

04-28-2017 LETTING ITEM 101

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

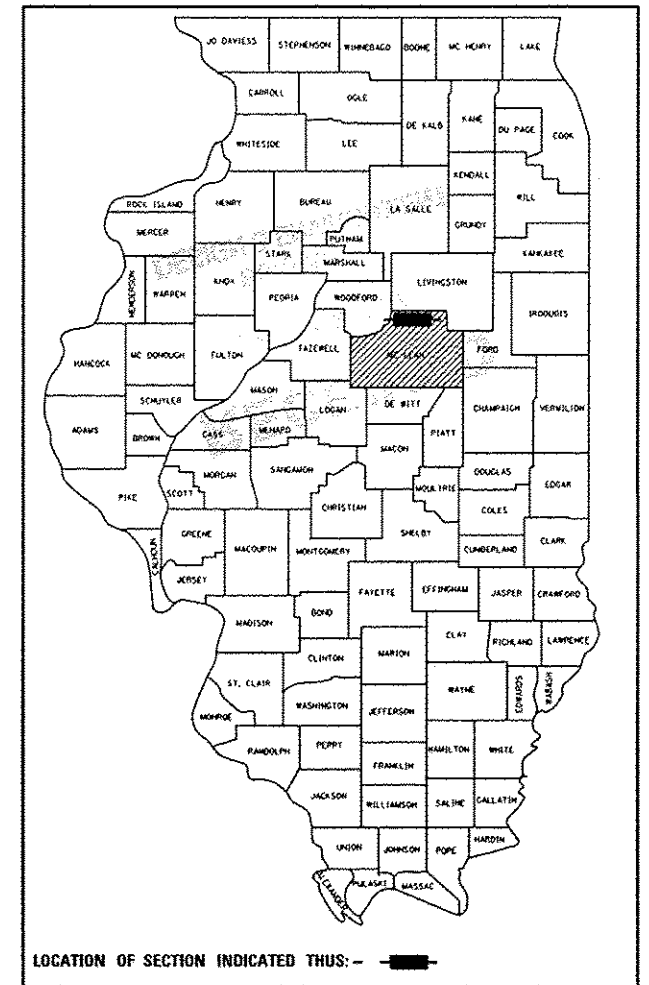
**PROPOSED
HIGHWAY PLANS**

F.A.P. ROUTE 317 (US 24)
SECTION 30CR
PROJECT NHPP-0317(098)
CULVERT REPLACEMENT
MCLEAN COUNTY

DITCH 1 & 1.2 MILES EAST OF EL PASO & 2.5 MILES EAST OF WOODFORD COUNTY LINE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	1
ILLINOIS			CONTRACT NO. 70697	

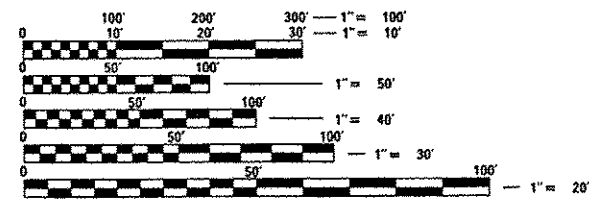
D-95-077-07



FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4-6

CURRENT TRAFFIC DATA	
2016 ADT	3,800
P.U.%	74.9
S.U.%	10.5
M.U.%	14.6

DESIGN DESIGNATION
OTHER PRINCIPAL ARTERIAL



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

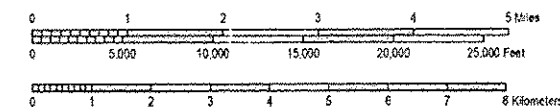
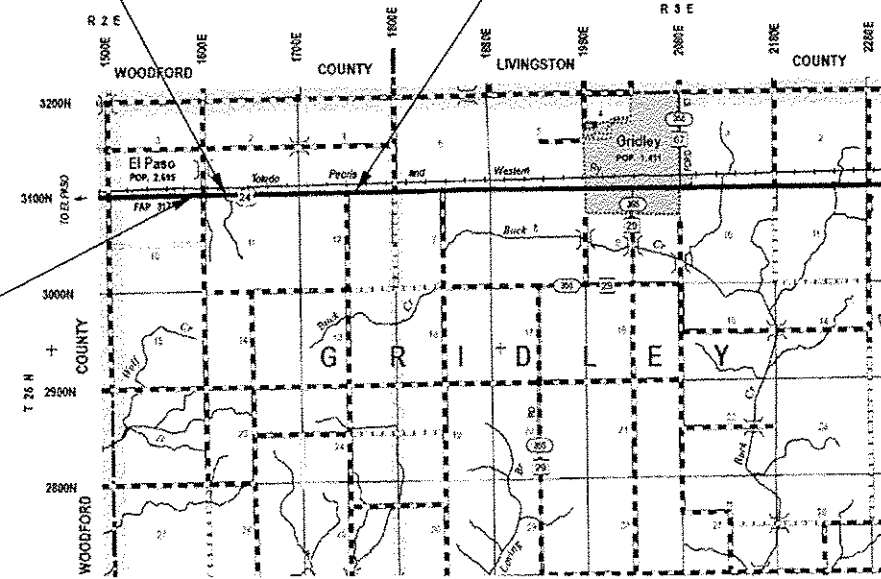
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811
GRIDLEY TWP.

PROJECT ENGINEER: JASON STULTS
DESIGN SQUAD LEADER: RYAN CARROLL
PHONE: 217-465-4181
CONTRACT NO. 70697

CULVERT NO. 2
EXIST. S.N. 057-8070
PROP. S.N. 057-8223
STA. 916+36.00
PROP. SINGLE 12' X 4' X 62'
PCC BOX CULVERT WITH
W.W.F. END SECTIONS

CULVERT NO. 3
EXIST. S.N. 057-8072
PROP. S.N. 057-8224
STA. 984+62.00
PROP. SINGLE 12' X 4' X 62'
PCC BOX CULVERT WITH
W.W.F. END SECTIONS

CULVERT NO. 1
EXIST. S.N. 057-8069
PROP. S.N. 057-8222
STA. 903+67.00
PROP. SINGLE 12' X 4' X 62'
PCC BOX CULVERT WITH
W.W.F. END SECTIONS



GROSS LENGTH = 101.00 FT. = 0.019 MILE
NET LENGTH = 101.00 FT. = 0.019 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *January 31, 2017*
Richard A. Jones
REGION THREE ENGINEER

Mar 24, 2017
Maureen M. Addis, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 24, 2017
David A. [Signature]
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

REV

INDEX OF SHEETS

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LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-08	PAVEMENT JOINTS
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
442201-03	CLASS C & D PATCHES
515001-03	NAME PLATES FOR BRIDGES
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS \geq 45 MPH
701206-03	LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS \geq 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-06	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

COMMITMENTS

THERE ARE NO COMMITMENTS FOR THIS CONTRACT.

FILE NAME *	USER NAME *	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS & LIST OF STANDARDS & COMMITMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
g:\NL284E810\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\057-8222\Drawings\Design\0578697-sht-generate		DRAWN	REVISED -			317	30CR	MCLEAN	66	2	
PLOT SCALE = 40.0000' / 1" in.	CHECKED -	REVISED -				SCALE: N/A		SHEET 1 OF 1 SHEETS		STA.----- TO STA.-----	
PLOT DATE = 1/31/2017	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					
CONTRACT NO. 70697											

GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-100A

ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

G.N.-105.09A

ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-107.37

UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800) 892-0123 OR 811.

G.N.-280

TEMPORARY EROSION CONTROL SEEDING IS INCLUDED IN THIS CONTRACT TO SEED DISTURBED EARTH DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH AT THE TIME OF THEIR COMPLETION.

G.N.-540

THE CONTRACTOR SHALL ASSEMBLE AND MATCH-MARK THE PRECAST BOX CULVERT SECTIONS AND END SECTIONS PRIOR TO SHIPMENT OF THESE COMPONENTS FROM THE MANUFACTURER, AND AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER FIT ON EACH JOINT. ANY SECTIONS OR END SECTIONS WHICH DO NOT PROVIDE A PROPER FIT AT THE JOINT SHALL BE REJECTED BY THE ENGINEER AND REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION BEING ALLOWED.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR PRECAST CONCRETE BOX CULVERTS OF THE SIZE SPECIFIED.

G.N.- 703A

SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (TACK COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

G.N.-781

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 781001, AND THE DETAILS SHOWN IN THE PLANS. IF THERE IS ANY DISCREPANCY BETWEEN THE STANDARD AND THE DETAILS IN THE PLANS, THE DETAILS IN THE PLANS SHALL GOVERN. THE FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING THE RAISED REFLECTIVE PAVEMENT MARKERS AND THE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED MIDWAY IN THE 30 FOOT (9 m) SPACE BETWEEN THE DASHED CENTERLINE STRIPES (WHEN APPLICABLE).

G.N.-1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

G.N.-Z0038

AN ALUMINUM TABLET OF THE TYPE SHOWN ON STANDARD 667101 SHALL BE PLACED ON THE PROPOSED STRUCTURE AS DIRECTED BY THE ENGINEER. THE BENCH MARK ELEVATION WILL BE ESTABLISHED AND MARKED BY THE DEPARTMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR PERMANENT BENCH MARKS.

FILE NAME =	USER NAME = carrollts	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
part\1\184E910\INTEG\11\inote.gov\1\1\DOT\100	uments\DOT Offices\District 5\Projects\057	DRAMS\ata\0esign\0570697-shi-genenote	REVISED -			317	30CR	MCLEAN	66	3	
#MODELNAME*	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 70697					
	PLOT DATE = 1/31/2017	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: N/A		SHEET 1 OF 1 SHEETS		STA.----- TO STA.-----			

SUMMARY OF QUANTITIES

LOCATION:	FAP 317 (US 24) RURAL CULVERT NO. 1 STA. 903+67.00 S.N. 057-8222	FAP 317 (US 24) RURAL CULVERT NO. 2 STA. 916+36.00 S.N. 057-8223	FAP 317 (US 24) RURAL CULVERT NO. 3 STA. 984+62.00 S.N. 057-8224
COUNTY:	MCLEAN	MCLEAN	MCLEAN
FUNDING BREAKOUT:	80% FED/20% STATE	80% FED/20% STATE	80% FED/20% STATE
CONSTRUCTION CODE:	00 04	00 04	00 04

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY
20200100	EARTH EXCAVATION	CU YD	280.0	130.0	70.0	80.0
20700220	POROUS GRANULAR EMBANKMENT	CU YD	362.0	101.0	51.0	210.0
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	500.0	100.0	200.0	200.0
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.25	0.25	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	69.0	23.0	23.0	23.0
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	69.0	23.0	23.0	23.0
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	69.0	23.0	23.0	23.0
25100115	MULCH, METHOD 2	ACRE	0.75	0.25	0.25	0.25
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75.0	25.0	25.0	25.0
28000305	TEMPORARY DITCH CHECKS	FOOT	120.0	40.0	40.0	40.0
28000400	PERIMETER EROSION BARRIER	FOOT	600.0	200.0	200.0	200.0
28100201	STONE RIPRAP, CLASS A1	TON	225.0	90.0	45.0	90.0
44200050	WELDED WIRE REINFORCEMENT	SQ YD	263.0	84.0	81.0	98.0

*SPECIALTY ITEM

FILE NAME =	USER NAME = carrollt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	
path: \\ILDOT\EB\DOT\Illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0578223\Drawings\Design\0578223-sh1-800	DESIGNED -	REVISED -	REVISED -			317	30CR	MCLEAN	66	4
PLOT SCALE = 48.0000" / in.	CHECKED -	REVISED -	REVISED -			CONTRACT NO: 70697				
PLOT DATE = 1/31/2017	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT				

REV

SUMMARY OF QUANTITIES

LOCATION:	FAP 317 (US 24) RURAL CULVERT NO. 1 STA. 903+67.00 S.N. 057-8222	FAP 317 (US 24) RURAL CULVERT NO. 2 STA. 916+36.00 S.N. 057-8223	FAP 317 (US 24) RURAL CULVERT NO. 3 STA. 984+62.00 S.N. 057-8224
COUNTY:	MCLEAN	MCLEAN	MCLEAN
FUNDING BREAKOUT:	80% FED/20% STATE	80% FED/20% STATE	80% FED/20% STATE
CONSTRUCTION CODE:	0004	0004	0004
TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY
44201347	CLASS C PATCHES, TYPE IV, 9 INCH	SQ YD	263.0	84.0	81.0	98.0
44213204	TIE BARS 3/4"	EACH	43.0	14.0	13.0	16.0
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	767.0	195.0	278.0	294.0
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1.0	1.0		
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1.0		1.0	
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1.0			1.0
51500100	NAME PLATES	EACH	3.0	1.0	1.0	1.0
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2.0	2.0		
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2.0		2.0	
54001003	BOX CULVERT END SECTIONS, CULVERT NO. 3	EACH	2.0			2.0
54011204	PRECAST CONCRETE BOX CULVERTS 12' X 4'	FOOT	168.0	56.0	56.0	56.0
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4.0	1.4	1.3	1.3
67100100	MOBILIZATION	LSUM	1.0	0.3	0.3	0.4

*SPECIALTY ITEM

FILE NAME =	USER NAME = carroll-t	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pc:\N\1284EBID\INTG\Illinois.gov\PKID07\Documents\DOT Offices\District 5\Projects\057100\Drawings\Design\0570597-ent-SDG		REVISIONS	REVISIONS			317	30CR	MCLEAN	66	5	
PLOT SCALE = 48,000 / 1 in.	CHECKED -	REVISIONS	REVISIONS			SCALE: N/A SHEET 2 OF 3 SHEETS STA. ----- TO STA. -----					
PLOT DATE = 1/26/2017	DATE -	REVISIONS	REVISIONS			ILLINOIS FED. AID PROJECT CONTRACT NO. 70697					

REV

SUMMARY OF QUANTITIES

105 1 0 017

LOCATION: FAP 317 (US 24) RURAL CULVERT NO. 1 STA. 903+67.00 S.N. 057-8222	FAP 317 (US 24) RURAL CULVERT NO. 2 STA. 916+36.00 S.N. 057-8223	FAP 317 (US 24) RURAL CULVERT NO. 3 STA. 984+62.00 S.N. 057-8224
COUNTY: MCLEAN		
FUNDING BREAKOUT: 80% FED/20% STATE		
CONSTRUCTION CODE: 0004	0004	0004
TOTAL QUANTITY	QUANTITY	QUANTITY

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	QUANTITY	QUANTITY	QUANTITY
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1.0	0.3	0.3	0.4
70100455	TRAFFIC CONTROL AND PROTECTION, STANDARD 701206	LSUM	1.0	0.3	0.3	0.4
70200100	NIGHTTIME WORK ZONE LIGHTING	LSUM	1.0	0.3	0.3	0.4
70300100	SHORT TERM PAVEMENT MARKING	FOOT	12.0	4.0	4.0	4.0
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	69.0	23.0	21.0	25.0
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	196.0	64.0	60.0	72.0
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	196.0	64.0	60.0	72.0
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	3.0	1.0	1.0	1.0
X0322128	MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SQ YD	321.0	107.0	107.0	107.0
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	12.0	4.0	4.0	4.0
X7200201	WIDTH RESTRICTION SIGNING	LSUM	1.0	0.3	0.3	0.4
Z0013798	CONSTRUCTION LAYOUT	LSUM	1.0	0.3	0.3	0.4
Z0038700	PERMANENT BENCH MARKS	EACH	3.0	1.0	1.0	1.0

*SPECIALTY ITEM

FILE NAME =	USER NAME = carrollr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\11284E810\INTEG.illinois.gov\PI\DOT\G... \Documents\DOT Offices\District 5\Projects\DS7... \DRAWINGData\Design\0578697-shr-S00						317	3OCR	MCLEAN	66	6	
PLOT SCALE = 48,0000' / 1" in.						SCALE: N/A	SHEET 3	OF 3	SHEETS	STA. -----	TO STA. -----
PLOT DATE = 1/31/2017										CONTRACT NO. 70697	

REV

SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE											
STRUCTURE NUMBER	SIDE	STATION	TO	STATION	20200100		EARTH & STRUCTURE EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)		
					EARTH EXCAVATION CU YD	STRUCTURE EXCAVATION (INCLUDED IN COST OF PCBC) CU YD			CU YD	CU YD	CU YD
057-8222	RT	902+50.00	TO	904+75.00	74.0	63.0	102.8	23.0	79.8		
	LT	902+50.00	TO	904+75.00	52.0	51.0	77.3	48.0	29.3		
	STRUCTURE TOTAL =					126.0	114.0	180.0	71.0	109.0	
	ROUNDED STRUCTURE TOTAL =					130.0	115.0	180.0	70.0	110.0	
057-8223	RT	915+25.00	TO	917+30.00	37.0	79.0	87.0	47.0	40.0		
	LT	915+25.00	TO	917+30.00	34.0	58.0	69.0	56.0	13.0		
	STRUCTURE TOTAL =					71.0	137.0	156.0	103.0	53.0	
	ROUNDED STRUCTURE TOTAL =					70.0	135.0	155.0	105.0	50.0	
057-8224	RT	983+25.00	TO	986+00.00	43.0	55.0	73.5	33.0	40.5		
	LT	983+25.00	TO	986+00.00	36.0	52.0	66.0	60.0	6.0		
	STRUCTURE TOTAL =					79.0	107.0	139.5	93.0	46.5	
	ROUNDED STRUCTURE TOTAL =					80.0	105.0	140.0	95.0	45.0	
TOTAL =					280.0	355.0	475.0	270.0	205.0		

NOTE:
SHRINKAGE FACTOR OF 25% USED.

POROUS GRAN. EMBANKMENT SCHEDULE			
STRUCTURE	POROUS GRANULAR EMBANKMENT	AVERAGE WIDTH	20700220 POROUS GRANULAR EMBANKMENT
	SQ FT	FOOT	CU YD
057-8222	42.0	65.0	101.0
057-8223	21.3	65.0	51.0
057-8224	87.1	65.0	210.0
TOTAL =			362.0

TEMPORARY DITCH CHECK SCHEDULE			
STRUCTURE NUMBER	SIDE	STATION	28000305
			TEMPORARY DITCH CHECKS
			FOOT
057-8222	RT	903+42	10.0
	LT	903+42	10.0
	RT	903+84	10.0
	LT	903+90	10.0
STRUCTURE TOTAL =			40.0
057-8223	LT	916+10	10.0
	RT	916+10	10.0
	LT	916+60	10.0
	RT	916+60	10.0
STRUCTURE TOTAL =			40.0
057-8224	LT	984+48	10.0
	RT	984+48	10.0
	LT	984+75	10.0
	RT	984+75	10.0
STRUCTURE TOTAL =			40.0
TOTAL =			120.0

EXPLORATION TRENCH SCHEDULE					
STRUCTURE	SIDE	STATION	TO	STATION	21301052
					EXPLORATION TRENCH 52" DEPTH
					FOOT
057-8222	LT	902+93.00	TO	903+93.00	100.0
	STRUCTURE TOTAL =				
057-8223	RT	915+94.00	TO	916+94.00	100.0
	LT	915+94.00	TO	916+94.00	100.0
STRUCTURE TOTAL =					200.0
057-8224	RT	984+14.00	TO	985+14.00	100.0
	LT	984+14.00	TO	985+14.00	100.0
STRUCTURE TOTAL =					200.0
TOTAL =					500.0

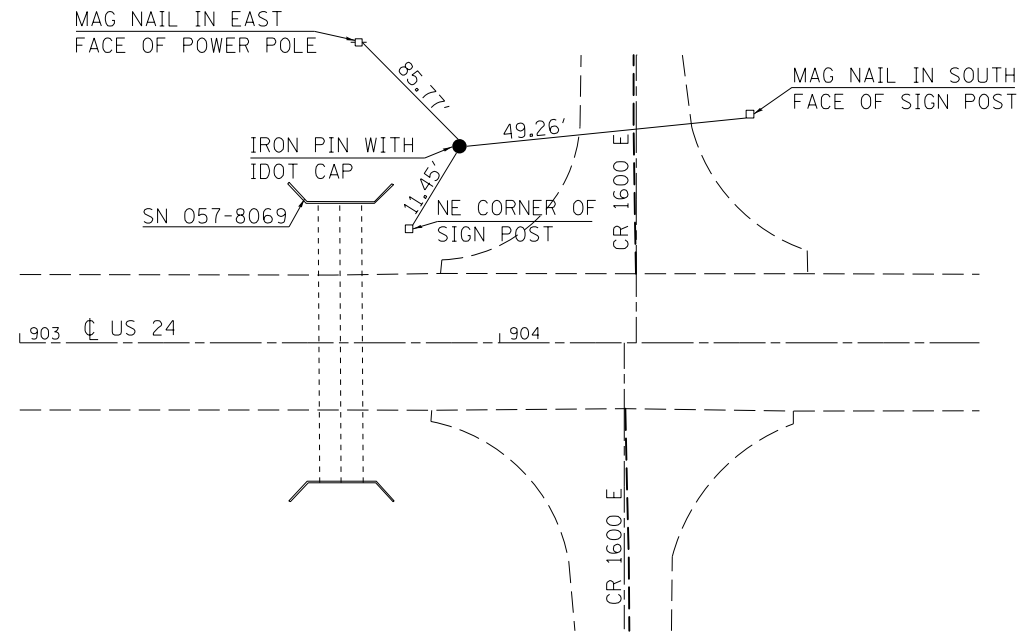
SEEDING SCHEDULE									
STRUCTURE NUMBER	MEASURED AREA		ROUNDED AREA (NEAREST 1/4 ACRE)	25000210	25000400	25000500	25000600	25100115	28000250
	SQ FT	ACRE	ACRE	SEEDING CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH METHOD 2	TEMP. EROS. CONTROL SEEDING
				ACRE	POUND	POUND	POUND	ACRE	POUND
057-8222	7,277.0	0.17	0.25	0.25	23.0	23.0	23.0	0.25	25.0
057-8223	9,012.0	0.21	0.25	0.25	23.0	23.0	23.0	0.25	25.0
057-8224	9,993.0	0.23	0.25	0.25	23.0	23.0	23.0	0.25	25.0
TOTAL =				0.75	69.0	69.0	69.0	0.75	75.0
ROUNDED TOTAL =				0.75	69.0	69.0	69.0	0.75	75.0

PERIMETER EROSION BARRIER SCHEDULE					
STRUCTURE	SIDE	STATION	TO	STATION	28000400
					PERIMETER EROSION BARRIER
					FOOT
057-8222	LT	902+93.00	TO	903+93.00	100.0
	RT	902+93.00	TO	903+93.00	100.0
STRUCTURE TOTAL =					200.0
057-8223	RT	915+94.00	TO	916+94.00	100.0
	LT	915+94.00	TO	916+94.00	100.0
STRUCTURE TOTAL =					200.0
057-8224	RT	984+14.00	TO	985+14.00	100.0
	LT	984+14.00	TO	985+14.00	100.0
STRUCTURE TOTAL =					200.0
TOTAL =					600.0

PATCHING SCHEDULE									
STRUCTURE NUMBER	STATION	TO	STATION	SIDE	LENGTH	WIDTH	44201347	44213204	44200050
							CLASS C TYPE 9.0 INCH	TIE BARS 3/4"	WELDED WIRE REINFORCEMENT
							SQ YD	EACH	SQ YD
057-8222	903+53.50	TO	903+80.50	LT	27.00	14	42.0		42.0
	903+53.50	TO	903+80.50	RT	27.00	14	42.0	14	42.0
STRUCTURE TOTAL =							84.0	14	84.0
057-8223	916+23.00	TO	916+49.00	LT	26.00	14	40.4		40.4
	916+23.00	TO	916+49.00	RT	26.00	14	40.4	13	40.4
STRUCTURE TOTAL =							81.0	13	81.0
057-8224	984+46.25	TO	984+77.75	LT	31.50	14	49.0		49.0
	984+46.25	TO	984+77.75	RT	31.50	14	49.0	16	49.0
STRUCTURE TOTAL =							98.0	16	98.0
TOTAL =							263.0	43	263.0

RIPRAP AND FILTER FABRIC SCHEDULE										
STRUCTURE NUMBER	STATION	DEPTH	LENGTH	WIDTH	AREA UNDER CULVERT	VOLUME UNDER CULVERT	AREA UNDER APRON	VOLUME UNDER TWO APRONS	TOTAL VOLUME	28100201
										STONE RIPRAP CLASS A1
										TON
057-8222	903+67.00	1.0	60.0	18.0	1,080.0	40.0	135.0	10.0	50.0	90.0
057-8223	916+36.00	0.5	60.0	18.0	1,080.0	20.0	135.0	5.0	25.0	45.0
057-8224	984+62.00	1.0	60.0	18.0	1,080.0	40.0	135.0	10.0	50.0	90.0
TOTAL =										225.0
USE =										225.0

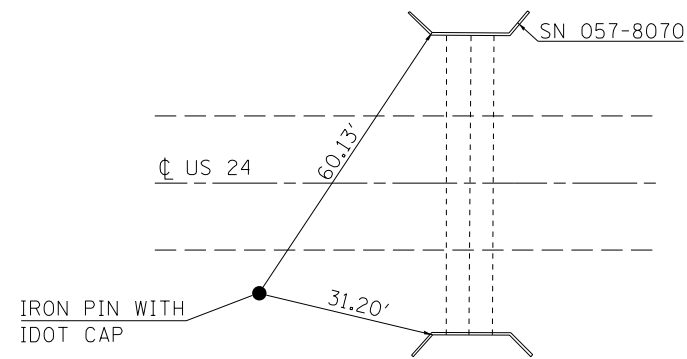
TS 400
STA. 904 + 13.73, 46.69' LT



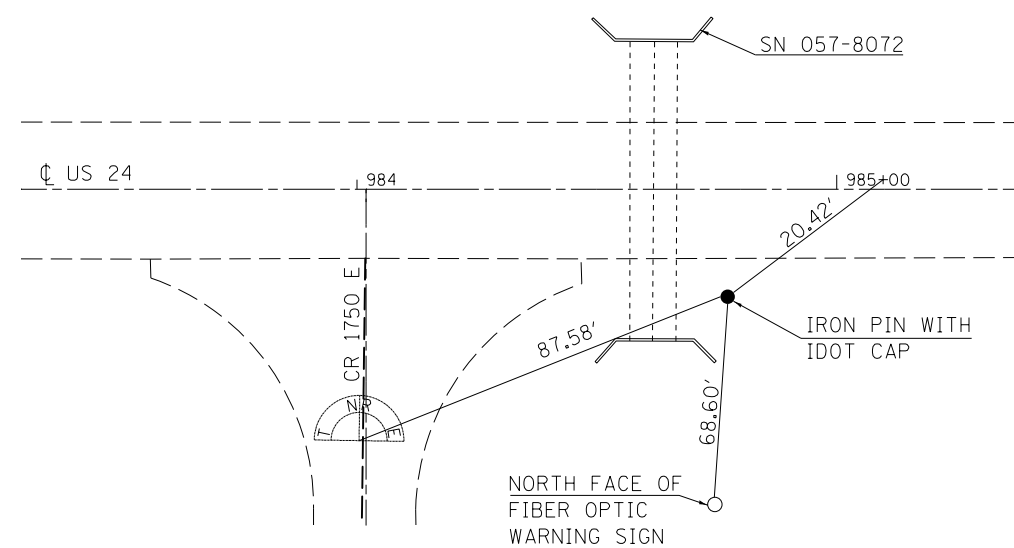
TS COORDINATES AND ELEVATIONS TABLE

TS	DESCRIPTION	NORTHING	EASTING	ELEVATION
400	IRON PIN WITH IDOT CAP	1483532.721	808504.552	725.61
401	IRON PIN WITH IDOT CAP	1483483.061	809689.544	727.13
403	IRON PIN WITH IDOT CAP	1483594.774	816573.866	729.40

TS 401
STA. 915 + 97.76, 22.25' RT



TS 403
STA. 984 + 82.99, 22.59' RT



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -
p:\11\084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 5\Projects\05779\Drawings\Design\0570697-sh1-ATB.dgn		CHECKED -	REVISED -
\$MODELNAME\$	PLOT DATE = 1/31/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENTS, TIES, &
BENCHMARKS

SCALE: N/A SHEET 1 OF 1 SHEETS STA. ----- TO STA. -----

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	10
CONTRACT NO. 70697				
ILLINOIS FED. AID PROJECT				

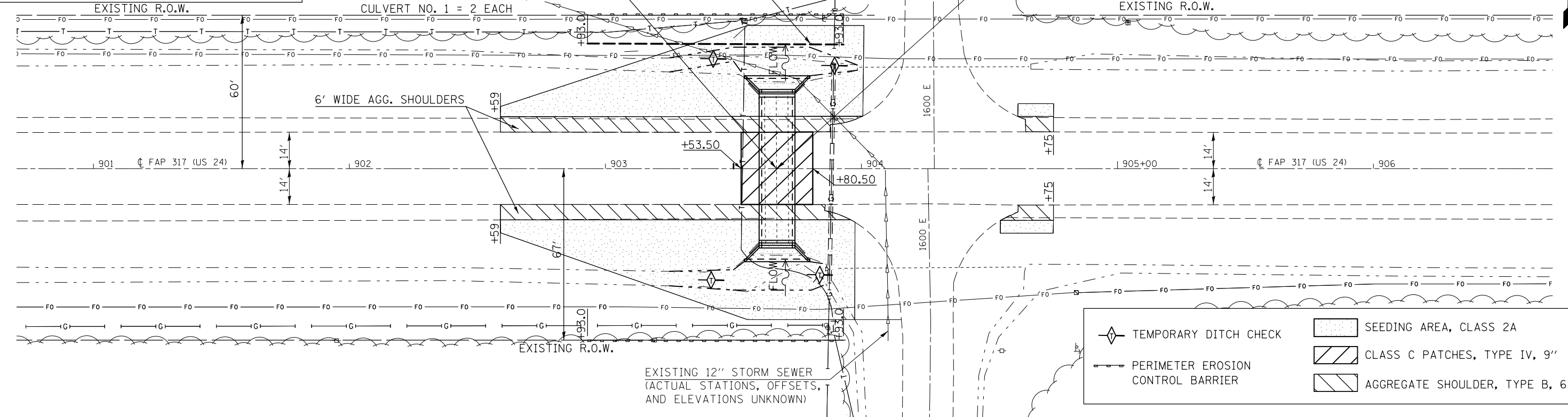
BENCH MARK:
CHISELED SQUARE ON TOP OF NORTHEAST CORNER
OF NORTH HEADWALL. HEADWALL IS REACHED FROM
THE INTERSECTION OF US 24 & TR 1600E TRAVEL
WEST 55'. VERTICAL DATUM = NAVD 88
ELEVATION = 725.138

PROPOSED S.N. 057-8222
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 903+67
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 1 = 2 EACH

EXISTING S.N. 057-8069
3 - 36" x 59' CMP CULVERTS
CL STATION 903+67
SKEW = 0°

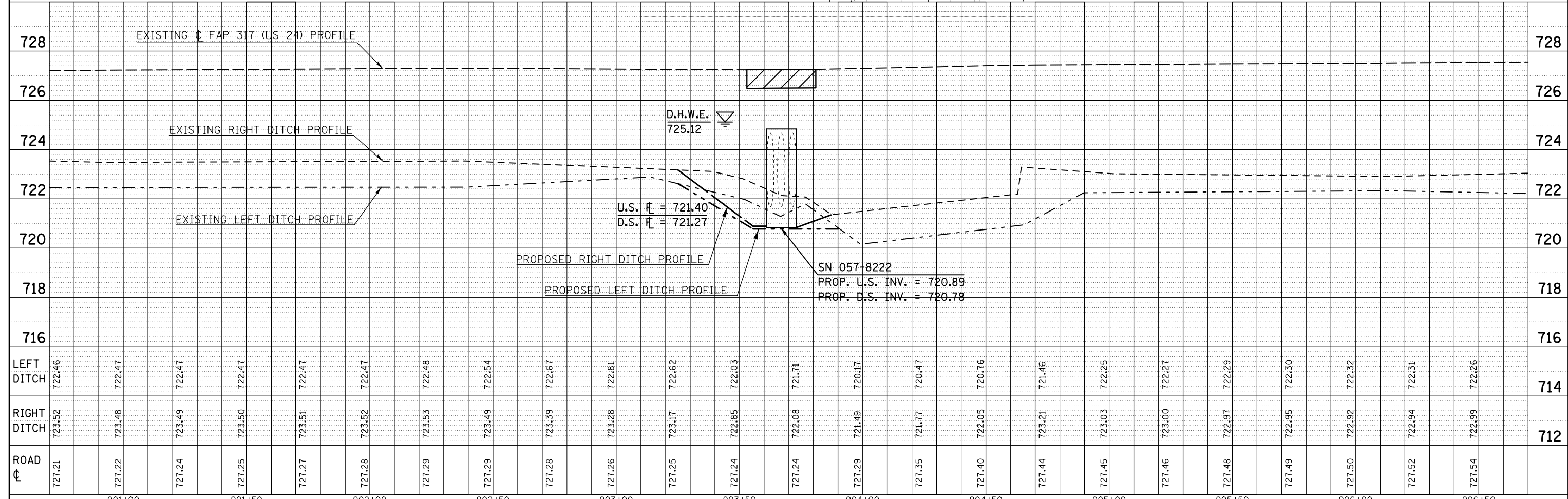


PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNED	BY
NO.	CHECKED	
	FILE NAME	

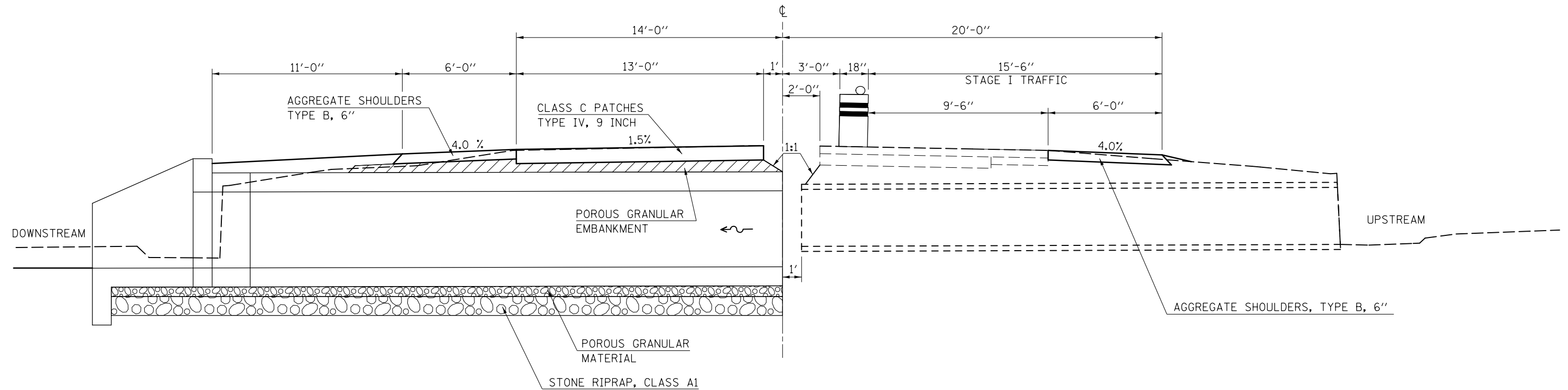


	TEMPORARY DITCH CHECK		SEEDING AREA, CLASS 2A
	PERIMETER EROSION CONTROL BARRIER		CLASS C PATCHES, TYPE IV, 9"
			AGGREGATE SHOULDER, TYPE B, 6"

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	BY
NO.	STRUCTURE	
	NOTATIONS	



TYPICAL STAGING DETAILS SN 057-8222 STAGE I

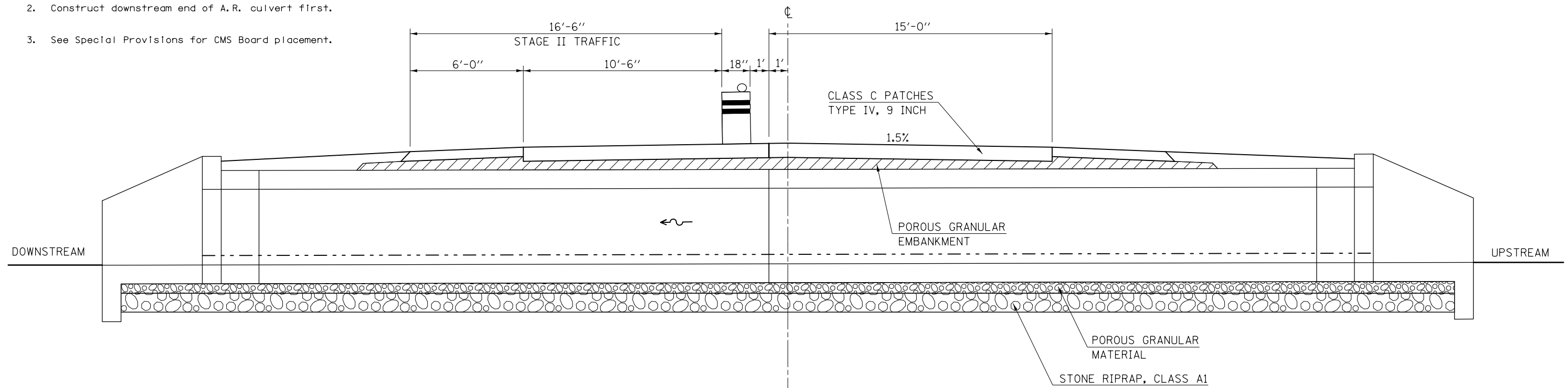


TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 2.0 CAL DAY = 4.0 CAL DAY

NOTES

1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. Construct downstream end of A.R. culvert first.
3. See Special Provisions for CMS Board placement.

TYPICAL STAGING DETAILS SN 057-8222 STAGE II



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\Drawings\Design\0570697-details.dgn		REVISION	REVISION
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISION	REVISION
PLOT DATE = 1/31/2017	DATE -	REVISION	REVISION

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGING DETAILS
S.N. 057-8222; CULVERT NO. 1

SCALE: N/A SHEET 1 OF 1 SHEETS STA. ----- TO STA. -----

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	12
CONTRACT NO. 70697				
ILLINOIS FED. AID PROJECT				

CLASS C PATCHES,
TYPE IV, 8 INCH

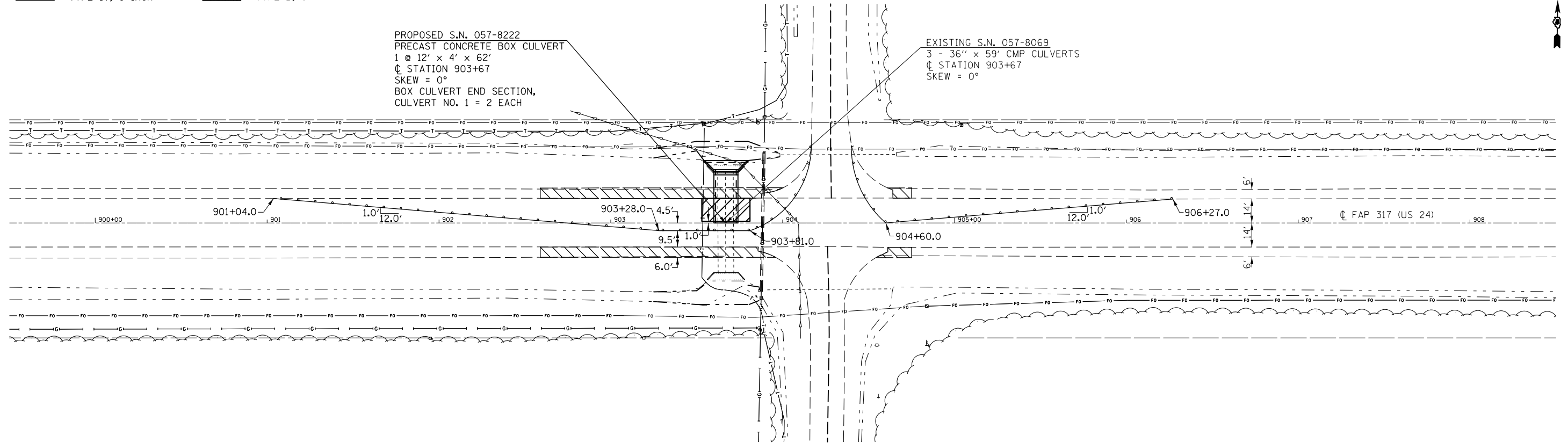
AGGREGATE SHOULDERS,
TYPE B, 6"

CULVERT NO. 1 – STAGE I TRAFFIC CONTROL PLAN



PROPOSED S.N. 057-8222
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 903+67
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 1 = 2 EACH

EXISTING S.N. 057-8069
3 - 36" x 59' CMP CULVERTS
CL STATION 903+67
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

CLASS C PATCHES,
TYPE IV, 8 INCH

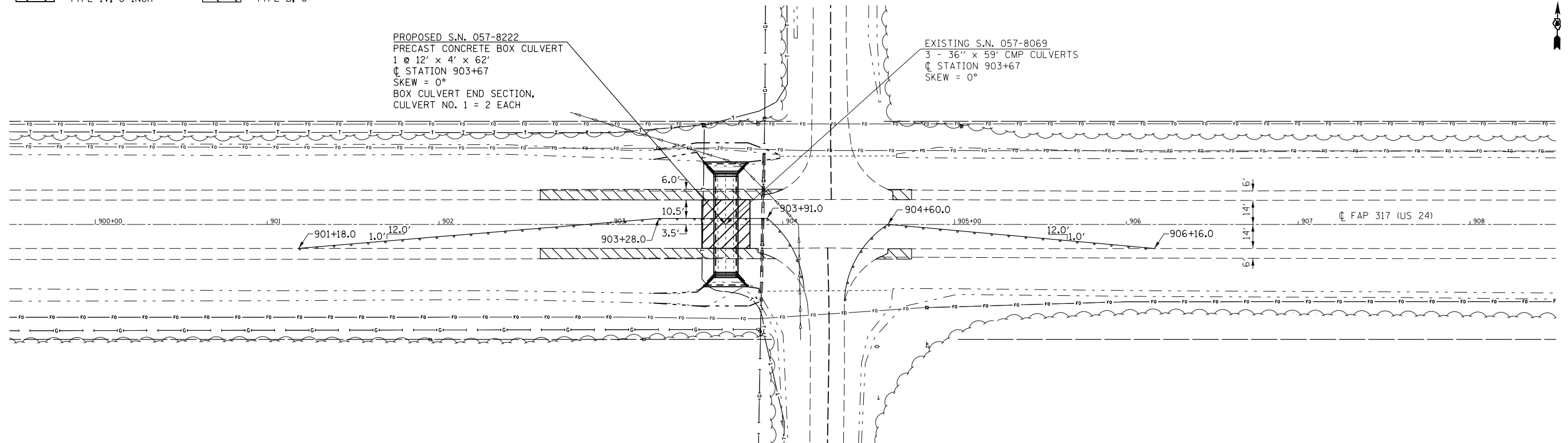
AGGREGATE SHOULDERS,
TYPE B, 6"

CULVERT NO. 1 – STAGE II TRAFFIC CONTROL PLAN



PROPOSED S.N. 057-8222
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 903+67
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 1 = 2 EACH

EXISTING S.N. 057-8069
3 - 36" x 59' CMP CULVERTS
CL STATION 903+67
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL PLAN S.N. 057-8222; CULVERT NO. 1				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11\084EBIDINTEG\illinois.gov\PIDOT\Documents\DOT Offices\District 5\Projects\057-8222\Design\0570697-sh1-traffic-control.dgn		CHECKED -	REVISED -		317	30CR	MCLEAN	66	13				
PLOT SCALE = 60.0000' / in.		DATE -	REVISED -		CONTRACT NO. 70697				ILLINOIS FED. AID PROJECT				
#MODELNAME#	PLOT DATE = 1/31/2017			SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.			

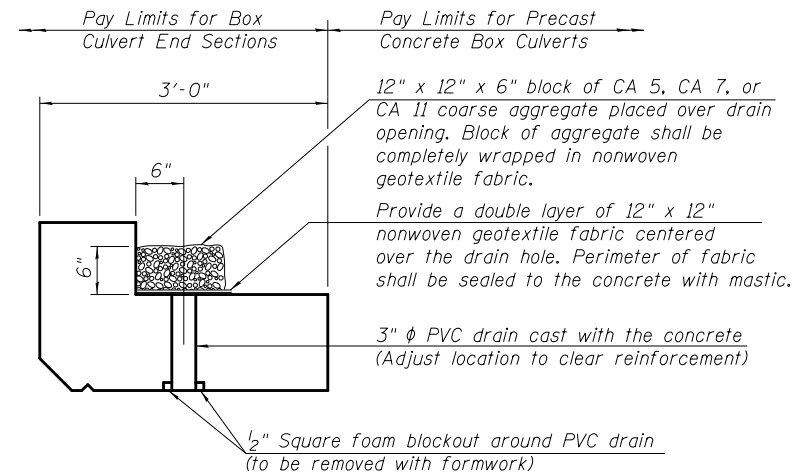
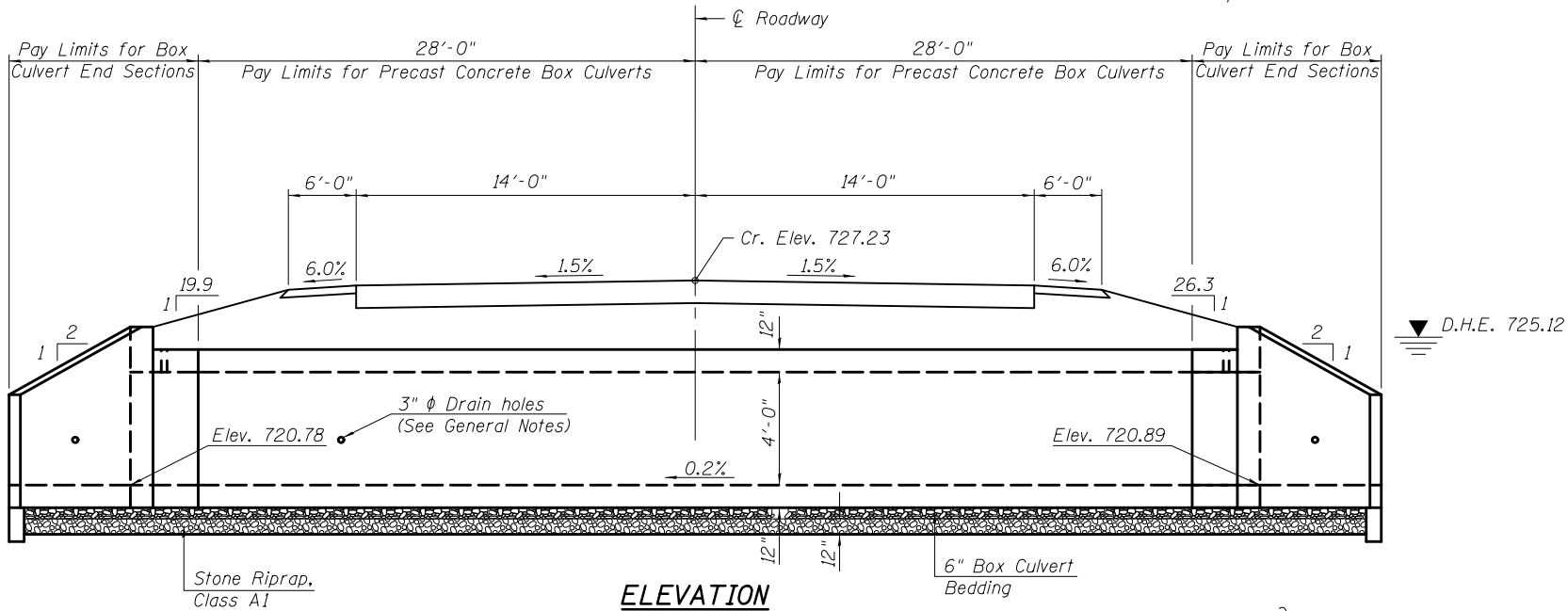
Existing Structure: Triple 36" CMP Culverts with Cast-in-Place End Sections.
 Benchmark: Chisled square on top of NE corner of north headwall. Headwall is reached from the intersection of US 24 and TR 1600E, travel west 55'. Vertical Datum = NAVD 88, Elevation = 725.138

INDEX OF SHEETS

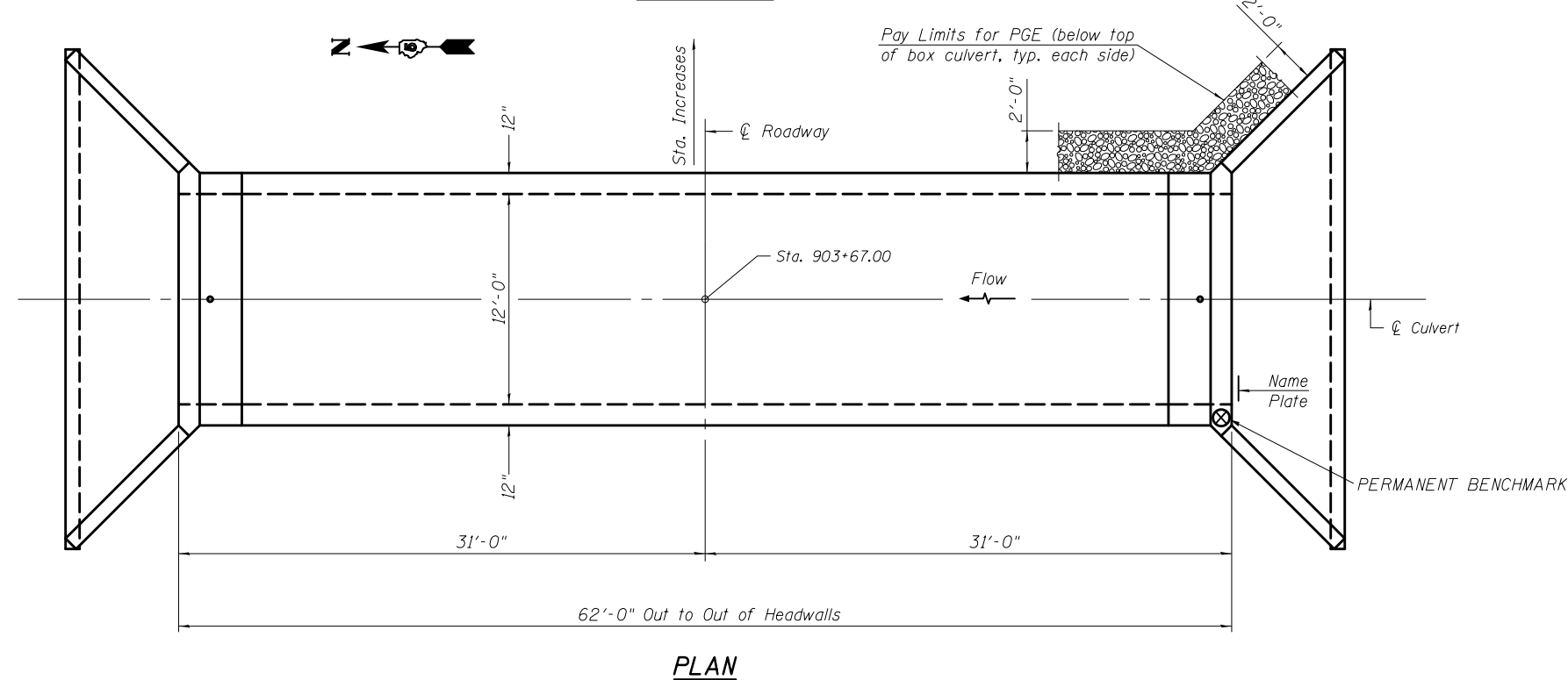
1. General Plan and Elevation
- 2.-3. Precast Concrete Box Culvert Apron End Section Details

GENERAL NOTES

The design fill height for this box is 1.39 ft. The precast box culvert sections shall conform to the requirements of ASTM C1577.
 Drain holes shall be provided on exterior culvert walls for each precast box segment 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, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.
 The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.
 Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.
 Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment below the top of the box culvert extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ft from the face of embankment.



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.)



DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
 6th Edition with 2013 Interims

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

f'c = 5,000 psi
 fy = 65,000 psi (Welded Wire Fabric)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 1	Each	1.0
Name Plates	Each	1.0
Box Culvert End Sections, Culvert No. 1	Each	2.0
Precast Concrete Box Culverts, 12'x4'	Foot	56.0
Porous Granular Embankment	Cu. Yd.	101.0
Stone Riprap, Class A1	Ton	90.0
Membrane Waterproofing	Sq. Yd.	107.0

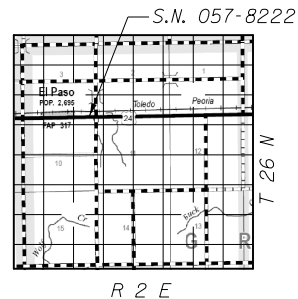
WATERWAY INFORMATION

Drainage Area = 0.481 Sq Mi Low Grade Elev. = 726.56 @ Sta. 894+50.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	144	21	36			726.34	724.30	
Design	50	238	21	45				Over 725.12	
Base	100	280	21	48				Over 725.50	
Overtopping	500	383	21	48				Over 726.90	
Max. Calc.									

STATION 903+67.00
 BUILT 20XX BY
 STATE OF ILLINOIS
 F.A.P. RT. 317
 SEC. 30CR
 LOADING HL-93
 STR. NO. 057-8222

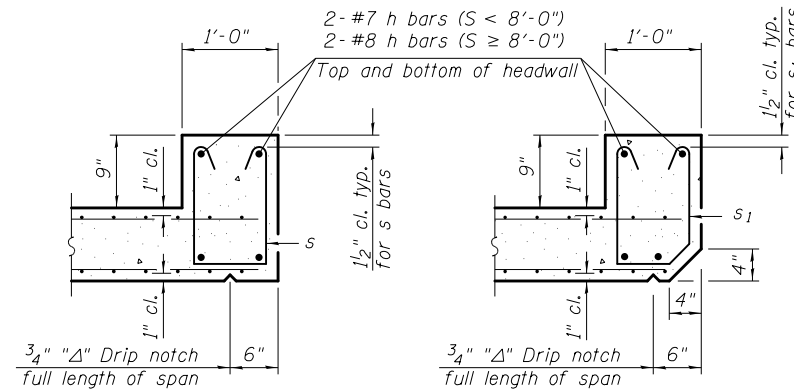
NAME PLATE
 See Std. 515001



LOCATION SKETCH

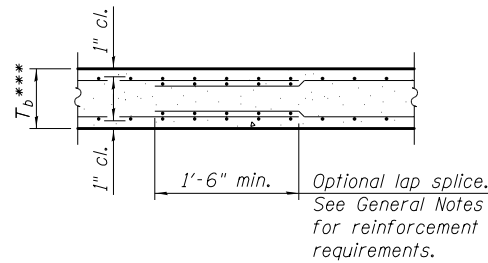
GENERAL PLAN AND ELEVATION
US 24 OVER DITCH
F.A.P. RTE. 317 SEC. 30CR
MCLEAN COUNTY
STATION 903+67.00
S.N. 057-8222

SCB-GPE-AES 10-22-13



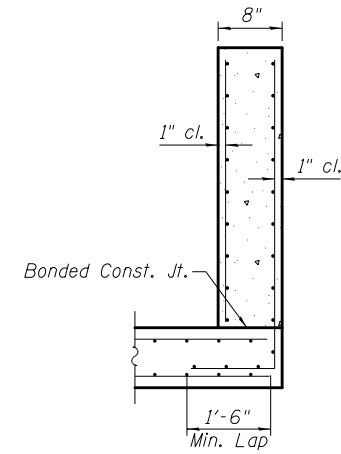
SECTION B-B
(Top slab at downstream end)

SECTION B-B
(Top slab at upstream end)

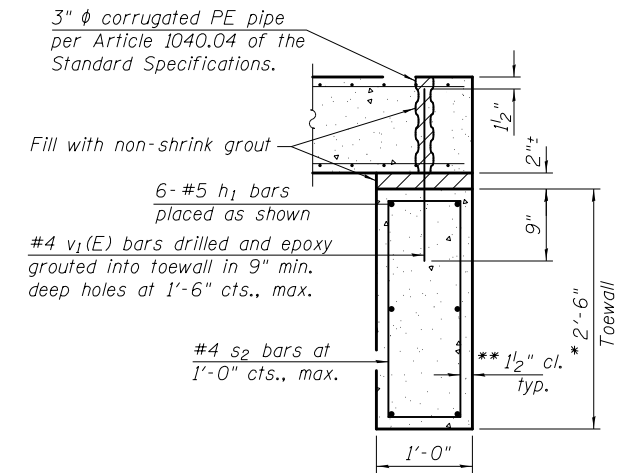


SECTION B-B
(Bottom Slab)

*** This dimension shall be increased by 2" for CIP construction.



SECTION C-C



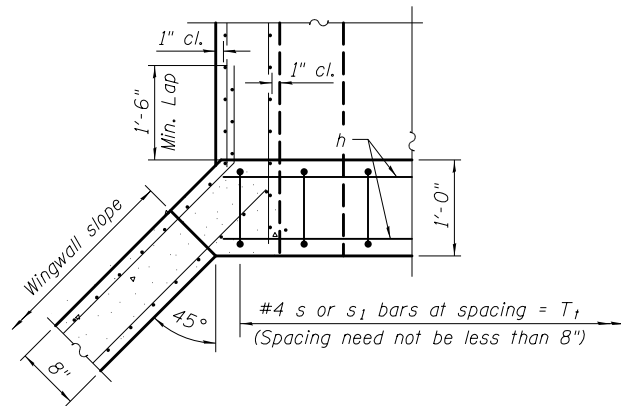
SECTION D-D

TOEWALL CONSTRUCTION SEQUENCE

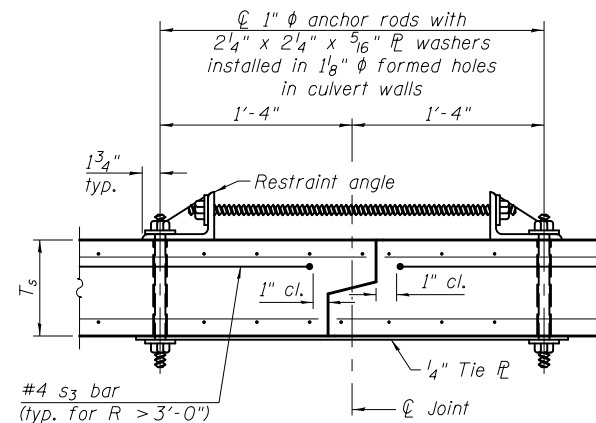
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

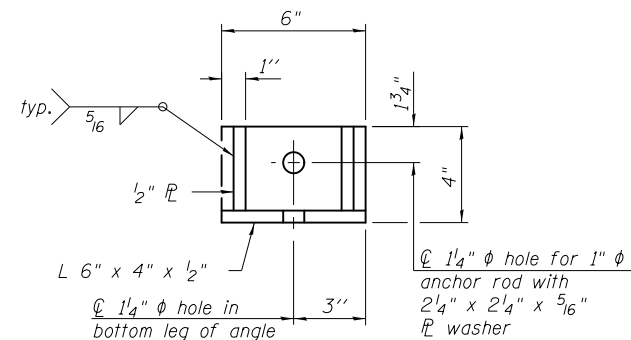
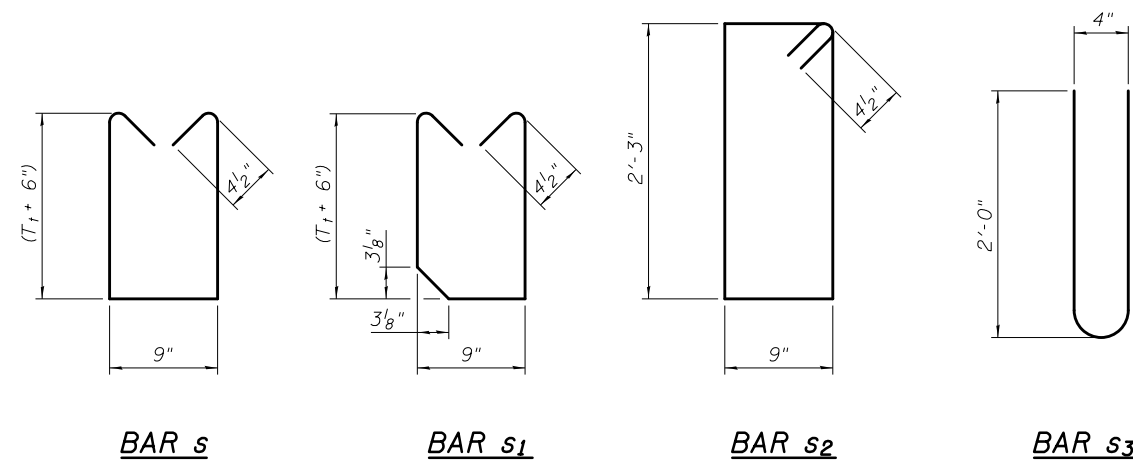
** If soil conditions permit, toewall may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toewall shall be increased to 3" by increasing the size of the toewall.



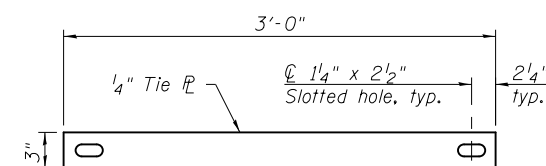
SECTION E-E



SECTION F-F
(Showing culvert tie details)



RESTRAINT ANGLE DETAIL



TIE PLATE DETAIL

Notes:

1" diameter anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M111 or M232 as applicable. 2 1/4" x 2 1/4" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

SCB-AES-2

11-5-13

(Sheet 2 of 2)

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON AND END SECTION DETAILS S.N. 057-8222; CULVERT NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\057\DESIGN\057-8222-Details.dgn	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			317	30CR	MCLEAN	66	16	
MODELNAME	PLOT DATE = 1/31/2017	DATE -	REVISED -			CONTRACT NO. 70697					
						SCALE:	SHEET 2 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

NOTE:
 1. EXISTING S.N. 057-8069 IS LOCATED AT STA. 903+67
 2. THIS AS-BUILT PLAN SHEET IS FROM FILE -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DATE PLOTTED: 1/31/2017
 PLOT SCALE: 1/8" = 1'-0"

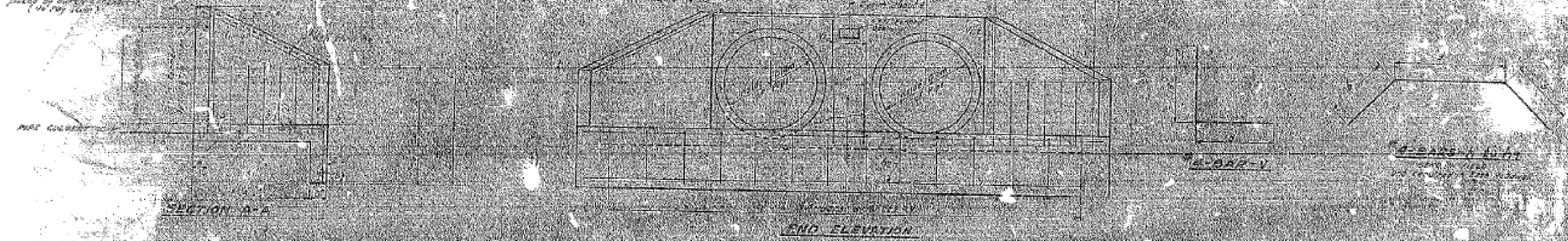


TABLE OF DIMENSIONS

ITEM NO.	DESCRIPTION	DIMENSIONS	
		FEET	INCHES
1	Overall Length	100.00	0.00
2	Overall Width	12.00	0.00
3	Span Length	40.00	0.00
4	Span Width	12.00	0.00
5	Abutment Length	30.00	0.00
6	Abutment Width	12.00	0.00
7	End Wall Thickness	1.00	0.00
8	End Wall Height	10.00	0.00
9	End Wall Top Width	12.00	0.00
10	End Wall Bottom Width	12.00	0.00
11	End Wall Top Slope	1:1	
12	End Wall Bottom Slope	1:1	
13	End Wall Top Finish	10.00	0.00
14	End Wall Bottom Finish	0.00	0.00
15	End Wall Top Elevation	100.00	0.00
16	End Wall Bottom Elevation	90.00	0.00

DIMENSIONS FOR
 TABLE A-1

ITEM NO.	DESCRIPTION	FEET	INCHES
1	Span Length	40.00	0.00
2	Span Width	12.00	0.00
3	Abutment Length	30.00	0.00
4	Abutment Width	12.00	0.00
5	End Wall Thickness	1.00	0.00
6	End Wall Height	10.00	0.00
7	End Wall Top Width	12.00	0.00
8	End Wall Bottom Width	12.00	0.00
9	End Wall Top Slope	1:1	
10	End Wall Bottom Slope	1:1	
11	End Wall Top Finish	10.00	0.00
12	End Wall Bottom Finish	0.00	0.00
13	End Wall Top Elevation	100.00	0.00
14	End Wall Bottom Elevation	90.00	0.00

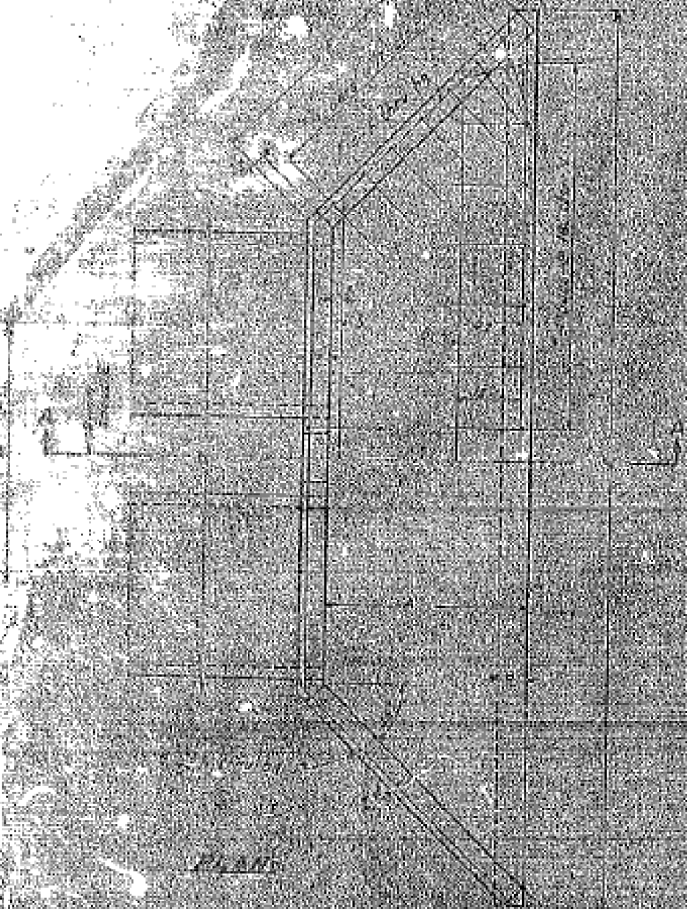


TABLE OF QUANTITIES

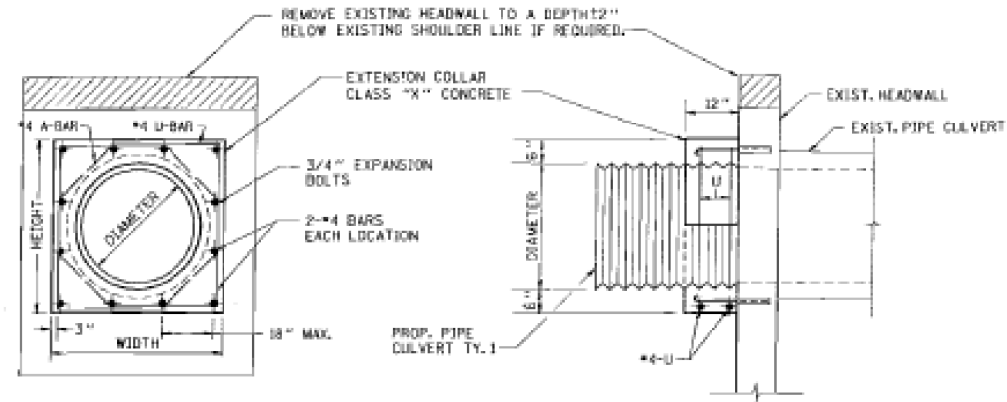
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
1	Concrete for Abutments	1000	cu yd
2	Concrete for End Walls	500	cu yd
3	Concrete for Span	2000	cu yd
4	Reinforcing Steel	10000	lbs
5	Formwork	1000	sq ft
6	Excavation	500	cu yd
7	Backfill	1000	cu yd
8	Gravel	1000	cu yd
9	Asphalt	1000	sq ft
10	Paint	100	gal
11	Signage	1	unit
12	Construction	1000	hours
13	Permit	1	unit
14	Inspection	1	unit
15	Design	1	unit
16	Construction	1000	hours
17	Permit	1	unit
18	Inspection	1	unit
19	Design	1	unit
20	Construction	1000	hours
21	Permit	1	unit
22	Inspection	1	unit
23	Design	1	unit
24	Construction	1000	hours
25	Permit	1	unit
26	Inspection	1	unit
27	Design	1	unit
28	Construction	1000	hours
29	Permit	1	unit
30	Inspection	1	unit
31	Design	1	unit
32	Construction	1000	hours
33	Permit	1	unit
34	Inspection	1	unit
35	Design	1	unit
36	Construction	1000	hours
37	Permit	1	unit
38	Inspection	1	unit
39	Design	1	unit
40	Construction	1000	hours
41	Permit	1	unit
42	Inspection	1	unit
43	Design	1	unit
44	Construction	1000	hours
45	Permit	1	unit
46	Inspection	1	unit
47	Design	1	unit
48	Construction	1000	hours
49	Permit	1	unit
50	Inspection	1	unit

FOR INFORMATION ONLY

FOR INFORMATION ONLY

NOTE
 1. EXISTING S.N. 057-8069 IS LOCATED AT STA. 903+67
 2. THIS AS-BUILT PLAN SHEET IS FROM FILE - 057102.US00024.8605.3155L.PDF

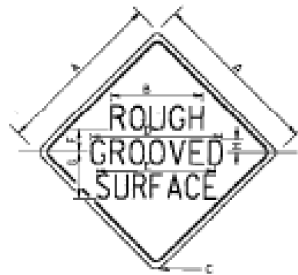
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 49	30CR15	MCLEAN	66	19
PROJECT				
K WOODFORD/MCLEAN				



EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS.
 MINIMUM CERTIFIED PROOF LOAD = 4,000 LBS.

LOCATION	EXISTING CULVERT SIZE	PIPE DIMENSION	PIPE AREA	EXTENSION COLLAR		A-BAR			U-BAR			FOR INFORMATION ONLY	
				WIDTH	HEIGHT	'2'	'3'	'4'	'1'	'2'	'3'	CLASS 'X' CONC. HOWL.	3/4" DIA. EXPANSION BOLTS
796+04	3#24	3#24	3.1	36	36	20	15	30	0.22	19	8		
845+79	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
850+60	24	24	3.1	36	36	20	15	30	0.22	19	8		
903+67	3#36	3#36	7.1	48	48	20	27	41	0.33	24	12		
916+36	3#42	3#42	9.6	54	54	22	31	48	0.39	27	12		
975+00	18	18	1.8	30	30	17	23	24	0.17	16	4		
1030+95	2#30	2#30	4.9	42	42	17	23	36	0.27	20	12		
1055+23	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
1110+48	36	36	7.1	48	48	20	27	41	0.33	24	12		
1126+10	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
790+65	12	12	0.78	24	24	11	16	18	0.12	13	4		
904+27	30	30	4.9	42	42	17	23	36	0.27	20	12		

PIPE CULVERT EXTENSION DETAIL (COLLAR)



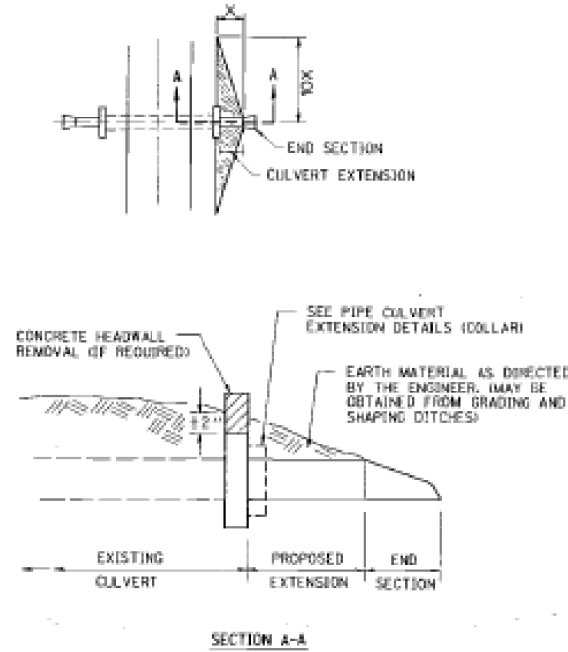
SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	H
36 X 36	36.0	17.2	2.2	24.3	23.5	5.5	10.5	2.5
48 X 48	48.0	24.1	3.0	34.0	33.0	6.0	13.0	3.5

SIGN SIZE	SERIES LINES			MARGIN	BORDER	BLANK STD.
	1	2	3			
36 X 36	5C	5C	5C	0.6	0.8	B4-360
48 X 48	7C	7C	7C	0.8	1.2	B4-480

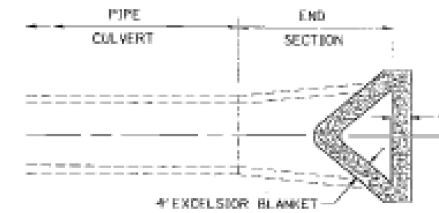
ALL DIMENSIONS IN INCHES.

SIGNING FOR COLD MILLING OPERATIONS

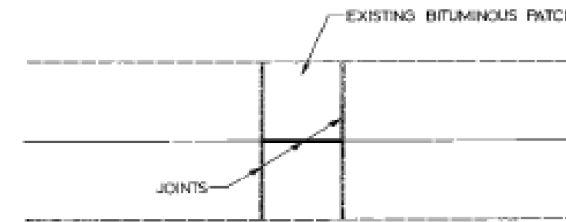
SINCE CERTAIN TYPES OF VEHICLES MAY EXPERIENCE SOME DEGREE OF DIRECTIONAL INSTABILITY ON THE COLD MILLED PAVEMENT SURFACE, PARTICULARLY WHEN A DRIVER MAY NOT BE PREPARED FOR THE ROUGHNESS, THE CONTRACTOR SHALL PROVIDE AND ERRECT, THE 48" X 48" SIGN SHOWN ABOVE AT EACH LIMIT OF THE COLD MILLED PAVEMENT SURFACE. THE SIGNS SHALL BE REMOVED AFTER THE PAVEMENT IS RESURFACED AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE COST OF FURNISHING, ERRECTING AND MAINTAINING THESE SIGNS SHALL BE INCIDENTAL TO THE CONTRACT.



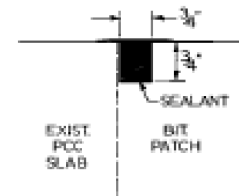
PLAN AT CULVERT EXTENSIONS



EXCELSIOR BLANKET AT PROPOSED END SECTIONS



PLAN VIEW



ROUTED & FILLED JOINT

JOINT SEALING PATCHES DETAIL

DETAILS

FOR INFORMATION ONLY

FOR INFORMATION ONLY

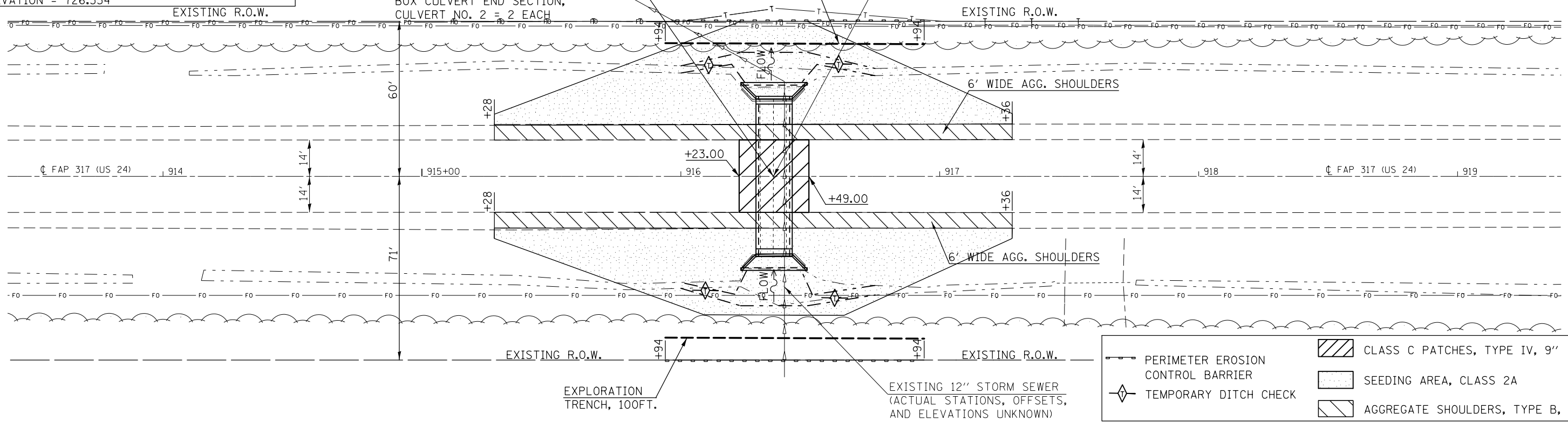
BENCH MARK:
CHISELED SQUARE ON TOP OF SOUTHWEST CORNER
OF SOUTH HEADWALL. HEADWALL IS REACHED FROM
THE INTERSECTION OF US 24 & TR 1600E TRAVEL
EAST 1207'. VERTICAL DATUM = NAVD 88
ELEVATION = 726.354

PROPOSED S.N. 057-8223
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 916+36
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 2 = 2 EACH

EXISTING S.N. 057-8070
3 - 42" x 61" CMP CULVERTS
CL STATION 916+36
SKEW = 0°

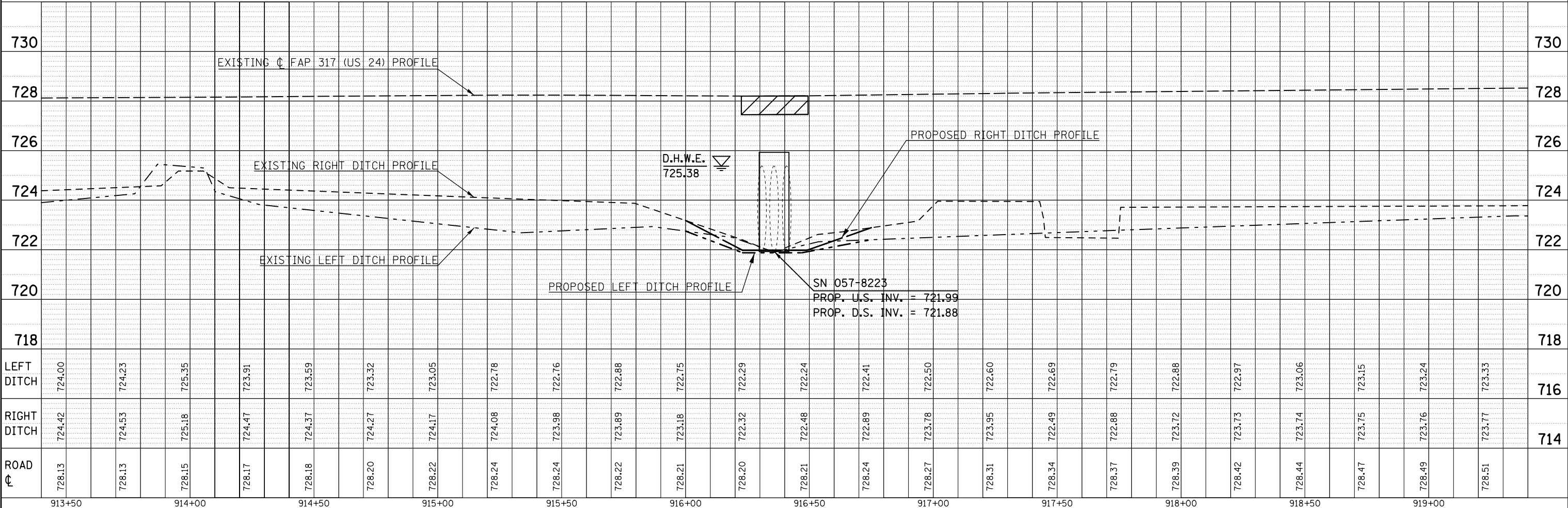


PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	DESIGNED	
	BY	
	NO.	



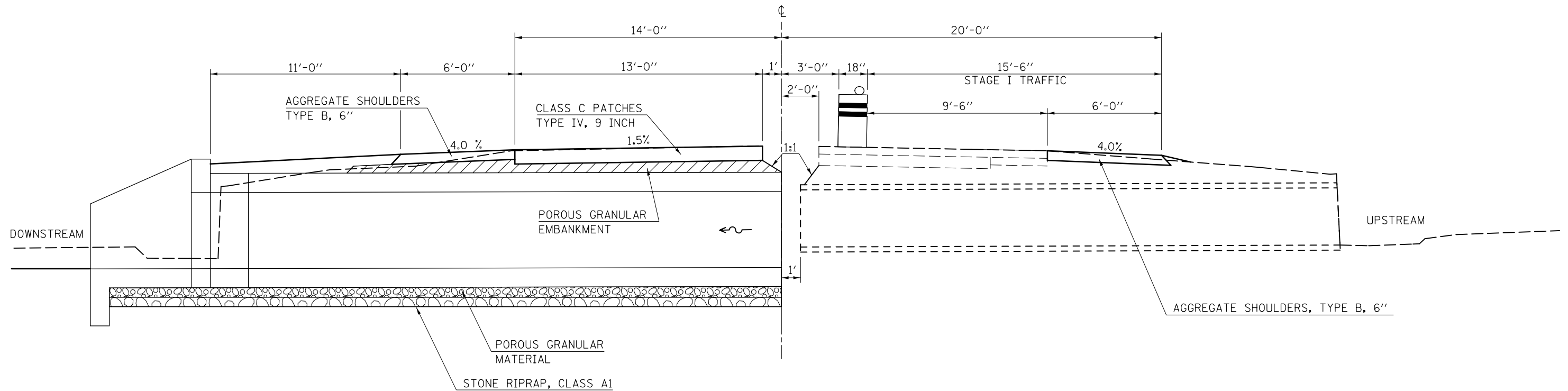
- PERIMETER EROSION CONTROL BARRIER
- TEMPORARY DITCH CHECK
- CLASS C PATCHES, TYPE IV, 9"
- SEEDING AREA, CLASS 2A
- AGGREGATE SHOULDERS, TYPE B, 6"

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	BY	
	NO.	



FILE NAME =	USER NAME = corrollr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE - BOX CULVERT NO. 2 STA. 916 + 36, S.N. 057-8223	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.allinois.gov\PI00T\Documents\DOT Offices\District 5\Projects\0570697\DRAMA\Design\0570697-sht-hyd.pln	DRAMA	CHECKED -	REVISED -			317	30CR	MCLEAN	66	20
MODELNAME\$	PLOT SCALE = 40.0000' / in.	DATE -	REVISED -			CONTRACT NO. 70697				
	PLOT DATE = 1/31/2017					ILLINOIS FED. AID PROJECT				

TYPICAL STAGING DETAILS SN 057-8223 STAGE I

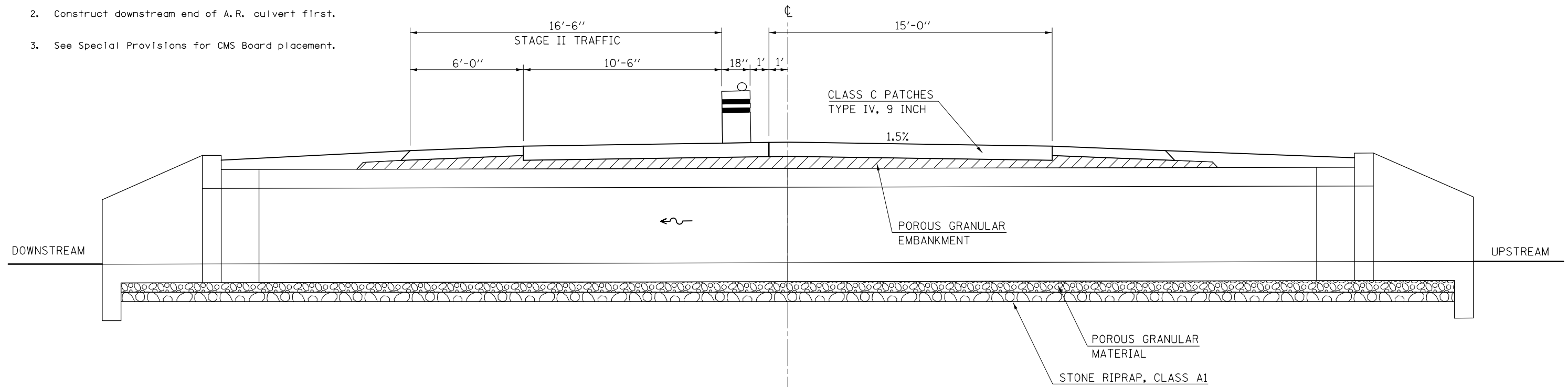


TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 2.0 CAL DAY = 4.0 CAL DAY

NOTES

1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. Construct downstream end of A.R. culvert first.
3. See Special Provisions for CMS Board placement.

TYPICAL STAGING DETAILS SN 055-8223 STAGE II



FILE NAME =	USER NAME = corrollrt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAILS S.N. 057-8223; CULVERT NO. 2	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\05779\Drawings\Design\0570697-details.dgn		CHECKED -	REVISED -			317	30CR	MCLEAN	66	21
PLOT SCALE = 48.0000' / in.		DATE -	REVISED -		SCALE: N/A	SHEET 2 OF 3 SHEETS		STA. ----- TO STA. -----		CONTRACT NO. 70697
PLOT DATE = 1/31/2017						ILLINOIS FED. AID PROJECT				

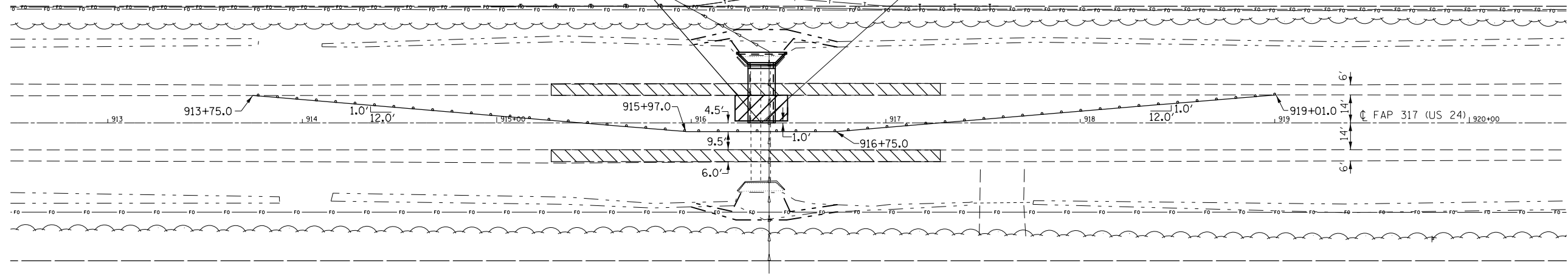
CULVERT NO. 2 – STAGE I TRAFFIC CONTROL PLAN

CLASS C PATCHES,
TYPE IV, 8 INCH

AGGREGATE SHOULDERS,
TYPE B, 6"

PROPOSED S.N. 057-8223
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 916+36
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 2 = 2 EACH

EXISTING S.N. 057-8070
3 - 42" x 61' CMP CULVERTS
CL STATION 916+36
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

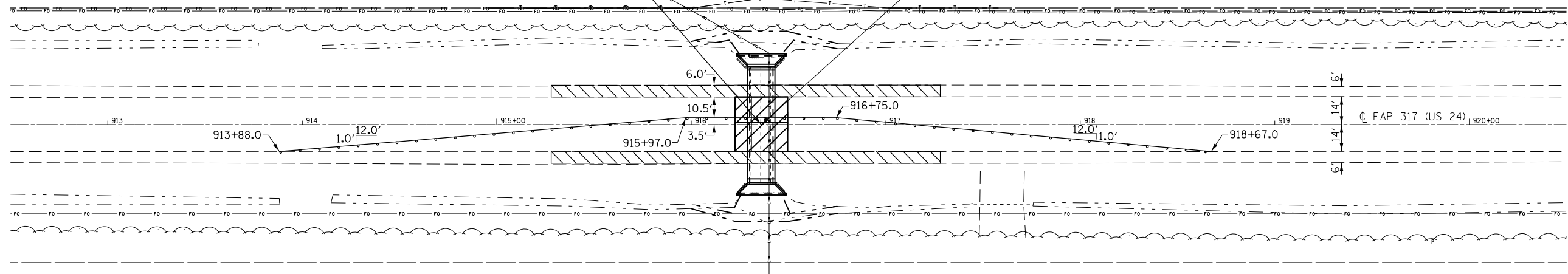
CULVERT NO. 2 – STAGE II TRAFFIC CONTROL PLAN

CLASS C PATCHES,
TYPE IV, 8 INCH

AGGREGATE SHOULDERS,
TYPE B, 6"

PROPOSED S.N. 057-8223
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 916+36
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 2 = 2 EACH

EXISTING S.N. 057-8070
3 - 42" x 61' CMP CULVERTS
CL STATION 916+36
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL PLAN S.N. 057-8223; CULVERT NO. 2			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0578223\Design\0578223-sh1-traffic-control.dgn	PLANNED BY =	CHECKED -	REVISED -					317	3OCR	MCLEAN	66	22
	PLANNED BY =	DATE -	REVISED -					CONTRACT NO. 70697				

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

ILLINOIS FED. AID PROJECT

Existing Structure: Triple 42" CMP Culverts with Cast-in-Place End Sections.

Benchmark: Chisled square on top of SW corner of south headwall. Headwall is reached from the intersection of US 24 and TR 1600E, travel east 1,207'. Vertical Datum = NAVD 88, Elevation = 726.354

INDEX OF SHEETS

1. General Plan and Elevation
- 2.-3. Precast Concrete Box Culvert Apron End Section Details

GENERAL NOTES

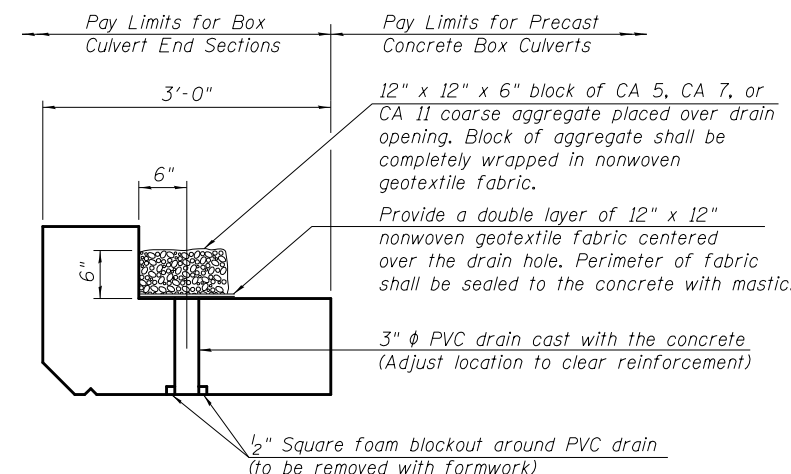
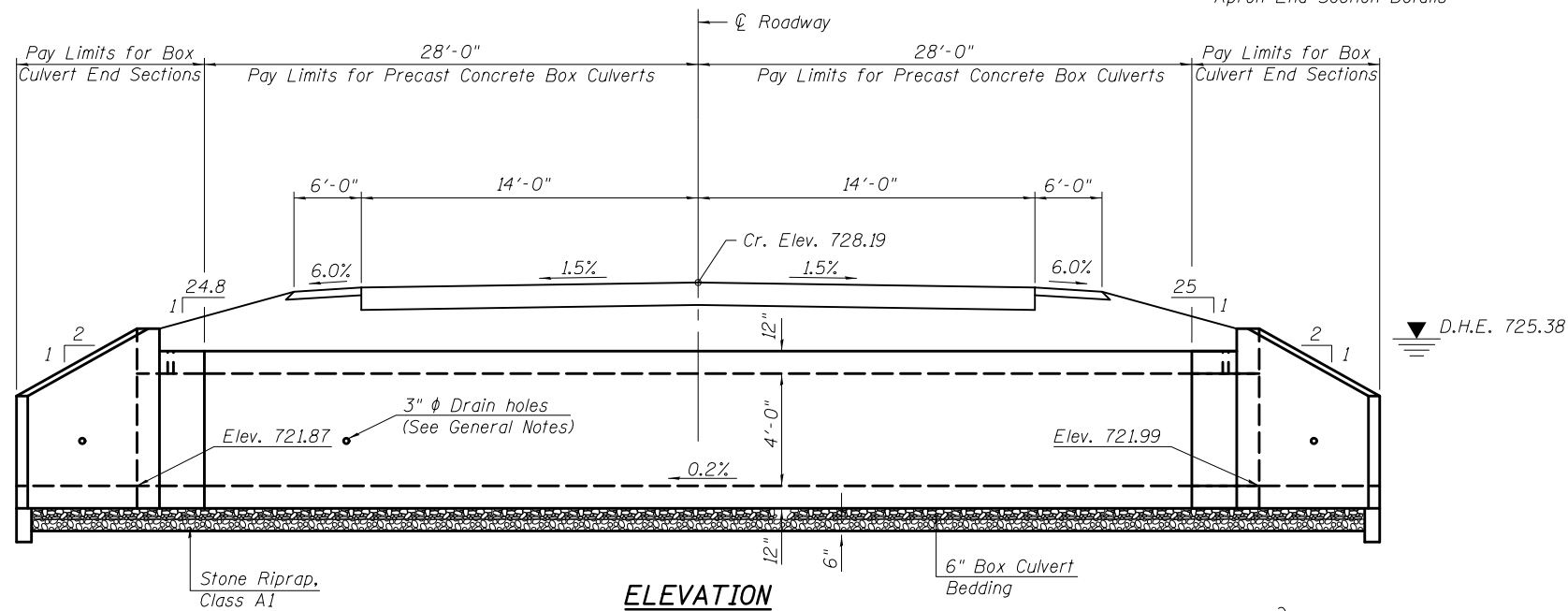
The design fill height for this box is 1.26 ft. The precast box culvert sections shall conform to the requirements of ASTM C1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment 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, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.

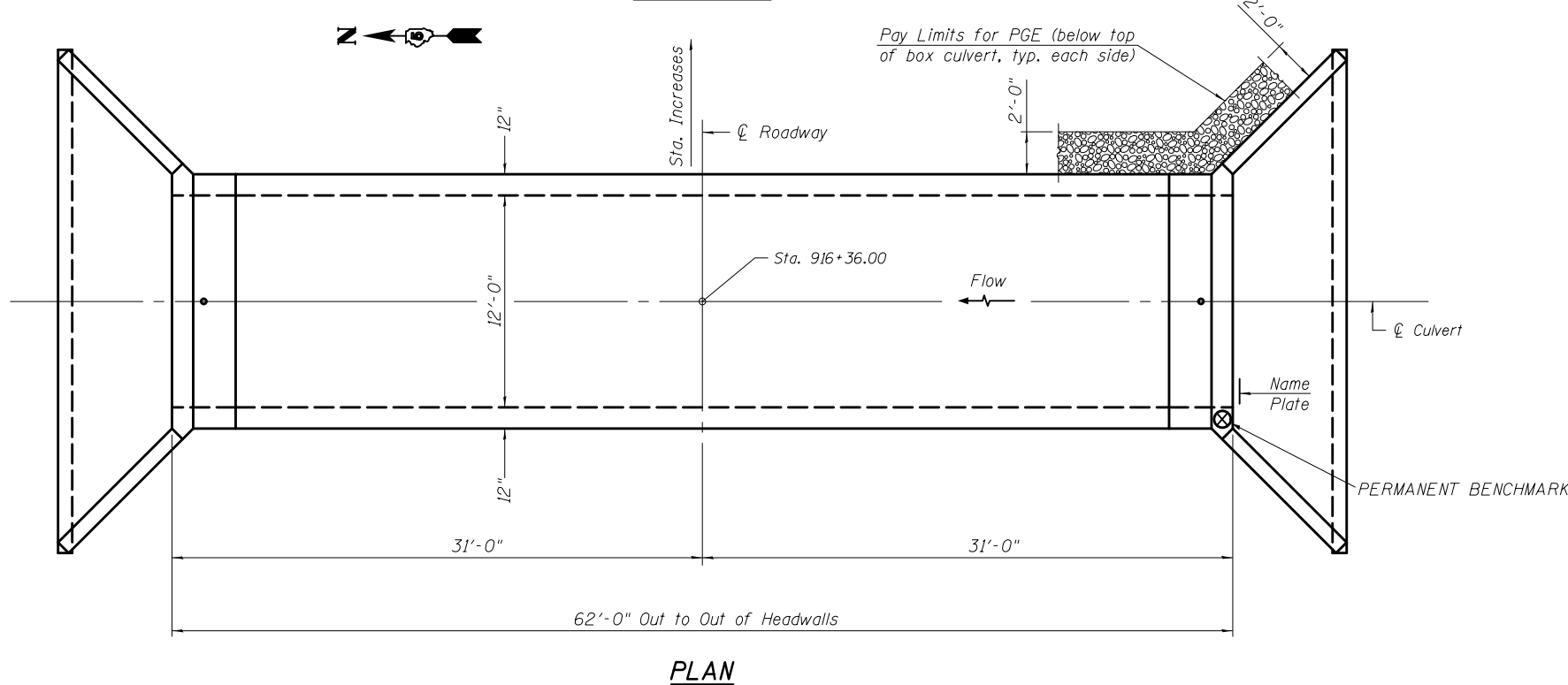
Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment below the top of the box culvert extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ft from the face of embankment.



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.)



DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
6th Edition with 2013 Interims

LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

f'_c = 5,000 psi
 f_y = 65,000 psi (Welded Wire Fabric)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 2	Each	1.0
Name Plates	Each	1.0
Box Culvert End Sections, Culvert No. 2	Each	2.0
Precast Concrete Box Culverts, 12'x4'	Foot	56.0
Porous Granular Embankment	Cu. Yd.	51.0
Stone Riprap, Class A1	Ton	45.0
Membrane Waterproofing	Sq. Yd.	107.0

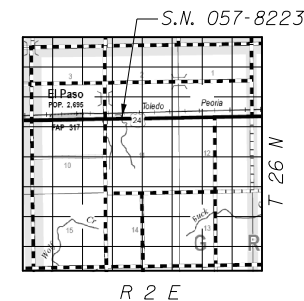
WATERWAY INFORMATION

Drainage Area = 0.348 Sq Mi Low Grade Elev. = 728.04 @ Sta. 914+00.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	111	29	34			725.34	724.82		
Design	50	182	29	41		726.91	725.38		
Base	100	214	29	44		Over	725.64		
Overtopping	500	293	29	48		Over	726.29		
Max. Calc.									

STATION 916+36.00
BUILT 20XX BY
STATE OF ILLINOIS
F.A.P. RT. 317
SEC. 30CR
LOADING HL-93
STR. NO. 057-8223

NAME PLATE
See Std. 515001

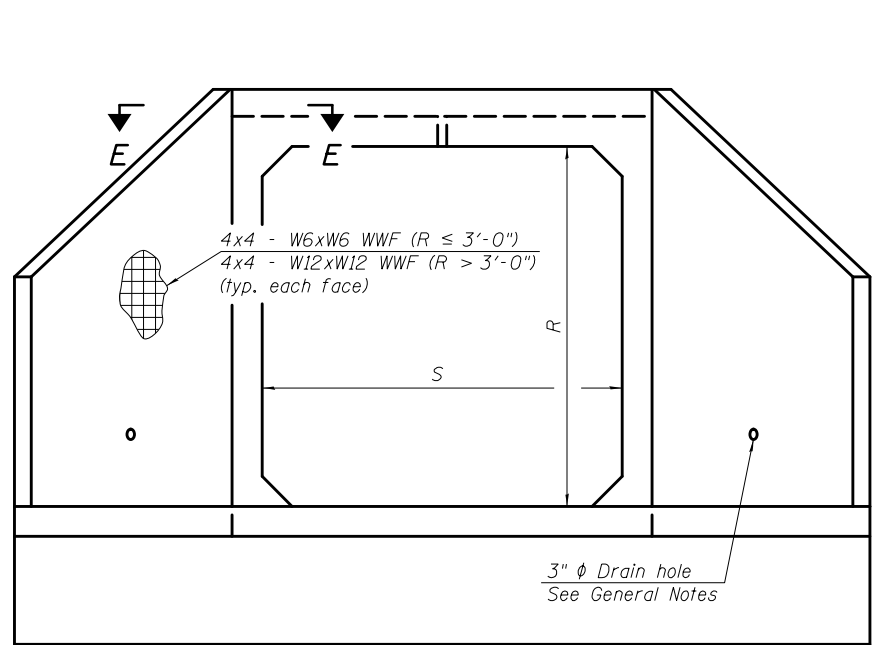


LOCATION SKETCH

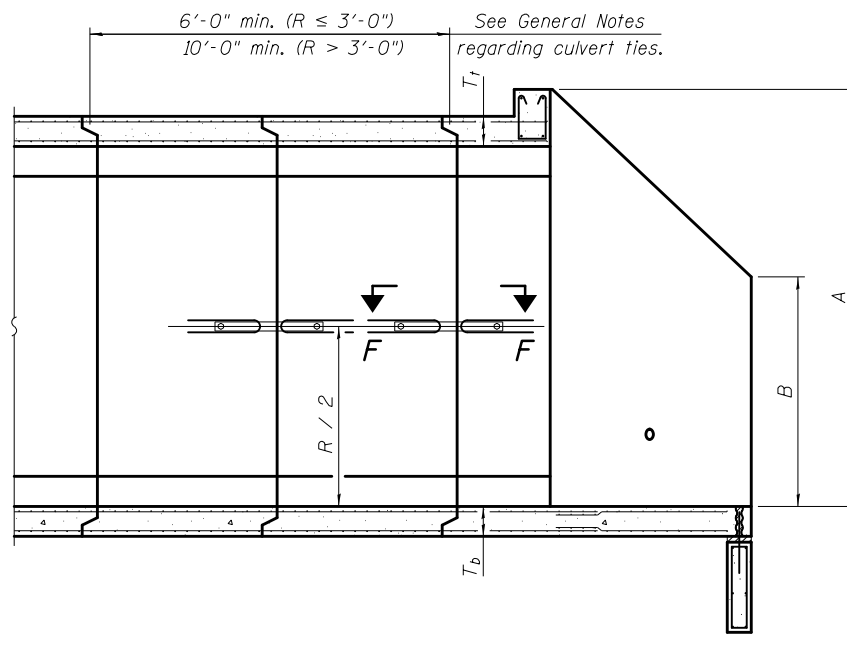
GENERAL PLAN AND ELEVATION
US 24 OVER DITCH
F.A.P. RTE. 317 SEC. 30CR
MCLEAN COUNTY
STATION 916+36.00
S.N. 057-8223

SCB-GPE-AES 10-22-13

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION		F.A.P. RTE. 317	SECTION 30CR	COUNTY MCLEAN	TOTAL SHEETS 66	SHEET NO. 23
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0577\Drawings\0697-Details.dgn	DRWING DATA Design: RUC/0697-details.dgn	CHECKED -	REVISED -		S.N. 057-8223; CULVERT NO. 2		ILLINOIS FED. AID PROJECT		CONTRACT NO. 70697		
\$MODELNAME\$	PLOT DATE = 1/31/2017	DATE -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.			



END VIEW



SECTION A-A

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.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

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 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

All exposed concrete edges shall be chamfered 3/4" unless noted otherwise.

The Contractor may use reinforcement bars in lieu of welded wire fabric (WWF). 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 WWF. Minimum lap lengths detailed herein are applicable to WWF and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

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 the lower 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

Span (S)	Rise (R)	T _t	T _b	T _s	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	10'-4 ⁵ / ₈ "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 ⁷ / ₈ "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	12'-4 ⁵ / ₈ "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 ⁷ / ₈ "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7 ¹ / ₂ "	6"	5"	3'-4 ¹ / ₂ "	2'-2 ¹ / ₂ "	2'-11 ³ / ₈ "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 ¹ / ₂ "	3'-10"	11'-2 ³ / ₈ "	2.8	Yes
4'-0"	3'-0"	7 ¹ / ₂ "	6"	5"	4'-4 ¹ / ₂ "	2'-8 ¹ / ₂ "	3'-11 ³ / ₈ "	5'-7"	13'-8 ¹ / ₈ "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 ¹ / ₂ "	5'-3"	13'-2 ³ / ₈ "	3.7	Yes
4'-0"	4'-0"	7 ¹ / ₂ "	6"	5"	5'-4 ¹ / ₂ "	3'-2 ¹ / ₂ "	4'-11 ³ / ₈ "	7'-0"	15'-8 ¹ / ₈ "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 ⁵ / ₈ "	6'-8"	15'-2 ¹ / ₂ "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 ¹ / ₄ "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	14'-10 ¹ / ₈ "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 ¹ / ₄ "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	16'-10 ¹ / ₈ "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 ¹ / ₄ "	6'-9"	16'-5 ⁷ / ₈ "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	18'-10 ¹ / ₈ "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 ¹ / ₄ "	8'-2"	18'-5 ⁷ / ₈ "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	13'-10 ⁵ / ₈ "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	16'-0 ¹ / ₈ "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	15'-10 ⁵ / ₈ "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	18'-0 ¹ / ₈ "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 ³ / ₄ "	6'-11"	17'-10 ³ / ₄ "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	20'-0 ¹ / ₈ "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 ³ / ₄ "	8'-4"	19'-10 ³ / ₄ "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	22'-0 ¹ / ₄ "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 ³ / ₄ "	9'-9"	21'-10 ³ / ₄ "	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	17'-2 ¹ / ₈ "	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	19'-2 ¹ / ₈ "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	21'-2 ¹ / ₈ "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	23'-2 ¹ / ₄ "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	18'-2 ¹ / ₈ "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	20'-2 ¹ / ₈ "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	22'-2 ¹ / ₈ "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	24'-2 ¹ / ₄ "	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0 ³ / ₄ "	4'-4"	17'-6 ⁷ / ₈ "	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0 ³ / ₄ "	5'-9"	19'-6 ⁷ / ₈ "	7.5	Yes
9'-0"	4'-0"	9"	9"	9"	5'-6"	3'-3"	5'-0 ³ / ₄ "	7'-2"	21'-6 ⁷ / ₈ "	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 ⁷ / ₈ "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 ⁸ / ₈ "	9'-11"	25'-5 ⁵ / ₈ "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 ¹ / ₂ "	4'-5"	18'-10 ¹ / ₄ "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 ¹ / ₂ "	5'-10"	20'-10 ¹ / ₄ "	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1 ¹ / ₂ "	7'-3"	22'-10 ³ / ₈ "	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 ¹ / ₂ "	8'-8"	24'-10 ³ / ₈ "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 ¹ / ₂ "	10'-1"	26'-10 ³ / ₈ "	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2 ⁷ / ₈ "	4'-7"	20'-3 ⁸ / ₈ "	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2 ⁷ / ₈ "	6'-0"	22'-3 ⁸ / ₈ "	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 ¹ / ₄ "	7'-4"	24'-1 ³ / ₈ "	11.5	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 ¹ / ₄ "	10'-2"	28'-1 ⁷ / ₈ "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 ⁵ / ₈ "	4'-8"	21'-6 ¹ / ₂ "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 ⁵ / ₈ "	6'-1"	23'-6 ¹ / ₂ "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 ⁵ / ₈ "	7'-6"	25'-6 ⁵ / ₈ "	13.0	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 ⁵ / ₈ "	10'-4"	29'-6 ⁵ / ₈ "	17.4	Yes

Note:

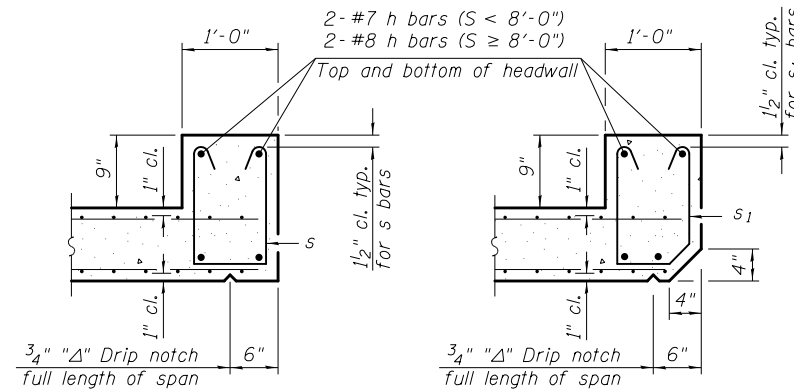
Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES-1

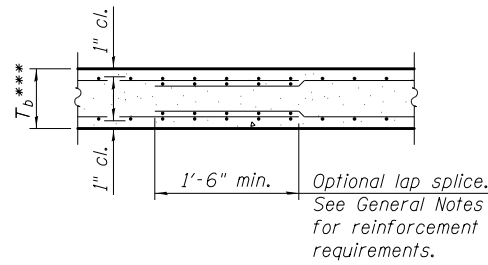
11-5-13

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON AND END SECTION DETAILS S.N. 057-8223; CULVERT NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL084EBIDINTEG.illinois.gov\PIW00TDocuments\DOT Offices\District 5\Projects\0578223\Drawings\Design\067-0697-details.dgn		CHECKED -	REVISED -			317	30CR	MCLEAN	66	24
PLOT SCALE = 48.0000' / in.		DATE -	REVISED -			CONTRACT NO. 70697				
MODELNAME	PLOT DATE = 1/31/2017					SCALE:	SHEET 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT



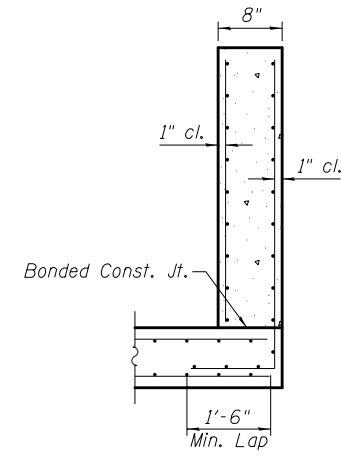
SECTION B-B
(Top slab at downstream end)

SECTION B-B
(Top slab at upstream end)

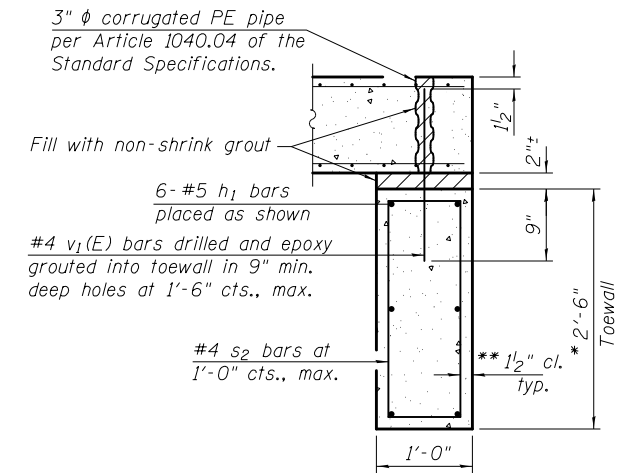


SECTION B-B
(Bottom Slab)

*** This dimension shall be increased by 2" for CIP construction.



SECTION C-C



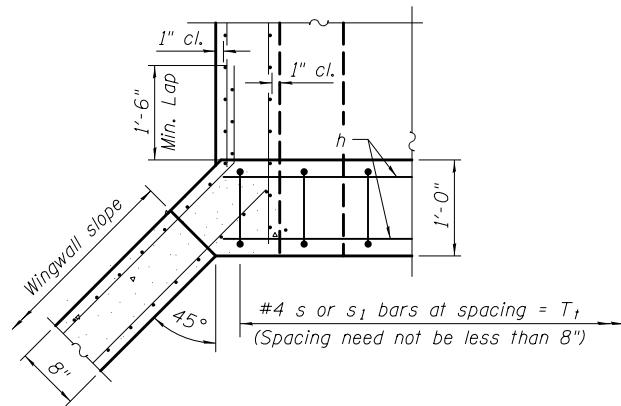
SECTION D-D

TOEWALL CONSTRUCTION SEQUENCE

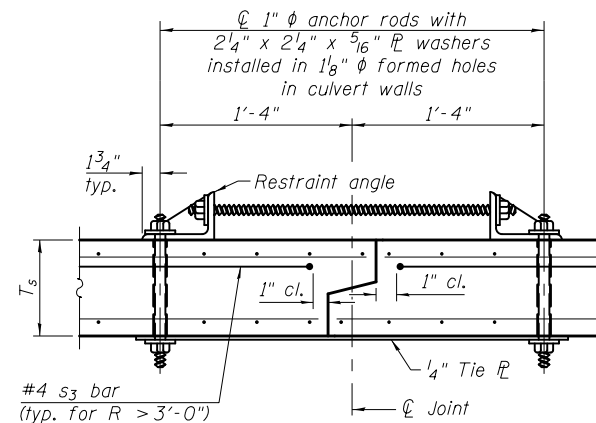
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

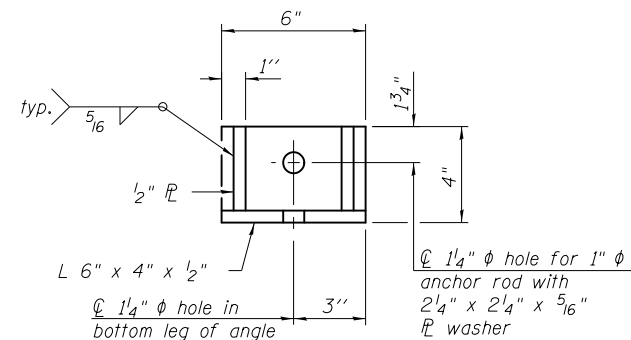
** If soil conditions permit, toewall may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toewall shall be increased to 3" by increasing the size of the toewall.



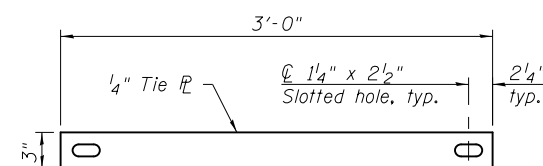
SECTION E-E



SECTION F-F
(Showing culvert tie details)



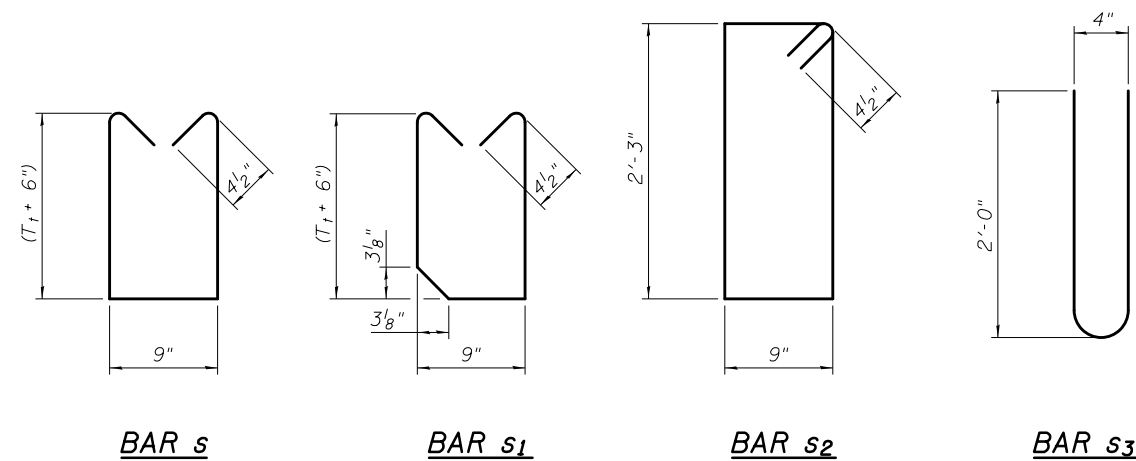
RESTRAINT ANGLE DETAIL



TIE PLATE DETAIL

Notes:

1" φ anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M111 or M232 as applicable. 2 1/4" x 2 1/4" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.

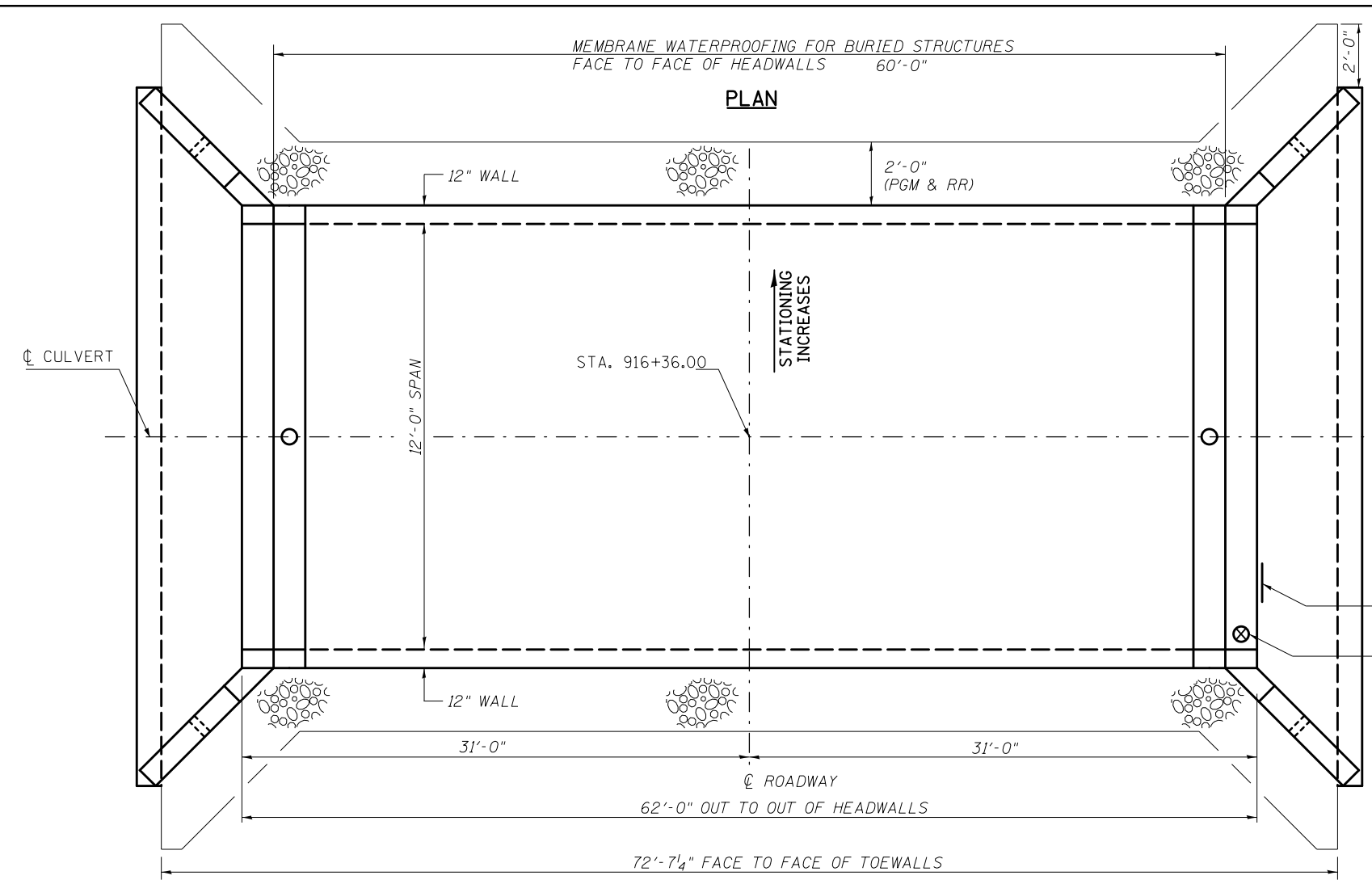


SCB-AES-2

11-5-13

(Sheet 2 of 2)

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON AND END SECTION DETAILS S.N. 057-8223; CULVERT NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\057\DESIGN\057-8223-Details.dgn	DESIGNED - RTC	REVISED -	317			30CR	MCLEAN	66	25	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70697							
MODELNAME	DATE -	REVISED -	SCALE:			SHEET 2 OF 2 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		



STONE RIPRAP, CLASS A1
(IF REQUIRED)

STONE RIPRAP, CLASS A1 SHALL BE USED DUE TO UNSTABLE SOIL CONDITIONS

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 281 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR STONE RIPRAP, CLASS A1.

THE EXCAVATION AND REMOVAL OF THE UNSUITABLE MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED WITH THE PAY ITEM FOR STONE RIPRAP, CLASS A1.

POROUS GRANULAR EMBANKMENT

POROUS GRANULAR EMBANKMENT SHALL EXTEND 2 FT. BEYOND THE AGGREGATE SHOULDER

THE WORK SHOWN IN THE DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF ARTICLE 207 AND ARTICLE 540 OF THE STANDARD SPECIFICATIONS.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR POROUS GRANULAR EMBANKMENT.

THE AREA TO BE EXCAVATED FOR THE PROPOSED BOX CULVERT AND END SECTIONS SHALL NOT BE MEASURED FOR PAYMENT. THE COST OF THE EXCAVATION SHALL BE INCLUDED IN THE COST OF PRECAST CONCRETE BOX CULVERTS.

NAME PLATE
PERMANENT BENCHMARK

MEMBRANE WATERPROOFING FOR BURIED STRUCTURES

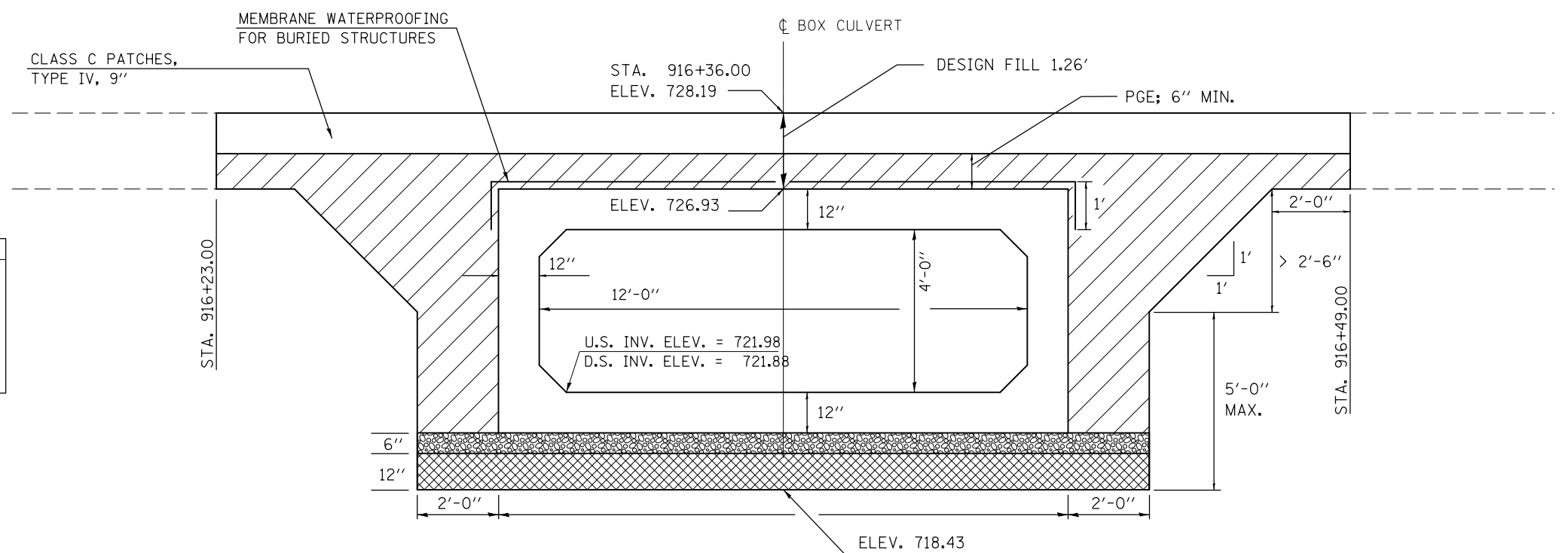
SEE GUIDE BRIDGE SPECIAL PROVISION NO. 81

BILL OF MATERIAL

Item	Unit	Total
POROUS GRANULAR EMBANKMENT	CU YD	51.0
STONE RIPRAP, CLASS A1	TON	45.0
MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SQ YD	107.0

LEGEND

	POROUS GRANULAR EMBANKMENT (CA-6)
	POROUS GRANULAR MATERIAL (CA-7) (6'') INCLUDED WITH PRECAST BOX CULVERT
	STONE RIPRAP, CLASS A1



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -
p:\11\084EBID\INTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\05796\Drawings\Design\0570697-details.dgn		REVISION	REVISION
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISION	REVISION
PLOT DATE = 1/31/2017	DATE -	REVISION	REVISION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

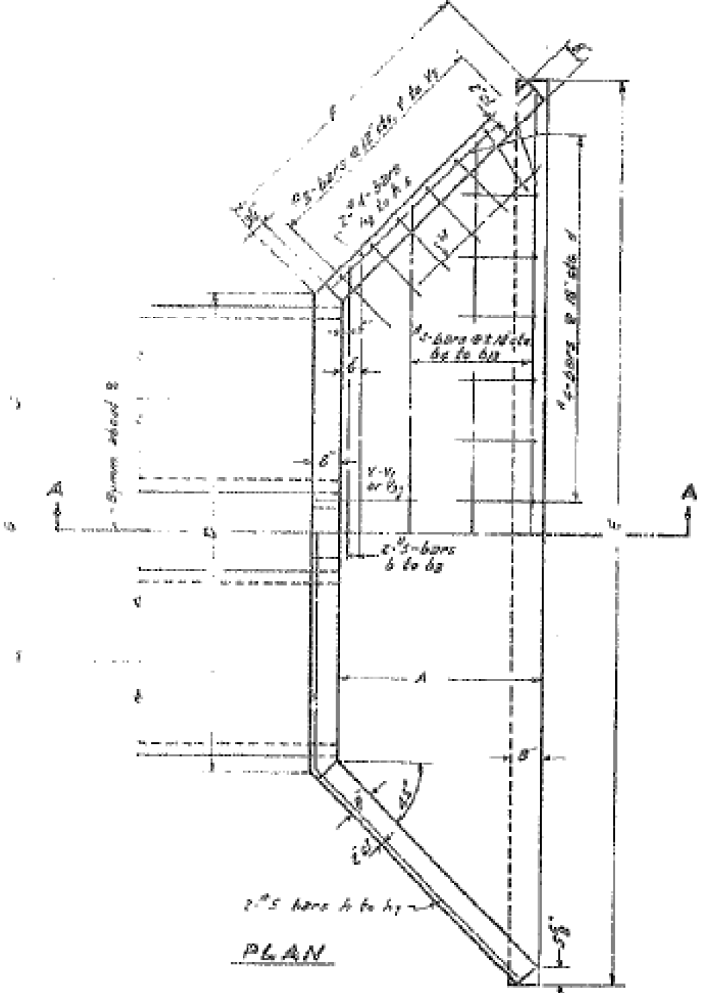
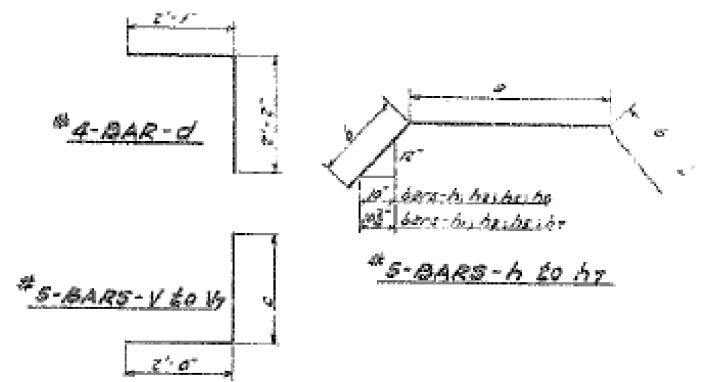
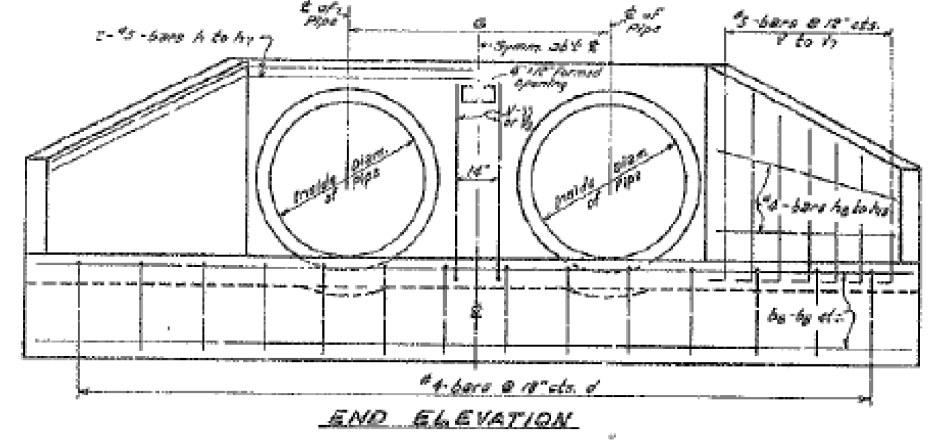
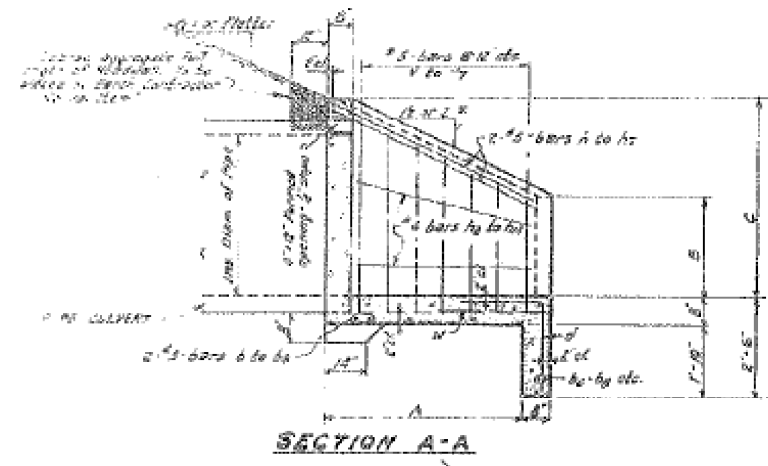
POROUS GRANULAR EMBANKMENT DETAILS
S.N. 057 + 8223; CULVERT NO. 2

SCALE: N/A SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	26
CONTRACT NO. 70697				
ILLINOIS FED. AID PROJECT				

NOTE:
 1. EXISTING S.N. 057-8070 IS LOCATED AT STA. 916+36
 2. THIS AS-BUILT PLAN SHEET IS FROM FILE -

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS



DIMENSIONS OF BENT BARS

BARS	C	TOTAL LENGTH	2-PIPS			3-PIPS			
			B	b	TOTAL LENGTH	B	b	TOTAL LENGTH	
V	8'-0"	8'-0"	h	10'-5"	8'-0"	20'-9"	10'-2"	8'-0"	26'-6"
V1	5'-0"	7'-6"	h1	10'-5"	8'-0"	20'-9"	10'-2"	8'-0"	26'-6"
V2	6'-0"	7'-0"	h2	11'-5"	8'-0"	20'-9"	11'-0"	8'-0"	29'-9"
V3	8'-0"	8'-0"	h3	11'-5"	7'-0"	20'-9"	11'-0"	7'-0"	33'-0"
V4	4'-0"	8'-0"	h4	12'-9"	8'-0"	25'-9"	10'-5"	8'-0"	32'-9"
V5	3'-0"	8'-0"	h5	12'-9"	8'-0"	25'-9"	10'-5"	8'-0"	32'-9"
V6	3'-0"	8'-0"	h6	13'-11"	7'-0"	28'-3"	11'-5"	7'-0"	35'-9"
V7	2'-0"	8'-0"	h7	13'-11"	7'-0"	28'-3"	11'-5"	7'-0"	35'-9"

DIMENSIONS AND QUANTITIES

DESIGN NO.	INSIDE DIAM. OF PIPE	SLOPE OF FILL A	DIMENSIONS										QUANTITIES			
			FOR ALL MULTIPLES					2-PIPS		3-PIPS			2-PIPS		3-PIPS	
A	B	C	F	G	D	E	D	E	D	E	CL. X CONC. E-HEADWALLS CU. YDS.	REIN. BARS E-HEADWALLS LBS.	CL. X CONC. E-HEADWALLS CU. YDS.	REIN. BARS E-HEADWALLS LBS.		
D42-1/2	42"	1 1/2	3'-0"	2'-2"	2'-2"	5'-0"	5'-9"	10'-7"	11'-8"	10'-4"	23'-2"	7.1	460	4.2	600	
D42-2	42"	2:1	4'-0"	2'-2"	2'-2"	5'-0"	5'-9"	10'-7"	11'-8"	10'-4"	26'-7"	8.8	500	4.4	600	
D48-1/2	48"	1 1/2	3'-9"	2'-5"	2'-0"	5'-7"	6'-4"	11'-9"	10'-8"	18'-1"	26'-0"	8.4	510	4.1	610	
D48-2	48"	2:1	4'-0"	2'-5"	2'-0"	5'-7"	6'-4"	11'-9"	10'-8"	18'-1"	28'-2"	10.3	580	4.7	700	
D54-1/2	54"	1 1/2	4'-0"	2'-8"	2'-0"	6'-0"	6'-8"	12'-0"	10'-8"	19'-10"	28'-7"	10.0	580	4.1	700	
D54-2	54"	2:1	5'-7"	2'-8"	2'-0"	6'-5"	6'-8"	12'-0"	10'-8"	19'-10"	31'-5"	12.6	670	4.6	810	
D60-1/2	60"	1 1/2	4'-7"	2'-11"	2'-0"	6'-9"	7'-0"	10'-11"	10'-8"	21'-7"	31'-2"	11.7	680	4.5	790	
D60-2	60"	2:1	6'-2"	2'-11"	2'-0"	7'-0"	7'-0"	11'-1"	10'-8"	21'-7"	34'-4"	15.0	780	4.8	930	

DIMENSIONS OF STRAIGHT BARS

BAR	SIZE	LENGTH	
		2-PIPS	3-PIPS
b	#5	11'-9"	17'-0"
b1	#5	13'-0"	19'-3"
b2	#5	14'-0"	20'-9"
b3	#5	15'-3"	22'-9"
b4	#4	16'-0"	20'-0"
b5	#4	16'-3"	25'-0"
b6	#4	17'-3"	26'-0"
b7	#4	19'-0"	24'-0"
b8	#4	19'-0"	25'-5"
b9	#4	20'-6"	26'-0"
b10	#4	21'-3"	27'-0"
b11	#4	23'-0"	27'-9"
b12	#4	24'-0"	30'-0"
b13	#4	25'-0"	34'-0"
h3	#4	4'-9"	8'-9"
h4	#4	5'-3"	5'-3"
h10	#4	6'-0"	6'-0"
h11	#4	6'-6"	6'-6"
h12	#4	7'-3"	7'-3"
h13	#4	8'-0"	8'-0"
h14	#4	8'-9"	8'-9"
w	#4	3'-0"	4'-0"

BARS IN ONE HEADWALL - 2-PIPS

42" PIPE		48" PIPE		54" PIPE		60" PIPE	
BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.
17	18	18	18	18	18	18	18
6	6	6	6	6	6	6	6
62	62	62	62	62	62	62	62
64	64	64	64	64	64	64	64
66	66	66	66	66	66	66	66
68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69
h	h	h	h	h	h	h	h
h9	h9	h9	h9	h9	h9	h9	h9
v7	v7	v7	v7	v7	v7	v7	v7
v8	v8	v8	v8	v8	v8	v8	v8
v9	v9	v9	v9	v9	v9	v9	v9
w	w	w	w	w	w	w	w

BARS IN ONE HEADWALL - 3-PIPS

42" PIPE		48" PIPE		54" PIPE		60" PIPE	
BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.	BAR NO.
17	17	17	17	17	17	17	17
6	6	6	6	6	6	6	6
62	62	62	62	62	62	62	62
64	64	64	64	64	64	64	64
66	66	66	66	66	66	66	66
68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69
h	h	h	h	h	h	h	h
h9	h9	h9	h9	h9	h9	h9	h9
v7	v7	v7	v7	v7	v7	v7	v7
v8	v8	v8	v8	v8	v8	v8	v8
v9	v9	v9	v9	v9	v9	v9	v9
w	w	w	w	w	w	w	w

NOTE: - Class K concrete shall be used throughout.
 If embankment slope above headwall is flatter than 2:1 provide wings for 2:1 slope.
 Long bars may be galvanized using laps of 20 diameters. No extra compensation will be allowed.
 All bars shall be round ASTM A305-49. The size number (indicated thus "5") is the number of 1/8 inches in the nominal diameter.

REINFORCED CONCRETE HEADWALLS FOR MULTIPLE PIPE CULVERTS, 42", 48", 54" AND 60" DIAMETER, 2 AND 3 PIPES AT RIGHT ANGLES WITH ROADWAY

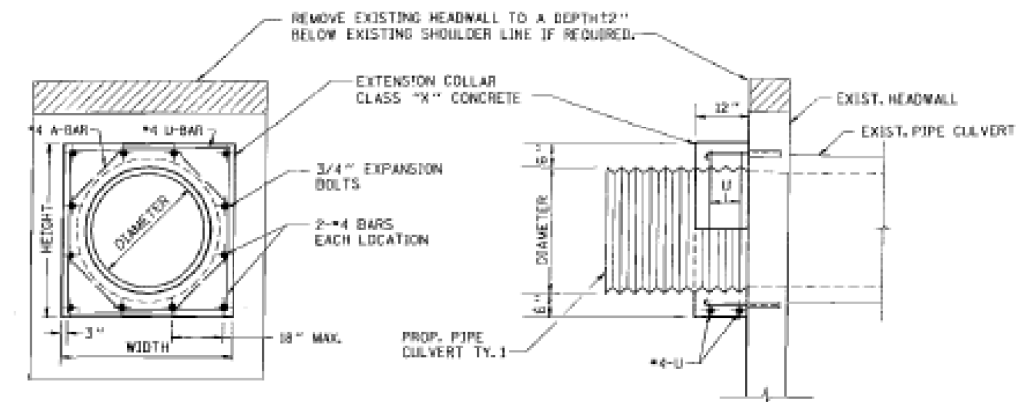
STANDARD E103

FOR INFORMATION ONLY

FOR INFORMATION ONLY

NOTE:
 1. EXISTING S.N. 057-8070 IS LOCATED AT STA. 916+36
 2. THIS AS-BUILT PLAN SHEET IS FROM FILE - 057102.US00024.8605.3155L.PDF

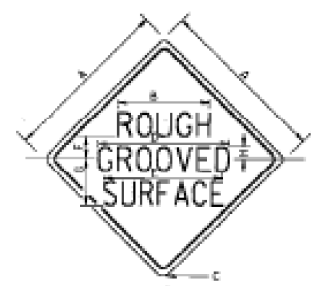
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 49	30CR15	MCLEAN	66	25
PROJECT				
K WOODFORD/MCLEAN				



EXPANSION BOLTS SHALL CONSIST OF SELF DRILLING EXPANSION SHIELDS AND 3/4" DIA. HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE. BOLTS SHALL BE DRILLED IN THE CENTER OF THE EXISTING BOX CULVERT BARREL WALLS.
 MINIMUM CERTIFIED PROOF LOAD = 4,000 LBS.

LOCATION	EXISTING CULVERT SIZE	PIPE DIMENSION	PIPE AREA	EXTENSION COLLAR		A-BAR			U-BAR			FOR INFORMATION ONLY	
				WIDTH	HEIGHT	"2"	"3"	"4"	"1"	"2"	"3"	CLASS X CONC. HDWL.	REINFORCEMENT BARS
796+04	3#24	3#24	3.1	36	36	20	15	30	0.22	19	8		
845+79	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
850+60	24	24	3.1	36	36	20	15	30	0.22	19	8		
903+67	3#36	3#36	7.1	48	48	20	27	41	0.33	24	12		
916+36	3#42	3#42	9.6	54	54	22	31	48	0.39	27	12		
975+00	18	18	1.8	30	30	17	23	24	0.17	16	4		
1030+95	2#30	2#30	4.9	42	42	17	23	36	0.27	20	12		
1055+23	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
1110+48	36	36	7.1	48	48	20	27	41	0.33	24	12		
1126+10	2#36	2#36	7.1	48	48	20	27	41	0.33	24	12		
790+65	12	12	0.78	24	24	11	16	18	0.12	13	4		
904+27	30	30	4.9	42	42	17	23	36	0.27	20	12		

PIPE CULVERT EXTENSION DETAIL (COLLAR)

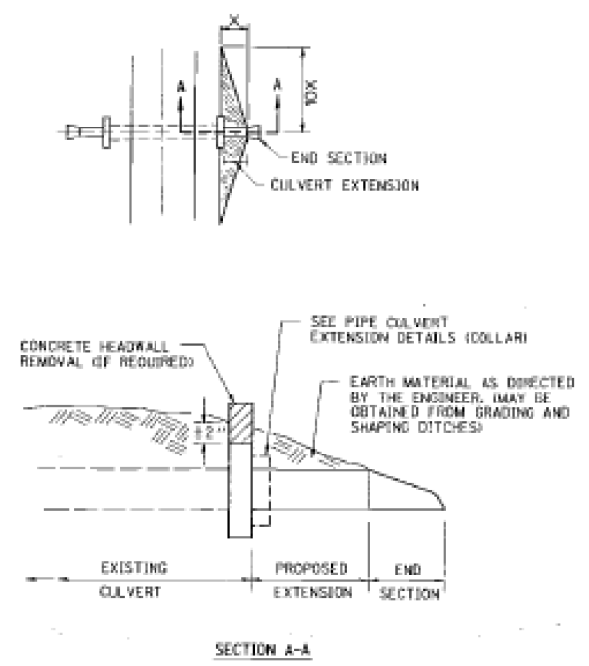


SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	H
36 X 36	36.0	17.2	2.2	24.3	23.5	5.5	10.5	2.5
48 X 48	48.0	24.1	3.0	34.0	33.0	6.0	13.0	3.5

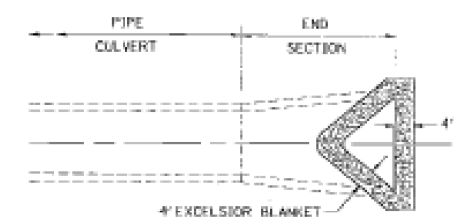
SIGN SIZE	SERIES LINES			MARGIN	BORDER	BLANK STD.
	1	2	3			
36 X 36	5C	5C	5C	0.6	0.8	B4-360
48 X 48	7C	7C	7C	0.8	1.2	B4-480

ALL DIMENSIONS IN INCHES.

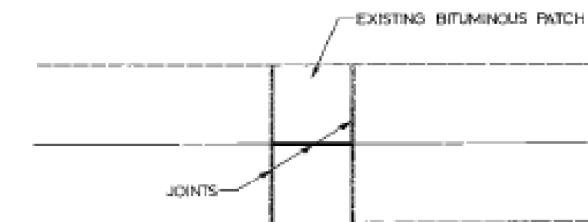
SIGNING FOR COLD MILLING OPERATIONS



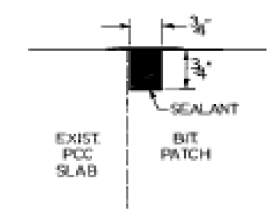
PLAN AT CULVERT EXTENSIONS



EXCELSIOR BLANKET AT PROPOSED END SECTIONS



PLAN VIEW



ROUTED & FILLED JOINT

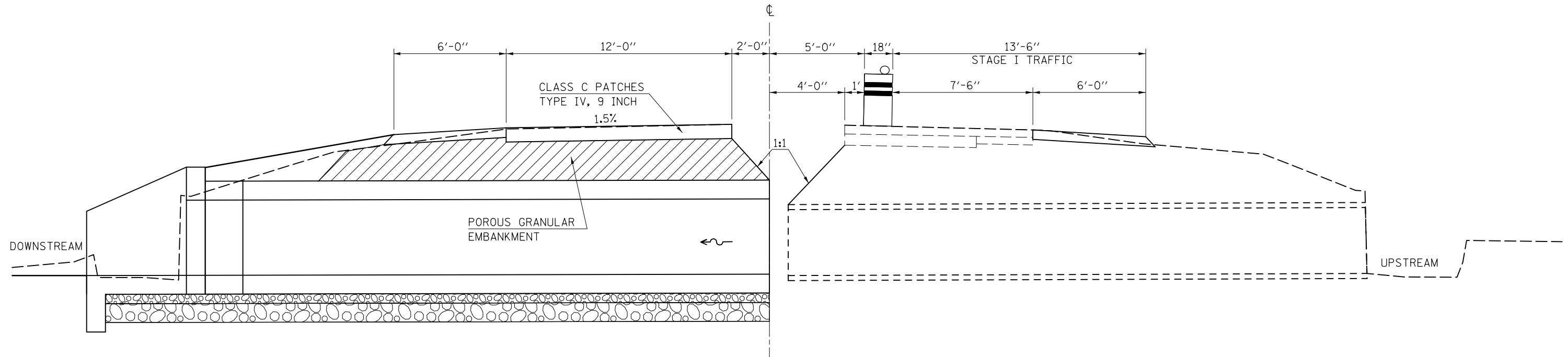
JOINT SEALING PATCHES DETAIL

DETAILS

FOR INFORMATION ONLY

FOR INFORMATION ONLY

TYPICAL STAGING DETAILS SN 057-8224 STAGE I

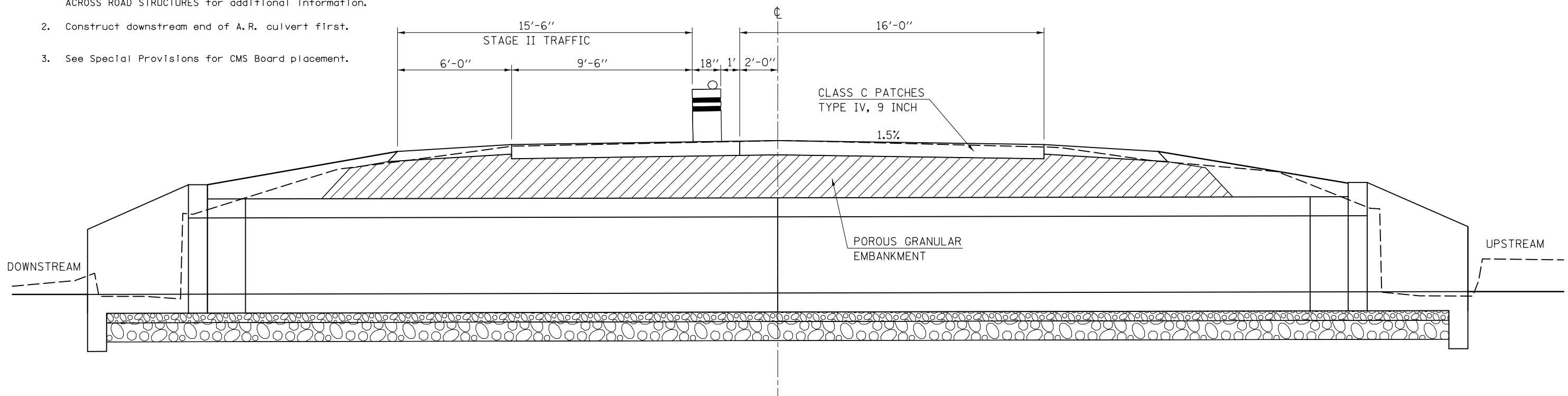


TRAFFIC CONTROL STANDARD	ESTIMATED TIME	CHANGEABLE MESSAGE SIGNS
701206	2 Days - 48 hrs. - Non-Stop (2) - 12 hr. Day Shifts (2) - 12 hr. Night Shifts	2 EACH AT 2.0 CAL DAY = 4.0 CAL DAY

NOTES

1. Refer to Special Provisions for TRAFFIC CONTROL AND PROTECTION, STANDARD 701206 and STAGE CONSTRUCTION ACROSS ROAD STRUCTURES for additional information.
2. Construct downstream end of A.R. culvert first.
3. See Special Provisions for CMS Board placement.

TYPICAL STAGING DETAILS SN 055-8224 STAGE II



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAILS S.N. 057-8224; CULVERT NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\057-8224\Drawings\Design\0570697-details.dgn		DRAWN -	REVISED -			317	30CR	MCLEAN	66	30
PLOT SCALE = 48.0000' / in.		CHECKED -	REVISED -		SCALE: N/A	SHEET 2 OF 3 SHEETS		CONTRACT NO. 70697	ILLINOIS FED. AID PROJECT	
PLOT DATE = 1/31/2017		DATE -	REVISED -		STA. ----- TO STA. -----					

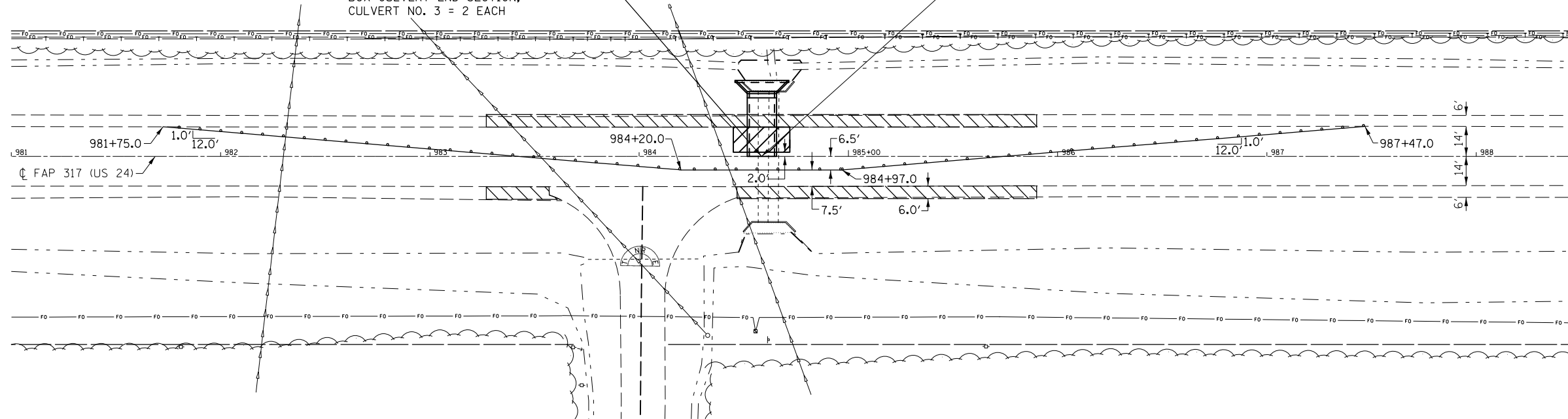
CULVERT NO. 3 – STAGE I TRAFFIC CONTROL PLAN

CLASS C PATCHES,
TYPE IV, 8 INCH

AGGREGATE SHOULDERS,
TYPE B, 6"

PROPOSED S.N. 057-8224
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 984+62
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 3 = 2 EACH

EXISTING S.N. 057-8072
3 - 42" x 63' CMP CULVERTS
CL STATION 984+62
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

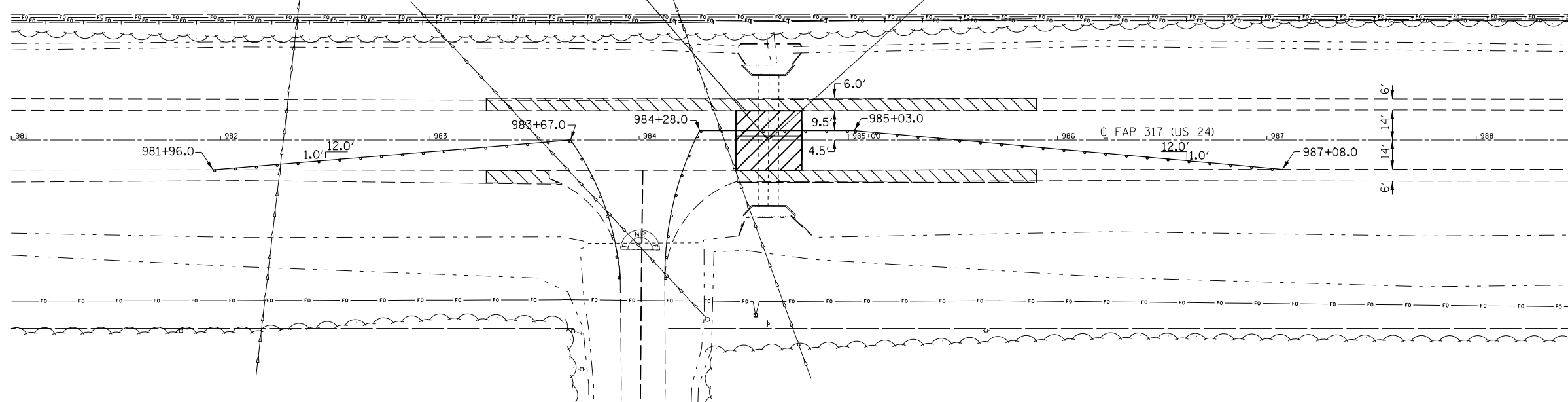
CULVERT NO. 3 – STAGE II TRAFFIC CONTROL PLAN

CLASS C PATCHES,
TYPE IV, 8 INCH

AGGREGATE SHOULDERS,
TYPE B, 6"

PROPOSED S.N. 057-8224
PRECAST CONCRETE BOX CULVERT
1 @ 12' x 4' x 62'
CL STATION 984+62
SKEW = 0°
BOX CULVERT END SECTION,
CULVERT NO. 3 = 2 EACH

EXISTING S.N. 057-8072
3 - 42" x 63' CMP CULVERTS
CL STATION 984+62
SKEW = 0°



NOTE:
INSTALL TRAFFIC CONTROL NOTED AND IN
ACCORDANCE WITH STANDARD 701206

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL PLAN S.N. 057-8224; CULVERT NO. 3			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0578224\Design\0570697-sh-t-traffic-control-plan.dgn	DRAWN	REVISED	REVISED					317	3OCR	MCLEAN	66	31
PLOT SCALE = 60.0000' / in.	CHECKED -	REVISED -	REVISED -					CONTRACT NO. 70697				
#MODELNAME#	PLOT DATE = 1/31/2017	DATE -	REVISED -	SCALE:	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

Existing Structure: Triple 42" CMP Culverts with Cast-in-Place End Sections.

Benchmark: Chisled square on top of NE corner of north headwall. Headwall is reached from the intersection of US 24 and TR 1750E, travel east 68'. Vertical Datum = NAVD 88. Elevation = 727.042.

INDEX OF SHEETS

1. General Plan and Elevation
- 2.-3. Precast Concrete Box Culvert Apron End Section Details

GENERAL NOTES

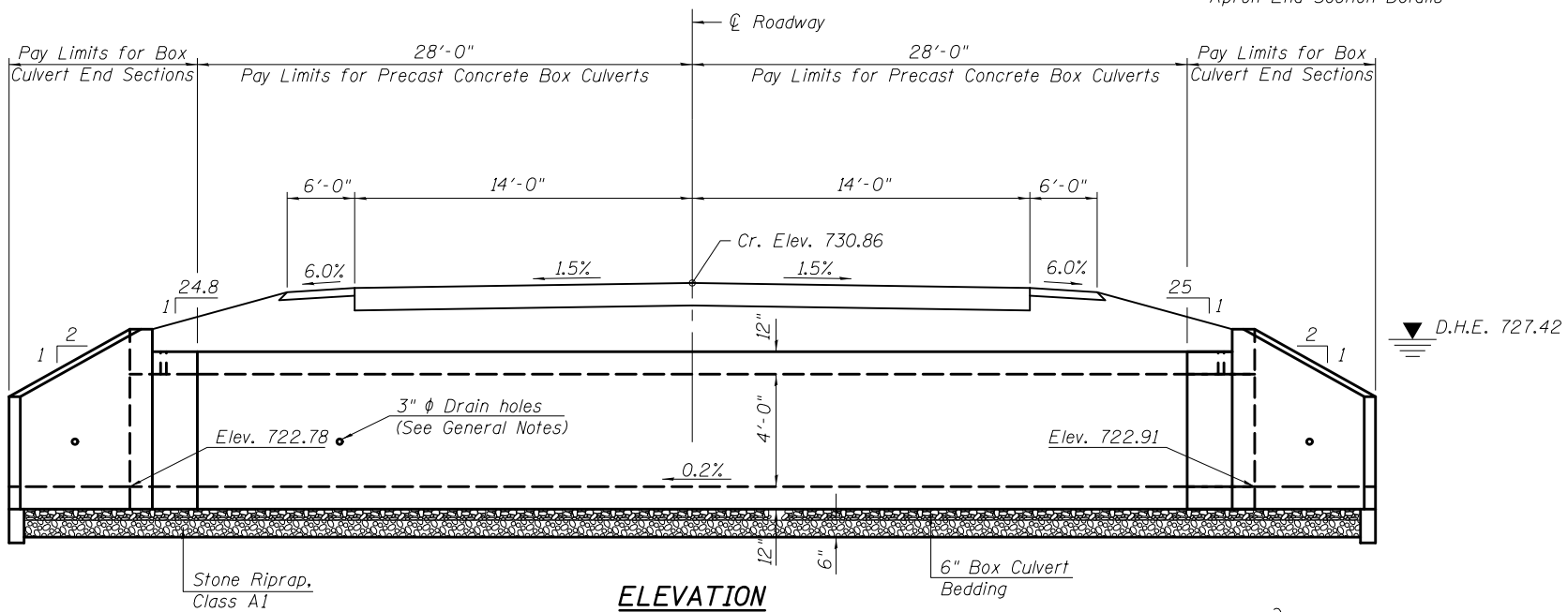
The design fill height for this box is 3.01 ft. The precast box culvert sections shall conform to the requirements of ASTM C1577.

Drain holes shall be provided on exterior culvert walls for each precast box segment 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, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

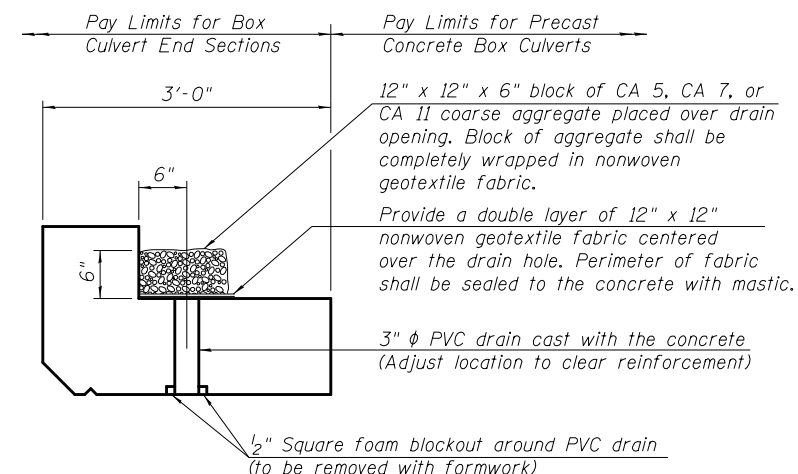
The 6 in. thick layer of porous granular material required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.

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

Precast concrete box culverts and box culvert end sections shall be backfilled with Porous Granular Embankment below the top of the box culvert extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ft from the face of embankment.

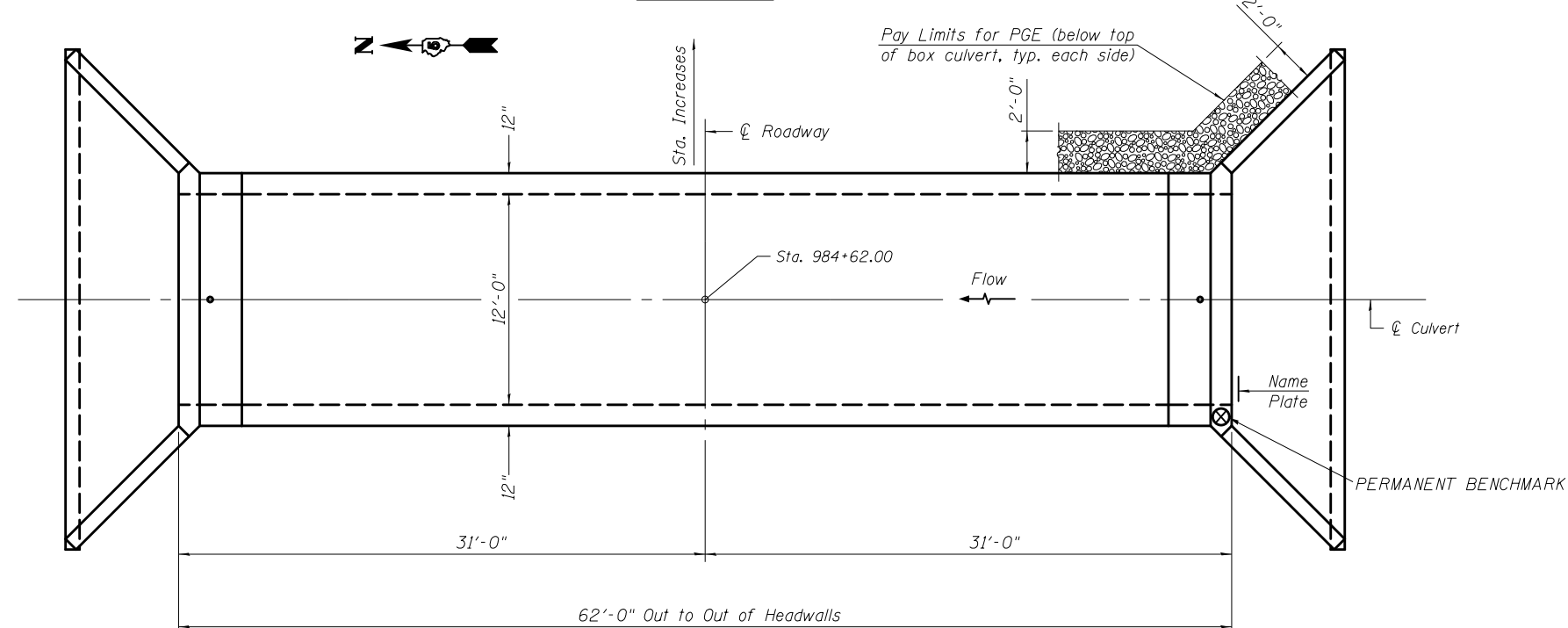


ELEVATION



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.)



PLAN

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
6th Edition with 2013 interims

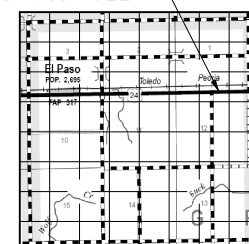
LOADING HL-93

DESIGN STRESSES

PRECAST UNITS

$f'_c = 5,000 \text{ psi}$
 $f_y = 65,000 \text{ psi}$ (Welded Wire Fabric)

S.N. 057-8224



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures No. 3	Each	1.0
Name Plates	Each	1.0
Box Culvert End Sections, Culvert No. 3	Each	2.0
Precast Concrete Box Culverts, 12'x4'	Foot	56.0
Porous Granular Embankment	Cu. Yd.	210.0
Stone Riprap, Class A1	Ton	90.0
Membrane Waterproofing	Sq. Yd.	107.0

WATERWAY INFORMATION

Drainage Area = 0.589 Sq Mi Low Grade Elev. = 730.86 @ Sta. 984+65.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	193	29	42					728.16	726.37
Design	50	320	29	48				Over	727.42
Base	100	379	29	48				Over	728.03
Overtopping	500	522	29	48				Over	729.91
Max. Calc.									

STATION 984+62.00
BUILT 20XX BY
STATE OF ILLINOIS
F.A.P. RT. 317
SEC. 30CR
LOADING HL-93
STR. NO. 057-8224

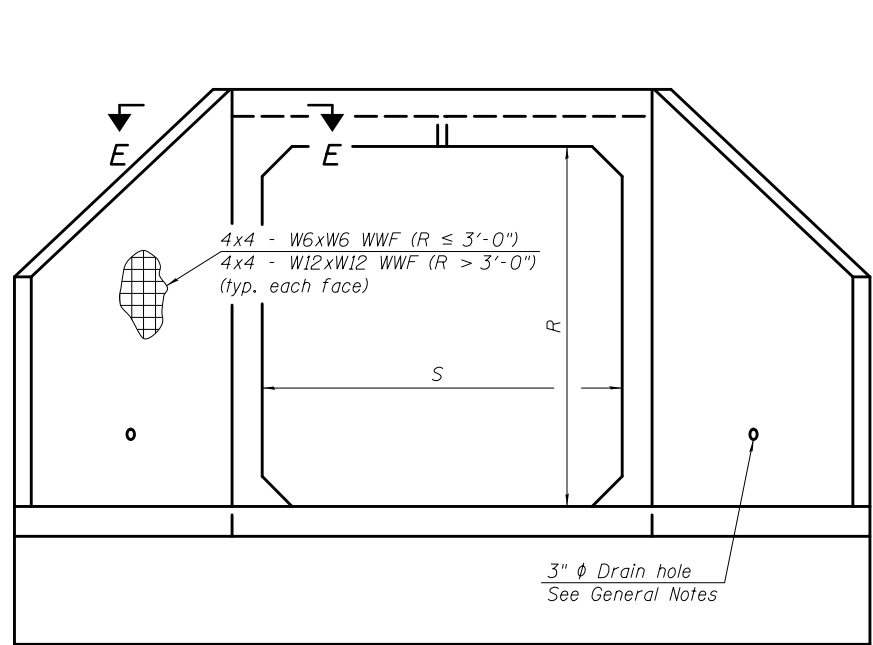
NAME PLATE
See Std. 515001

GENERAL PLAN AND ELEVATION
US 24 OVER DITCH
F.A.P. RTE. 317 SEC. 30CR
MCLEAN COUNTY
STATION 984+62.00
S.N. 057-8224

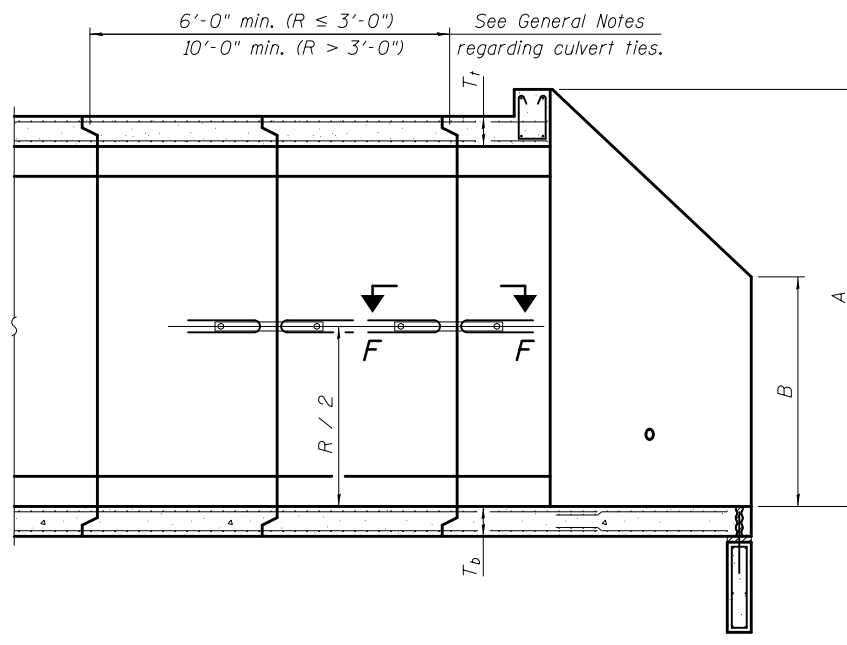
SCB-GPE-AES

10-22-13

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION		F.A.P. RTE. 317	SECTION 30CR	COUNTY MCLEAN	TOTAL SHEETS 66	SHEET NO. 32	
pw:\IL\084EBIDINTEG\Illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0577\Drawings\0670697-details.dgn	DRWING DATA\Design\0670697-details.dgn	CHECKED -	REVISED -		S.N. 057-8224; CULVERT NO. 3		SCALE:	SHEET 1	OF 1 SHEETS	STA. TO STA.	CONTRACT NO. 70697	
\$MODELNAME\$	PLOT DATE = 1/31/2017	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					



END VIEW



SECTION A-A

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.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

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 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

All exposed concrete edges shall be chamfered 3/4" unless noted otherwise.

The Contractor may use reinforcement bars in lieu of welded wire fabric (WWF). 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 WWF. Minimum lap lengths detailed herein are applicable to WWF and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

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 the lower 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

Span (S)	Rise (R)	T _t	T _b	T _s	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	10'-4 ⁵ / ₈ "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 ⁷ / ₈ "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	12'-4 ⁵ / ₈ "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 ⁷ / ₈ "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7 ¹ / ₂ "	6"	5"	3'-4 ¹ / ₂ "	2'-2 ¹ / ₂ "	2'-11 ³ / ₈ "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 ¹ / ₂ "	3'-10"	11'-2 ³ / ₈ "	2.8	Yes
4'-0"	3'-0"	7 ¹ / ₂ "	6"	5"	4'-4 ¹ / ₂ "	2'-8 ¹ / ₂ "	3'-11 ³ / ₈ "	5'-7"	13'-8 ¹ / ₈ "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 ¹ / ₂ "	5'-3"	13'-2 ³ / ₈ "	3.7	Yes
4'-0"	4'-0"	7 ¹ / ₂ "	6"	5"	5'-4 ¹ / ₂ "	3'-2 ¹ / ₂ "	4'-11 ³ / ₈ "	7'-0"	15'-8 ¹ / ₈ "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 ⁵ / ₈ "	6'-8"	15'-2 ¹ / ₂ "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 ¹ / ₄ "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	14'-10 ¹ / ₈ "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 ¹ / ₄ "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	16'-10 ¹ / ₈ "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 ¹ / ₄ "	6'-9"	16'-5 ⁷ / ₈ "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	18'-10 ¹ / ₈ "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 ¹ / ₄ "	8'-2"	18'-5 ⁷ / ₈ "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	13'-10 ⁵ / ₈ "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	16'-0 ¹ / ₈ "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	15'-10 ⁵ / ₈ "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	18'-0 ¹ / ₈ "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 ³ / ₄ "	6'-11"	17'-10 ³ / ₄ "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	20'-0 ¹ / ₈ "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 ³ / ₄ "	8'-4"	19'-10 ³ / ₄ "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	22'-0 ¹ / ₄ "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 ³ / ₄ "	9'-9"	21'-10 ³ / ₄ "	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	17'-2 ¹ / ₈ "	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	19'-2 ¹ / ₈ "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	21'-2 ¹ / ₈ "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	23'-2 ¹ / ₄ "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	18'-2 ¹ / ₈ "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	20'-2 ¹ / ₈ "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	22'-2 ¹ / ₈ "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	24'-2 ¹ / ₄ "	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0 ³ / ₄ "	4'-4"	17'-6 ⁷ / ₈ "	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0 ³ / ₄ "	5'-9"	19'-6 ⁷ / ₈ "	7.5	Yes
9'-0"	4'-0"	9"	9"	9"	5'-6"	3'-3"	5'-0 ³ / ₄ "	7'-2"	21'-6 ⁷ / ₈ "	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 ⁷ / ₈ "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 ⁸ / ₈ "	9'-11"	25'-5 ⁵ / ₈ "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 ¹ / ₂ "	4'-5"	18'-10 ¹ / ₄ "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 ¹ / ₂ "	5'-10"	20'-10 ¹ / ₄ "	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1 ¹ / ₂ "	7'-3"	22'-10 ³ / ₈ "	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 ¹ / ₂ "	8'-8"	24'-10 ³ / ₈ "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 ¹ / ₂ "	10'-1"	26'-10 ³ / ₈ "	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2 ⁷ / ₈ "	4'-7"	20'-3 ⁸ / ₈ "	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2 ⁷ / ₈ "	6'-0"	22'-3 ⁸ / ₈ "	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 ¹ / ₄ "	7'-4"	24'-1 ³ / ₈ "	11.5	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 ¹ / ₄ "	10'-2"	28'-1 ⁷ / ₈ "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 ⁵ / ₈ "	4'-8"	21'-6 ¹ / ₂ "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 ⁵ / ₈ "	6'-1"	23'-6 ¹ / ₂ "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 ⁵ / ₈ "	7'-6"	25'-6 ⁵ / ₈ "	13.0	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 ⁵ / ₈ "	10'-4"	29'-6 ⁵ / ₈ "	17.4	Yes

Note:

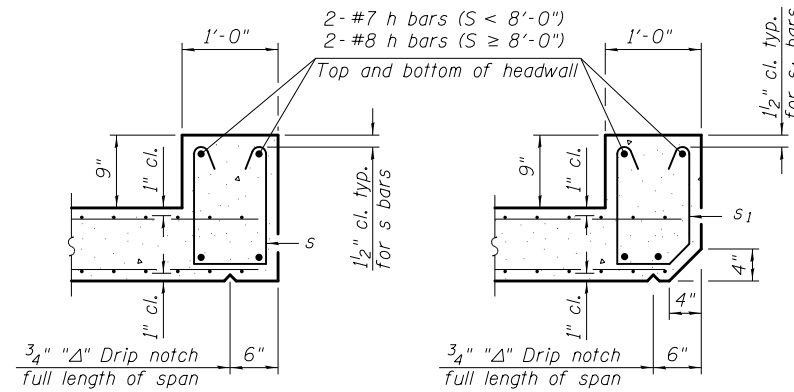
Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES-1

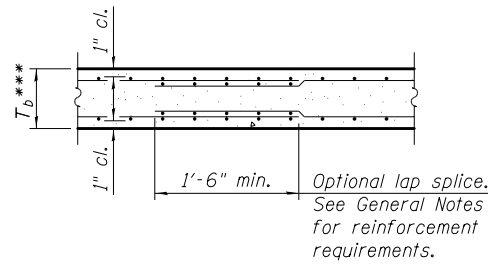
11-5-13

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON AND END SECTION DETAILS S.N. 057-8224; CULVERT NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL084EBIDINTEG\Illinois.gov\PIW001\Documents\DOT Offices\District 5\Projects\057\057-8224\057-8224-Details.dgn		CHECKED -	REVISED -			317	30CR	MCLEAN	66	33
PLOT SCALE = 48.0000' / in.		DATE -	REVISED -			CONTRACT NO. 70697				
#MODELNAME#						SCALE:	SHEET 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT



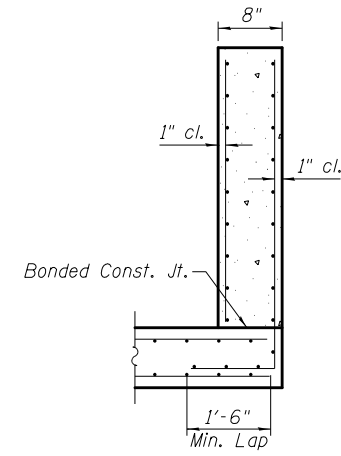
SECTION B-B
(Top slab at downstream end)

SECTION B-B
(Top slab at upstream end)

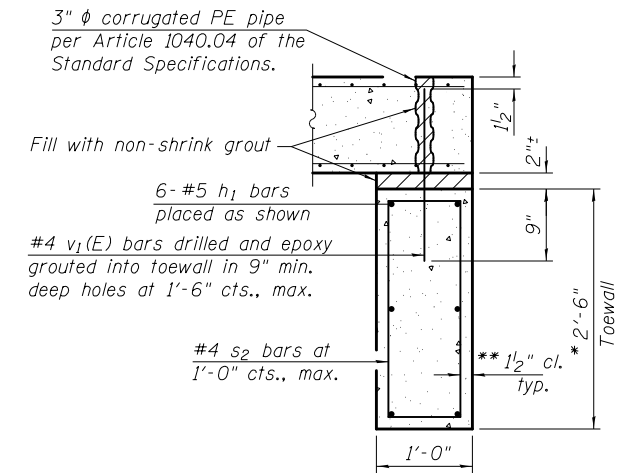


SECTION B-B
(Bottom Slab)

*** This dimension shall be increased by 2" for CIP construction.



SECTION C-C



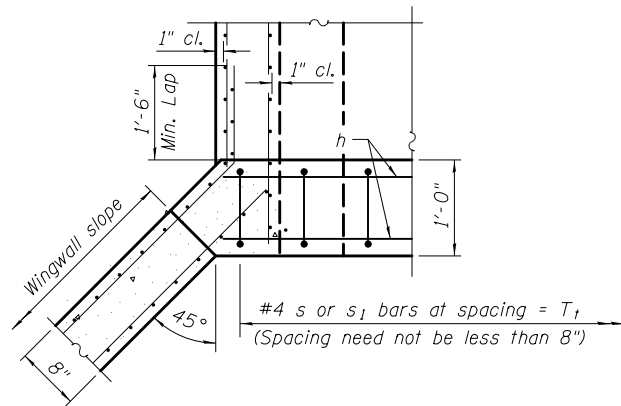
SECTION D-D

TOEWALL CONSTRUCTION SEQUENCE

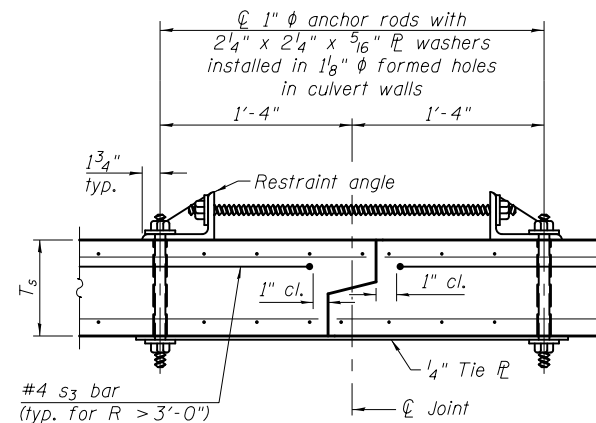
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

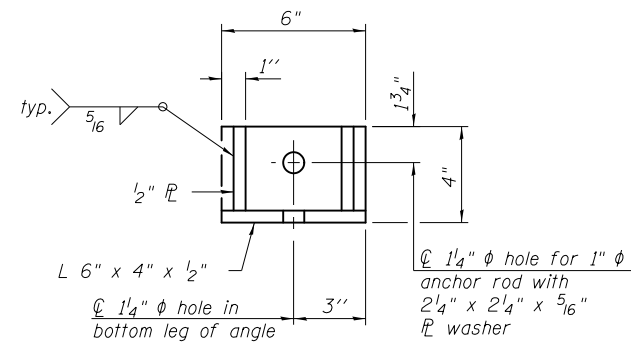
** If soil conditions permit, toewall may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toewall shall be increased to 3" by increasing the size of the toewall.



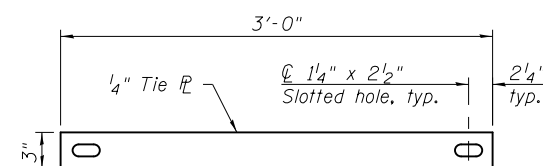
SECTION E-E



SECTION F-F
(Showing culvert tie details)



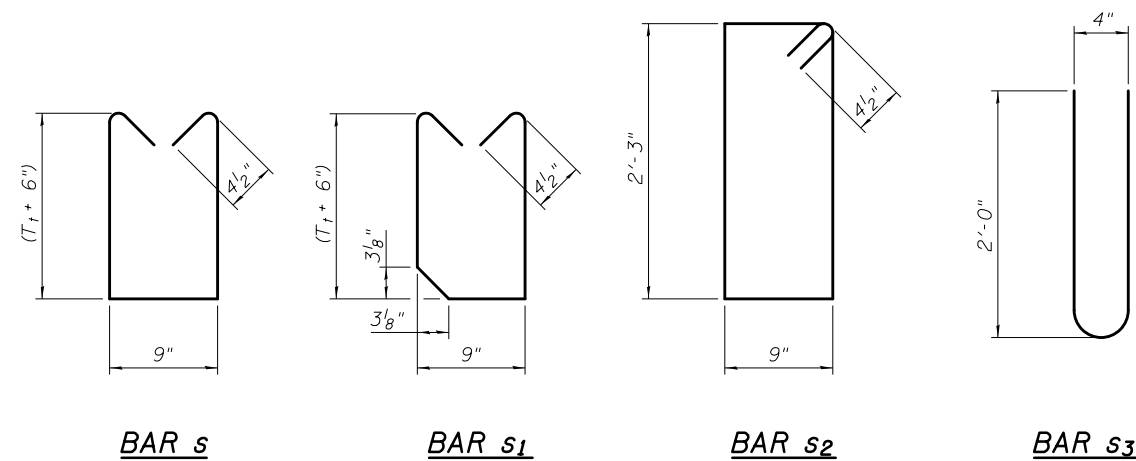
RESTRAINT ANGLE DETAIL



TIE PLATE DETAIL

Notes:

1" φ anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M111 or M232 as applicable. 2 1/4" x 2 1/4" x 5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.



SCB-AES-2

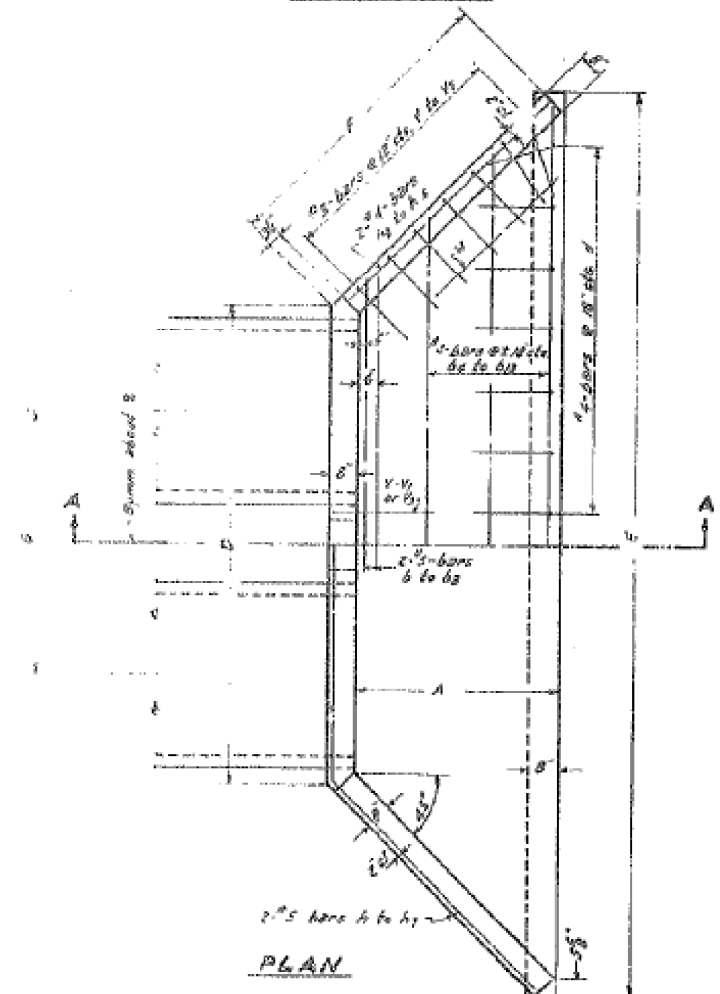
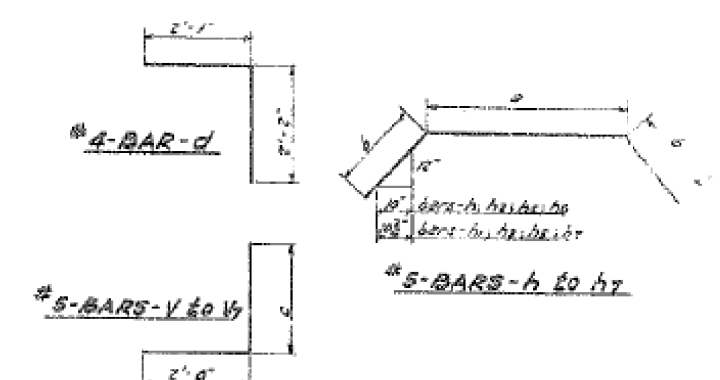
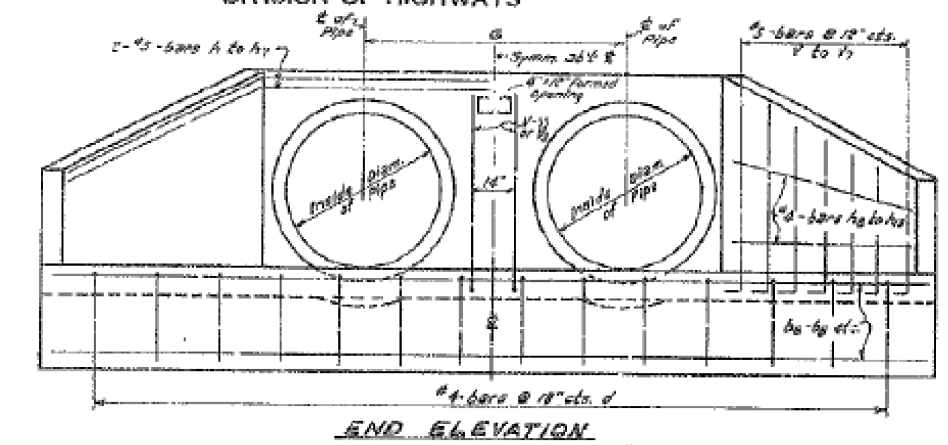
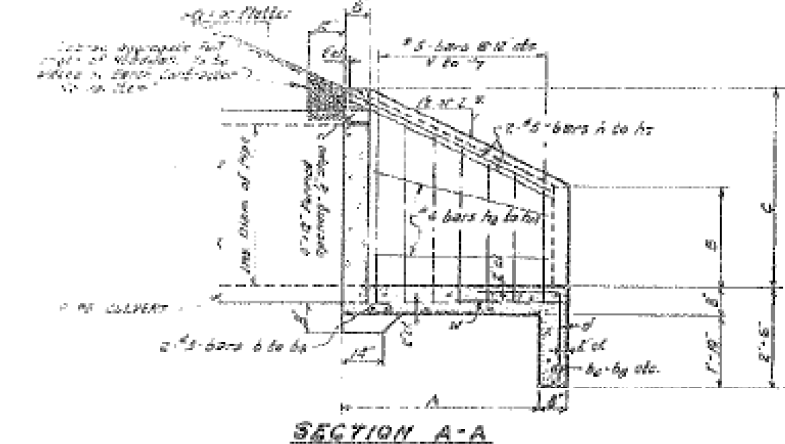
11-5-13

(Sheet 2 of 2)

FILE NAME =	USER NAME = corrollrt	DESIGNED - RTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST CONCRETE BOX CULVERT APRON AND END SECTION DETAILS S.N. 057-8224; CULVERT NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\057\DESIGN\057-8224-Details.dgn	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			317	30CR	MCLEAN	66	34	
MODELNAME	PLOT DATE = 1/31/2017	DATE -	REVISED -			CONTRACT NO. 70697					
						ILLINOIS FED. AID PROJECT					
						SCALE:	SHEET 2	OF 2 SHEETS	STA.	TO STA.	

NOTE:
 1. EXISTING S.N. 057-8072 IS LOCATED AT STA. 984+62
 2. THIS AS-BUILT PLAN SHEET IS FROM FILE -

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS



DIMENSIONS OF BENT BARS

BARS	C	TOTAL LENGTH	2-PIPER			3-PIPER			
			B	b	TOTAL LENGTH	B	b	TOTAL LENGTH	
V	0'-0"	0'-0"	h	10'-5"	5'-0"	20'-9"	10'-2"	5'-2"	26'-0"
V1	5'-0"	7'-0"	h1	10'-5"	6'-0"	23'-9"	10'-2"	6'-0"	29'-9"
V2	0'-0"	7'-0"	h2	11'-5"	6'-10"	23'-5"	11'-0"	5'-11"	29'-9"
V3	0'-0"	0'-0"	h3	11'-5"	7'-0"	23'-9"	11'-0"	7'-0"	33'-0"
V4	4'-0"	0'-0"	h4	12'-9"	0'-0"	23'-9"	11'-0"	0'-0"	32'-9"
V5	3'-0"	0'-0"	h5	12'-9"	0'-0"	23'-9"	11'-0"	0'-0"	32'-9"
V6	3'-0"	0'-0"	h6	13'-11"	7'-2"	28'-3"	21'-5"	7'-2"	35'-9"
V7	2'-0"	0'-0"	h7	13'-11"	9'-0"	32'-3"	21'-5"	9'-0"	40'-0"

DIMENSIONS AND QUANTITIES

DESIGN NO.	INSIDE DIAM. OF PIPE	SLOPE OF FILL A	DIMENSIONS										QUANTITIES			
			FOR ALL MULTIPLES					2-PIPER		3-PIPER			2-PIPER		3-PIPER	
A	B	C	F	G	D	E	D	E	D	E	CL. X CONC. 2-PIPER	REIN. BARS 2-PIPER	CL. X CONC. 3-PIPER	REIN. BARS 3-PIPER		
D42-1/2	42"	1 1/2:1	3'-0"	2'-2"	2'-2"	5'-0"	5'-9"	10'-7"	11'-0"	10'-4"	23'-2"	7.1	460	4.2	600	
D42-2	42"	2:1	4'-0"	2'-2"	4'-0"	5'-0"	5'-9"	10'-7"	11'-0"	10'-4"	26'-7"	8.8	500	4.4	600	
D48-1/2	48"	1 1/2:1	3'-9"	2'-5"	2'-0"	5'-7"	6'-4"	11'-9"	12'-0"	10'-11"	26'-0"	8.4	510	4.1	610	
D48-2	48"	2:1	4'-0"	2'-5"	4'-11"	5'-0"	6'-2"	11'-9"	12'-0"	10'-11"	28'-2"	10.3	530	4.7	700	
D54-1/2	54"	1 1/2:1	4'-0"	2'-8"	2'-0"	6'-0"	6'-8"	12'-0"	12'-0"	11'-0"	28'-7"	10.0	520	4.1	700	
D54-2	54"	2:1	5'-7"	2'-8"	2'-0"	6'-2"	6'-11"	12'-0"	12'-0"	11'-0"	31'-5"	12.0	570	4.6	810	
D60-1/2	60"	1 1/2:1	4'-7"	2'-11"	0'-0"	6'-9"	7'-0"	12'-0"	12'-0"	11'-0"	31'-2"	11.7	560	4.5	750	
D60-2	60"	2:1	6'-2"	2'-11"	0'-0"	7'-0"	7'-0"	12'-0"	12'-0"	11'-0"	34'-4"	15.0	700	4.2	930	

DIMENSIONS OF STRAIGHT BARS

BAR	SIZE	LENGTH	
		2-PIPER	3-PIPER
b	#5	11'-9"	17'-0"
b1	#5	13'-0"	19'-3"
b2	#5	14'-0"	20'-9"
b3	#5	15'-3"	22'-9"
b4	#5	16'-0"	20'-0"
b5	#5	16'-3"	25'-0"
b6	#5	17'-3"	26'-0"
b7	#5	19'-0"	24'-0"
b8	#5	19'-0"	25'-5"
b9	#5	20'-0"	26'-0"
b10	#5	21'-3"	27'-0"
b11	#5	23'-0"	27'-9"
b12	#5	24'-0"	30'-0"
b13	#5	25'-0"	34'-0"
h3	#4	4'-9"	8'-9"
h4	#4	5'-3"	5'-3"
h10	#4	0'-0"	0'-0"
h11	#4	0'-0"	0'-0"
h12	#4	7'-3"	7'-3"
h13	#4	8'-0"	8'-0"
h14	#4	0'-9"	0'-9"
W	#4	3'-0"	4'-0"

BARS IN ONE HEADWALL - 2-PIPER

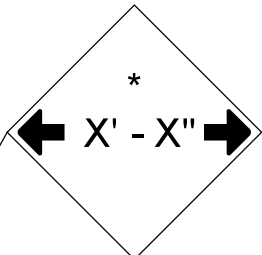
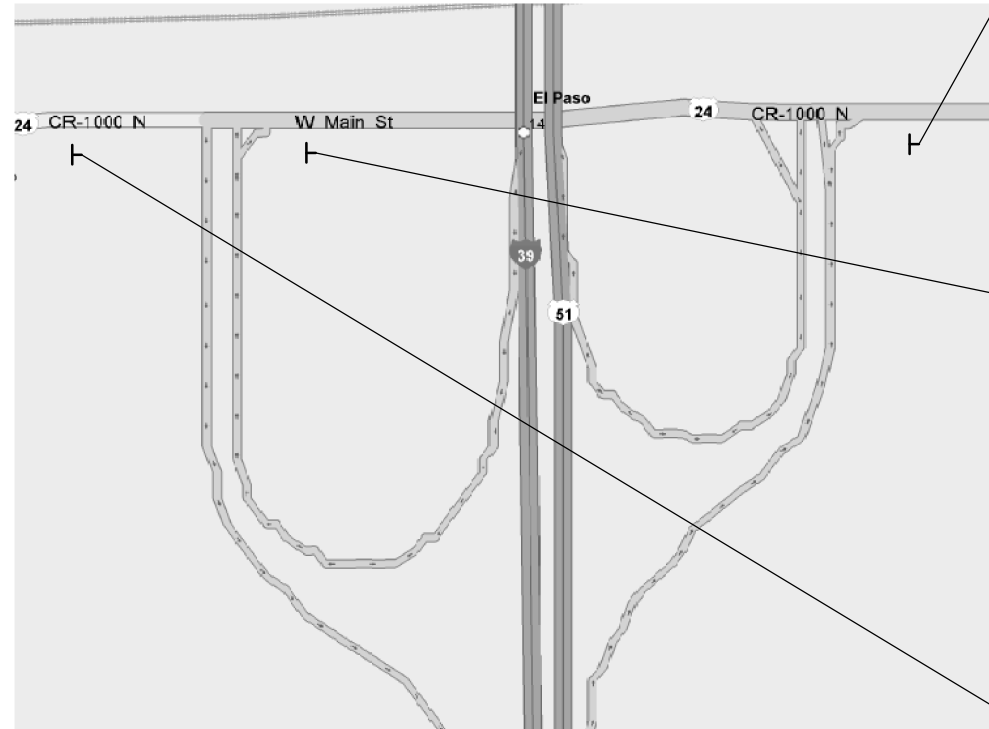
42" PIPE		48" PIPE		54" PIPE		60" PIPE	
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BARS IN ONE HEADWALL - 3-PIPER

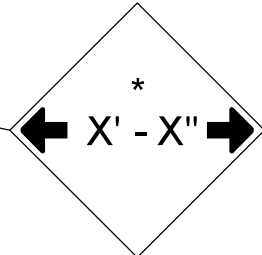
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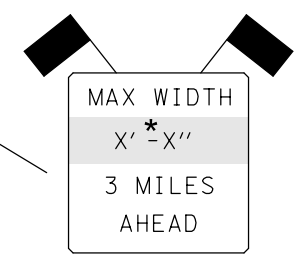
US 24 & I-39 INTERCHANGE



2 MILES
ERECT BY EAST
US 24 SIGN



2 MILES
ERECT BY EAST
US 24 SIGN

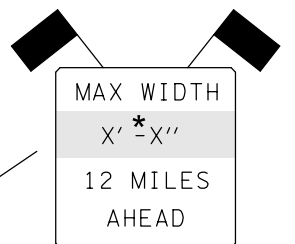
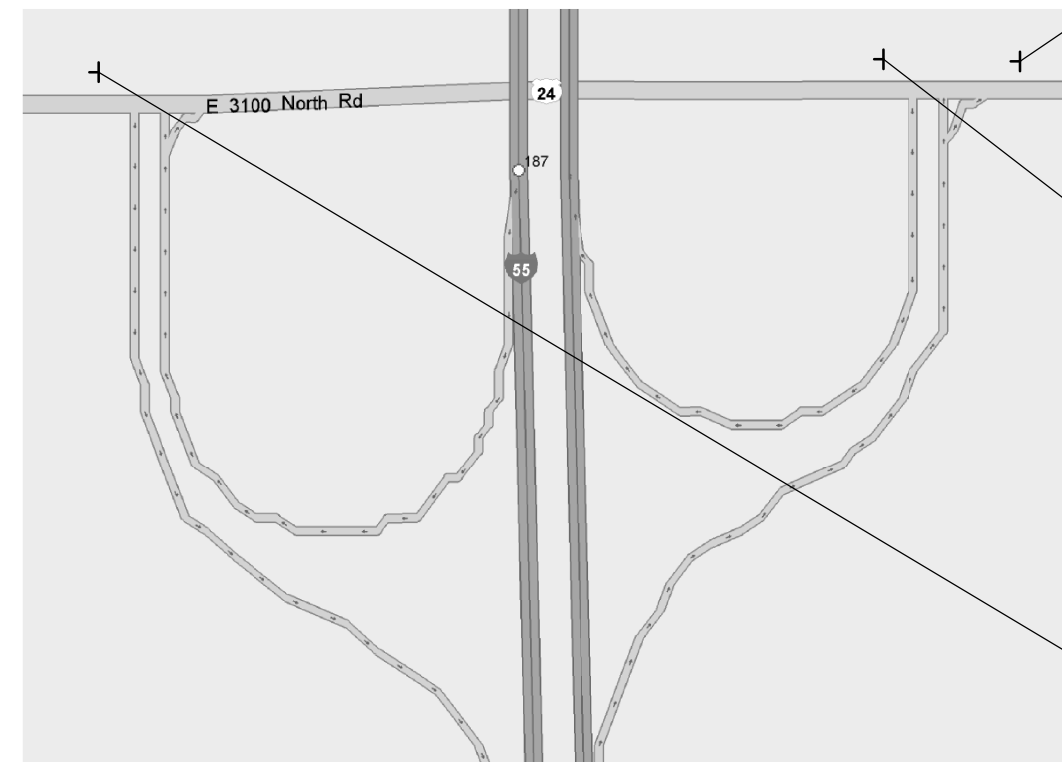


ERECT BY JCT
39/51 SIGNS

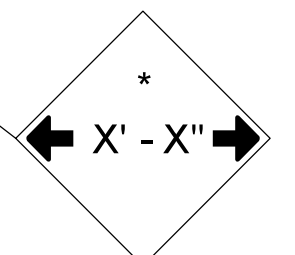
* STAGE I WIDTH
12' - 0"
STAGE II WIDTH
14' - 0"



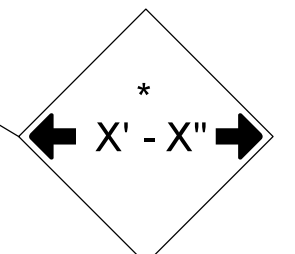
US 24 & I-55 INTERCHANGE



ERECT BY SPEED
LIMIT 45 SIGN



12 MILES
ERECT 100' WEST
OF GREENBOARD



11 MILES
ERECT 100' WEST
OF GREENBOARD

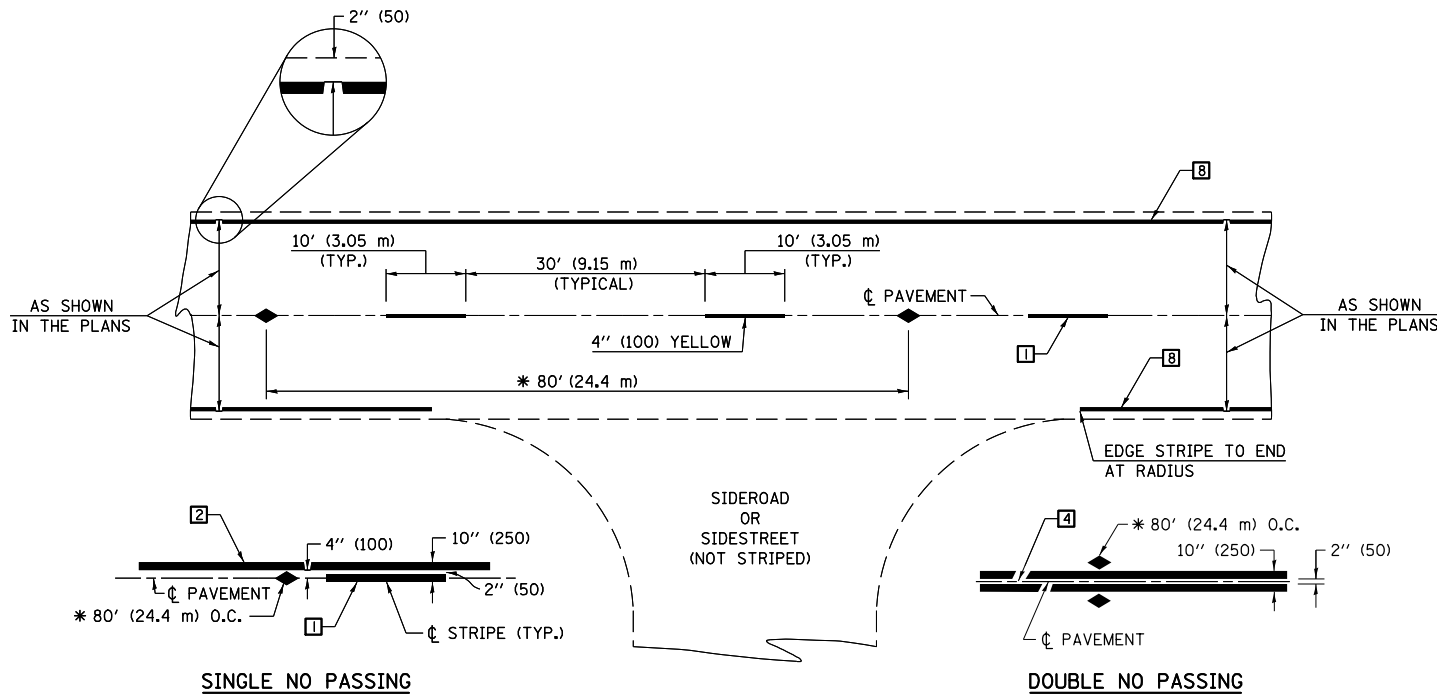
* STAGE I WIDTH
12' - 0"
STAGE II WIDTH
14' - 0"

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED -
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0579\Drawings\Design\0570697-details.dgn		CHECKED -	REVISED -
\$MODELNAME\$	PLOT DATE = 1/31/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNING DETAIL			
SCALE:	SHEET 1	OF 2 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	30 CR			37
CONTRACT NO. 70697				
ILLINOIS FED. AID PROJECT				



* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

TWO LANE/TWO WAY

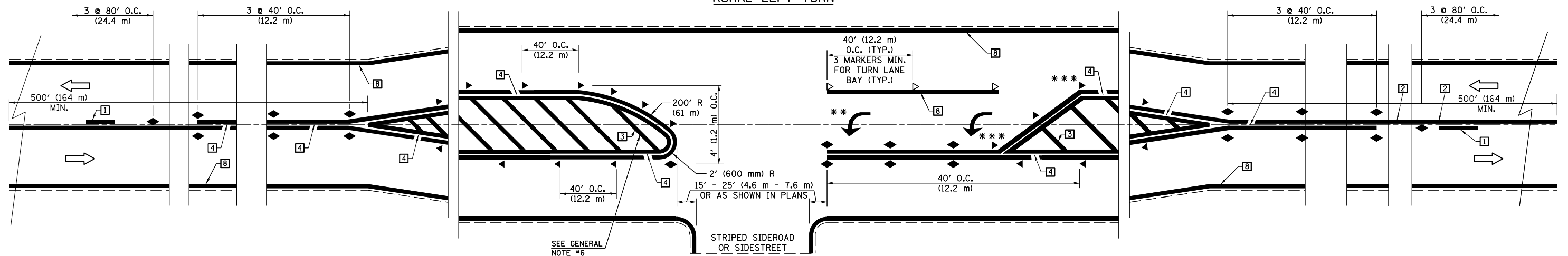
TYPICAL PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RURAL LEFT TURN



*** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

** TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED - 11/06
p:\work\084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT Offices\District 5\Projects\05798\Drawings\Design\0570697-details.dgn		DRAWN -	REVISED - 09/2009 - KJT
PLOT SCALE = 40.0000' / in.	CHECKED -		REVISED -
PLOT DATE = 1/31/2017	DATE -		REVISED -

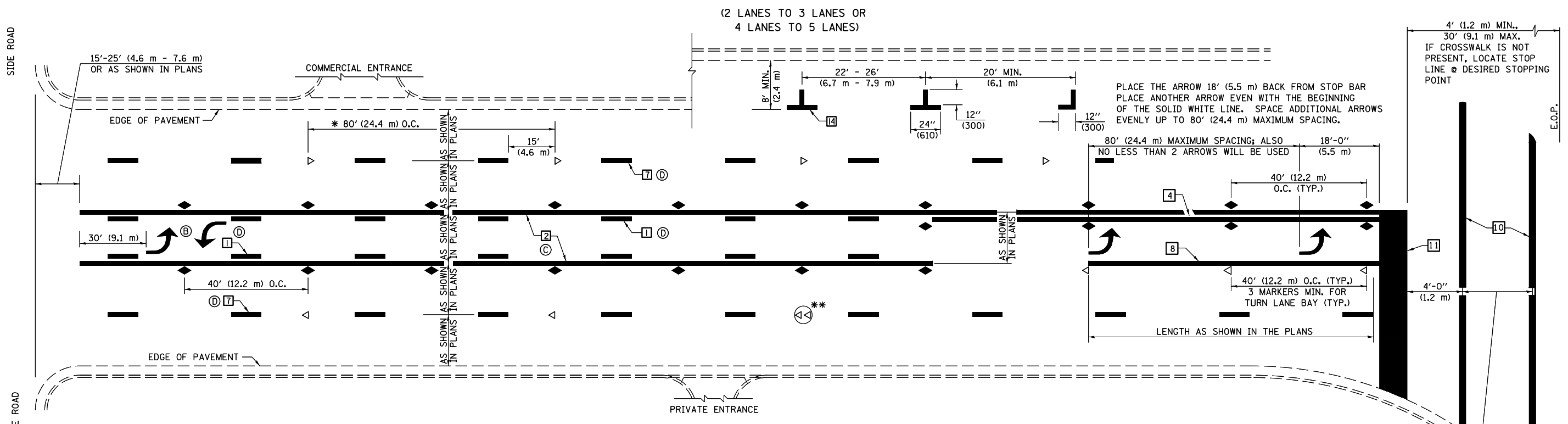
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)**

SCALE: N/A SHEET NO. 1 OF 4 SHEETS STA. ----- TO STA. -----

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	40
CONTRACT NO. 70697				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

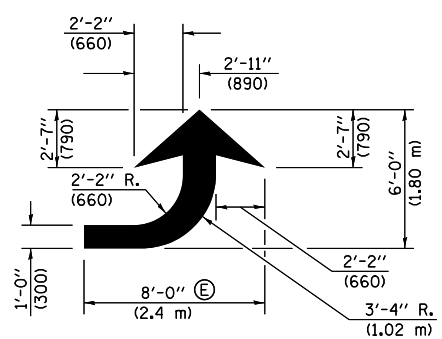


* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

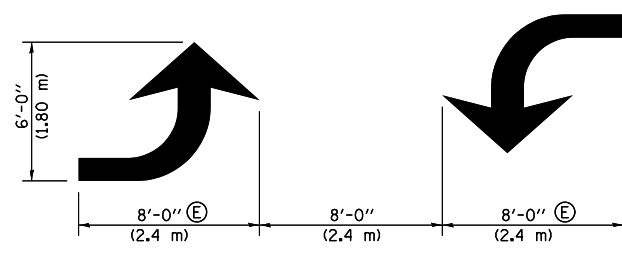
GENERAL NOTES:

- ⓑ TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- ⓒ THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- ⓓ THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- ⓔ USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)



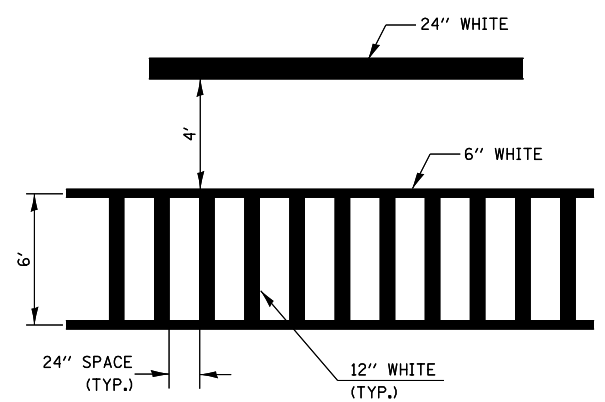
LEFT ARROW

REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m²)
(WHITE)

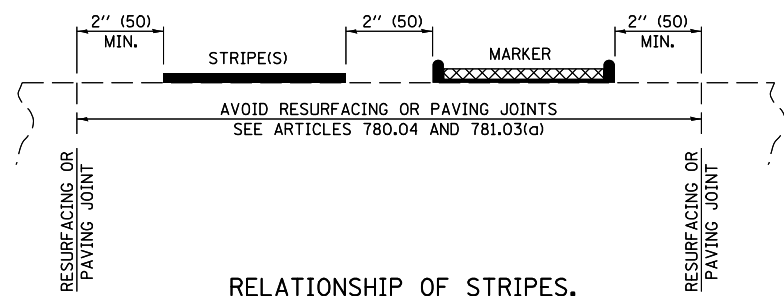


TYPICAL DOUBLE TURN ARROWS (WHITE)

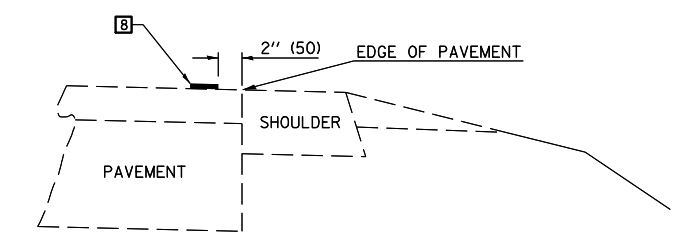
BLOOMINGTON-NORMAL CITY LIMITS ONLY



TYPICAL SPACING FOR CROSSWALKS & STOP BARS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



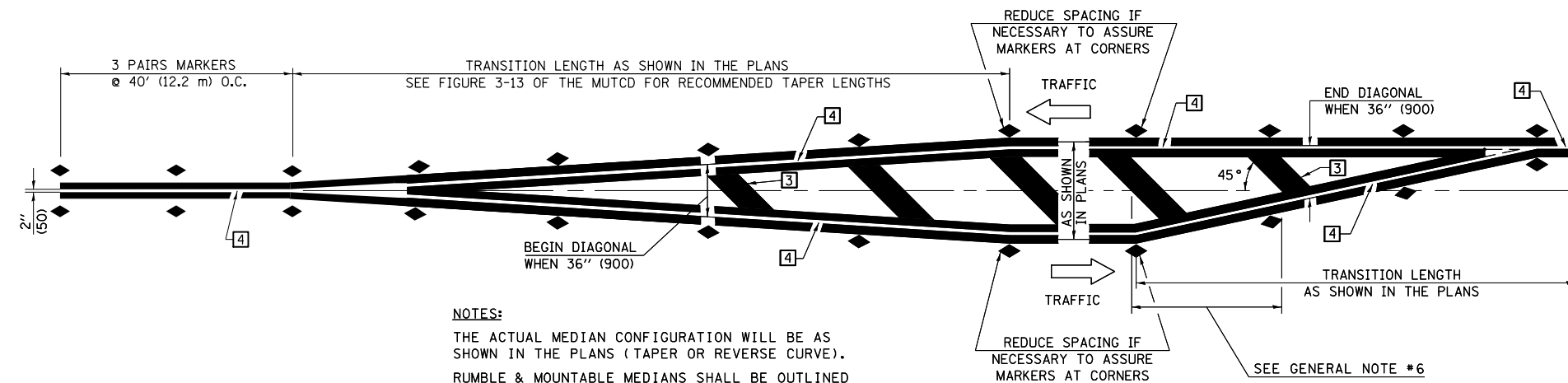
RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT (SAFETY SHOULDER OR PAVED SURFACE) SEE ARTICLE 780.04

CROSSWALK WIDTH 6'-0" (1.8 m) OR AS SHOWN IN THE PLANS

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED - 11/06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING AND MARKERS (RURAL & URBAN APPLICATIONS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0570697\Drawings\Design\0570697-details.dgn	PLotted SCALE = 40.0000' / in.	CHECKED -	REVISED - 09/2009 - KJT			317	30CR	MCLEAN	66	41	
PLotted DATE = 1/31/2017	DATE -	REVISED -	SCALE: N/A			SHEET NO. 2 OF 4 SHEETS		STA. -----	TO STA. -----		CONTRACT NO. 70697
						FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				

DISTRICT 5 DETAIL NO. 7800AAA

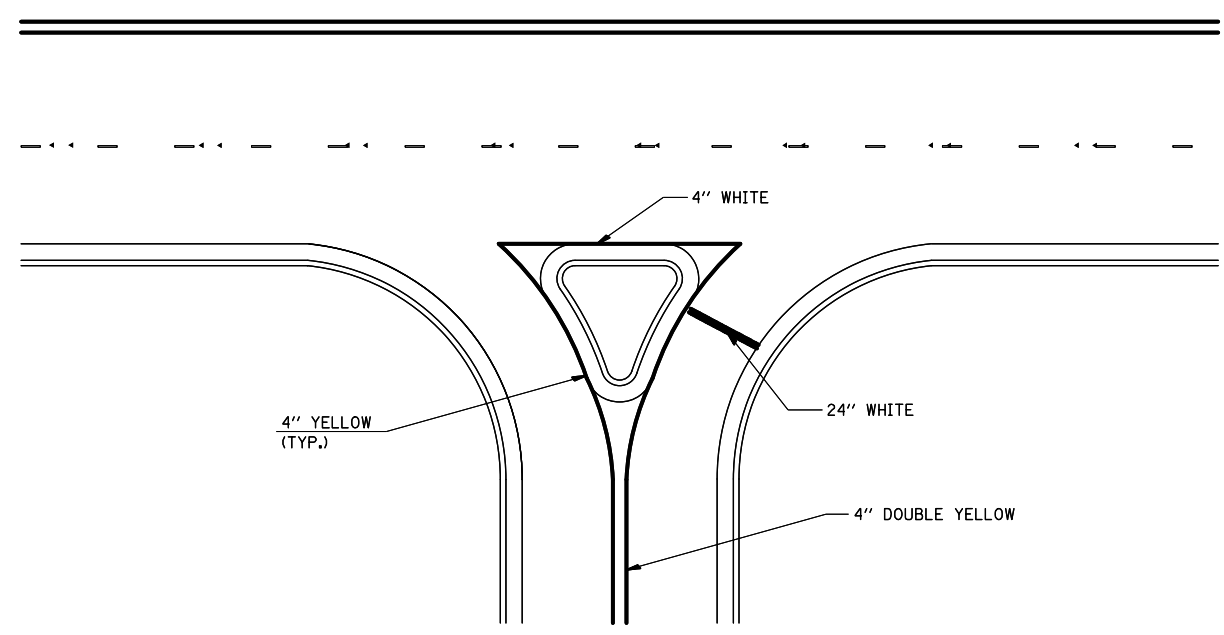


NOTES:
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

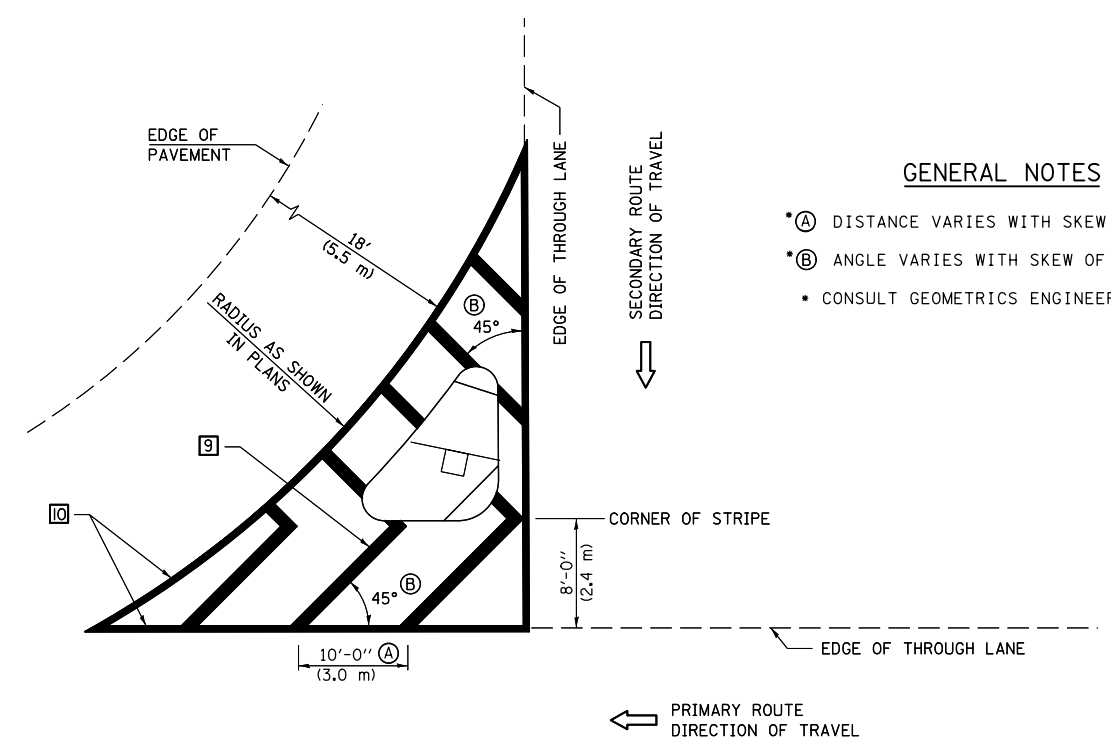
TYPICAL MEDIAN TRANSITIONS

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



RIGHT IN - RIGHT OUT ACCESS



GENERAL NOTES

- (A) DISTANCE VARIES WITH SKEW OF INTERSECTION.
- (B) ANGLE VARIES WITH SKEW OF INTERSECTION.
- CONSULT GEOMETRICS ENGINEER

ISLAND

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED - 11/06
p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0579\Drawings\Design\0570697-details.dgn		CHECKED -	REVISED - 09/2009 - KJT
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS
 (RURAL & URBAN APPLICATIONS)**

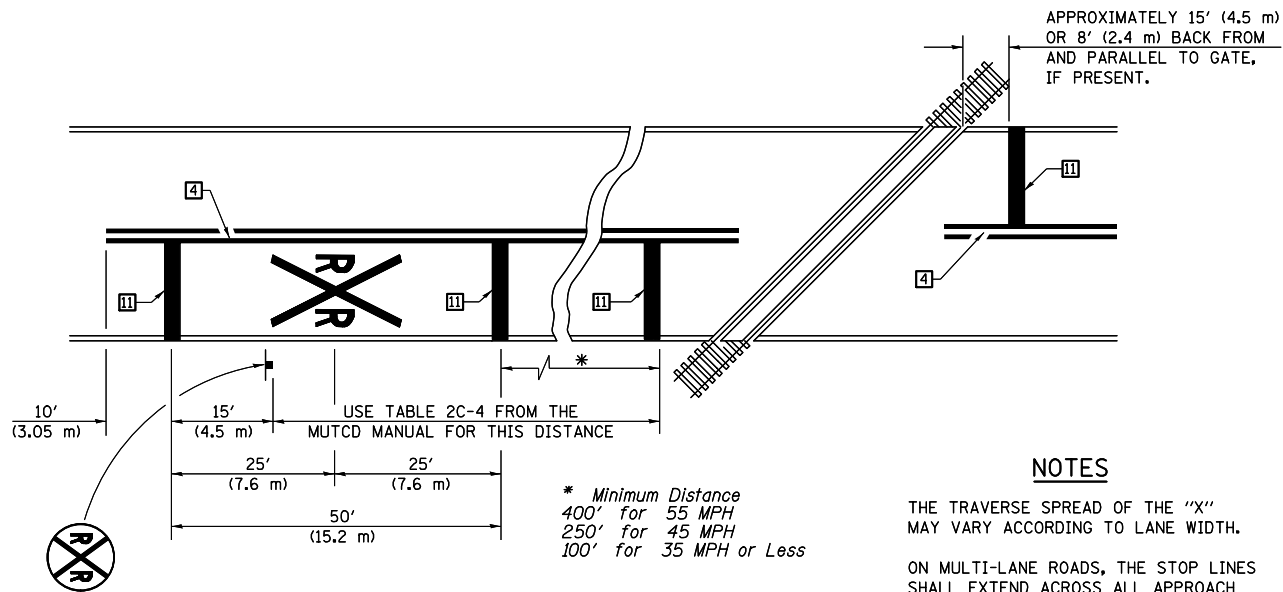
SCALE: N/A SHEET NO. 3 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	42
CONTRACT NO. 70697				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



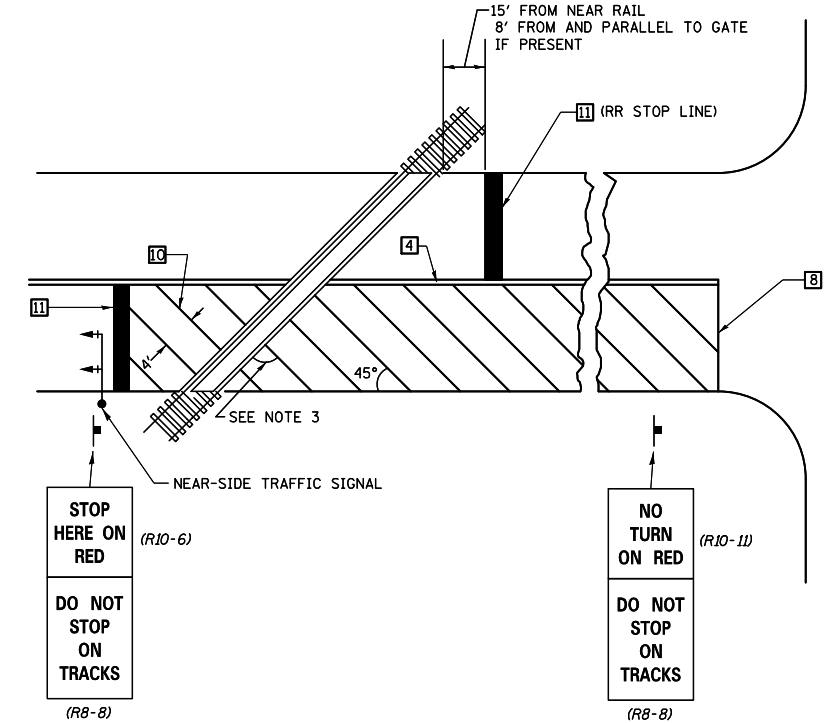
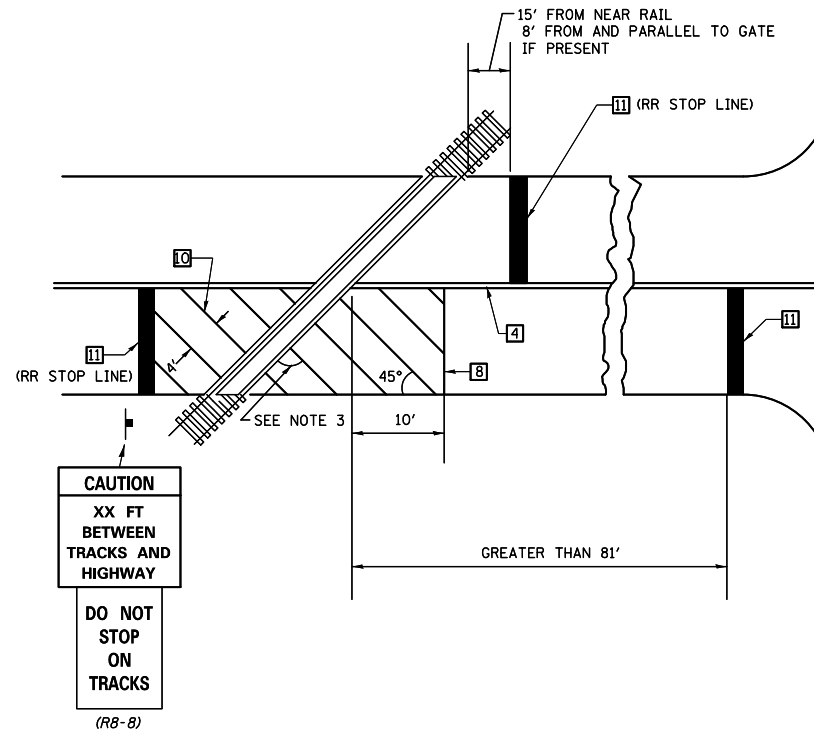
PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

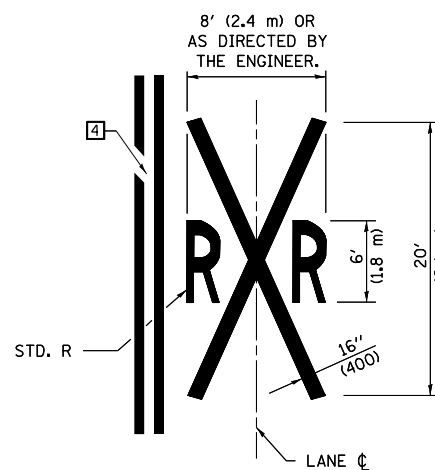
WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.
- WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.



Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISED - 11/06
p:\1\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05798\Drawings\Design\0570697-details.dgn		CHECKED -	REVISED - 09/2009 - KJT
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS
(RURAL & URBAN APPLICATIONS)

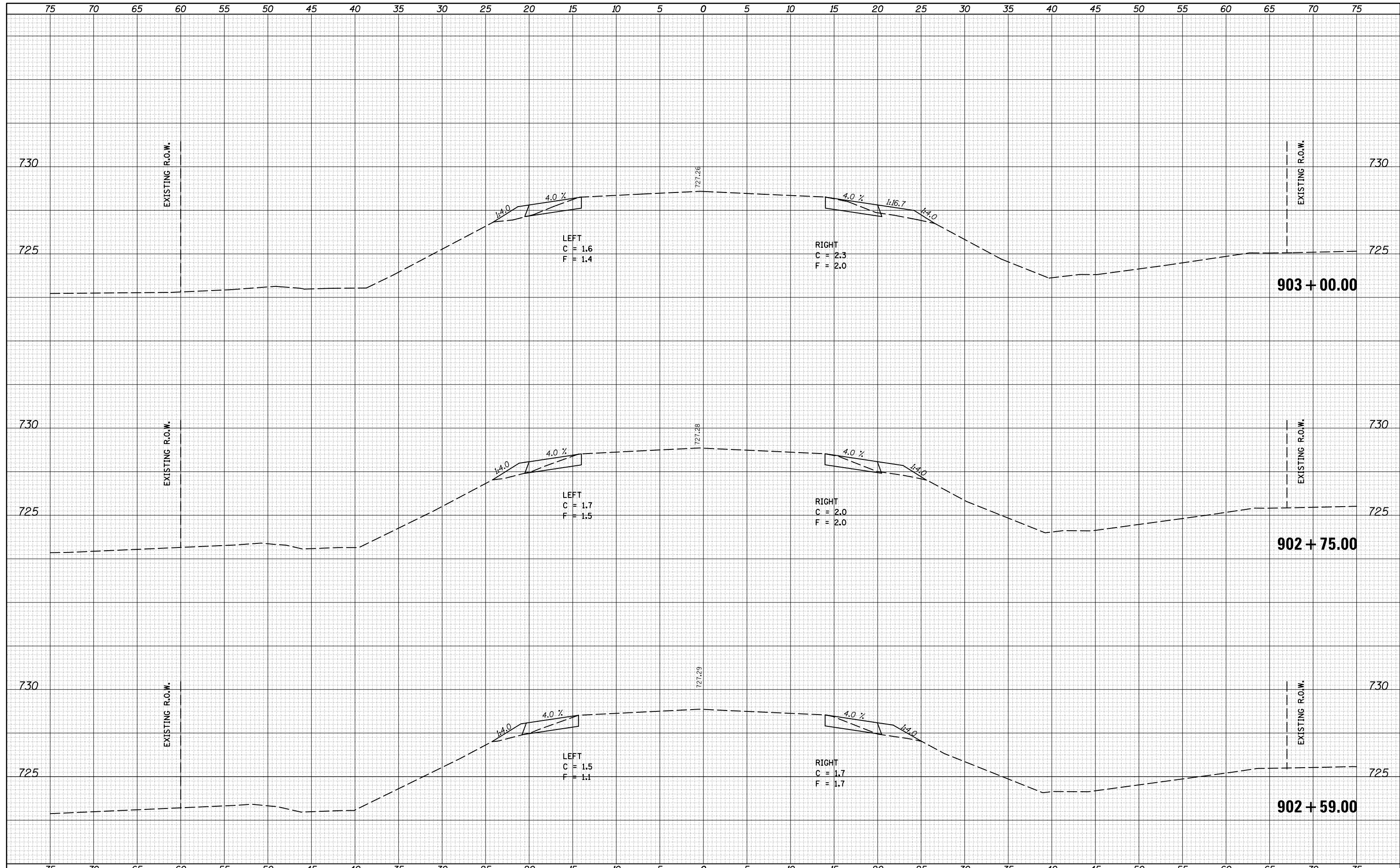
SCALE: N/A SHEET NO. 4 OF 4 SHEETS STA. ----- TO STA. -----

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	30CR	MCLEAN	66	43
CONTRACT NO. 70697				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

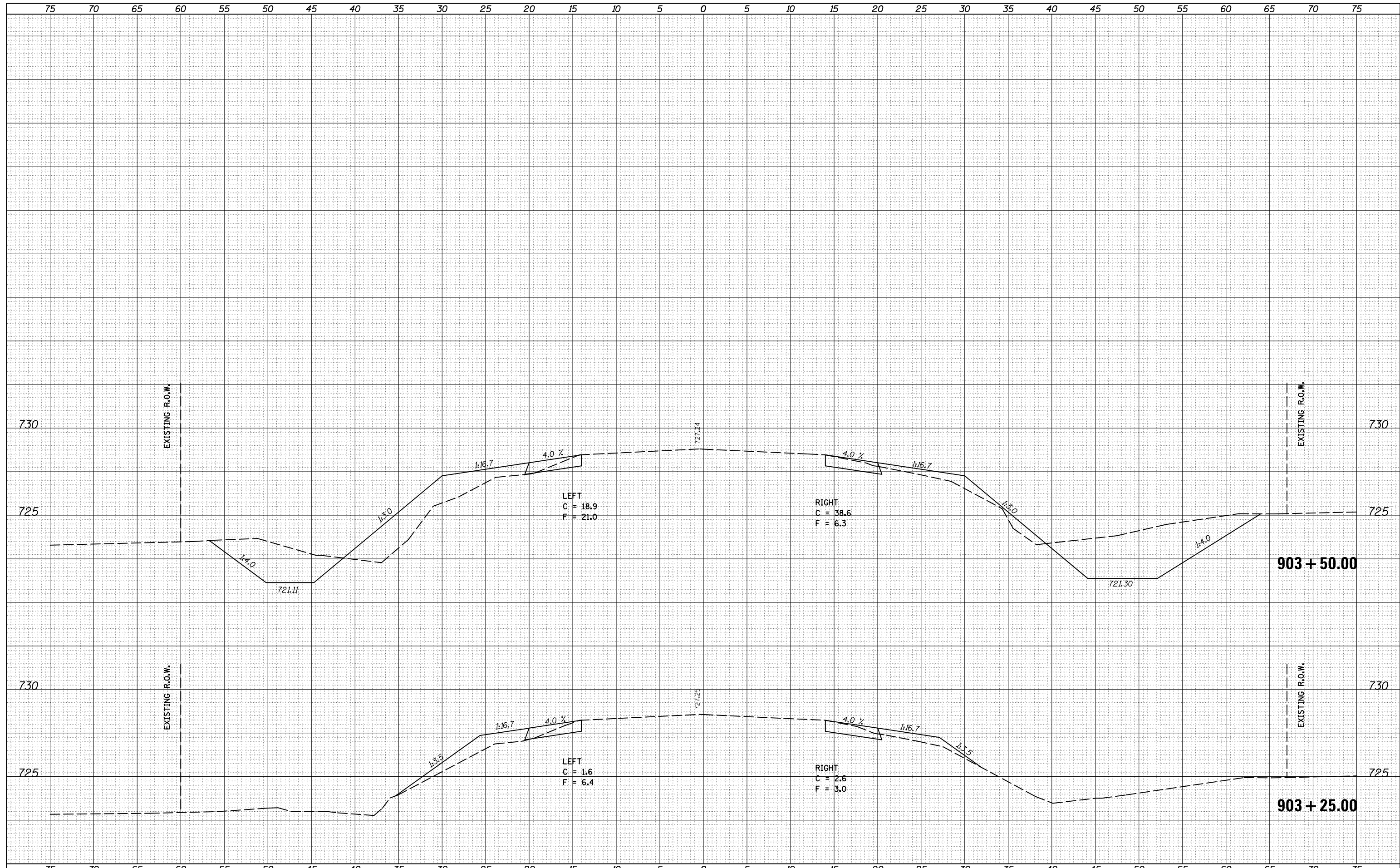
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BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

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



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

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

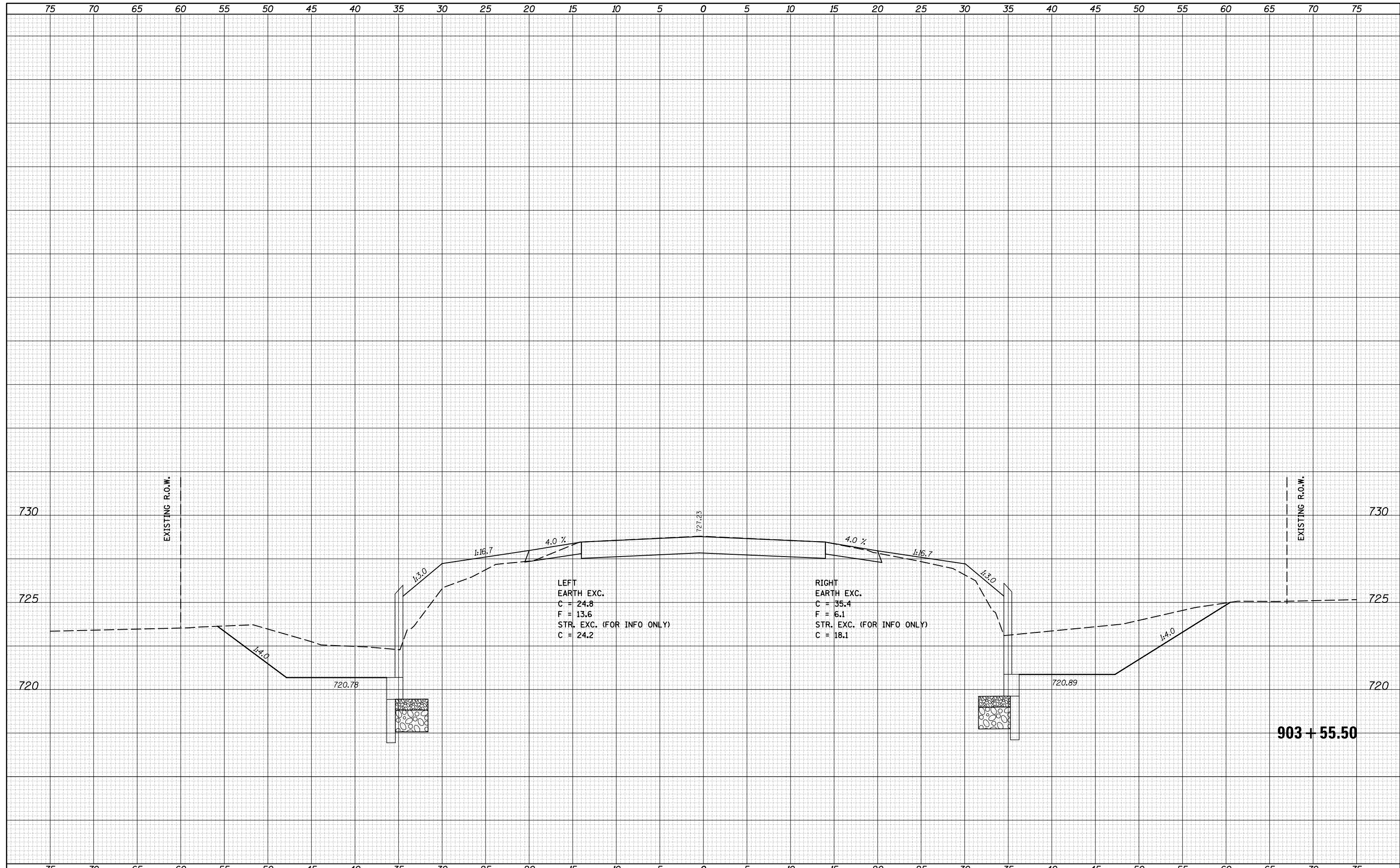


FILE NAME =	USER NAME = corollr	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-8222 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht.8222.dgn	DRAWN	REVISIED -	REVISIED -					317	30CR	MCLEAN	66	45
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -					CONTRACT NO. 70697				
DATE = 1/31/2017	DATE -	REVISIED -	REVISIED -					ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 8 SHEETS STA. 903+25.00 TO STA. 903+50.00

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

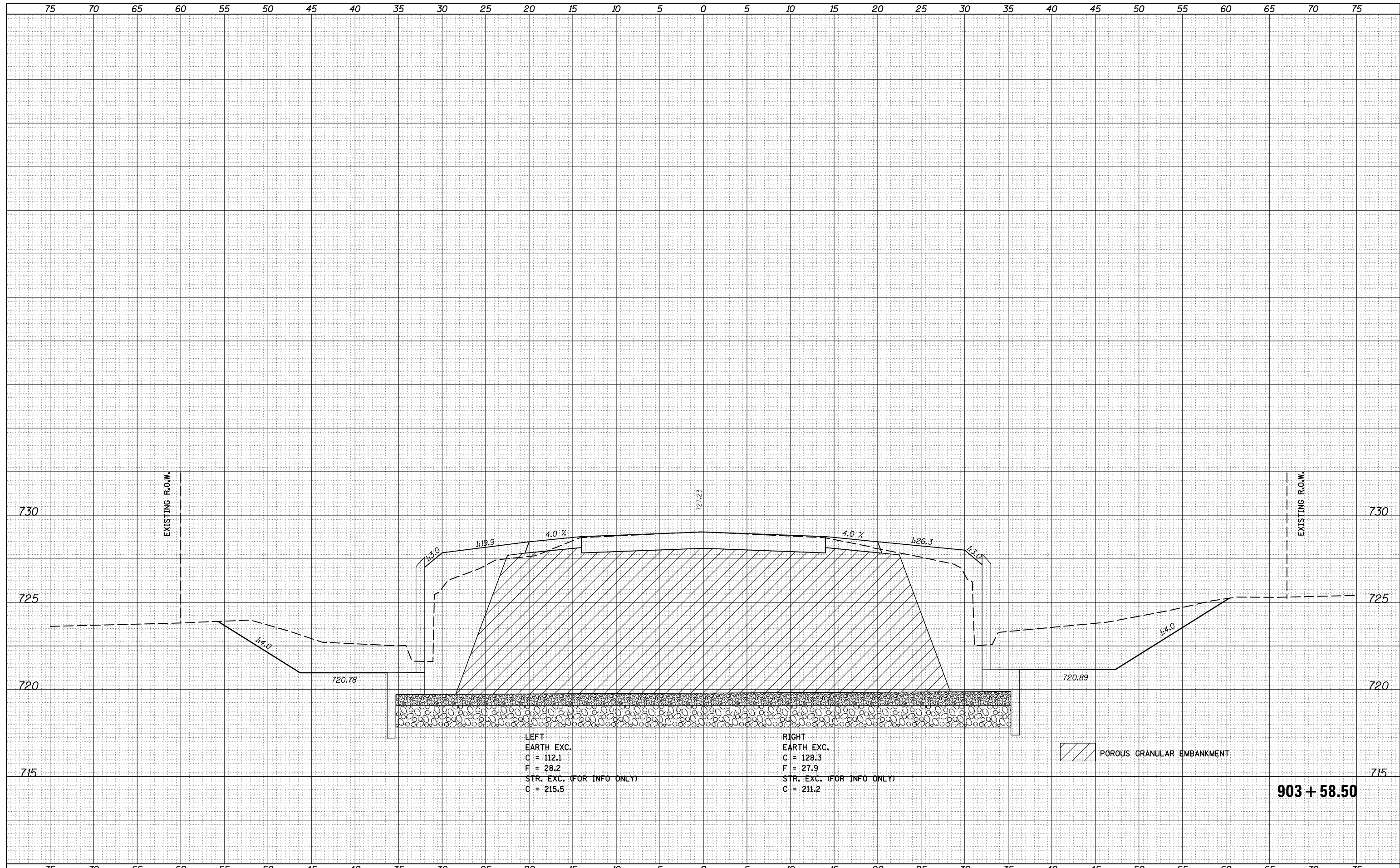
DATE	
BY	
ORIGINAL SURVEY NO.	
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TEMPLATE AREAS CHECKED	
NOTE BOOK AREAS CHECKED	



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-8222 CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CADD\Design\0570697-sht-XSht.8222.dgn		REVISIED -	REVISIED -			317	3OCR	MCLEAN	66	46
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\$MODELNAME\$	PLOT DATE = 1/31/2017	DATE -	REVISIED -	SCALE:	SHEET 3 OF 8 SHEETS	STA. 903+55.50 TO STA. 903+55.50	ILLINOIS FED. AID PROJECT			

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

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



LEFT
EARTH EXC.
C = 112.1
F = 28.2
STR. EXC. (FOR INFO ONLY)
C = 215.5

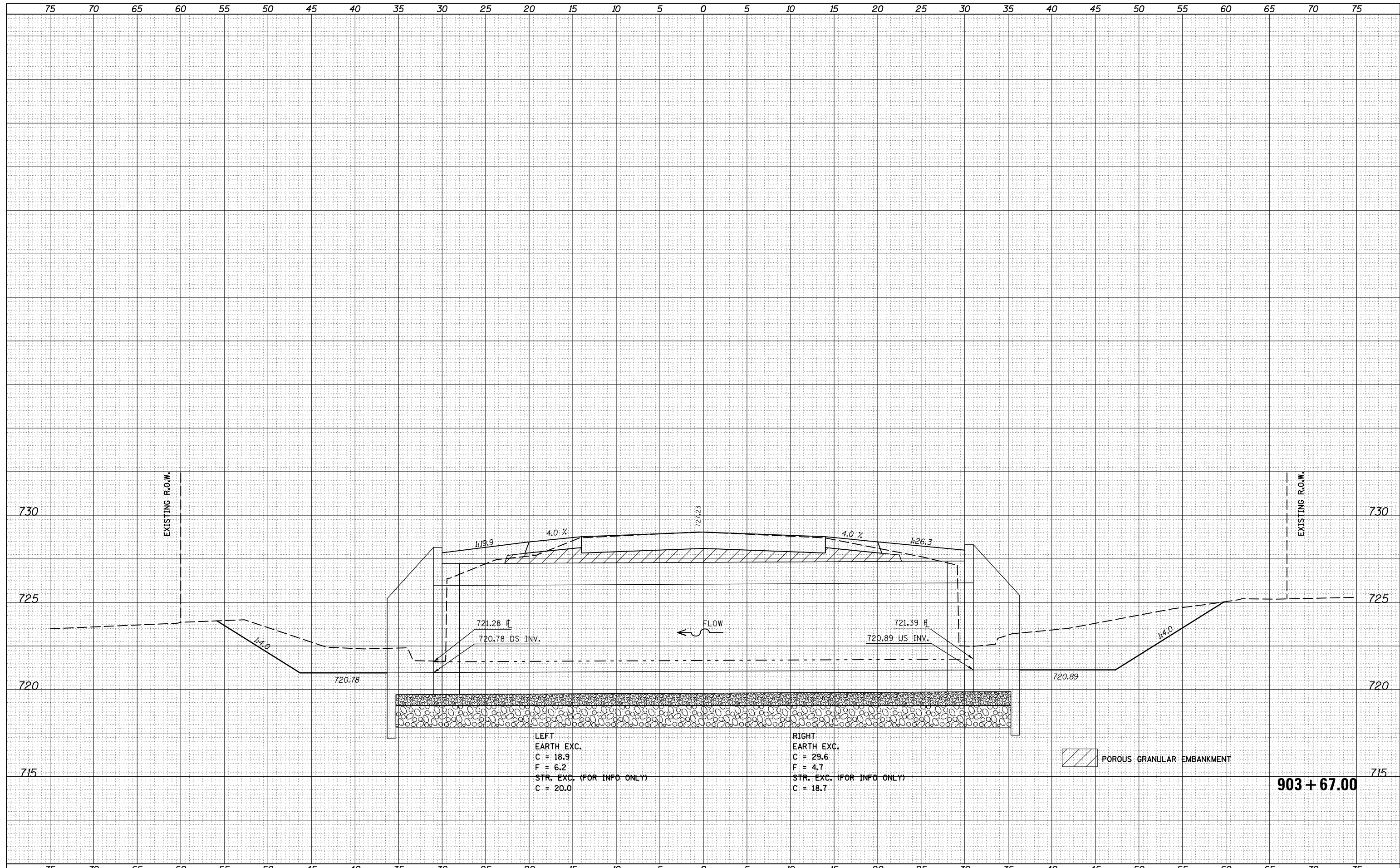
RIGHT
EARTH EXC.
C = 128.3
F = 27.9
STR. EXC. (FOR INFO ONLY)
C = 211.2

POROUS GRANULAR EMBANKMENT

903 + 58.50

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

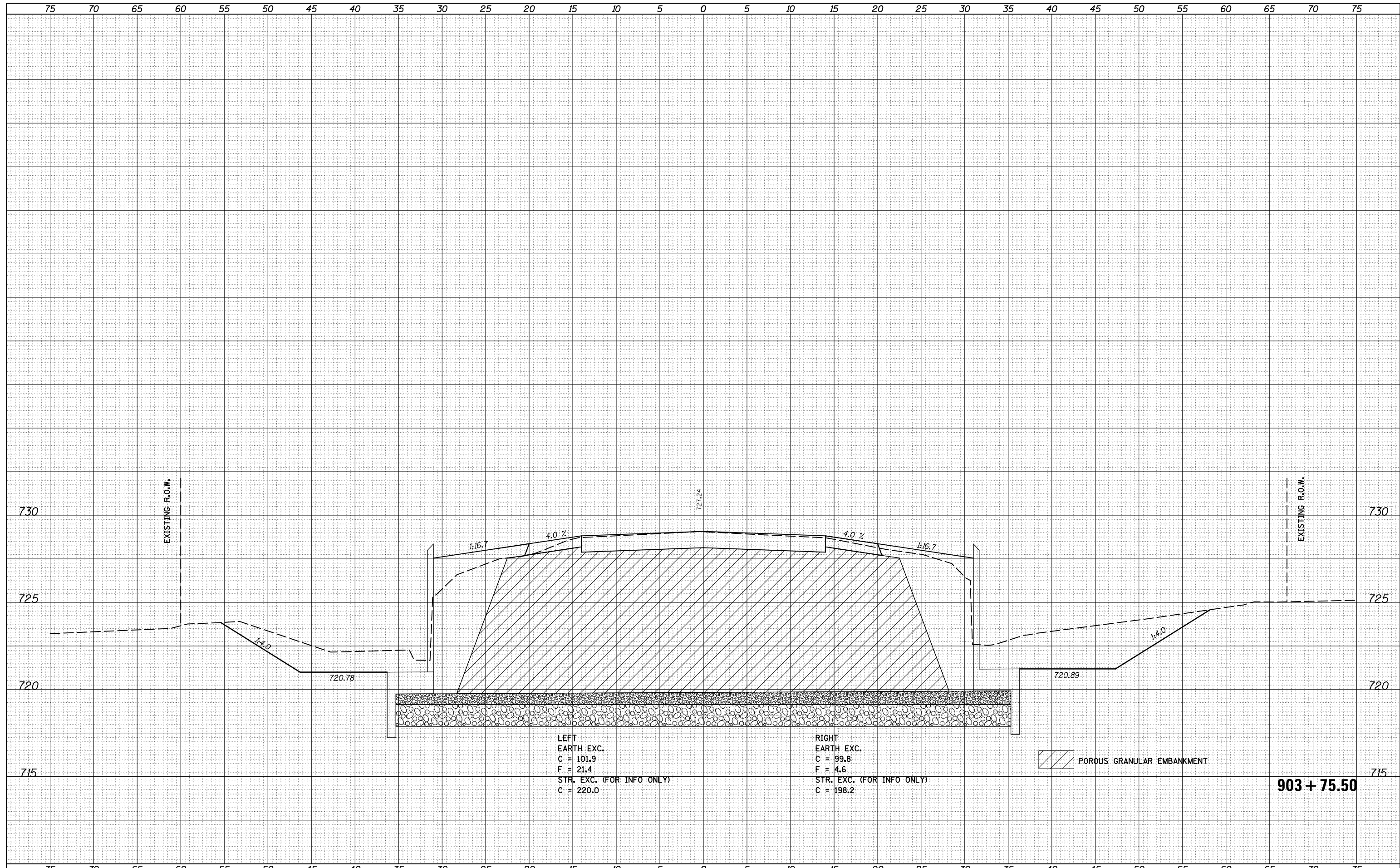
DATE	
BY	
ORIGINAL SURVEY NO.	
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PLOTTED TEMPLATE AREAS	CHECKED
NOTE BOOK NO.	



FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISOR -	F.A.P. RTE. 317	SECTION 30CR	COUNTY MCLEAN	TOTAL SHEETS 66	SHEET NO. 48
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0570697\CD\DRAWING\0570697-sht-XSht-8222.dgn		CHECKED -	REVISOR -	SCALE: 1" = 40'	SHEET 5 OF 8 SHEETS	CONTRACT NO. 70697	ILLINOIS FED. AID PROJECT	
MODEL NAME	DATE: 1/31/2017	DATE -	REVISOR -	S.N. 057-8222 CROSS SECTIONS				
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				STA. 903+67.00 TO STA. 903+67.00				

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



LEFT
EARTH EXC.
C = 101.9
F = 21.4
STR. EXC. (FOR INFO ONLY)
C = 220.0

RIGHT
EARTH EXC.
C = 99.8
F = 4.6
STR. EXC. (FOR INFO ONLY)
C = 198.2

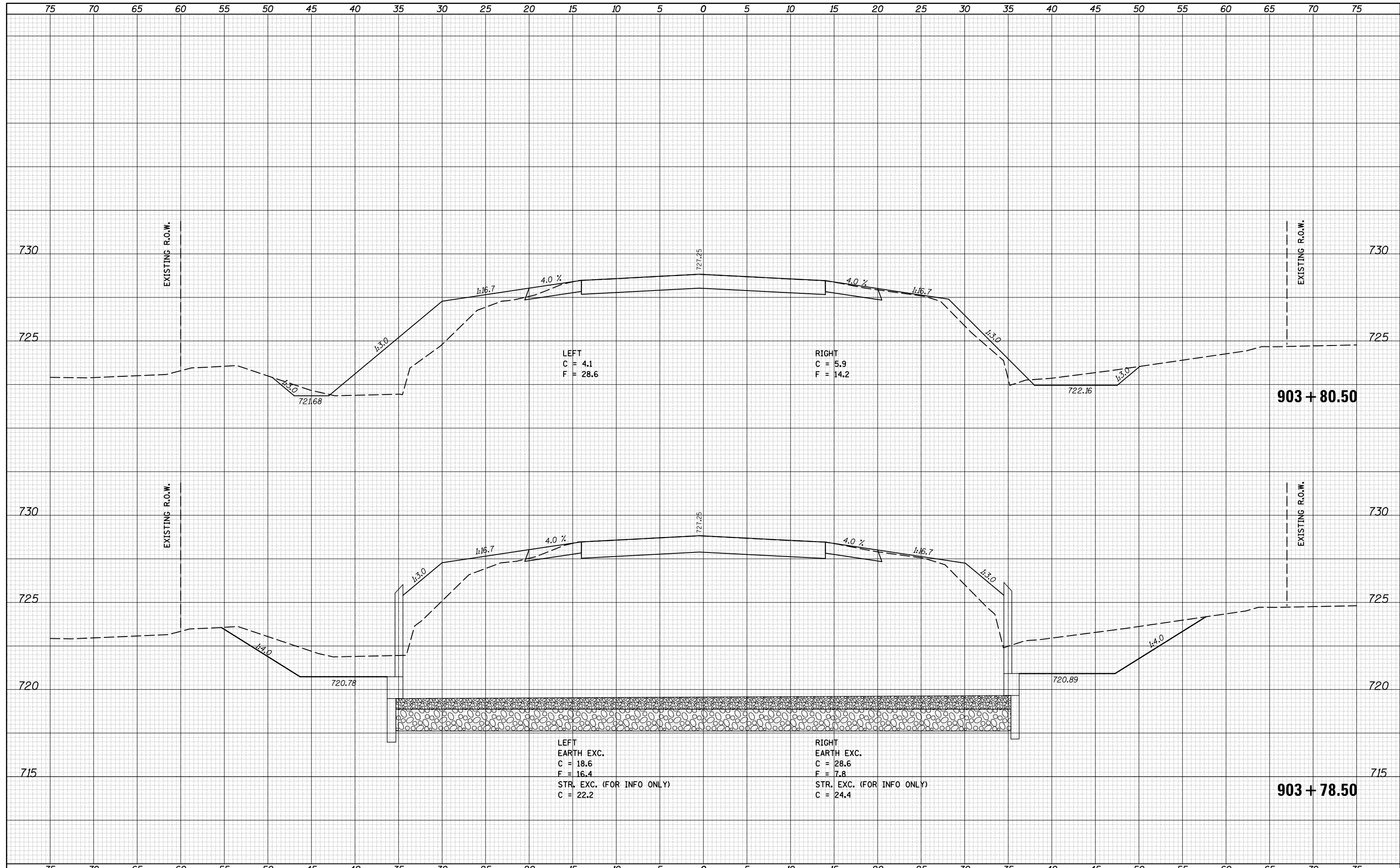
POROUS GRANULAR EMBANKMENT

903 + 75.50

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-8222 CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -			CONTRACT NO. 70697				
DATE = 1/31/2017	DATE -	REVISIED -	REVISIED -			ILLINOIS FED. AID PROJECT				

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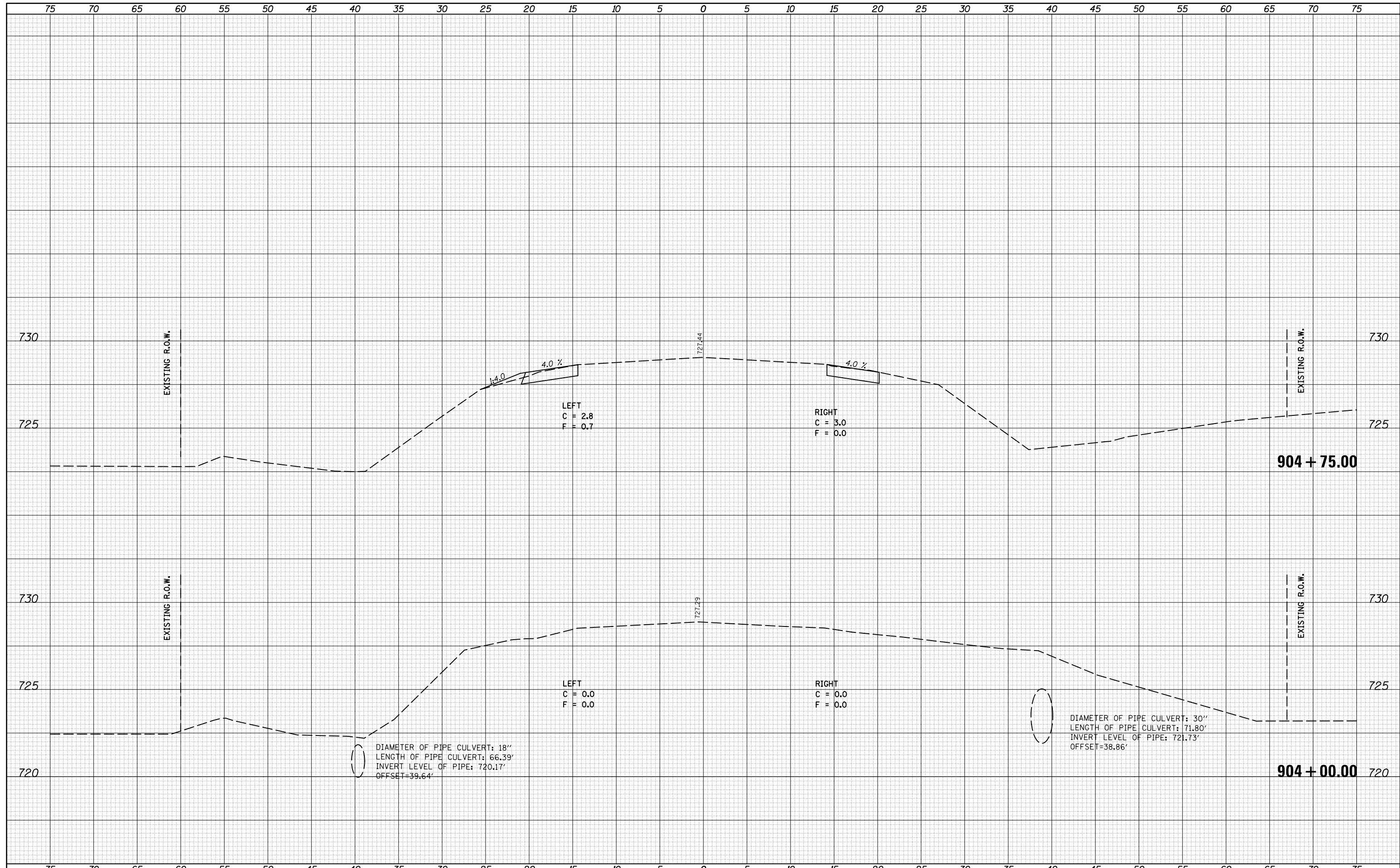


**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

S.N. 057-8222 CROSS SECTIONS

DATE	
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FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
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FILE NAME =	USER NAME = carrollt	DESIGNED -	REVISED -	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 10.0000' / in.	CHECKED -	REVISED -	REVISED -	CONTRACT NO. 70697				
\$MODELNAME\$	DATE - 1/31/2017	DATE -	REVISED -	ILLINOIS FED. AID PROJECT				

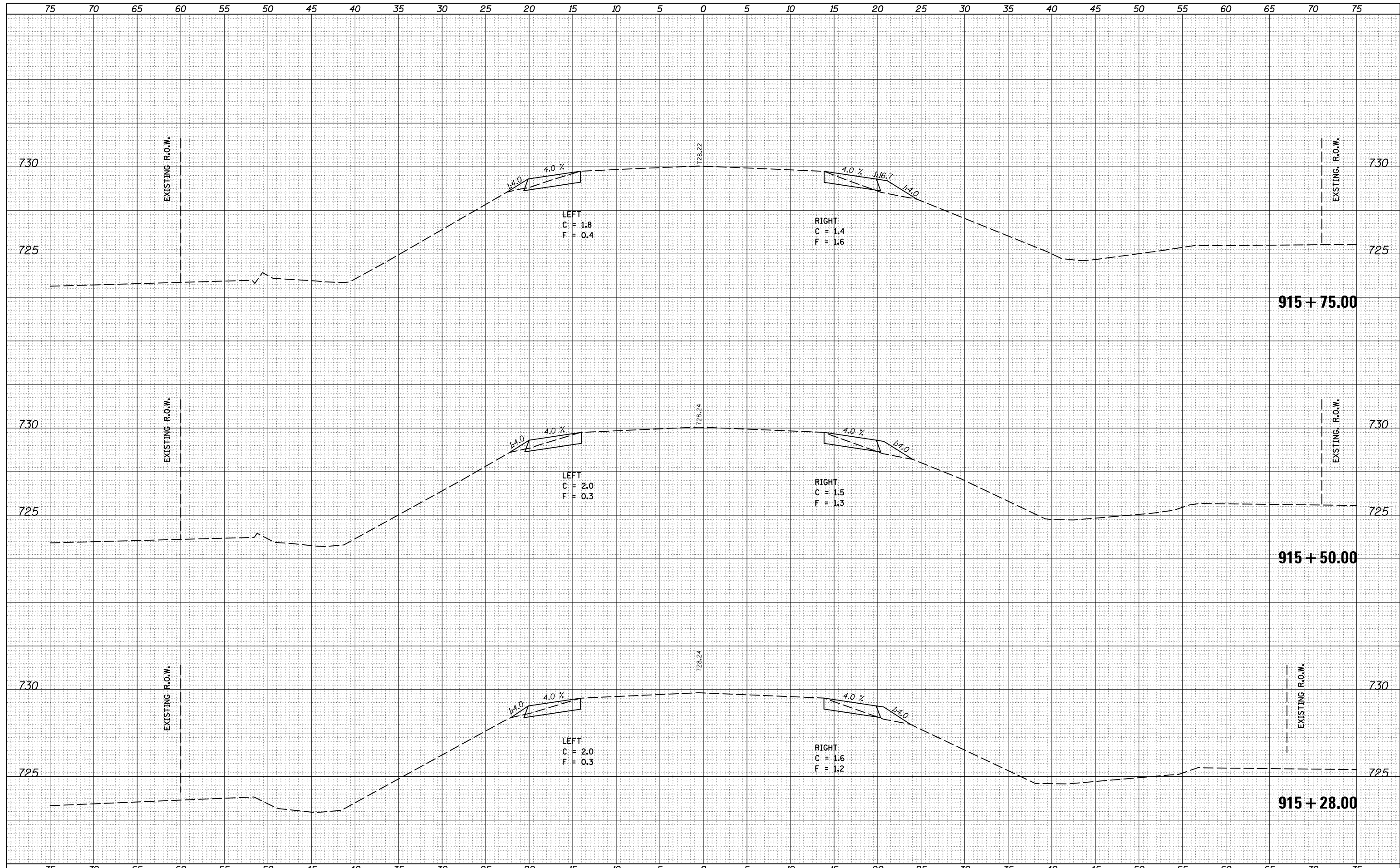
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

S.N. 057-8222 CROSS SECTIONS

SCALE: SHEET 8 OF 8 SHEETS STA. 904+00.00 TO STA. 904+75.00

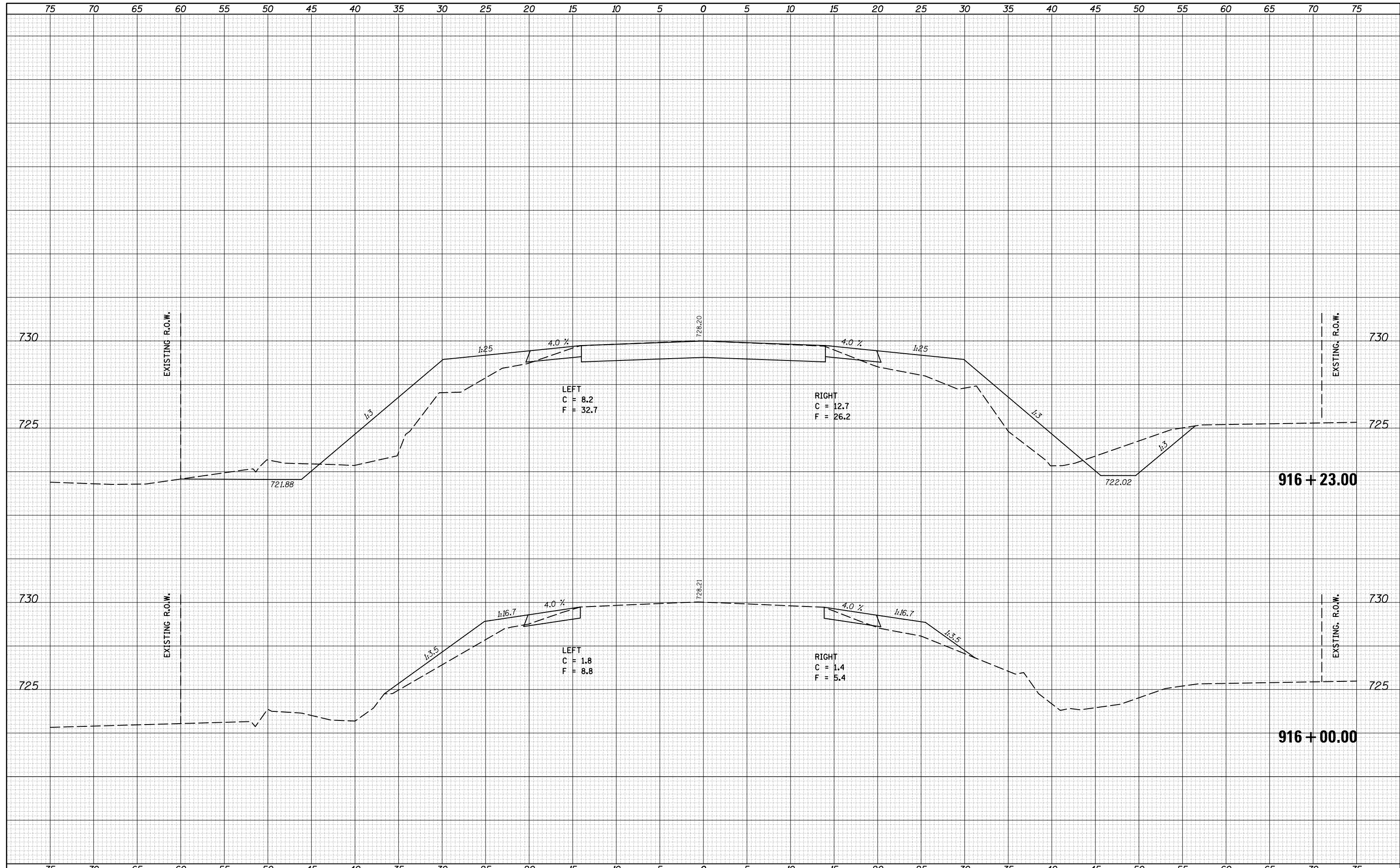
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
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DATE	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
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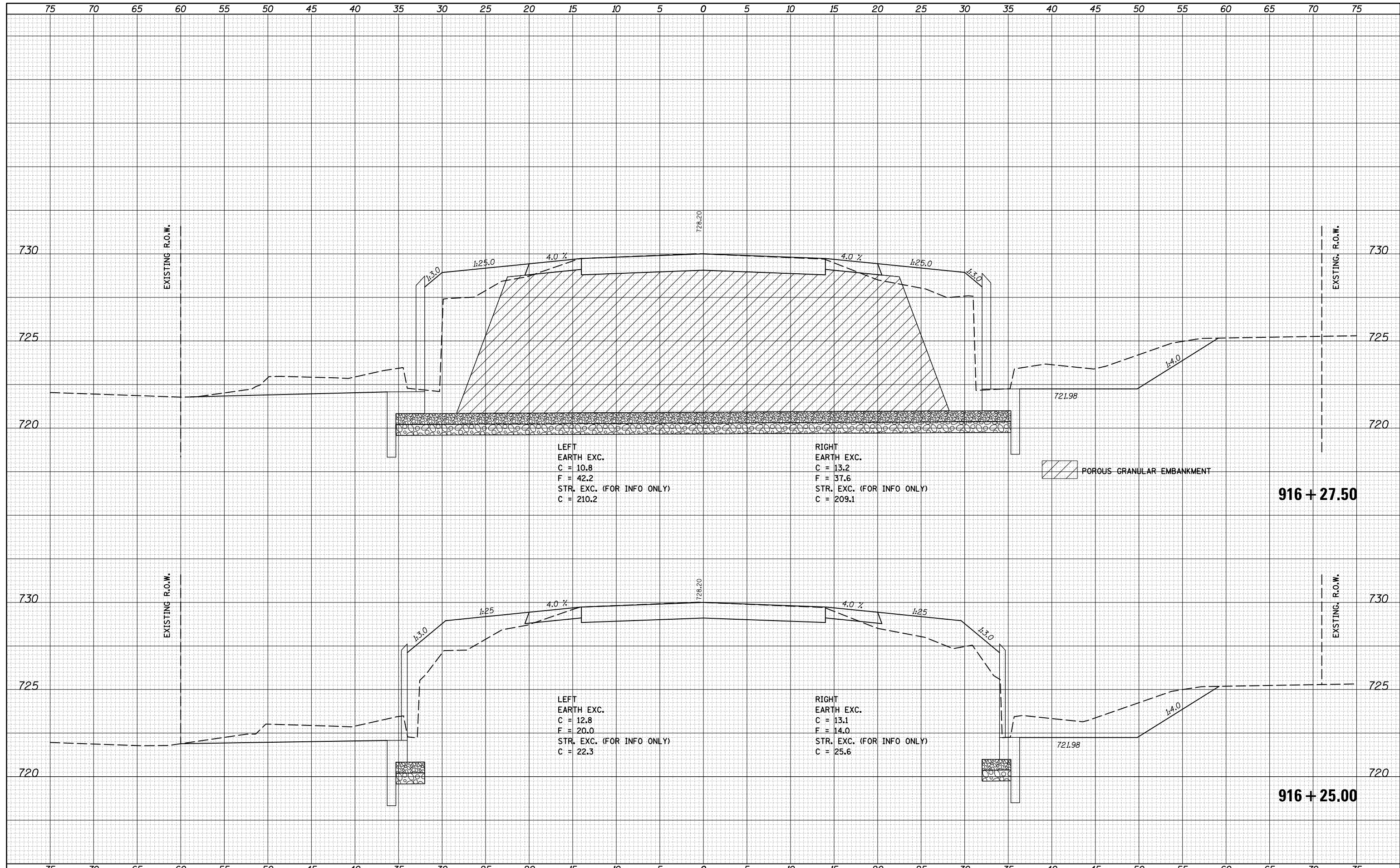
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DATE	
BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



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

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



LEFT
EARTH EXC.
C = 10.8
F = 42.2
STR. EXC. (FOR INFO ONLY)
C = 210.2

RIGHT
EARTH EXC.
C = 13.2
F = 37.6
STR. EXC. (FOR INFO ONLY)
C = 209.1

POROUS GRANULAR EMBANKMENT

916 + 27.50

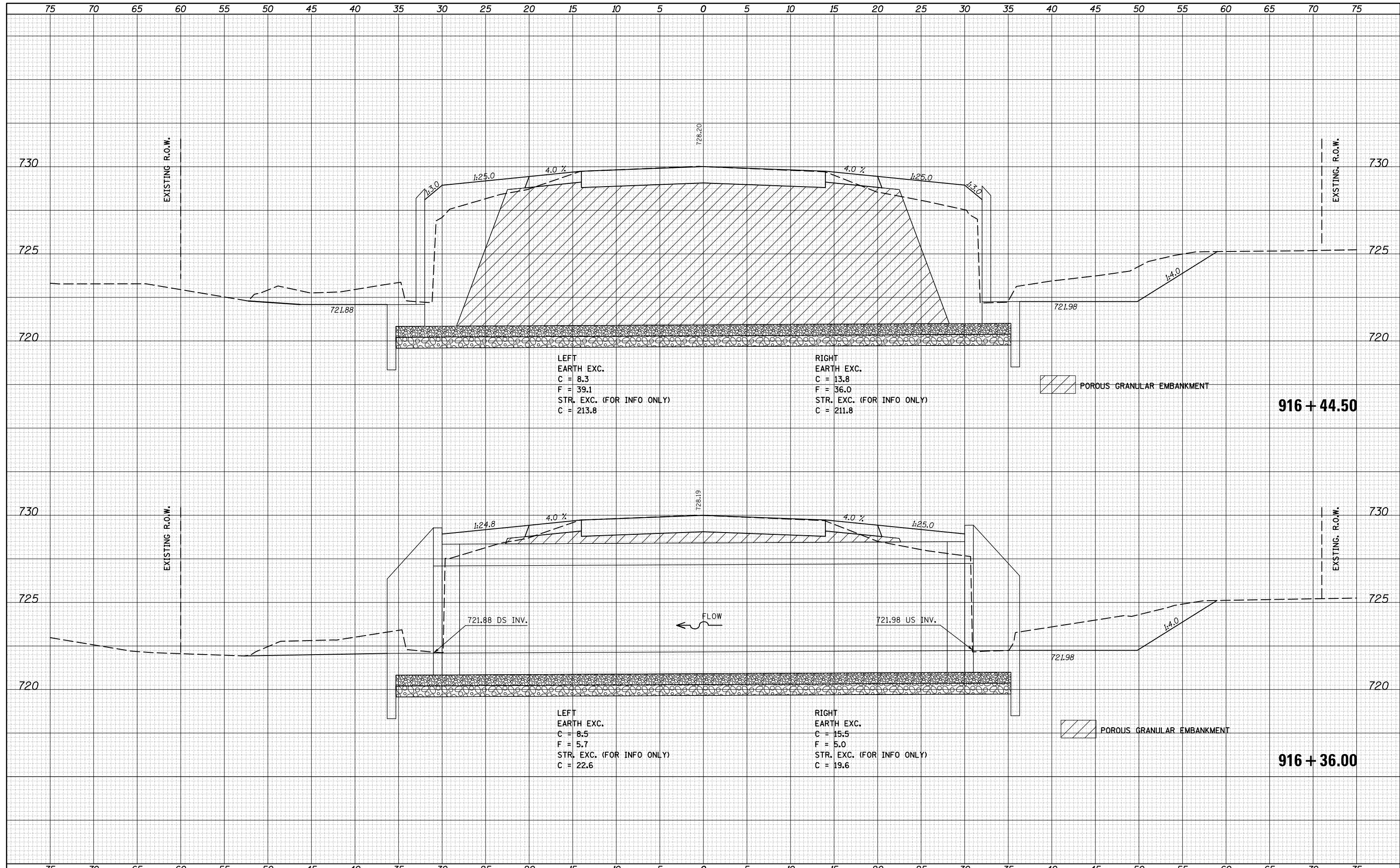
LEFT
EARTH EXC.
C = 12.8
F = 20.0
STR. EXC. (FOR INFO ONLY)
C = 22.3

RIGHT
EARTH EXC.
C = 13.1
F = 14.0
STR. EXC. (FOR INFO ONLY)
C = 25.6

916 + 25.00

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

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



LEFT
EARTH EXC.
C = 8.3
F = 39.1
STR. EXC. (FOR INFO ONLY)
C = 213.8

RIGHT
EARTH EXC.
C = 13.8
F = 36.0
STR. EXC. (FOR INFO ONLY)
C = 211.8

POROUS GRANULAR EMBANKMENT

916 + 44.50

LEFT
EARTH EXC.
C = 8.5
F = 5.7
STR. EXC. (FOR INFO ONLY)
C = 22.6

RIGHT
EARTH EXC.
C = 15.5
F = 5.0
STR. EXC. (FOR INFO ONLY)
C = 19.6

POROUS GRANULAR EMBANKMENT

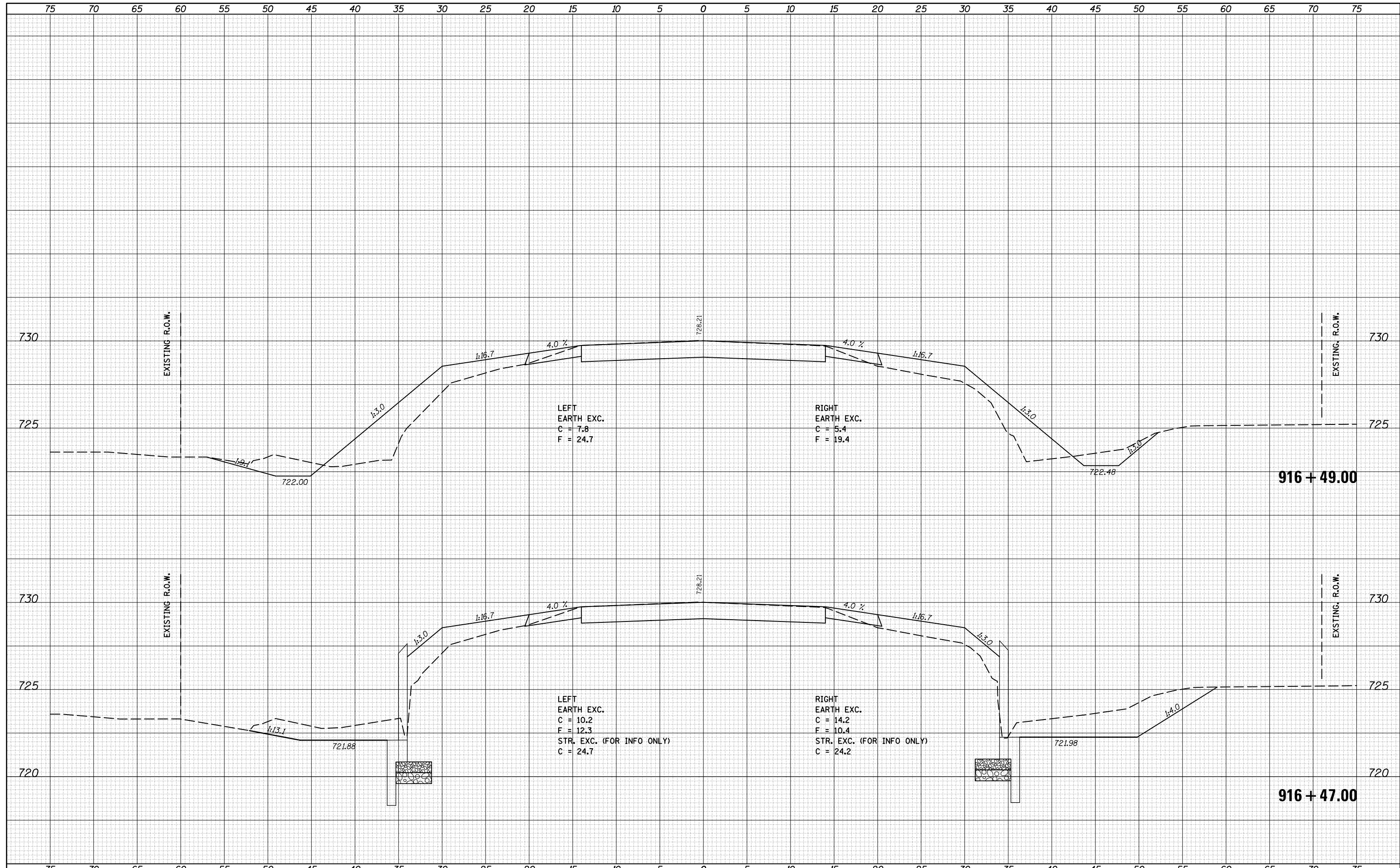
916 + 36.00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

S.N. 057-8223 CROSS SECTIONS

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

DATE	
BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

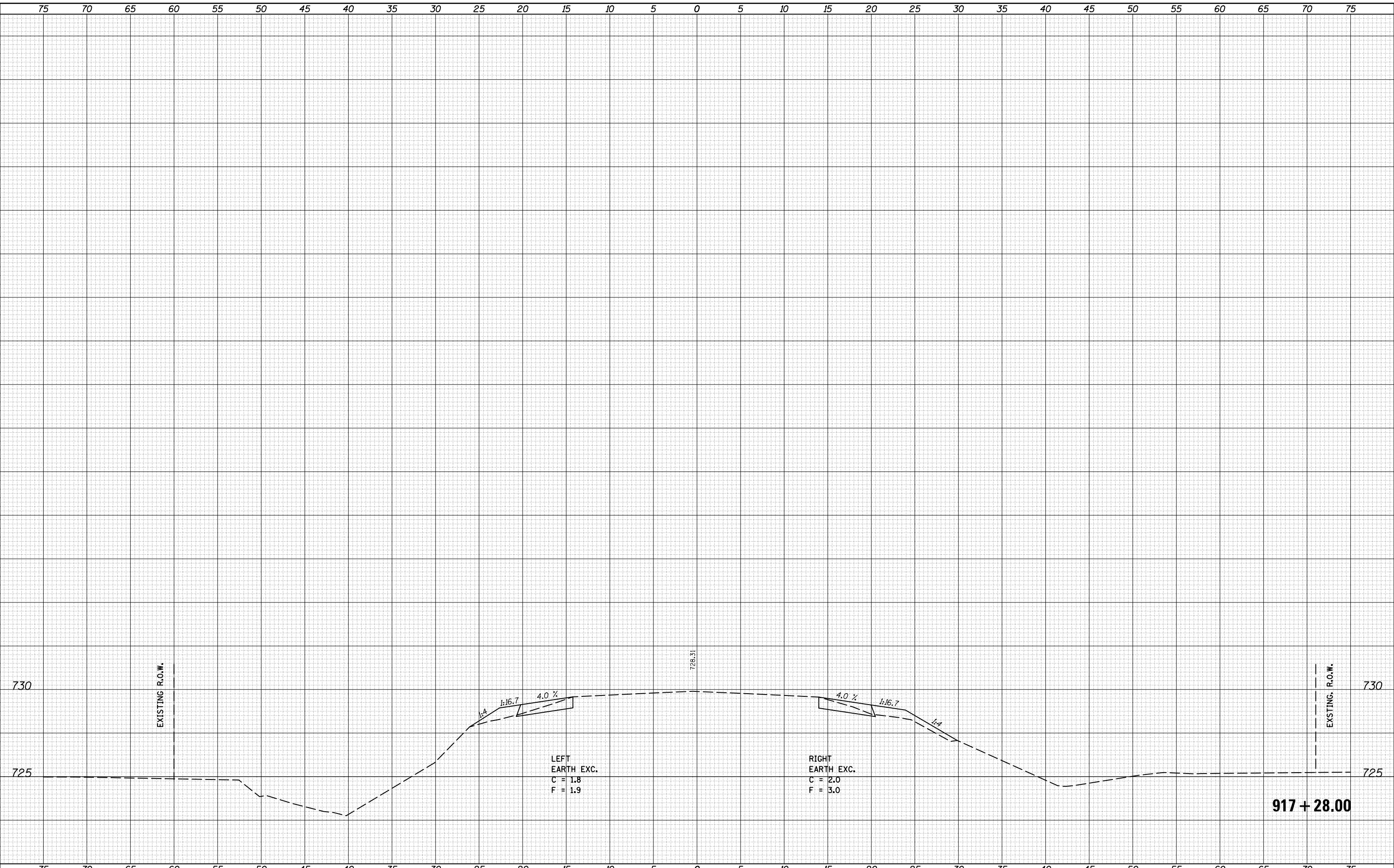


FILE NAME =	USER NAME = carrollr	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-8223 CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht-8223.dgn	DRAWN	REVISIED -	REVISIED -			317	30CR	MCLEAN	66	56
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MODELNAME\$	DATE -	REVISIED -	REVISIED -			SCALE:	SHEET 5	OF 7	SHEETS	STA. 916+47.00

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

DATE	BY	SURVEYED	PLOTTED
		NOTE BOOK	TEMPLATE
		AREAS CHECKED	AREAS CHECKED

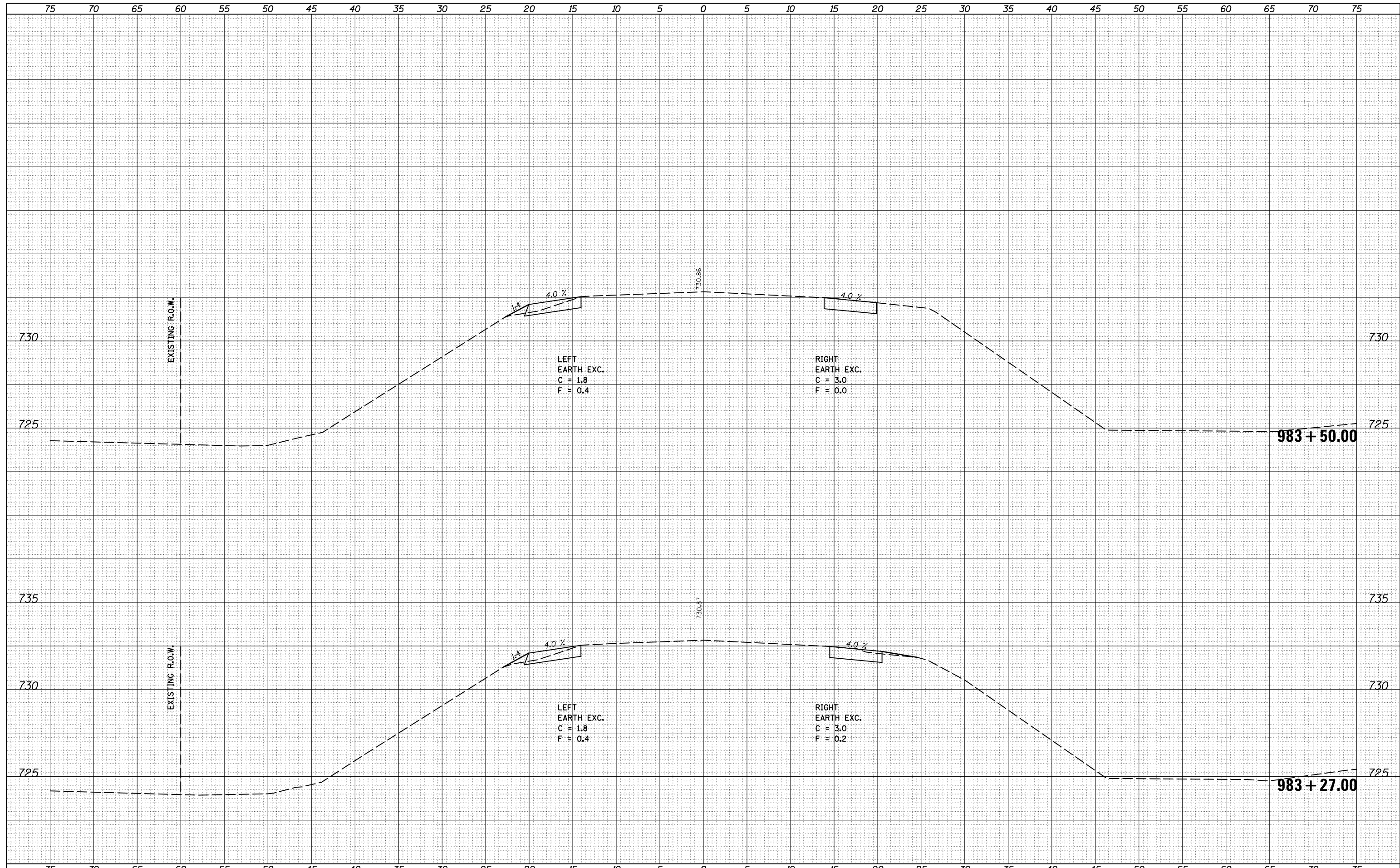
DATE	BY	SURVEYED	PLOTTED
		NOTE BOOK	TEMPLATE
		AREAS CHECKED	AREAS CHECKED



FILE NAME =	USER NAME = corrollt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 057-8223 CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht.8223.dgn	DRAWN	REVISIED -	REVISIED -			317	3OCR	MCLEAN	66	58
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -			CONTRACT NO. 70697				
\$MODELNAME\$	DATE - 1/31/2017	REVISIED -	REVISIED -			SCALE:	SHEET 7	OF 7	SHEETS	STA. 917+28.00

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

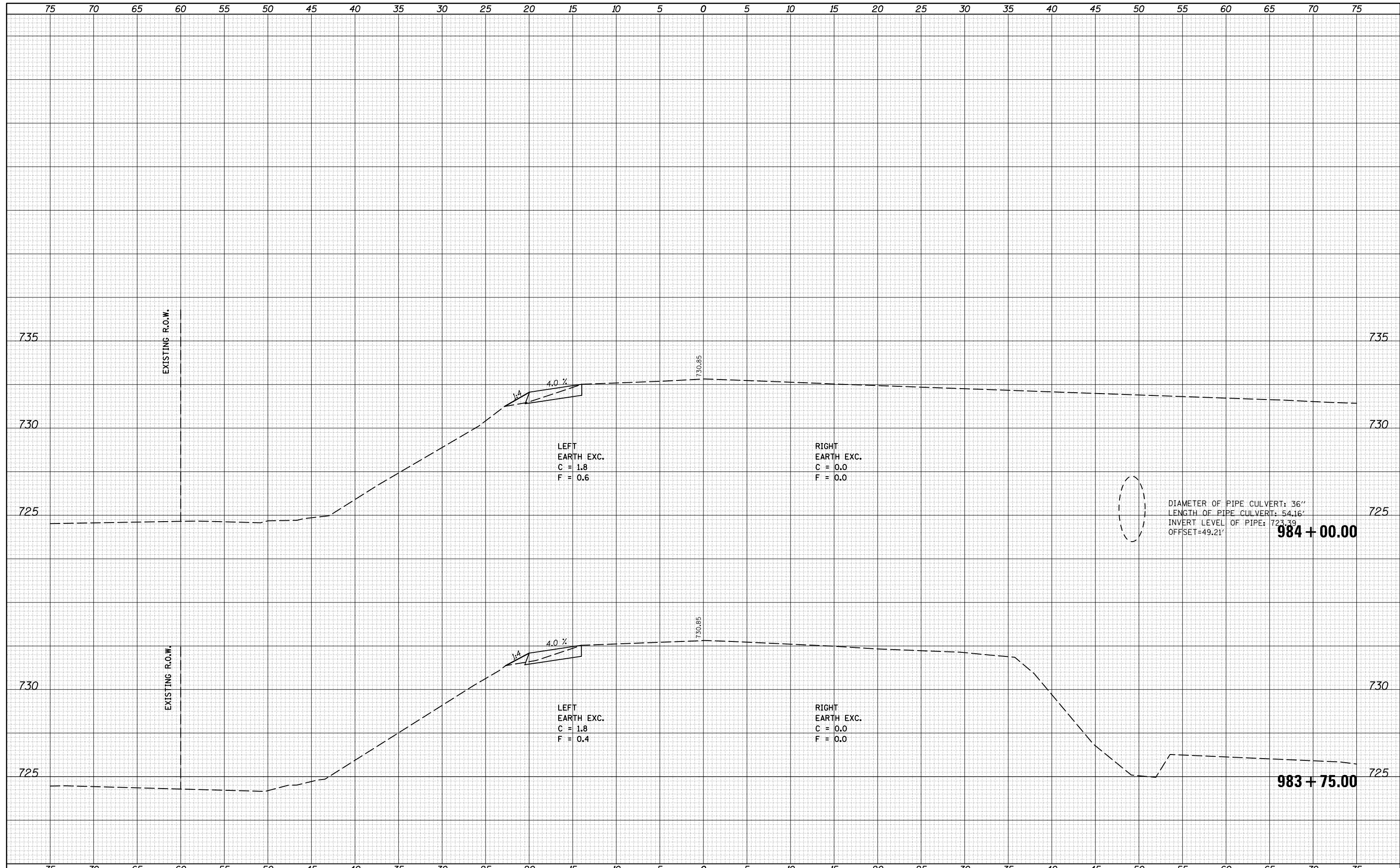
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



FILE NAME =	USER NAME = carrollt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	057-8224 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.Illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht.8224.dgn		REVISIED -	REVISIED -					317	30CR	MCLEAN	66	59
PLOT SCALE = 10.0000' / in.		CHECKED -	REVISIED -					CONTRACT NO. 70697				
PLOT DATE = 1/31/2017		DATE -	REVISIED -					ILLINOIS FED. AID PROJECT				
SCALE:				SHEET 1 OF 8 SHEETS				STA. 983+27.00 TO STA. 983+50.00				

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

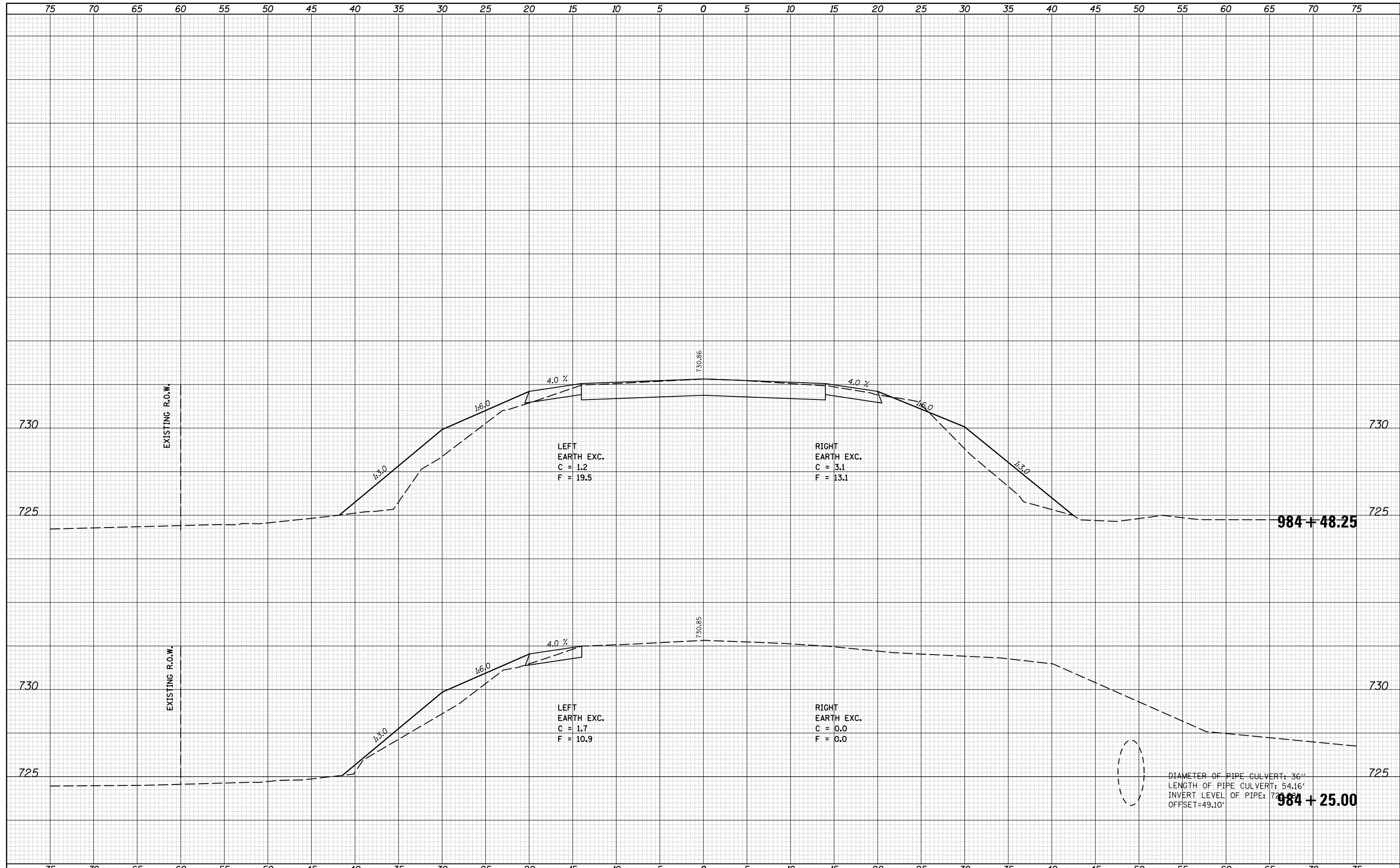
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



FILE NAME =	USER NAME = carrollr	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	057-8224 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\IL084EBIDINTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht-8224.dgn		REVISIED -	REVISIED -					317	3OCR	MCLEAN	66	60
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	CONTRACT NO. 70697									
DATE = 1/31/2017	DATE -	REVISIED -	ILLINOIS FED. AID PROJECT									

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

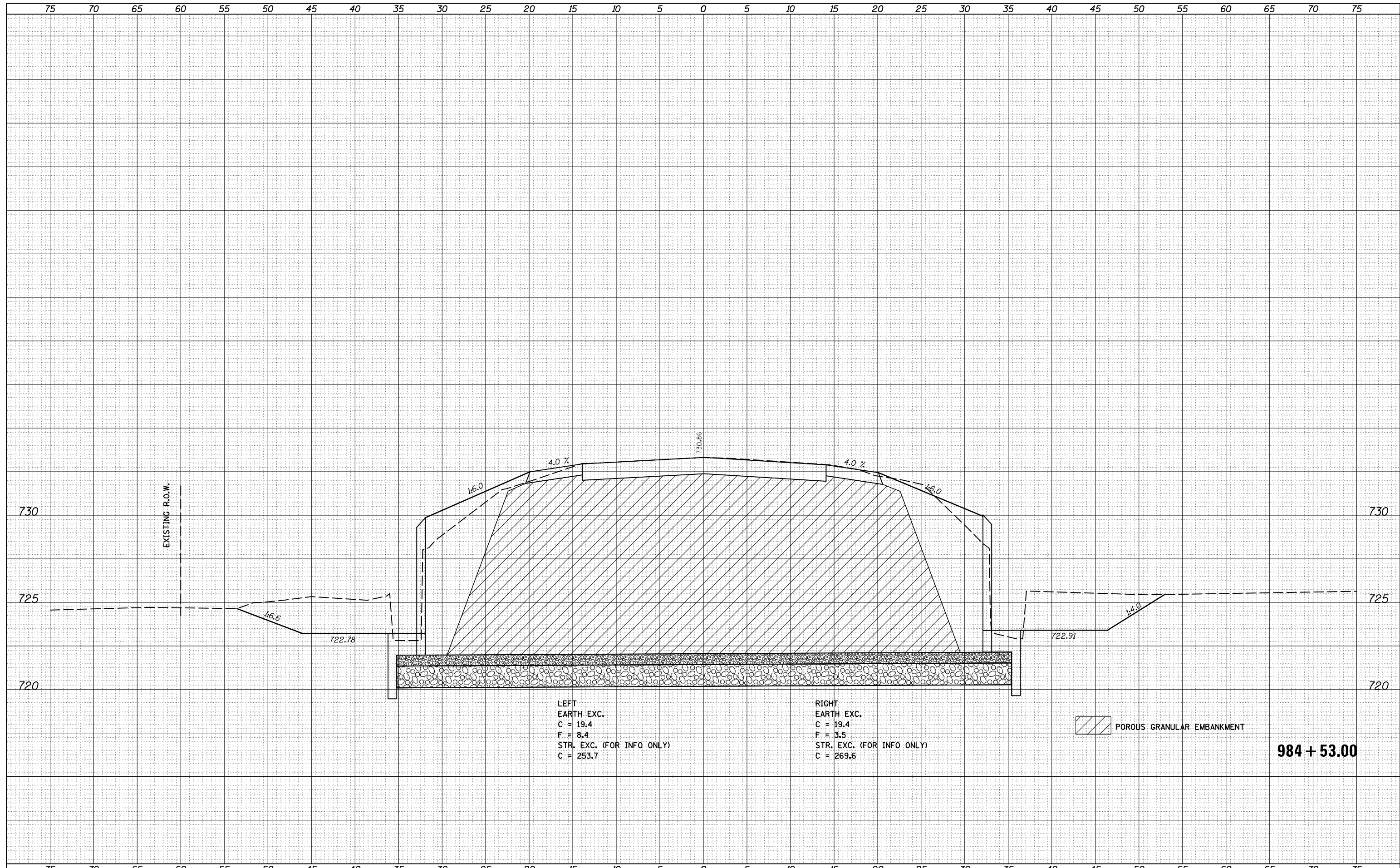
DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



FILE NAME =	USER NAME = corollrt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	057-8224 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.Illinois.gov\PIWIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CADD\Design\0570697-sht-XSht.8224.dgn		REVISIED -	REVISIED -					317	3OCR	MCLEAN	66	61
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	CONTRACT NO. 70697									
MODELNAME	DATE -	REVISIED -	SCALE: SHEET 3 OF 8 SHEETS STA. 984+25.00 TO STA. 984+48.25									
	PLOT DATE = 1/31/2017	DATE -		ILLINOIS FED. AID PROJECT								

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

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



LEFT
EARTH EXC.
C = 19.4
F = 8.4
STR. EXC. (FOR INFO ONLY)
C = 253.7

RIGHT
EARTH EXC.
C = 19.4
F = 3.5
STR. EXC. (FOR INFO ONLY)
C = 269.6

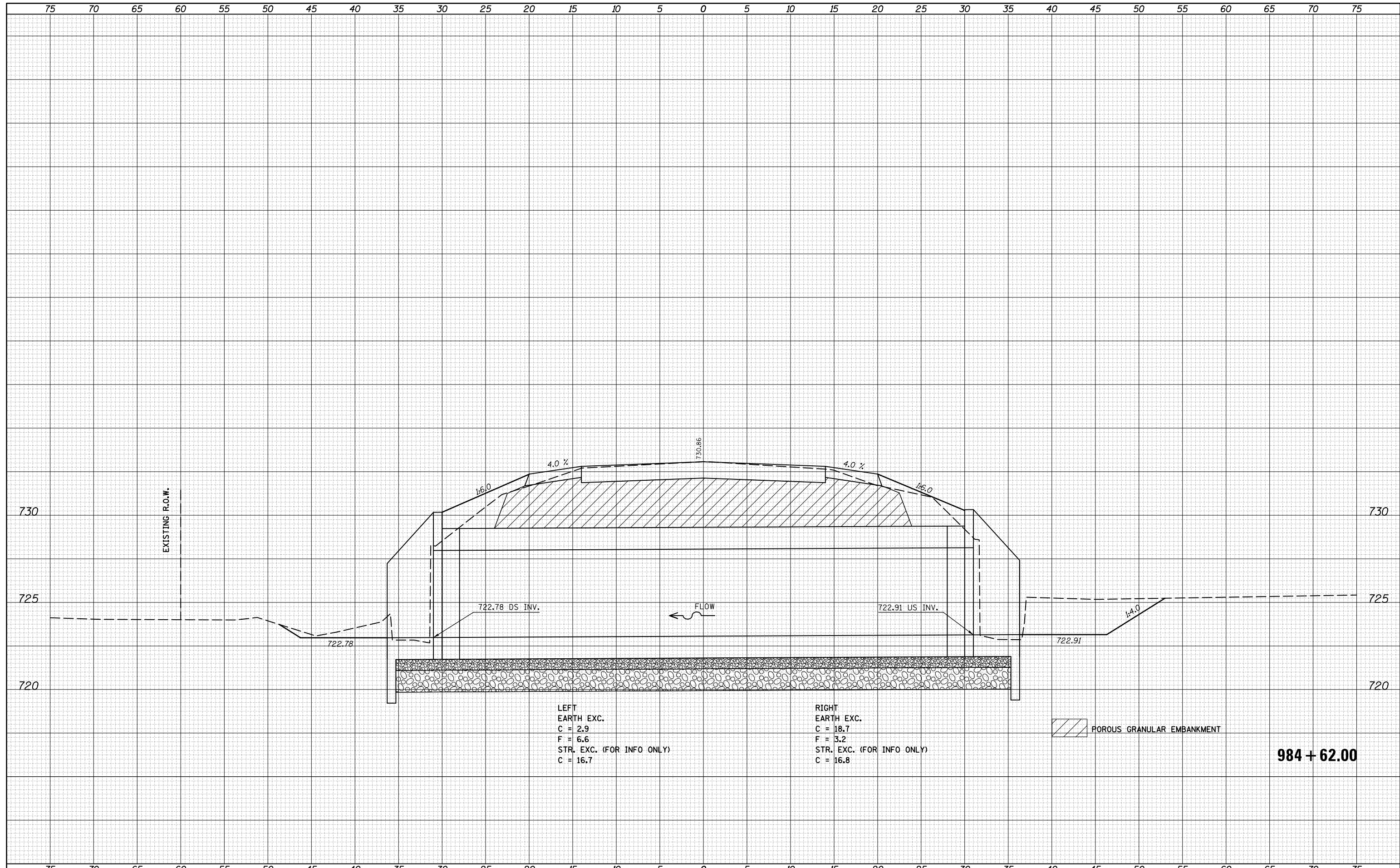
POROUS GRANULAR EMBANKMENT

984 + 53.00

FILE NAME =	USER NAME = carrollrt	DESIGNED -	REVISOR -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	057-8224 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.Illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0578697\CADD\Design\0578697-sht-XSht.8224.dgn		REVISOR -	REVISOR -					317	30CR	MCLEAN	66	62
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISOR -	REVISOR -					CONTRACT NO. 70697				
DATE = 1/31/2017	DATE -	REVISOR -	REVISOR -					ILLINOIS FED. AID PROJECT				
MODELNAME				SCALE:	SHEET 4	OF 8	SHEETS	STA. 984+53.00	TO STA. 984+53.00			

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

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



LEFT
 EARTH EXC.
 C = 2.9
 F = 6.6
 STR. EXC. (FOR INFO ONLY)
 C = 16.7

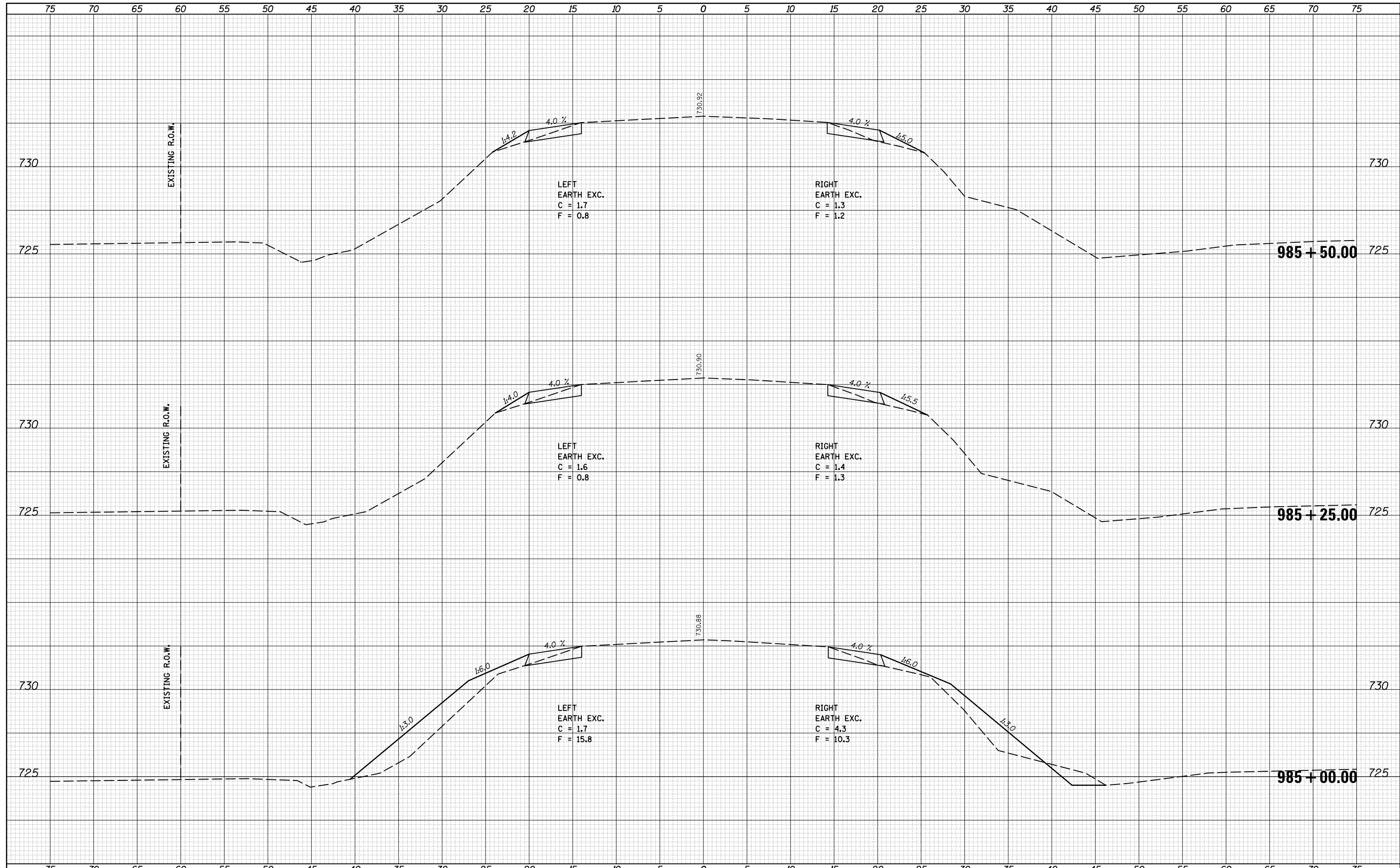
RIGHT
 EARTH EXC.
 C = 18.7
 F = 3.2
 STR. EXC. (FOR INFO ONLY)
 C = 16.8

POROUS GRANULAR EMBANKMENT

984 + 62.00

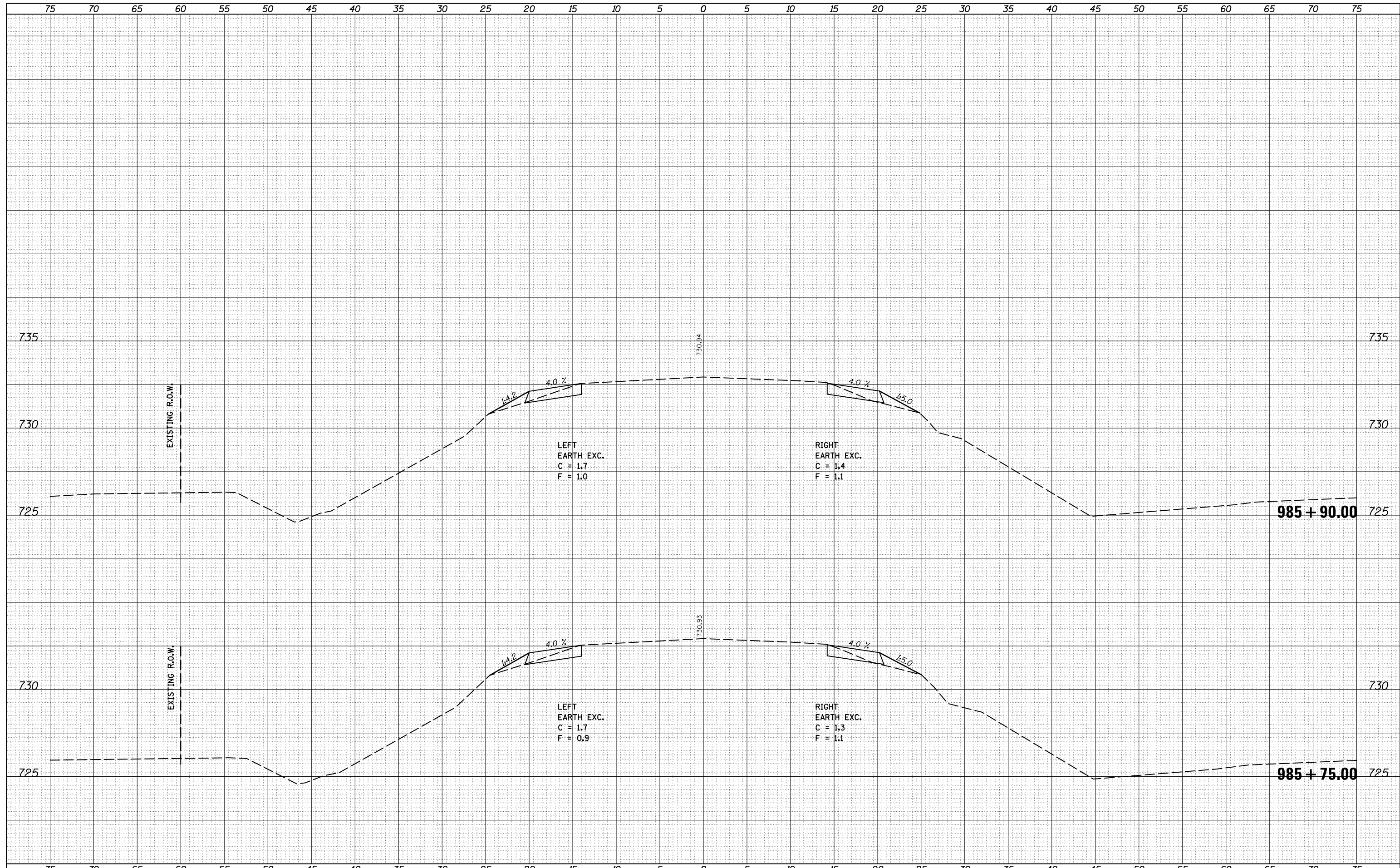
DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	AREAS CHECKED

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



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

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



FILE NAME =	USER NAME = carrollt	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	057-8224 CROSS SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 5\Projects\0570697\CAD\DRAWING\0570697-sht-XSht-8224.dgn	DRAWN	REVISIED -	REVISIED -					317	30CR	MCLEAN	66	66
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -					CONTRACT NO. 70697				
DATE = 1/31/2017	DATE -	REVISIED -	REVISIED -					ILLINOIS FED. AID PROJECT				
\$MODELNAME\$				SCALE:	SHEET 8	OF 8	SHEETS	STA. 985+75.00	TO STA. 985+90.00			