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GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION REQUIRED).
2. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE/SHE MUST IMMEDIATELY REPORT THEM TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS, AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
3. ALL ELEVATIONS SHOWN ON THE PLANS ARE ON THE NAVD88 DATUM.
4. UNLESS OTHER CONDITIONS WARRANT AN EXTENDED LANE CLOSURE AS DETERMINED OR APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESUFACING OPERATIONS AND CLASS D PATCHING.
5. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT AL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
6. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LBS / SQ YD / APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

7. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. FOR FRAME AND LID ADJUSTMENTS WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.
9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS OVER 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1V:3H.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY DETECTOR LOOPS DAMAGED DURING CONSTRUCTION.
11. EXISTING TREE PROTECTION: CONTRACTOR SHALL TAKE PRECAUTION BY PRESERVING EXISTING TREES WITHIN THE RIGHT OF WAY. IF ANY DAMAGE OCCURS, TREES SHALL BE REPLACED IN KIND PER ARTICLE 201.07 REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL REQUIREMENT STATED HEREIN.
12. THE CONTRACTOR SHALL MAINTAIN, PROTECT, AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
13. SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS, SHALL BE TO FULL DEPTH, AND SHALL RESULT IN A CLEAN STRAIGHT EDGE IN THE PORTION REMAINING.
14. THE RESIDENT ENGINEER WILL CONTACT THE FOREST PRESERVE DISTRICT OF COOK COUNTY PRIOR TO THE START OF CONSTRUCTION TO INFORM THEM OF THE INITIATION OF CONSTRUCTION ACTIVITIES NEAR THEIR PROPERTIES. THE FOREST PRESERVE DISTRICT OF COOK COUNTY CONTACT IS JOHN STERENBERG, (708) 711-1192.
15. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
16. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
17. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT CONTRACTOR EXPENSE.
18. THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.
19. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAIN CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.
20. BACKFILLING STORM SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART. 550.07(b, c) OF THE SSRBC WILL NOT BE ALLOWED.
21. PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
22. THE CONTRACTOR SHALL CONTACT THE DISTRICT 1 TRAFFIC CONTROL SUPERVISOR KALPANA KANNAN-HOSADURGA VIA EMAIL AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
23. TWO WEEKS PRIOR TO PLACMENT OF PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT FADI SULTAN, THE AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS.GOV.
24. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

DISTRICT 1 STANDARDS

STANDARD NUMBER	TITLE
BD-01	DRIVEWAY DETAILS
BD-07	STORM SEWER CONNECTION TO EXISTING SEWER
BD-08	FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATC-HING FOR HMA SURFACED PAVEMENT
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINTS: AND HMA TAPER
BD-33	HMA TAPER AT EDGE OF PCC PAVEMENT
BD-37	MANHOLE TYPE A 7 FOOT DIAMETER
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-16	SHORT-TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-02	MAST ARM MOUNTED STREET NAME SIGNS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS (7 SHEETS)
TS-07	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

COMMITMENTS

NONE AT THIS TIME.

25. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGES OF SOUTH BARRINGTON AND HOFFMAN ESTATES. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
26. EXISTING VEGETATED AREAS (TREES, SHRUBS, VEGETATIVE BUFFERS, TURF AREAS, ETC.) WHERE DISTURBANCE IS NOT OCCURRING (INCLUDING AREAS OUTSIDE THE PROJECT LIMITS) SHALL NOT BE DISTURBED TO ENSURE THAT EXISTING VEGETATION IS PRESERVED HEALTHY TO MINIMIZE SOIL EROSION AND TO ELIMINATE SOIL COMPACTION. NO MATERIALS ARE TO BE STORED, OR VEHICLES DRIVEN, OR PARKED WITHIN THESE UNDISTURBED AREAS AT ANY TIME.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE ROADSIDE DEVELOPMENT UNIT AT 847.705.4171 TO SCHEDULE A WALK THROUGH TO DETERMINE TREE PROTECTION, TREE REMOVAL, TREE PRUNING, TREE ROOT PRUNING, AND ANY FORESTRY WORK A MINIMUM OF 14 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL TREE PROTECTION, TREE REMOVAL, SELECTIVE CLEARING, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA.
27. TEMPORARY FENCE SHOULD BE ERECTED ALONG THE DRIPLINE OF THE TREES, SHRUBS, AND LANDSCAPED BEDS WITHIN THE LIMITS OF CONSTRUCTION DESIGNATED TO REMAIN TO ESTABLISH A "TREE PROTECTION ZONE" AND AROUND EXISTING WETLANDS TO ESTABLISH A "WETLAND PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOBSITE. NO WORK IS TO BE PERFORMED (OTHER THAN ROOT PRUNING), MATERIALS STORED, OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE" AND "WETLAND PROTECTION ZONE". REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
28. THE CONTRACTOR SHALL ATTACH AN ALUMINUM SIGN WITH THE FOLLOWING TEXT: PROTECTED WETLAND - NO INTRUSION. THE SIGN(S) SHALL BE ATTACHED TO THE STAKES BY A METHOD APPROVED BY THE ENGINEER. THE SIGN(S) WILL BE PROVIDED BY THE DEPARTMENT AND SHALL BE PICKED UP BY THE CONTRACTOR FROM THE DISTRICT ONE ROADSIDE DEVELOPMENT ARCHITECT IN SCHAUMBURG, ILLINOIS. SCHEDULING THE PICKUP OF THE SIGNS CAN BE ARRANGED BY CONTACTING THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT AT (847)705-4171. WHEN WORK HAS BEEN COMPLETED, THE SIGN SHALL BE RETURNED TO THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT. THE COST OF PICKING UP, ATTACHING THE SIGNS TO THE TEMPORARY FENCE STAKES, AND RETURNING THE SIGNS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TEMPORARY FENCE.
29. PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT DUE TO THE PROXIMITY TO THE EXISTING WETLANDS/BODIES OF WATER. PHOSPHORUS WOULD BE DETRIMENTAL TO THE NEARBY WETLANDS. A PHOSPHORUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD EQUAL 0).
30. THE CONTRACTOR WILL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT 847.705.4171, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT APPROVAL OF THE TREES, SHRUBS, PERENNIALS, BULBS, AND NATIVE SEEDING.

HIGHWAY STANDARDS

STANDARD NUMBER	TITLE
000001-09	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 SYSTEMS
420001-11	PAVEMENT JOINTS
420111-04	PCC PAVEMENT ROUNDOUTS
424001-12	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-05	DIAGONAL CURB RAMPS FOR SIDEWALKS
442201-04	CLASS C AND D PATCHES
482006-03	HMA SHOULDER ADJACENT TO RIGID PAVEMENT
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
542001-06	CONCRETE END SECTIONS FOR PIPE CULVERTS 15" (375MM) THRU 84" (2100MM) DIA.
542011-02	CONCRETE END SECTION FOR ELLIPTICAL PIPE CULVERTS 15" THRU 72" EQUIVALENT DIAMETER
542201-02	REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS 15" THRU 36" DIA. SKEWED WITH ROADWAY
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311-07	TRAVERSABLE PIPE GRATE FOR CONCRETE END SECTIONS
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
602001-02	CATCH BASIN TYPE A
602011-02	CATCH BASIN TYPE C
602402-03	PRECAST MANHOLE TYPE A 5' DIA
602406-11	PRECAST MANHOLE TYPE A 6' DIA
602701-02	MANHOLE STEPS
604001-05	FRAME AND LIDS TYPE 1
604036-03	GRATE TYPE 8
604051-04	FRAME AND GRATE TYPE 11
604091-05	FRAME AND GRATE TYPE 24
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606201-04	TYPE B GUTTER (INLET, OUTLET & ENTRANCE)
606301-04	PC CONCRETE ISLANDS AND MEDIANS
606306-04	CORRUGATED PC CONCRETE MEDIANS
606308-04	PERMANENT SURVEY MARKERS
630001-13	STEEL PLATE BEAM GUARDRAIL
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
642006-01	SHOULDER RUMBLE STRIPS, 8 IN.
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24' (600 MM) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-05	OFF-ROAD OPERATION, MULTILANE, 15' (4.5 M) TO24" (600 MM) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS- DAY ONLY
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS >=45 MPH
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS >= 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS >= 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS <= 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-09	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-II	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAIL
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTORS MOUNTING DETAILS
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16" THROUGH 55"
878001-11	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
664001-02	CHAIN LINK FENCE



1 REVISED SHEET 4/14/2026

MODEL: Sheet 1
FILE NAME: p:\In\p\mnt01_s-a-transyscorp.net\Documents\Projects_2026\CH4401\401\200018\CA0J02_Sheet01-General\016X313-SHT-Gen_Notes.dgn

	USER NAME = anthonybasile		DESIGNED - CMW	REVISED - 4/13/2026 CMW	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, GENERAL NOTES HIGHWAY STANDARDS, COMMITMENTS				F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN - IAK	REVISED -						362	2019-161-W	COOK	666	2
	PLOT SCALE = 0.16666633 ' / in.		CHECKED - CMW	REVISED -						CONTRACT NO. 62K33				
	PLOT DATE = 4/11/2026		DATE - 02/02/2026	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

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FILE NAME: p:\proj\pawint01 s-e transyscorp.com\transyscorp\proj\Documents\Projects_2020\CH4401\401200018\CAD\02 - Sheets\01-General\03\K33-SHT-Summary of Quantities.dgn

				CONSTRUCTION CODE									
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	80% FED/ 10%STATE/ 5% HOFFMAN ESTATES/ 5% SOUTH BARRINGTON	80% FED 20% STATE	80% FED 20% STATE	100% HOFFMAN ESTATES	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	TENNIS CLUB LANE/ LAKEWOOD BLVD TRAFFIC SIGNAL	MUNDHANK TRAFFIC SIGNAL	ALGONQUIN RD (IL 62) TRAFFIC SIGNAL	EVP SIGNAL WORK	SAFETY	CULVERT SN# 016-2313	MSE RETAINING WALL SN# 016-W2509	SOLDIER PILE WALL SN# 016-Z066	RETAINING WALL SN# 016-Z067
				0003 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0004 URBAN	0044 URBAN	0044 URBAN	0044 URBAN
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	6	6									
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	3	3									
** 20101700	SUPPLEMENTAL WATERING	UNIT	775	775									
20200100	EARTH EXCAVATION	CU YD	8,525	8,525									
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	26,843	26,843	1								
20400800	FURNISHED EXCAVATION	CU YD	41,795	41,795									
20700220	POROUS GRANULAR EMBANKMENT	CU YD	9,663	9,663									
20800150	TRENCH BACKFILL	CU YD	902	902									
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	19,282	19,282	1								
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	16,413	16,413									
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	45,824	45,824	1								
21101695	TOPSOIL FURNISH AND PLACE, 30"	SQ YD	4,536	4,536									
** 25000210	SEEDING, CLASS 2A	ACRE	8	8									
** 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	937	937									
** 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	937	937									
25000750	MOWING	ACRE	40	40									

* SPECIAL PROVISION
** SPECIALTY ITEM



USER NAME = MatthewToussaint
DRAWN - AJB
PLOT SCALE = 0.16666633 ' / in.
PLOT DATE = 2/3/2026

DESIGNED - AJB
REVISD -
CHECKED - CMW
DATE - 02/02/2026

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 24 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	4
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

1 REVISED SHEET 4/14/2026

FILE NAME: [pw://mq-pwint01.a-e.transyscorp.com:transyscorp-pw/L/Documents/Projects 2020/CH401/401200018/CAD/02 - Sheets/01-General/0162K33-SHT-Summary of Quantities.dgn](http://pw://mq-pwint01.a-e.transyscorp.com:transyscorp-pw/L/Documents/Projects%2020/CH401/401200018/CAD/02-Sheets/01-General/0162K33-SHT-Summary of Quantities.dgn)



Ardmore Roderick

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	5
		CONTRACT NO. 62K33		
ILLINOIS		FED. AID PROJECT		

REV-SEP

MODEL: Sheet 4
FILE NAME: p:\proj\pwin\01 s-e\transyscorp\proj\Documents\Projects_2020\CH4401\401200018\CAD\02 - Sheet\01-General\0316X13-SHT-Summary of Quantities.dgn

				CONSTRUCTION CODE									
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	80% FED/ 10%STATE/ 5% HOFFMAN ESTATES/ 5% SOUTH BARRINGTON	80% FED 20% STATE	80% FED 20% STATE	100% HOFFMAN ESTATES	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	TENNIS CLUB LANE/ LAKEWOOD BLVD TRAFFIC SIGNAL	MUNDHANK TRAFFIC SIGNAL	ALGONQUIN RD (IL 62) TRAFFIC SIGNAL	EVP SIGNAL WORK	SAFETY	CULVERT SN# 016-2313	MSE RETAINING WALL SN# 016-W2509	SOLDIER PILE WALL SN# 016-Z066	RETAINING WALL SN# 016-Z067 SN# 016-Z068
				0003 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0004 URBAN	0044 URBAN	0044 URBAN	0044 URBAN
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	7,007	7,007									
44000600	SIDEWALK REMOVAL	SQ FT	812						812				
44003100	MEDIAN REMOVAL	SQ FT	5,864	5,864									
44004250	PAVED SHOULDER REMOVAL	SQ YD	716	716									
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	26	26									
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	28	28									
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	280	280									
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	244	244									
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1							1			
50104400	CONCRETE HEADWALL REMOVAL	EACH	18	18									
50105220	PIPE CULVERT REMOVAL	FOOT	424	424									
50200100	STRUCTURE EXCAVATION	CU YD	931							410	330	167	24
50300225	CONCRETE STRUCTURES	CU YD	91							0		58	33
50300285	FORM LINER TEXTURED SURFACE	SQ FT	1,427									988	439

* SPECIAL PROVISION
** SPECIALTY ITEM

△ REVISED SHEET 4/14/2026

	USER NAME = MatthewToussaint	DESIGNED - AJB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - AJB	REVISIED -							362	2019-161-W	COOK	666	7
	PLOT SCALE = 0.16666633 ' / in.	CHECKED - CMW	REVISED -		SCALE: SHEET 4 OF 24 SHEETS STA. TO STA.				CONTRACT NO. 62K33				
	PLOT DATE = 2/3/2026	DATE - 02/02/2026	REVISED -						ILLINOIS FED. AID PROJECT				

MODEL: Sheet 5
FILE NAME: p:\proj\pawint01 s-a-transyscorp.com\transyscorp\proj\Documents\Projects_2020\CH4401\401200018\CAD\02 - Sheets\01-General\016\K33-SHT-Summary of Quantities.dgn

				CONSTRUCTION CODE									
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	80% FED/ 10%STATE/ 5% HOFFMAN ESTATES/ 5% SOUTH BARRINGTON	80% FED 20% STATE	80% FED 20% STATE	100% HOFFMAN ESTATES	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	TENNIS CLUB LANE/ LAKEWOOD BLVD TRAFFIC SIGNAL	MUNDHANK TRAFFIC SIGNAL	ALGONQUIN RD (IL 62) TRAFFIC SIGNAL	EVP SIGNAL WORK	SAFETY	CULVERT SN# 016-2313	MSE RETAINING WALL SN# 016-W2509	SOLDIER PILE WALL SN# 016-Z066	RETAINING WALL SN# 016-Z067 SN# 016-Z068
				0003 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0004 URBAN	0044 URBAN	0044 URBAN	0044 URBAN
50300300	PROTECTIVE COAT	SQ YD	315								66	150	99
50401205	PRECAST CONCRETE CAPS	EACH	1,442	1,442	1								
50500505	STUD SHEAR CONNECTORS	EACH	547									483	64
50700105	TREATED TIMBER	F.B.M.	35							35			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	89,950							79,100		7,910	2,940
50800515	BAR SPLICERS	EACH	125							125			
50901720	BICYCLE RAILING	FOOT	279							52	227		
**51200610	FURNISHING TREATED PILES OVER 38 FEET	FOOT	64,092	64,092	1								
**51202305	DRIVING PILES	FOOT	64,092	64,092									
**51202900	TEST PILE TIMBER	EACH	2	2									
**51500100	NAME PLATES	EACH	5							1	1	1	2
**52200015	PERMANENT SHEET PILING	SQ FT	3284										3,284
**52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	6,786	6,786									
**52200100	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	200									116	84

* SPECIAL PROVISION
** SPECIALTY ITEM



USER NAME = MatthewToussaint
DESIGNED - AJB
DRAWN - AJB
PLOT SCALE = 0.16666633 ' / in.
CHECKED - CMW
PLOT DATE = 2/3/2026
DATE - 02/02/2026

DESIGNED - AJB
DRAWN - AJB
CHECKED - CMW
DATE - 02/02/2026

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 5 OF 24 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	8
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

1 REVISED SHEET 4/14/2026

MODEL - Sheet 10
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				CONSTRUCTION CODE									
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	80% FED/ 10%STATE/ 5% HOFFMAN ESTATES/ 5% SOUTH BARRINGTON	80% FED 20% STATE	80% FED 20% STATE	100% HOFFMAN ESTATES	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	TENNIS CLUB LANE/ LAKEWOOD BLVD TRAFFIC SIGNAL	MUNDHANK TRAFFIC SIGNAL	ALGONQUIN RD (IL 62) TRAFFIC SIGNAL	EVP SIGNAL WORK	SAFETY	CULVERT SN# 016-2313	MSE RETAINING WALL SN# 016-W2509	SOLDIER PILE WALL SN# 016-Z066	RETAINING WALL SN# 016-Z067 SN# 016-Z068
				0003 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0004 URBAN	0044 URBAN	0044 URBAN	0044 URBAN
60624600	CORRUGATED MEDIAN	SQ FT	360	360									
**	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1,756					1,756				
**	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1					1				
**	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5					5				
	63200310	GUARDRAIL REMOVAL	FOOT	294					294				
**	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	25 225					25 225				
**	66900530	SOIL DISPOSAL ANALYSIS	EACH	8					8				
**	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1					1				
**	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1					1				
**	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	60					60				
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	30	30								
	67100100	MOBILIZATION	L SUM	1	1								
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	330					330				
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	405					405				

* SPECIAL PROVISION
** SPECIALTY ITEM

1 REVISED SHEET 4/14/2026



USER NAME = MatthewToussaint	DESIGNED - AJB	REVISED -
	DRAWN - AJB	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED - CMW	REVISED -
PLOT DATE = 2/3/2026	DATE - 02/02/2026	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 10 OF 24 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	13
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

MODEL: Sheet 23
FILE NAME: p:\proj\pawint01 s-e transyscorp.com\transyscorp\proj\Documents\Projects_2020\CH4401\401200018\CAD\02 - Sheets\01-General\0316X13-SHT-Summary of Quantities.dgn

				CONSTRUCTION CODE									
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE	80% FED/ 10%STATE/ 5% HOFFMAN ESTATES/ 5% SOUTH BARRINGTON	80% FED 20% STATE	80% FED 20% STATE	100% HOFFMAN ESTATES	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE	80% FED 20% STATE
				ROADWAY	TENNIS CLUB LANE/ LAKEWOOD BLVD TRAFFIC SIGNAL	MUNDHANK TRAFFIC SIGNAL	ALGONQUIN RD (IL 62) TRAFFIC SIGNAL	EVP SIGNAL WORK	SAFETY	CULVERT SN# 016-2313	MSE RETAINING WALL SN# 016-W2509	SOLDIER PILE WALL SN# 016-Z066	RETAINING WALL SN# 016-Z067
				0003 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0021 URBAN	0004 URBAN	0044 URBAN	0044 URBAN	0044 URBAN
* **	X4024100	TEMPORARY ACCESS (WINTERIZE)	SQ YD	2,000					2000				
*	X5021512	COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK)	EACH	2	2								
*	X5021514	COFFERDAM (TYPE 2) (IN-STREAM/WETLAND WORK)	EACH	2	2								
*	X5510011	PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE	EACH	2	2								
*	☐ X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	943	943								
*	☐ X5537900	STORM SEWERS TO BE CLEANED 15"	FOOT	228	228								
*	☐ X5538000	STORM SEWERS TO BE CLEANED 18"	FOOT	833	833								
*	☐ X5538600	STORM SEWERS TO BE CLEANED 36"	FOOT	718	718								
*	☐ X5538700	STORM SEWERS TO BE CLEANED 42"	FOOT	201	201								
*	X6020096	MANHOLES, TYPE A, 6'-DIAMETER, WITH 2 TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE	EACH	4	4								
	X6640525	CHAIN LINK FENCE, 4' ATTACHED TO STRUCTURE	FOOT	274							274		1
*	X6640104	FENCE REMOVAL	FOOT	1,374	1,374								
*	**	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1							
*	**	X7050167	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	1	1							

* SPECIAL PROVISION
** SPECIALTY ITEM

1 REVISIED SHEET 4/14/2026

☐ NON-PART 100% STATE



USER NAME = MatthewToussaint	DESIGNED - AJB	REVISED -
	DRAWN - AJB	REVISED -
PLOT SCALE = 0.16666633 ' / in.	CHECKED - CMW	REVISED -
PLOT DATE = 2/3/2026	DATE - 02/02/2026	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE:	SHEET 23 OF 24 SHEETS	STA.	TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	26
				CONTRACT NO. 62K33
ILLINOIS FED. AID PROJECT				

Bench Mark: Mag Nail in S. Edge of Pavement at Covered Bridge Road & Barrington Road. STA 83+42.52, 10' LT. Elev. 841.48
Mag Nail near nose at entrance to Falcon Lakes Subdivision. STA 75+03.15, 11' LT. Elev. 866.79

Existing Structure:

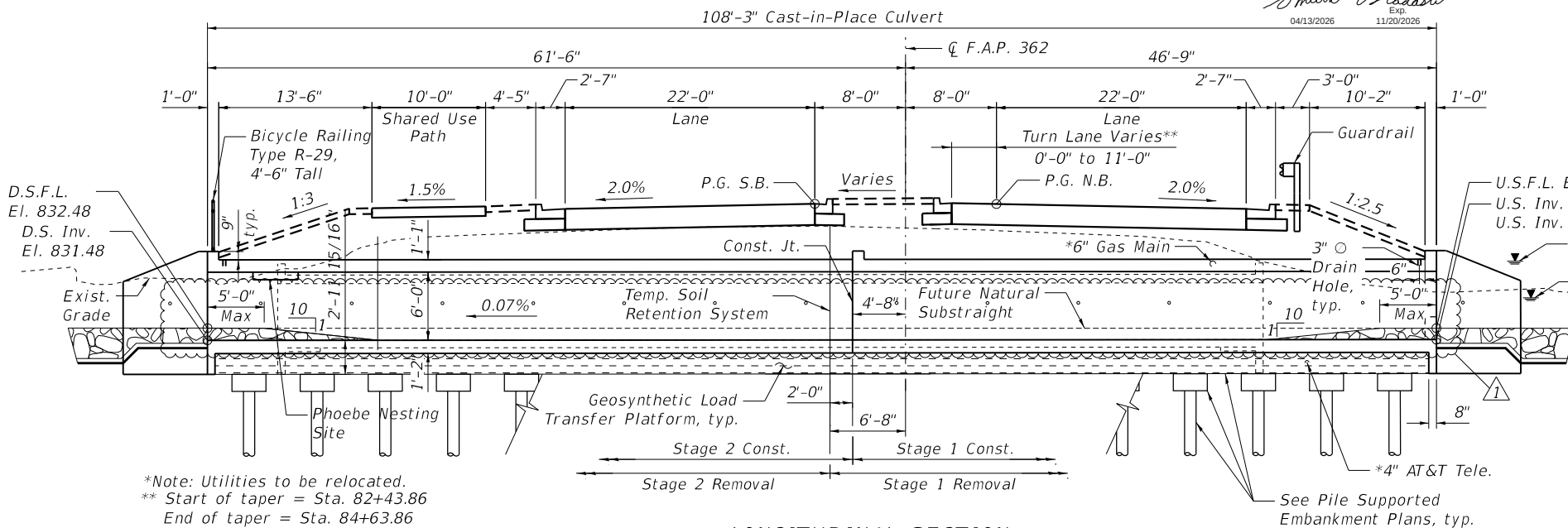
Structure No. 016-1294 built under F.A.P. Route 362. The existing Structure is a 7'w x 5'h single cell box culvert and 86.8' long. Existing Structure skewed 1.6° North East of alignment. Traffic will be maintained utilizing stage construction.

Salvage: None

Precast alternative is not allowed.

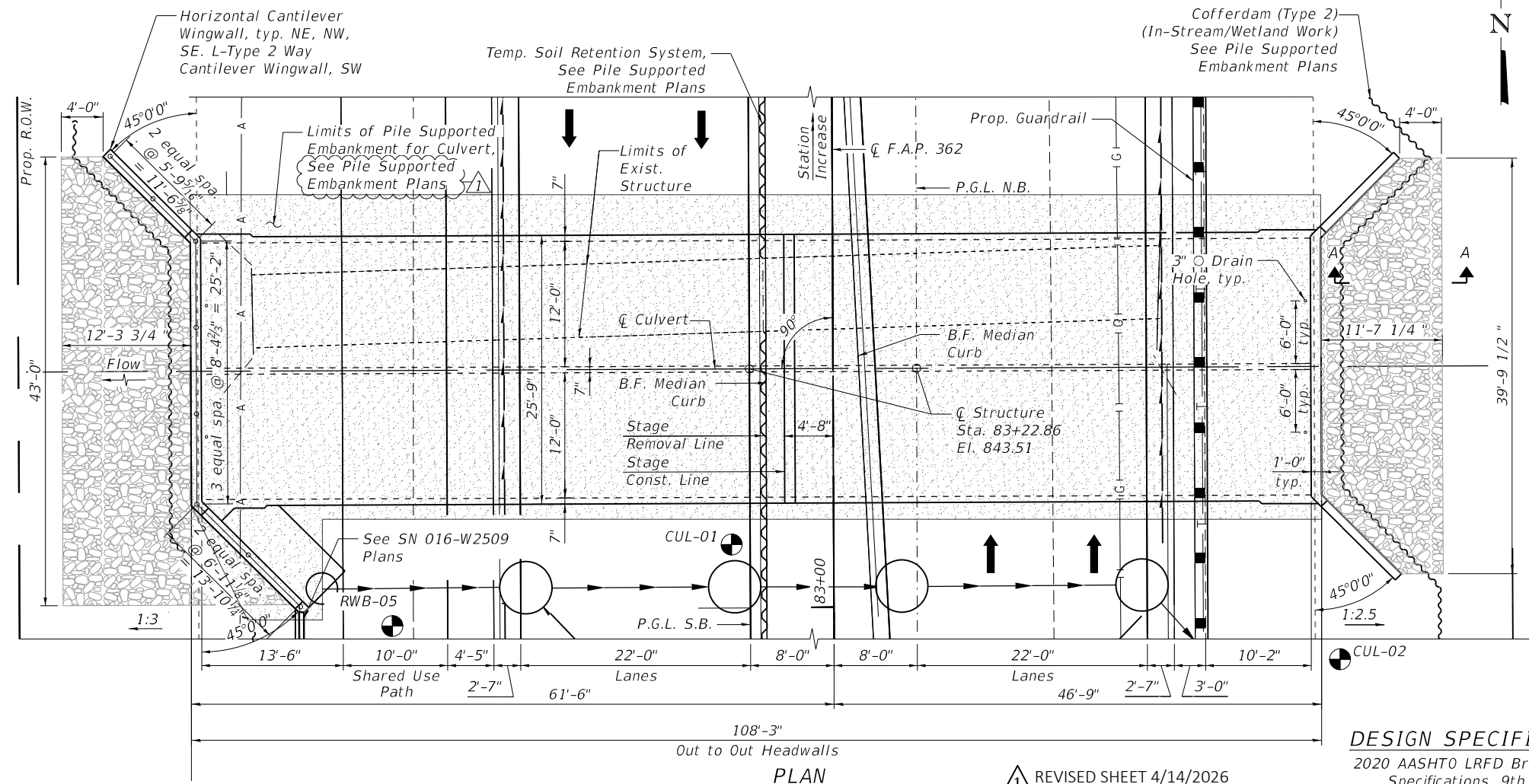


Shaw Bradash
Exp. 04/13/2026
11/20/2026



*Note: Utilities to be relocated.
** Start of taper = Sta. 82+43.86
End of taper = Sta. 84+63.86

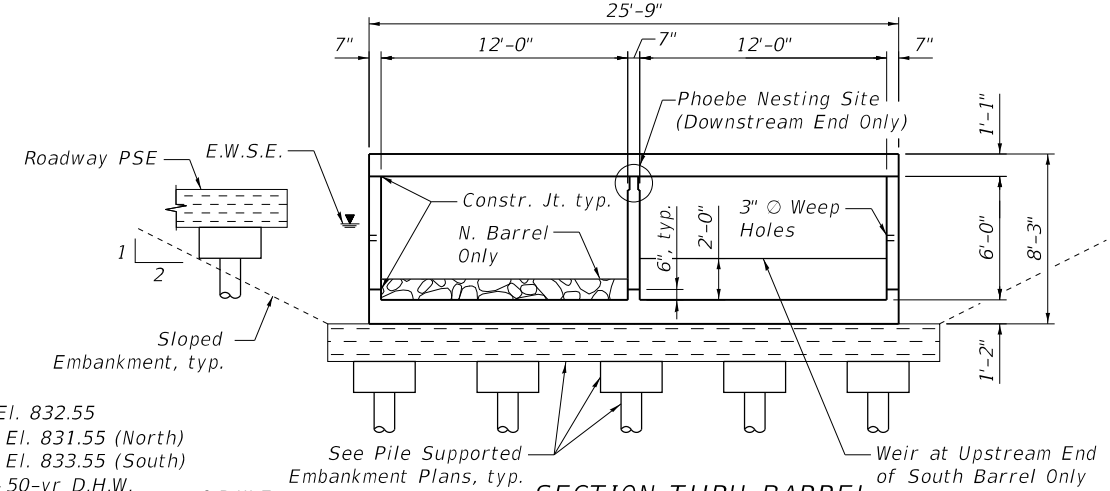
LONGITUDINAL SECTION
(Looking North)



PLAN

REVISED SHEET 4/14/2026

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design
Specifications, 9th Edition



SECTION THRU BARREL
(Looking East)

- LEGEND
- Exist. Underground Gas
 - Exist. Aerial Power Lines
 - Exist. Underground Tele.
 - Prop. Storm Sewer
 - Prop. Underdrain
 - Temp. Soil Retention System (TSRS)
 - Cofferdam (Type 2) (In-Stream/Wetland Work)
 - Soil Boring

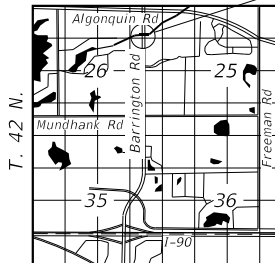
NOTES

- Offsets are measured from proposed centerline of F.A.P. 362.
- Culvert is built in conjunction with new MSE Wall S.N. 016-W2509.
- Contractor shall coordinate culvert construction with MSE retaining wall construction and installation of Pile Supported Embankment (PSE) system. Installation procedures may be affected by existing conditions. It is the Contractor's responsibility to determine the most cost-effective method of construction and include all items necessary for the proper and safe execution of the work. General suggested construction sequence is as follows:
 - Install TSRS longitudinally, along construction stage line as shown on PSE plans.
 - Excavate to depth required for PSE installation and remove portion of existing culvert.
 - Install PSE below culvert as shown on PSE plans, and construct first stage of culvert.
 - Install remainder of PSE for roadway.
 - Install second stage of PSE and culvert in a similar manner.
 - Construct MSE wall and join at SW wingwall of culvert.
- See Sheet S-2 for Section A-A, Waterway Information Table, and Profile Grade of F.A.P. 362.
- See Sheets S-15 & S-16 for soil boring logs.
- See Pile Supported Embankment Plans for details and pay items related to Pile Supported Embankment (PSE), Temporary Soil Retention System (TSRS), and Cofferdam (Type 2) (In-Stream/Wetland Work).

LOADING HL-93

Allow 50#/sq. ft. for future
wearing surface.

R. 8 E. 3rd P.M.



LOCATION SKETCH

DESIGN STRESSES

(FIELD UNITS)

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

GENERAL PLAN & ELEVATION
BARRINGTON ROAD OVER
POPLAR CREEK
F.A.P. RTE. 362
SECTION 2019-161-W
COOK COUNTY
STATION 83+22.86
STRUCTURE NO. 016-2313

MODEL: STP2
FILE NAME: p:\projects\transp\scorp\p1\Documents\Projects_2020\C1401\401\200018\CAD\02 - Sheets\20-Structural\Sheets\016x33-Culvert_GPE



USER NAME = MazenSyed	DESIGNED - STB	REVISED - 4/13/2026 STB
	DRAWN - JPK	REVISED -
PLOT SCALE = 0.166666" / in.	CHECKED - STB	REVISED -
PLOT DATE = 04/13/2026	DATE - 02/02/2026	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-2313

SCALE: 1" = 7' SHEET S-1 OF S-16 SHEETS STA. TO STA.

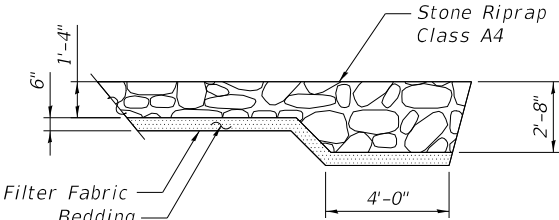
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	309
CONTRACT NO. 62K33				
ILLINOIS / FED. AID PROJECT				

GENERAL NOTES

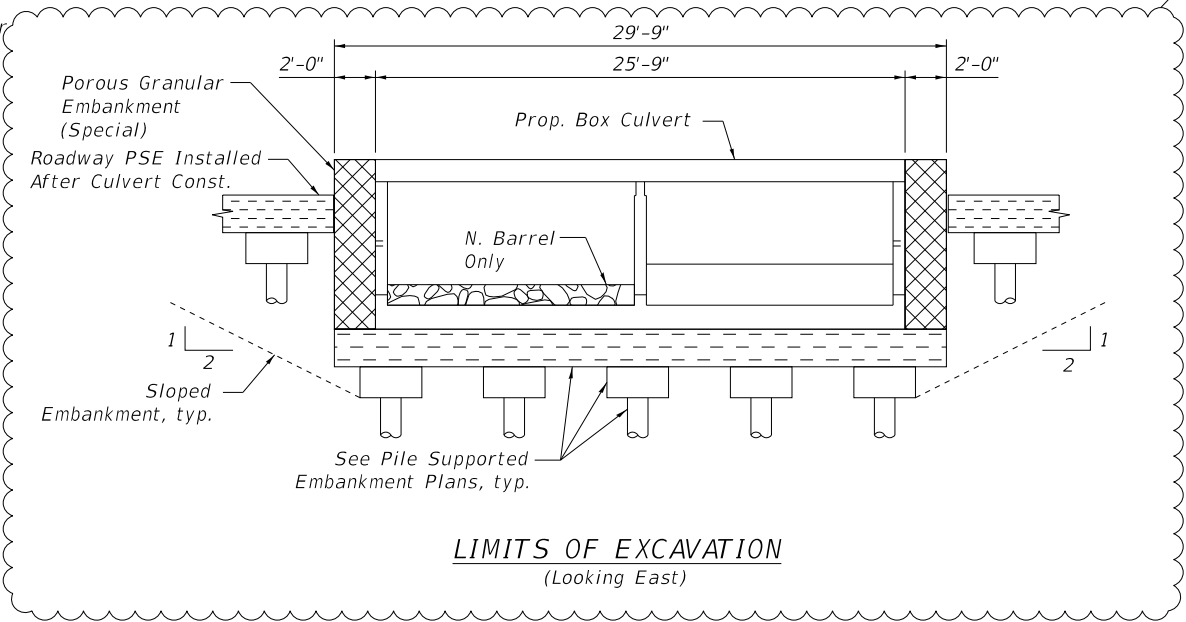
1. Reinforcement bars designated "(E)" shall be epoxy coated.
2. Contractor shall not scale dimensions from the contract plans for construction purposes. Scales are for information only.
3. No construction joints except those shown on the plans shall be allowed unless approved by the Engineer.
4. It shall be the Contractor's responsibility to verify the locations of all utilities prior to starting construction. Contact J.U.L.I.E., 800-892-0123.
5. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
6. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except Cofferdams. This shall include the placement of run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown on the contract plans.
7. Precast Alternative is not allowed.
8. Temporary Soil Retention System details and quantities are covered under the pile supported embankment plans.
9. Cofferdam details and quantities are covered under the pile supported embankment plans.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Rip Rap Class A4	SQ YD	145
Filter Fabric	SQ YD	105
Removal of Existing Structures	EACH	1
Structure Excavation	CU YD	410
Treated Timber	F.B.M.	35
Reinforcement Bars, Epoxy Coated	POUND	79,100
Bar Splicers	EACH	125
Bicycle Railing	FOOT	52
Name Plates	EACH	1
Concrete Box Culverts	CU YD	299
Porous Granular Embankment (Special)	CU YD	133



SECTION A-A



LIMITS OF EXCAVATION
(Looking East)

STATION 83+22.86
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RTE. 362
SECT. (2019-161-W)
LOADING HL-93
STR. NO. 016-2313

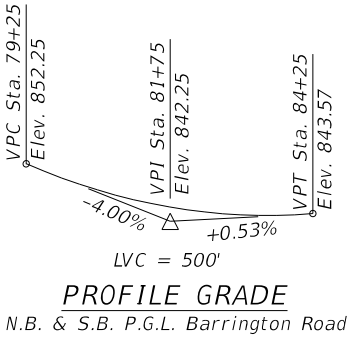
NAME PLATE
(See std. 515001)

INDEX OF SHEETS

S1	General Plan and Elevation
S2	General Data
S3	Stage Construction 1 of 2
S4	Stage Construction 2 of 2
S5	Temporary Concrete Barrier
S6	Culvert Plan Bottom Slab Details
S7	Culvert Plan Top Slab Details
S8	Culvert Longitudinal Section
S9	West Wingwall Details
S10	East Wingwall Details
S11	Culvert Details
S12	Railing Details 1
S13	Railing Details 2
S14	Bar Splicer Assembly and Mechanical Splicer Details
S15	Soil Boring Logs Sheet 1 of 2
S16	Soil Boring Logs Sheet 2 of 2

LIST OF ABBREVIATIONS

B	Baseline	B.F.	Back Face
CL	Centerline	cl.	Clearance
const.	Construction	Ø	Diameter
conc.	Concrete	El.	Elevation
cts.	Centers	long.	Longitudinal
E.F.	Each Face	min.	Minimum
exist.	Existing	O.F.	Outside Face
F.F.	Front Face	prop.	Proposed
jt.	Joint	R.O.W.	Right of Way
max.	Maximum	rte.	Route
no.	Number	RET.	Retaining Wall
PG	Profile Grade	spa.	Spaces
PSE	Pile Supported Embankment	sta.	Station
Req'd.	Required	struct.	Structure
sect.	Section	P	Plate
spec.	Specification	o.c.	On Center
std.	Standard	U.N.O.	Unless Noted Otherwise
typ.	Typical	N.B.	Northbound
Temp.	Temporary	S.B.	Southbound
D.S.	Downstream	P.G.L.	Profile Grade Line



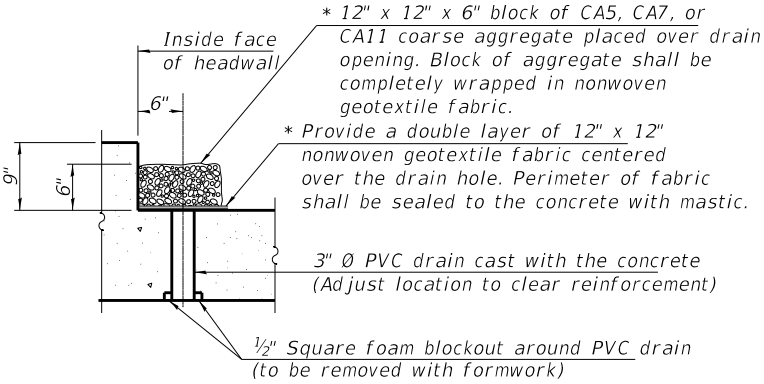
WATERWAY INFORMATION

Drainage Area = 3.4 sq. mi									
Exist. Overtopping Elev. 840.38 @ Sta. 83+32									
Prop. Overtopping Elev. 843.43 @ Sta. 83+30									
Flood	Freq. Yr.	Q C.F.S.	Q	Opening Exist. Prop.	Sq.Ft. Nat. H.W.E.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.	Exist. Prop.	Exist. Prop.
Ten-Year	10	165	35	108	837.57	1.24 0.19	838.81	837.76	837.76
Design	50	260	35	108	838.45	2.08 0.37	840.53	838.82	838.82
Base	100	307	35	108	838.92	1.77 0.46	840.69	839.38	839.38
Scour Design Check	-	-	-	-	-	-	-	-	-
Max Calc	500	426	35	108	840.31	0.66 0.47	840.97	840.78	840.78

10-Year Velocity through Existing Structure = 2 ft/s

10-Year Velocity through Proposed Structure = 1 ft/s

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

REVISED SHEET 4/14/2026

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

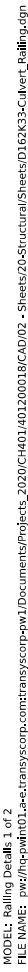
GENERAL DATA
STRUCTURE NO. 016-2313

SCALE: SHEET S-2 OF S-16 SHEETS STA. TO STA.

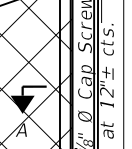
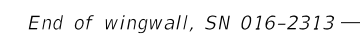
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	310
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				



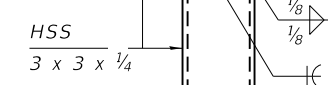
USER NAME	= kingaludza	DESIGNED -	NMB	REVISED -	4/13/2026 STB
DRAWN -	NMB	REVIS	-	REVISED -	-
PLOT SCALE	=	CHECKED -	STB	REVISED -	-
PLOT DATE	= 04/13/2026	DATE	= 02/02/2026	REVISED -	-



See Plans for SN 016-W2509



 *Bicycle Railing*



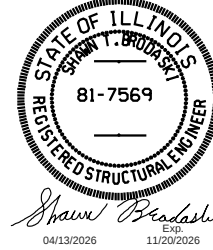
NOTES:

1. For Sections A-A, B-B, and C-C see Sheet S-13.
2. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

1. For Sections A-A, B-B, and C-C see Sheet S-13.
2. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

Existing Structure: None
No Salvage

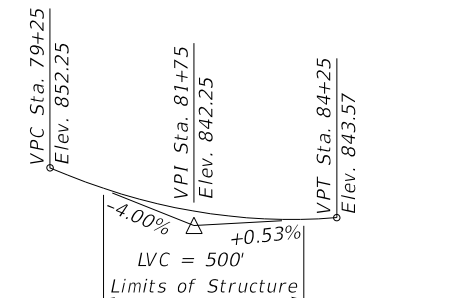
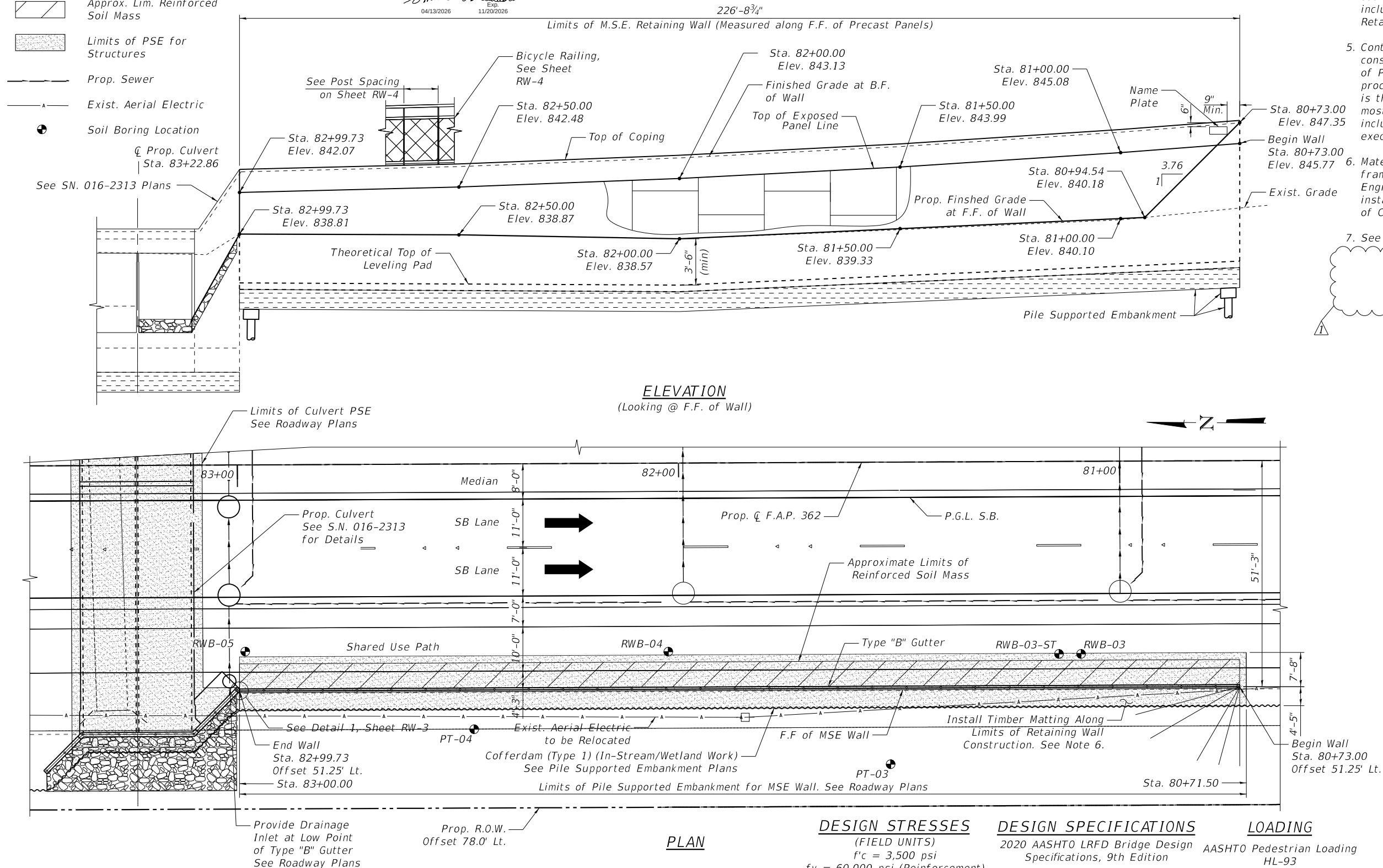
 PSE Pile and Cap
 Cofferdam (Type 1)
 PSE Load Transfer Platform
 Approx. Lim. Reinforced Soil Mass
 Limits of PSE for Structures
 Prop. Sewer
 Exist. Aerial Electric
 Soil Boring Location



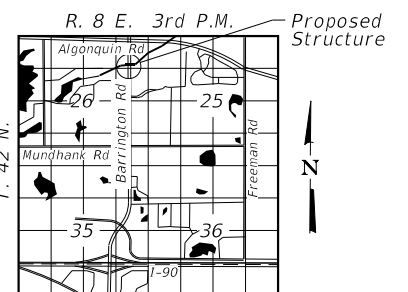
WALL ELEVATIONS TABLE							
Station	Offset	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F
80+73.00	51'-3"	847.52	845.77	847.35	836.88	840.89	847.35
80+94.54	51'-3"	846.97	845.22	840.18	836.58	840.18	846.80
81+00.00	51'-3"	846.83	845.08	840.10	836.50	840.00	846.66
81+50.00	51'-3"	845.74	843.99	839.33	835.78	839.26	845.57
82+00.00	51'-3"	844.88	843.13	838.57	835.07	838.57	844.71
82+50.00	51'-3"	844.23	842.48	838.87	835.14	838.87	844.06
82+99.73	51'-3"	843.82	842.07	838.81	835.24	838.81	843.65

Elevation A - Top of coping
Elevation B - Top of Exposed Panel Line
Elevation C - Finished Grade at F.F. of Wall
Elevation D - Theoretical Top of Leveling Pad (Max.)
Elevation E - Existing Grade Line at F.F. of Wall
Elevation F - Finished Grade at B.F. of Wall

1. Wall offsets are measured from the proposed ϕ of F.A.P. 362 to the front face of precast panels.
2. Wall is built in conjunction with new culvert S.N. 016-2313.
3. Horizontal Dimensions measured along front face of precast panels.
4. Cast-in-place concrete and reinforcing steel, epoxy coated, required for coping and leveling pad will be included in payment for Mechanically Stabilized Earth Retaining Wall.
5. Contractor shall coordinate MSE retaining wall construction with culvert construction and installation of Pile Supported Embankment system. Installation procedures may be affected by existing conditions. It is the Contractor's responsibility to determine the most cost-effective method of construction and include all items necessary for the proper and safe execution of the work.
6. Material, limits of installation, and removal time frame for timber matting shall be as approved by the Engineer. The cost for timber matting material, installation, and removal shall be included in the cost of Cofferdam (Type 1) (In-stream/Wetland Work).



N.B. & S.B. P.G.L. Barrington Road



GENERAL PLAN & ELEVATION

F.A.P. 362 - SEC. 2019-161-W

STA. 80+73.00 TO STA 82+99.73

STRUCTURE NO. 016-W2509

(FIELD UNITS)

$f_y = 60,000 \text{ psi (Reinforcement)}$
(PRECAST UNITS)

$f'_c = 4,500 \text{ psi (Precast Panels)}$

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING
AASHTO Pedestrian Loading
HL-93

1 REVISED SHEET 4/14/2026



USER NAME = nickbrustin	DESIGNED - STB	REVISED -  4/13/2026 STB
	DRAWN - JPK	REVISED -
PLOT SCALE = 0.16666633' / in.	CHECKED - STB	REVISED -
PLOT DATE = 04/13/2026	DATE = 02/02/2026	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

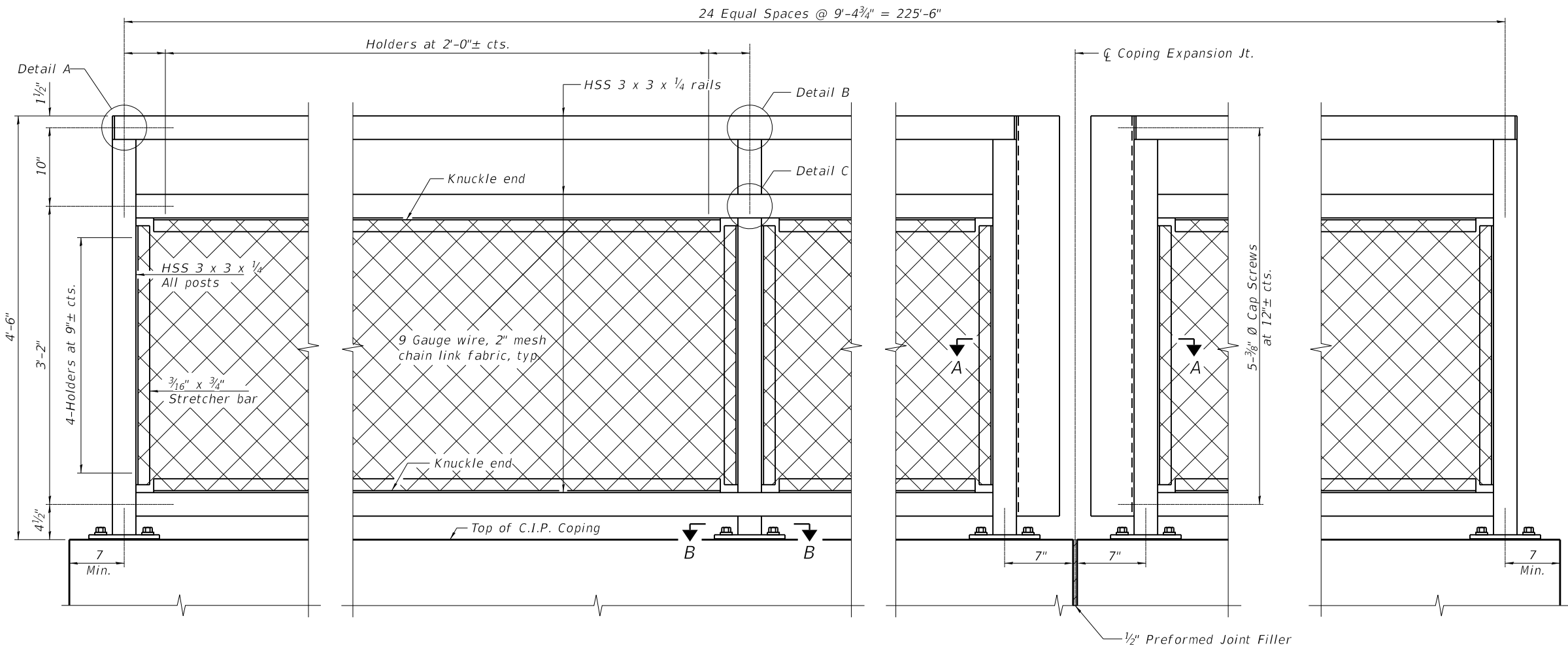
GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-W2509

SCALE: 1" = 12'	SHEET RW-1 OF RW-7 SHEETS	STA.	TO STA.
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F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	325
		CONTRACT NO. 62K33		
ILLINOIS		FED. AID PROJECT		

MODEL: MSE WALL GPE
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Model: Railing Details 1 of 2
FILE NAME: p:\projects\2019\2019-161-W\2019-161-W-016-W2509-Railing.dgn



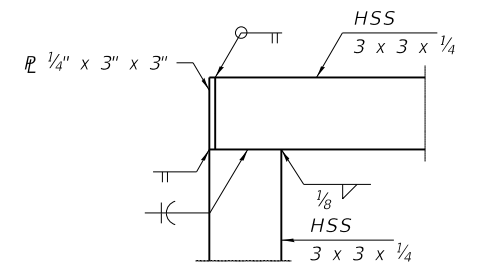
ELEVATION BICYCLE RAILING
(Inside face)

Notes:

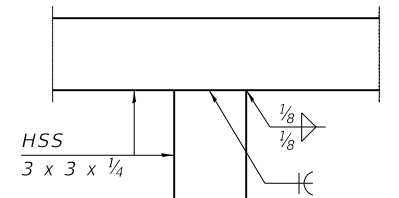
- Coping concrete and reinforcement, and precast wall facing panels shall be paid for as Mechanically Stabilized Earth Retaining Wall.
- All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

RAILING CRITERIA

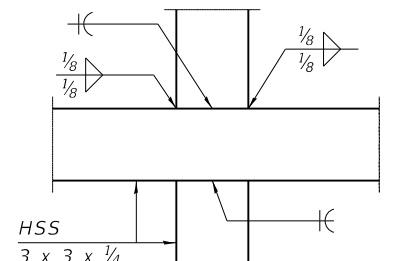
MASH 2016 Test Level	4
Bicycle Railing Weight (plf)	50
Max Post Spacing	9'-4 3/4"



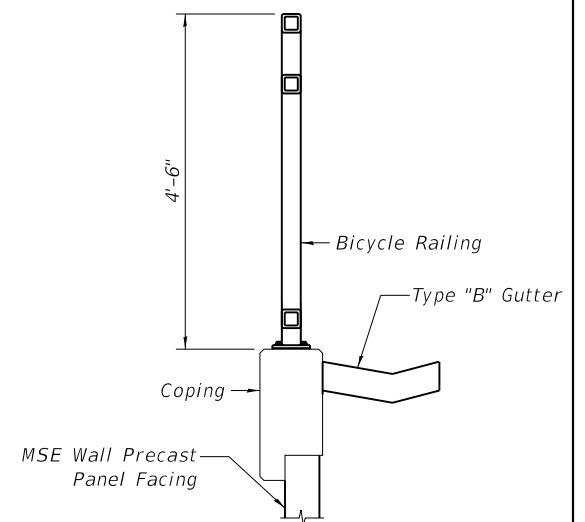
DETAIL A



DETAIL B



DETAIL C



SECTION THRU COPING

1 REVISED SHEET 4/14/2026



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DRAWN	- JPK
PLOT SCALE	= 0.166666" / in.
PLOT DATE	= 04/13/2026

DESIGNED	- STB
REVIS	- 4/13/2026 STB
DRAWN	- JPK
CHECKED	- STB
DATE	- 02/02/2026

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**RAILING DETAILS 1
STRUCTURE NO. 016-W2509**

SCALE: SHEET RW-4 OF RW-7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	328
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

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1 REVISED SHEET 4/14/2026

1. Wall offsets are measured from the $\odot$ Barrington Rd. to the front face of concrete wall facing.
2. For railing details, see Sheet WA-6.

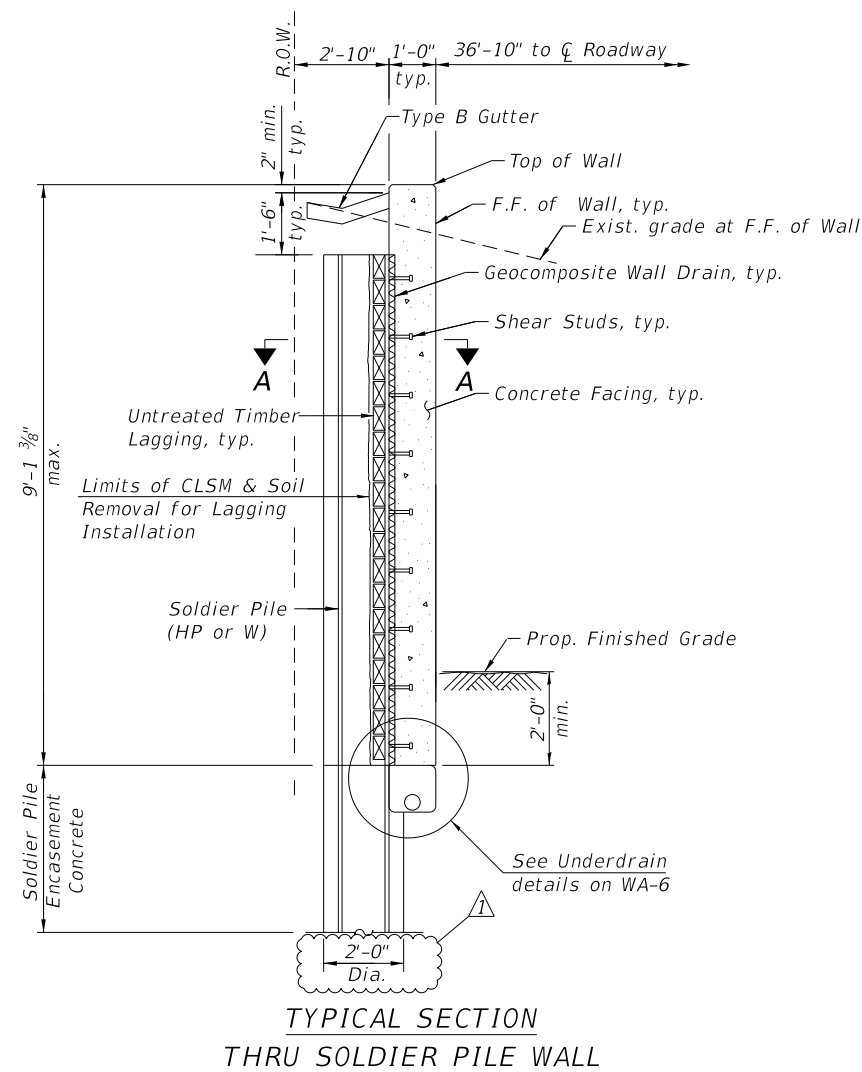
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362	2019-161-W	COOK	666	332
		CONTRACT NO. 62K33		
ILLINOIS		FED. AID PROJECT		

TOTAL BILL OF MATERIAL

GENERAL NOTES

1. *Reinforcement bars designated (E) shall be epoxy coated.*
2. *The Contractor is responsible for the design and performance of the lagging using no less than a 3 inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1,000 psi.*
3. *No construction joints except those shown on the plans shall be allowed unless approved by the Engineer.*
4. *It shall be the Contractor's responsibility to verify the location of all utilities prior to starting construction. Contact J.U.L.I.E, 800-892-0123.*
5. *Protective coat shall be applied to the front face and top of concrete facing to a distance of 1'-0" below finished grade.*
6. *No field welding is permitted except as specified in the contract documents.*

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	167
Concrete Structures	Cu. Yd.	58.3
Form Liner Textured surface	Sq. Ft.	988
Protective Coat	Sq. Yd.	150
Stud Shear Connectors	Each	483
Reinforcement Bars Epoxy Coated	Pound	7910
Name Plates	Each	1
Furnishing Soldier Piles (HP Section)	Foot	116
Furnishing Soldier Piles (W Section)	Foot	468
Drilling and setting Soldier Piles (In Soil)	Cu. Ft.	1004
Untreated Timber Lagging	Sq. Ft.	1536
Geocomposite Wall Drain	Sq. Yd.	125
Pipe Underdrains for Structures 4"	Foot	275
Chain Link Fence, 4' Attached to Structure	Foot	274



STATION 75+25.00
Build 20__ BY
STATE OF ILLINOIS
F.A.I. RT. 362
SEC. (2019-161-W)
LOADING HL-93
STR. NO. 016-Z066

NAME PLATE

INDEX OF SHEETS

WA-1	Plan and Elevation
WA-2	General Notes and Bill of Materials
WA-3	Soldier Pile Layout
WA-4	Soldier Pile Schedule
WA-5	Concrete Facing Details
WA-6	Typical Sections & Details
WA-7	Soil Boring Logs Sheet 1 of 2
WA-8	Soil Boring Logs Sheet 2 of 2

LIST OF ABBREVIATIONS

<i>B.</i>	<i>Baseline</i>	<i>B.F.</i>	<i>Back Face</i>
<i>cl.</i>	<i>Centerline</i>	<i>cl.</i>	<i>Clearance</i>
<i>const.</i>	<i>Construction</i>	<i>○</i>	<i>Diameter</i>
<i>conc.</i>	<i>Concrete</i>	<i>elev.</i>	<i>Elevation</i>
<i>cts.</i>	<i>Centers</i>	<i>long.</i>	<i>Longitudinal</i>
<i>E.F.</i>	<i>Each Face</i>	<i>min.</i>	<i>Minimum</i>
<i>exist.</i>	<i>Existing</i>	<i>O.F.</i>	<i>Outside Face</i>
<i>F.F.</i>	<i>Front Face</i>	<i>prop.</i>	<i>Proposed</i>
<i>jt.</i>	<i>Joint</i>	<i>R.O.W.</i>	<i>Right of Way</i>
<i>LT</i>	<i>Left</i>	<i>RT</i>	<i>Right</i>
<i>max.</i>	<i>Maximum</i>	<i>rte.</i>	<i>Route</i>
<i>no.</i>	<i>Number</i>	<i>RET.</i>	<i>Retaining Wall</i>
<i>PG</i>	<i>Profile Grade</i>	<i>spa.</i>	<i>Spaces</i>
<i>P.G.L.</i>	<i>Profile Grade Line</i>	<i>sta.</i>	<i>Station</i>
<i>Req'd.</i>	<i>Required</i>	<i>struct.</i>	<i>Structure</i>
<i>sect.</i>	<i>Section</i>	<i>℞</i>	<i>Plate</i>
<i>spec.</i>	<i>Specification</i>	<i>o.c.</i>	<i>On Center</i>
<i>std.</i>	<i>Standard</i>	<i>U.N.O.</i>	<i>Unless Noted Otherwise</i>
<i>typ.</i>	<i>Typical</i>		



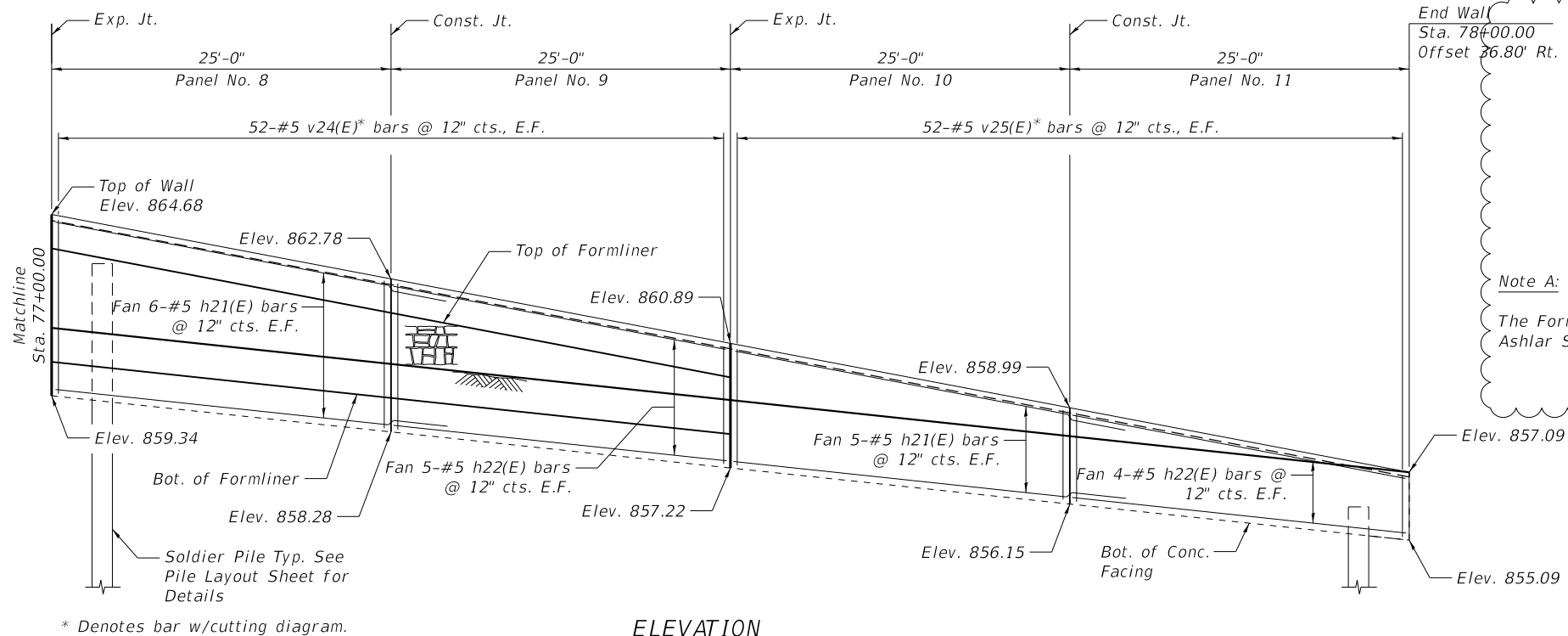
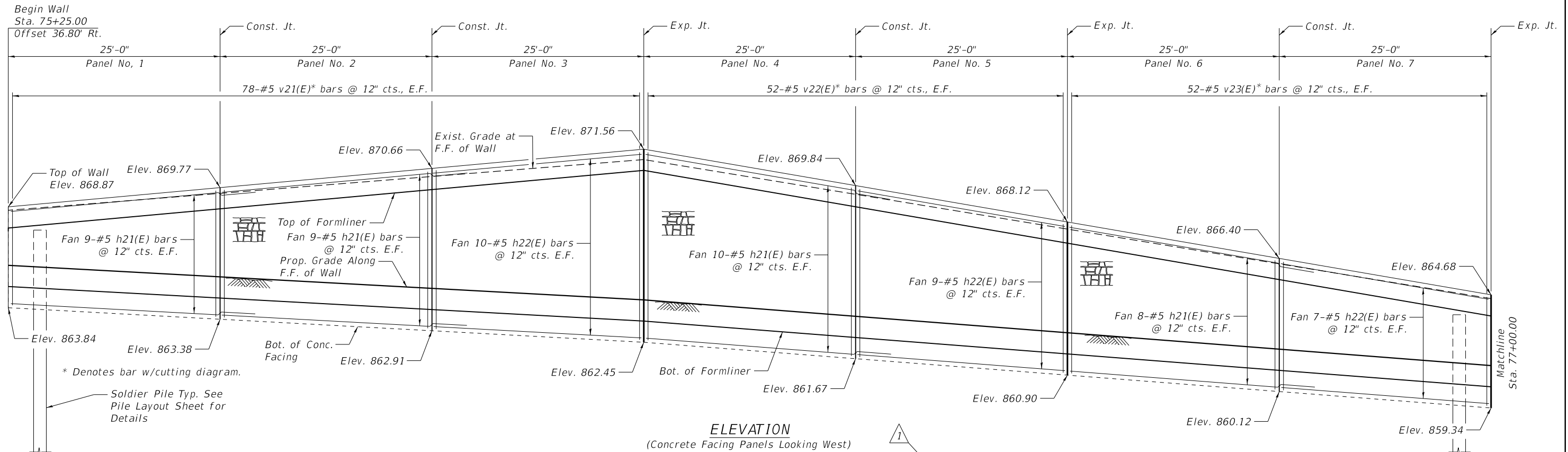
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PLOT DATE = 02/02/2026	DATE = 02/02/2026	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES AND BILL OF MATERIALS
STRUCTURE NO. 016-Z066

GENERAL NOTES AND BILL OF MATERIALS STRUCTURE NO. 016-Z066						F.A. P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						362	2019-161-W	COOK	666	333
						CONTRACT NO. 62K33				
SCALE:	SHEET	WA-2	OF	WA-8	SHEETS	STA.	TO STA.			

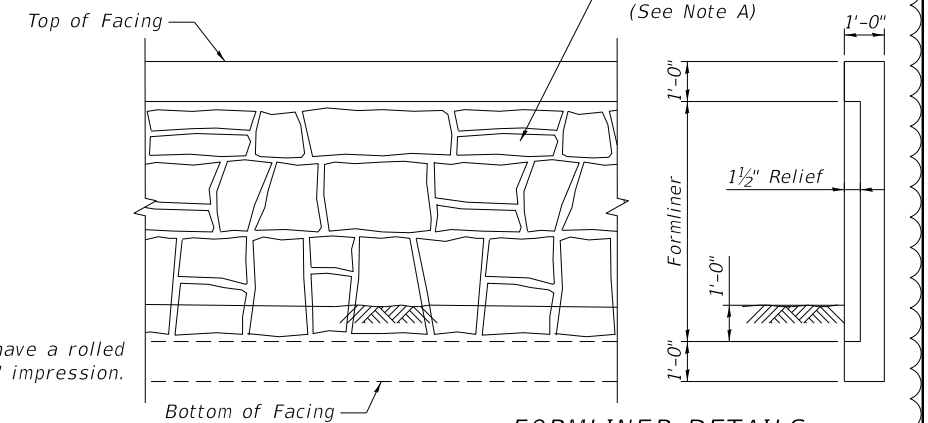
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End Wall
Sta. 78+00.00
Offset 36.80' Rt.

Note A:

The Form Liner Pattern shall have a rolled Ashlar Stone Finish with a 1½" impression.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h21(E)	94	#5	28'-7"	—
h22(E)	70	#5	24'-8"	—
v21(E)	78	#5	13'-6"	—
v22(E)	52	#5	15'-7"	—
v23(E)	52	#5	11'-10"	—
v24(E)	52	#5	8'-4"	—
v25(E)	52	#5	5'-0"	—
Concrete Structures			Cu. Yd.	58.3
Reinforcement Bars, Epoxy Coated			Pound	7910

Min. bar lap:
#5 bars = 3'-7"

FIELD CUTTING DIAGRAM

Order bars full length and cut as shown

Bar	A	B	C	D
v21(E)	13'-6"	4'-8"	8'-9"	4'-8"
v22(E)	15'-7"	6'-10"	8'-9"	6'-10"
v23(E)	11'-10"	5'-0"	6'-10"	5'-0"
v24(E)	8'-4"	3'-4"	5'-0"	3'-4"
v25(E)	5'-0"	1'-8"	3'-4"	1'-8"

NOTES:

- Reinforcement Bars designated (E) shall be epoxy coated.
- Bars indicated thus 6x3-#5 etc. indicates 6 lines of bars with 3 lengths per line.
- See Sheets SB-01 through SB-19 for boring logs.



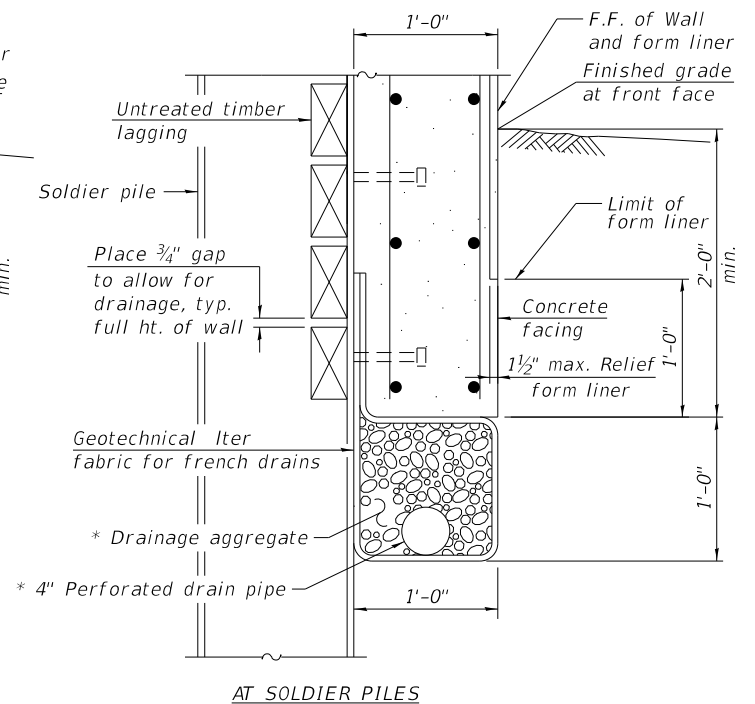
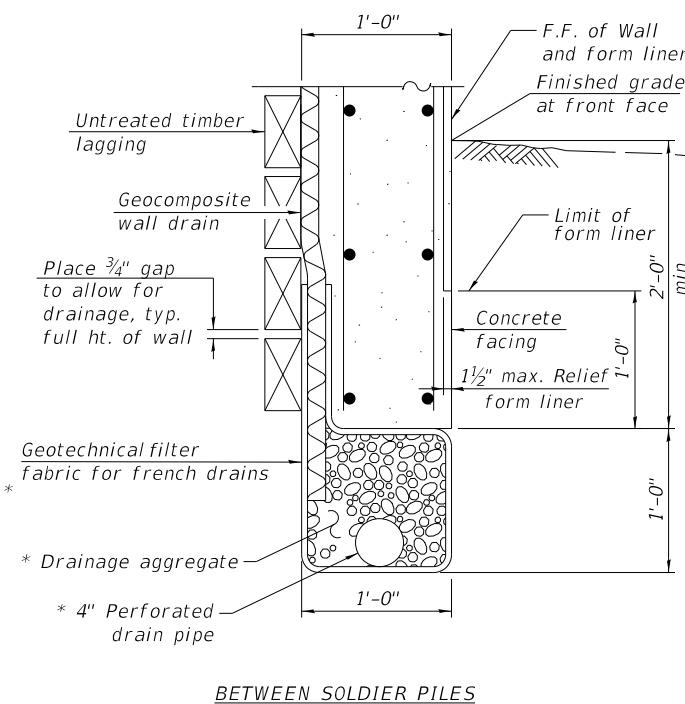
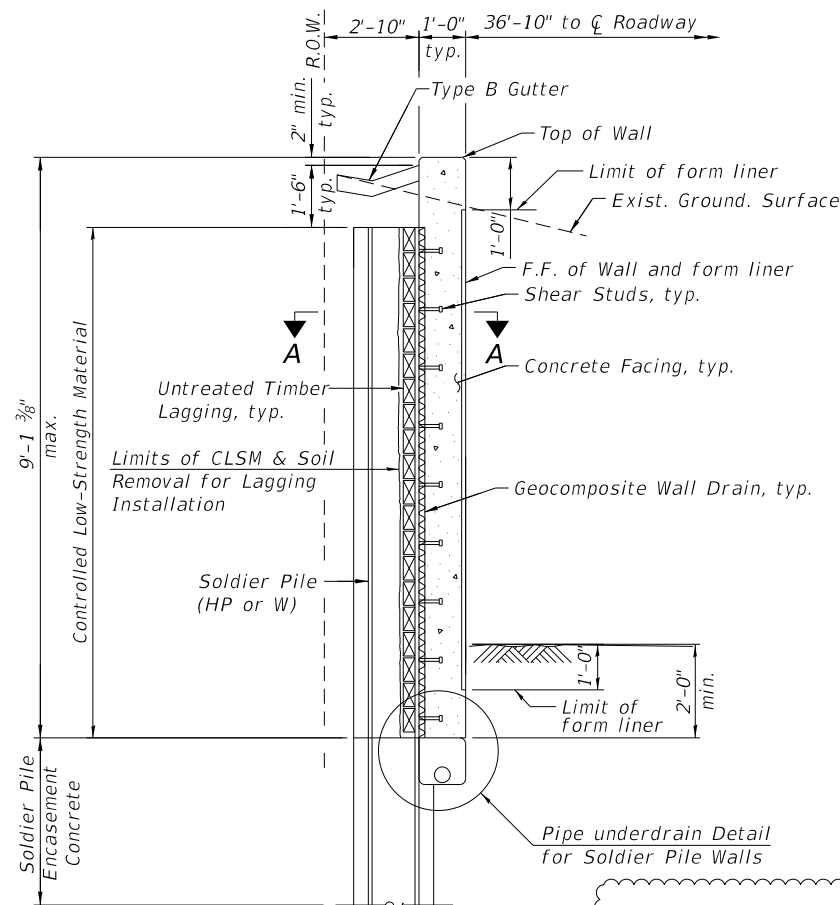
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PLOT DATE	= 04/13/2026					

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE FACING DETAILS
STRUCTURE NO. 016-2066**

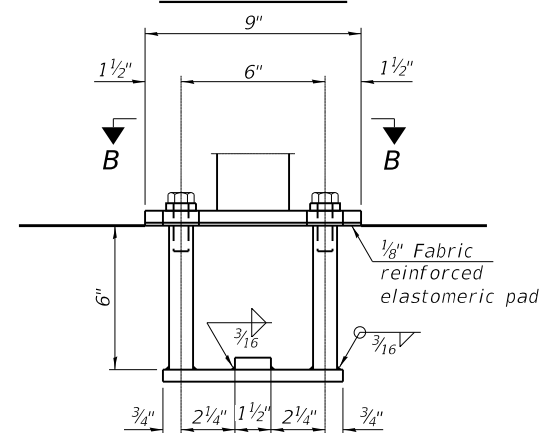
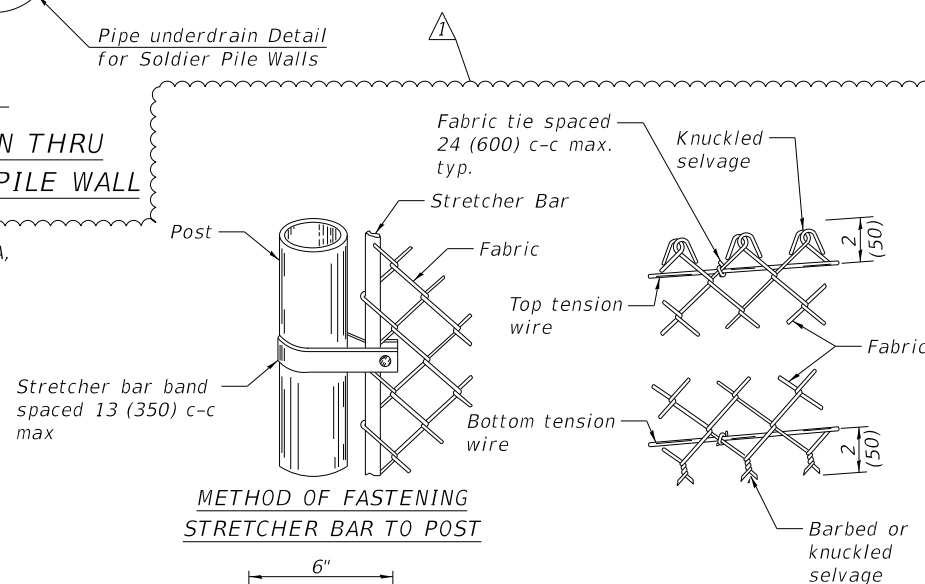
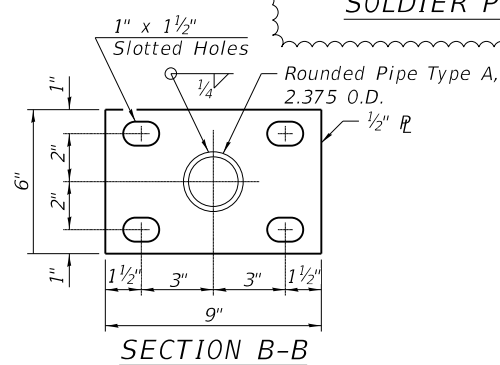
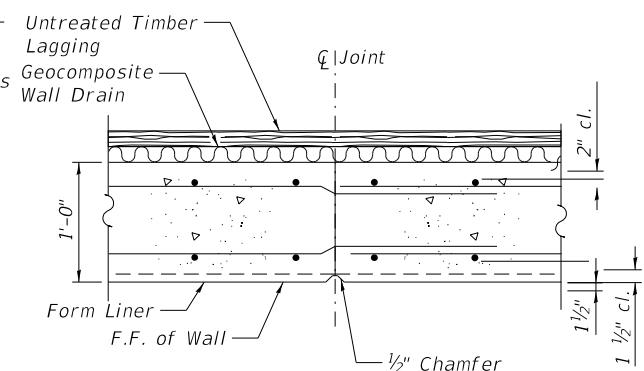
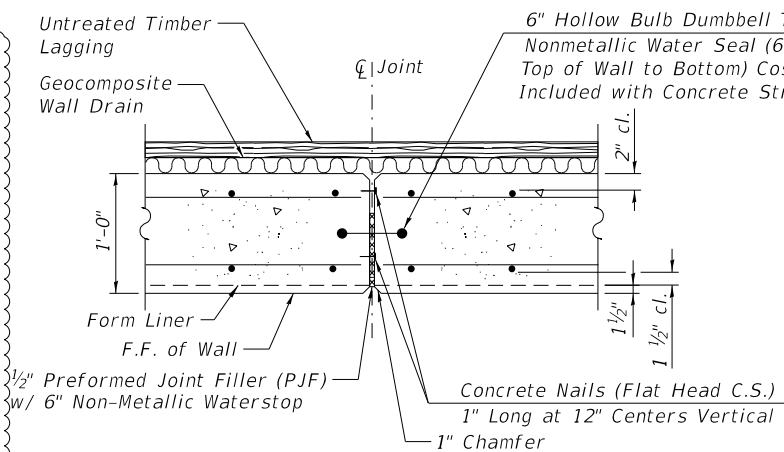
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	336
CONTRACT NO. 62K33				
ILLINOIS / FED. AID PROJECT				



UNDERDRAIN DETAILS FOR SOLDIER PILE WALLS

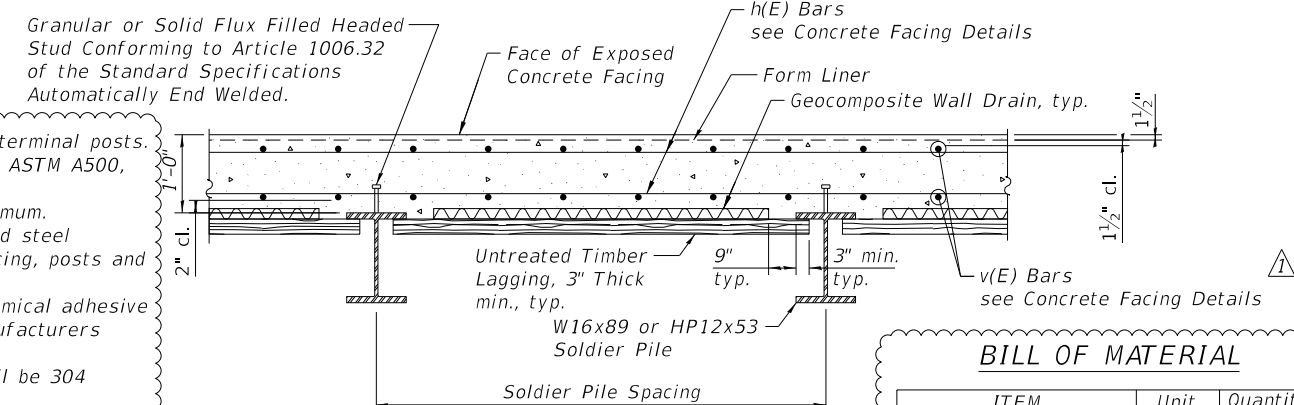
Included in the cost of Pipe Underdrains for Structures.



In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

NOTES:

1. Utilize Pipe Type A for all line and terminal posts.
2. Pipe shall be ASTM A53, Grade B or ASTM A500, Grade B.
3. Base Plates shall be ASTM A36 minimum.
4. Aluminum-coated steel or zinc-coated steel materials shall be provided for fencing, posts and base plates.
5. Anchors shall be stainless steel chemical adhesive type and shall be installed per manufacturers recommendations.
6. Anchor bolts, nuts and washers shall be 304 stainless steel.
7. Post shall be beveled to match top of wall slope at base plate.
8. For additional details, see Hwy. Std. 664001.



BILL OF MATERIAL

ITEM	Unit	Quantity
Chain Link Fence, 4' Attached to Structure	Foot	274

1. Reinforcement bars designated (E) shall be epoxy coated.
2. The Contractor is responsible for the design and performance of the lagging using no less than a 3 inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1,000 psi.
3. No construction joints except those shown on the plans shall be allowed unless approved by the Engineer.
4. It shall be the Contractor's responsibility to verify the location of all utilities prior to starting construction. Contact J.U.L.I.E, 800-892-0123.
5. Protective coat shall be applied to the front face and top of concrete facing to a distance of 1'-0" below finished grade.
6. No field welding is permitted except as specified in the contract documents.



ITEM	UNIT	TOTAL
Structure Excavation	CU YD	24
Concrete Structures	CU YD	9.0
Form Liner Textured surface	SQ FT	133
Protective Coat	SQ YD	21
Stud Shear Connectors	EACH	64
Reinforcement Bars Epoxy Coated	POUND	1,190
Furnishing Soldier Piles (HP Section)	FOOT	84
Drilling and setting Soldier Piles (In Soil)	CU FT	147
Untreated Timber Lagging	SQ FT	211
Geocomposite Wall Drain	SQ YD	18
Pipe Underdrains for Structures 4"	FOOT	55
Name Plates	EACH	1

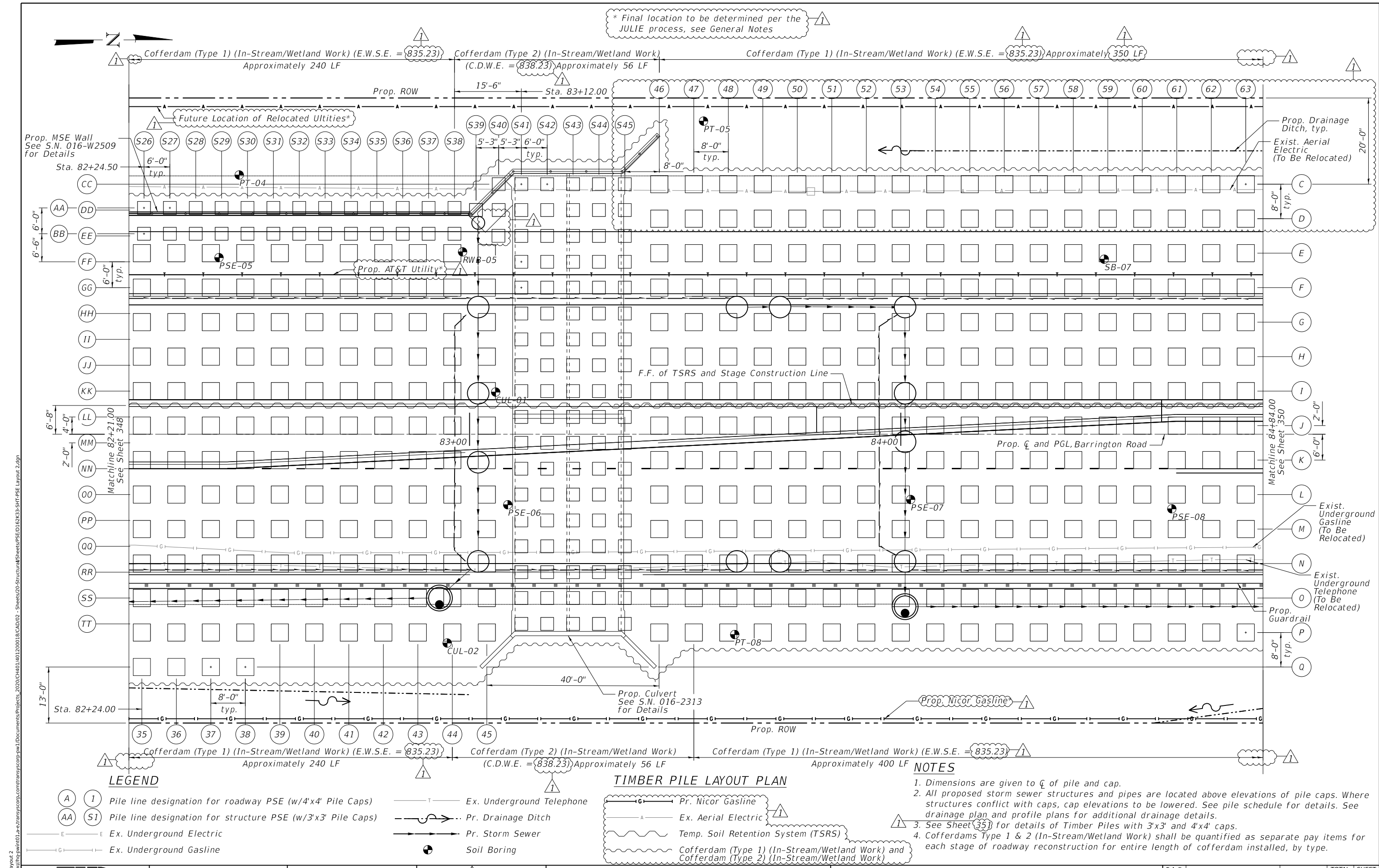
<i>Pile Number</i>	<i>Pile Size</i>	<i>Station at F.F. of Wall</i>	<i>Offset at F.F. of Wall</i>	<i>Top of Pile Elev.</i>	<i>Bottom of CIP Facing</i>	<i>Pile Tip Elev.</i>	<i>Length of Pile (ft)</i>	<i>No. of Shear Studs</i>
1	HP12x53	98+77.50	68.00	862.30	859.97	848.30	14.0	8
2	HP12x53	98+87.50	68.00	862.69	860.13	848.69	14.0	10
3	HP12x53	98+97.50	68.00	863.08	860.29	849.08	14.0	10
4	HP12x53	99+07.50	68.00	863.47	860.44	849.47	14.0	12
5	HP12x53	99+17.50	68.00	863.86	860.60	849.86	14.0	12
6	HP12x53	99+27.50	68.00	864.25	860.76	850.25	14.0	12

NAME PLATE

WC-1	Plan and Elevation
WC-2	General Notes, Soldier Pile Schedule and Bill of Materials
WC-3	Soldier Pile Layout
WC-4	Concrete Facing Details
WC-5	Typical Sections & Details
WC-6	Soil Boring Logs

<i>B.</i>	<i>Baseline</i>	<i>B.F.</i>	<i>Back Face</i>
<i>CL</i>	<i>Centerline</i>	<i>cl.</i>	<i>Clearance</i>
<i>const.</i>	<i>Construction</i>	$\bigcirc$	<i>Diameter</i>
<i>conc.</i>	<i>Concrete</i>	<i>elev.</i>	<i>Elevation</i>
<i>cts.</i>	<i>Centers</i>	<i>long.</i>	<i>Longitudinal</i>
<i>E.F.</i>	<i>Each Face</i>	<i>min.</i>	<i>Minimum</i>
<i>exist.</i>	<i>Existing</i>	<i>O.F.</i>	<i>Outside Face</i>
<i>F.F.</i>	<i>Front Face</i>	<i>prop.</i>	<i>Proposed</i>
<i>jt.</i>	<i>Joint</i>	<i>prop.</i>	<i>Proposed</i>
<i>LT</i>	<i>Left</i>	<i>R.O.W.</i>	<i>Right of Way</i>
<i>max.</i>	<i>Maximum</i>	<i>RT</i>	<i>Right</i>
<i>no.</i>	<i>Number</i>	<i>rte.</i>	<i>Route</i>
<i>PG</i>	<i>Profile Grade</i>	<i>RET.</i>	<i>Retaining Wall</i>
<i>P.G.L.</i>	<i>Profile Grade Line</i>	<i>spa.</i>	<i>Spaces</i>
<i>Req'd.</i>	<i>Required</i>	<i>sta.</i>	<i>Station</i>
<i>sect.</i>	<i>Section</i>	<i>struct.</i>	<i>Structure</i>
<i>spec.</i>	<i>Specification</i>	R	<i>Plate</i>
<i>std.</i>	<i>Standard</i>	<i>o.c.</i>	<i>On Center</i>
<i>typ.</i>	<i>Typical</i>	<i>U.N.O.</i>	<i>Unless Noted Otherwise</i>

1 REVISED SHEET 4/14/2026



MODEL: PSE Layout 2
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LEGEND

- (A) 1 Pile line designation for roadway PSE (w/4'x4' Pile Caps)
- (AA) S1 Pile line designation for structure PSE (w/3'x3' Pile Caps)
- E- Ex. Underground Electric
- G- Ex. Underground Gasline
- T- Ex. Underground Telephone
- D- Pr. Drainage Ditch
- S- Pr. Storm Sewer
- Soil Boring

TIMBER PILE LAYOUT PLAN

- G- Pr. Nicor Gasline
- A- Ex. Aerial Electric
- S- Temp. Soil Retention System (TSRS)
- C- Cofferdam (Type 1) (In-Stream/Wetland Work) and Cofferdam (Type 2) (In-Stream/Wetland Work)

NOTES

1. Dimensions are given to ϕ of pile and cap.
2. All proposed storm sewer structures and pipes are located above elevations of pile caps. Where structures conflict with caps, cap elevations to be lowered. See pile schedule for details. See drainage plan and profile plans for additional drainage details.
3. See Sheet 351 for details of Timber Piles with 3'x3' and 4'x4' caps.
4. Cofferdams Type 1 & 2 (In-Stream/Wetland Work) shall be quantified as separate pay items for each stage of roadway reconstruction for entire length of cofferdam installed, by type.



USER NAME	= kingaludzia	DESIGNED -	STB	REVISED -	4/13/2026 MS
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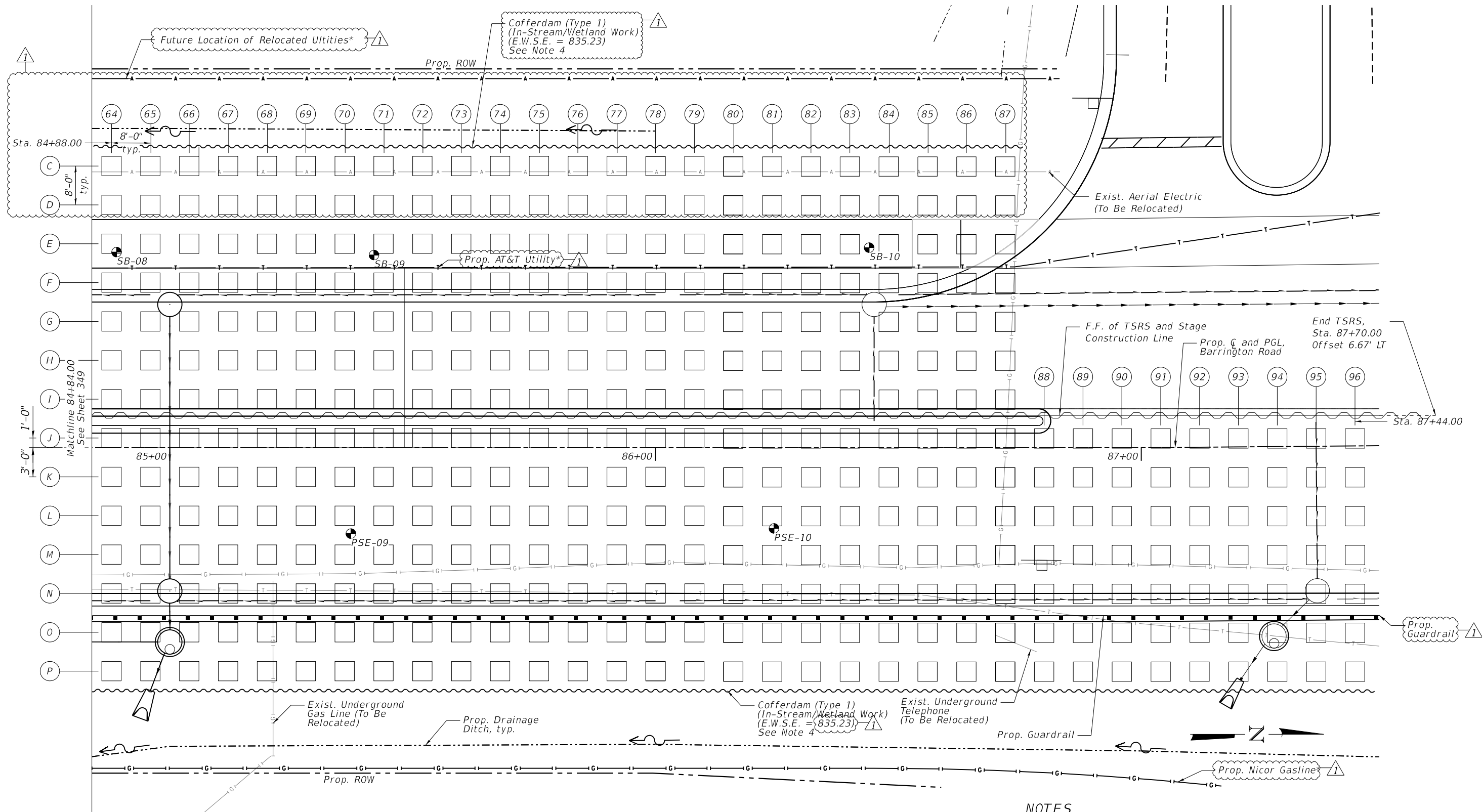
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE SUPPORTED EMBANKMENT
PILE LAYOUT PLAN 2

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	349
CONTRACT NO. 62K33				
ILLINOIS FED. AID PROJECT				

MODEL: PSE Layout 3
FILE NAME: p:\projects\p101\se-trans\scorp\p101\Documents\Projects\2020\CH401\401.200018\CAD\02 - Sheets\20-Structural\Sheets\PSE\DI\6X33-SFT-PSE Layout 3.dgn



LEGEND

- (A) 1 Pile line designation for roadway PSE (w/4'x4' Pile Caps)
(AA) S1 Pile line designation for structure PSE (w/3'x3' Pile Caps)
— E — E Ex. Underground Electric
— G — G Ex. Underground Gasline
— T — T Ex. Underground Telephone
— D — D Pr. Drainage Ditch
— S — S Pr. Storm Sewer
● Soil Boring
* Final location to be determined per the JULIE process, see General Notes

TIMBER PILE LAYOUT PLAN

- G — Pr. Nicor Gasline
— A — Ex. Aerial Electric
— S — Temp. Soil Retention System (TSRS)
— C — Cofferdam (Type 1) (In-Stream/Wetland Work) and Cofferdam (Type 2) (In-Stream/Wetland Work)

NOTES

1. Dimensions are given to ϕ of pile and cap.
2. All proposed storm sewer structures and pipes are located above elevations of pile caps. Where structures conflict with caps, cap elevations to be lowered. See pile schedule for details. See drainage plan and profile plans for additional drainage details.
3. See Sheet 351 for details of Timber Piles with 3'x3' and 4'x4' caps.
4. Cofferdams Type 1 & 2 (In-Stream/Wetland Work) shall be quantified as separate pay items for each stage of roadway construction for entire length of cofferdam installed, by type.



USER NAME	= kingaludzia	DESIGNED	- STB	REVISED	- 4/13/2026 MS
DRAWN	- JPK	REVISION	-		
PLOT SCALE	= 0.083333" / in.	CHECKED	- STB	REVISION	-
PLOT DATE	= 04/13/2026	DATE	- 02/02/2026	REVISION	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

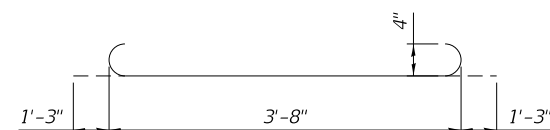
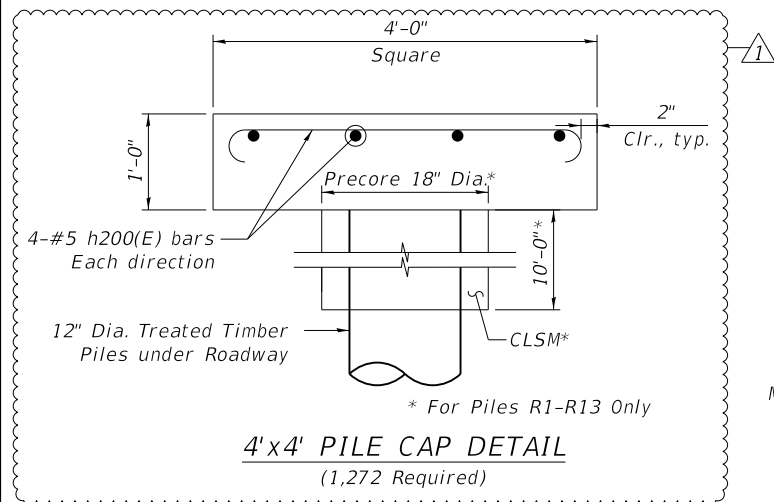
PILE SUPPORTED EMBANKMENT
PILE LAYOUT PLAN 3

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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3. Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60.
2. If necessary, the subgrade treatment required to establish a working platform, below load transfer platform, should consist of excavating an additional 12 inches of organic material, placing a layer of geogrid and geofabric at the base of the excavation to ensure separation from the weak material, and building back with 12 inches of IDOT porous granular embankment. The geofabric may be cut at the pile installation points, if necessary.
3. Within the roadway widening in the wetland areas, a working platform will be required prior to setting concrete forms and pouring the caps. Beginning at an offset of 30 feet east (RT) of the Barrington Road centerline and extending to an offset of 60 feet east (RT) between Station 80+50 and Station 87+50 and beginning at an offset of 45 feet west (LT) of the Barrington Road centerline and extending to an offset of 60 feet west (LT) between Station 80+50 and Station 84+50, the Contractor shall remove existing material to an elevation of 834 feet. A layer of geogrid and geofabric should be placed at the base of the excavation and the ground should be brought back to the cap base elevation of 835 feet with IDOT porous granular embankment.
4. If a drainage structure will be located below the level of pile caps, other than those identified in the table on this sheet, the pile caps in conflict need to be lowered below the bottom of the structure. In addition, a minimum of one pile needs to be placed below the structure to support it.
5. For Pile Supported Embankment see special provisions for Biaxial Geogrid, Porous Granular Embankment (Special), and Precast Concrete Caps.
6. A cantilever sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

7. Piles R1 through R13 shall be driven through 18 inch diameter precored holes extending from bottom of pile cap elevation according to Article 512.09(c) of the Standard Specifications except that the void space outside of the pile shall be filled with Controlled Low-Strength Material (CLSM). Cost included in Driving Piles.



4'x4' PRECAST CONCRETE CAP
BILL OF MATERIAL

<i>Item</i>	<i>Unit</i>	<i>Total</i>
<i>Concrete</i>	<i>Cu. Yd.</i>	<i>0.6</i>
<i>Reinforcement Bars, Epoxy Coated</i>	<i>Pound</i>	<i>52</i>

3'-0"

Square

1'-0"

3-#5 h201(E) bars
Each direction

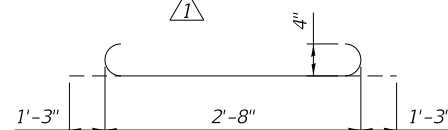
14" Dia. Treated Timber Piles under MSE Retaining Wall and Culvert

2"
Clr., typ.

Porous Embankment between ()

3'x3' PILE CAP DETAIL

(170) Required



3'x3' PRECAST CONCRETE CAP
BILL OF MATERIAL

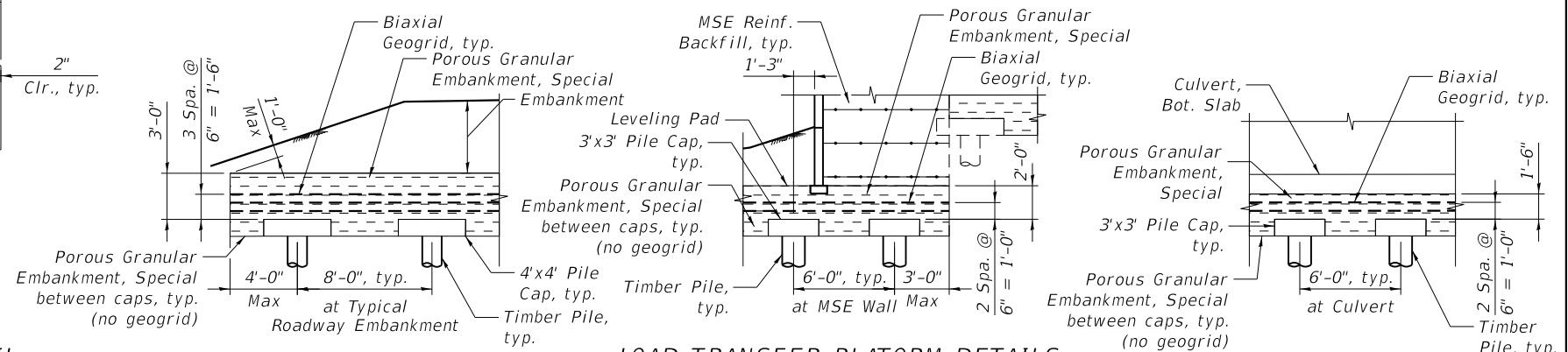
<i>Item</i>	<i>Unit</i>	<i>Total</i>
<i>Concrete</i>	<i>Cu. Yd.</i>	<i>0.4</i>
<i>Reinforcement Bars, Epoxy Coated</i>	<i>Pound</i>	<i>30</i>

(PRECAST UNITS)
 $f'c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Reinforcement)}$

Item	Unit	Total
Precast Concrete Caps, 3'x3'	Each	170
Precast Concrete Caps, 4'x4'	Each	1,272
Driving Piles	Foot	64,092
Test Pile Timber	Each	2
Furnishing Treated Piles over 38 Feet	Foot	64,092
Temporary Soil Retention System	Sq. Ft.	6,786
Biaxial Geogrid	Sq. Yd.	28,505
Porous Granular Embankment, Special	Cu. Yd.	11,874
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	2
Cofferdam (Type 2) (In-Stream/Wetland Work)	Each	2

Pile Column Limits	Pile Rows	Nominal Required Bearing (Kips)	Factored Resistance Available (Kips)	Estimated Pile Length (Feet)	Top of Cap Elevation (Feet)	Total Number of Piles	Total Number of 3'x3' Pile Caps	Total Number of 4'x4' Pile Caps	Total Number of Biaxial Geogrid Layers
1-13	C-R	145	80	41	840	208	0	208	3
14-15	C-Q	145	80	41	837.5	30	0	30	3
16-19	E-Q	145	80	41	835.5	52	0	52	3
20-32	E-Q	145	80	41	835	169	0	169	3
33-38	E-Q	145	80	47	835	78	0	78	3
39-44	E-P	145	80	47	835	72	0	72	3
45	E-P	145	80	47	835	12	0	12	3
46-77	C-P	145	80	47	835	448	0	448	3
78-87	C-P	145	80	47	835	140	0	140	3
88-96	J-P	145	80	47	835	63	0	63	3
S1-S3	AA-BB	200	110	45	834	6	6	0	2
S4-S11	AA-BB	200	110	44	833	16	16	0	2
S12-S38	AA-BB	200	110	43	832	54	54	0	2
S39-S45	CC-TT	180	100	41	828	94	94	0	2

Note: Along Pile Row 0, at the following Column Line locations the piles and caps need to be set two feet lower than the adjacent piles to accommodate placement of storm sewer manholes.
Column Lines: 1, 20, 21, 33, 43, 44, 53, 64, 66, & 94



Profile view of the bridge deck showing the bottom of the concrete cap and the bridge deck elevation. The profile includes a 1:2 slope on the left and right sides. Key points are labeled with stationing and elevation.

Station	Elevation
Sta. 79+30.00	Elev. 850.53
Sta. 79+50.00	Elev. 849.57
Sta. 80+50.00	Elev. 845.29
Sta. 80+98.00	Elev. 843.38
Sta. 82+80.00	Elev. 841.46
Sta. 82+89.50	Elev. 841.45
Sta. 83+00.08	Elev. 841.39
Sta. 83+13.80	Elev. 841.37
Sta. 83+22.86	Elev. 841.37
Sta. 83+48.70	Elev. 841.38
Sta. 83+65.74	Elev. 841.33
Sta. 87+50.00	Elev. 841.96
Sta. 87+70.00	Elev. 841.86
Bottom of Concrete Cap	Elev. 834.00
Sta. 83+10.00	Elev. 827.00
Sta. 83+35.75	Elev. 827.00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: 1" = 10'	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
362	2019-161-W	COOK	666	351
		CONTRACT NO. 62K33		
ILLINOIS		FED. AID PROJECT		