-66F12-002-GENNOTE.dgn	USER NAME = CHAMLIN	DESIGNED JKC	REVISIONS
		DRAWN LAG	REVISIONS
		CHECKED JKC	REVISIONS
		DATE 7/5/18	REVISIONS



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

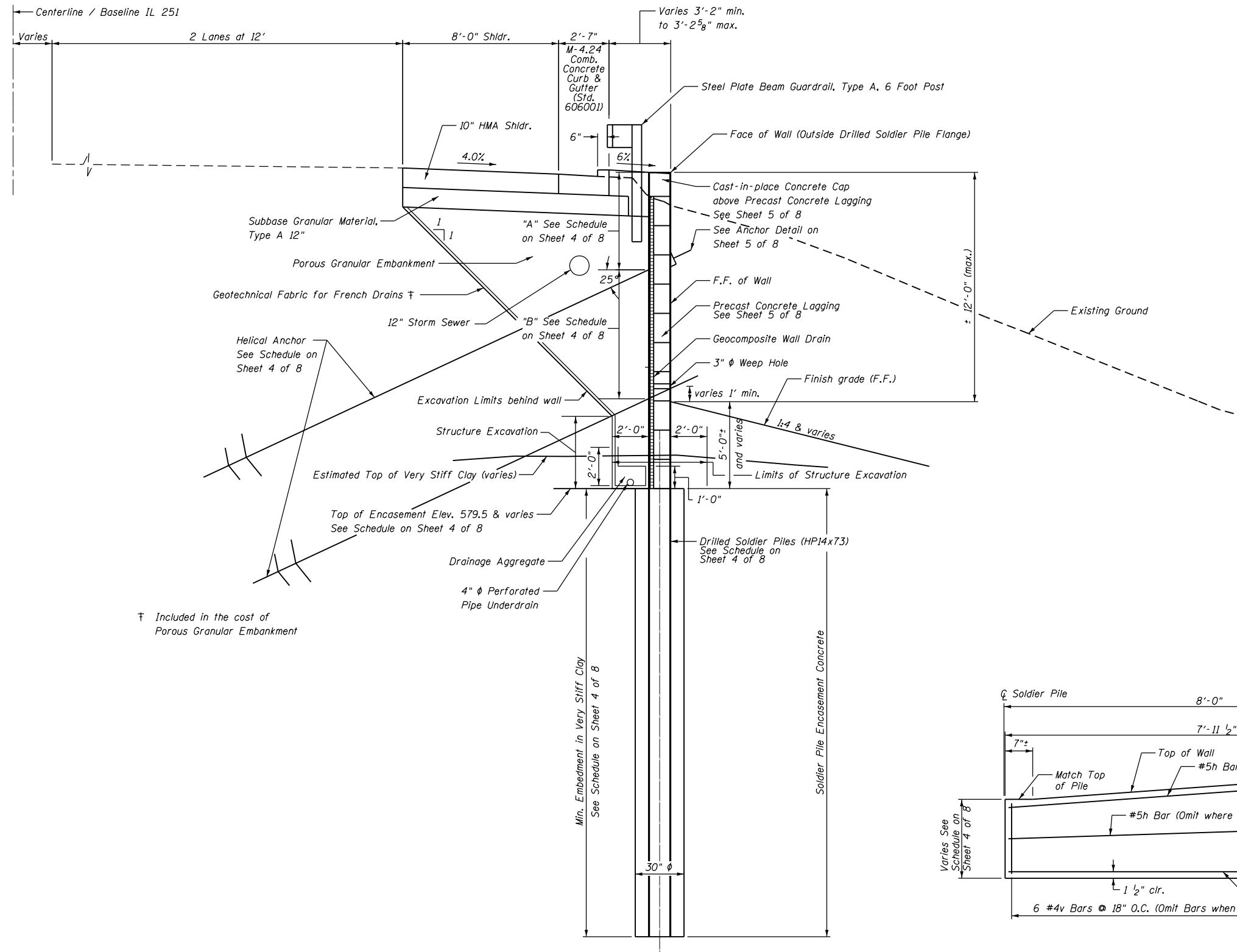
**GENERAL NOTES AND BILL OF MATERIALS
STRUCTURE NO. 050-8801**

SCALE: N.T.S. SHEET 2 OF 8 SHEETS STA. TO STA.

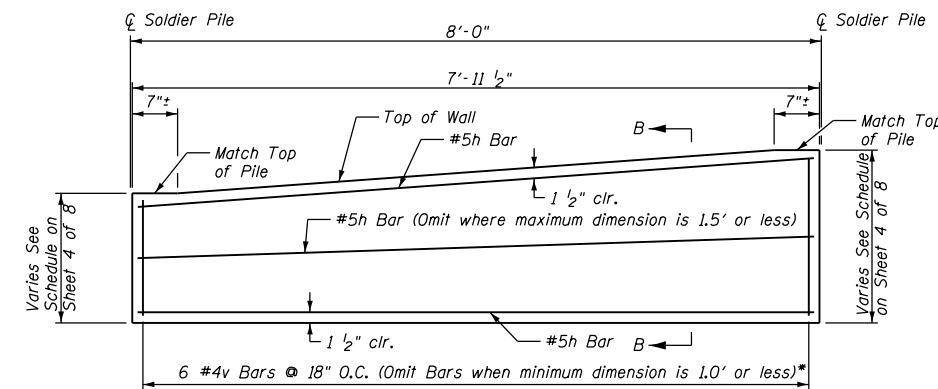
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	14
			CONTRACT NO. 66F12	
ILLINOIS FED. AID PROJECT				

BILL OF MATERIAL

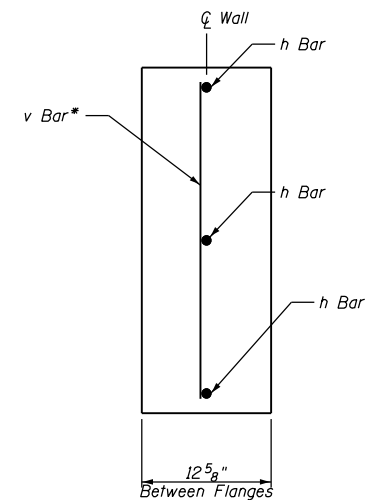
Bar	No.	Size	Length	Shape
h	41	#5	7'-8"	—
v	72	#4	2'-0"	—
Reinforcement Bars		Pound	430	
Concrete Structures		Cu. Yds.	6.6	



TYPICAL WALL SECTION
(Looking North)



CAST-IN-PLACE CONCRETE AT TOP OF WALL



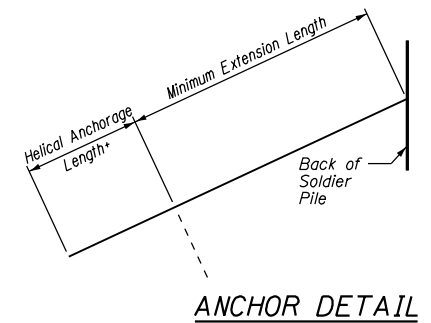
SECTION B-B

* cut to fit

SN 050-8801 DRILLED SOLDIER PILE SCHEDULE

SOLDIER PILE STATION	TOP OF PILE ELEVATION	BOTTOM OF PILE ELEVATION	TOP OF ENCASEMENT ELEVATION	DEPTH OF ENCASEMENT	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	FURNISHING SOLDIER PILES (HP SECTION)	NUMBER OF 18" LAGGING PLANKS TO SOUTH	LAGGING WITH WEEP HOLE LOCATION	CAST-IN-PLACE LAGGING MAXIMUM & MINIMUM HEIGHT		PRECAST CONCRETE LAGGING AREA	CONCRETE STRUCTURES	"A" **	SERVICE DESIGN LOAD	MINIMUM EXTENSION LENGTH*	"B" **	SERVICE DESIGN LOAD	MINIMUM EXTENSION LENGTH*
	(FEET)	(FEET)	(FEET)	(FEET)	(CU. FT.)	(FEET)	(EACH)	---	MAX (FEET)	MIN (FEET)	(SQ. FT.)	(CU. YD.)	(FEET)	(KIPS)	(FEET)	(FEET)	(KIPS)	(FEET)
STA 162+23.20	597.46	582.50	591.50	9.00	44.18	14.96	3	---	1.46	1.31	33	0.39	2	17.6	15	---	---	---
STA 162+31.20	597.31	578.00	587.00	9.00	44.18	19.31	6	---	1.31	1.17	66	0.35	2	40.9	15	---	---	---
STA 162+39.20	597.17	566.00	584.00	18.00	88.36	31.17	8	---	1.17	1.02	88	0.31	5	70.3	15	---	---	---
STA 162+47.20	597.02	561.50	579.50	18.00	88.36	35.52	11	6th from bottom	1.02	0.88	121	0.27	5	56.8	15	6	79.3	15
STA 162+55.20	596.88	561.50	579.50	18.00	88.36	35.38	11	6th from bottom	0.88	0.73	121	0.23	5	56.8	15	6	79.3	15
STA 162+63.20	596.73	561.50	579.50	18.00	88.36	35.23	10	5th from bottom	2.23	2.08	110	0.61	5	56.8	15	6	79.3	15
STA 162+71.20	596.58	561.50	579.50	18.00	88.36	35.08	10	5th from bottom	2.08	1.94	110	0.57	5	56.8	15	6	79.3	15
STA 162+79.20	596.44	561.50	579.50	18.00	88.36	34.94	10	5th from bottom	1.94	1.80	110	0.53	5	56.8	15	6	79.3	15
STA 162+87.20	596.30	561.50	579.50	18.00	88.36	34.80	10	5th from bottom	1.80	1.66	110	0.49	5	56.8	15	6	79.3	15
STA 162+95.20	596.16	561.50	579.50	18.00	88.36	34.66	10	5th from bottom	1.66	1.52	110	0.45	5	56.8	15	6	79.3	15
STA 163+08.00	596.02	561.50	579.50	18.00	88.36	34.52	10	5th from bottom	1.52	1.38	110	0.41	5	56.8	15	6	79.3	15
STA 163+16.00	595.88	561.50	579.50	18.00	88.36	34.38	10	5th from bottom	1.38	1.24	110	0.37	5	56.8	15	6	79.3	15
STA 163+24.00	595.74	561.50	579.50	18.00	88.36	34.24	10	5th from bottom	1.24	1.09	110	0.33	5	56.8	15	6	79.3	15
STA 163+32.00	595.59	561.50	579.50	18.00	88.36	34.09	10	4th from bottom	1.09	0.93	110	0.29	5	56.8	15	6	79.3	15
STA 163+40.00	595.43	561.50	579.50	18.00	88.36	33.93	10	---	0.93	0.78	110	0.24	5	56.8	15	6	79.3	15
STA 163+48.00	595.28	561.50	579.50	18.00	88.36	33.78	6	---	0.78	0.60	66	0.20	5	61.7	15	6	58.4	15
STA 163+56.00	595.10	576.50	585.50	9.00	44.18	18.60	2	---	2.10	1.94	22	0.57	2	44	15	---	---	---
STA 163+64.00	594.94	581.00	590.00	9.00	44.18	13.94	---	---	---	---	---	---	2	19.2	15	---	---	---
TOTAL QUANTITY =					1414	549					1617	6.6			* Minimum Length = 15'			

** See Anchor Detail on sheet 5 of 8



* Helical Anchorage Length is the combination of helical lead and helical extension sections



3705 Progress Blvd
Peru, IL 61354
815 780-8486

SOIL BORING LOG

Solutions You Can Build On Date 3/13/18
 ROUTE FA46 (IL 251) DESCRIPTION IL 251 north bound slope failure south of Shooting Park Road In Peru LOGGED BY TLM
 SECTION 1 (I) LOCATION NW 1/4, SEC. 16, TWP. 33N, RNG. 1E, 3rd PM.
 COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
BORING NO.	Station	DEPTH	LOG	CS	QUIST	Stream Bed Elev.	ft	DEPTH	LOG	CS	QUIST
	Offset	H	S	Qu	T	Groundwater Elev.:		H	S	Qu	T
	Ground Surface Elev.	(ft)	(/6")	(tsf)	(%)	First Encounter	ft	(ft)	(/6")	(tsf)	(%)
						Upon Completion	ft				
						After	Hrs.				
HMA Surface over 4" Aggregate	596.36		10			Very Stiff Gray Brown Clay Fill w/ black cinders (coal) and some limestone pieces, moist (continued)			3		
Stiff Brown Gray Clay Fill w/ rounded aggregate pieces, moist			5	2.9	22				7	2.1	22
			5	B					6	B	
			3						3		
			3	1.5	25				4	2.1	21
			4	P					5	B	
			3						4		
			4	4.5	26				5	2.1	18
			4	B					6	B	
	588.69		3						5		
Stiff Gray Clayey Reworked Shale Fill	588.19		4	1.5	20				5	2.1	24
			4	P					6	B	
Stiff Red Clay Reworked Clayey Shale Fill, moist	587.19		4			Very Stiff Gray Clay, moist (fill?)	567.19		3		
Stiff Gray Clay Fill w/ some cinders, moist			6	2.3	22				5	2.1	28
			7	S					7	B	
	584.69		3						5		
Very Stiff Gray Brown Clay Fill w/ some coal fragments, moist			5	2.5	21				8	2.4	23
			7	P					13	S	
	582.19		2			Hard Brown Silty Clay, moist	562.19		8		
Stiff Gray Clay Fill, moist			3	2.0	24				17	4.5	17
			6	P		Hard Gray Silty Clay, moist	560.69		24	P	
	579.69		3			Hard Red Weathered Shale	559.69		13		
Very Stiff Gray Brown Clay Fill w/ black cinders (coal) and some limestone pieces, moist			5	2.0	26				39	4.5	15
			5	B					74	P	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)



3705 Progress Blvd
Peru, IL 61354
815 780-8486

SOIL BORING LOG

Solutions You Can Build On Date 3/13/18
 ROUTE FA46 (IL 251) DESCRIPTION IL 251 north bound slope failure south of Shooting Park Road In Peru LOGGED BY TLM
 SECTION 1 (I) LOCATION NW 1/4, SEC. 16, TWP. 33N, RNG. 1E, 3rd PM.
 COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

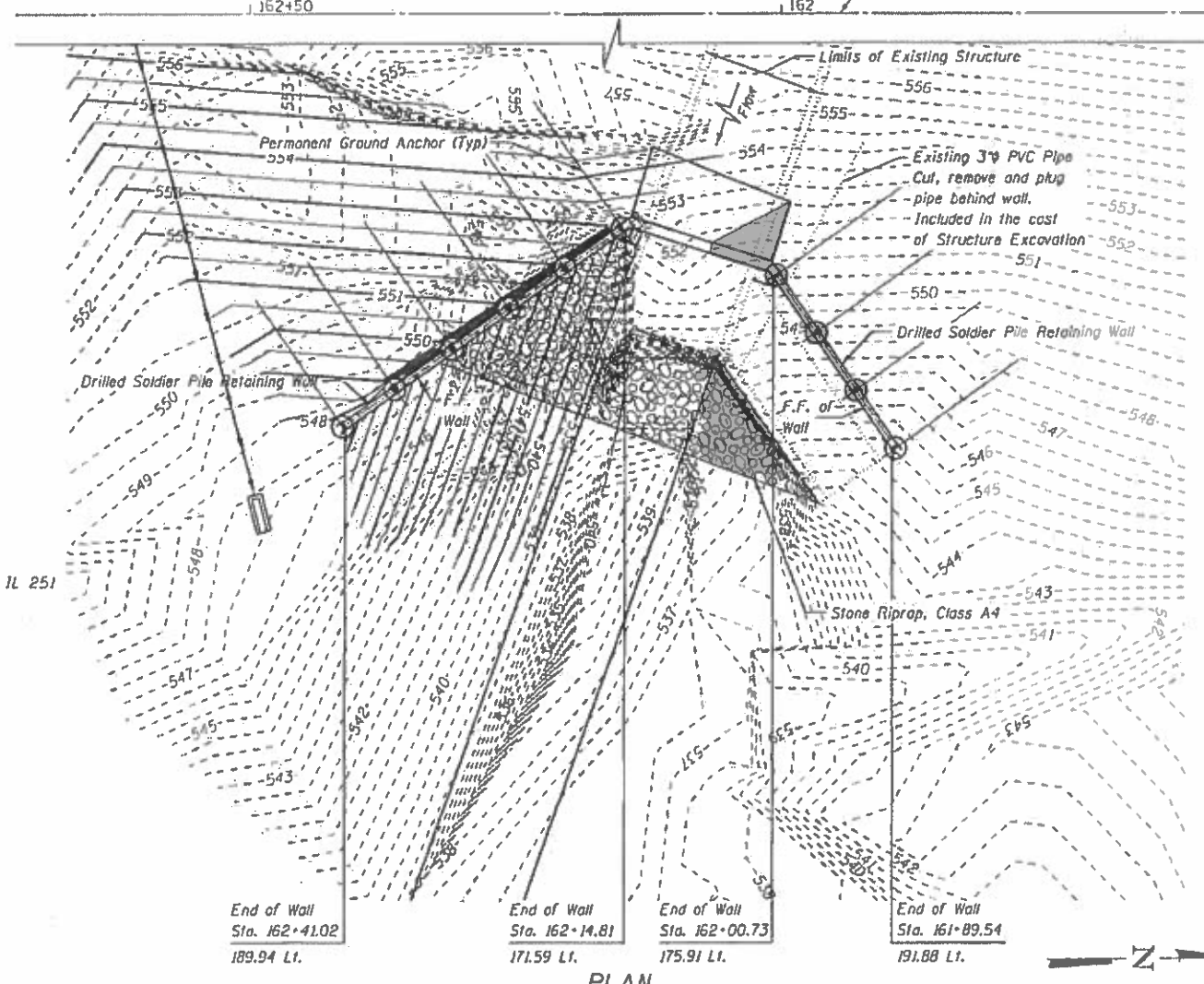
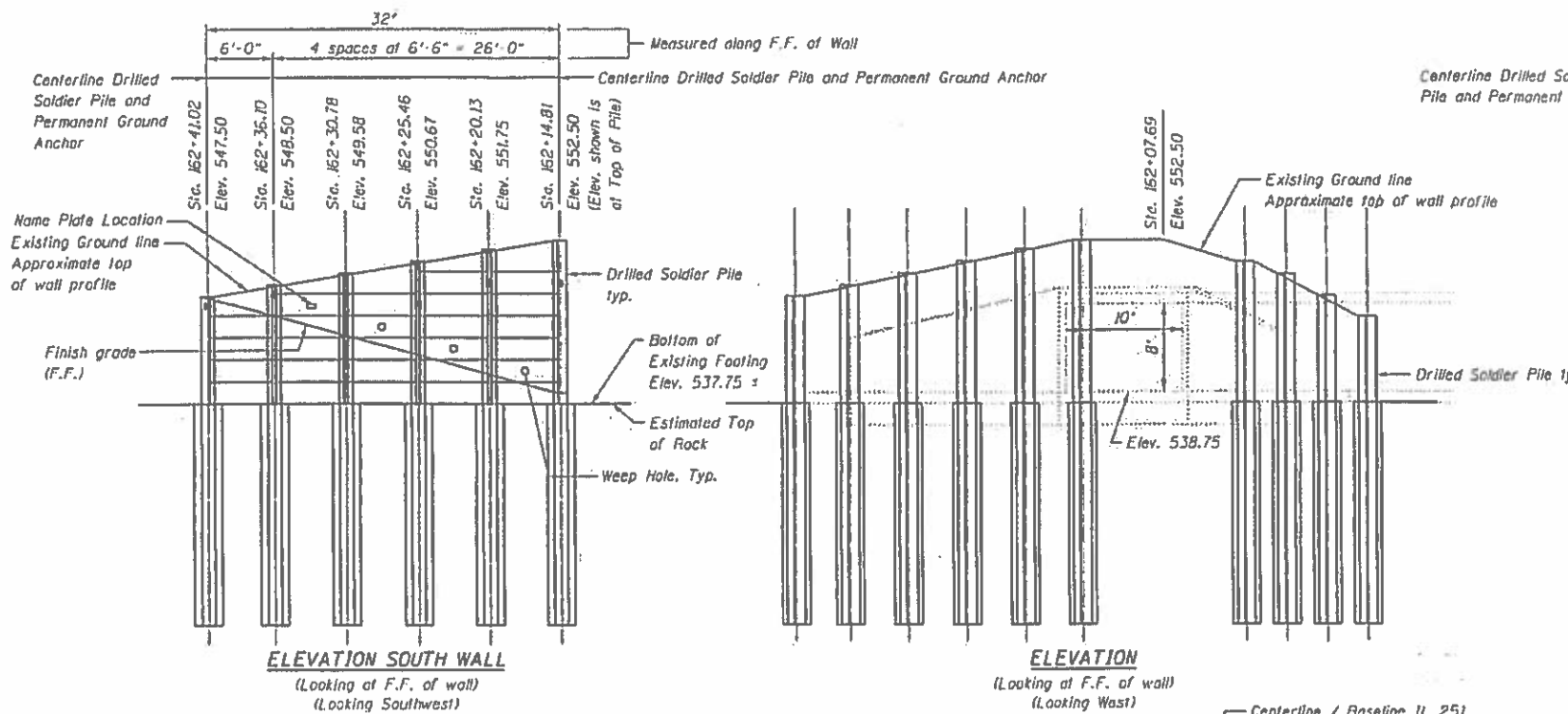
STRUCT. NO.	Station	D	B	U	M	Surface Water Elev.	ft	D	B	U	M
BORING NO.	Station	DEPTH	LOG	CS	QUIST	Stream Bed Elev.	ft	DEPTH	LOG	CS	QUIST
	Offset	H	S	Qu	T	Groundwater Elev.:		H	S	Qu	T
	Ground Surface Elev.	(ft)	(/6")	(tsf)	(%)	First Encounter	ft	(ft)	(/6")	(tsf)	(%)
						Upon Completion	ft				
						After	Hrs.				
Hard Red Weathered Shale (continued)			23			End of Boring					
			53	4.5	14						
			88	P							
			23								
			40	-	8						
MSPT for the last 6 inches of sample	552.69		40	5.25							
				MSPT							
			20								
			100	6.33	10						
MSPT for the last 6 inches of sample	547.69			See MSPT							
				MSPT							
			34								
			30	4.5	12						
Red Clay	543.19		30	S							
			46								
			125	-	11						
	537.69										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
 BBS, form 137 (Rev. 8-99)

BENCHMARK 1
CHISELED SQUARE TOP OF WALL
SOUTH OF CONTROL POINT 251511
Sta 170+01.86
36.3502 LT.
N 1700365.8430
E 768236.4840
ELEV. 586.78

Existing Structure:
10'x8' Cast-in-place Concrete Box
Culvert SN 050-2524
Section 12
Built 1961
374' Between Headwalls
Variable Wall and Slab Thicknesses
20° Lt Fwd Skew

Traffic Control:
Outside Lane Closure



Offsets are measured from Baseline IL 251
to front face of wall.
F.F. - Front Face

DESIGN SPECIFICATIONS
2017 AASHTO LRFD Bridge Design Specifications

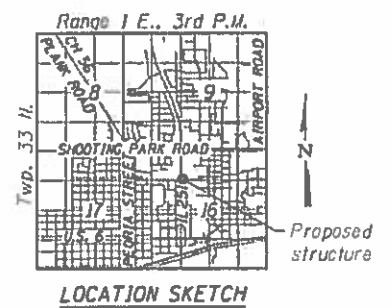
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

EXISTING
fs = 20,000 psi (Reinforcement)
fc = 1,400 psi (Barrel)
fc = 1,000 psi (Wing Walls)

PRECAST UNITS
f'c = 6,000 psi
fy = 60,000 psi (Reinforcement)

- INDEX OF SHEETS**
- 1 General Plan & Elevation
 - 2 General Notes and Bill of Materials
 - 3 Plan and Wall Section
 - 4 Drilled Soldier Pile Schedule
 - 5 Details
 - 6 Wall Above Culvert Detail
 - 7 Soil Barings

APPROVED
For Structural Adequacy Only
[Signature]
Engineer of Bridges & Structures



JAMES K. CLIKARD
LICENSED STRUCTURAL ENGINEER
No. 081-004555
STATE OF ILLINOIS
Expires 11-30-2018
[Signature]
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-001717

GENERAL PLAN & ELEVATION
IL ROUTE 251
F.A.P. 46
SECTION (11)-2
LASALLE COUNTY
STATION 161+89.54 TO 162+41.02
STRUCTURE NO. 050-8802

FILE NAME: 0508802-66F12-001-CPE.dwg	USER NAME: CHAMLIN	DESIGNED: JKC	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	F.A.P. RTE. 46	SECTION (11)-2	COUNTY LaSalle	TOTAL SHEETS 44	SHEET NO. 21	
CHAMLIN ASSOCIATES, INC.	PLOT SCALE: 1/8"=1'-0"	DRAWN: LAG	REVISED: -		SCALE: 1"=8'	SHEET 1	OF 7 SHEETS	STA. 162+23.20 TO STA. 163+64.00	CONTRACT NO. 66F12	ILLINOIS FED. AID PROJECT
	PLOT DATE: 4/24/2018	CHECKED: JKC	REVISED: -							
		DATE: 7/5/18	REVISED: -							

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	72
Stone Riprap, Class A4	Sq. Yd.	33
Filter Fabric	Sq. Yd.	33
Structure Excavation	Cu. Yd.	185
Concrete Structures	Cu. Yd.	12.2
Stud Shear Connectors	Each	14
Reinforcement Bars	Pound	670
Name Plates	Each	1
Furnishing Soldier Piles (HP Section)	Foot	196
Drilling And Setting Soldier Piles (In Rock)	Cu. Ft.	251
Precast Concrete Lagging	Sq. Ft.	560
Geocomposite Wall Drain	Sq. Yd.	46
Permanent Ground Anchors	Each	10
Slope Inclinator Casing	Foot	22

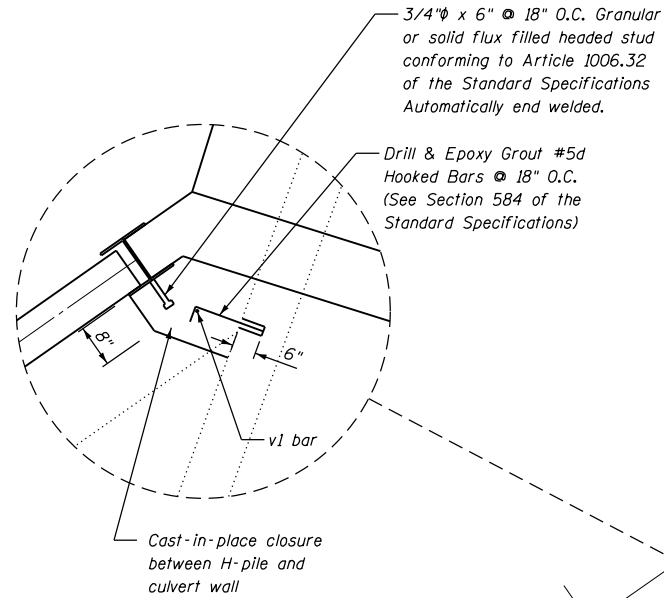
GENERAL NOTES

- All soldier pile steel shall be AASHTO M270 Grade 50.
- The Organic Zinc Rich Primer/Epoxy/Urethane Paint System shall be used for painting new soldier piles. The entire system shall be shop applied. The color shall be Gray, Munsell No. 5b 7/1.
- Plan dimensions and details relative to the existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering materials. Such variations shall not be cause for additional compensation for a change in 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 shall attach a Slope Inclinator Casing to the Soldier Pile at Sta. 162+20.13, unless otherwise directed by the Engineer.
- Layout of the Slope Protection System may be varied to suit ground conditions in the field as directed by the Engineer.

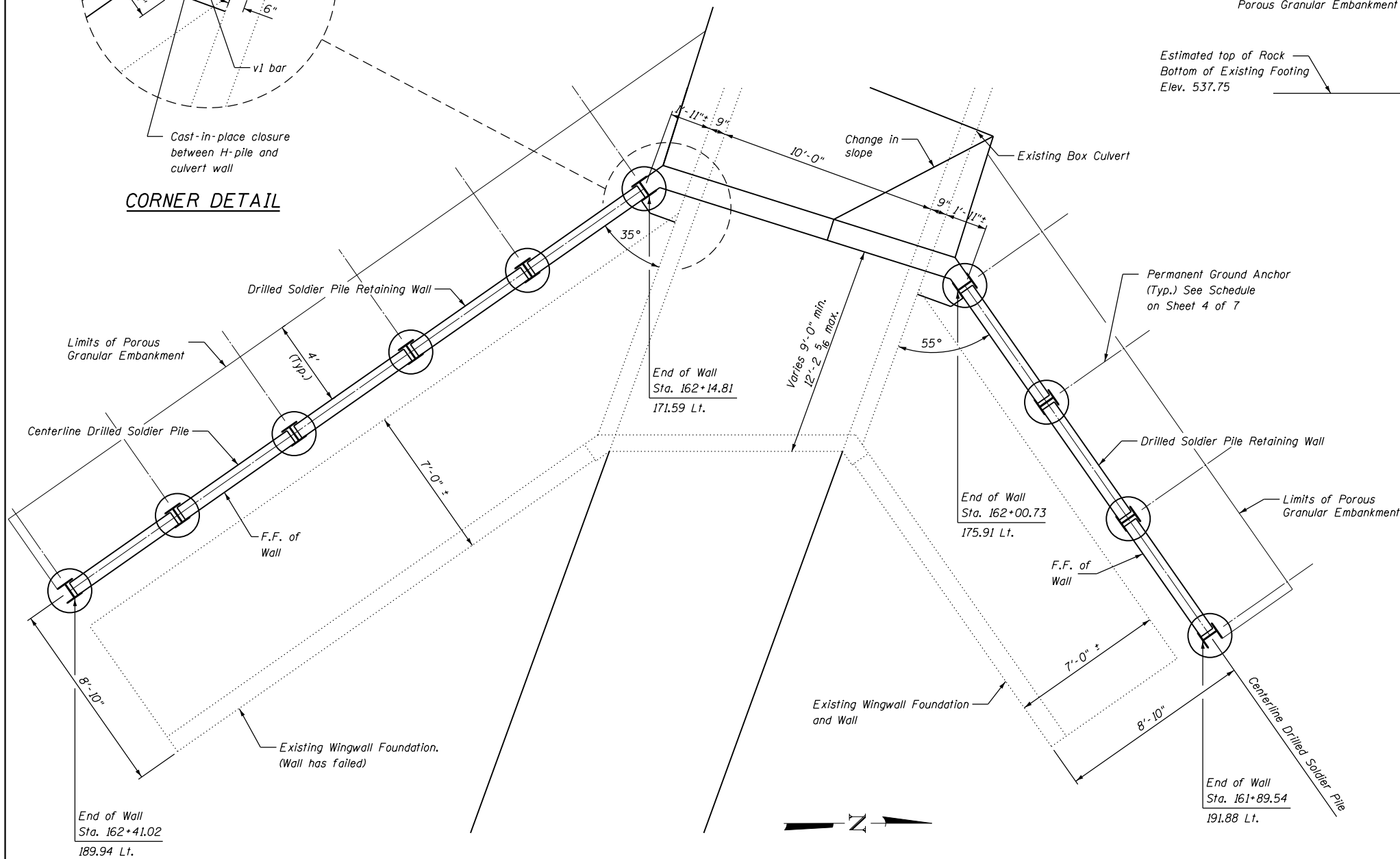
STATION 162+15
BUILT BY
STATE OF ILLINOIS
FAP 46 SEC. (1)I-2
LOADING HL-93
STRUCTURE NO. 050-8802

NAME PLATE
See Std. 515001

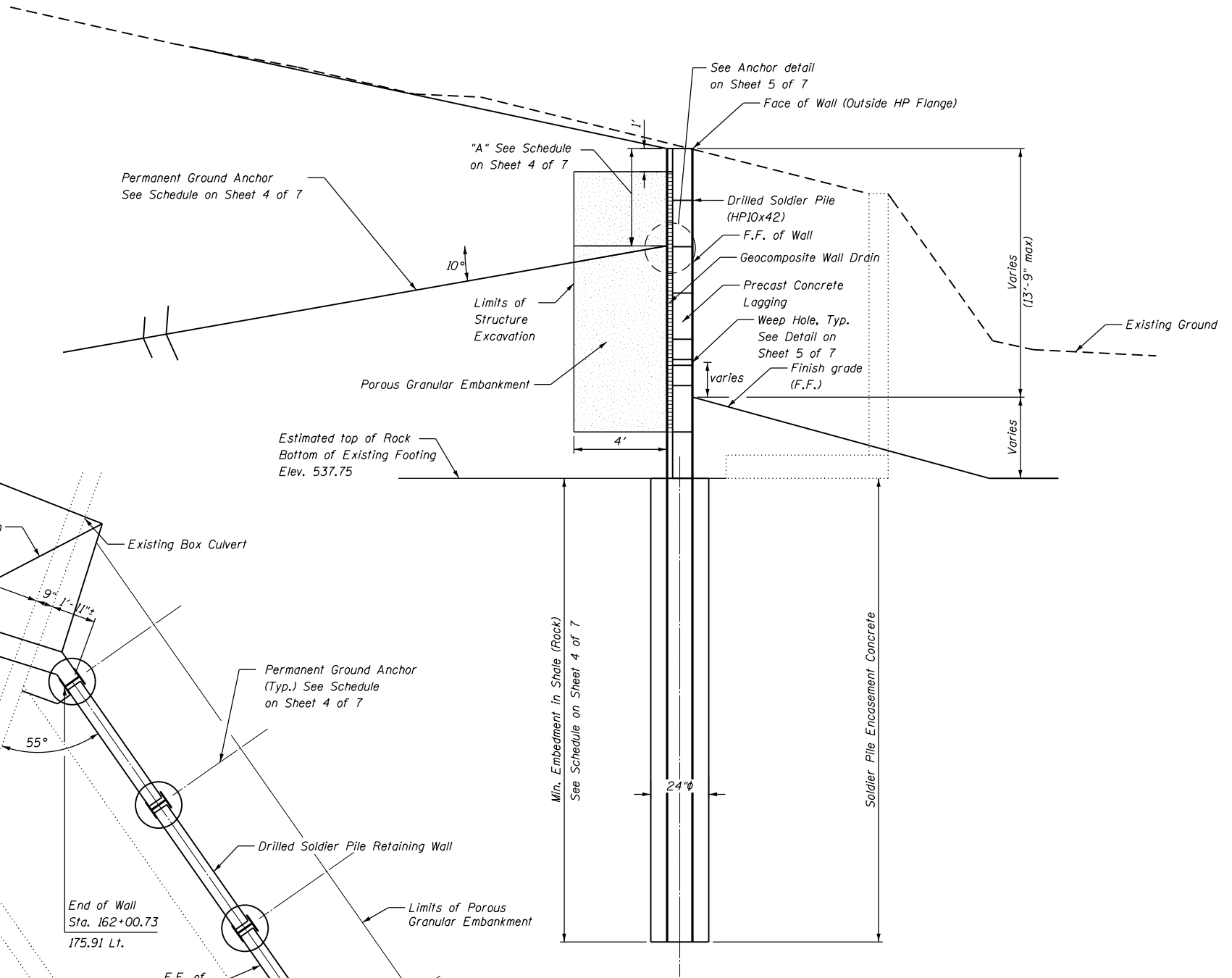
	FILE NAME = 0508802-66F12-002-GENNOTE.dgn	USER NAME = CHAMLIN	DESIGNED JKC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND BILL OF MATERIALS STRUCTURE NO. 050-8802	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN LAG	REVISED -			46	(1)I-2	LaSalle	44	22
		PLOT SCALE = 2.0000' / 1" =	CHECKED JKC	REVISED -			CONTRACT NO. 66F12				
		PLOT DATE = 8/30/2018	DATE 7/5/18	REVISED -			ILLINOIS FED. AID PROJECT				
						SCALE: N.T.S.	SHEET 2	OF 7 SHEETS	STA.	TO STA.	



CORNER DETAIL



PLAN

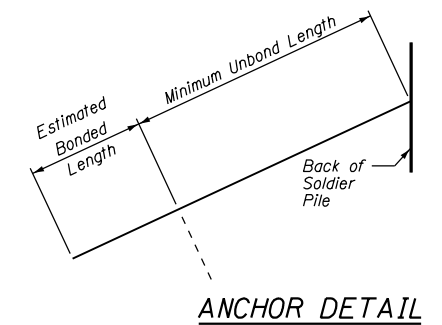


TYPICAL WALL SECTION

(Looking Northwest or Northeast)

SN 050-8802 DRILLED SOLDIER PILE SCHEDULE															
SOLDIER PILE STATION	TOP OF PILE ELEVATION	BOTTOM OF PILE ELEVATION	TOP OF ENCASEMENT ELEVATION	DEPTH OF ENCASEMENT	DRILLING AND SETTING SOLDIER PILES (IN ROCK)	FURNISHING SOLDIER PILES (HP SECTION)	NUMBER OF 24" LAGGING PLANKS TO SOUTH	LAGGING WITH WEEP HOLE LOCATION	VARIABLE HEIGHT PRECAST LAGGING MAXIMUM & MINIMUM HEIGHT		PRECAST CONCRETE LAGGING AREA	"A" **	SERVICE DESIGN LOAD	MINIMUM UNBONDED LENGTH*	MINIMUM BONDED LENGTH*
	(FEET)	(FEET)	(FEET)	(FEET)	(CU. FT.)	(FEET)	(EACH)	---	MAX (FEET)	MIN (FEET)	(SQ. FT.)	(FEET)	(KIPS)	(FEET)	(FEET)
NORTH WALL															
STA 161+89.54	545.50	529.75	537.75	8.00	25.13	15.75	3	---	3.70	1.75	52.35	1	15.1	15	15
STA 161+93.27	547.45	529.75	537.75	8.00	25.13	17.70	4	3rd from bottom	3.65	1.70	64.05	2	20.1	15	15
STA 161+97.00	549.40	529.75	537.75	8.00	25.13	19.65	5	2nd from bottom	2.75	1.65	73.20	2	29.4	15	17
STA 162+00.73	550.50	529.75	537.75	8.00	25.13	20.75	---	---	---	---	---	2	42.0	15	24
SOUTH WALL															
STA 162+14.81	552.50	529.75	537.75	8.00	25.13	22.75	6	2nd from bottom	2.75	2.00	86.25	4	51.3	15	29
STA 162+20.13	551.75	529.75	537.75	8.00	25.13	22.00	6	3rd from bottom	2.00	0.92	80.76	3.2	42.0	15	24
STA 162+25.46	550.67	529.75	537.75	8.00	25.13	20.92	5	4th from bottom	2.92	1.83	74.25	4	39.7	15	23
STA 162+30.78	549.58	529.75	537.75	8.00	25.13	19.83	5	---	1.83	0.75	67.74	2	34.3	15	20
STA 162+36.1	548.50	529.75	537.75	8.00	25.13	18.75	4	---	2.75	1.75	61.50	1	25.9	15	15
STA 162+41.02	547.50	529.75	537.75	8.00	25.13	17.75	---	---	---	---	---	1	21.5	15	15
TOTAL QUANTITY=					251	196					560		* Minimum Length = 15'		

** See Anchor Detail on sheet 5 of 7



FILE NAME = 0508802-66F12-004-DSP-SCHED.dgn	USER NAME = CHAMLIN	DESIGNED JKC	REVISED -
		DRAWN LAG	REVISED -
		CHECKED JKC	REVISED -
		DATE 7/5/18	REVISED -

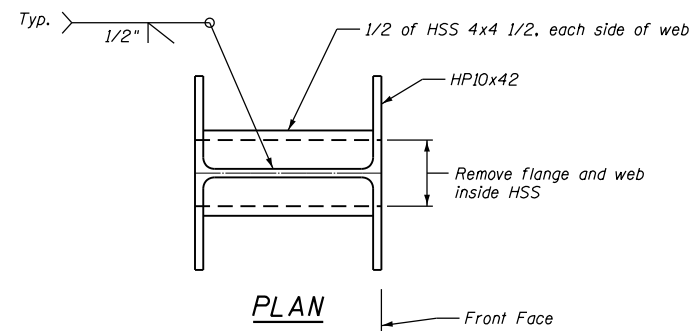
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRILLED SOLDIER PILE SCHEDULE
STRUCTURE NO. 050-8802**

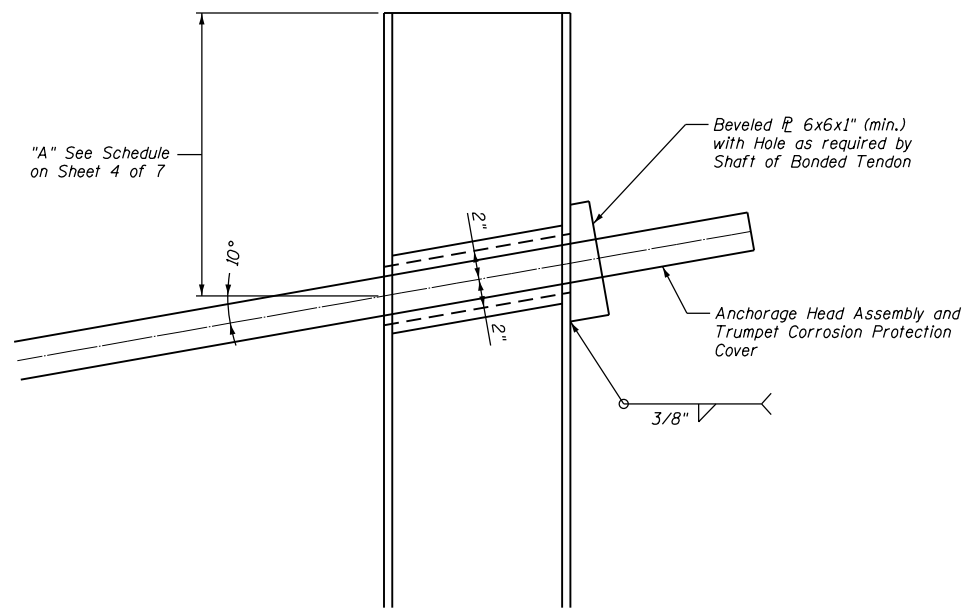
SCALE: N.T.S. SHEET 4 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	24
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				



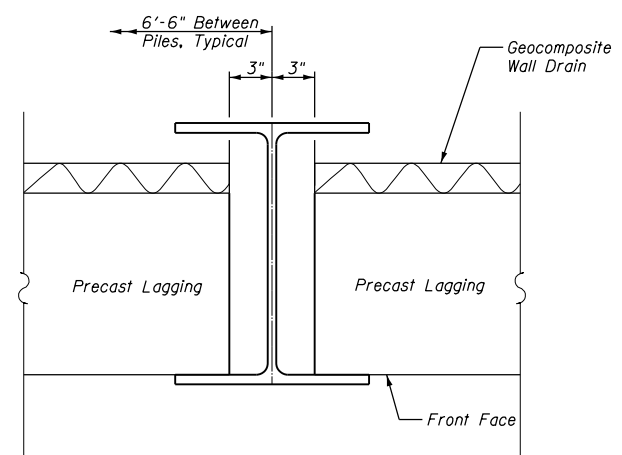


PLAN

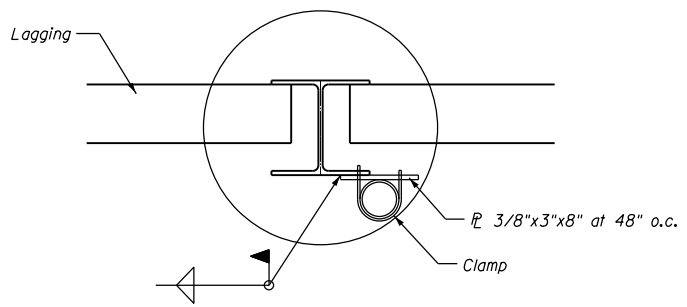


ELEVATION

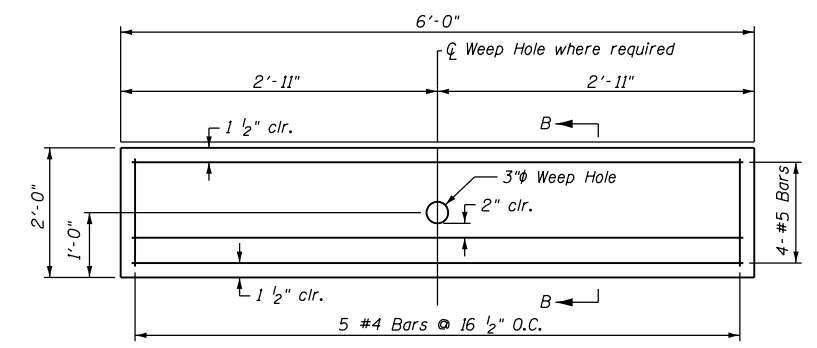
ANCHOR DETAIL



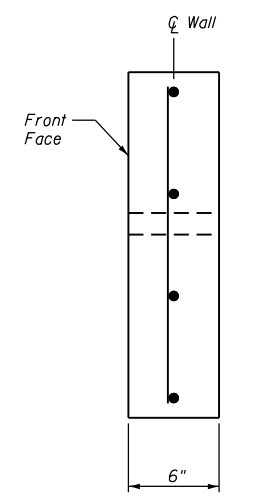
SECTION THROUGH SOLDIER PILE



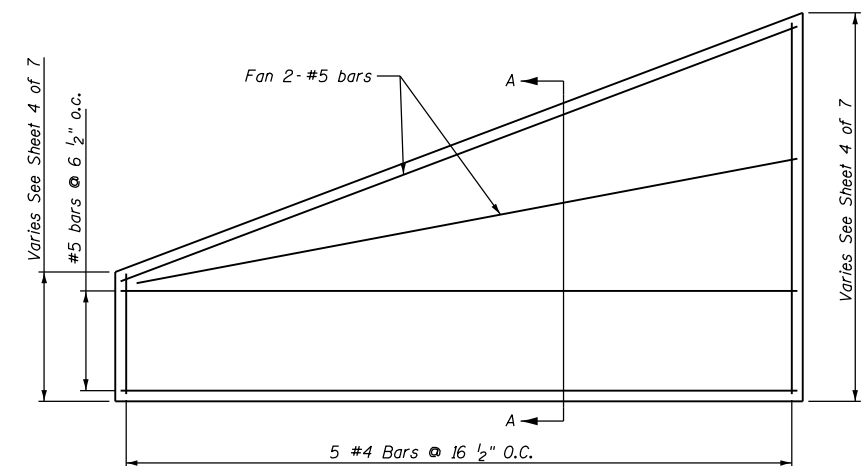
SUGGESTED SLOPE INCLINOMETER CASING SUPPORT DETAIL



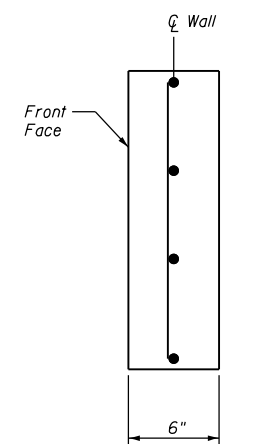
24" - PRECAST CONCRETE LAGGING



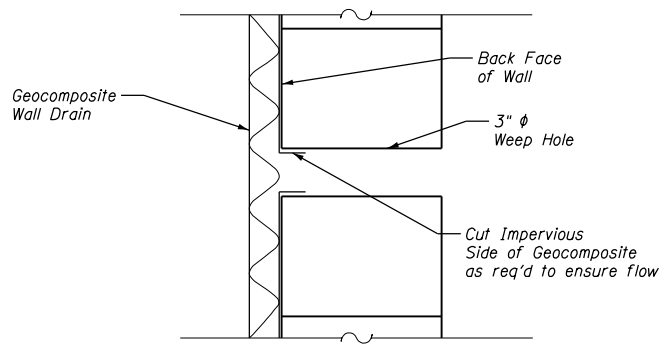
SECTION B-B



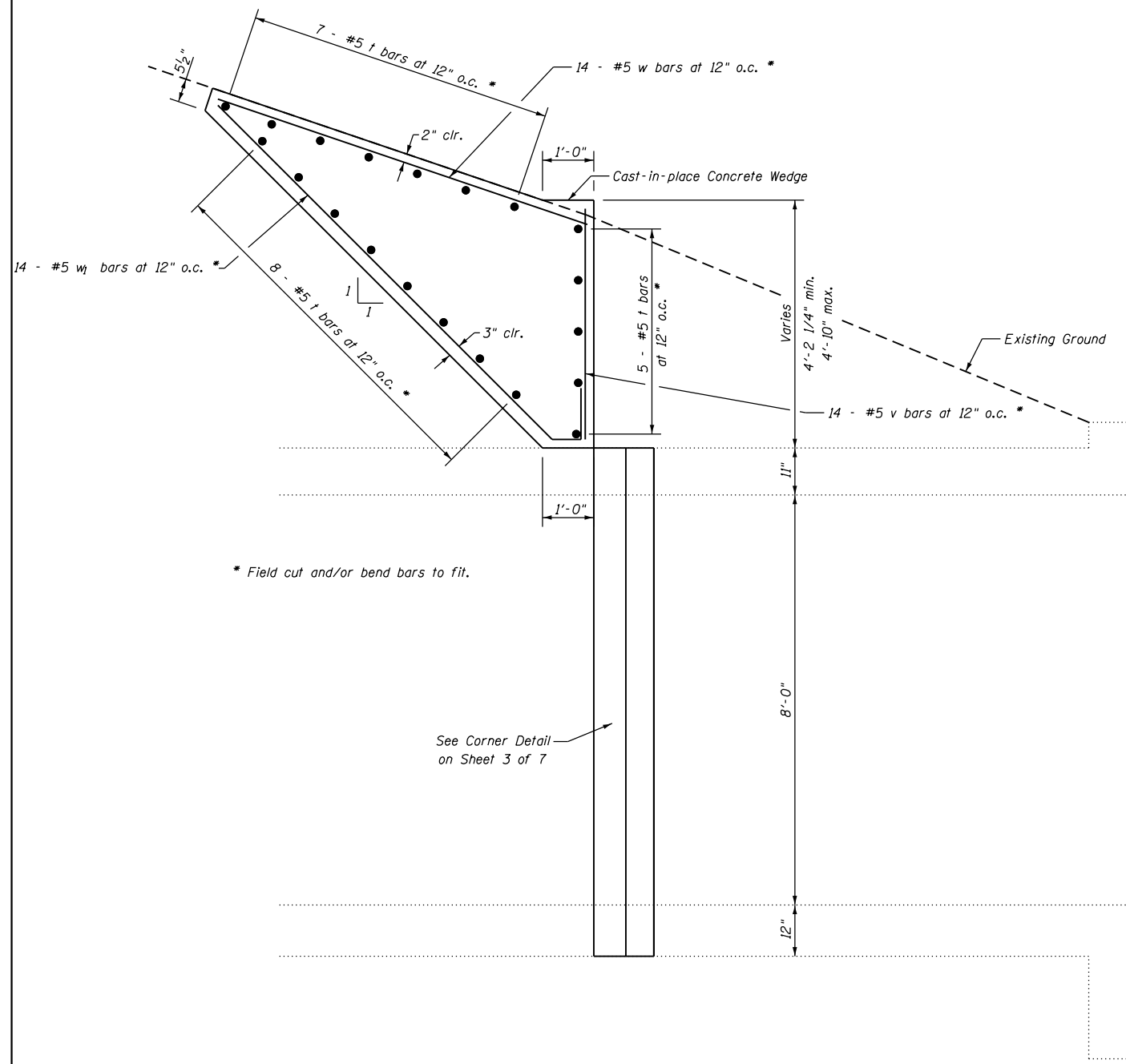
VARIABLE DEPTH PRECAST LAGGING



SECTION A-A



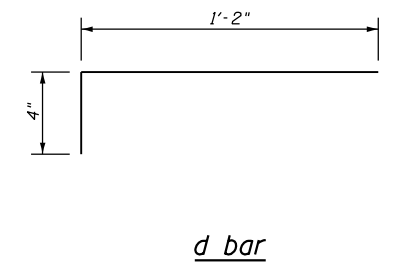
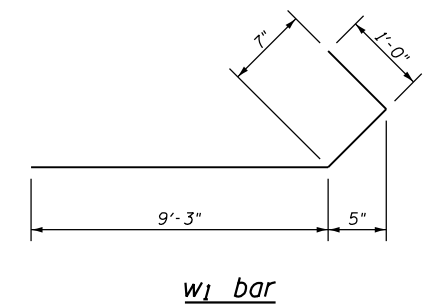
WEEP HOLE DRAIN DETAIL



WALL SECTION ABOVE BOX CULVERT
(Looking North)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d	14	#5	1'-6"	L
t	20	#5	13'-9"	—
v	14	#5	4'-6"	—
v ₁	2	#5	9'-7"	—
w	14	#5	7'-9"	—
w ₁	14	#5	10'-10"	∩
Reinforcement Bars			Pound	670
Concrete Structures			Cu. Yds.	12.2



FILE NAME = 0508802-66F12-206-WALL-DETAIL.dgn	USER NAME = CHAMLIN	DESIGNED JKC	REVISED -
		DRAWN LAG	REVISED -
		CHECKED JKC	REVISED -
		DATE 7/5/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL ABOVE CULVERT DETAIL
STRUCTURE NO. 050-8802

SCALE: SHEET 6 OF 7 SHEETS STA. 162+23.20 TO STA. 163+64.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	26
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				





Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 6/22/00

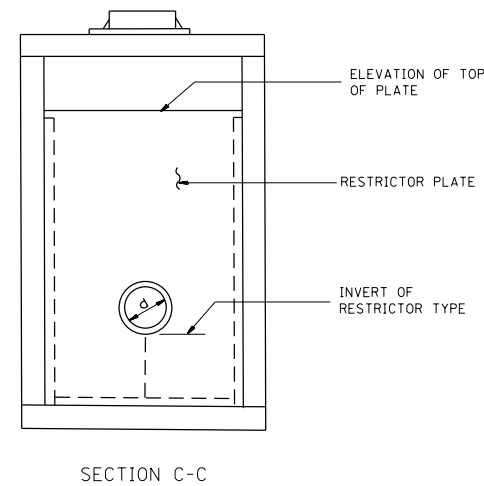
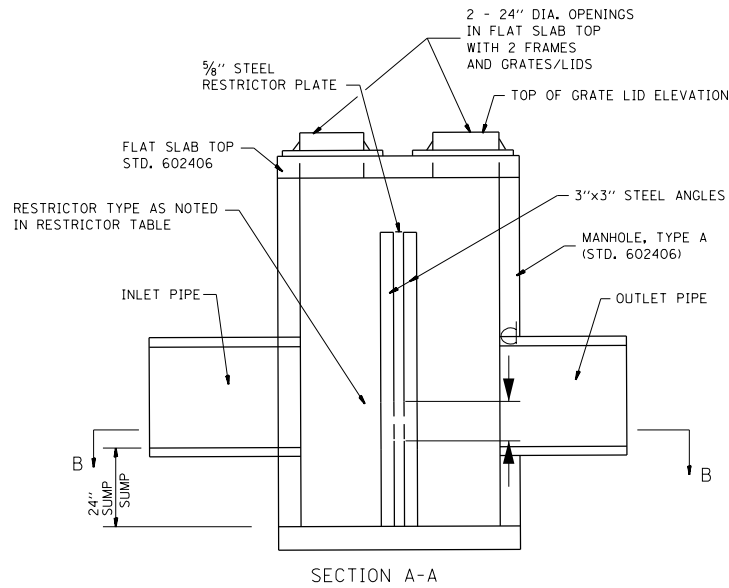
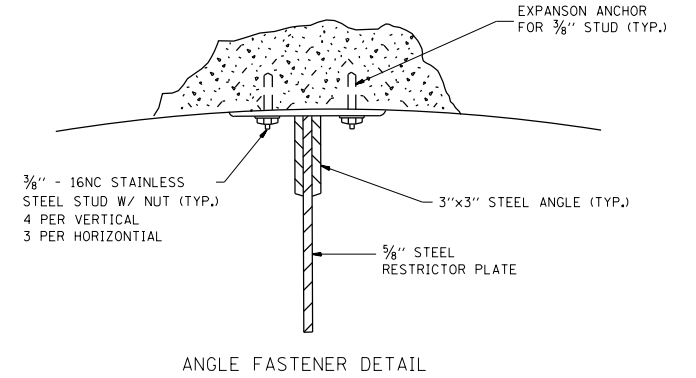
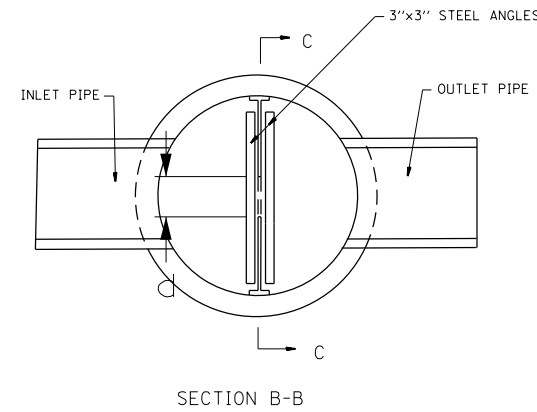
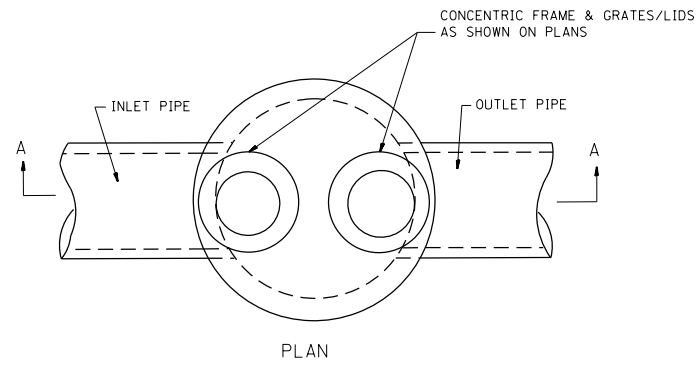
ROUTE FA 46 (IL 251) DESCRIPTION IL 251 North Bound Slope Failure South of Shooting Park Road in Peru LOGGED BY DPS
SECTION (1)I LOCATION NW 1/4, SEC. 16, TWP. 33N, RNG. 1E, 3rd PM.
COUNTY LaSalle DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

STRUCT. NO.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST	
Station	H	S	Qu	T	Stream Bed Elev.	H	S	Qu	T	
BORING NO.	Offset	Ground Surface Elev.	(ft)	(/6")	(tsf)	(%)	Groundwater Elev.:	First Encounter	Upon Completion	After 24 Hrs.
6 ('00 Boring #3)	162+90 ***	190.0 ft Lt. ***	ft	(ft)	(/6")	(tsf)	ft	ft	ft	ft
Brown Soft Silty Clay Loam	2									
	2	0.3	33							
550.85	3	P								
Brown & Gray Stiff Clay Loam with trace of Coal	2									
	3	1.8	26							
549.35	2	P								
Brown Stiff Clay Loam with Gravel	2									
	2	1.5	25							
	4	P								
547.35	-5	4								
Brown Medium Silty Clay with trace of Coal, Gravel at 6.5'	2									
	2	1.0	27							
545.85	5	P								
Brown Medium Silty Clay with trace of Gravel	2									
	2		27							
544.35	3									
Gray & Brown Medium Clay Loam	1									
	2	0.8	34							
543.02	3	B								
Black Medium Coal - Low Temp - Actual thickness of Coal may be as small as 2"	4		115							
542.35	-10									
Gray Stiff Clay Loam	2									
	2	1.9	33							
540.85	5	B								
Gray & Red Stiff Clay Loam	1									
	2	1.1	31							
539.35	4	S								
Red Hard Shaley Clay	5									
	11	6.3	17							
538.35	11	S								
Gray Hard Shaley Clay	15									
	19	6.9	17							
	-15	8	S							
	17	>4.5	13							
535.85	52	P								
Gray Hard Shale	11									
	19		15							
534.35	81/1"									
Hard Limestone	100/0"									
* Hole Collapsed at 15.0 Ft. at Completion. No Groundwater above this point.										
	-20									

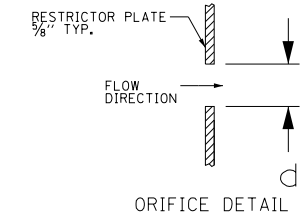
** At 24 hours, no Groundwater above top of hole collapse at 15.0 Ft.
*** Station and Offset estimated from notes in file and 2016 survey data.
End of Boring

SOIL BORING IL 251 NBL SLIDE GPJ IL_DOT.GDT 11/6/17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, form 137 (Rev. 8-99)

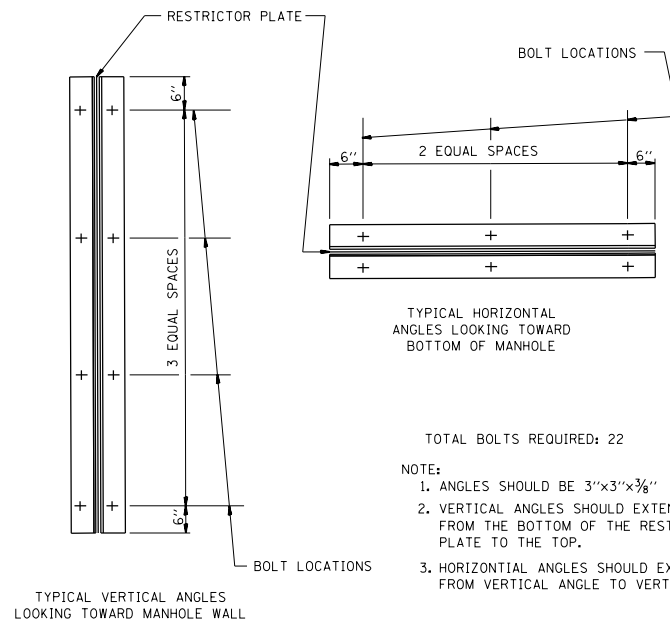


- NOTES:
1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
 2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.



STRUCTURE NO.	STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER (IN) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION OF TOP OF PLATE OVERFLOW
5	165+84.0 LT	6'	2-T1F CL	SQUARE EDGED	4"	581.70	586.20

BASIS OF PAYMENT: MANHOLE, TYPE A RESTRICTOR PLATE WITH THE FRAME AND GRATE AND DIAMETER SPECIFIED.



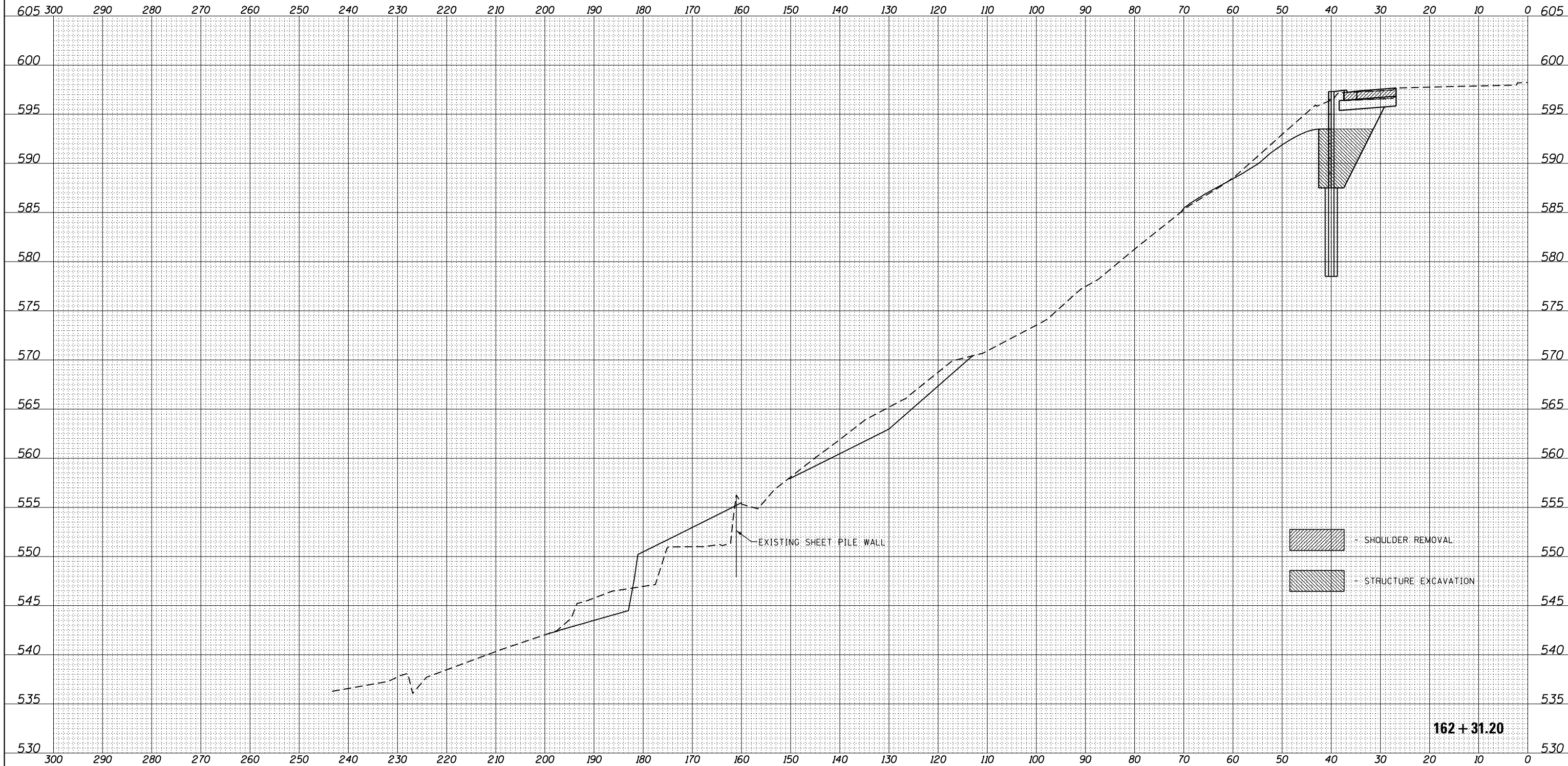
- TOTAL BOLTS REQUIRED: 22
- NOTE:
1. ANGLES SHOULD BE 3"x3"x3/8"
 2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
 3. HORIZONTAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SHORT TUBE	ROUNDED
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.	
C=.52	C=.62	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED



- SHOULDER REMOVAL
- STRUCTURE EXCAVATION

FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 20.0009' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JCK
 DRAWN - LAG
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

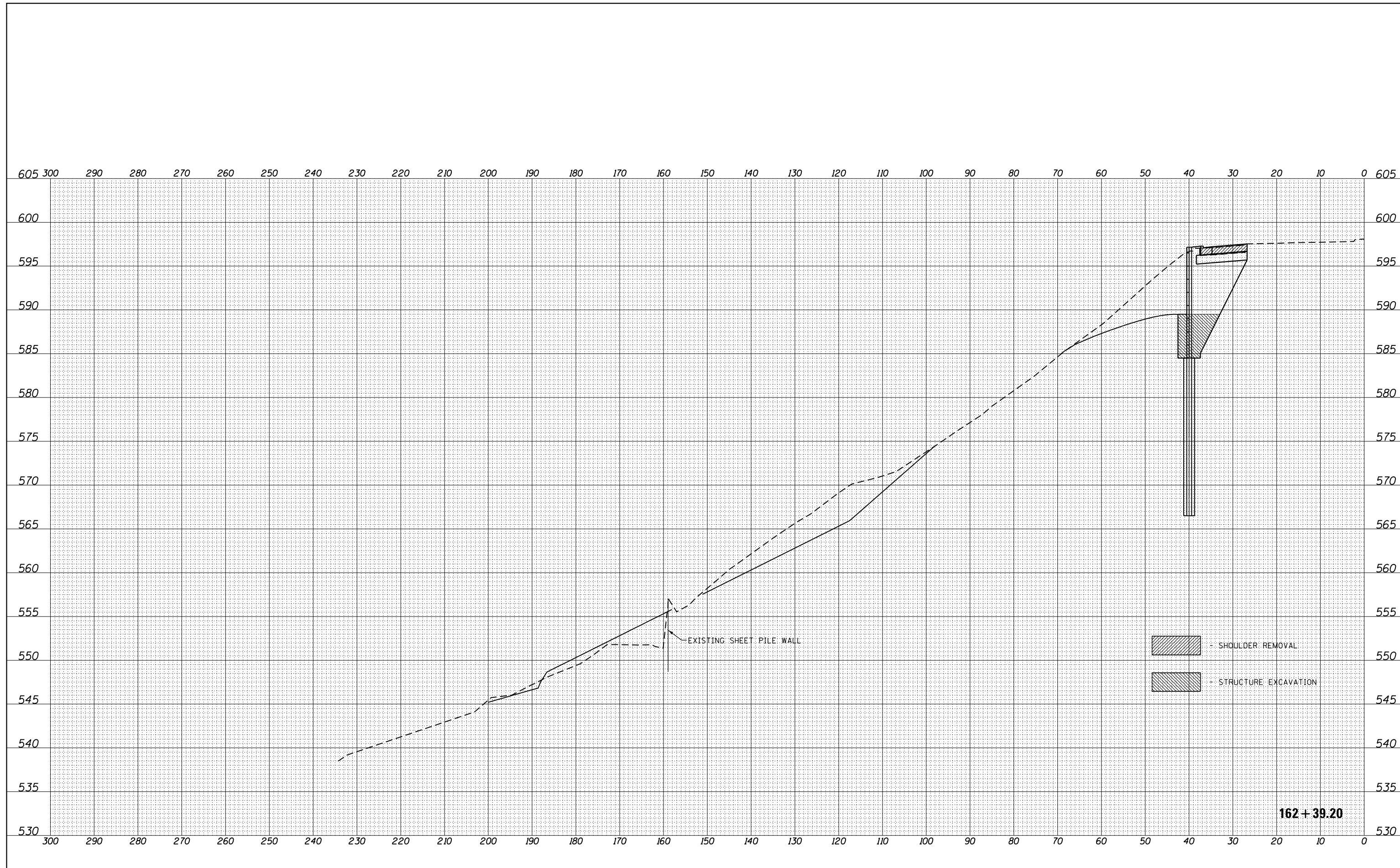
CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 162+31.20 TO STA. 162+31.20

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	31
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME = D366F12-sht-xxsh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 20.0009' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JCK
 DRAWN - LAG
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

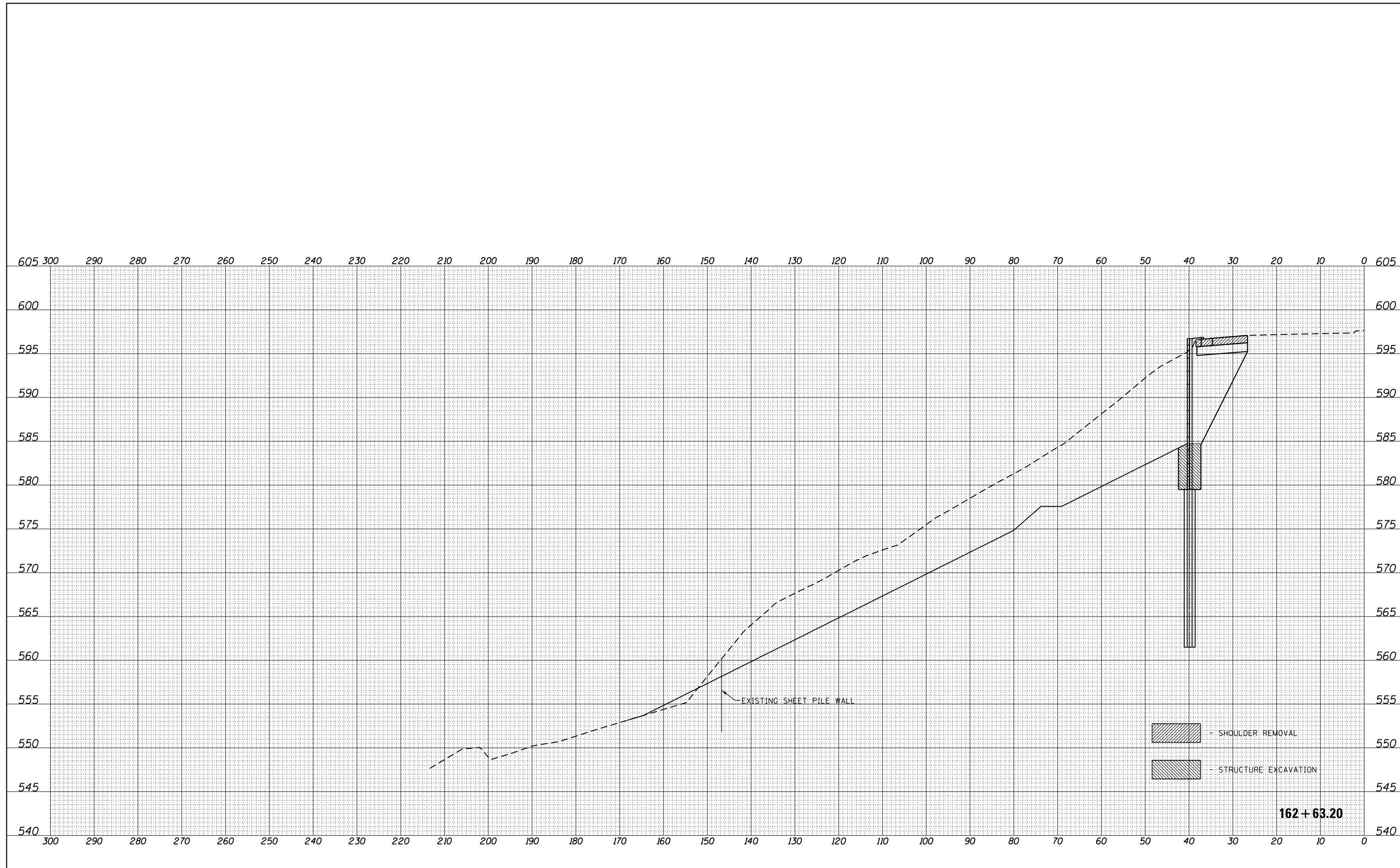
SCALE: 1"=10' SHEET OF SHEETS STA. 162+39.20 TO STA. 162+39.20

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	32
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

162 + 39.20

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	



- SHOULDER REMOVAL
- STRUCTURE EXCAVATION

162 + 63.20

FILE NAME = D366F12-sht-xxsh-251-LT.dgn
CHAMLIN ASSOCIATES, INC.

USER NAME = CHAMLIN	DESIGNED - JCK	REVISED -
	DRAWN - LAG	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JKC	REVISED -
PLOT DATE = 8/30/2018	DATE - 7/18	REVISED -

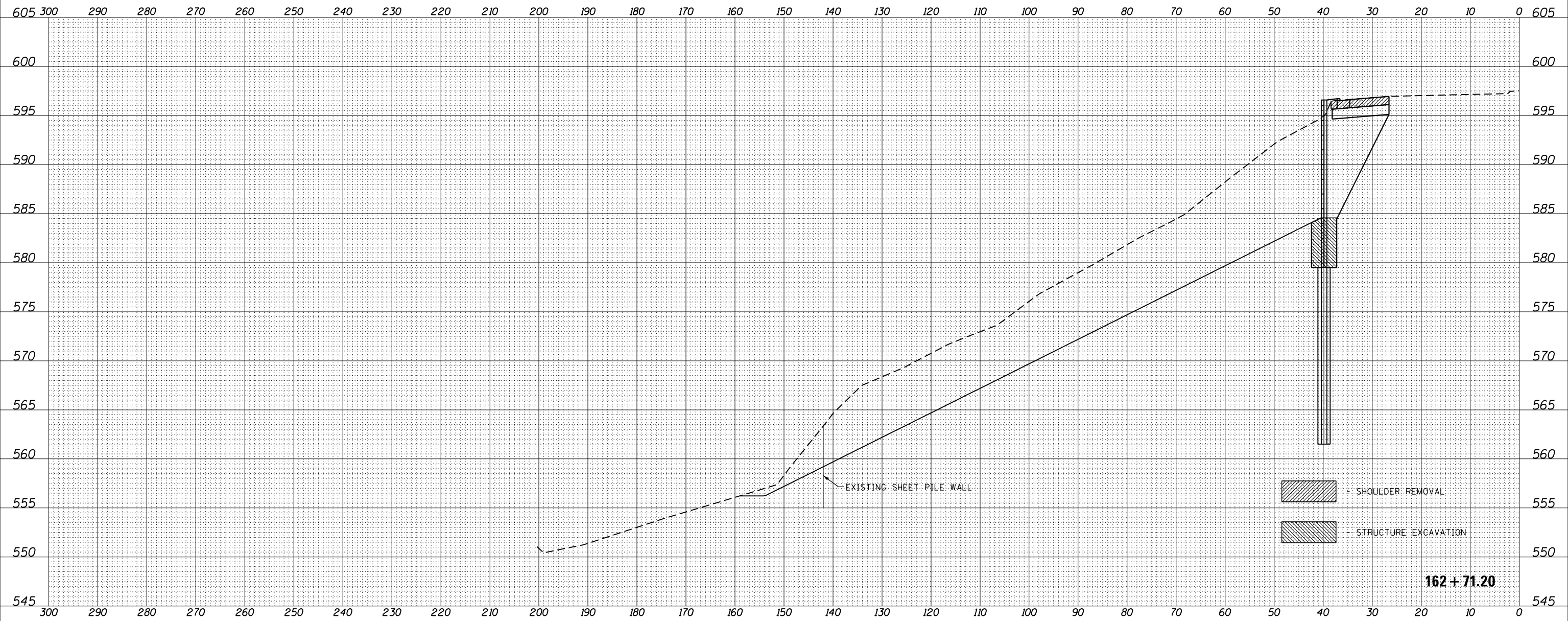
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS	
SCALE: 1"=10'	SHEET OF SHEETS STA. 162+63.20 TO STA. 162+63.20

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	35
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN	DESIGNED - JCK	REVISED -
	DRAWN - LAG	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JKC	REVISED -
PLOT DATE = 8/30/2018	DATE - 7/18	REVISED -

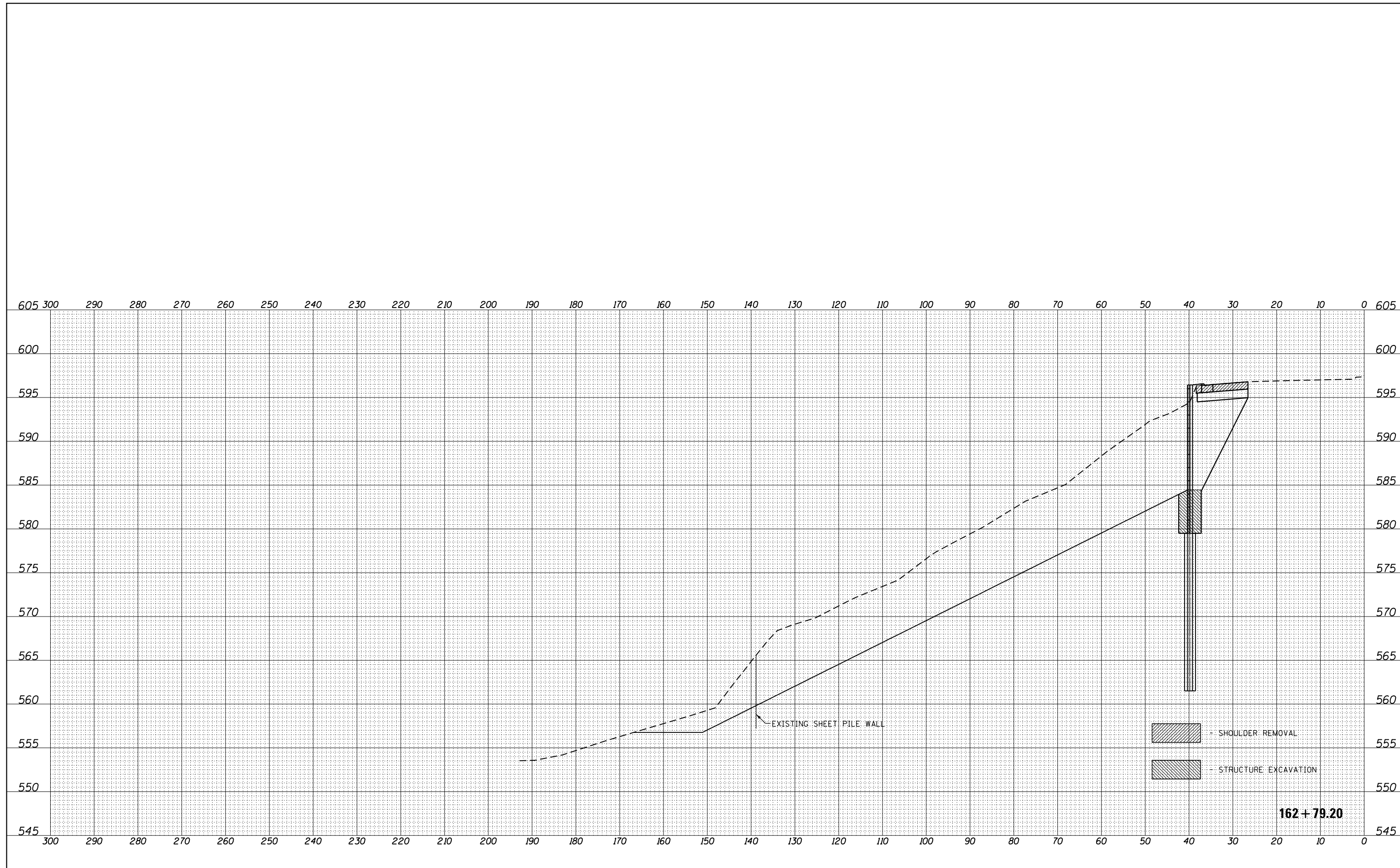
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS	
SCALE: 1"=10'	SHEET OF SHEETS STA. 162+71.20 TO STA. 162+71.20

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	36
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



FILE NAME = D366F12-sht-xssh-251-LT.dgn	USER NAME = CHAMLIN	DESIGNED - JCK	REVISED -
		DRAWN - LAG	REVISED -
		CHECKED - JKC	REVISED -
		DATE - 7/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

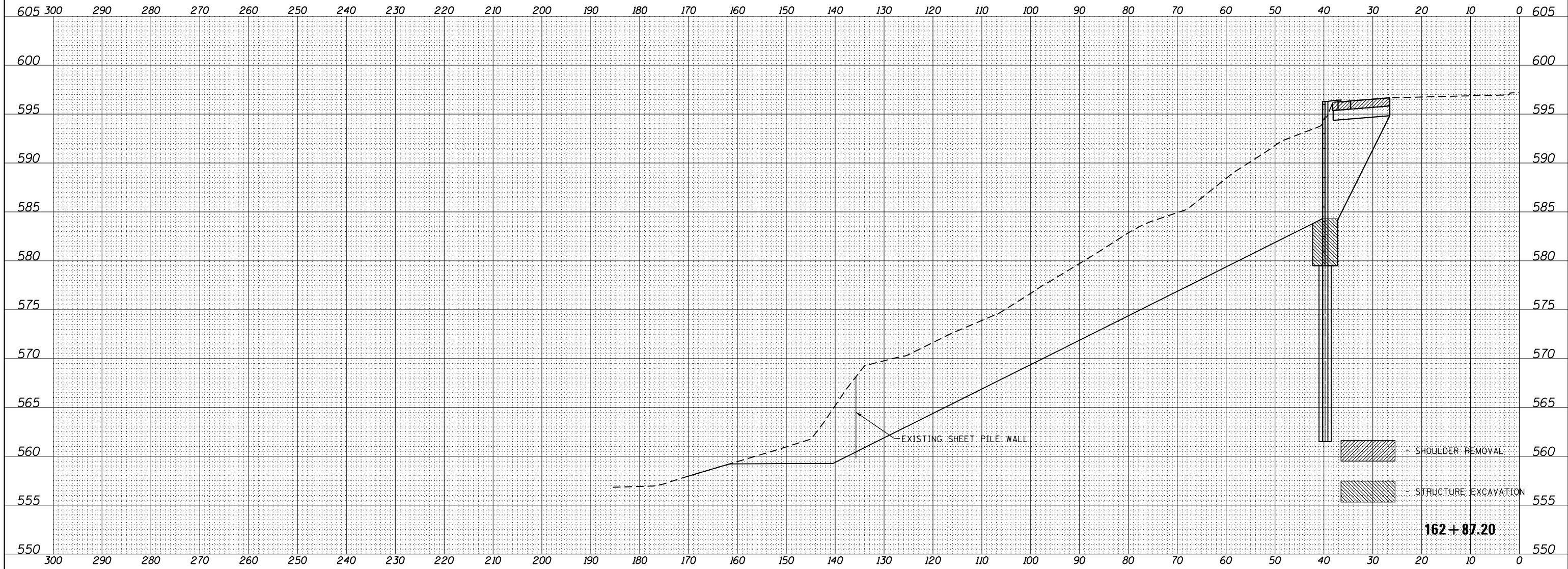
SCALE: 1"=10'	SHEET	OF	SHEETS	STA. 162+79.20 TO STA. 162+79.20
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F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	37
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	



FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 20.0000' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JCK
 DRAWN - LAG
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

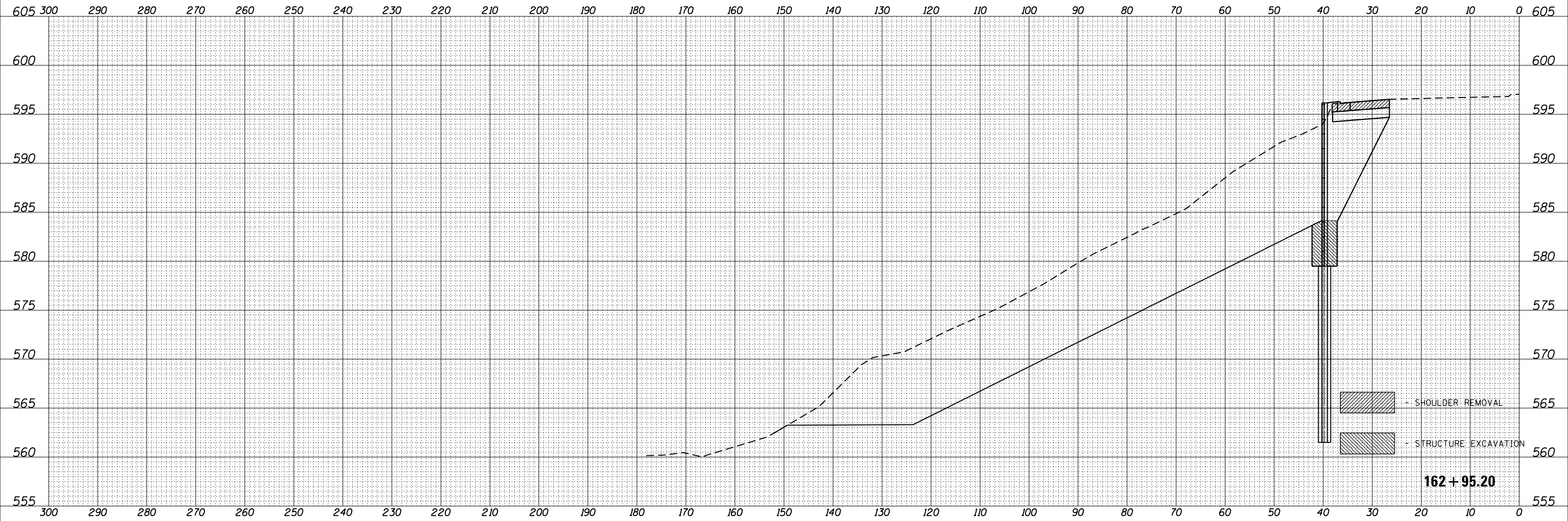
CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 162+87.20 TO STA. 162+87.20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	38
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 20.0000' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JCK
 DRAWN - LAG
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

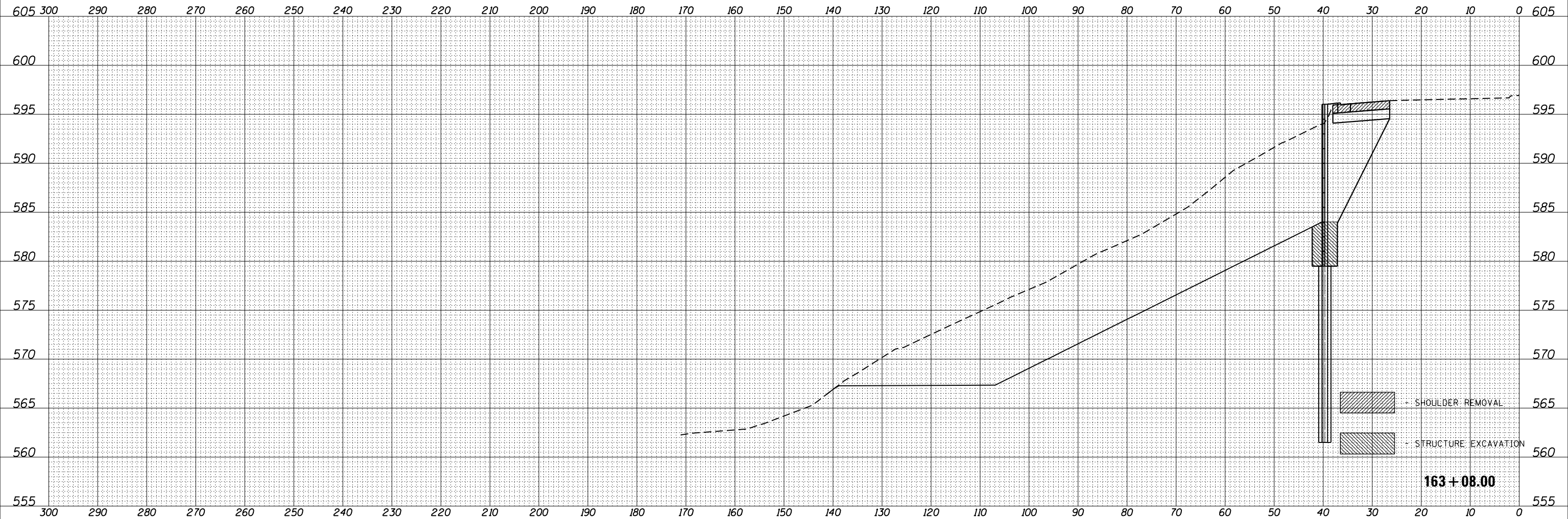
CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 162+95.20 TO STA. 162+95.20

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	39
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	



FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN	DESIGNED - JCK	REVISED -
	DRAWN - LAG	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JKC	REVISED -
PLOT DATE = 8/30/2018	DATE - 7/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

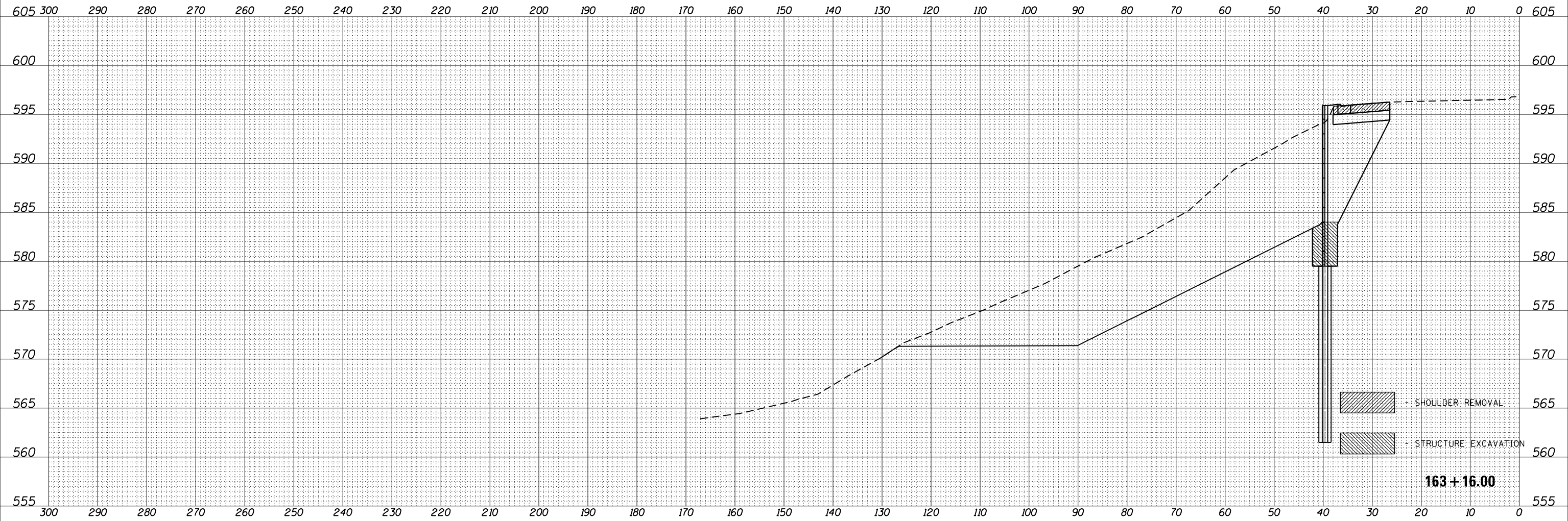
CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 163+08.00 TO STA. 163+08.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	40
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE



FILE NAME = D366F12-sht-xssh-251-LT.dgn
CHAMLIN & ASSOCIATES, INC.

USER NAME = CHAMLIN
 PLOT SCALE = 20.0000' / in.
 PLOT DATE = 8/30/2018

DESIGNED - JCK
 DRAWN - LAG
 CHECKED - JKC
 DATE - 7/18

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: 1"=10' SHEET OF SHEETS STA. 163+16.00 TO STA. 163+16.00

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
46	(1)I-2	LaSalle	44	41
CONTRACT NO. 66F12				
ILLINOIS FED. AID PROJECT				

