11-17-2023 LETTING ITEM 088

INDEX OF SHEETS

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAS ROUTE 819 (IL-177) SECTION 101CR-1 PROJECT HBFP-IGV1(607) **CULVERT REPLACEMENT WASHINGTON COUNTY**

C-98-032-20

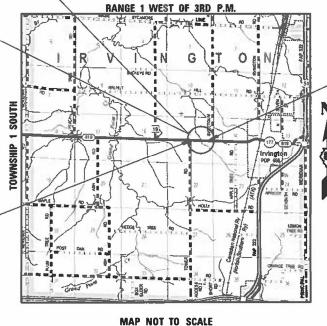
PROPOSED STRUCTURE

LAT: 38.43929163 LONG: -89.18661197 S.N. 095-2529

EXISTING STRUCTURE

LAT: 38.43929163 LONG: -89.18661197 S.N. 095-2496 BUILT IN 1928 AS A SINGLE BARREL 8'-0" X 8'-0" CONCRETE BOX CULVERT WITH NO SKEW. THE OUT TO OUT HEADWALL LENGTH IS 41'-8".

> **PROJECT BEGINS** STA. 458 + 79LAT: 38,43930556 LONG: -89.18699444



LOCATION MAP

GROSS LENGTH = 60.00 FT. = 0.0114 MILE NET LENGTH = 60.00 FT. = 0.0114 MILE

PROJECT ENDS STA. 459 + 39 LAT: 38.43928611 LONG: -89.18656111



EXPIRES 11/30/23

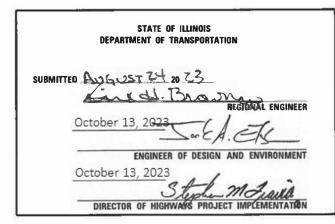
SECTION WASHINGTON 19 1 819 101CR-1 CONTRACT NO. 76M90

D-98-018-20



FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR

2019 ADT = 2200 (ACTUAL) 2024 ADT = 2400 (ESTIMATED)2044 ADT = 3200 (ESTIMATED) SU = 4.5% MU = 5.0%DIRECTIONAL DISTRIBUTION = 50-50



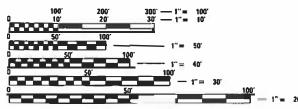
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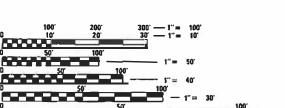


ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-0123 OR 811

PROJECT ENGINEER: BILLIE OWEN

PROJECT MANAGER: MEIWU AN



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD

CONTRACT NO. 76M90

STANDARDS

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 000001-08 AREAS OF REINFORCEMENT BARS 001001-02 001006-00 DECIMAL OF AN INCH AND OF A FOOT 280001-07 TEMPORARY EROSION CONTROL SYSTEMS PAVEMENT JOINTS 420001-10 PAVEMENT WELDED WIRE REINFORCEMENT 420701-03 442101-09 CLASS B PATCHES NAME PLATE FOR BRIDGES 515001-04 STEEL PLATE BEAM GUARDRAIL 630001-12 630101-10 STRONG POST GUARDRAIL ATTACHED TO CULVERT 635001-02 DELINEATORS 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE 701011-04 OFF-RD OPERATIONS, 2L, 2W, DAY ONLY 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEEDS \geq 45MPH 701901-08 TRAFFIC CONTROL DEVICES 720001-01 SIGN PANEL MOUNTING DETAILS 720006-04 SIGN PANEL ERECTION DETAILS METAL POSTS FOR SIGNS, MARKERS & DELINEATORS 720011-01 TELESCOPING STEEL SIGN SUPPORT 728001-01 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS) 780001-05 TYPICAL PAVEMENT MARKINGS 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR B.L.R.-21-9 CONSTRUCTION ON RURAL LOCAL HIGHWAYS

GENERAL NOTES

1. THE PROPOSED PAVEMENT MARKINGS SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKINGS, AS DIRECTED BY THE ENGINEER.

- 2. THE CONTRACTOR SHALL PROVIDE POSITIVE AND ADEQUATE DRAINAGE AT ALL TIMES.
- 3. THE TWO (2) CHANGEABLE MESSAGE SIGNS REQUIRED FOR THIS PROJECT SHALL BE IN PLACE AND OPERATION TWO (2) WEEKS PRIOR TO ANY LANE CLOSURUE AT LOCATOINS DETERMINED BY THE ENGINEER. THE ENGINEER WILL PROVIDE THE MESSAGE TO THE CONTRACTOR FOR THE TWO (2) WEEKS PRIOR TO CONSTRUCTION AND DURING CONSTRUCTION.
- 4. ALL ELEVATIONS REFER TO THE USGS MEAN SEA LEVEL DATUM, NAVD 88.
- 5. IF THE CONTRACTOR, FOR HIS CONSTRUCTION ACTIVITY, REMOVES TREES WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT DESIGNATED ON THE PLANS FOR REMOVAL, I.E. IN ORDER TO GAIN ACCESS TO THE PROJECT SITE; IT WILL BE HIS RESPONSIBILITY TO REPLACE THE TREES AT A 1:1 RATIO. THE TREES WILL BE REPLACED WITH A 1 GALLON NATIVE ILLINOIS TREE SPECIES AND SHALL BE APPROVED BY THE ENGINEER. THE TREE REMOVAL AND TREE REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 6. UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:
 AT&T ILLINOIS
 CLEARWAVE COMMUNICATIONS
 EGYPTIAN TELEPHONE COOP. ASSN.
 TRI-COUNTY ELECTRIC COOPERATIVE, INC
 WASHINGTON COUNTY

COMMITMENTS

- 1. TREES THREE (3) INCHES IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST THROUGH SEPTEMBER 30TH OF ANY GIVEN YEAR.
- 2. ALL LANES OF IL ROUTE 177 SHALL BE OPEN TO TRAFFIC DURING THE 2024 SOLAR ECLIPSE FROM 7:00 A.M. ON SATURDAY APRIL 6TH, 2024 THROUGH 10:00 P.M. ON MONDAY APRIL 8TH, 2024.

		ADT		
ROUTE	FAS 819 (IL 177)		ADT (CONST YR)	2400
SECTION	101CR-1		MU %	5
COUNTY	WASHINGTON		SU %	4.5
CONTRACT	76M90]	20 YR. ESAL'S	0.79
DESCRIPTION	CULVERT REPLACEMENT - HOYLETON - SN 095-2496	IL 177 AT W TRIBUTARY T	O GRAND POINT CREEK 4.	7 MILE EAST OF

PLAN QUANTITIES FOR HOT-MIX ASPHALT ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LBS / SQ YD / INCH

ANY QCP PAY ITEM THAT HAS A QUANTITY OF 1600 TONS OR LESS WILL HAVE TWO SUBLOTS EACH OF WHICH WILL BE HALF OF THE PLAN QUANTITY OR HALF OF THE ADJUSTED QUANTITY BY THE ENGINEER / TECHNICIAN.

WILLETT HOFMANN
& A S S O C I A T E S I N C
ENCINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, ILL 610210367
T.815/28-3381 DESIGN FIRM: #184-000918

USER NAME = greg	DESIGNED -	6 ₩G	REVISED -	Ī
	CHECKED -	G68	REVISED -	
PLOT SCALE = 10.0000 ' / in.	DRAWN -	EOIL	REVISED -	
PLOT DATE = 8/24/2023	CHECKED -	DBB .	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGHWAY STANDARDS STANDAY NOTES AND SOMMITMENTS	F.A.S. RTE.	SECTION		TOTAL SHEETS	SHEET NO.
HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS		101CR-1	WASHINGTON	19	2
		WHA# 1155D20	CONTRA	CT NO. 7	76M90
SHEET NO. 1 OF 1 SHEETS		ILLINOIS FED. AID	PROJECT		

SSDZU_IDUTU8\DESIGN\CAU_SHEETS\WO_6\1133DZZ_WO_6_General IN

PAY CODE	PAY ITEM	UNIT	TOTAL QUANTITY	CULVERT REPLACEMENT 0004 RURAL
20300100	CHANNEL EXCAVATION	CU YD	514	514
20-			,	
20400800	FURNISHED EXCAVATION	CU YD	72	72
86 1				
25000210	SEEDING, CLASS 2A	ACRE	0.10	0.10
FB:				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	9	9
		1 0 0 11 2		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9
25100630	EROSION CONTROL BLANKET	SQ YD	373	373
S				
28100107	STONE RIPRAP, CLASS A4	SQ YD	79	79
28100109	STONE RIPRAP, CLASS A5	SQ YD	91	91
28100109	STONE RIFNAF, CLASS AS	30 10	91	91
28200200	FILTER FABRIC	SQ YD	170	170
F-1				
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	160	160
44000100	PAVEMENT REMOVAL	SQ YD	160	160
44200050	WELDED WIRE REINFORCEMENT	SQ YD	160	160
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	160	160
		, -		
74	1	1		1

)20°1155D20_IDOTD8\DESIGN\CAD_SHEETS\WO_6\1155D20_WO6_Summary-of-QT

VIIIA	WILLETT HOFMANN
	ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED -	GBG	REVISED -
CHECKED -	GFS	REVISED
DRAWN -	GBG	REVISED -
CHECKED -	GFS	REVISED -
	CHECKED - DRAWN -	CHECKED = GFS DRAWN = GBG

CON	STRU	JC	TION	CODE
80%	FFD	1	20%	STATE

PAY CODE	PAY ITEM	UNIT	TOTAL QUANTITY	CULVERT REPLACEMENT 0004 RURAL
44201299	DOWEL BARS 1 1/2"	EACH	30	30
44213204	TIE BARS 3/4"	EACH	36	36
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	120	120
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200100	STRUCTURE EXCAVATION	CU YD	372	372
51500100	NAME PLATES	EACH	1	1
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2
63000007	STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT POSTS	FOOT	68	68
63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	52	52
			3	
63200310	GUARDRAIL REMOVAL	FOOT	120	120
67100100	MOBILIZATION	L SUM	1	1
- 137				
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
m-			1	
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	260	260
			,	

* SPECIALTY ITEM



USER NAME = greg	DESIGNED GBG	REVISED :-
	CHECKED - GFS	REVISED -
PLOT SCALE = 20.0000 ' / in.	DRAWN - GBG	REVISED -
PLOT DATE = 8/24/2023	CHECKED - GFS	REVISED -

CON	STRU	JC	TION	CODE
80%	FED	1	20%	STATE

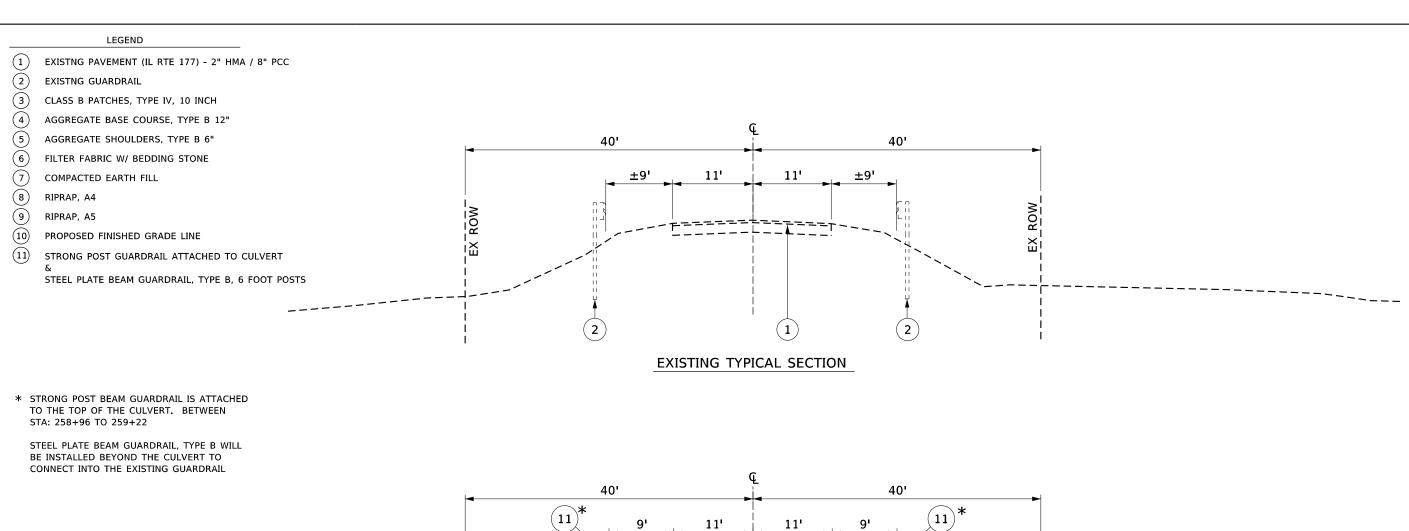
					80% FED / 20% STATE
	PAY CODE	PAY ITEM	UNIT	TOTAL QUANTITY	CULVERT REPLACEMENT 0004 RURAL
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1	1
1	,0100100		2,10.1		-
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4	4
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
	Z0016702	DETOUR SIGNING	L SUM	1	1
	54011107	PRECAST CONCRETE BOX CULVERTS 11'x 7'	FOOT	102	102
	X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	294	294
	X2070304	POROUS GRANULAR EMBANKMENT (SPECIAL)	CU YD	405	405
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1
	i i				
				,	
	-				

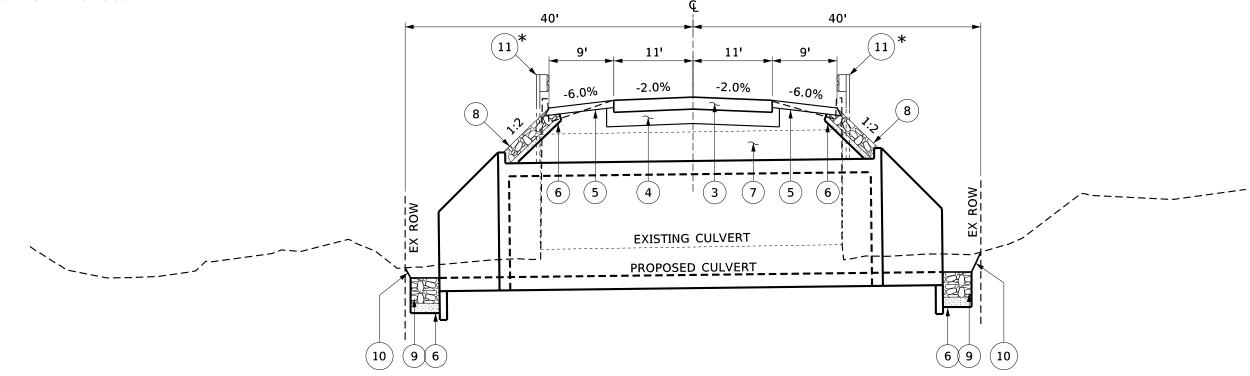
* SPECIALTY ITEM



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PLOT SCALE = 20.0000 ' / in.	DRAWN - GBG	REVISED -
PLOT DATE = 8/24/2023	CHECKED - GFS	REVISED -

SUMMARY OF QUANTITIES		SECTION		TOTAL SHEETS	SHEET NO.
		819 101CR-1 W		19	5
		WHA# 1155D20	CONTRA	CT NO. 7	76M90
SHEET 03 OF 03 SHEETS		ILLINOIS FED	. AID PROJECT		





PROPOSED TYPICAL SECTION

PROPOSED CULVERT - STA: 258+96.04 TO 259+21.96 PROPOSED PATCH - STA: 258+79.00 TO 259+39.00

VUUA	WILLETT HOFMANN & A S S O C I A T E S I N C ENCHIERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918
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	CHECKED -	-	GFS	REVISED -
PLOT SCALE = 13.3333 ' / in.	DRAWN -	-	GBG	REVISED -
PLOT DATE = 8/24/2023	CHECKED -	-	GFS	REVISED -
		_		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TVDIOAL OFOTIONO		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL SECTIONS	819	101CR-1	WASHINGTON	19	6
		WHA# 1155D20 CONTRACT N			
T NO. 1 OF 1 SHEETS ILLINOIS FED. AID PROJECT					

SCHEDULE OF QUANTITIES

	SEEDING & RESTORATION										
			SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	EROSION CONTROL BLANKET				
ROAD	STATION / OFFSET	REMARKS	ACRE	POUND	POUND	POUND	SQ YD				
IL RTE 177	LT 258+70.00	90 LBS PER ACRE	0.03	2.7	2.7	2.7	103				
IL RTE 177	RT 258+70.00	90 LBS PER ACRE	0.03	2.7	2.7	2.7	104				
IL RTE 177	LT 259+45.00	90 LBS PER ACRE	0.02	1.8	1.8	1.8	87				
IL RTE 177	RT 259+45.00	90 LBS PER ACRE	0.02	1.8	1.8	1.8	79				
		PROJECT TOTAL	0.10	9.0	9.0	9.0	373				

		PAVEMEN	IT & ROADWAY	IMPROVEMENTS	; ;			I	T
			AGGREGATE BASE COURSE, TYPE B 12"	PAVEMENT REMOVAL	WELDED WIRE REINFORCEMENT	CLASS B PATCHES, TYPE IV, 10 INCH	DOWEL BARS 1 1/2"	TIE BARS 3/4"	AGGREGATE SHOULDERS, TYPE B 6"
ROAD	STATION / OFFSET	REMARKS	SQ YD	SQ YD	SQ YD	SQ YD	EACH	EACH	SQ YD
IL RTE 177	258+79.00 to 259+39.00		160	160	160	160		20	
IL RTE 177	LT 258+79.00 to 259+39.00						15	8	60
IL RTE 177	RT 258+79.00 to 259+39.00						15	8	60
		PROJECT TOTAL	160	160	160	160	30	36	120

		GUARDRAIL IMPROVEMENT	S			
			STRONG POST GUARDRAIL ATTACHED TO CULVERT	STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT POSTS	GUARDRAIL REMOVAL	GUARDRAIL REFLECTORS, TYPE A
ROAD	STATION / OFFSET	REMARKS	FOOT	FOOT	FOOT	EACH
IL RTE 177	LT 258+79.00 to 259+39.00				60	2
IL RTE 177	RT 258+79.00 to 259+39.00				60	2
IL RTE 177	LT 258+79 to 258+96			17		
IL RTE 177	LT 258+96 to 259+22		26			
IL RTE 177	LT 259+22 to 259+39			17		
IL RTE 177	RT 258+79 to 258+96			17		
IL RTE 177	RT 258+96 to 259+22		26			
IL RTE 177	RT 259+22 to 259+39			17		
		PROJECT TOTAL	52	68	120	4

WILLETT HOFMANN
8 A S S O C I A T E S I N C
ENCINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DONN, IL 61021-0367
T. 815-284-3361 DESIGN FRIEW, 1846-000918

USER NAME = greg	DESIGNED -	GBG	REVISED -
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PLOT SCALE = 2.0000 '/in.	DRAWN -	GBG	REVISED -
PLOT DATE = 8/24/2023	CHECKED -	GFS	REVISED -

SHEET

COUEDING OF CHARTITIES		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SCHEDULE OF QUANTITIES	819	101CR-1	WASHINGTON	19	7
		WHA# 1155D20	CONTRACT NO. 76M90		
01 OF 02 SHEETS		ILLINOIS EED	AID DRO IECT		

SCHEDULE OF QUANTITIES

	PA	VEMENT MARKINGS & DELINEATORS		-
			PAINT PAVEMENT MARKING - LINE 4"	RAISED REFLECTIVE PAVEMENT MARKER
ROAD	STATION / OFFSET	REMARKS	FOOT	EACH
IL RTE 177	LT 258+69 to 259+59		90	
IL RTE 177	RT 258+69 to 259+59		90	
IL RTE 177	259+09 to 259+59		50	
IL RTE 177	258+69 to 259+59		30	
IL RTE 177	259+36.52			1
		PROJECT TOTAL	260	1

	EARTHWORK TABLE									
			EARTH EXCAVATION (SPECIAL)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT	EARTH BALANCE WASTE (+) OR FURNISHED EXCAVATION (-)				
ROAD	STATION / OFFSET	REMARKS	CU YD	CU YD	CU YD	CU YD				
IL RTE 177	258+63.50 TO 259+54.50	ENTIRE PROJECT AREA	294	220	292	-72				
	-	PROJECT TOTAL	294	220	292	-72				

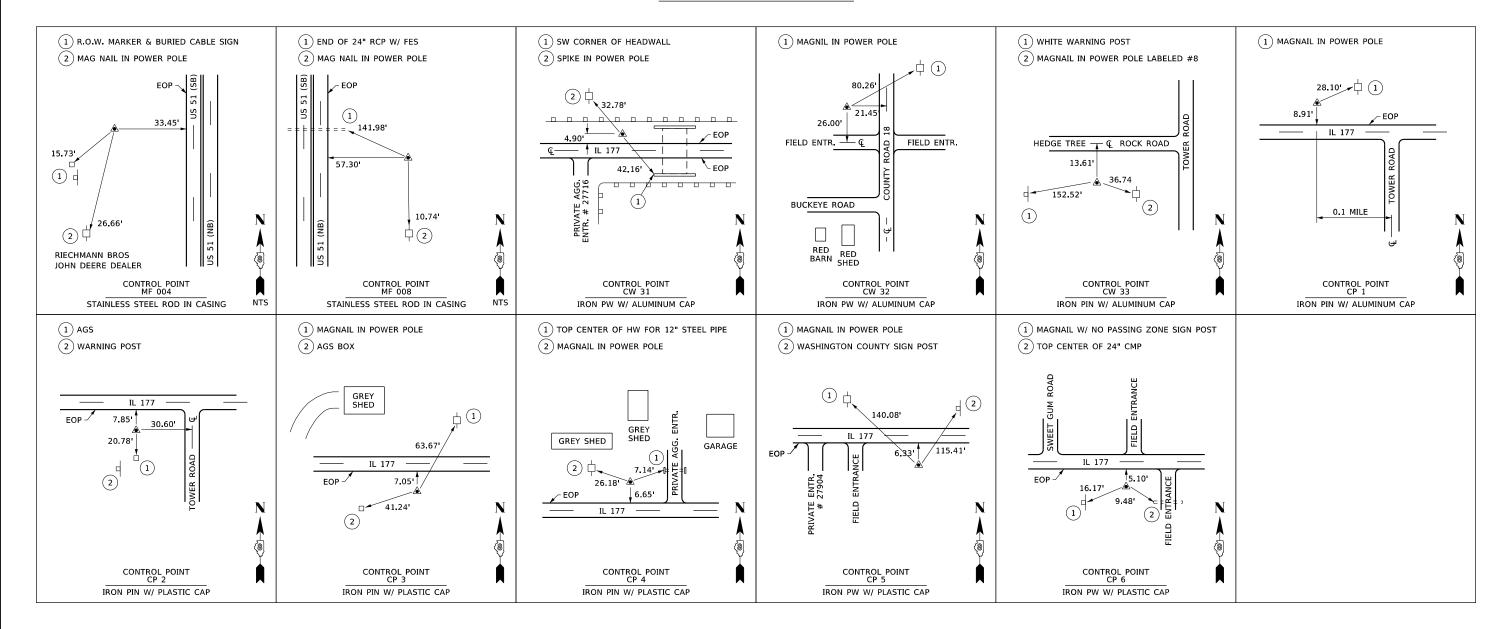
ROJECTS\2020\1155D20_IDOTD8\DESIGN\CAD_SHEETS\WO_6\1155D20_WO_6

VIIA	WILLETT HOFMANN
	engineering architecture Land surveying 809 EAST 2ND STREET, DIXON, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918

USER NAME = greg	DESIGNED -	GBG	REVISED -
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PLOT SCALE = 2.0000 ' / in.	DRAWN -	GBG	REVISED -
PLOT DATE = 8/24/2023	CHECKED -	GFS	REVISED -

SCHEDULE OF QUANTITIES		SECTI	ON		COUNTY	TOTAL SHEETS	SHEET NO.
		101CR-1 WAS		WASHINGTON	19	8	
		WHA# 1155	D20		CONTRA	CT NO.	76M90
SHEET 02 OF 02 SHEETS			ILLINOIS	FED. AIC	PROJECT		

CONTROL POINTS ALIGNMENT & TIES



	IL 177 CONTROL POINTS							
POINT ID	NORTHING	EASTING	ELEVATION	DESCRPTION	LOCATION			
1	87316.7087	152055.3810	490.620	Iron Pin w/ Plastic Cap	2.5 miles west of US Route 51 on IL RTE 177			
2	87260.2696	152535.2650	492.832	Iron Pin w/ Plastic Cap	2.5 miles west of US Route 51 on IL RTE 177			
3	87238.6369	153127.8807	494.804	Iron Pin w/ Plastic Cap	2.5 miles west of US Route 51 on IL RTE 177			
4	87223.4680	154403.3462	504.537	Iron Pin w/ Plastic Cap	2.25 miles west of US Route 51 on IL RTE 177			
5	87167.7034	154920.3838	508.882	Iron Pin w/ Plastic Cap	2.0 miles west of US Route 51 on IL RTE 177			
6	87145.3154	155522.9968	510.585	Iron Pin w/ Plastic Cap	2.0 miles west of US Route 51 on IL RTE 177			
CW31	87246.5894	153795.8848	497.388	Iron Pin w/ Alum Cap	2.25 miles west of US Route 51 on IL RTE 177			
CW32	96036.5158	148693.8924	-	Iron Pin w/ Alum Cap	1.5 miles north of IL KIE 1// on CO HWY 18			
CW33	76740.1141	150059.6275	-	Iron Pin w/ Alum Cap	2.0 miles south of IL RTE 177 on Tower Rd and 0.5 miles west on Hedge Tree Road			
MF 004	94925.7844	165821.9786	-	Stainless Steel Rod in Casing NGS PID DQ1786	1.5 miles north of IL RTE 177 on US Route 51			
MF 008	76060.1159	160582.6522	-	Stainless Steel Rod in Casing NGS PID DQ1790	2.4 miles south of IL RTE 177 on US Route 51			

	BENCHMARKS						
POINT ID	ELEVATION	DESCRPTION					
Z 159	535.690	NGS MONUMENT SET IN TOP OF NE END OF CONCRETE WINGWALL OF THE SOUTH CONCRETE HEADWALL OF CONCRETE BOX CULVERT, 265' SOUTH OF THE CENTERLINE OF IL177, 49' WEST OF THE CENTERLINE OF FIRST ST., 44' EAST OF THE RAILROAD TRACKS, IN IRVINGTON. PID JB1034					
Y 159	529.652	NGS MONUMENT SET IN TOP OF AND 0.8' WEST OF THE EAST END OF THE SOUTH CONCRETE HEADWALL OF DOUBLE BOX CULYERT, 29' SOUTH OF THE CENTERLINE OF IL 177, 40' WEST OF THE CENTERLINE OF FIRST ST., 34' EAST OF THE RAILROAD TRACKS, IN IRVINGTON. PID JB1033,					
BM 1	522.130	CUT "SQUARE" ON OF EAST HEADWALL FOR A FIELD ENTRANCE, 0.5' FROM SOUTH END OF HEADWALL, 253' WEST OF SN 095-2467, NORTH OF IL 177, 0.1 MILE EAST OF APPLE TREE RD.					
BM 2	510.092	CHISELED "X" ON SOUTH BOLT OF FIRE HYDRANT AT THE NORTHWEST QUAD OF THE INTERSECTION OF IL 127 AND SWEETGUM RD.					
вм з	493.761	RR SPIKE IN SOUTH SIDE OF POWER POLE, NORTH OF IL 177, NORTHWEST OF SN 095-2496, 0.2 MILES EAST OF TOWER RD.					
BM 4	493.940	RR SPIKE IN SOUTH SIDE OF POWER POLE, NORTH OF IL 177, 0.1 MILES WEST OF TOWER RD.					

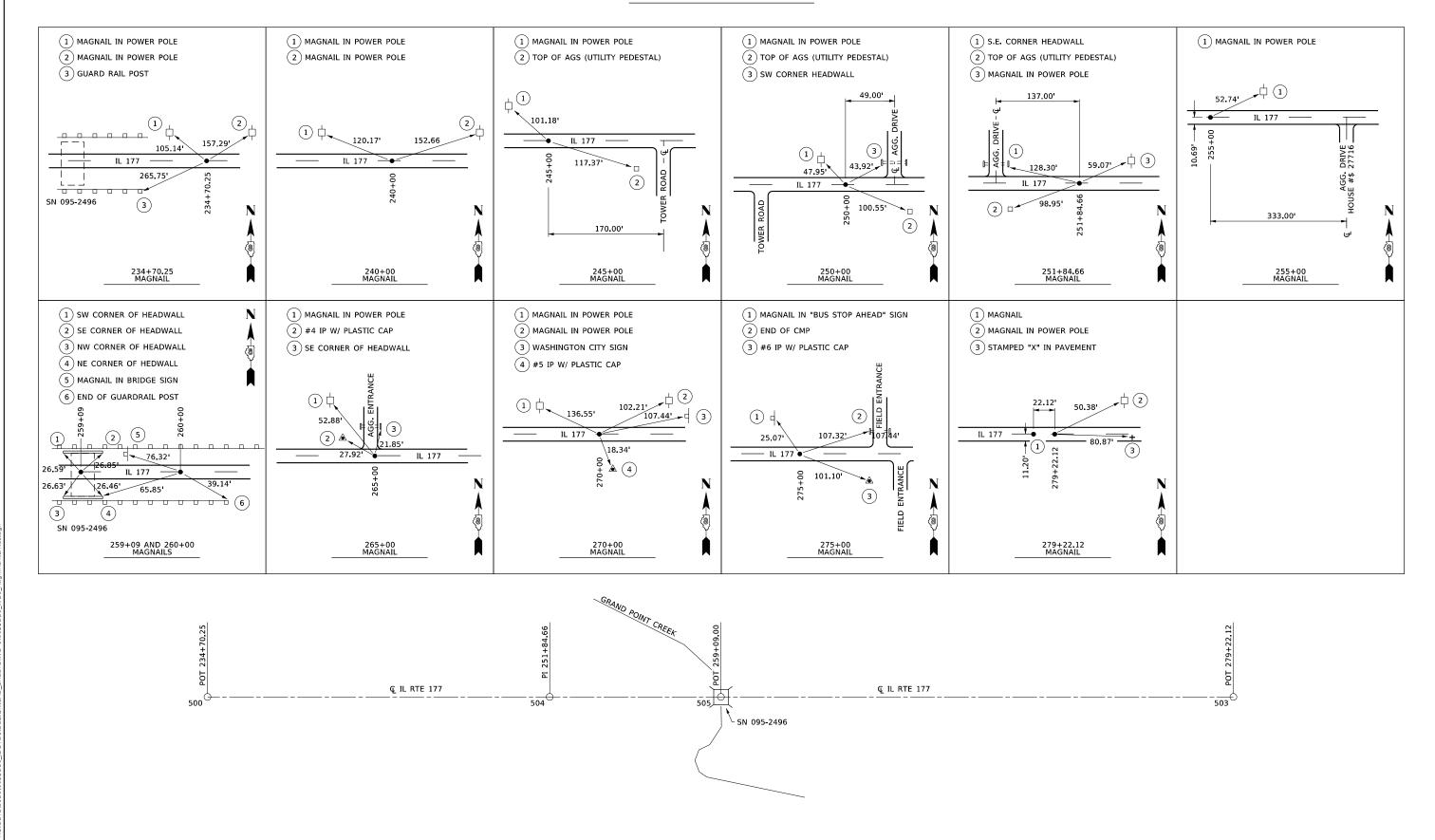


USER NAME = greg	DESIGNED -	GBG	REVISED -
	CHECKED -	GFS	REVISED -
PLOT SCALE = 20.0000 ' / in.	DRAWN -	GBG	REVISED -
PLOT DATE = 8/15/2023	CHECKED -	GFS	REVISED -

SCALE: N / A

IDOT CONTROL POINTS & BENCHMARKS TIE IN POINTS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		101CR-1	WASHINGTON	19	9
		WHA# 1155D20	CONTRA	CT NO. 7	'6M90
SHEET 1 OF 1 SHEETS		ILLINOIS FED. AI	PROJECT		

CENTERLINE ALIGNMENT & TIES

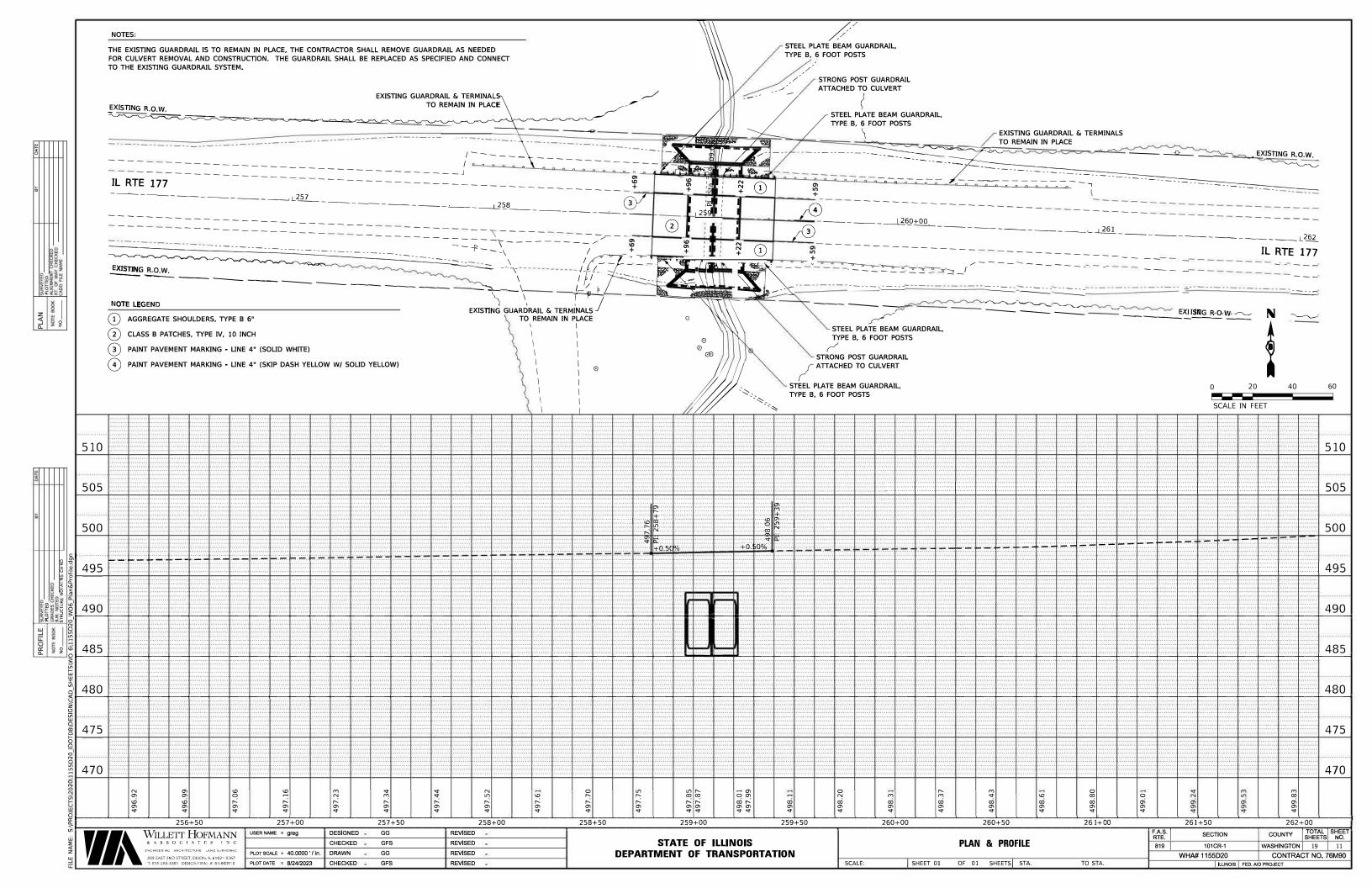


WILLETT HOFMANN
& A S S O C I A T E S I N C
ENCINTERING ARCHITECTURE LAND SUPPERING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-009318

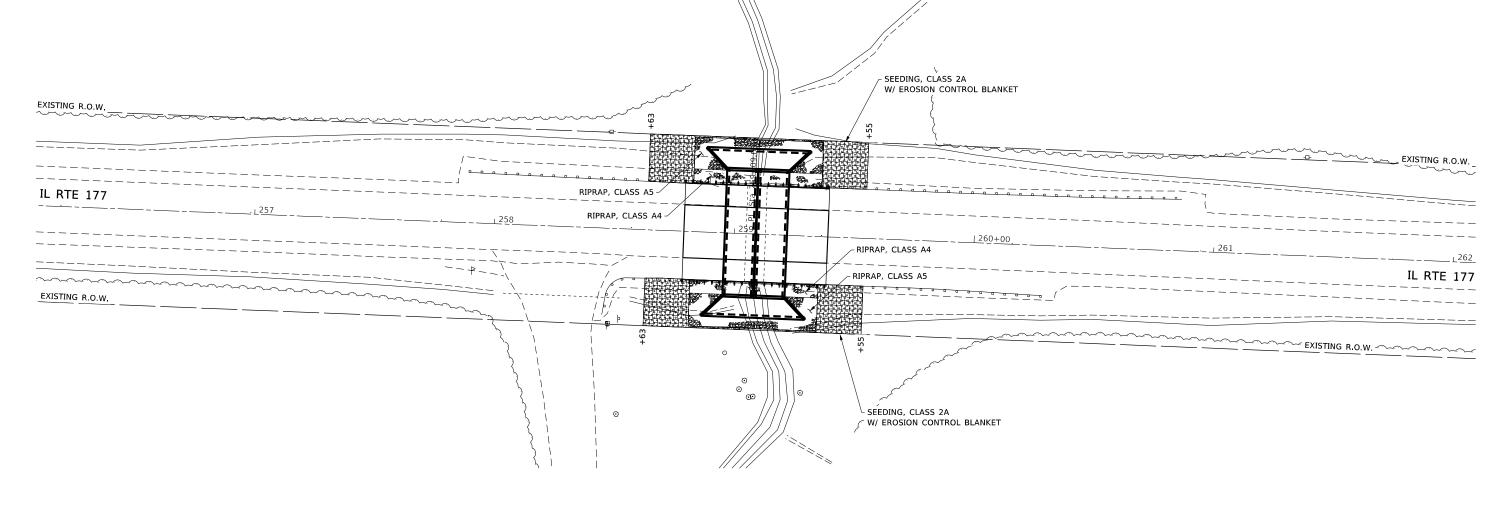
 <u> </u>			
PLOT DATE = 8/15/2023	CHECKED -	GFS	REVISED -
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	CHECKED -	GFS	REVISED -
USER NAME = greg	DESIGNED -	GBG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ī	CENTERLINE ALIGNMENT	F.A.S. RTE	SECTION		TOTAL SHEETS	SHEET NO.
ı	TIE IN POINTS	819	101CR-1	WASHINGTON	19	10
L	TIL HA TOHATS		WHA# 1155D20	CONTRA	CT NO. 7	76M90
l	SCALE: N / A SHEET 1 OF 1 SHEETS		ILLINOIS FED. AII	PROJECT		







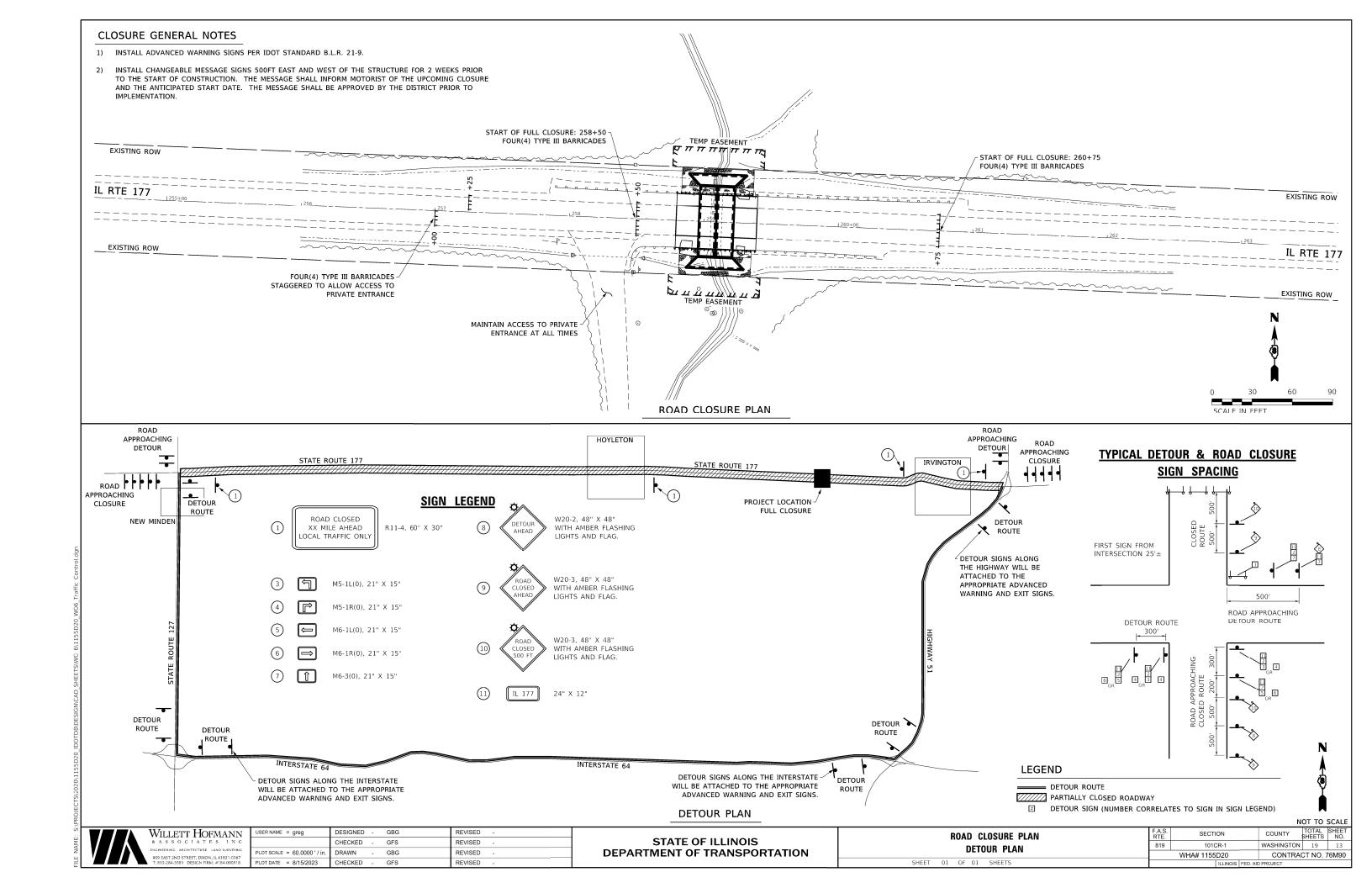
20 40 60

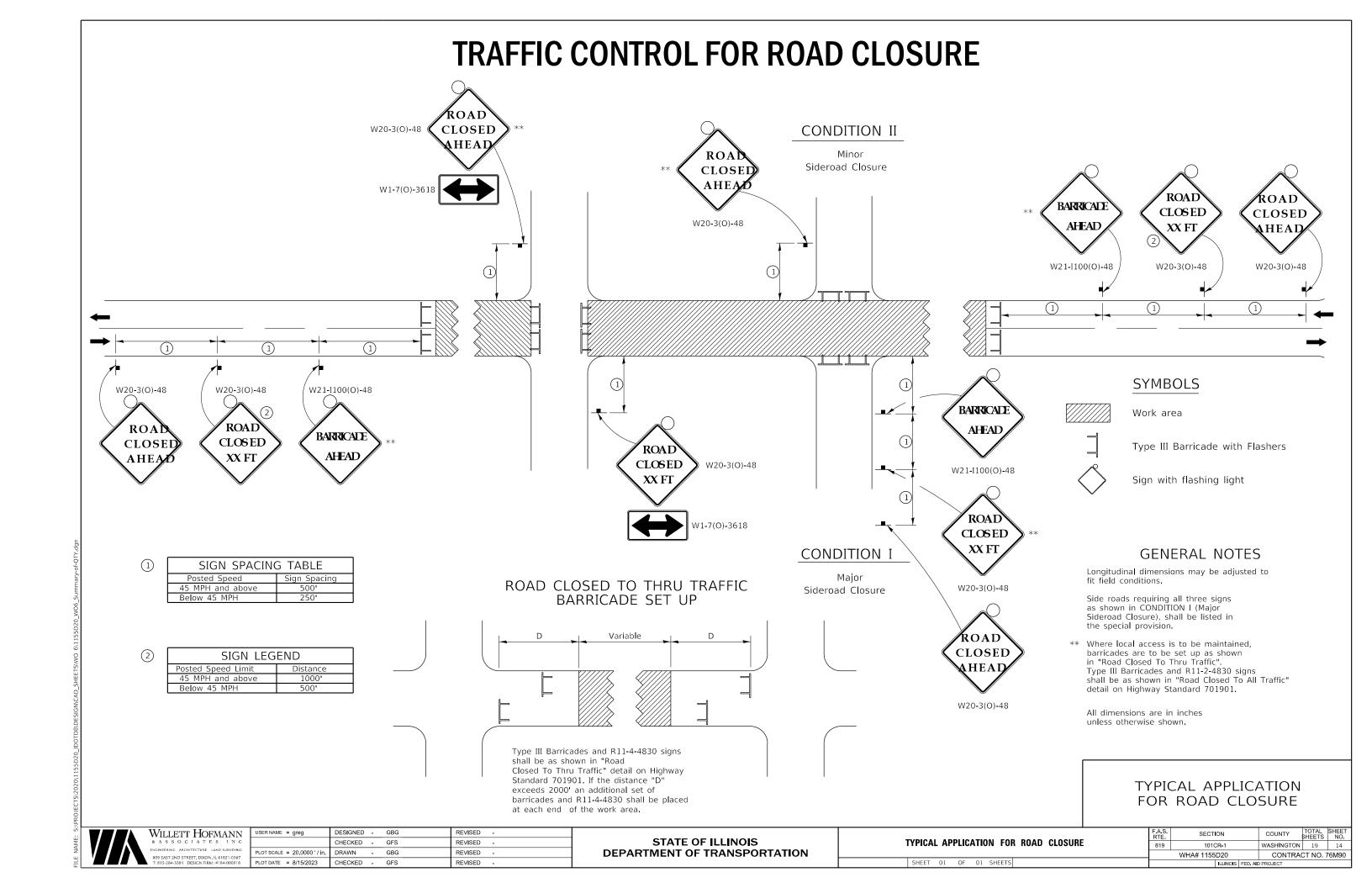


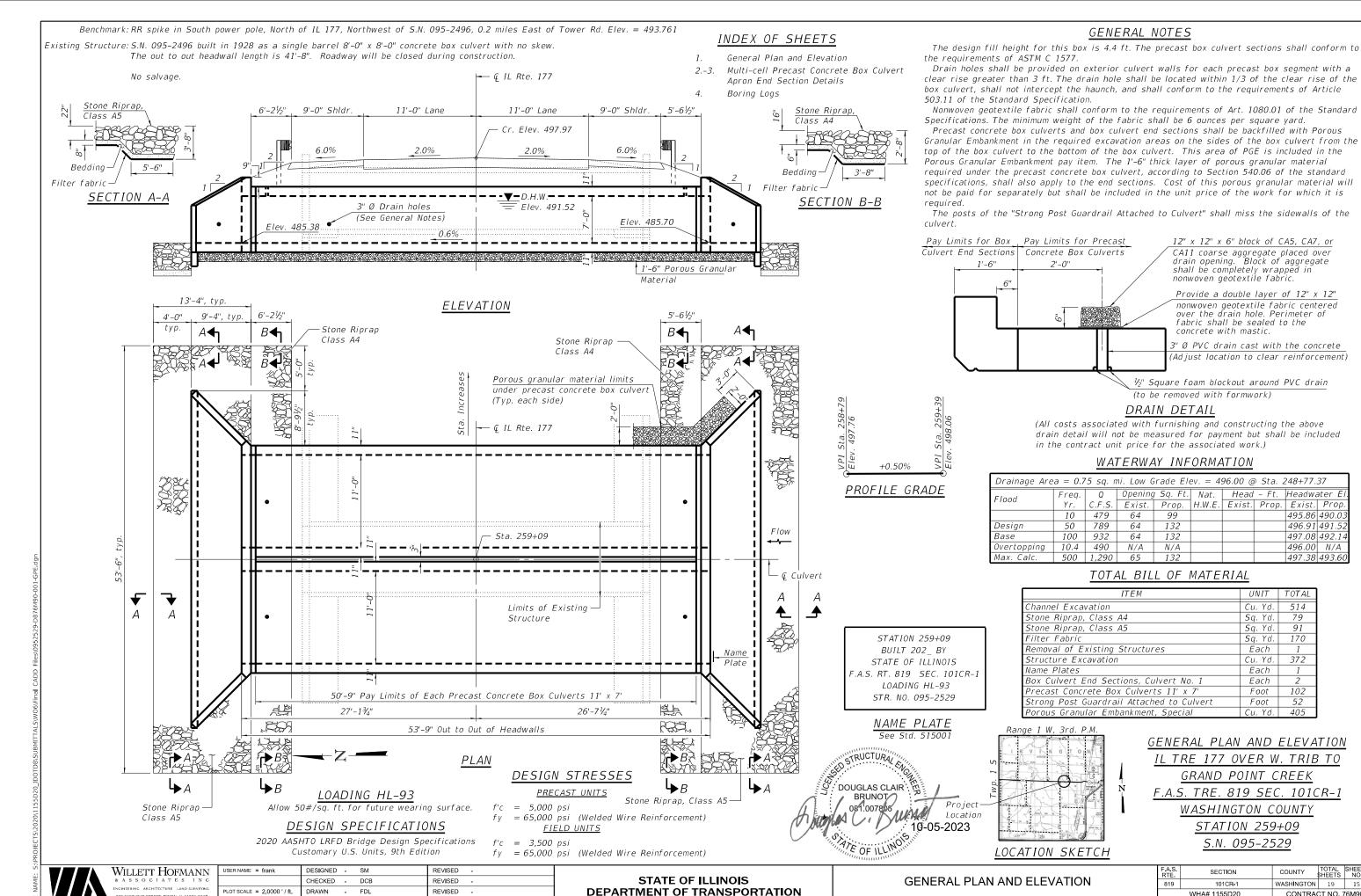
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STATE OF ILLINOIS				
DEPARTMENT	0F	TRANSPORTATION		

EROSION CONTROL PLAN								F.A.S. SECTION				TOTAL SHEETS	SHEET NO.
								9 101CR-1			WASHINGTON	19	12
							WHA# 1155D20 CONTRACT					T NO. 76M90	
SCALE:	SHEET 01	OF	01	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT						







PLOT DATE = 10/5/2023

CHECKED - DCB

REVISED

WHA# 1155D20 CONTRACT NO. 76M90

WASHINGTON 19

COUNTY

495.86 490.0

496.91 491.5

497.08 492.1

496.00 N/A

497.38 493.60

514

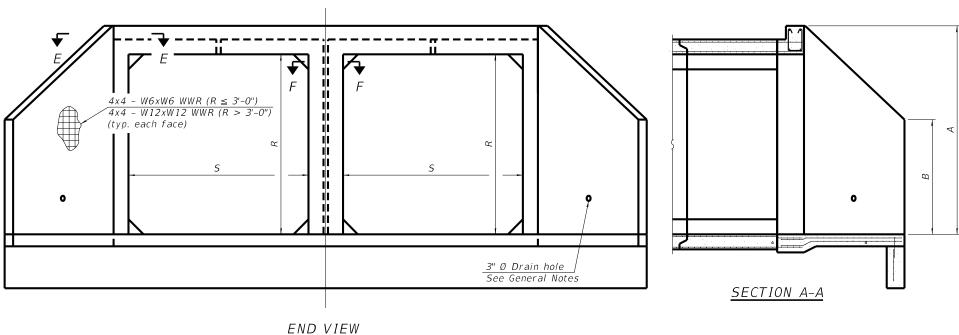
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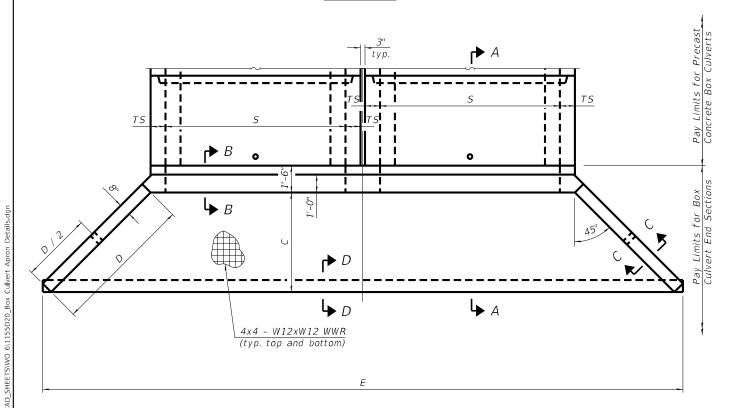
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372

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52





PLAN

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

Details for Double Cell Box Culvert shown. Details for Triple Cell Box Culvert similar.

The details contained herein are for constructing the end sections using cast-in-place (CIP) construction. The Contractor may propose to furnish the end sections using precast construction methods and the end sections may consist of multiple precast concrete segments. The Contractor shall be responsible for determining all details associated with the precast option including any strengthening or stiffening provisions necessary for handling the precast segments. Conceptual details followed by shop drawings and design calculations sealed by an Illinois Licensed Structural Engineer shall be submitted to the Engineer for review and approval. Elements of the precast option shall at a minimum result in the same wingwall geometry and not have a thickness less than that detailed herein. The option to construct the end sections using precast construction methods shall be at no additional charge.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than $lac{1}{2}$ "

The contractor may use reinforcement bars in lieu of welded wire reinforcement (WWR). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in an area of reinforcement equal to or greater than that provided by the WWR. Minimum lap lengths detailed herein are applicable to WWR

Reinforcement (circumferential and longitudinal) in the precast concrete box culvert segments immediately adjacent to the box culvert end sections that is being lapped with the end section reinforcement shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

							Double	Cell
Span (S)	Rise (R)	Tt , Tb , & Ts	Α	В	С	D	E	Concrete Cu. Yd.
11'-0"	7'-0"	1 1"	8'-8"	5'-0"	8'-3¾"	11'-9"	43'-5¾"	20.7

Willett Hofmann

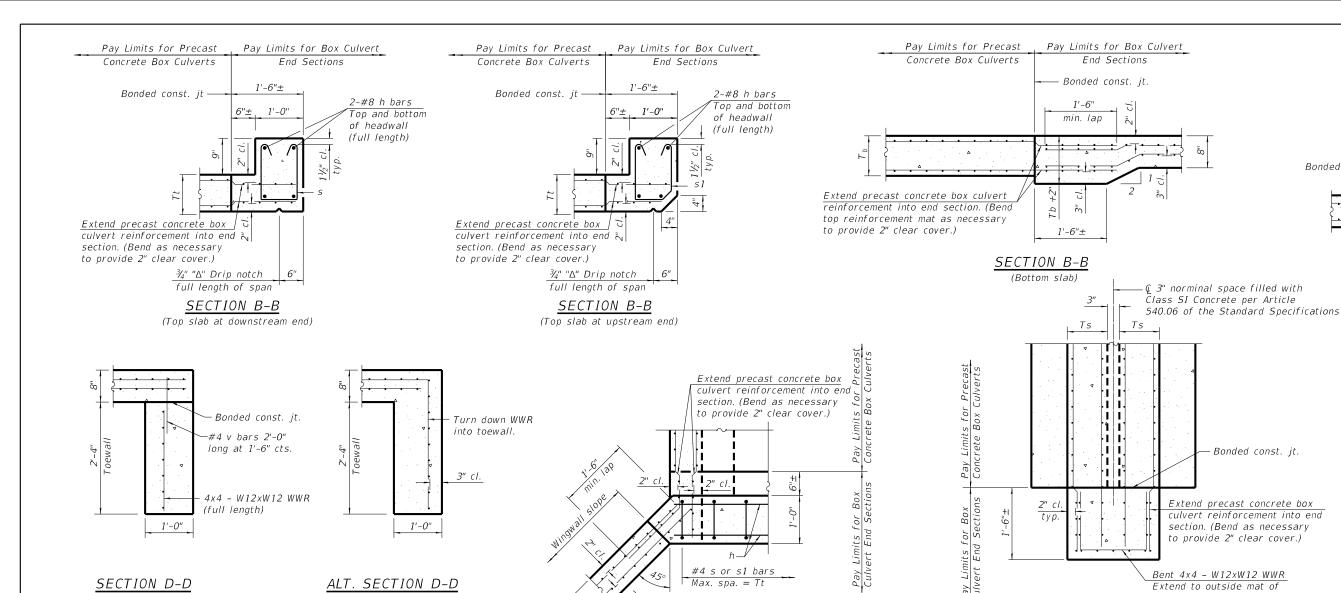
1	USER NAME = greg	DESIGNED -	SM	REVISED -	
3		CHECKED -	DCB	REVISED -	
3	PLOT SCALE = 0.1667 ' / in.	DRAWN -	FDL	REVISED -	
	PLOT DATE = 8/15/2023	CHECKED -	DCB	REVISED -	
					_

DEPARTMENT OF TRANSPORTATION

(Sheet 1 of 2) MULTI-CELL PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS - STRUCTURE NO. 095-2529 SHEET 2 OF 4 SHEETS

SECTION COUNTY 819 101CR-1 WASHINGTON 19 16 CONTRACT NO. 76M90 WHA# 1155D20

STATE OF ILLINOIS

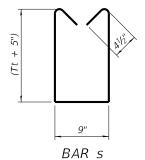


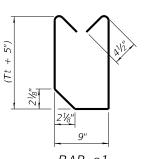
TOEWALL CONSTRUCTION SEQUENCE

- 1. Perform excavation and construct toewall.
- Backfill accordingly and prepare bedding for box culvert end sections.
- 3. Construct remainder of box culvert end section.

Note:

If soil conditions permit, the toewall may be poured monolithically with the bottom slab of the end section using Alt. Section D-D subject to approval from the Engineer.



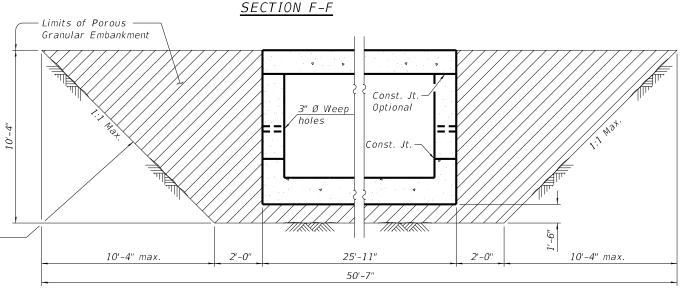


9" BAR s1

SECTION E-E

Excavation is incidental to the pay item Precast Concrete Box Culverts 11'x7'

and shall not be measured for payment.



reinforcemnet in top and bottom slab of box culvert.

PAY LIMITS FOR POROUS
GRANULAR EMBANKMENT
(Hatched area)

(Sheet 2 of 2)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-CELL PRECAST CONCRETE BOX CULVERT APRON END SECTION DETAILS - STRUCTURE NO. 095-2529

SHEET 3 OF 4 SHEETS

 F.A.S. RTE.
 SECTION
 COUNTY
 TOTAL SHEET
 SHEET NO.

 819
 101CR-1
 WASHINGTON
 19
 17

 WHA# 1155D20
 CONTRACT NO. 76M90

 ILLINOIS FED. AID PROJECT

Bonded const. jt. -

.

1'-6"

min. lap

SECTION C-C



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date ___1/27/23

ROUTE F.A.S. 819 (IL 177) DESCRIPTION					L-177 Culvert Replacement				_ LOGGED BY			
SECTION _	101CR-1		LOCAT	ION _	Near I	rvington Illinois, Latitute 38.43929	°, Longitud	e -89	.18699)°		
COUNTY _	Washington DRILLING	G ME	THOD			HSA HAMMER TYPE AUTO						
Station BORING NO.	SB-01 (SW quad.) 258+64 11.3 ft RT	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter 48	ft 1.8 ft. <u>▼</u>	D E P T H	B L O W S	U C S Qu	M O I S T	
	11.3 ft RT face Elev. 497.76 ft	(ft)	(/6")	(tsf)	(%)	Upon Completion After Hrs.	ft	(ft)	(/6")	(tsf)	(%)	
ASPHALT P	AVEMENT - 2" 497.6 PAVEMENT - 8" 496.9	5	3			SILTY CLAY - Brownish Gray, Medium Stiff (continued) Becomes Very Stiff, w/ Gravel			5			
Medium Stiff		_	3	1.5 P	18	Pieces		_	7 13	3.4 B	14	
		_	1 3 3	2.3 P	28			_	4 7 10	4.1 B	13	
LL=29%, PL	=17%, PI=12%	5 	4	·				25 	4			
			3	0.6 B	18				8 10	3.8 B	13	
Becomes Me	edium Stiff to Stiff		1 2 3	1.3 B	24		467.8		4 6 8	3.7 B	13	
Becomes Sti LL=49%, PL	ff =16%, PI=33%		2 2 2 4	2.6 B	18	End of Boring						
Becomes Me	edium Stiff		1 2 3	0.9 B	18				-			
Becomes Gr	ay and Brown	<u></u>	1 2 2	1.0 B	21							
Becomes Gr	ay and Stiff		4 5 10	2.5 B	14							

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)



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date ____1/27/23

SECTION 101CR-1	L	OCAT	ION _	Near I	vington Illinois, Latitude	38.43932°, Lo	ongitud	e -89	.18672	2°	
COUNTY Washington DRILLING	MET	THOD			HSA	HAMMER	ГҮРЕ		_ Al	JTO	
STRUCT. NO095-2496 Station	D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev		_ ft _ ft	D E P	B L O	U C S	M O I
BORING NO. SB-02 (NE quad.) Station 259+64 Offset 11.3 ft LT	T H	W S	Qu (4-5)	S T	Upon Completion	482.1	ft	T H	W S	Qu (tof)	S T
Ground Surface Elev. 498.06 ft		(/6")	(tsf)	(%)	After Hrs		_ ft	(ft)	(/6")	(tsf)	(%)
ASPHALT PAVEMENT - 2" 497.9 CONCRETE PAVEMENT - 8" 497.2	_	3			SILTY CLAY - Brown a Soft to Medium Stiff (co	and Gray, ontinued)		_	4		
SILTY CLAY - Brown and Gray, Soft to Medium Stiff	_	2	0.7	17				_	_ 4 8	2.0	13
Soft to Media in Still		2	В	''					12	B	
D 0 M 1 000		5			,			_	_		
Becomes Gray, Medium Stiff to Stiff, w/ Lignite Stains		10	2.8	14	w/ Trace Coal				<u>5</u> 8	1.7	11
, =. 9	-5	10	P					-25	12	В	
December During and Once Coff to		WH							5		
Becomes Brown and Gray, Soft to Medium Stiff, w/ Gravel Pieces	_	3	1.3	23					8	1.9	11
,		3	В						13	В	
11-240/ DI-460/ DI-460/	_	w w						_	4		
LL=31%, PL=16%, PI=15%		2	0.3	21					8	1.6	11
	-10	2	В		L		468.1	-30	12	В	
					End of Boring						
w/ Lignite Stains		1									
W/ Lightle Stains	_	2	0.6	21				_			
		2	В								
		1						_			
	-	2	0.7	20							
		3	В					35			
								_			
Becomes Light Brown, Stiff, w/	<u> </u>	2									
Gravel	_	7	2.5	14				_			
		11	В								
Becomes Grav	_	5						_			
LL=26%, PL=15%, PI=11%		7	1.7	10							
		10	В					40			

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)



USER NAME = greg	DESIGNED	-	SM	REVISED -	
	CHECKED	-	DCB	REVISED -	
PLOT SCALE = 0.1667 '/in.	DRAWN	-	FDL	REVISED -	
PLOT DATE = 8/15/2023	CHECKED	-	DCB	REVISED -	
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