

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	1
		ILLINOIS	CONTRACT NO. 72F59	

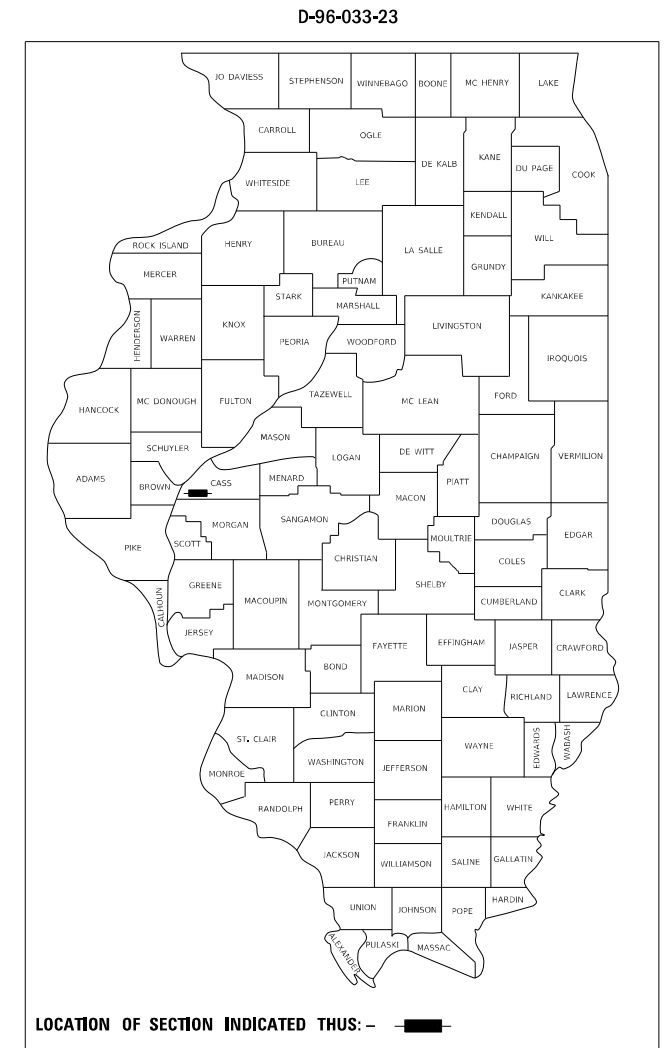
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FAP 67, 614 (IL 78, IL 125)
ADT-3,595 (2021)
CLASSIFICATION – MINOR ARTERIAL
PV = 87.82%
SV = 4.93%
MU = 7.25%

PROPOSED HIGHWAY PLANS

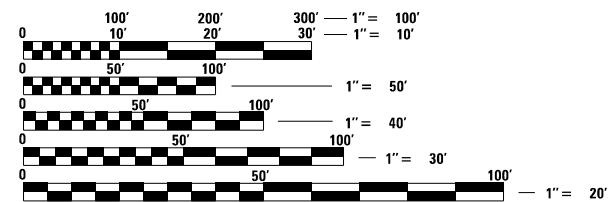
FAP ROUTE 67 (IL 125)
SECTION 6CR-1
PROJECT HBFP-7RGG(179)
CULVERT REPLACEMENT
CASS COUNTY

C-96-076-23



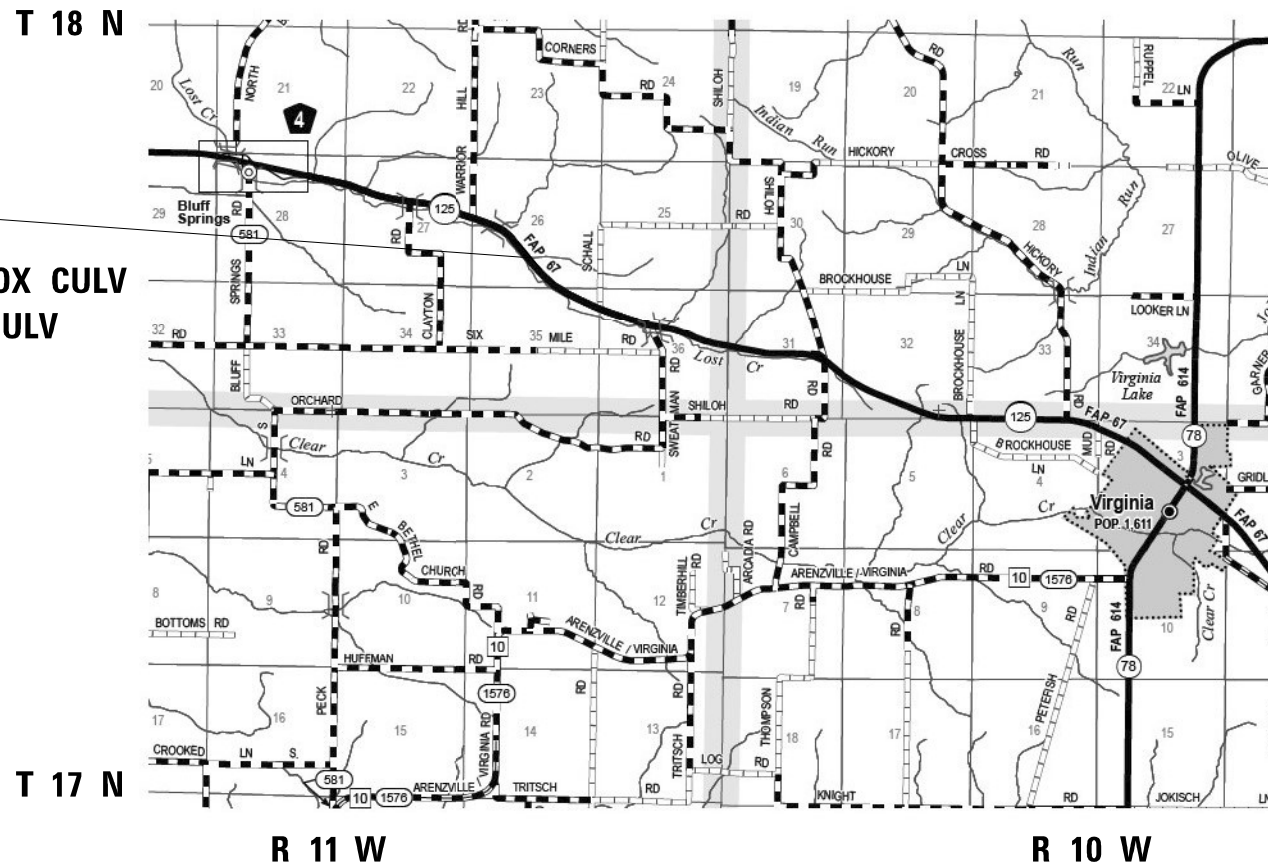
CULVERT REPLACEMENT

STA 151+96
EX SN 009-7002 8.25' X 8.25' BOX CULV
PR SN 009-7023 10' X 9' BOX CULV



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 EXCAVATORS
1-800-892-0123
OR 811



PROJECT ENGINEER: JAY EDWARDS (217) 785-0597
PROJECT MANAGER: JONATHAN COX (217) 782-1378

GROSS LENGTH = 887.32 FT. = 0.168 MILE
NET LENGTH = 887.32 FT. = 0.168 MILE

CONTRACT NO. 72F59

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 28, 2023

Jay P. Myers
REGIONAL ENGINEER

October 13, 2023
Scott A. Etkin
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2023
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE DISTRICT 6 BUREAU OF OPERATIONS AT (217) 785-5306 THREE WEEKS PRIOR TO IMPLEMENTING ANY TRAFFIC CONTROL.
2. THE DISTRICT 6 BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS (PH: 217-785-5306).
3. ALL TEMPORARY PAVEMENT MARKING TAPE THAT IS TO REMAIN IN PLACE LONGER THAN 14 DAYS SHALL BE TYPE III OR TYPE IV TAPE. TYPE I TEMPORARY PAVEMENT MARKING TAPE MAY BE USED FOR APPLICATIONS OF 14 DAYS OR LESS.
4. NO PASSING ZONES TO BE FIELD VERIFIED BY THE DISTRICT 6 BUREAU OF OPERATIONS. THE RESIDENT ENGINEER SHALL NOTIFY THE BUREAU OF OPERATIONS AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PERMANENT PAVEMENT MARKING (PH: 217-785-5306)
5. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON NAVD88.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

HMA SURFACE/BINDER	0.056 TONS/(SQ. YD.*IN.)
BITUMINOUS MATERIALS (TACK COAT)	0.05 LBS/SQ FT (MILLED HMA)
AGGREGATE WEDGE SHOULDERS TYPE B	1.6 TONS/CUYD
AGGREGATE BASE COURSE TYPE B	1.6 TONS/CUYD
STONE DUMPED RIPRAP	1.5 TONS/CUYD
NITROGEN FERTILIZER NUTRIENT	90 LB/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LB/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LB/ACRE
AGRICULTURE GROUND LIMESTONE	2 TONS/ACRE

STANDARDS

000001-08	701201-05
001001-02	701301-04
001006	701311-03
280001-07	701321-18
515001-04	701901-08
666001-01	704001-08
701001-02	780001-05
701006-05	781001-04
	782006-01

COMMITMENTS

- 1.) TREES EQUAL TO OR GREATER THAN 3 INCHES IN DIAMETER SHALL NOT BE REMOVED FROM APRIL 1ST TO 30TH OF ANY GIVEN YEAR.

INDEX OF SHEETS

1	COVER SHEET
2	GENERAL NOTES, LIST OF STANDARDS, INDEX OF SHEETS
3-6	SUMMARY OF QUANTITIES
7	SCHEDULES OF QUANTITIES
8-9	TYPICAL SECTIONS
10	ALIGNMENT, TIES, AND BENCHMARKS
11-12	PLAN SHEETS
13-14	STAGING PLANS
15	EROSION CONTROL PLANS
16-17	WIDTH RESTRICTION SIGNING DETAIL
18-32	BOX CULVERTS SHEETS
33	MISCELLANEOUS DETAILS
34-42	CROSS SECTIONS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE

LOCATIONS:	IL 97, IL 125	IL 97, IL 125
MIXTURE USE (S):	HMA Surface Course & Shoulders	HMA Base Course
PG:	SBS PG 64-28	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL-19.0
FRICTION AGGREGATE:	MIX "C"	N/A
MIXTURE WEIGHT:	112 lb/sy*in	112 lb/sy*in
QUALITY MANAGEMENT:	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A
MTD:	NO	NO

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT 6**

EXAMINED August, 14 20 23
[Signature]
ENGINEER OF OPERATIONS

EXAMINED August, 22 20 23
[Signature]
ENGINEER OF PROJECT IMPLEMENTATION

EXAMINED August, 23 20 23
[Signature]
ENGINEER OF PROGRAM DEVELOPMENT

REV. - MS

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	DRAWN -	REVISED -
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PLOT DATE = 9/1/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, LIST OF STANDARDS,
INDEX OF SHEETS, MIX REQUIREMENTS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	2
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

				6-00512-0000
				80% FEDERAL 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BOX CULVERT 0004 S.N. 009-7023
20100500	TREE REMOVAL, ACRES	ACRE	0.5	0.5
20200100	EARTH EXCAVATION	CU YD	1801	1801
25000200	SEEDING, CLASS 2	ACRE	0.7	0.7
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	61	61
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	61	61
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	61	61
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.4	1.4
25100115	MULCH, METHOD 2	ACRE	0.7	0.7
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	200	200
28000305	TEMPORARY DITCH CHECKS	FOOT	130	130
28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	1399	1399
28200200	FILTER FABRIC	SQ YD	1399	1399
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	520	520
35501332	HOT-MIX ASPHALT BASE COURSE, 12"	SQ YD	520	520

REV. - MS

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USER NAME = Robert.Miles	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
PLOT SCALE = 100.0000' / in.	DRAWN -	REVISED -		SCALE: N/A	SHEET 1	OF 4	SHEETS	STA. N/A	TO STA. N/A	67	6CR-1	CASS	42	3
PLOT DATE = 8/28/2023	CHECKED -	REVISED -		CONTRACT NO. 72F59										
	DATE -	REVISED -		ILLINOIS FED. AID PROJECT										

				6-00512-0000
				80% FEDERAL 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BOX CULVERT 0004 S.N. 009-7023
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1170	1170
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1654	1654
40600370	LONGITUDINAL JOINT SEALANT	FOOT	887	887
40604150	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	265	265
44000100	PAVEMENT REMOVAL	SQ YD	731	731
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	3156	3156
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	96	96
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	161	161
50800105	REINFORCEMENT BARS	POUND	41350	41350
50800515	BAR SPLICERS	EACH	84	84
51500100	NAME PLATES	EACH	1	1
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	2172	2172
52200600	GEOTEXTILE RETAINING WALL	SQ FT	130	130

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF
QUANTITIES**

SCALE: N/A SHEET 2 OF 4 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	4
			CONTRACT NO. 72F59	
		ILLINOIS	FED. AID PROJECT	

				6-00512-0000
				80% FEDERAL 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BOX CULVERT 0004 S.N. 009-7023
54003000	CONCRETE BOX CULVERTS	CU YD	210.3	210.3
54248510	CONCRETE COLLAR	CU YD	4.6	4.6
63200310	GUARDRAIL REMOVAL	FOOT	909	909
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	10	10
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	268	268
70300100	SHORT TERM PAVEMENT MARKING	FOOT	266	266
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	30	30
70400100	TEMPORARY CONCRETE BARRIER	FOOT	387.5	387.5

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	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF
QUANTITIES**

SCALE: N/A SHEET 3 OF 4 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	5
			CONTRACT NO. 72F59	
		ILLINOIS	FED. AID PROJECT	

				6-00512-0000
				80% FEDERAL 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BOX CULVERT
				0004
				S.N. 009-7023
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	350	350
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
* 78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	1996	1996
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	10	10
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Ø Z0076600	TRAINEES	HOUR	500	500
Z0023602	GRANULAR CULVERT BACKFILL	CU YD	1323	1323
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500
* Z0054517	ROCK FILL - FOUNDATION	TON	242	242

* SPECIALTY ITEM

Ø 0042

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USER NAME = Robert.Miles	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
DRAWN -	REVISIED -	REVISIED -		SCALE: N/A	SHEET 4	OF 4	SHEETS	STA. N/A	TO STA. N/A	67	6CR-1	CASS	42	6
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISIED -		CONTRACT NO. 72F59										
PLOT DATE = 8/28/2023	DATE -	REVISIED -		ILLINOIS FED. AID PROJECT										

				20100500	28000250	28000305	28100705	28200200	
LOCATION		SIDE	AREA	TREE REMOVAL, ACRES	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECKS	STONE DUMPED RIPRAP, CLASS A3	FILTER FABRIC	
FAP 67 (IL 125)			SQFT	ACRE	POUND	FOOT	SQ YD	SQ YD	
148+20.00	TO	155+18.00	LT	26057	0.34	100.0	90.0	922.9	922.9
148+70.00	TO	156+00.00	RT	19574	0.14	100.0	40.0	476.5	476.5
TOTAL				0.5	200	130	1399	1399	

			70300100	70300150
LOCATION		SIDE	SHORT TERM PAVEMENT MARKING (FT)	SHORT TERM PAVEMENT MARKING REM (SQFT)
FAP 67 (IL 125)			CENTERLINE	EDGELINE
147+47.68	TO	156+35.00	266	0
TOTAL			266	30

				78100100	78300200
LOCATION		SIDE	AREA	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER REM
FAP 67 (IL 125)			EACH	EACH	
147+47.68	TO	156+35.00	10	10	
TOTAL				10	10

				70400100	70400200	70600251	70600352
LOCATION		SIDE	AREA	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3
FAP 67 (IL 125) - STAGE 1			FOOT	FOOT	EACH	EACH	
150+05.00	TO	153+86.00	381.0		2.0		
FAP 67 (IL 125) - STAGE 2							
150+30.00	TO	153+69.00		339.0		2.0	
TOTAL				381	339	2	2
USE				387.5	350	2	2

				63200310
LOCATION		SIDE	AREA	GUARDRAIL REMOVAL
FAP 67 (IL 125)			FT	
150+09.00	TO	154+63.00	LT	454.0
149+10.00	TO	153+65.00	RT	455.0
TOTAL				909

				78009005	
LOCATION		SIDE	AREA	MODIFIED URETHANE MARKING 5" (FOOT)	
FAP 67 (IL 125)			EDGELINE	CENTERLINE	
147+47.68	TO	156+35.00	RT/LT	1774.6	221.8
TOTAL				1996	

				66600105
LOCATION		SIDE	AREA	FURNISHING AND ERECTING ROW MARKERS
FAP 67 (IL 125)			EACH	
151+50.00	TO	153+45.00	LT	4.0
148+55.00	TO	153+50.00	RT	6.0
TOTAL				10

				31101400	35501332	40600275	40600290		40600370	40604150	44000100	44000155	48102100	
LOCATION		SIDE	LENGTH (FOOT)	AREA (SQ FT)	SUBBASE GRANULAR MATERIAL, TYPE B 6"	HOT-MIX ASPHALT BASE COURSE, 12"	BITUMINOUS MATERIALS (PRIME COAT) (AGG BASE)	BITUMINOUS MATERIALS (TACK COAT) (MILLED HMA)	BITUMINOUS MATERIALS (TACK COAT) (BETWEEN LIFTS)	LONGITUDINAL JOINT SEALANT	POLY HMA SURFACE COURSE, IL 9.5, MIX "C", N50	PAVEMENT REMOVAL	HMA SURFACE REM 1 1/2"	AGGREGATE WEDGE SHOULDERS, TYPE B
FAP 67 (IL 125)			LT/RT		SQYD	SQYD	POUND	POUND	POUND	FOOT	TON	SQYD	SQYD	TON
147+47.68	TO	149+72.62	LT	224.94	3374.5			168.7			31.5		374.9	
147+47.68	TO	150+36.87	RT	289.19	4337.9			216.9			40.5		482.0	
149+72.62	TO	150+86.50	LT	113.88	1879.5			94.0			17.5	27.8	208.8	
150+36.87	TO	150+86.50	RT	49.63	817.8			40.9			7.6		90.9	
150+86.50	TO	151+35.00	LT/RT	48.50	1746			87.3			16.3	31.9	194.0	
151+35.00	TO	152+65.00	LT/RT	130.00	4680	520.0	520.0	1170.0	234.0	234.0	43.7	606.5	520.0	
152+65.00	TO	153+00.00	LT/RT	35.00	1259			63.0			11.8	23.3	139.9	
153+00.00	TO	154+27.02	LT	127.02	2096.1			104.8			19.6	41.4	232.9	
153+00.00	TO	153+49.50	RT	49.50	815.5			40.8			7.6		90.6	
154+27.02	TO	156+35.00	LT	207.98	3120			156.0			29.1		346.7	
153+49.50	TO	156+35.00	RT	285.50	4282			214.1			40.0		475.8	
147+47.68	TO	156+35.00	LT/RT	887.32	-					887.3				95.8
SUBTOTAL					520	520	1170	1420	234	887	265	731	3156	96
TOTAL					520	520	1170	1654		887	265	731	3156	96

				25000200	25100115	25000400	25000500	25000600	25000700
LOCATION		SIDE	AREA	SEEDING, CLASS 2	MULCH, METHOD 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHEROUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE
FAP 67 (IL 125)			SQFT	ACRE	ACRE	POUND	POUND	POUND	TON
147+95.00	TO	156+35.00	LT	18809	0.43	0.43	38.86	38.86	0.86
148+50.00	TO	156+35.00	RT	10748	0.25	0.25	22.21	22.21	0.49
TOTAL				0.7	0.7	61	61	61	1.4

			20200100			
LOCATION		SIDE	EARTH EXCAVATION	SHRINKAGE FACTOR	EMBANKMENT	BALANCE WASTE +
FAP 67 (IL 125)			CU YD	CU YD	CU YD	CU YD
148+00.00	TO	156+35.00	1801.0	1350.8	487.0	863.8
TOTAL			1801	1351	487	864

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USER NAME = Sydnle.Schwarz	DESIGNED -	REVISED -
PLOT SCALE = 1:9997' / in.	DRAWN -	REVISED -
PLOT DATE = 9/3/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF
QUANTITIES**

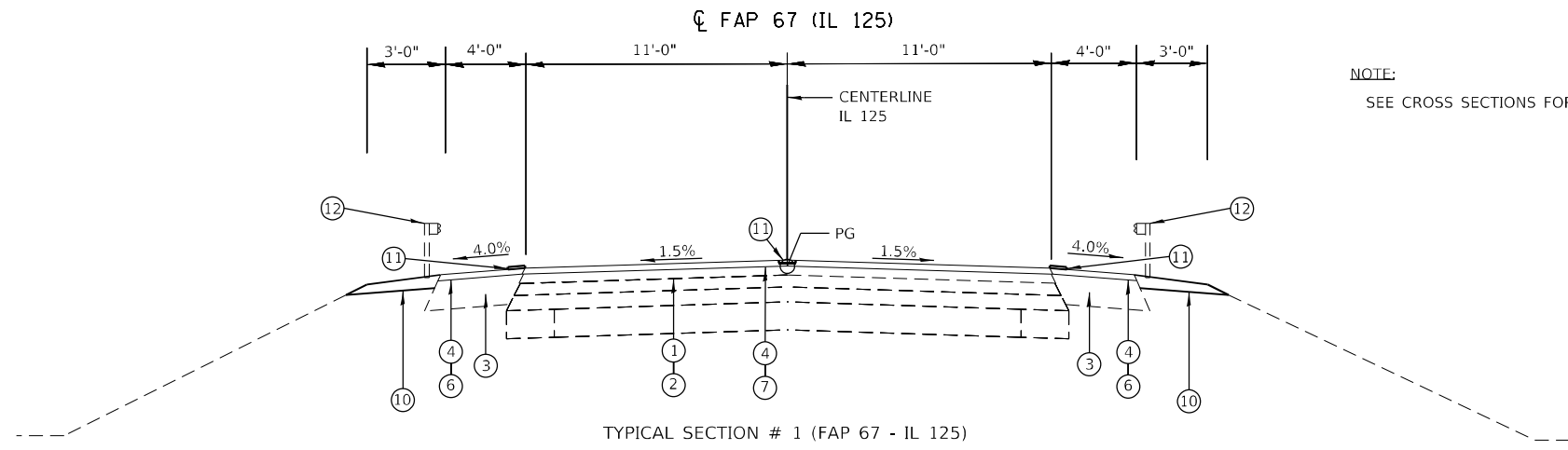
SCALE: N/A SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	7
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

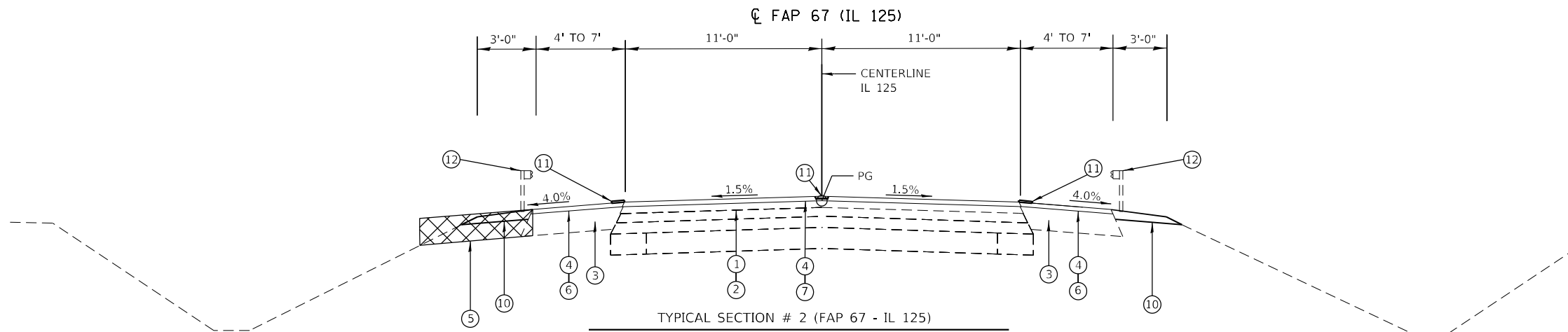
LEGEND

- ① EXISTING HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 2 1/2"
- ② EXISTING POLY SURFACE COURSE, IL-9.5 1 1/2" 'MIX C', N50
- ③ EXISTING HOT MIX ASPHALT SHOULDERS
- ④ PROPOSED HMA SURFACE REMOVAL 1 1/2"
- ⑤ PROPOSED PAVEMENT REMOVAL
- ⑥ PROPOSED HMA SHOULDERS 1 1/2"
- ⑦ PROPOSED HMA POLY SURFACE COURSE, IL 9.5 1 1/2", 'MIX C', N50
- ⑧ PROPOSED HMA BASE COURSE, 12"
- ⑨ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 6"
- ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- ⑪ PROPOSED MODIFIED URETHANE PAVEMENT MARKING - LINE 5"
- ⑫ PROPOSED GUARDRAIL REMOVAL

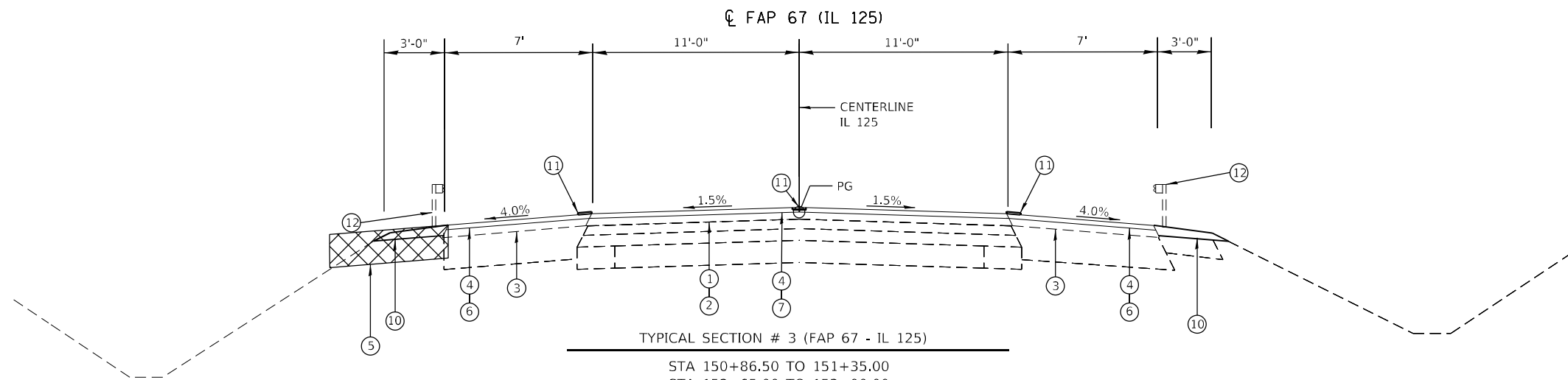
NOTE:
SEE CROSS SECTIONS FOR DITCH GRADING INFORMATION



TYPICAL SECTION # 1 (FAP 67 - IL 125)
 STA 147+47.68 TO STA 149+72.62 LT
 STA 147+47.68 TO STA 150+36.87 RT
 STA 154+27.02 LT TO STA 154+70.00 LT
 STA 153+49.50 RT TO STA 153+97.72 RT



TYPICAL SECTION # 2 (FAP 67 - IL 125)
 STA 149+72.62 LT TO 150+86.50
 STA 150+36.87 RT TO 150+86.50
 STA 153+00.00 TO 154+27.02 LT
 STA 153+00.00 TO 153+49.50 RT



TYPICAL SECTION # 3 (FAP 67 - IL 125)
 STA 150+86.50 TO 151+35.00
 STA 152+65.00 TO 153+00.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

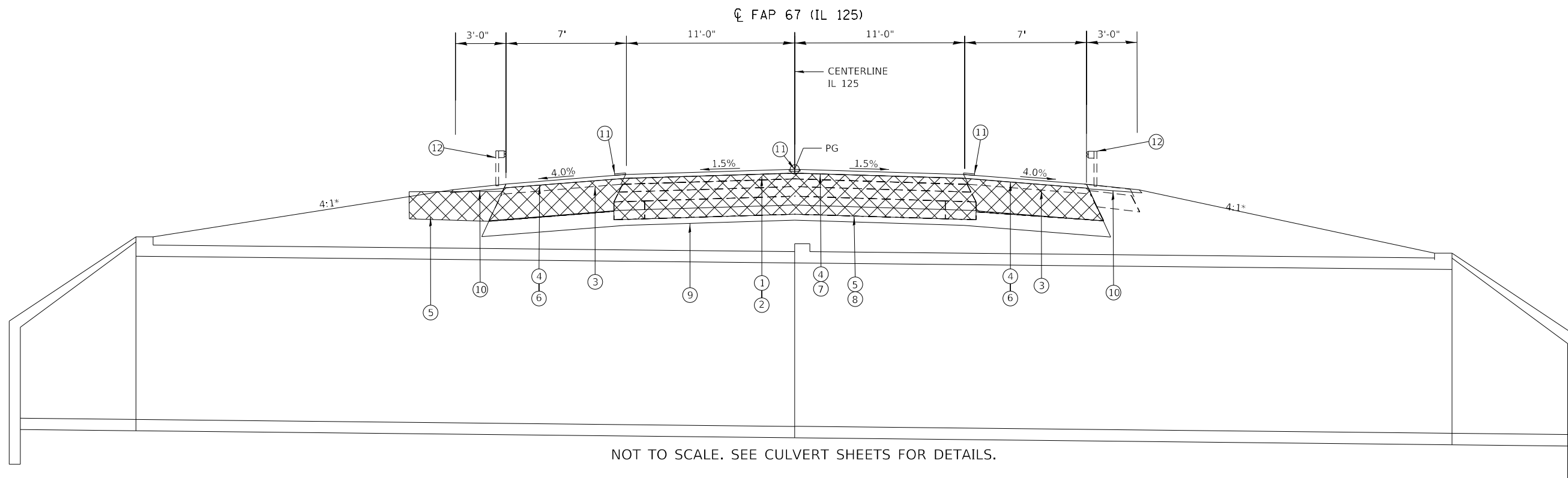
TYPICAL SECTIONS

USER NAME = Sydnle.Schwarz	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISOR -
PLOT DATE = 8/31/2023	DATE -	REVISOR -

SCALE: N/A	SHEET 1	OF 2 SHEETS	STA. N/A	TO STA. N/A
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F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 8
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

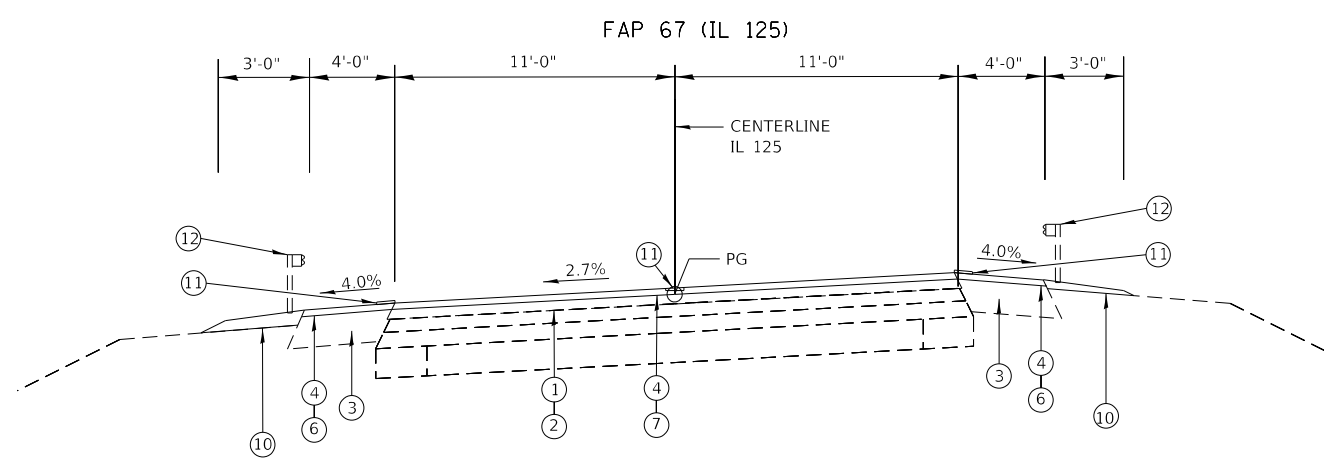
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NOT TO SCALE. SEE CULVERT SHEETS FOR DETAILS.

TYPICAL SECTION # 4 (FAP 67 - IL 125)
STA 151+35.00 TO STA 152+65.00

- LEGEND**
- ① EXISTING HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50 2¼"
 - ② EXISTING POLY SURFACE COURSE, IL-9.5 1½" 'MIX C', N50
 - ③ EXISTING HOT MIX ASPHALT SHOULDERS
 - ④ PROPOSED HMA SURFACE REMOVAL 1½"
 - ⑤ PROPOSED HMA BASE REMOVAL
 - ⑥ PROPOSED HMA SHOULDERS 1½"
 - ⑦ PROPOSED HMA POLY SURFACE COURSE, IL 9.5 1½", 'MIX C', N50
 - ⑧ PROPOSED HMA BASE COURSE, 12"
 - ⑨ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE B, 6"
 - ⑩ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
 - ⑪ PROPOSED MODIFIED URETHANE PAVEMENT MARKING - LINE 5"
 - ⑫ PROPOSED GUARDRAIL REMOVAL



TYPICAL SECTION # 5 (FAP 67 - IL 125)
STA 154+70.00 LT TO 156+35.00
STA 153+97.72 RT TO 156+35.00

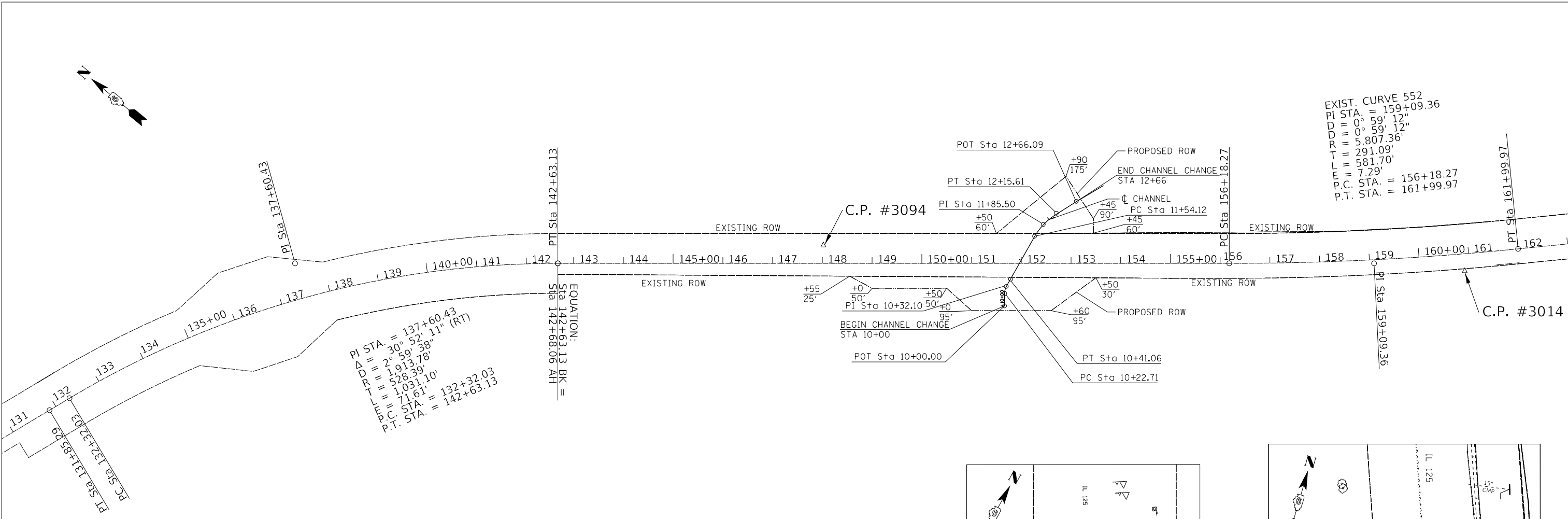
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USER NAME = Robert.Miles	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 8/27/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: N/A		SHEET 2		OF 2 SHEETS		STA.	TO STA.
		TYPICAL SECTIONS					

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	9
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				



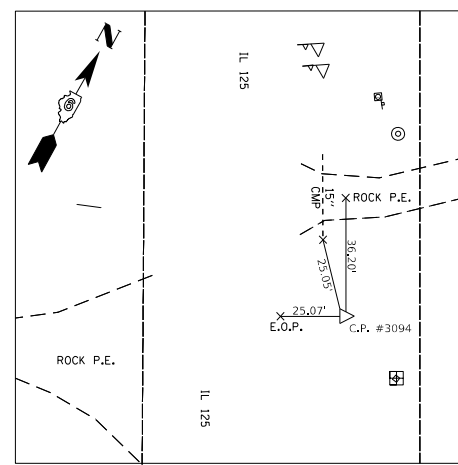
EXIST. CURVE 552
 PI STA. = 159+09.36
 D = 0° 59' 12"
 R = 5,807.36'
 L = 291.09'
 E = 581.70'
 P.C. STA. = 156+18.27
 P.T. STA. = 161+99.97

PI STA. = 137+60.43
 Δ = 2° 30' 52" 11" (RT)
 DR = 1,913.78'
 RT = 528.39'
 L = 1,031.10'
 E = 71.61'
 P.C. STA. = 132+32.03
 P.T. STA. = 142+63.13

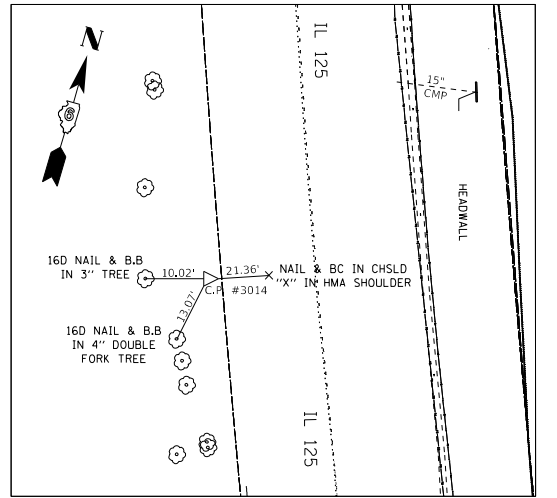
STATE PLANE (IL WEST ZONE) NAD83 - 1997 ADJ			
ALIGNMENT COORDINATES - IL 125			
IL 125	STATION	N	E
PC	132+32.03	1207696.7305	2256577.9388
PT	142+63.13	1207113.9127	2257413.4148
STA EQ.: STA. 142+63.13 BK = STA 142+68.06 AH			
PC	156+18.27	1206074.5484	2258275.2706
PT	161+99.97	1205646.0974	2258668.3632

STATE PLANE (IL WEST ZONE) NAD83 - 1997 ADJ			
ALIGNMENT COORDINATES - CHANNEL			
IL 125	STATION	N	E
POT	10+00.00	1206367.8807	2257921.0473
PC	10+22.71	1206382.5303	2257938.3955
PT	10+41.06	1206387.5812	2257946.3458
PC	11+54.12	1206410.1206	2258066.1163
PI	11+85.50	1206415.6383	2258097.0109
PT	12+15.61	1206405.9081	2258126.8480
POT	12+66.09	1206390.2595	2258174.8338

D672F59 BENCHMARKS		
BENCHMARK	NAVD88 ELEVATION	DESCRIPTION
BM JJ-24	559.854	SET CHSLD [] CENTER N HDWL CULVERT, 5.20 MILE W OF JCT IL78 @ STA 171+24.2; 21.3 LT
BM JJ-25	545.304	SET PK NAIL & BC E END CMP UNDER FIELD ENTRANCE N SIDE OF IL125, 5.6 MILE W OF JCT IL78 @ STA 155+42.5; 31.7 LT
BM JJ-26	542.496	FOUND A CHSLD [] SE WINGWALL BOX CULVERT UNDER IL125, 5.61 MILE W OF JCT IL78 @ STA 152+02.0; 21.3 RT
BM JJ-27	537.507	FOUND A CHSLD [] SE WINGWALL STR # 009-2000, 5.85 MILE W OF JCT IL78 @ STA 136+83.0; 20.0 RT



CONTROL POINT #3094
 STA 148+02.11' OFF 37.1' LT
 SET #4 REBAR W/ IDOT CAP
 N: 1206726.511
 E: 2257782.893



CONTROL POINT #3014
 STA 160+89.20 OFF 33.7' RT
 SET #4 REBAR W/ IDOT CAP
 N: 1205701.058
 E: 2258566.076

MODEL: D:\default
 FILE NAME: p:\11\dot-2\w\benfley.com\PHWDOT\Documents\DOT Offices\District 6\Projects\D672F59\Cadd\Drawings\672F59-sh1-ATR.dgn

USER NAME = Robert.Miles	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 200.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2023	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

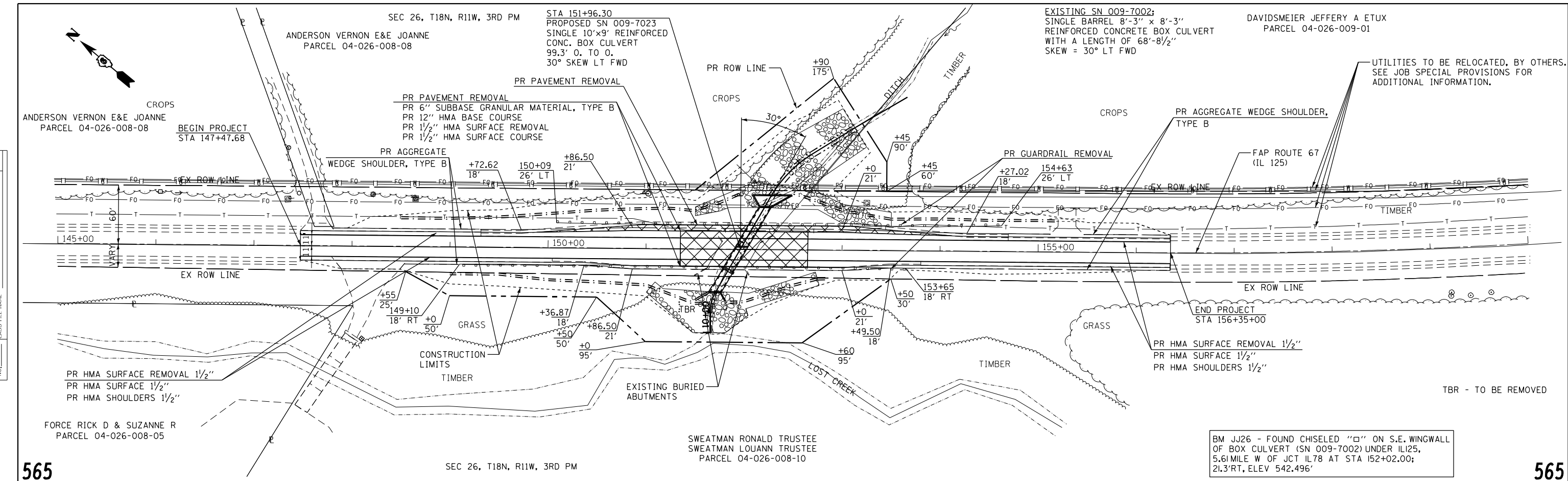
ALIGNMENTS, TIES & BENCHMARKS

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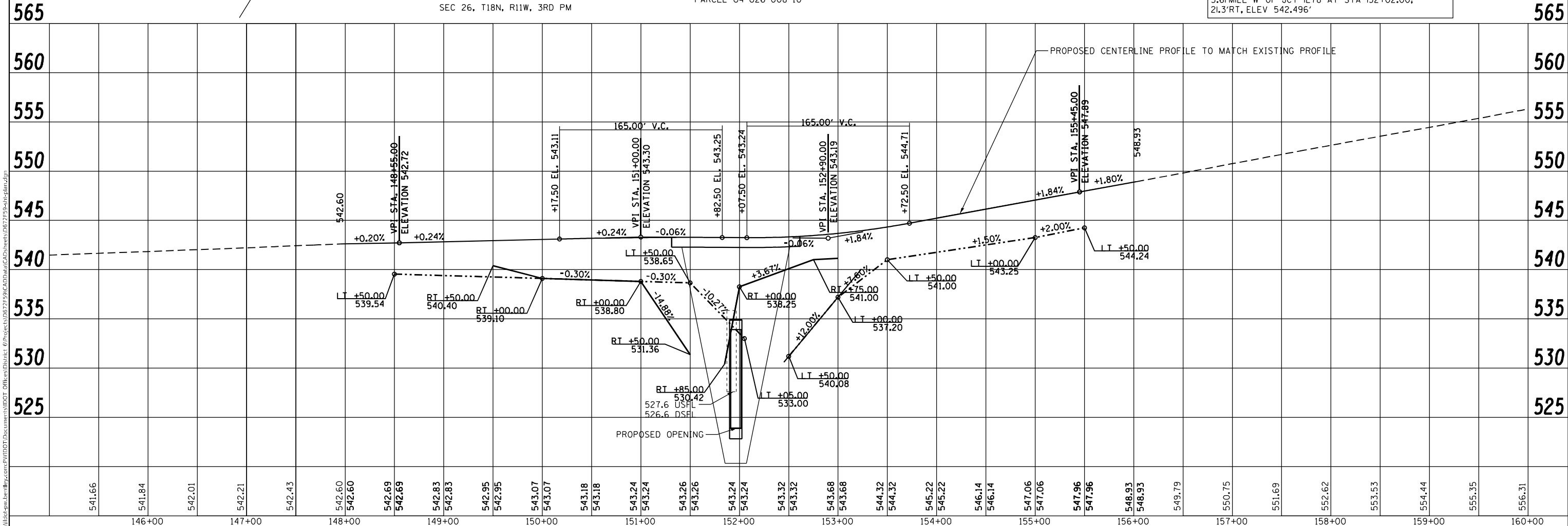
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	10
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
GRADE CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

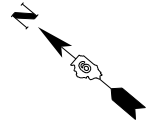
DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	



BM JJ26 - FOUND CHISELED "O" ON S.E. WINGWALL OF BOX CULVERT (SN 009-7002) UNDER IL125, 5.6 MILE W OF JCT IL78 AT STA 152+02.00; 21.3' RT, ELEV 542.496'

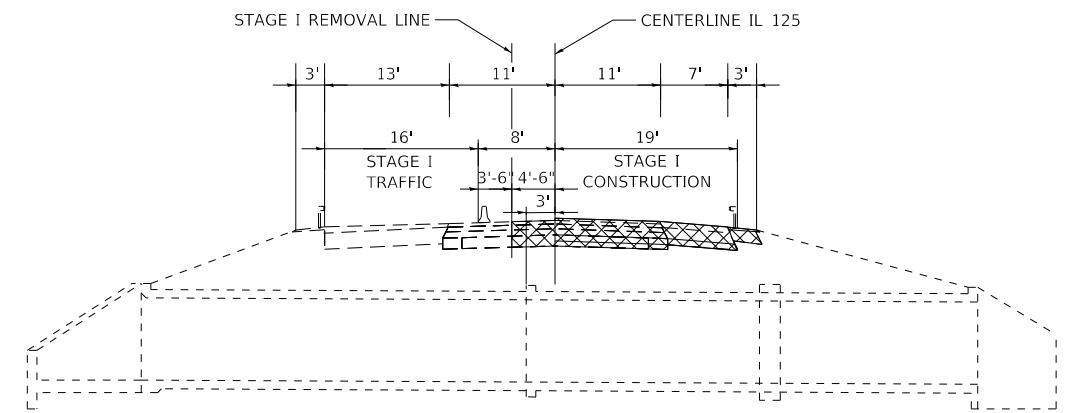
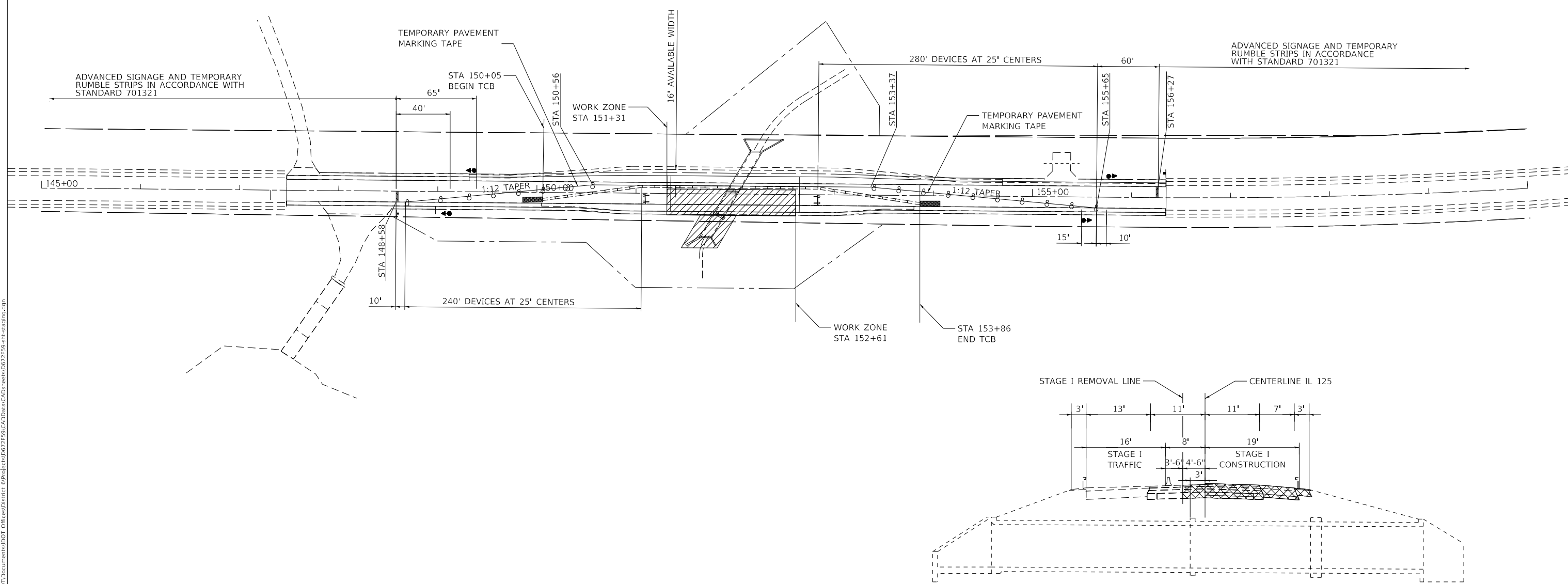


USER NAME = Sydnle,Schwartz	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PLAN & PROFILE IL 125		F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 11
PLOT SCALE = 100,000000' / in.	CHECKED -	REVISED -	SCALE: N/A		SHEET 1 OF 2 SHEETS		STA. 145+00 TO STA. 160+00		CONTRACT NO. 72F59		
PLOT DATE = 8/31/2023	DATE -	REVISED -					ILLINOIS		FED. AID PROJECT		



SYMBOLS

	Work area		Drum with steady burning bi-directional light
	Sign		Temporary concrete barrier
	Type III barricade		Double vertical panel (see detail)
	Traffic signal		Crystal, bidirectional barrier wall/guardrail marker
	Impact attenuator		



STAGE I TRAFFIC CONTROL TYPICAL SECTION

MODEL: Default
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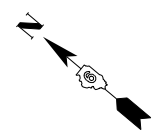
USER NAME = Robert.Miles	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/27/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**




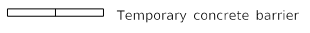





SCALE: 50				STAGE 1 MAINTENANCE OF TRAFFIC EX SN 009-7002 PR SN 009-7023					
SHEET 1	OF 2	SHEETS	STA. 145+00	TO STA. 160+00	F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 13

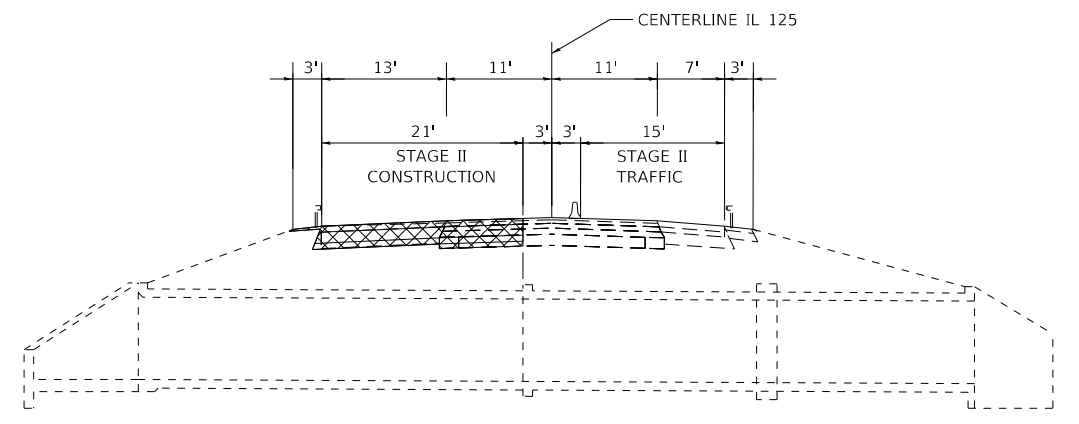
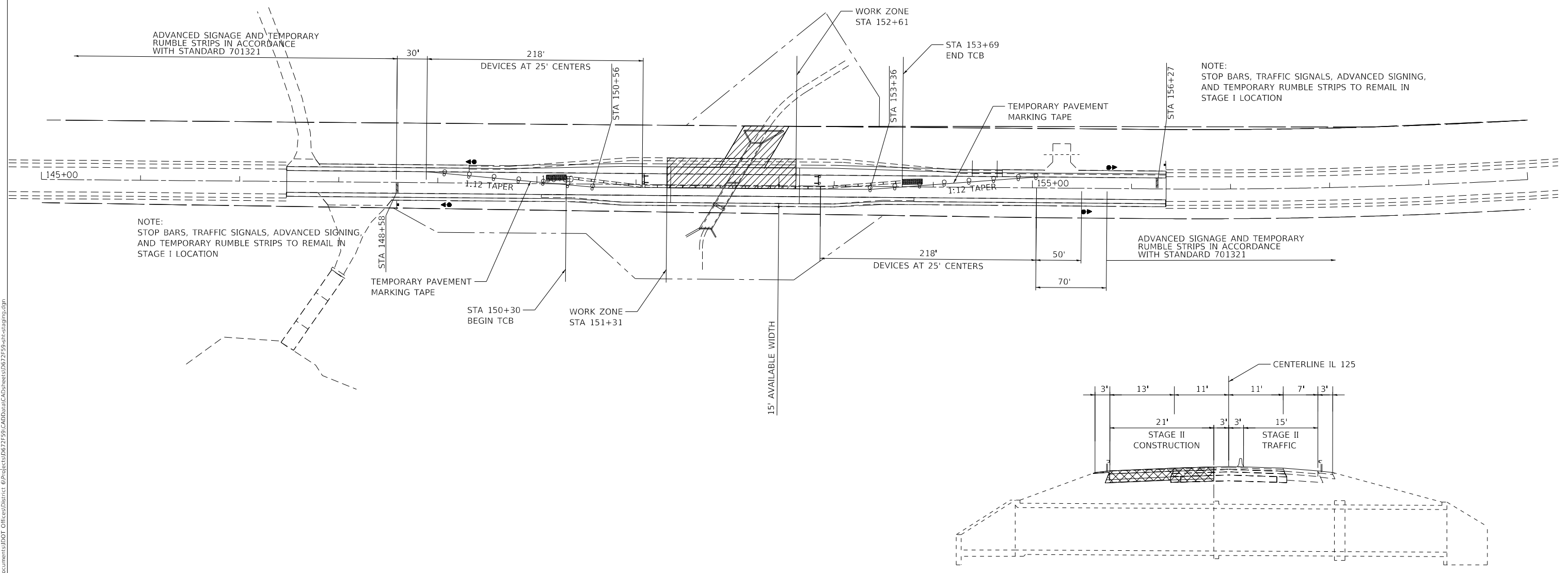
F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 13
ILLINOIS FED. AID PROJECT				

CONTRACT NO. 72F59



SYMBOLS

	Work area		Drum with steady burning bi-directional light
	Sign		Temporary concrete barrier
	Type III barricade		Double vertical panel (see detail)
	Traffic signal		Crystal, bidirectional barrier wall/guardrail marker
	Impact attenuator		



STAGE II TRAFFIC CONTROL TYPICAL SECTION

MODEL: Default
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USER NAME = Robert.Miles	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,000,000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/27/2023	DATE -	REVISED -




**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE 2 MAINTENANCE OF TRAFFIC EX SN 009-7002 PR SN 009-7023			
SCALE: 50	SHEET 2	OF 2 SHEETS	STA. 145+00 TO STA. 160+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	14
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				



NOTE: TEMP EROSION CONTROL SEEDING AREA EXCLUDES AREA WHERE TYPE A3 RIP RAP IS SHOWN

LEGEND	
	TEMP EROSION CONTROL SEEDING AREA
	TREE REMOVAL AND TEMP EROSION CONTROL SEEDING AREA
	TEMPORARY DITCH CHECKS

REV. - MS

MODEL: Default
 FILE: MainE_Plan\lides-cw-bentley.com\PROJECTS\DOT\Documents\DOT\Office\District_6\Projects\0672F59\CADD\DATA\CAD\Sheet\0672F59-erl-Erosion-Control.dgn

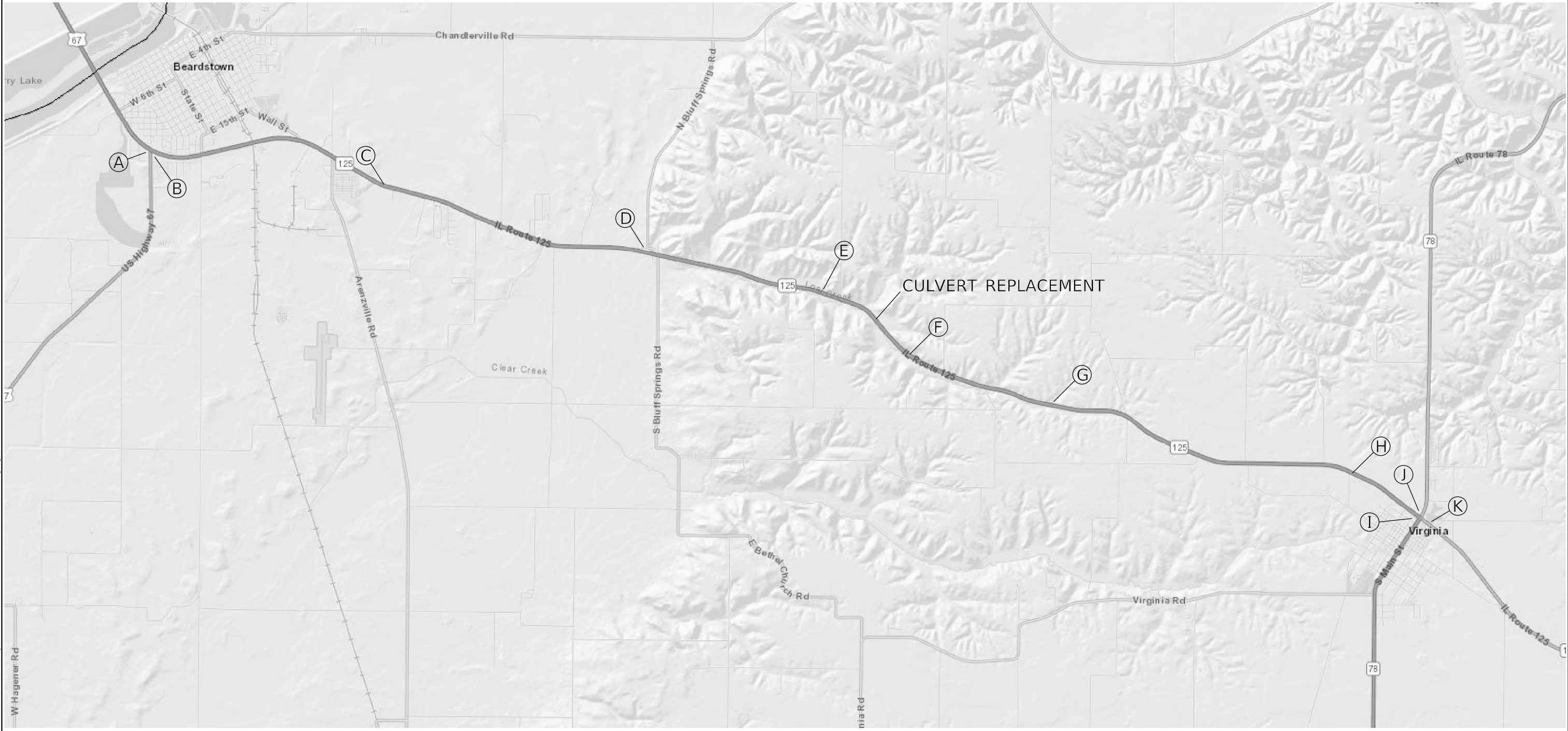
USER NAME = Robert.Miles	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 125

SCALE: 50 SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	15
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				



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USER NAME = Sydnle.Schwarz	DESIGNED -	REVISED -
DRAWN -	REVISED -	
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/28/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IL 125 - MAX WIDTH SIGN DETAIL				
SCALE: N/A	SHEET 1	OF 2	SHEETS	STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6CR-1	CASS	42	16
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

B.M. JJ26 Chiseled Square on S.E. wingwall of box culvert (SN 009-7002) on S. side of IL 125, 5.61 Mi. W. of Jct. IL 78 / IL 125, Sta. 152+02.00, 21.30' Rt. Elev. 542.496

Existing Structure: S.N. 009-7002, reconstructed in 1954 as SBI Route 3, Section 6X-1 at Sta. 151+94.20. The existing structure is a single barrel 8'-3" x 8'-3" R.C. box culvert with a culvert length of ±68'-8½". The existing structure will be removed and replaced, in stages, with a single barrel 9'x10' cast-in-place box culvert. Old abutments from previous structure will also be removed.

Traffic shall be maintained at all times utilizing Stage Construction.

No Salvage.

*** 4 to 1 Slope within 30 foot clear zone.
Slope 1.5 to 1 beyond clear zone.

PRECAST OPTION NOT ALLOWED

Top of Weir
Elev. 528.00

U.S. Inv.
Elev. 524.40

Rockfill Foundation

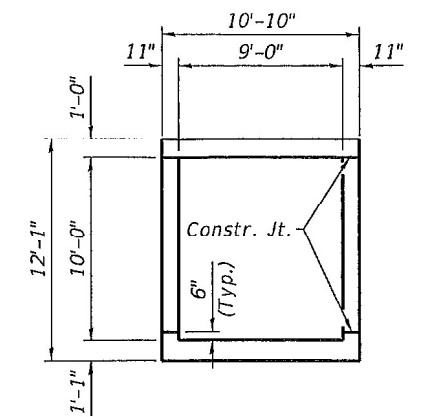
LONGITUDINAL SECTION
(Looking East - Dimension at Rt. L's)

D.S. INV.
Elev. 523.90 **

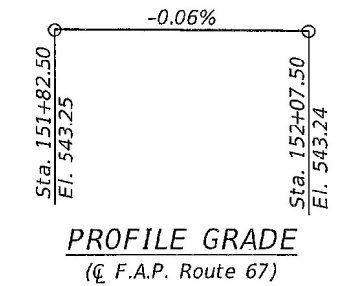
** Construct D.S. INV.
1½" Higher due to settlement
Elev. 524.02

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Stage Construction Details
- 4.-5. Temporary Soil Retention System & Geotextile Retaining Wall
6. Granular Backfill to Bottom of Box Culvert
- 7.-11. Culvert Details
12. Concrete Collar Details
13. Bar Splicer Assembly and Mechanical Splicer Details
14. Temporary Concrete Barrier
15. Soil Boring Logs



SECTION THRU BARREL
(Dimension at Rt. L's)



PROFILE GRADE
(Q F.A.P. Route 67)

DESIGN SPECIFICATIONS

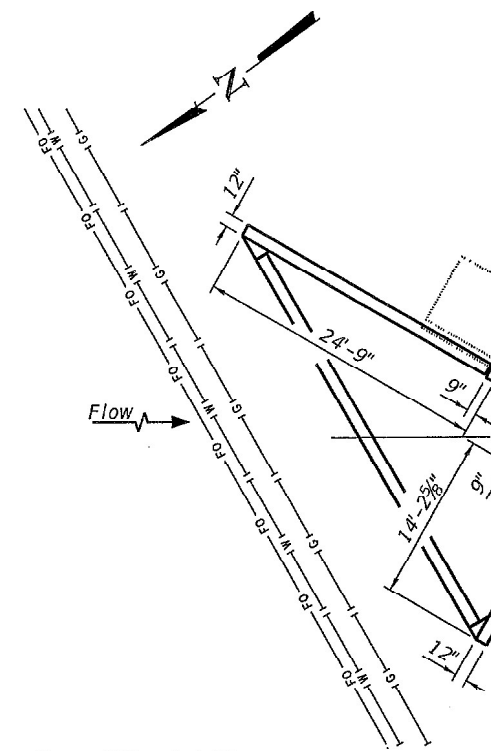
2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 Interims

LOADING HL-93
(NEW CONSTRUCTION)

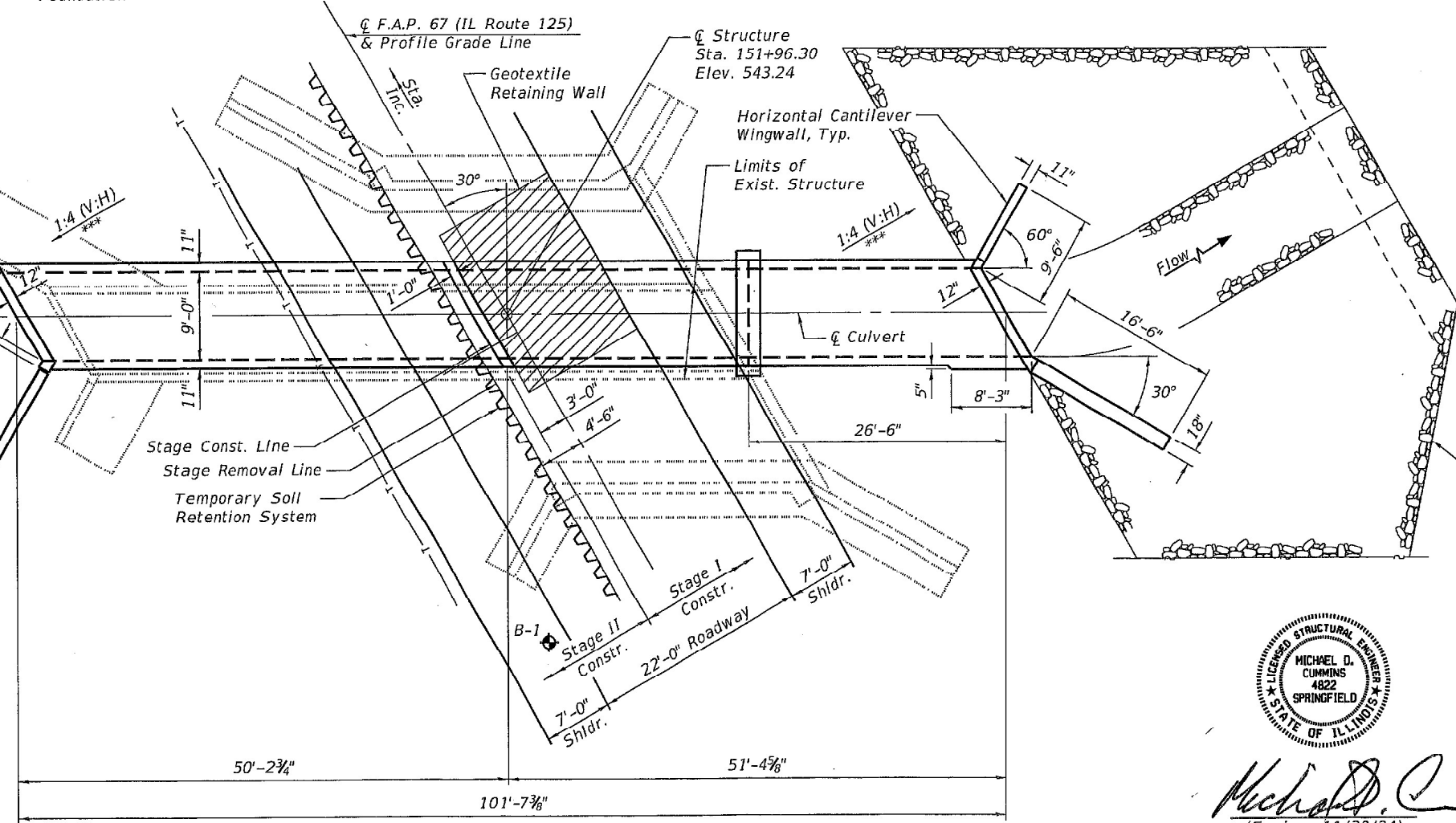
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS

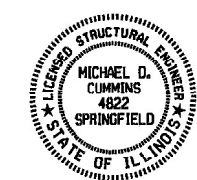
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)



LOCATION SKETCH



PLAN



Michael D. Cummins 8-25-23
(Expires 11/30/24)

GENERAL PLAN & ELEVATION

IL 125 OVER DITCH

F.A.P. RTE 67

SECTION 6 CR

CASS COUNTY

STA 151+96.30

STRUCTURE NO. 009-7023



JOB = 2644.6
FILE = 2644.6-GPE.dgn
DATE = 8/25/2023

DESIGNED - MDC
CHECKED - AAN
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 009-7023
SHEET NO. 1 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6 CR-1	CASS	42	18
			CONTRACT NO. 72F59	
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
 Plan dimensions and details relative to the existing structure have been taken from existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

STATION 151+96.30
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.P. 67 SEC. 6 CR-1
 LOADING HL-93
 STR. NO. 009-7023

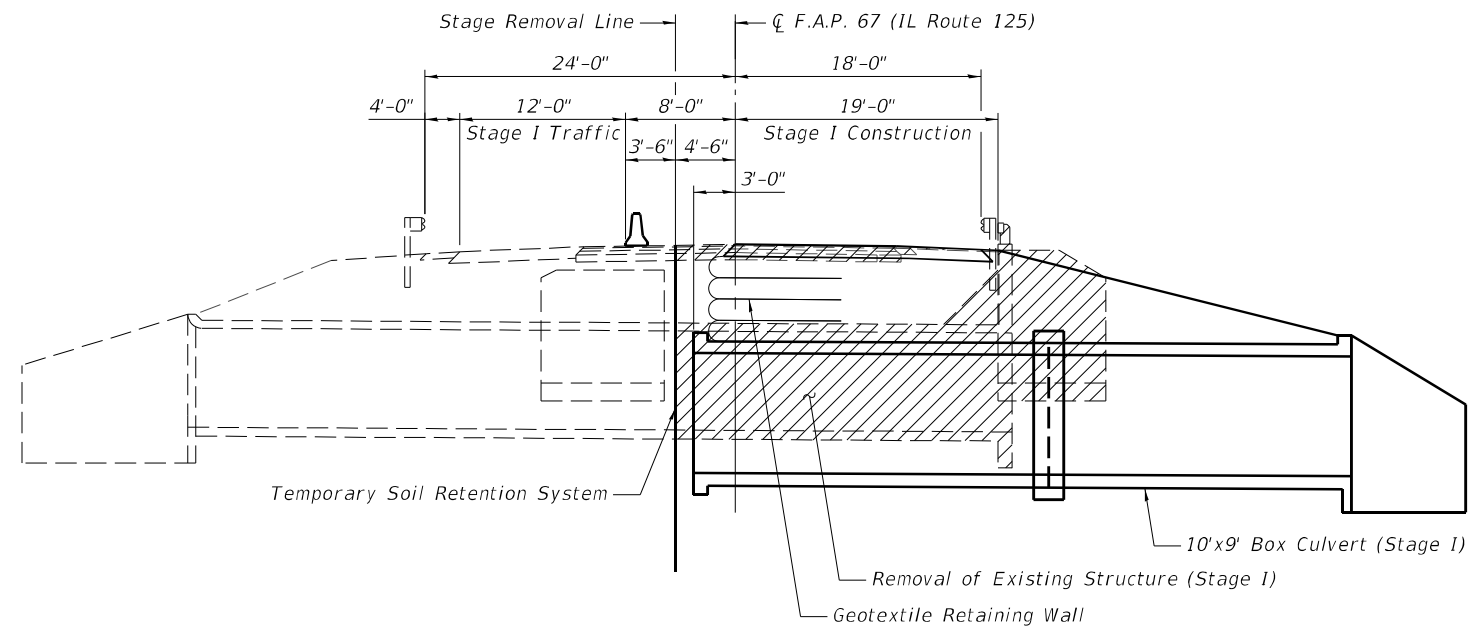
NAME PLATE
 See Std. 515001

WATERWAY INFORMATION

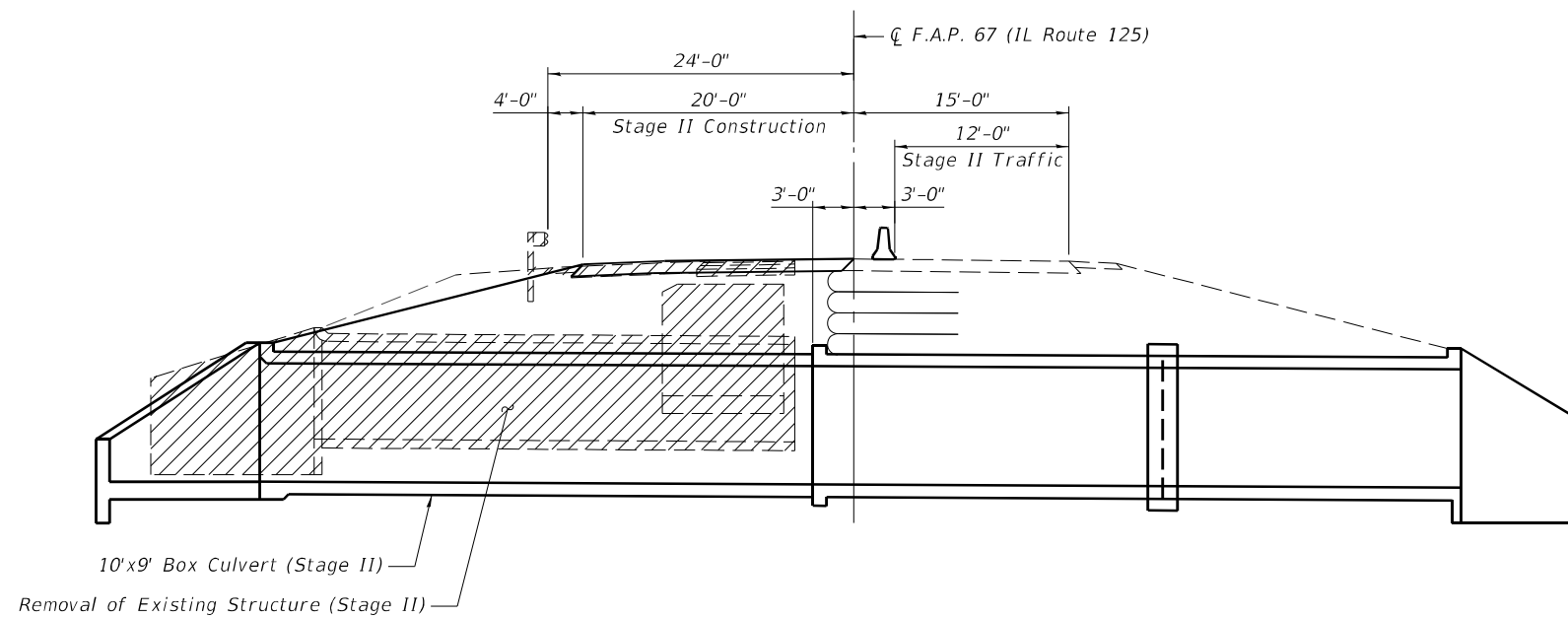
Drainage Area = 0.4 Sq. Miles Low Grade Elev. 540.7 @ Sta. 142+85									
Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Ten-Year	10	439	14	61	531.1	2.1	0.2	533.2	531.3
Design	50	710	30	78	533.1	2.5	0.7	535.6	533.8
Base	100	831	36	85	533.8	2.8	0.9	536.6	534.8
Max. Calc.	500	1,120	50	90	535.5	3.8	2.0	539.3	537.5

TOTAL BILL OF MATERIAL

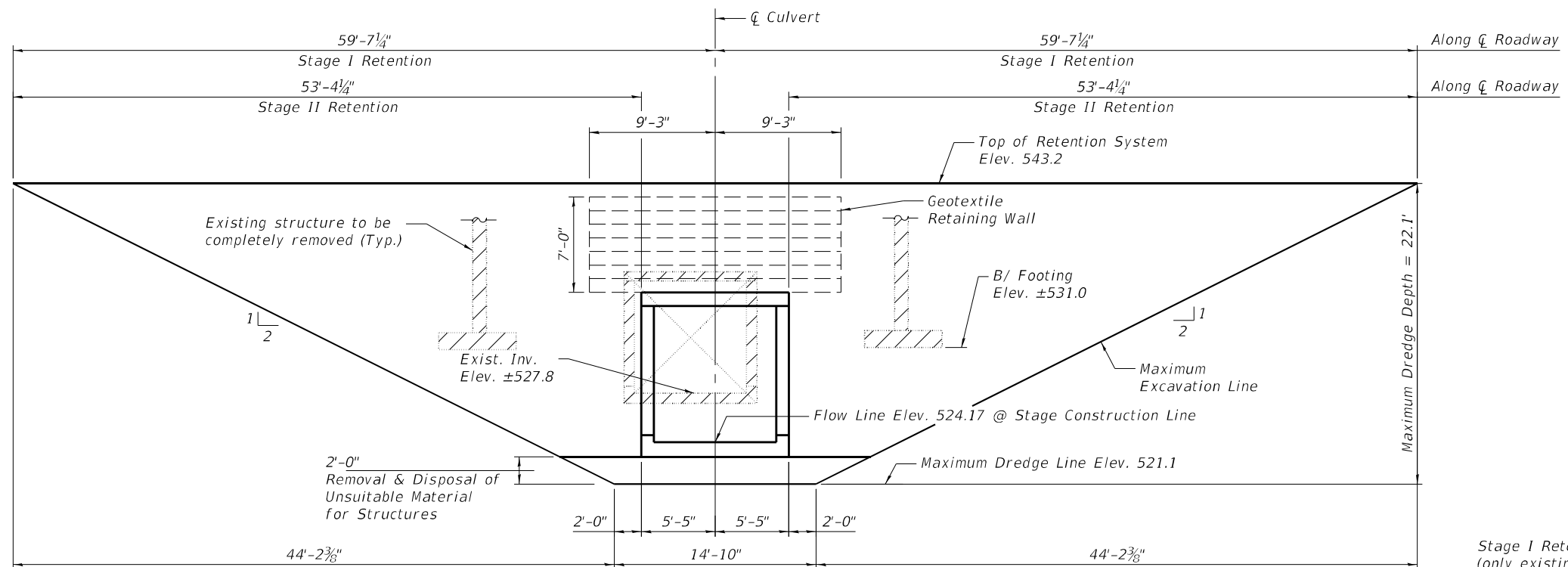
ITEM	UNIT	QUANTITY
Removal of Existing Structures	Each	1
Concrete Box Culverts	Cu. Yd.	210.3
Concrete Collar	Cu. Yd.	4.6
Reinforcement Bars	Pound	41,350
Temporary Soil Retention System	Sq. Ft.	2172
Name Plates	Each	1
Bar Splicers	Each	84
Geotextile Retaining Wall	Sq. Ft.	130
Rock Fill-Foundation	Ton	242
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	161
Granular Culvert Backfill	Cu. Yd.	1323



STAGE I CONSTRUCTION
(Dimension at Rt. L's)



STAGE II CONSTRUCTION
(Dimension at Rt. L's)



TEMPORARY SOIL RETENTION SYSTEM & GEOTEXTILE RETAINING WALL

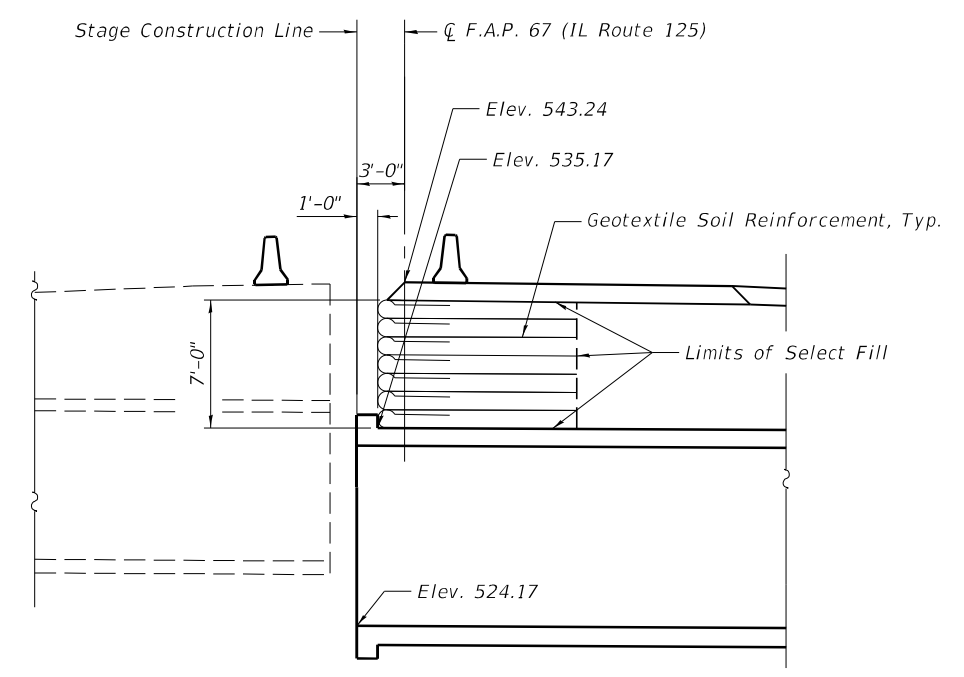
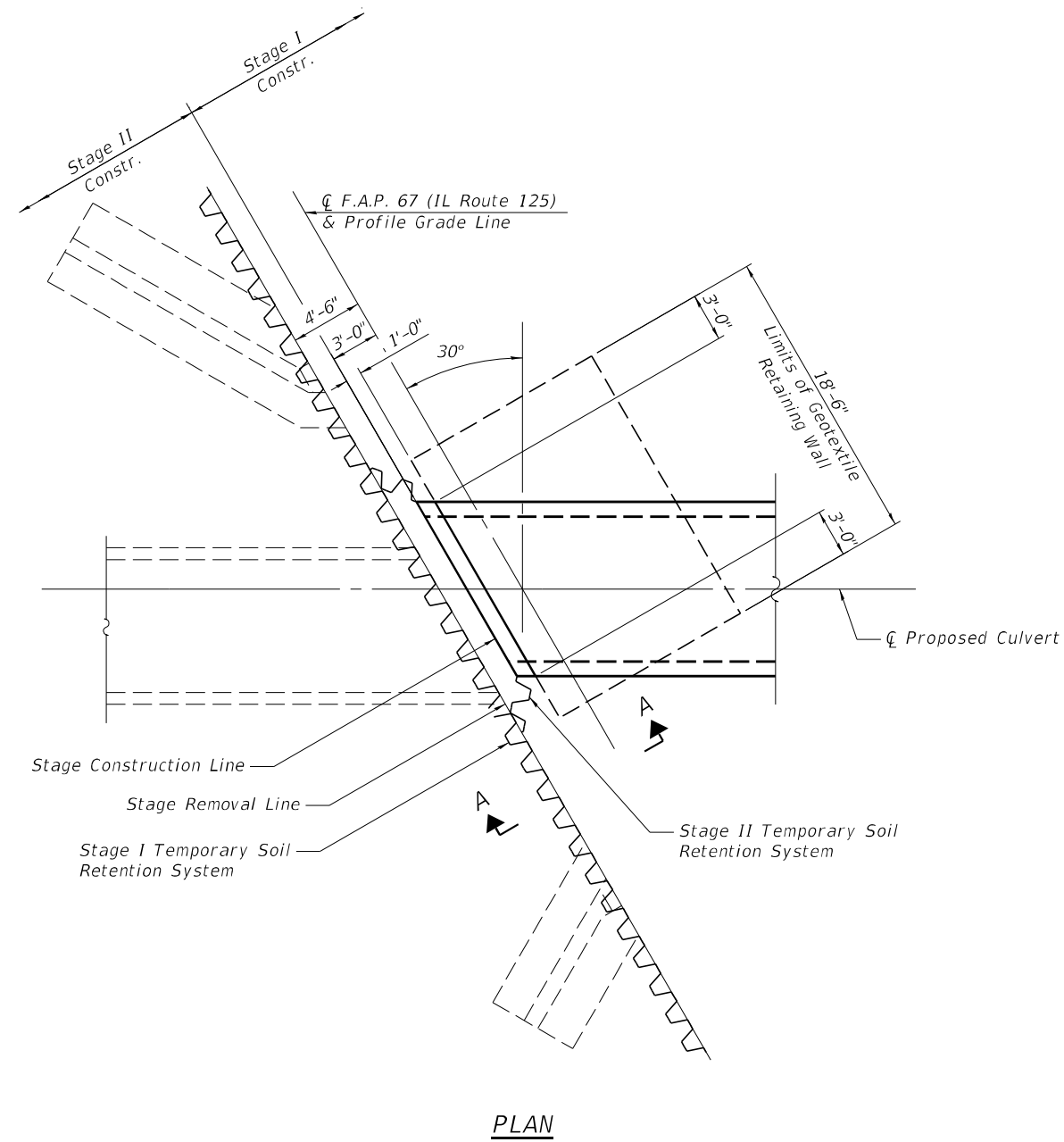
(Looking North)
Cross Section @ Rt. 2's to Culvert

Stage I Retention= 1224 Ft²
(only existing culvert opening omitted)
Stage II Retention= 948 Ft²
Total= 2172 Ft²

- Notes:
1. Hatched areas indicate Removal of Existing Structures.
 2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
 3. If contractor elects to use additional Geotextile Retaining Wall for the Stage II Temporary Soil Retention System, it will be measured and paid for as Temporary Soil Retention System.

BILL OF MATERIAL

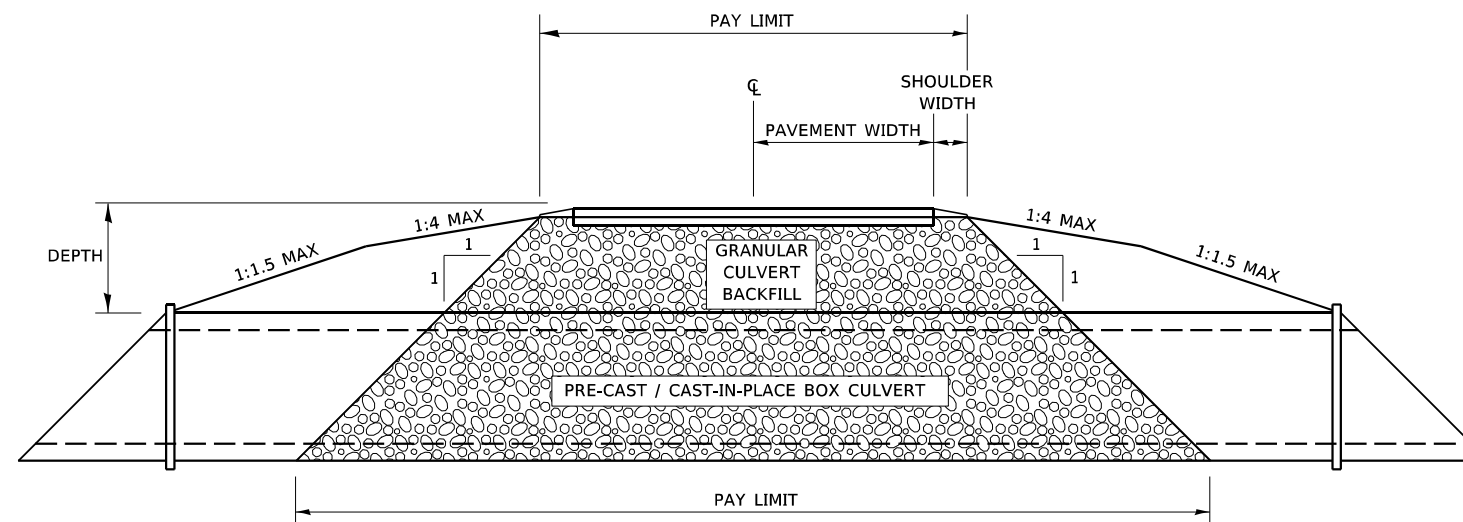
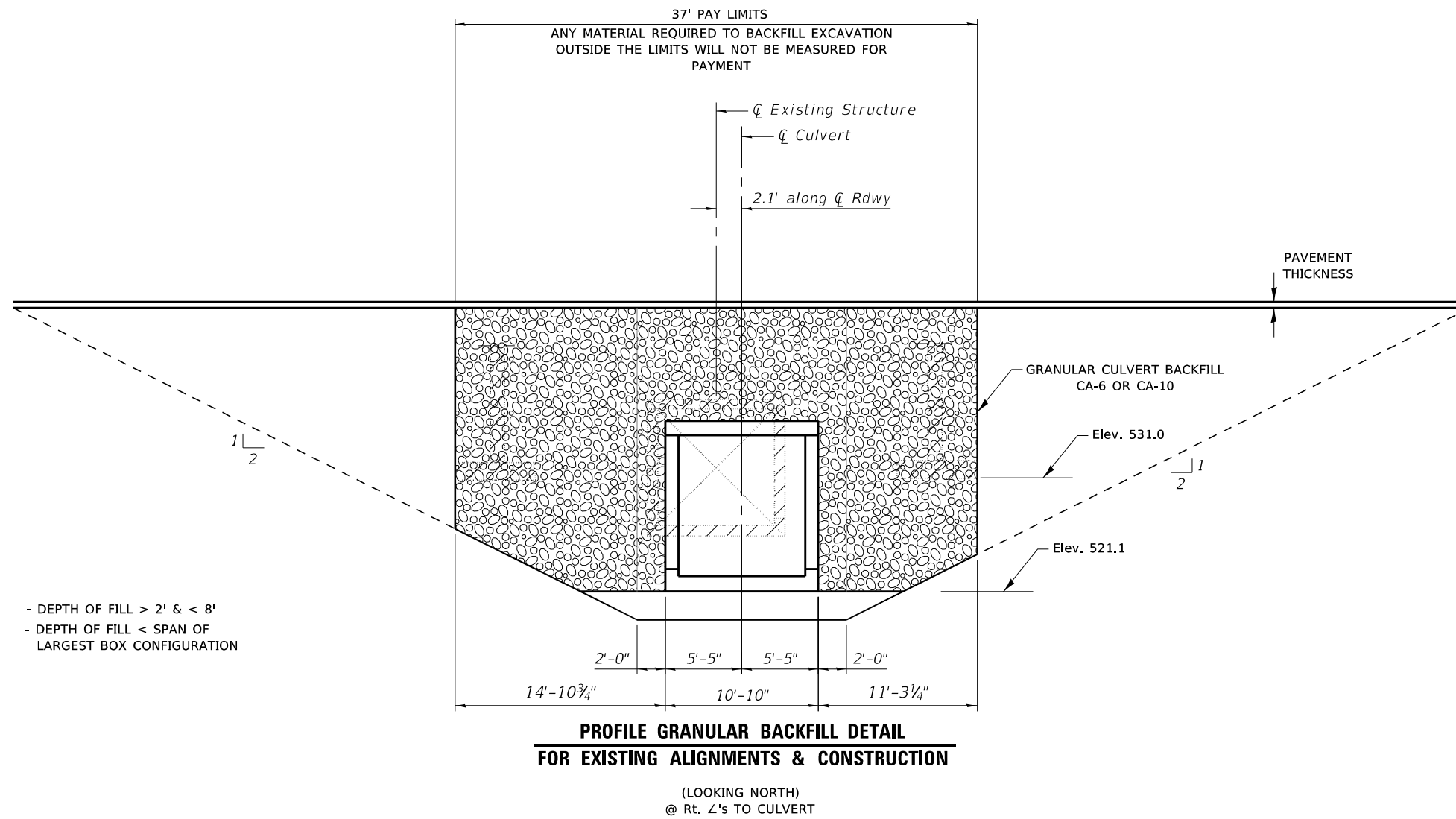
ITEM	UNIT	QUANTITY
Temporary Soil Retention System	Sq. Ft.	2172



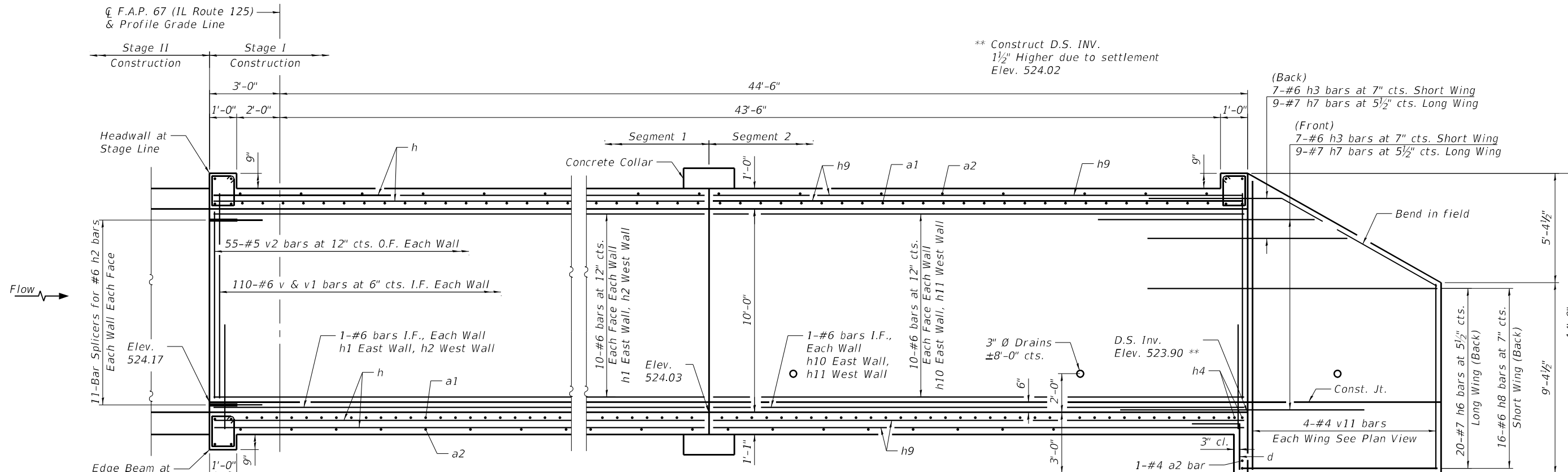
SECTION A-A

BILL OF MATERIAL

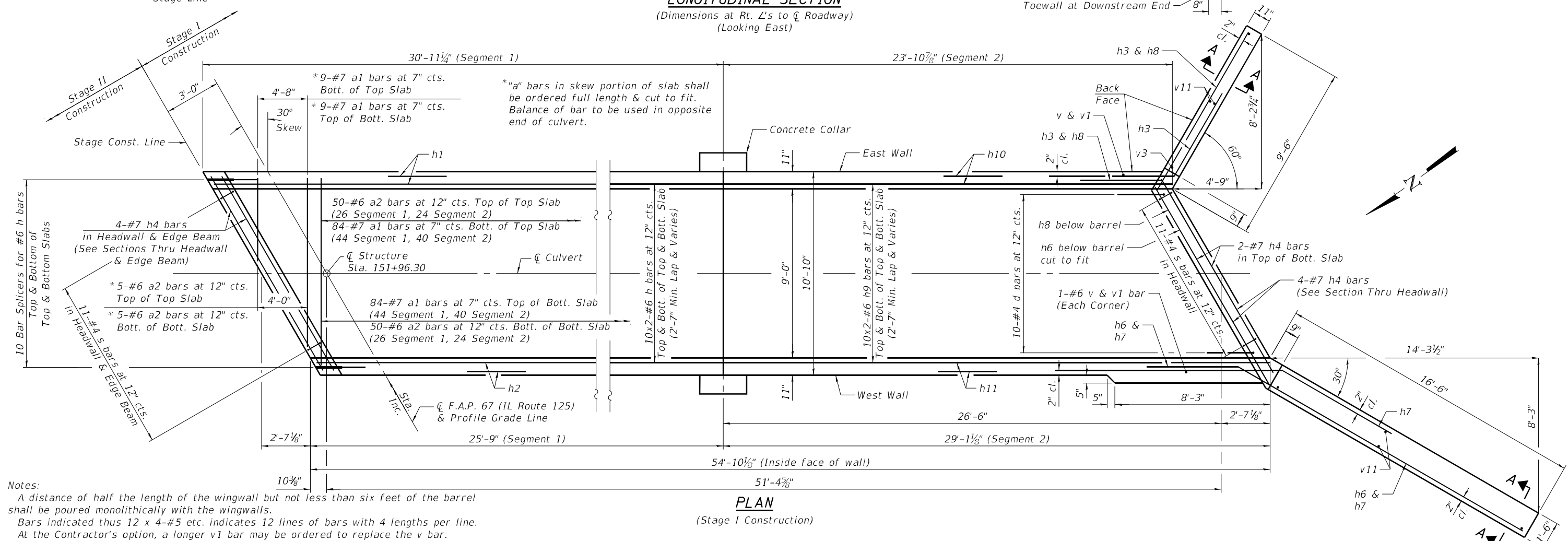
ITEM	UNIT	QUANTITY
Geotextile Retaining Wall	Sq. Yd.	130



CROSS SECTION GRANULAR BACKFILL DETAIL FOR EXISTING ALIGNMENTS & CONSTRUCTION



LONGITUDINAL SECTION
(Dimensions at Rt. L's to C Roadway)
(Looking East)



PLAN
(Stage I Construction)

Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
No reduction in quantities shall be made for this substitution.



JOB = 2644,6
FILE = 2644,6-CulvertDetails.dgn
DATE = 8/25/2023

DESIGNED - MDC
CHECKED - AAN
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

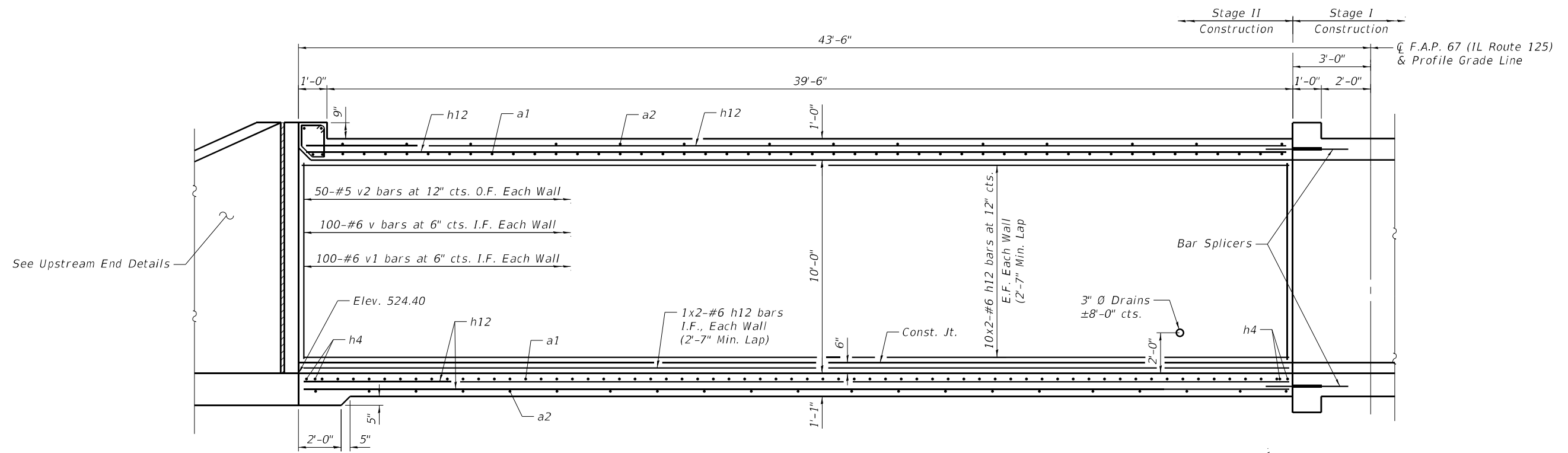
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE I BOX CULVERT DETAILS (DOWNSTREAM END)
STRUCTURE NO. 009-7023**

SHEET NO. 7 OF 15 SHEETS

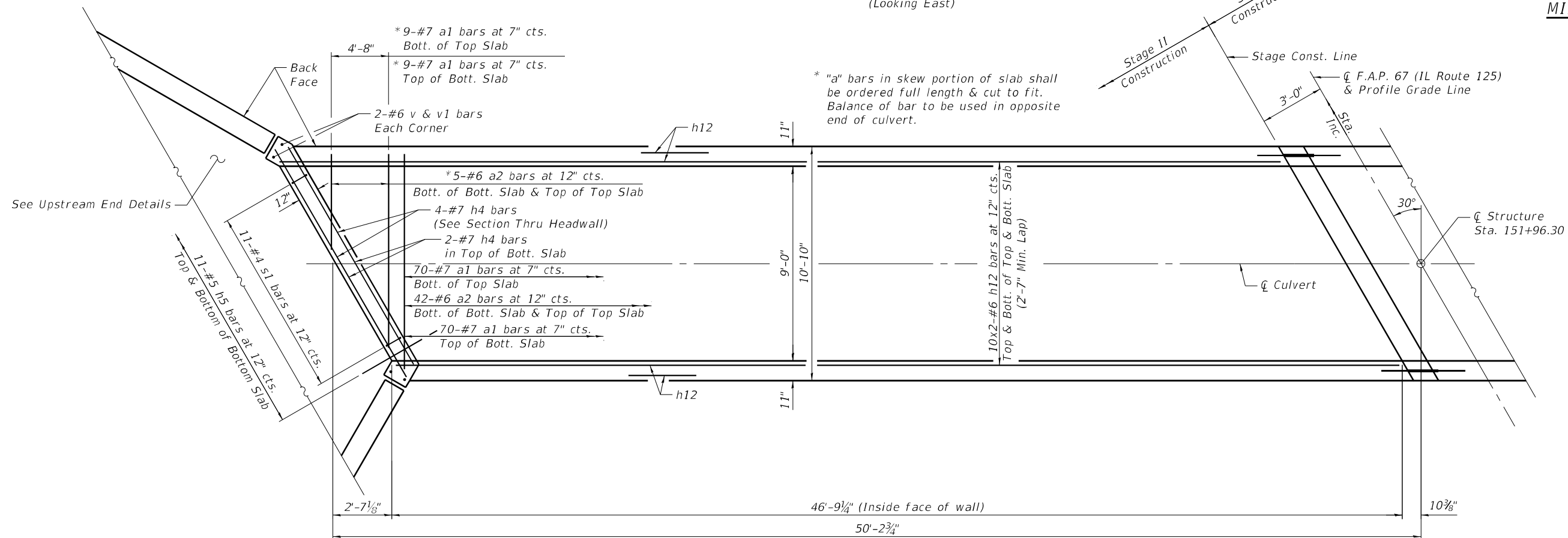
F.A.P. RTE. 67	SECTION 6 CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 24
CONTRACT NO. 72F59				

ILLINOIS FED. AID PROJECT



LONGITUDINAL SECTION
(Dimensions at Rt. L's to \bar{C} Roadway)
(Looking East)

MINIMUM BAR LAP
#6 bar = 2'-7"



PLAN
(Stage II Construction)

Notes:
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
No reduction in quantities shall be made for this substitution.

* Bars indicated thus shall be cut to fit and use remainder of bar in opposite face.



JOB = 2644.6	DESIGNED - MDC	REVISD -
FILE = 2644.6-CulvertDetails.dgn	CHECKED - AAN	REVISD -
DATE = 8/25/2023	DRAWN - SJS	REVISD -
	CHECKED - MDC	REVISD -

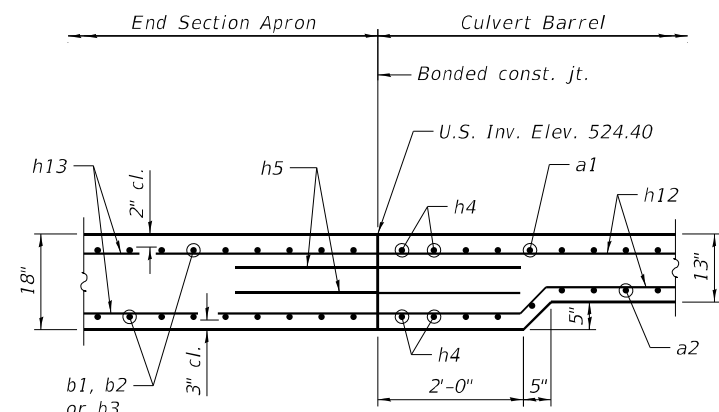
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II BOX CULVERT DETAILS
STRUCTURE NO. 009-7023

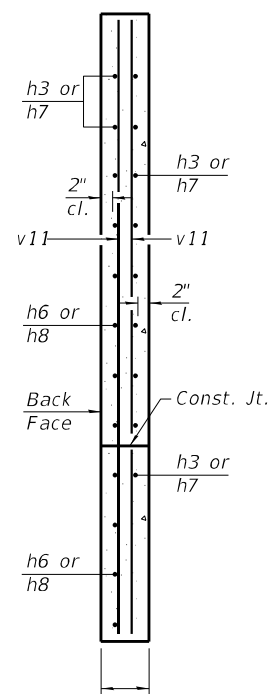
SHEET NO. 8 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6 CR-1	CASS	42	25
CONTRACT NO. 72F59				

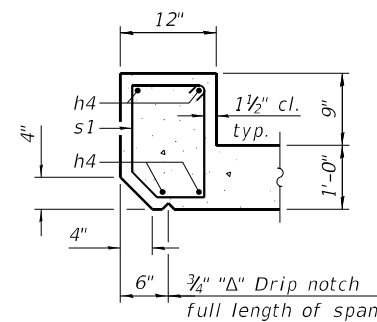
ILLINOIS FED. AID PROJECT



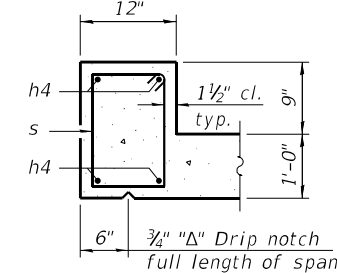
SECTION B-B
(Bottom slab)
UPSTREAM



SECTION A-A

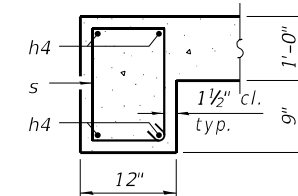


UPSTREAM



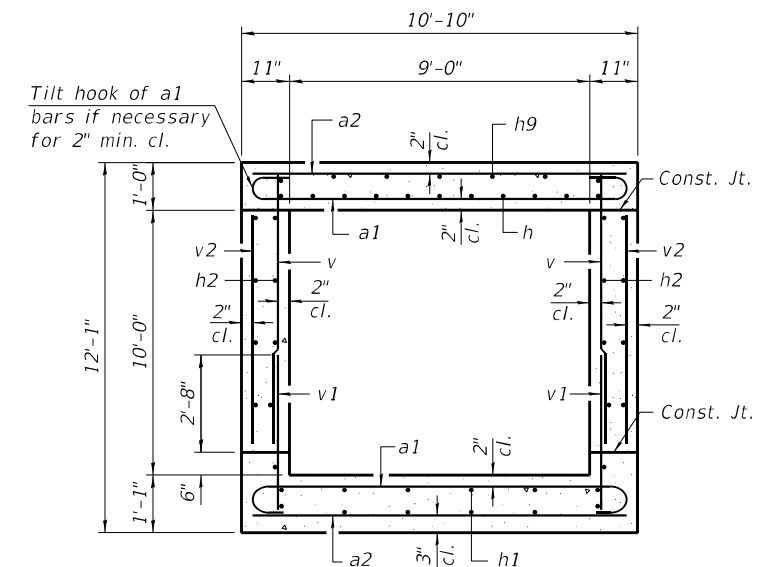
DOWNSTREAM & STAGELINE

SECTION THRU HEADWALL



AT STAGELINE

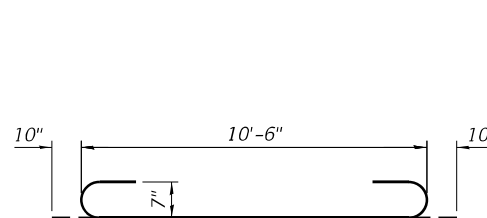
SECTION THRU EDGE BEAM



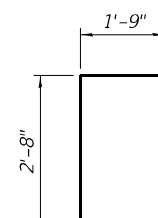
SECTION THRU BARREL

BILL OF MATERIAL FOR CULVERT DOWNSTREAM END

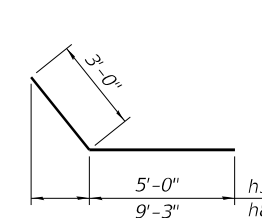
Bar	No.	Size	Length	Shape
a1	344	#7	12'-2"	
a2	204	#6	10'-6"	
d	10	#4	4'-5"	
h	80	#6	16'-7"	
h1	21	#6	30'-7"	
h2	21	#6	25'-5"	
h3	14	#6	8'-0"	
h5	22	#5	4'-0"	
h4	22	#7	12'-0"	
h6	20	#7	19'-3"	
h7	18	#7	8'-0"	
h8	16	#6	12'-3"	
h9	80	#6	15'-8"	
h10	21	#6	28'-9"	
h11	21	#6	23'-6"	
h12	122	#6	24'-6"	
s	33	#4	4'-11"	
s1	11	#4	4'-9"	
v	426	#6	10'-0"	
v1	426	#6	4'-0"	
v2	210	#5	9'-2"	
v11	8	#4	14'-5"	
Concrete Box Culverts	Cu. Yd.	173.8		
Reinforcement Bars	Pound	34,460		
Bar Splicers	Each	84		



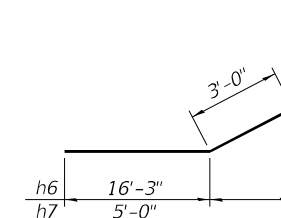
BAR a1



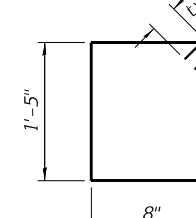
BAR d



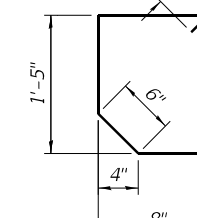
BARS h3 & h8



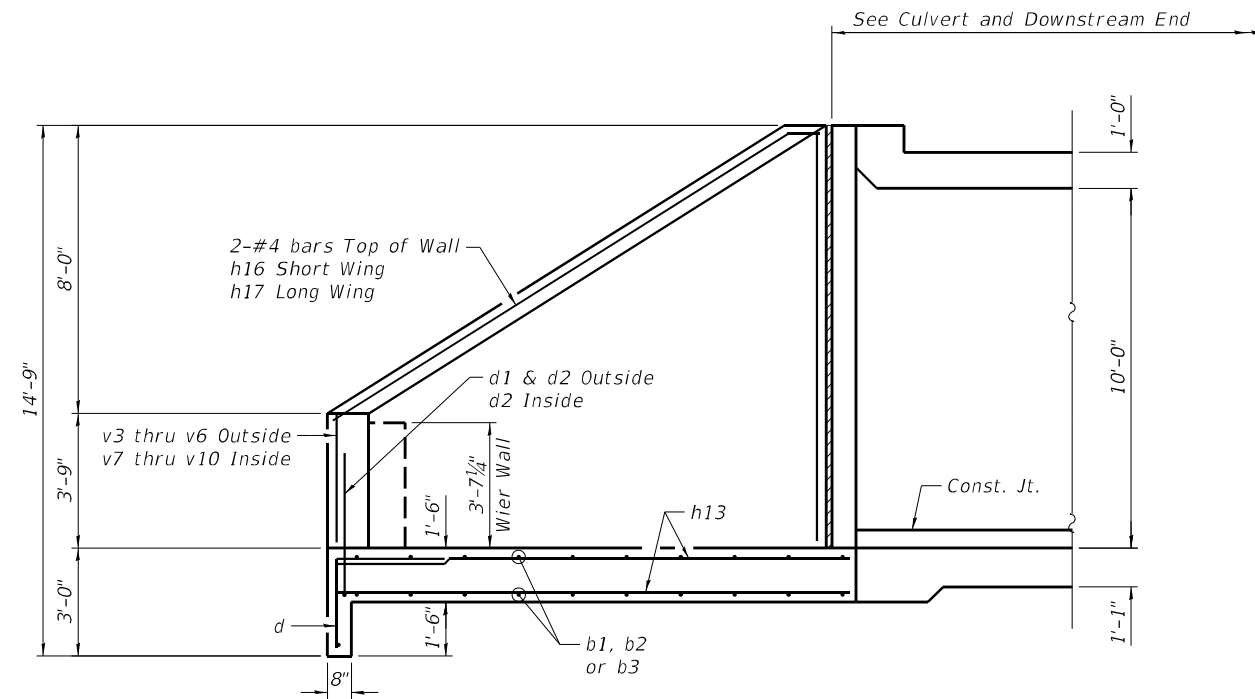
BARS h6 & h7



BAR s

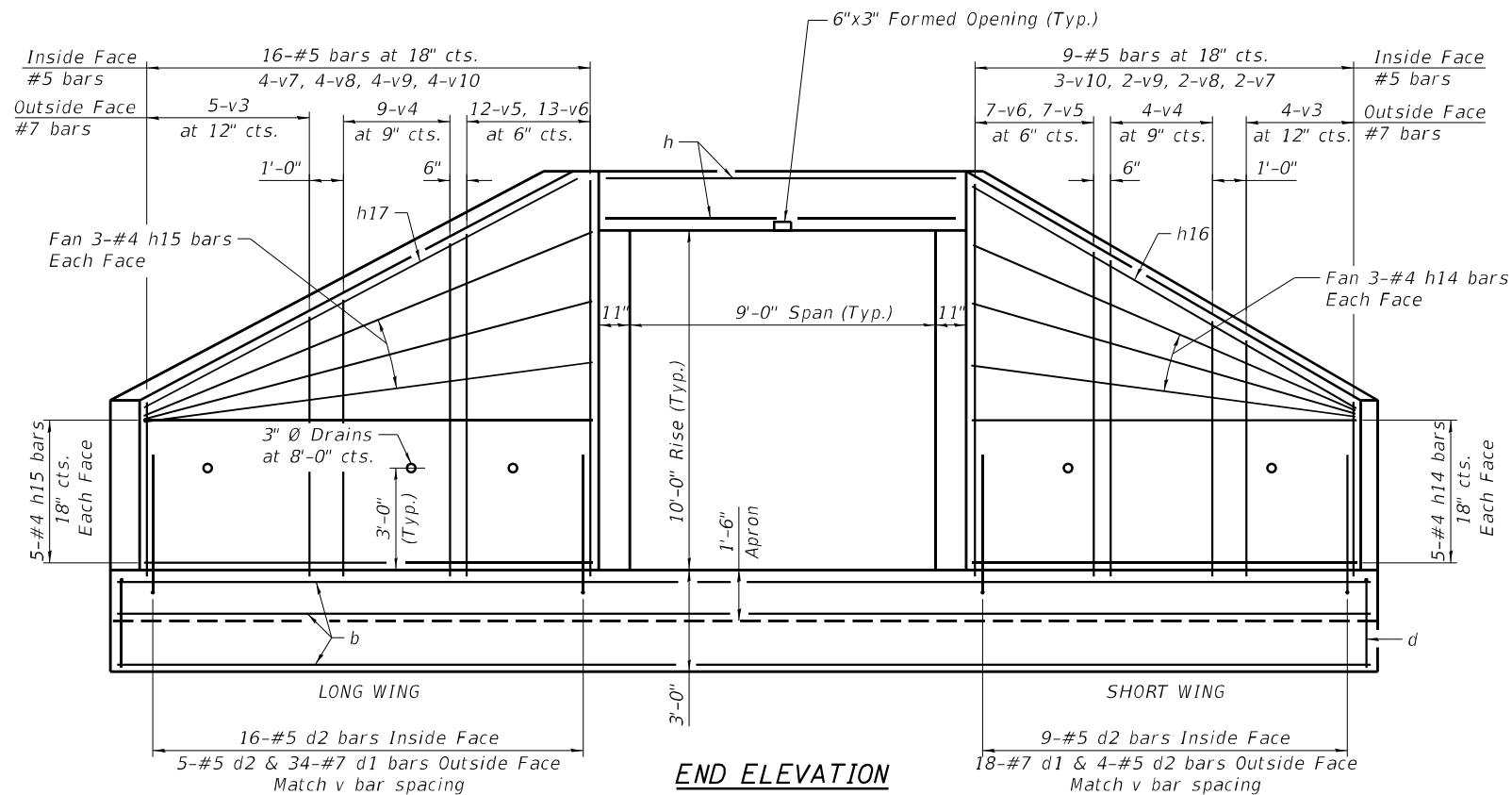


BAR s1



HALF SIDE ELEVATION

(Showing Wing Reinforcement)
(Wier Wall not shown for clarity)



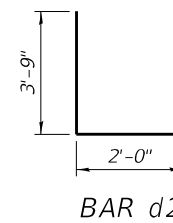
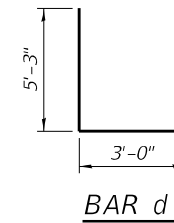
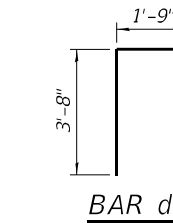
END ELEVATION

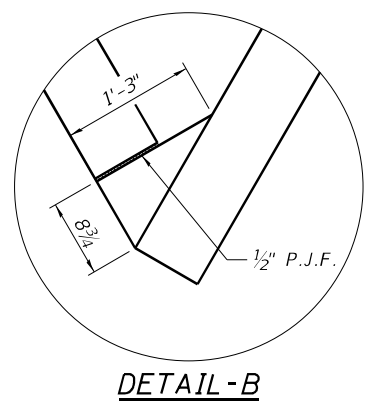
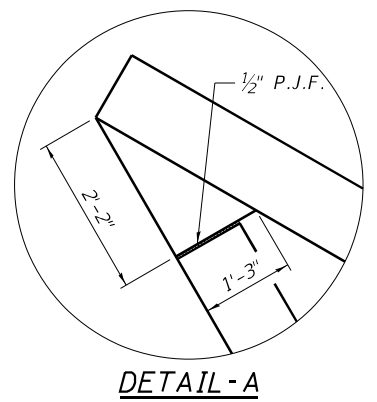
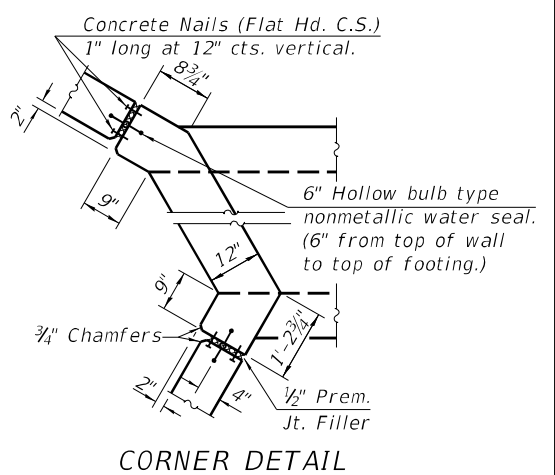
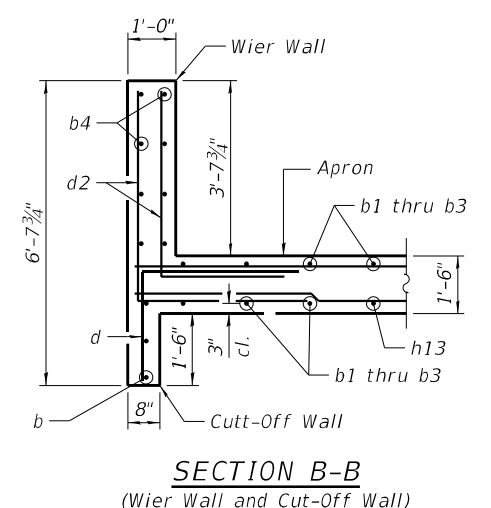
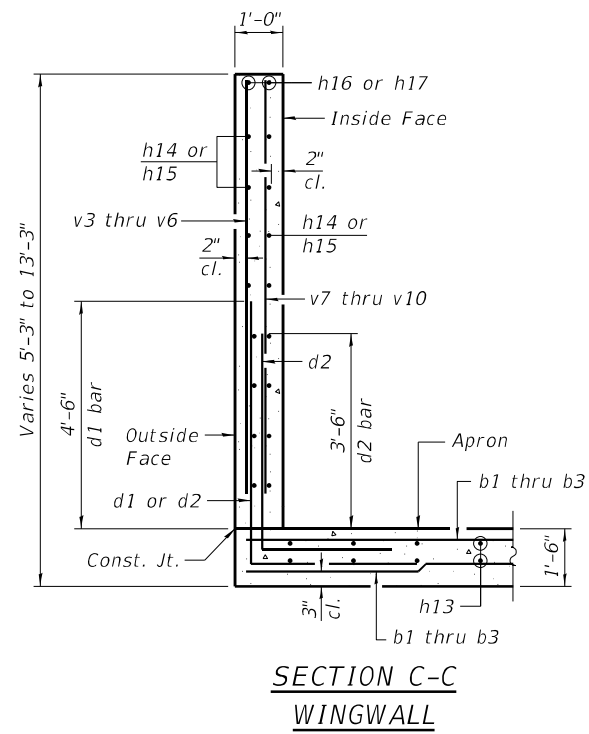
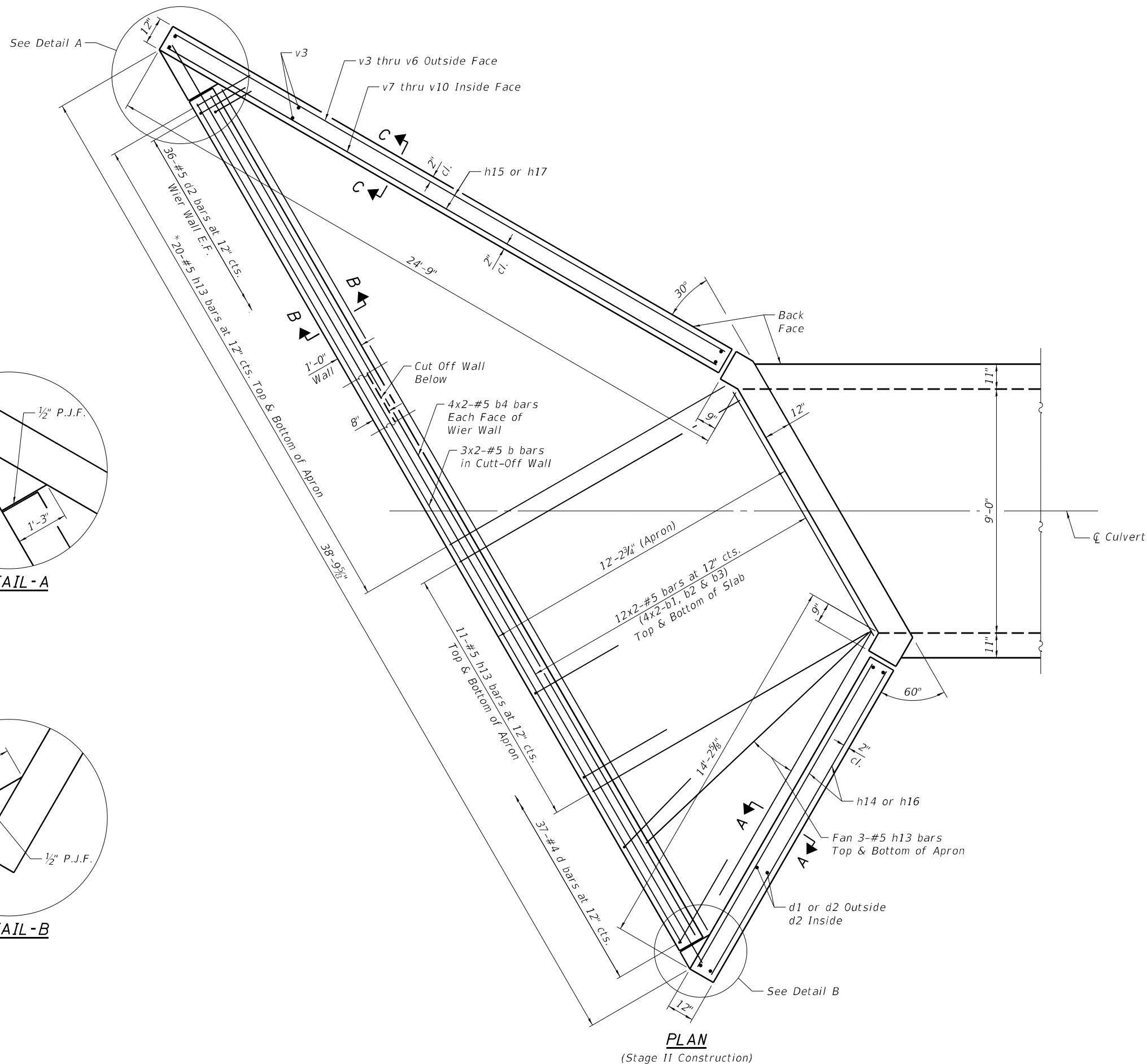
(Showing Wing Reinforcement)
(Wier Wall not shown for clarity)

BILL OF MATERIAL FOR UPSTREAM END

(Quantities given for information only)

Bar	No.	Size	Length	Shape
b	6	#5	20'-3"	—
b1	16	#5	20'-0"	—
b2	16	#5	15'-8"	—
b3	16	#5	11'-4"	—
b4	16	#5	18'-10"	—
d	37	#4	4'-5"	└
d1	52	#7	8'-3"	L
d2	106	#5	5'-9"	L
h13	68	#5	11'-9"	—
h14	16	#4	13'-0"	—
h15	16	#4	23'-8"	—
h16	2	#4	14'-9"	—
h17	2	#4	24'-5"	—
v3	9	#7	3'-6"	—
v4	13	#7	5'-0"	—
v5	19	#7	7'-6"	—
v6	20	#7	10'-0"	—
v7	6	#5	3'-6"	—
v8	6	#5	5'-0"	—
v9	6	#5	7'-6"	—
v10	7	#5	10'-0"	—
Concrete Box Culverts		Cu. Yd.	36.5	
Reinforcement Bars		Pound	5200	





PLAN
(Stage II Construction)

CEC Cummins
Engineering
Corporation
Civil and Structural Engineering

JOB = 2644,6
FILE = 2644,6-CulvertDetails.dgn
DATE = 8/25/2023

DESIGNED - MDC
CHECKED - AAN
DRAWN - SJS
CHECKED - MDC

REVISED -
REVISED -
REVISED -
REVISED -

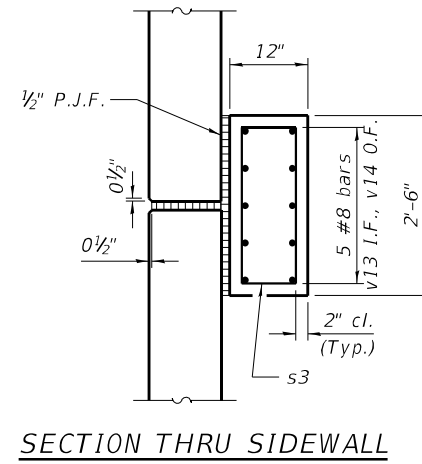
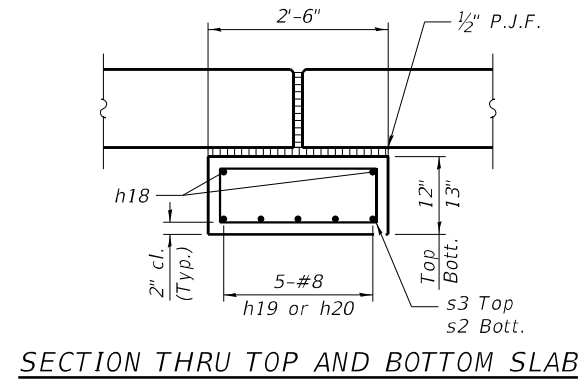
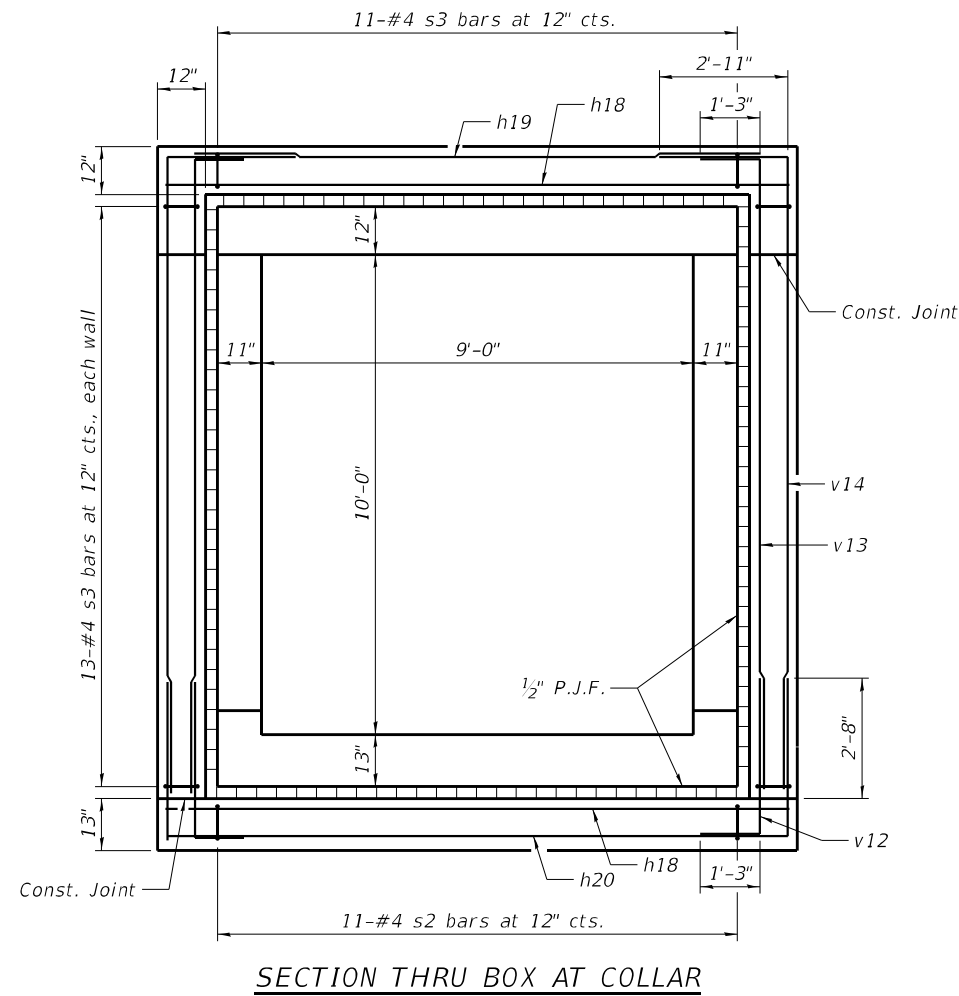
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II BOX CULVERT DETAILS (UPSTREAM END)
STRUCTURE NO. 009-7023

SHEET NO. 11 OF 15 SHEETS

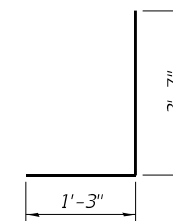
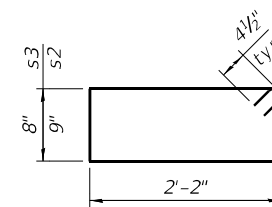
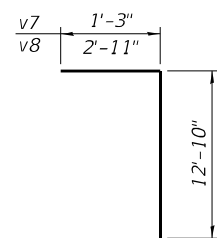
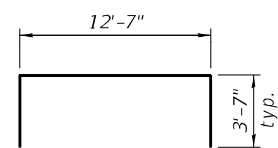
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6 CR-1	CASS	42	28
			CONTRACT NO. 72F59	

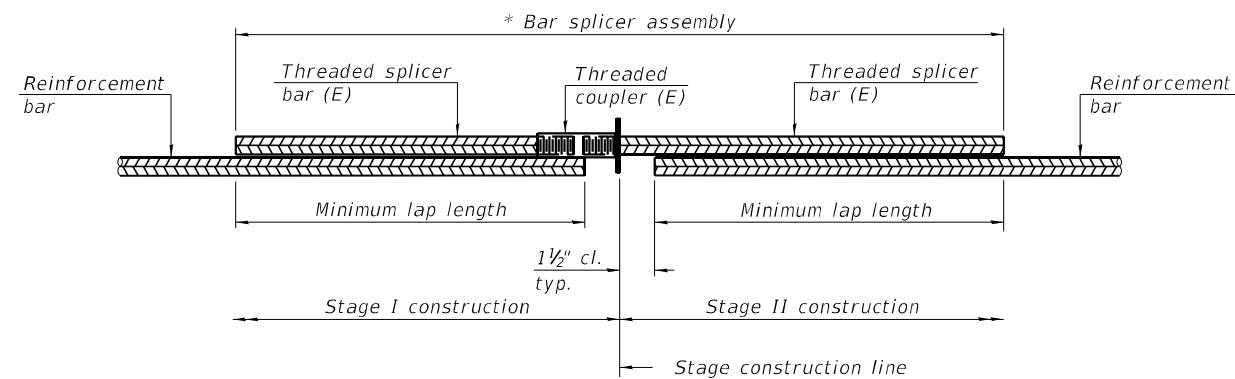
ILLINOIS FED. AID PROJECT



**BILL OF MATERIAL
ONE COLLAR**

Bar	No.	Size	Length	Shape
h18	4	#8	12'-7"	—
h19	5	#8	11'-3"	—
h20	5	#8	19'-9"	—
s2	11	#4	6'-7"	□
s3	37	#4	6'-5"	□
v12	10	#8	4'-10"	┌
v13	10	#8	14'-1"	┌
v14	10	#8	15'-9"	┌
Concrete Collar			Cu. Yd.	4.6
Reinforcement Bars			Pound	1690





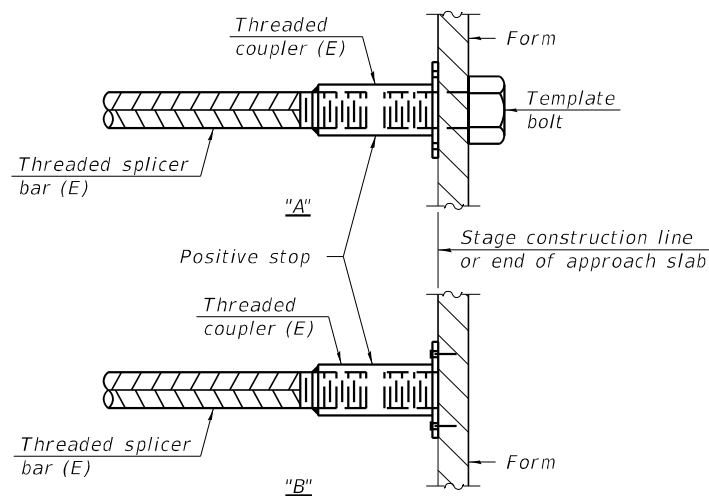
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#6	20	2'-7"
Bottom Slab	#6	20	2'-7"
Walls	#6	44	2'-7"

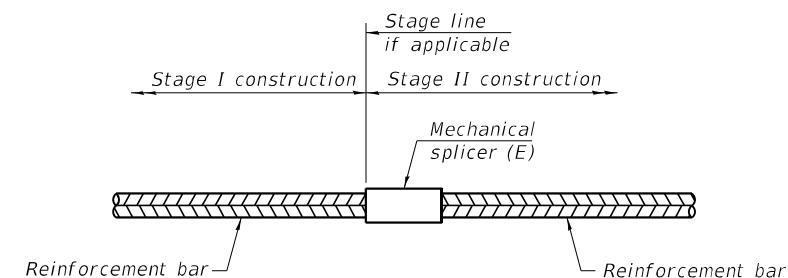


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

2-1-2023



JOB = 2644.6	DESIGNED - MDC	REVISED -
FILE = 2644.6-Splacers.dgn	CHECKED - AAN	REVISED -
DATE = 8/25/2023	DRAWN - SJS	REVISED -
	CHECKED - MDC	REVISED -

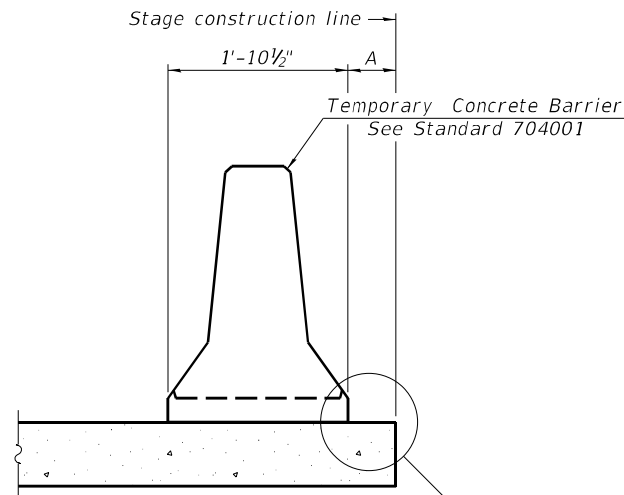
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 009-7023

SHEET NO. 13 OF 15 SHEETS

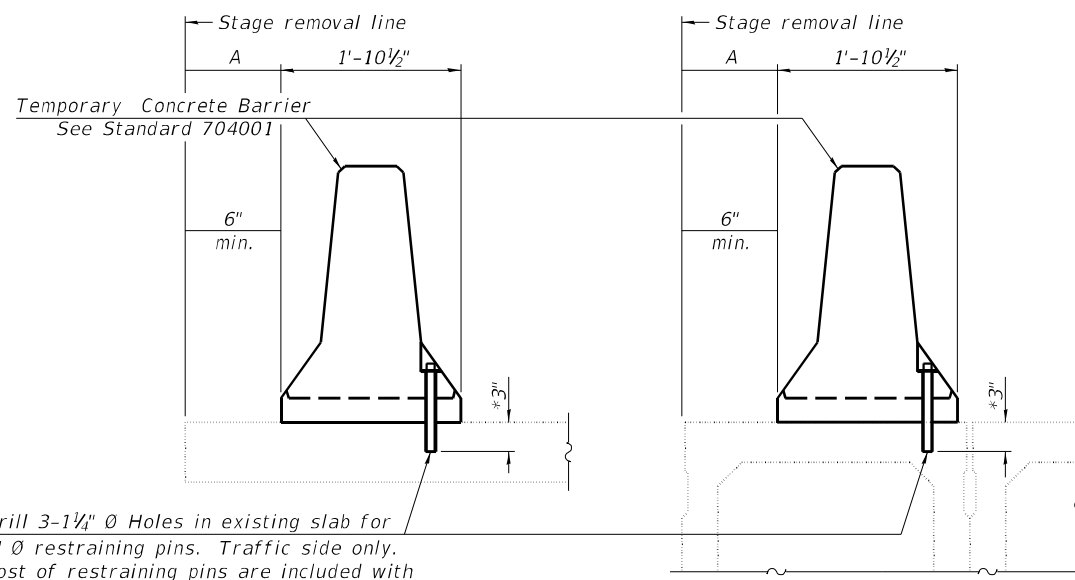
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6 CR-1	CASS	42	30
CONTRACT NO. 72F59				

ILLINOIS FED. AID PROJECT



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



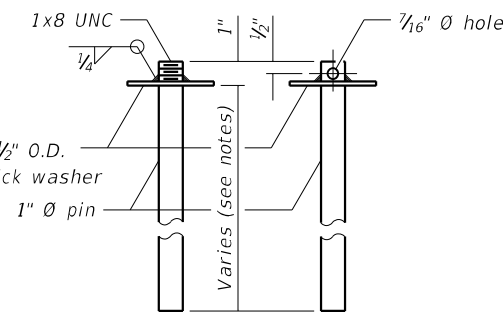
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

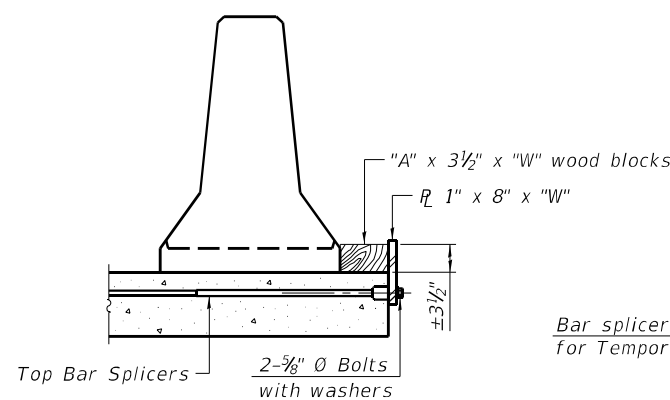
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

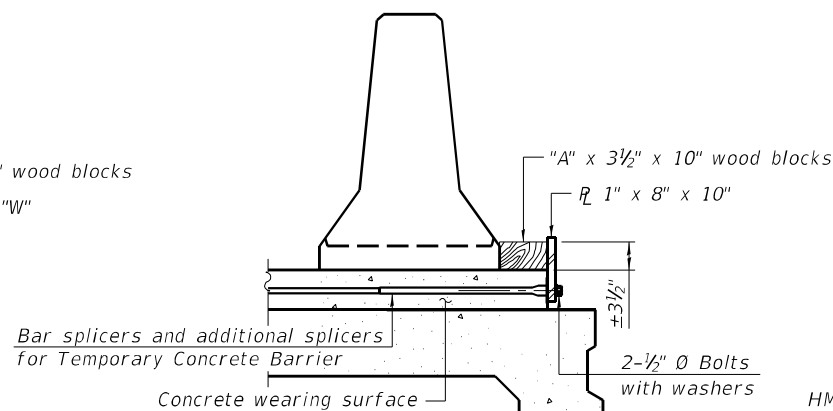


RESTRAINING PIN

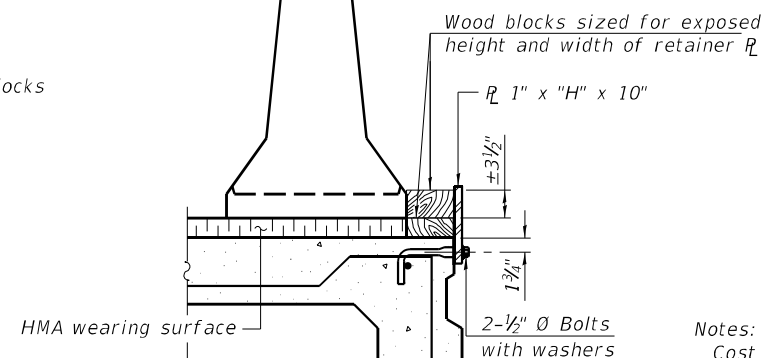
Cost of restraining pins included in the cost of Temporary Construction Barrier.



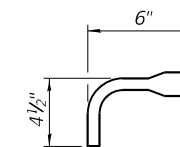
DETAIL I



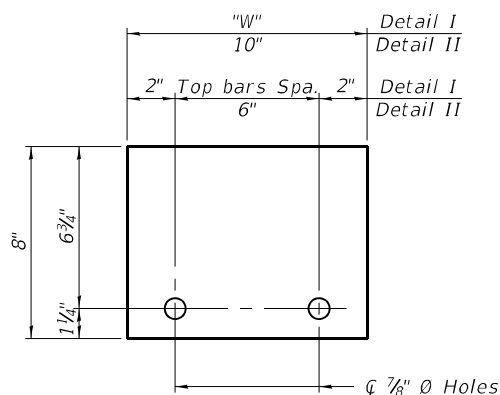
DETAIL II



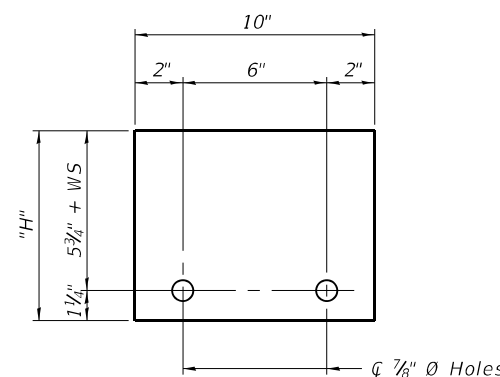
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{c} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021

CEC
Civil and Structural Engineering

Cummins Engineering Corporation
 JOB = 2644.6
 FILE = 2644.6-TempBarrier.dgn
 DATE = 8/25/2023

DESIGNED - MDC
 CHECKED - AAN
 DRAWN - SJS
 CHECKED - MDC

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 009-7023

SHEET NO. 14 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	6 CR-1	CASS	42	31
CONTRACT NO. 72F59				

ILLINOIS FED. AID PROJECT

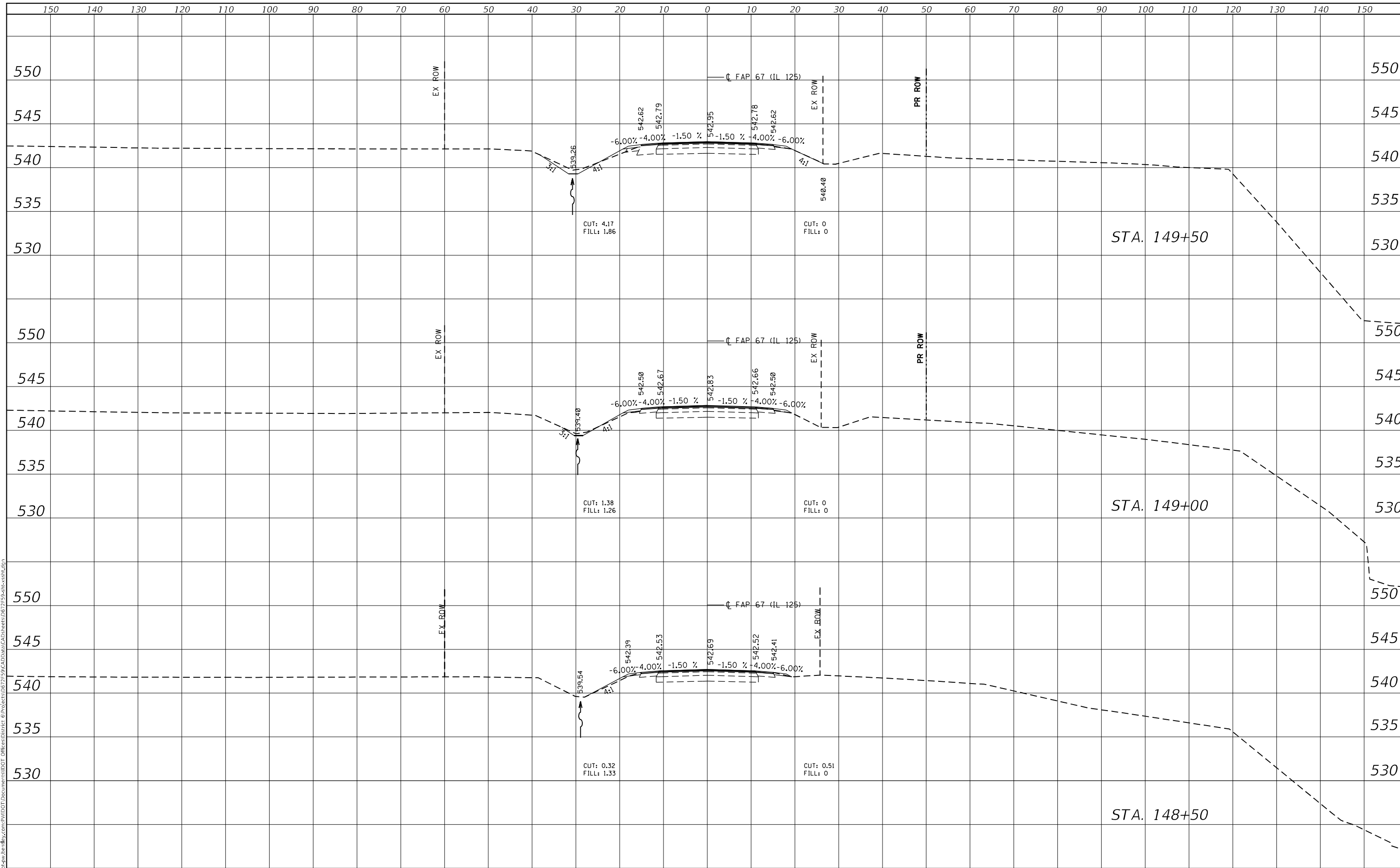
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200-GRANULAR DETAIL.DGN	USER NAME = Sydnle.Schwarz	DESIGNED - BKL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISCELLANEOUS DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000 * / in.	DRAWN - BKL	REVISED -						67	6CR-1	CASS	42	33
	PLOT DATE = 9/1/2023	CHECKED -	REVISED -		REVISED -	SCALE: N/A	SHEET 1	OF 1	SHEETS	STA. N/A	TO STA. N/A	ILLINOIS FED. AID PROJECT	

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

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



CASS
72F59

USER NAME = Sydnle.Schwarz	DESIGNED -	REVISED -
PLOT SCALE = 10,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 9/5/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

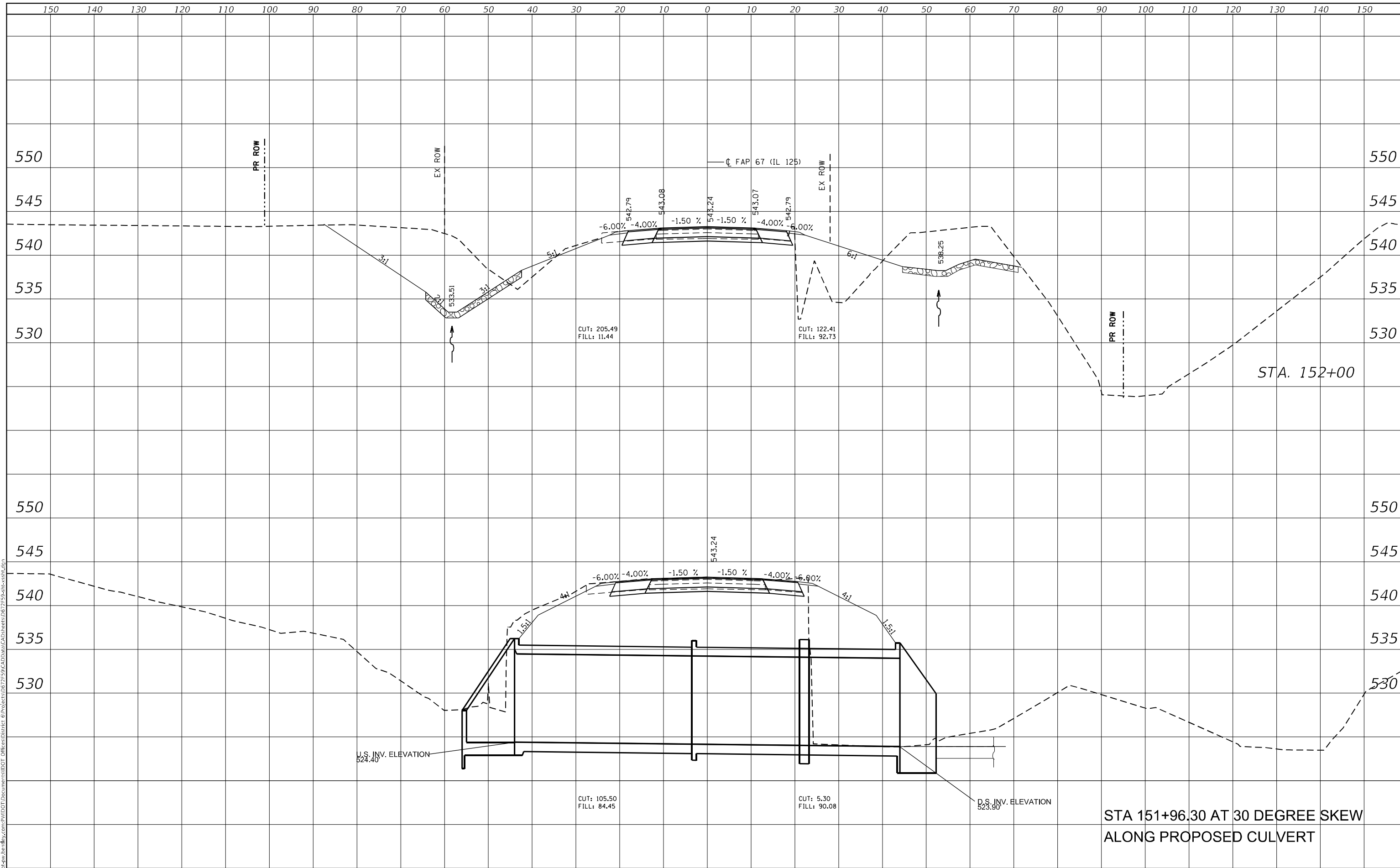
CROSS SECTION SHEETS - IL 125			
SCALE: 2V:1H	SHEET 2	OF 9 SHEETS	STA. 148+50.00 TO STA. 149+50.00

F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 35
CONTRACT NO. 72F59			ILLINOIS FED. AID PROJECT	

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

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

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTION SHEETS - IL 125

USER NAME = Sydnle.Schwarz	DESIGNED -	REVISD -
	DRAWN -	REVISD -
PLOT SCALE = 10,0000 * / in.	CHECKED -	REVISD -
PLOT DATE = 9/5/2023	DATE -	REVISD -

SCALE: 2V:1H SHEET 5 OF 9 SHEETS STA. 151+96.30 TO STA. 152+00.00

F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 38
CONTRACT NO. 72F59				
ILLINOIS FED. AID PROJECT				

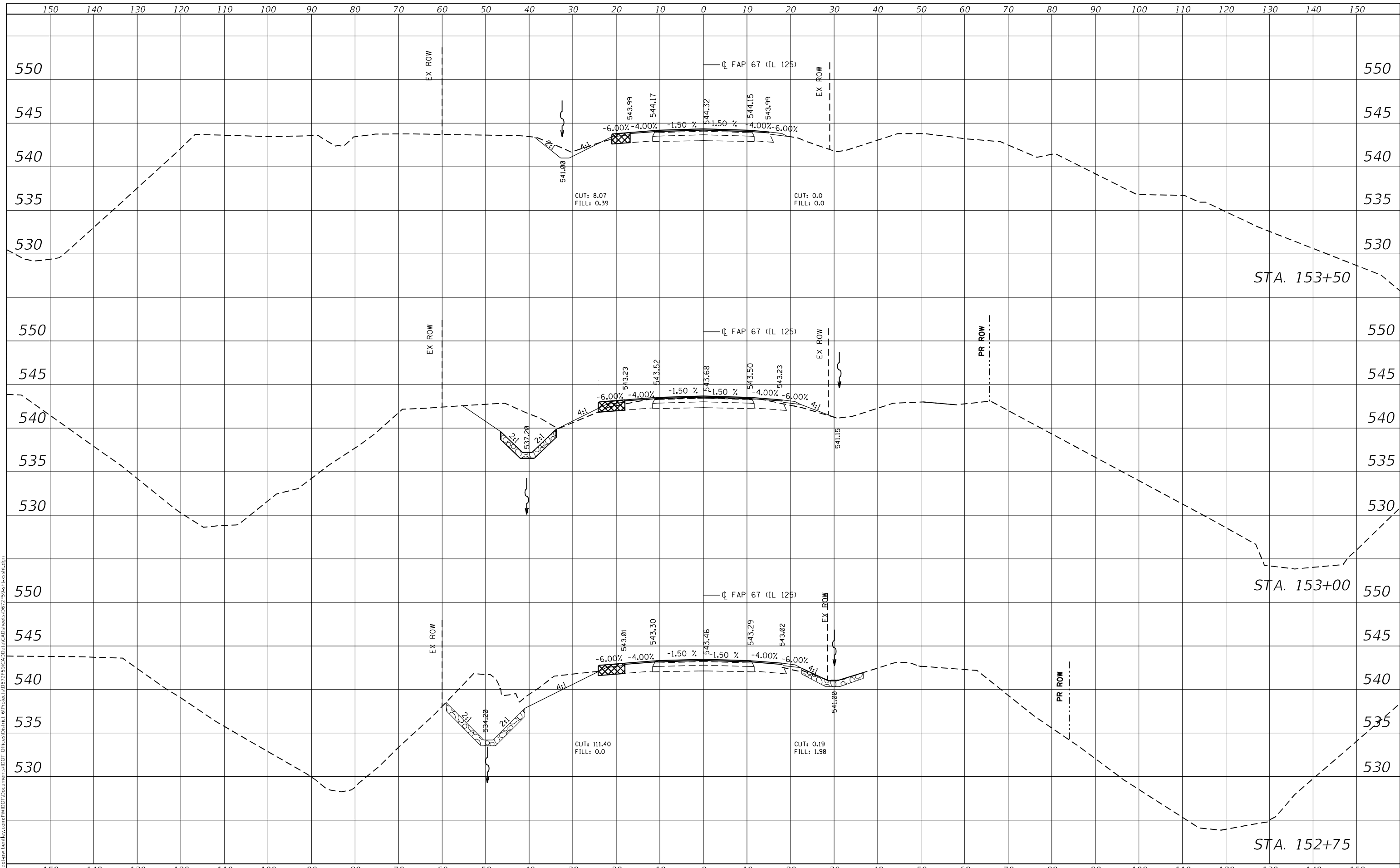
**STA 151+96.30 AT 30 DEGREE SKEW
 ALONG PROPOSED CULVERT**

STA. 152+00

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

ORIGINAL SURVEY NO.	SURVEYED	DATE
	PLOTTED	
	TEMPLATE	
	AREAS CHECKED	

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 FILE NAME: D:\mfr\...
 USER: ...



USER NAME = Sydnile.Schwarz	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 10,0000 * / in.	CHECKED -	REVISED -
PLOT DATE = 9/5/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTION SHEETS - IL 125			
SCALE: 2V:1H	SHEET 7	OF 9 SHEETS	STA. 152+75.00 TO STA. 153+50.00

F.A.P. RTE. 67	SECTION 6CR-1	COUNTY CASS	TOTAL SHEETS 42	SHEET NO. 40
CONTRACT NO. 72F59				ILLINOIS FED. AID PROJECT

