

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

FAP ROUTE 22 (IL 78)  
SECTION (128B)BR-2  
FEDERAL PROJECT NO. STP-M4U1(579)  
BRIDGE REPLACEMENT  
STARK COUNTY  
C-94-089-09

IL ROUTE 78 OVER WALNUT CREEK TRIBUTARY  
REPLACEMENT OF EXISTING BRIDGE WITH PROPOSED CULVERT

### INDEX OF SHEETS

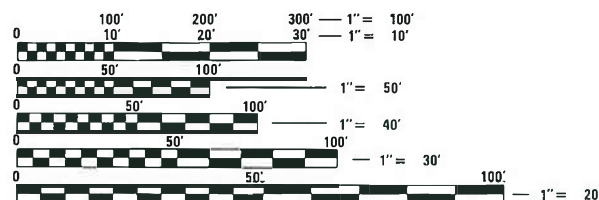
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### DESIGN DESIGNATION

MINOR ARTERIAL (RURAL) (088-2503)  
CURRENT ADT: 2,450 (2016)  
DESIGN ADT: 2,990 (2036)  
DESIGN SPEED: 55 MPH  
POSTED SPEED: 55 MPH  
MU = 3.4%, SU = 6.4%

### SCALE IN FEET

PLAN 1" = 50'  
PROFILE HORIZ 1" = 50'  
PROFILE VERT 1" = 5'  
CROSS SECTION HORIZ 1" = 10'  
CROSS SECTION VERT 1" = 5'

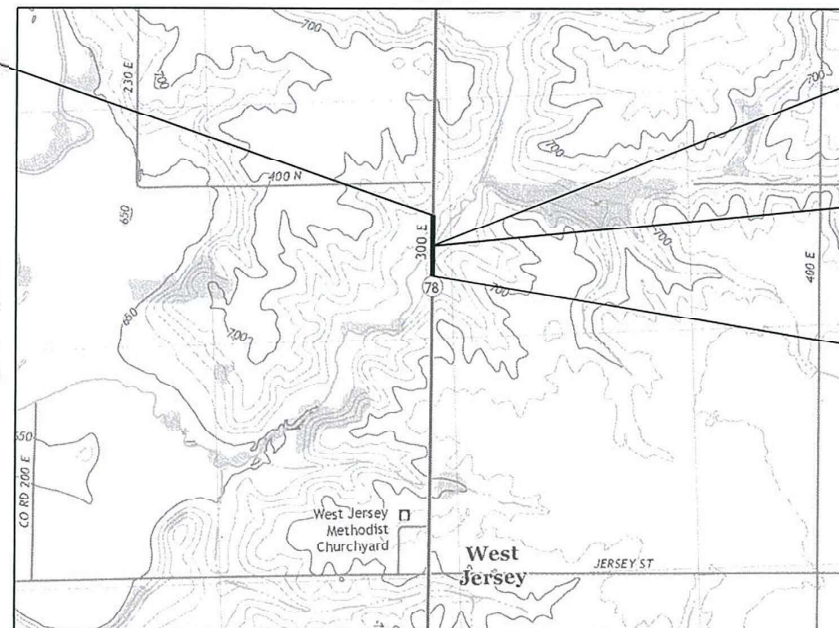


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER RICHARD DOTSON 309-671-3455  
PROJECT MANAGER MICHAEL HUDELSON 309-671-3466  
CONTRACT NO. 68897  
CATALOG NO. 034246-00D

BEGIN SECTION  
STA. 249 + 00



STA. 253 + 15.92  
BRIDGE REPLACEMENT

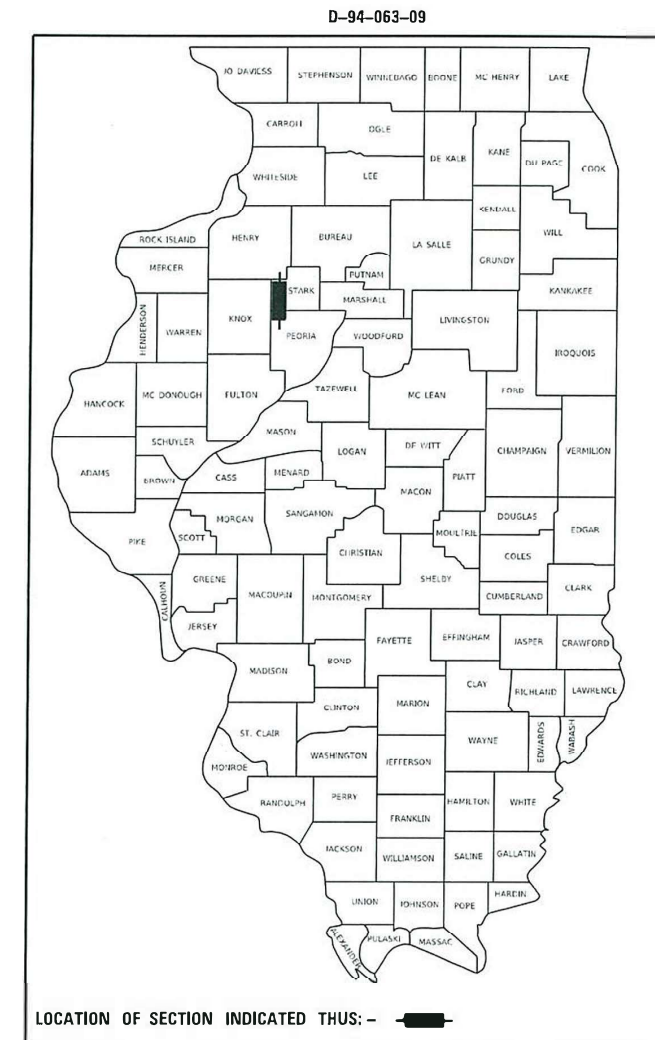
PROJECT INCLUDES TRIPLE 12' X 10'  
CAST-IN-PLACE CONCRETE BOX CULVERT  
EXIST. S. N. 088-0012 PROP. S. N. 088-2503

END SECTION  
STA. 257 + 50



GROSS LENGTH = 850.0 FT. = 0.16 MILE  
NET LENGTH = 850.0 FT. = 0.16 MILE

JEFFREY R. RENSING, P.E.  
IL P.E. NO. 062-055812  
EXPIRES: 11/30/2021  
8/7/2020  
Date



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 13, 2020  
Kensel A. Harrett, RSD  
REGIONAL ENGINEER

October 2, 2020  
[Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

October 2, 2020  
[Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**OATES ASSOCIATES**

Collinsville: 100 Lanier Court, Suite 1, Collinsville, IL 62234, 618.345.2200  
Belleville: 20 East Main Street, Belleville, IL 62200, 618.416.4688  
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ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

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**GENERAL NOTES**

1. SOIL REPORT AVAILABILITY

THE SOILS REPORT AND ALL SOILS DATA COLLECTED AND PROCESSED IN CONJUNCTION WITH THE DESIGN OF IMPROVEMENT IS ON FILE AT THE DISTRICT OFFICE WHERE IT IS AVAILABLE FOR INSPECTION BY CONTRACTORS OR PROSPECTIVE BIDDERS. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THE SOILS REPORT AND DATA HAVE BEEN MADE AVAILABLE, THAT THE CONTRACTOR IS AWARE OF THE REPORT CONTENTS AND APPENDICES, AND THAT THE SOILS REPORT IS PART OF THE CONTRACT DOCUMENTS.

2. AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

3. UTILITIES - LOCATIONS / INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN - ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

4. TREE REMOVAL - UTILITY RELOCATION

TREE REMOVAL MAY BE NECESSARY PRIOR TO UTILITY COMPANIES BEING ABLE TO RELOCATE THEIR FACILITIES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHOULD COORDINATE ANY CONTRACT TREE REMOVAL ACTIVITIES WITH THE UTILITY COMPANIES TO ELIMINATE CONFLICTS AND POTENTIAL DELAYS CAUSED BY UTILITY TREE REMOVAL ACTIVITIES OR INCOMPLETE UTILITY RELOCATIONS.

5. PLAN ELEVATIONS - U. S. G. S. MEAN SEA LEVEL DATUM

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U. S. G. S. MEAN SEA LEVEL DATUM.

6. PROPERTY OWNER ACCESS REQUIREMENTS

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

7. TEMPORARY MATERIAL REQUIREMENTS - UTILITY AND DRIVEWAY CROSSINGS

INCIDENTAL HOT-MIX ASPHALT SURFACE SHALL BE USED FOR ALL TEMPORARY SIDE ROAD CROSSINGS. AGGREGATE SURFACE COURSE MAY BE USED FOR ALL DRIVEWAY CROSSINGS EXCEPT DURING WINTER SHUTDOWN IN ACCORDANCE WITH ARTICLE 107.09.

8. TREE REMOVAL

THE CONTRACTOR SHALL CONTACT THE ENGINEER AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

9. ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM-D4 P10101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

10. SEEDING - SIDE SLOPE RIPPING

ALL SLOPES STEEPER THAN 3 TO 1 AND OVER 15 FT (4.5 M) IN HEIGHT SHALL BE RIPPED. THIS SHALL CONSIST OF RIPPING BETWEEN 18 INCHES TO 24 INCHES (450 MM TO 600 MM) DEEP NORMAL TO THE SLOPE. THE INTERVAL OF RIPPING ALONG THE SLOPE SHALL BE 12 FT. (3.6 M). THIS WORK SHALL BE DONE AFTER THE SEED BED HAS BEEN PREPARED BUT BEFORE ANY FERTILIZER OR SEED HAS BEEN APPLIED. THE FERTILIZER AND SEED SHALL BE APPLIED WITHIN A 24-HOUR PERIOD AFTER THE RIPPING HAS BEEN DONE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF SEEDING INVOLVED.

11. AGGREGATE SURFACE COURSE, TYPE B

AGGREGATE SURFACE COURSE, TYPE B SHALL BE REQUIRED FOR ALL GRANULAR CONSTRUCTION OF SIDE ROADS, ENTRANCES, AND MAILBOX TURNOUTS, WHETHER OR NOT PORTIONS OF THE SURFACES THUS CONSTRUCTED ARE TO BE COVERED WITH A BITUMINOUS SURFACE, EXCEPT WHERE NOTED DIFFERENTLY ON THE PLANS.

12. AGGREGATE FOR DRIVEWAY REPLACEMENT

THE MATERIAL USED FOR CONSTRUCTION OF PERMANENT AGGREGATE DRIVEWAYS SHALL BE GRAVEL OR CRUSHED STONE AS DIRECTED BY THE ENGINEER, TO REPLACE IN KIND THE EXISTING AGGREGATE DRIVEWAYS.

NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS REQUIREMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE PAY ITEM FOR THE AGGREGATE AS SPECIFIED ON THE PLANS.

13. PAVEMENT STATIONING NUMBERS & PLACEMENT

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH (20 MM) WIDE, 5 INCHES (125 MM) HIGH AND 5/8 INCH (15 MM) DEEP.

THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN:

INTERVAL - 200 FEET (ENGLISH STATIONING) OR 100 METERS (METRIC STATIONING)

BOTTOM OF NUMBERS - 6 INCHES (150 MM ) FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

LOCATION:

- 2,3, & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
- MULTI-LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
- RAMPS - ALONG BASELINE EDGE OF PAVEMENT

POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER

FORMAT - ENGLISH (METRIC) PAVEMENT STATIONS SHALL USE THIS FORMAT "XXX (XX+XOO)" WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

14. POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

SURFACE TYPE	RESIDUAL RATE
MILLED (HMA OR PCC)	0.08 LB/SF
EXISTING PAVEMENT	0.08 LB/SF
FOG COAT (BETWEEN LIFTS)	0.08 LB/SF

NOTE: ESTIMATED TRUCK APPLICATION RATE IS USED FOR ESTIMATING QUANTITIES.

15. HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S)	SURFACE COURSE	HMA FULL DEPTH	HMA SHOULDER (SURFACE LIFT)	HMA SHOULDER (LOWER LIFT)	HMA BASE COURSE WIDENING
AC/PG	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
MIXTURE COMPOSITION	IL 9.5	IL 19.0	IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE	MIXTURE D	N/A	MIXTURE C	N/A	N/A
QUALITY MANAGEMENT PROGRAM	OCQA	OCQA	OCQA	OCQA	OCQA

NOTES: INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL AGGREGATE SIZE.

16. BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.

17. PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

18. CROSSING EXISTING STRUCTURES WITH EQUIPMENT

THE FOLLOWING STRUCTURES SN 088-0012 MAY BE CROSSED WITH UNLOADED MATERIAL TRANSFER DEVICE. ANY STRUCTURES NOT LISTED ABOVE SHALL BE VERIFIED BY THE RESIDENT PRIOR TO BEGINNING WORK.

19. ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, STANDARDS, AND COMMITMENTS  
IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	2
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	







CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	52	52	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	70	70	
20200100	EARTH EXCAVATION	CU YD	1,065	1,065	
20400800	FURNISHED EXCAVATION	CU YD	150	150	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	257		257
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	386		386
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3,430	3,430	
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	70	70	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	70	70	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	70	70	
25100115	MULCH, METHOD 2	ACRE	0.75	0.75	
25100630	EROSION CONTROL BLANKET	SQ YD	313	313	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150	150	

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**  
**IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS      SHEET 1 OF 6 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	5
			CONTRACT NO. 68897	
			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
28000305	TEMPORARY DITCH CHECKS	FOOT	152	152	
28000400	PERIMETER EROSION BARRIER	FOOT	770	770	
28100109	STONE RIPRAP, CLASS A5	SQ YD	650		650
28200200	FILTER FABRIC	SQ YD	650		650
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1,418	1,418	
31102000	SUBBASE GRANULAR MATERIAL, TYPE C	CU YD	28	28	
35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	975	975	
35600708	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	SQ YD	273	273	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	7	7	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	100	100	
40600285	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POUND	5,269	5,269	
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	5,670	5,670	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	214	214	
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	270	270	

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**STATE OF ILLINOIS  
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**SUMMARY OF QUANTITIES  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS      SHEET 2 OF 6 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	6
			CONTRACT NO. 68897	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
40701891	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10 1/2"	SQ YD	535	535	
44000100	PAVEMENT REMOVAL	SQ YD	761	761	
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	159	159	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	750	750	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	850		850
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	87,230		87,230
50800515	BAR SPLICERS	EACH	246		246
51500100	NAME PLATES	EACH	1		1
52200015	PERMANENT SHEET PILING	SQ FT	735		735
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	683		683
54003000	CONCRETE BOX CULVERTS	CU YD	448.2		448.2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	339		339
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	700.0	700.0	

\*= SPECIALTY ITEM

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**SUMMARY OF QUANTITIES  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS      SHEET 3 OF 6 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	7
			CONTRACT NO. 68897	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
* 63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	100.0	100.0	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	854	854	
* 66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	10	10	
* 66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	2	2	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8	
67000600	ENGINEER'S FIELD LABORATORY	CAL MO	8	8	
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	
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	

\*= SPECIALTY ITEM

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**SUMMARY OF QUANTITIES  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS      SHEET 4 OF 6 SHEETS      STA.      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	8
CONTRACT NO. 68897				
ILLINOIS		FED. AID PROJECT		

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				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	14	14	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2,559	2,559	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	9,288	9,288	
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	24	24	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	450	450	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	425	425	
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	
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2	
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2,559	2,559	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	11	11	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	12	12	

\*= SPECIALTY ITEM

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS SHEET 5 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	9
			CONTRACT NO. 68897	
			ILLINOIS FED. AID PROJECT	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				0005	0010
				ROADWAY	STRUCTURAL
				80% - 20% FED-ST	80% - 20% FED-ST
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	11	11	
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	522	522	
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	339		339
X4400196	HOT-MIX ASPHALT SURFACE REMOVAL, SPECIAL	SQ YD	142	142	
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	3,313	3,313	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	4,006	4,006	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	222	222	
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	390	390	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0022800	FENCE REMOVAL	FOOT	444	444	
Z0034105	MATERIAL TRANSFER DEVICE	TON	569	569	
* Z0054500	ROCK FILL	TON	623		623
∅ Z0076600	TRAINEES	HOUR	1,000	1,000	
∅ Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1,000	1,000	

\*= SPECIALTY ITEM ∅ 0042

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**  
**IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: NTS      SHEET 6 OF 6 SHEETS      STA.      TO STA.

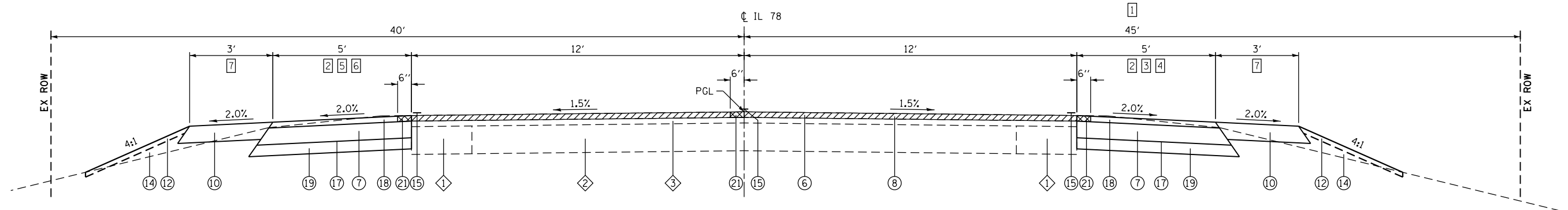
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68897	

**NOTES**

- 1 ROW IS 40' FROM CENTERLINE STARTING AT STA 256+00
- 2 TRANSITION HMA SHOULDER FROM 2' TO 5' FROM STA. 249+00 TO STA. 249+40 AND FROM STA. 257+10 TO STA. 257+50
- 3 HMA SHOULDER 5' WIDE FROM STA. 249+40 TO STA. 250+36 RT TRANSITION HMA SHOULDER FROM 5' TO 8' FROM STA. 250+36 TO STA. 250+54 RT
- 4 TRANSITION HMA SHOULDER FROM 8' TO 5' FROM STA. 256+22 TO STA. 256+40 RT HMA SHOULDER 5' WIDE FROM STA. 256+40 TO STA. 257+10 RT
- 5 TRANSITION HMA SHOULDER FROM 5' TO 8' FROM STA. 249+94 TO STA. 250+12 LT
- 6 TRANSITION HMA SHOULDER FROM 8' TO 5' FROM STA. 256+60 TO STA. 256+72 LT
- 7 TRANSITION AGG SHOULDER FROM 2' TO 3' FROM STA. 249+00 TO STA. 249+40 AND FROM STA. 257+10 TO STA. 257+50

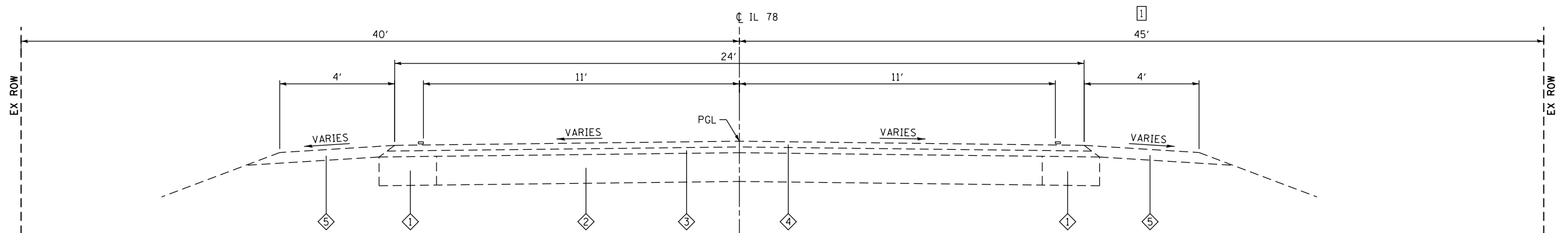
**LEGEND**

- 1 EXISTING BITUMINOUS BASE COURSE WIDENING
- 2 EXISTING PCC PAVEMENT
- 3 EXISTING BITUMINOUS OVERLAY
- 4 EXISTING BITUMINOUS SURFACE COURSE
- 5 EXISTING AGGREGATE SHOULDER
- 6 PROPOSED HMA SURFACE COURSE, 2"
- 7 PROPOSED HMA SHOULDER, 6"
- 8 PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH (2" AVERAGE)
- 9 PROPOSED HMA SHOULDER, 8"
- 10 PROPOSED AGGREGATE SHOULDER, 8"
- 11 PROPOSED HMA STABILIZATION, 6"
- 12 PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- 13 PROPOSED FULL DEPTH HMA, 10.5"
- 14 PROPOSED EMBANKMENT
- 15 PROPOSED EPOXY PAVEMENT MARKING - LINE 4"
- 16 PROPOSED AGGREGATE BASE COURSE, 4"
- 17 PROPOSED PRIME COAT
- 18 PROPOSED HMA SHOULDER, 2"
- 19 PROPOSED SUBBASE GRANULAR MAT, TYPE B, 4"
- 20 PROPOSED SUBBASE GRANULAR MAT, TYPE C
- 21 PROPOSED HMA SURFACE REMOVAL, SPECIAL (MILL WIDE / PAVE WIDE)



**PROPOSED ROADWAY CROSS SECTION - IL 78**

(Looking South)  
 STA. 249+00 TO STA. 250+12  
 STA. 256+15 TO STA. 257+50  
 (NOT TO SCALE)



**EXISTING ROADWAY CROSS SECTION - IL 78**

(Looking South)  
 STA. 249+00 TO STA. 257+50  
 (NOT TO SCALE)

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TYPICAL SECTIONS  
 IL 78 OVER WALNUT CREEK TRIBUTARY  
 SCALE: NTS SHEET 1 OF 2 SHEETS STA. TO STA.

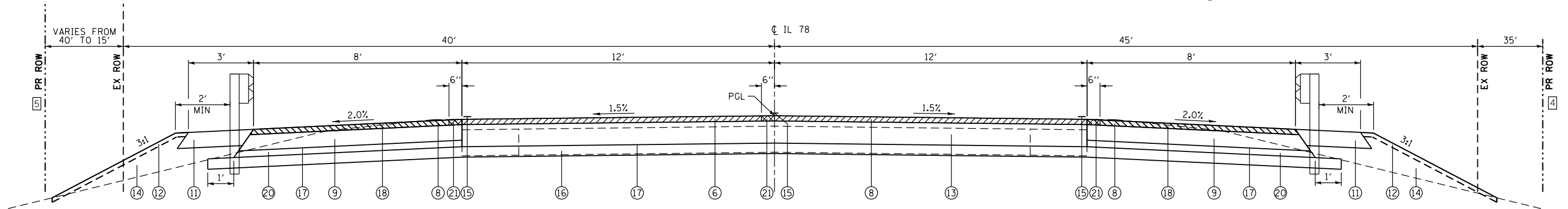
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	11
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

**NOTES**

- 1 GUARDRAIL FROM STA. 250+46 TO STA. 255+46 LT
- 2 GUARDRAIL FROM STA. 250+88 TO STA. 255+88 RT
- 3 TRANSITION HMA SHOULDER FROM 5' TO 8' FROM STA. 250+36 TO STA. 250+54 RT  
HMA SHOULDER 8' WIDE FROM STA. 250+54 TO STA. 256+22 RT
- 4 PR ROW FROM STA. 252+50 TO STA. 255+15 RT
- 5 PR ROW 40' FROM STA. 251+25 TO STA. 253+80 LT  
AND 15' FROM STA. 253+80 TO STA. 256+15 LT
- 6 PR TCE FROM STA. 254+58 TO STA. 255+85 LT
- 7 SEE HIGHWAY STANDARDS FOR HMA STABILIZATION REQUIREMENTS. THIS ITEM IS ONLY REQUIRED BEHIND PROPOSED GUARDRAIL. SEE PLAN AND PROFILE SHEETS FOR EXACT LOCATIONS.

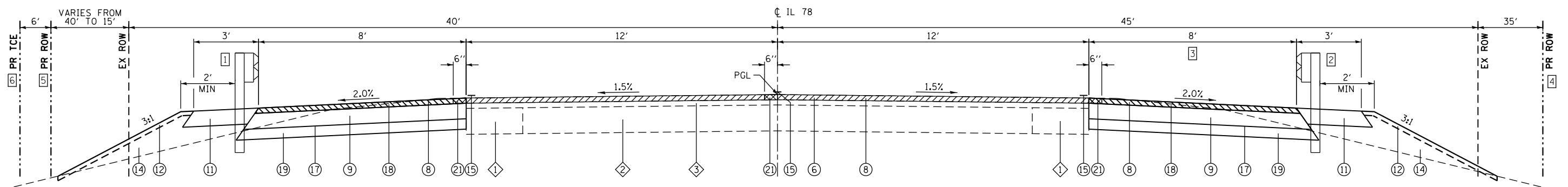
**LEGEND**

- 1 EXISTING BITUMINOUS BASE COURSE WIDENING
- 2 EXISTING PCC PAVEMENT
- 3 EXISTING BITUMINOUS OVERLAY
- 4 EXISTING BITUMINOUS SURFACE COURSE
- 5 EXISTING AGGREGATE SHOULDER
- 6 PROPOSED HMA SURFACE COURSE, 2"
- 7 PROPOSED HMA SHOULDER, 6"
- 8 PROPOSED HMA SURFACE REMOVAL, VARIABLE DEPTH (2" AVERAGE)
- 9 PROPOSED HMA SHOULDER, 8"
- 10 PROPOSED AGGREGATE SHOULDER, 8"
- 11 PROPOSED HMA STABILIZATION, 6" 7
- 12 PROPOSED TOPSOIL FURNISH AND PLACE, 4"
- 13 PROPOSED FULL DEPTH HMA, 10.5"
- 14 PROPOSED EMBANKMENT
- 15 PROPOSED EPOXY PAVEMENT MARKING - LINE 4"
- 16 PROPOSED AGGREGATE BASE COURSE, 4"
- 17 PROPOSED PRIME COAT
- 18 PROPOSED HMA SHOULDER, 2"
- 19 PROPOSED SUBBASE GRANULAR MAT, TYPE B, 4"
- 20 PROPOSED SUBBASE GRANULAR MAT, TYPE C
- 21 PROPOSED HMA SURFACE REMOVAL, SPECIAL (MILL WIDE / PAVE WIDE)



**PROPOSED ROADWAY CROSS SECTION - IL 78**

(Looking South)  
STA. 252+25 TO STA. 254+25  
(NOT TO SCALE)



**PROPOSED ROADWAY CROSS SECTION - IL 78**

(Looking South)  
STA. 250+12 TO STA. 252+25  
STA. 254+25 TO STA. 256+15  
(NOT TO SCALE)

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS  
IL 78 OVER WALNUT CREEK TRIBUTARY**  
SCALE: NTS SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	12
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

**PAVEMENT**

STATION	STATION	OFFSET	SUB GRAN MAT B 4 (SO YD)	SUB GRAN MAT C (CU YD)	AGG BASE CSE B 4 (SO YD)	HMA BC WID 8 (SO YD)	AGG SURF CSE B (NOTE 1) (TON)	P BIT MATLS PR CT (NOTE 1) (POUND)	P BIT MATLS TACK CT (NOTE 1 & 4) (POUND)	HMA SURF REM BUTT JT (SO YD)	HMA SC IL-9.5 D N50 (NOTE 1 & 2) (TON)	HMA PAVT FD 10 1/2 (SO YD)	PAVEMENT REM (SO YD)	AGGREGATE SHLDS B 8 (SO YD)	HMA SHOULDERS (NOTE 1 & 4) (TON)	HMA SURF REM SPL (SO YD)	HMA SURF REM VAR DP (NOTE 3) (SO YD)	MATL TRANSFER DEVICE (NOTE 1) (TON)
<b>STAGE 1, PHASE 1</b>																		
250+12.0	253+09.0	RT	161			144		361	104									
253+50.0	256+15.0	RT	144			129		322	93									
<b>STAGE 1, PHASE 2</b>																		
250+12.0	252+25.0	LT	211					474	284						88			
252+25.0	254+25.0	LT		14	443			945	586			212	307		83			125
254+25.0	256+15.0	LT	194					435	260						81			
<b>STAGE 2</b>																		
250+12.0	252+25.0	RT											95					
250+54.0	252+25.0	RT	170					381	228						71			
252+25.0	254+25.0	RT		14	532			1,145	714			323	250		83			190
254+25.0	256+22.0	RT	195					438	262						82			
254+25.0	256+15.0	RT										84						
<b>STAGE 3</b>																		
249+00.0	249+40.0	CL								107								
249+00.0	257+50.0	CL							2,593		254				157		2,267	254
249+00.0	250+12.0	LT	70					157	90					36	21			
249+00.0	250+54.0	RT	98					219	126					52	30			
250+12.0	256+15.0	LT															541	
250+54.0	256+22.0	RT															505	
256+15.0	257+50.0	LT	94											29	29			
256+22.0	257+50.0	RT	81					211	124					42	25			
256+25.0	256+47.0	LT					7	181	104				25					
257+10.0	257+50.0	CL								107								
MILL WIDE / PAVE WIDE									102		16					142		
<b>TOTAL</b>			<b>1,418</b>	<b>28</b>	<b>975</b>	<b>273</b>	<b>7</b>	<b>5,269</b>	<b>5,670</b>	<b>214</b>	<b>270</b>	<b>535</b>	<b>761</b>	<b>159</b>	<b>750</b>	<b>142</b>	<b>3,313</b>	<b>569</b>

**PAVEMENT NOTES:**

- APPLICATION RATES USED FOR QUANTITY ESTIMATES ARE AS FOLLOWS:  
 HOT-MIX ASPHALT: 0.056 TONS/SO YD/INCH  
 AGGREGATE SURFACE: 2.1 TON/CU YD  
 P BIT MATLS PR CT: 0.25 LBS/SO FT  
 P BIT MATLS TACK CT: 0.08 LBS/SO FT  
 P BIT MATLS TACK CT: MILLED SURFACE LIFTS 0.08 LBS/SO FT
- THE PROPOSED HMA SURFACE COURSE SHALL BE 2 IN. THICK.
- MINIMUM DEPTH OF HMA SURFACE REMOVAL, 1/2 IN. THICK
- ASSUMED 2 LIFT APPLICATIONS OF P BIT MATLS TACK CT ON HMA PAVT FD 10 1/2 AND HMA SHOULDERS

**GUARDRAIL**

STATION	STATION	LOCATION	SPBGR TY A 6FT POSTS (FOOT)	SPGR ATT TO CULVERT (FOOT)	TR BAR TRM T1 SPL TAN (EACH)	GUARDRAIL REMOV (FOOT)	TERMINAL MARKER - DA (EACH)	GRDRAIL REF TYPE A (EACH)	HMA STAB 6 AT SPBGR (SO YD)
250+12.0	255+80.0	LT							195
250+46.0	252+74.7	LT				229			
250+46.0	250+96.0	LT			1		1		
250+54.0	256+22.0	RT							195
250+88.0	251+38.0	RT			1		1		
250+88.0	253+07.4	RT				220			
250+96.0	252+77.0	LT	175.0					3	
251+38.0	253+05.0	RT	175.0					3	
252+77.0	253+27.0	LT		50.0					
253+05.0	253+55.0	RT		50.0					
253+27.0	254+96.0	LT	175.0					3	
253+42.5	255+44.7	LT				203			
253+55.0	255+38.0	RT	175.0					3	
253+84.0	255+86.0	RT				202			
254+96.0	255+46.0	LT			1		1		
255+38.0	255+88.0	RT			1		1		
<b>TOTAL</b>			<b>700.0</b>	<b>100.0</b>	<b>4</b>	<b>854</b>	<b>4</b>	<b>12</b>	<b>390</b>

**TREE REMOVAL**

STATION	OFFSET	TREE REMOV 6-15 (UNIT)	TREE REMOV OVER 15 (UNIT)
255+08.9	37.8' LT	6	
255+16.7	40.2' LT	10	
255+18.2	39.0' LT	10	
255+20.2	41.4' LT		32
255+21.8	43.4' LT	10	
255+30.7	45.9' LT	10	
255+66.3	28.7' LT	6	
255+86.8	35.4' LT		38
<b>TOTAL</b>		<b>52</b>	<b>70</b>

**MISCELLANEOUS**

DESCRIPTION	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8
ENGINEER'S FIELD LABORATORY	CAL MO	8
MOBILIZATION	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
TEMPORARY RUMBLE STRIPS	EACH	6
CHANGEABLE MESSAGE SIGN	CAL DA	14
CONSTRUCTION LAYOUT	L SUM	1

**SURVEY MARKERS**

STATION	OFFSET	PERM SURV MKRS T1 (EACH)
249+00.0	CL	1
258+00.0	CL	1
<b>TOTAL</b>		<b>2</b>

**ROW MARKERS**

STATION	OFFSET	FUR ERECT ROW MARKERS (EACH)
251+25.0	LT	1
251+65.0	LT	1
252+50.0	RT	1
252+90.0	RT	1
253+30.0	LT	1
253+80.0	LT	1
254+80.0	RT	1
255+15.0	RT	1
255+85.0	LT	1
256+10.0	LT	1
<b>TOTAL</b>		<b>10</b>

**FENCE**

STATION	STATION	OFFSET	FENCE REMOVAL (FOOT)
250+70.7	252+28.2	LT	233
252+73.5	254+56.9	LT	211
<b>TOTAL</b>			<b>444</b>

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>SCHEDULES OF QUANTITIES IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: NTS	SHEET 1	OF 2 SHEETS	STA. TO STA.

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 13
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

**EROSION CONTROL**

STATION	STATION	OFFSET	EROSION CONTR BLANKET (SQ YD)	TEMP EROS CONTR SEED (NOTE 1) (POUND)	TEMP DITCH CHECKS (FOOT)	PERIMETER EROS BAR (FOOT)
249+00.0	252+00.0	LT				307
249+00.0	250+00.0	RT				102
249+00.0	252+76.0	LT		36		
249+00.0	253+13.0	RT		40		
250+00.0	253+00.0	RT			54	
253+19.0	257+50.0	LT		40		
253+50.0	256+20.0	LT			72	
253+56.0	257+50.0	RT		34		
255+00.0	257+50.0	RT				255
254+50.0	255+00.0	RT			9	
254+50.0	256+25.0	LT	313			
256+46.0	257+50.0	LT			17	106
<b>TOTAL</b>			<b>313</b>	<b>150</b>	<b>152</b>	<b>770</b>

**EROSION CONTROL NOTES:**

1. THE QUANTITY FOR TEMPORARY EROSION CONTROL SEEDING ASSUMES TWO SEPARATE APPLICATIONS AT A RATE OF 100 POUNDS/ACRE PER APPLICATION. THE CONTRACTOR SHALL APPLY AS NECESSARY AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

**EARTHWORK**

STATION	STATION	OFFSET	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (NOTE 1) (CU YD)	EMBANKMENT (NOTE 2) (CU YD)	FURNISHED WASTE (+) OR SHORTAGE (-) (NOTE 3) (CU YD)	TOPSOIL F & P 4 (SQ YD)
249+00.0	257+50.0	CL	1065	800	950	-150	
249+00.0	252+76.0	LT					829
249+00.0	253+13.0	RT					918
253+19.0	257+50.0	LT					913
253+56.0	257+50.0	RT					770
<b>TOTAL</b>			<b>1,065</b>	<b>800</b>	<b>950</b>	<b>-150</b>	<b>3,430</b>

**EARTHWORK NOTES:**

1. ESTIMATED SHRINKAGE FACTOR = 25%.
2. APPROXIMATE EMBANKMENT QUANTITY IS SHOWN FOR INFORMATION ONLY.
3. DOES NOT INCLUDE ANY EXCESS MATERIAL FROM THE CULVERT EXCAVATION.

**TRAFFIC CONTROL**

STATION	OFFSET	STATION	OFFSET	TEMP CONC BARRIER (FOOT)	REL TEMP CONC BARRIER (FOOT)	IMP ATTN TEMP NRN TL3 (EACH)	IMP ATTN REL NRN TL3 (EACH)	PIN TEMP CONC BARRIER (EACH)
<b>STAGE 1</b>								
251+16.0	LT					1		
251+16.0	LT	255+34.0	LT	425				108
255+34.0	LT					1		
<b>STAGE 2</b>								
251+04.0	RT						1	
251+04.0	RT	255+46.0	RT	25	425			114
255+46.0	RT						1	
<b>TOTAL</b>				<b>450</b>	<b>425</b>	<b>2</b>	<b>2</b>	<b>222</b>

**PAVEMENT MARKING**

STATION	STATION	OFFSET	DESCRIPTION (NOTE 5)	TEMP PVT MK LINE 4 (NOTE 4) (FOOT)	PAVT MARK TAPE T4 4 (NOTE 1 & 2) (FOOT)	PAVT MARK TAPE T4 24 (FOOT)	MOD URETH PM LINE 4 (YELLOW) (NOTE 3) (FOOT)	MOD URETH PM LINE 4 (WHITE) (NOTE 3) (FOOT)	RAISED REFL PAVT MKR (EACH)	RAISED REF PVT MK REM (EACH)	PAVMT MRKG REM WTR BL (SQ FT)	TEMP PAVT MKING REMOV (SQ FT)
<b>STAGE 1, PHASE 1</b>												
249+10.0	250+12.0	RT	EDGE LINE - SOLID		102							34
249+10.0	257+35.0	LT	EDGE LINE - SOLID		825							275
250+12.0	256+15.0	RT	EDGE LINE - SOLID		603							201
256+15.0	257+35.0	RT	EDGE LINE - SOLID		120							40
<b>STAGE 1, PHASE 2</b>												
249+11.0		RT	STOP BAR			12						24
249+10.0	251+25.0	CL	CENTERLINE - SKIP DASH & SOLID								92	
249+75.0	257+17.0	LT	EDGE LINE - SOLID		744							248
250+76.5	255+73.5	RT	EDGE LINE - SOLID		498						166	166
255+25.0	257+35.0	CL	CENTERLINE - SKIP DASH & SOLID								90	
257+35.0		LT	STOP BAR			12						24
<b>STAGE 2</b>												
249+21.0	256+75.0	RT	EDGE LINE - SOLID		756							252
250+64.5	255+85.5	LT	EDGE LINE - SOLID		522						174	174
<b>STAGE 3</b>												
249+00.0	257+50.0	CL	CENTERLINE - SKIP DASH	220	440		220		11	11		222
249+00.0	252+95.0	CL	CENTERLINE - SOLID	395	790		395					396
249+00.0	257+50.0	LT	EDGE LINE - SOLID	850	1700			850				852
249+00.0	257+50.0	RT	EDGE LINE - SOLID	850	1700			850				852
255+06.0	257+50.0	CL	CENTERLINE - SOLID	244	488		244					246
<b>TOTAL</b>				<b>2,559</b>	<b>9,288</b>	<b>24</b>	<b>859</b>	<b>1,700</b>	<b>11</b>	<b>11</b>	<b>522</b>	<b>4,006</b>

**PAVEMENT MARKING NOTES:**

1. STAGE 1, PHASE 1 QUANTITIES ARE PROVIDED TO ACCOMMODATE ANY LANE SHIFTS THAT MAY BE REQUIRED FOR THE HMA BASE COURSE WIDENING CONSTRUCTION.
2. QUANTITY UNDER STAGE 3 REPRESENTS TWO APPLICATIONS. ONE FOR THE MILLED SURFACE AND ANOTHER FOR THE FINAL SURFACE.
3. SEE HIGHWAY STANDARD 780001 FOR PAVEMENT MARKING DETAILS.
4. TEMPORARY PAVEMENT MARKING LINE 4" WILL BE USED AT THE DIRECTION OF THE ENGINEER IF WEATHER OR DELAYS PREVENT THE INSTALLATION OF THE PERMANENT PAVEMENT MARKING. THIS QUANTITY REPRESENTS ONE APPLICATION.
5. EDGE LINE - WHITE / STOP BAR - WHITE / CENTERLINE - YELLOW

**SIGN**

STATION	OFFSET	TYPE	DESCRIPTION	SIZE (IN X IN X IN)	REMOV SIN PAN ASSY TA (EACH)	RELOC SIN PAN ASSY TA (EACH)
252+93.5	19.2' RT	W14-3	NO PASSING ZONE	48 X 48 X 36	1	
252+95.0	21.0' RT	W14-3	NO PASSING ZONE	48 X 48 X 36		1
255+06.0	21.0' LT	W14-3	NO PASSING ZONE	48 X 48 X 36		1
255+07.0	20.0' LT	W14-3	NO PASSING ZONE	48 X 48 X 36	1	
<b>TOTAL:</b>					<b>2</b>	<b>2</b>

**SEEDING**

STATION	STATION	OFFSET	SEEDING CL 2A (ACRE)	NITROGEN FERT NUTR (POUND)	PHOSPHORUS FERT NUTR (POUND)	POTASSIUM FERT NUTR (POUND)	MULCH METHOD 2 (ACRE)
249+00.0	252+76.0	LT	0.18	17	17	17	0.18
249+00.0	253+13.0	RT	0.20	19	19	19	0.20
253+19.0	257+50.0	LT	0.20	18	18	18	0.20
253+56.0	257+50.0	RT	0.17	16	16	16	0.17
<b>TOTAL</b>			<b>0.75</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>0.75</b>

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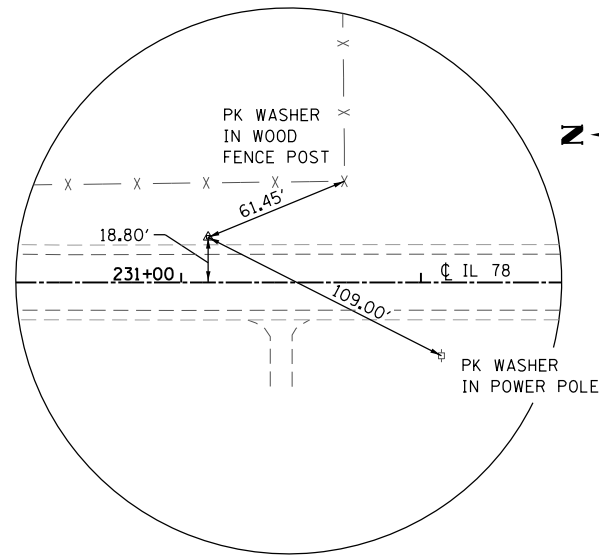
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PLOT DATE = 8/7/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

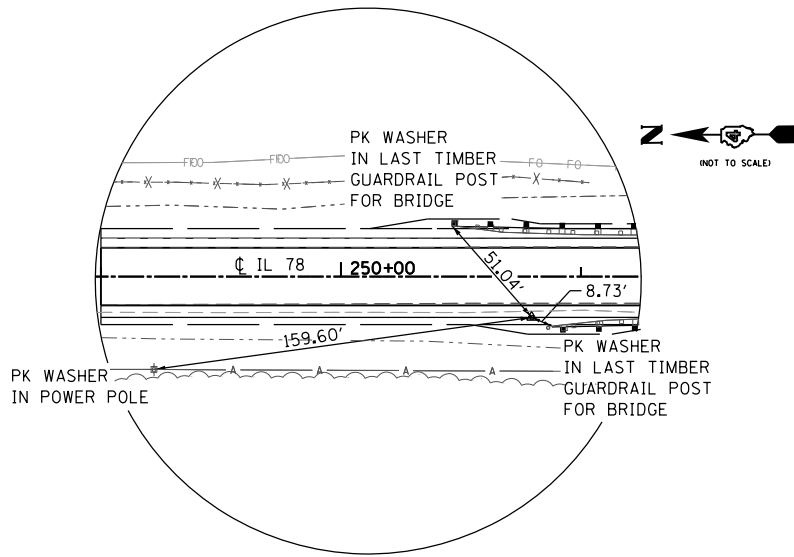
<b>SCHEDULES OF QUANTITIES</b>			
<b>IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: NTS	SHEET 2 OF 2 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	14
			CONTRACT NO. 68897	
		ILLINOIS	FED. AID PROJECT	

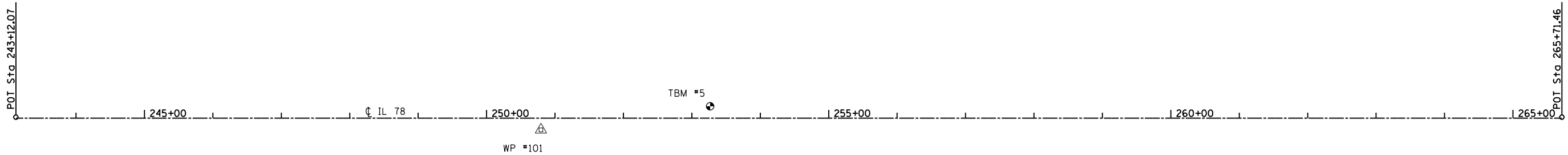




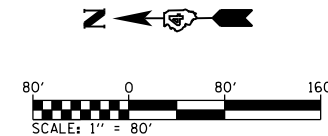
△ WP #102  
 30" - #5 REBAR WITH CAP FLUSH  
 STA. 231+11.32, 18.80' LT  
 N: 1,592,111.84  
 E: 2,362,880.45



△ WP #101  
 30" - #5 REBAR WITH CAP FLUSH  
 STA. 250+79.51, 16.99' RT  
 N: 1,590,143.80  
 E: 2,362,837.17



⊕ TBM-5 - CHISELED "□" ON TOP OF S.E. BRIDGE WING WALL, AT BRIDGE STRUCTURE #088-0012, U.S. 78 BRIDGE  
 STA. 253+26.64, 17.33' LT  
 ELEVATION 663.37



MODEL: Default  
 FILE NAME: I:\0229048\W0 15 5\088-0012 IL 78 over Walnut Creek Trib. Phase 2\CADD\Microstation\CADD Drawings\0468897-ah-align.dgn  
 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

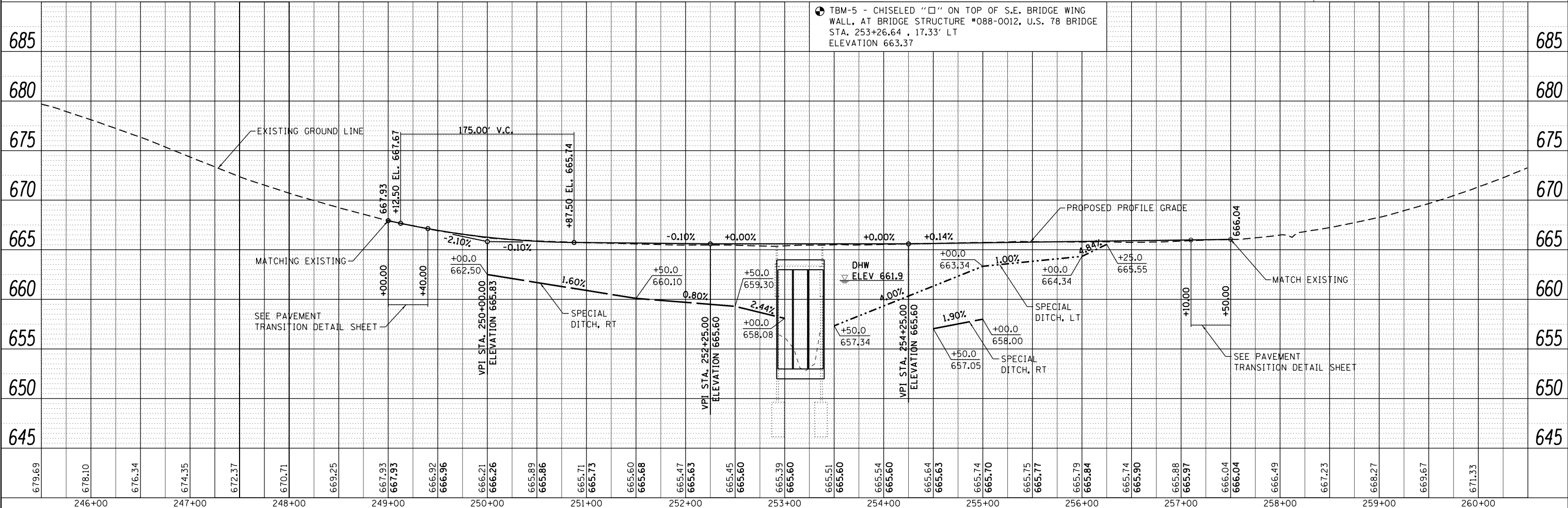
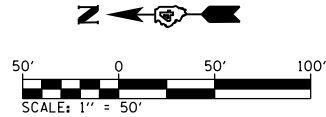
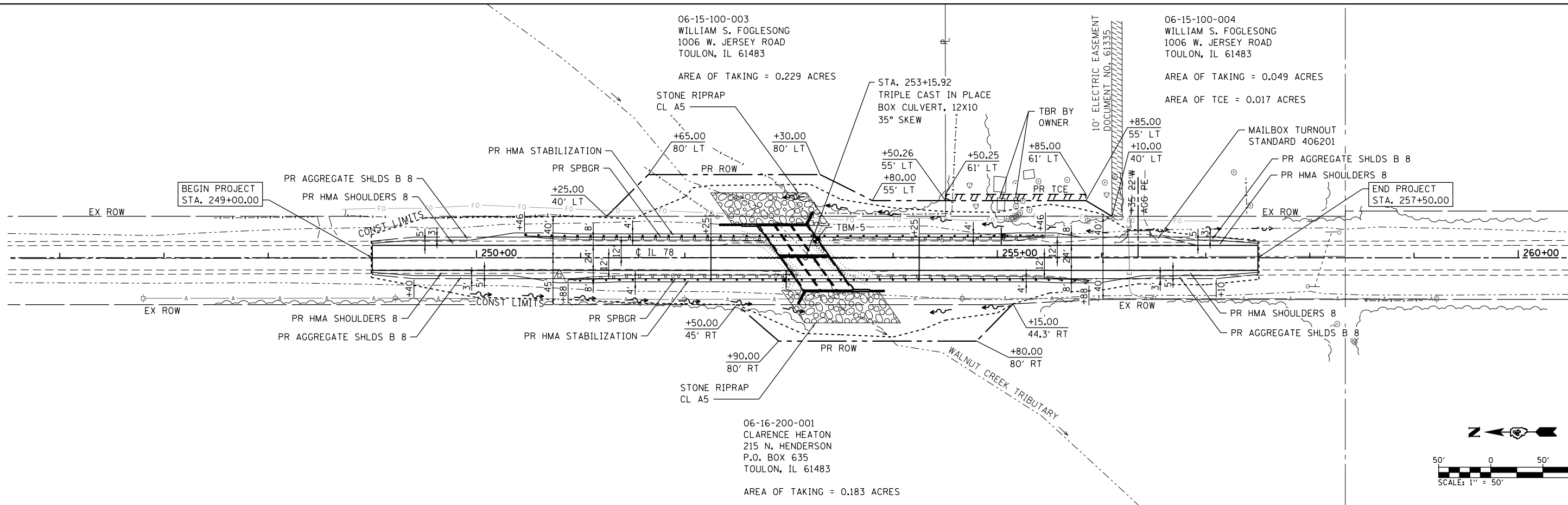
<b>ALIGNMENT, TIES, AND BENCHMARKS    IL 78 OVER WALNUT CREEK TRIBUTARY</b>	
SCALE: NTS	SHEET 1 OF 1 SHEETS
STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	15
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
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	STRUCTURE	
	NOTATION	
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⊙ TBM-5 - CHISELED "□" ON TOP OF S.E. BRIDGE WING WALL, AT BRIDGE STRUCTURE #088-0012, U.S. 78 BRIDGE STA. 253+26.64, 17.33' LT ELEVATION 663.37

**OATES ASSOCIATES**  
 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

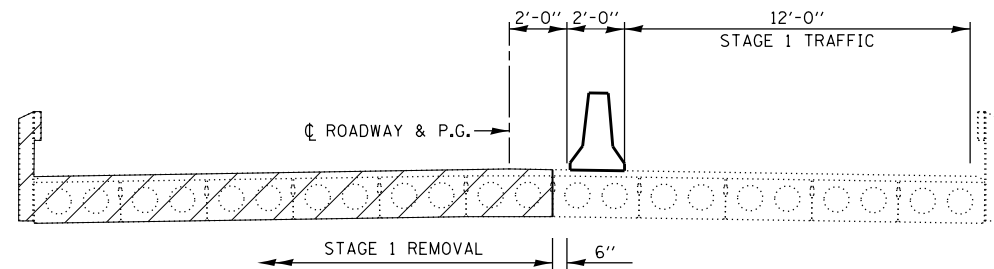
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PLOT DATE = 8/7/2020	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE SHEET  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

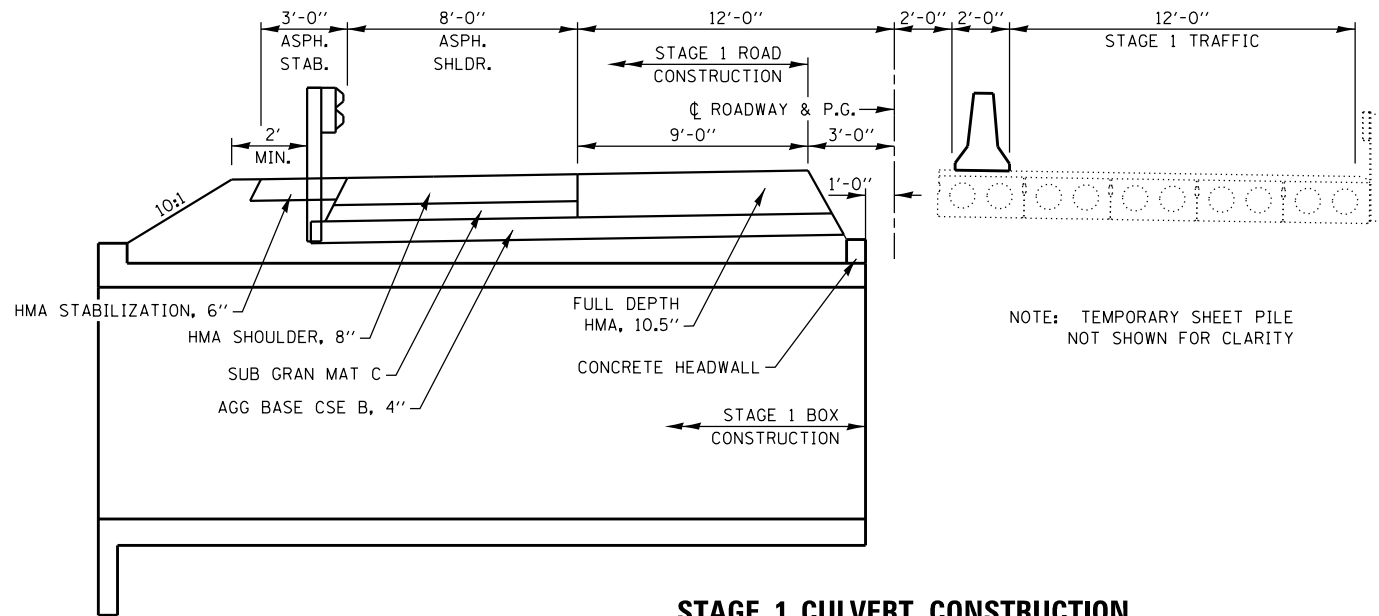
SCALE: 1" = 50' SHEET 1 OF 1 SHEETS STA. 249+00 TO STA. 257+50

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 16
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	



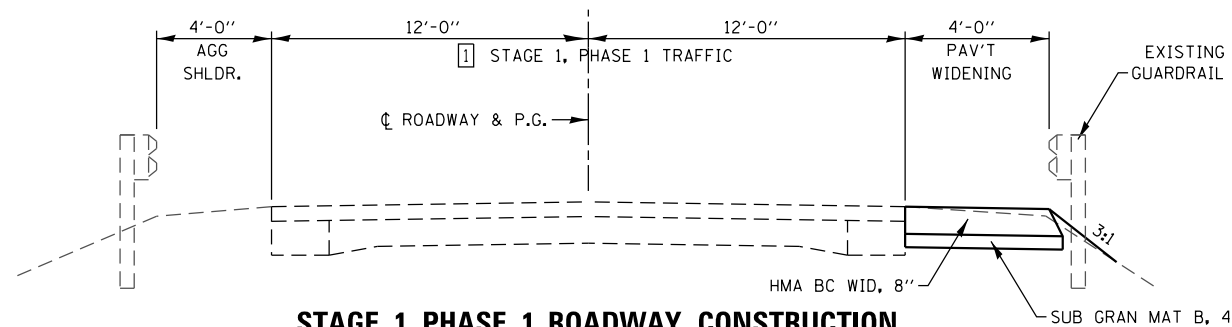
**STAGE 1 REMOVAL**

(LOOKING SOUTH)



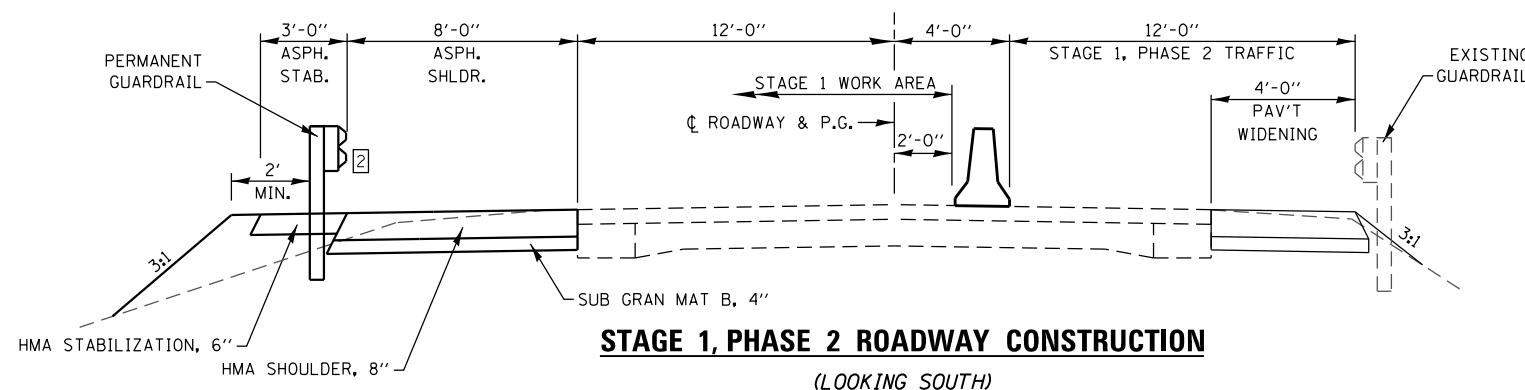
**STAGE 1 CULVERT CONSTRUCTION**

(LOOKING SOUTH)



**STAGE 1, PHASE 1 ROADWAY CONSTRUCTION**

(LOOKING SOUTH)



**STAGE 1, PHASE 2 ROADWAY CONSTRUCTION**

(LOOKING SOUTH)

**STAGE CONSTRUCTION GENERAL NOTES**

- ONE LANE OF TRAFFIC ON ILLINOIS ROUTE 78 SHALL BE MAINTAINED AT ALL TIMES.
- EMERGENCY ACCESS SHALL BE PROVIDED AT ALL TIMES.

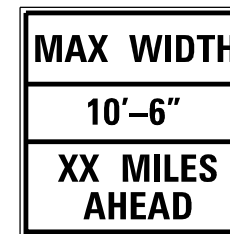
**SUGGESTED STAGE 1 CONSTRUCTION**

**PHASE 1**

- UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701326, REMOVE THE EXISTING SHOULDER AND CONSTRUCT THE HMA WIDENING, 8" ON THE RIGHT SIDE OF THE ROADWAY FROM STA. 250+12 TO STA. 256+15.
- INSTALL TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 TO CLOSE THE LEFT HALF OF THE ROADWAY. SEE "TRAFFIC CONTROL NOTES" FOR MORE DETAILS.
- INSTALL PAVEMENT MARKING TAPE TYPE IV FOR STAGE 1, PHASE 2 TRAFFIC.
- PLACE TEMPORARY CONCRETE BARRIER AND IMPACT ATTENUATORS AS SHOWN ON THE NEXT SHEET.

**PHASE 2**

- UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701321, DIRECT TRAFFIC TO THE RIGHT LANE OF IL ROUTE 78.
- CONSTRUCT TEMPORARY SHEET PILING AT THE NORTH AND SOUTH SIDES OF THE EXISTING STRUCTURE AND REMOVE THE LEFT SIDE OF THE EXISTING STRUCTURE.
- REMOVE THE EXISTING LEFT SIDE OF THE ROADWAY FROM STA. 252+25 TO STA. 254+25.
- CONSTRUCT THE LEFT SIDE OF THE CULVERT.
- CONSTRUCT THE FULL DEPTH HMA ON THE LEFT SIDE OF THE ROADWAY FROM STA. 252+25 TO STA. 254+25.
- CONSTRUCT THE LEFT SIDE OF THE HMA SHOULDER, 8" FROM STA. 250+12 TO STA. 256+15.
- INSTALL GUARDRAIL AND HMA STABILIZATION ON THE LEFT SIDE OF IL ROUTE 78 AND COMPLETE DRAINAGE AND GRADING IMPROVEMENTS.
- INSTALL PAVEMENT MARKING TAPE TYPE IV FOR STAGE 2 TRAFFIC.



W12-I103

PRIOR TO JUNCTION OF IL 78 AND IL 90 (2 ASSEMBLIES) AND JUNCTION OF IL 78 AND IL 17 (2 ASSEMBLIES).

SEE SPECIAL PROVISION "WIDTH RESTRICTION SIGNING" FOR FURTHER DETAILS.

**WIDTH RESTRICTION SIGNING DETAILS**

**TRAFFIC CONTROL NOTES**

- THREE PHASE SIGNAL OPERATION IS REQUIRED WHEN HWY STD 701321 IS IN EFFECT. THE ENGINEER OF TRAFFIC SHALL APPROVE ALL TIMING PARAMETERS. THE CONTRACTOR SHALL CONTACT ERIC HOWALD, DISTRICT 4 TRAFFIC SIGNAL TECHNICIAN, AT (309) 671-4481, TWO WEEKS PRIOR TO SIGNAL TURN ON.
- THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL CONFORM TO ALL MUTCD REQUIREMENTS.
- THE CONTRACTOR SHALL INSTALL MICROWAVE DETECTION FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HWY STD 701321. THE CONTRACTOR MAY ELECT TO UTILIZE DETECTOR LOOPS.
- REMOVAL OF DETECTOR LOOPS AND RUMBLE STRIPS AFTER STAGED CONSTRUCTION SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. ANY DAMAGE TO THE EXISTING PAVEMENT FROM THE RUMBLE STRIPS NEEDS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THERE WILL BE NO ADDITIONAL COMPENSATION.
- ALL TEMPORARY STRIPING, REFLECTORS, ETC. SHALL BE PLACED PRIOR TO PLACING TEMPORARY CONCRETE BARRIERS.

**ADDITIONAL NOTES**

- TWO-WAY TRAFFIC SHALL BE PERMITTED DURING NON-CONSTRUCTION HOURS, SEE HWY STANDARD 701326 FOR LANE CLOSURE PROCEDURES DURING WIDENING OPERATIONS.
- THE PERMANENT GUARDRAIL SHALL BE BUILT TALL ENOUGH TO MEET THE HEIGHT REQUIREMENTS LISTED ON HWY STANDARD 630001 AFTER SURFACE COURSE HAS BEEN PLACED.

MODEL: Stage 1 Typical SECTION: 12/23/2016 I:\15 5N088-0012 IL 78 over Walnut Creek Trib., Phase 2\CADD\Microstation\CADD Drawings\0468897-sh-rt-tpg10.dgn



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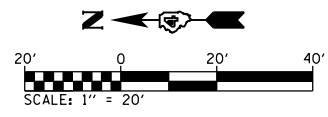
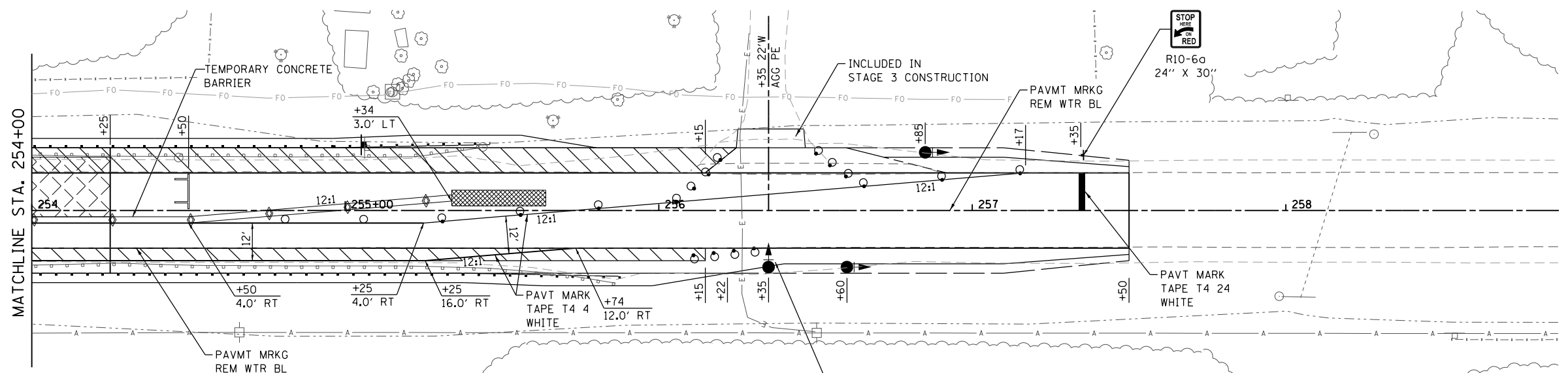
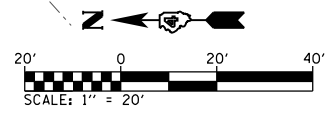
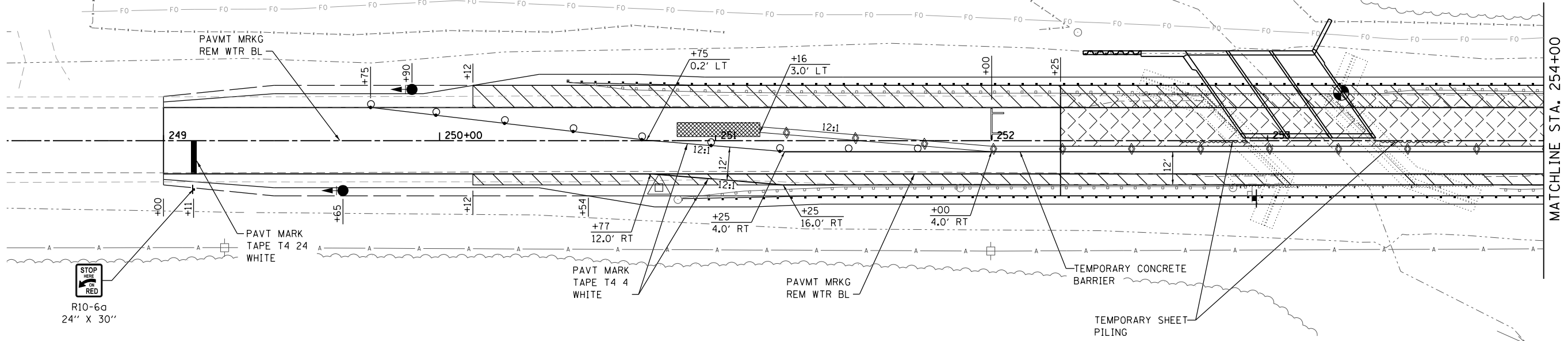
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DRAWN -	REVISED -
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DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STAGE 1 TYPICAL SECTIONS & STAGING NOTES  
 IL 78 OVER WALNUT CREEK TRIBUTARY

SCALE: 1" = 20' SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	17
				CONTRACT NO. 68897
		ILLINOIS	FED. AID PROJECT	



**LEGEND**

- → TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- STOP LINE 24"
- ▨ IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- DRUM
- ◆ TYPE C BI-DIRECTIONAL REFLECTOR
- ⌋ TYPE III BARRICADE WITH FLASHING LIGHTS
- ▨ WORK AREA
- ⌋ SIGN
- ▨ HMA BASE COURSE WIDENING

MODEL: Stage 1  
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 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

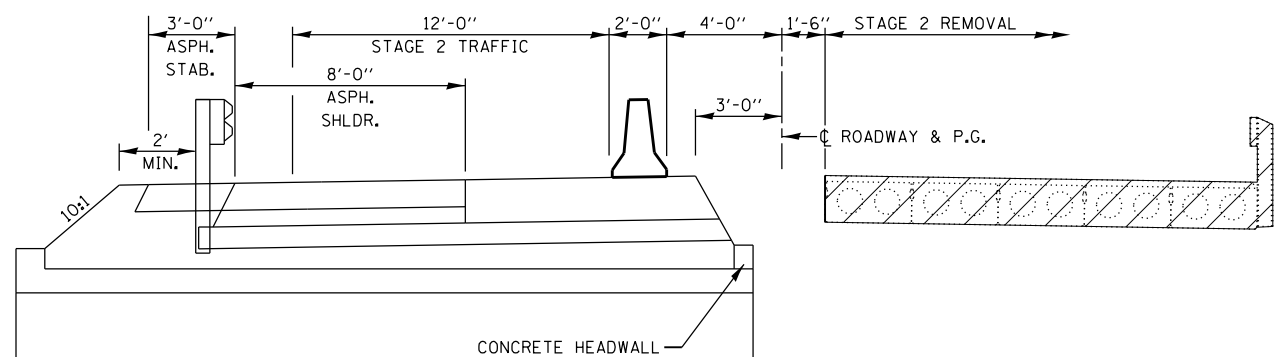


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PLOT DATE = 8/10/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE 1, PHASE 2 CONSTRUCTION & TRAFFIC CONTROL**  
**IL 78 OVER WALNUT CREEK TRIBUTARY**  
 SCALE: 1" = 20'    SHEET 2 OF 4 SHEETS    STA. 249+00 TO STA. 257+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	18
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				



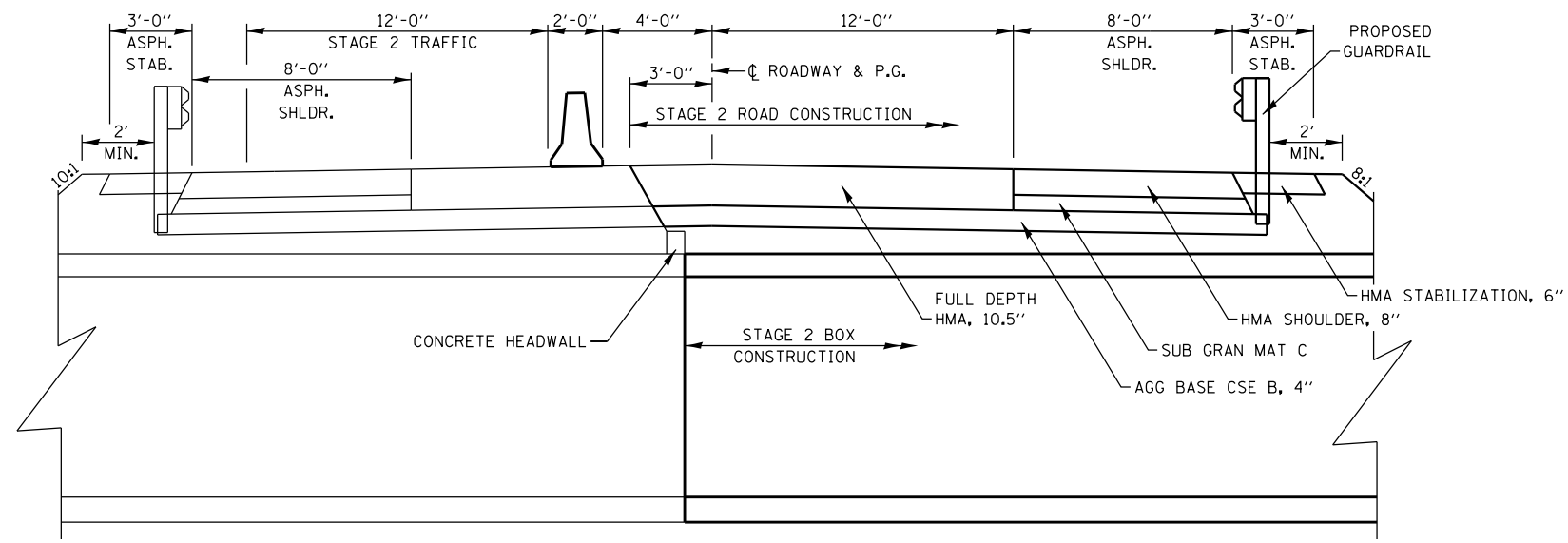
**STAGE 2 REMOVAL**  
(LOOKING SOUTH)

**SUGGESTED STAGE 2 CONSTRUCTION**

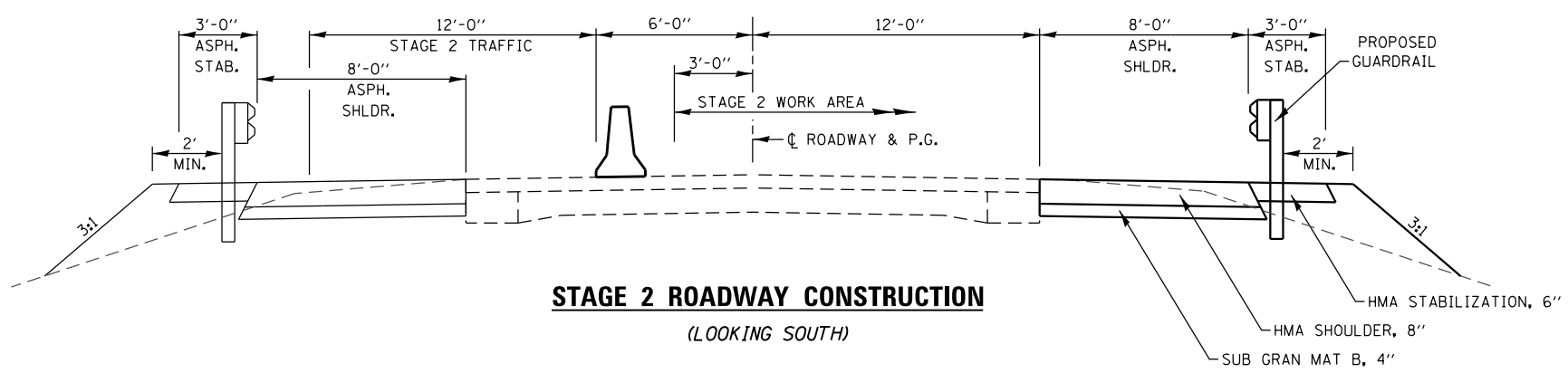
1. UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701321, DIRECT TRAFFIC TO THE LEFT LANE OF IL ROUTE 78.
2. REMOVE THE RIGHT SIDE OF THE EXISTING STRUCTURE.
3. REMOVE THE EXISTING RIGHT SIDE OF THE ROADWAY FROM STA. 252+25 TO STA. 254+25.
4. REMOVE THE PAVEMENT WIDENING, 8" FROM THE RIGHT SIDE OF THE ROADWAY FROM STA. 250+12 TO STA. 256+15.
5. CONSTRUCT THE RIGHT SIDE OF THE CULVERT.
6. CONSTRUCT THE FULL DEPTH HMA ON THE RIGHT SIDE OF THE ROADWAY FROM STA. 252+25 TO STA. 254+25.
7. CONSTRUCT THE RIGHT SIDE OF THE HMA SHOULDER, 8" FROM STA. 250+54 TO STA. 256+22.
8. INSTALL GUARDRAIL AND HMA STABILIZATION ON THE RIGHT SIDE OF IL ROUTE 78 AND COMPLETE DRAINAGE AND GRADING IMPROVEMENTS.

**SUGGESTED STAGE 3 CONSTRUCTION**

1. PERFORM HMA SURFACE REMOVAL AND BUTT JOINT ON BOTH SIDES OF IL ROUTE 78 (INCLUDING NEW HMA SHOULDERS) FROM STA. 249+00 TO STA. 257+50.
2. INSTALL HMA SHOULDERS (6") AND AGGREGATE SHOULDERS ON THE LEFT SIDE FROM STA. 249+00 TO STA. 250+12 AND FROM STA. 256+15 TO STA. 257+50 AND ON THE RIGHT SIDE FROM STA. 249+00 TO STA. 250+54 AND FROM STA. 256+22 TO STA. 257+50.
3. CONSTRUCT PROPOSED HMA SURFACE COURSE, 2" AND HMA SHOULDER (2") FOR BOTH SIDES OF IL ROUTE 78 FROM STA. 249+00 TO STA. 257+50.
4. CONSTRUCT ALL REMAINING IMPROVEMENTS.



**STAGE 2 CULVERT CONSTRUCTION**  
(LOOKING SOUTH)



**STAGE 2 ROADWAY CONSTRUCTION**  
(LOOKING SOUTH)

MODEL: Stage 2 Typical  
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 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



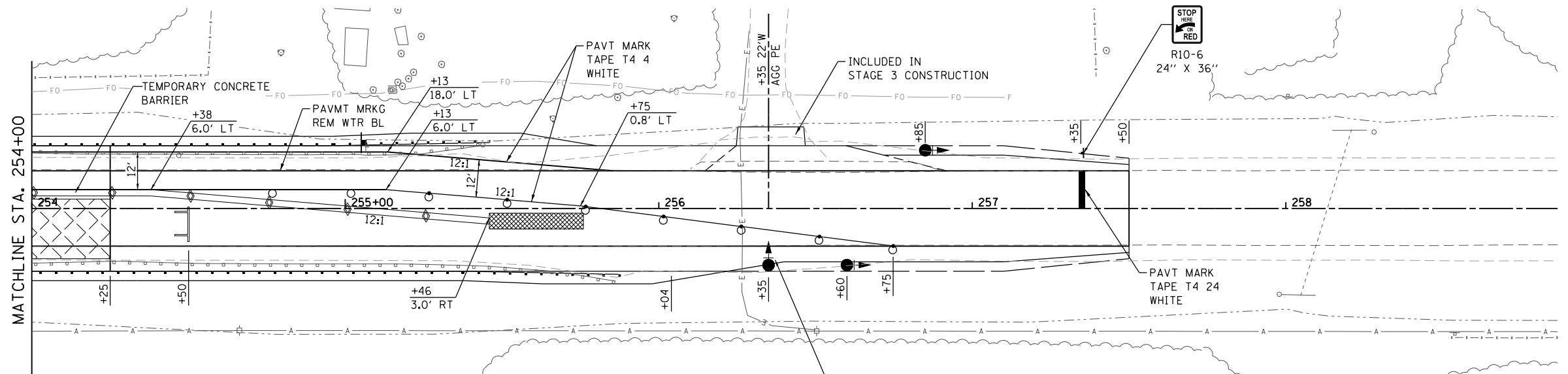
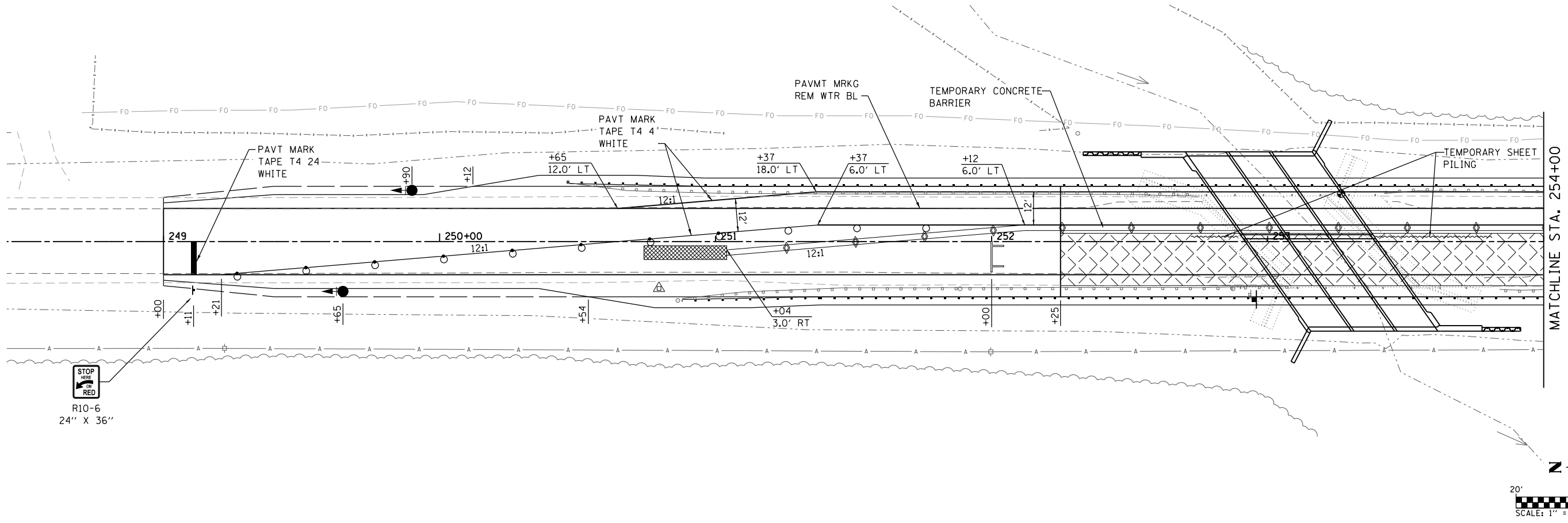
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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

STAGE 2 TYPICAL SECTIONS & STAGING NOTES IL 78 OVER WALNUT CREEK TRIBUTARY			
SCALE: 1" = 20'	SHEET 3	OF 4 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	19
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				





**LEGEND**

- TRAFFIC SIGNALS
- DRUM WITH STEADY BURNING LIGHT
- STOP LINE 24"
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3
- DRUM
- TYPE C BI-DIRECTIONAL REFLECTOR
- TYPE III BARRICADE WITH FLASHING LIGHTS
- WORK AREA
- SIGN
- HMA BASE COURSE WIDENING

MODEL: Stage 2  
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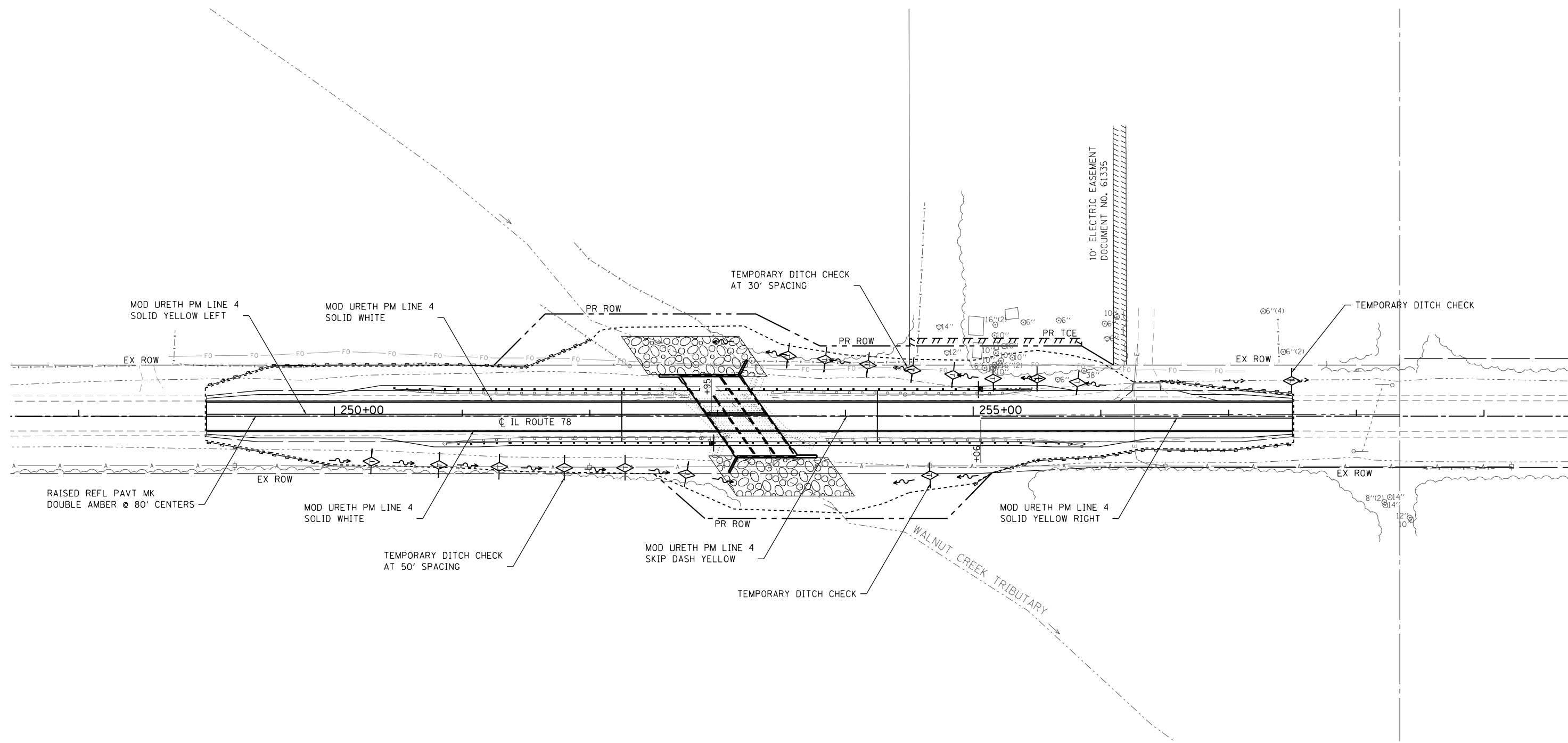
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STAGE 2 CONSTRUCTION & TRAFFIC CONTROL  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: 1" = 20'    SHEET 4 OF 4 SHEETS    STA. 249+00 TO STA. 257+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	20
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

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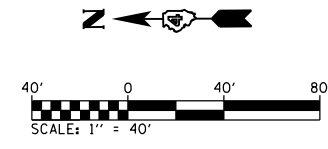


**EROSION CONTROL LEGEND**

- LIMITS OF CONSTRUCTION
- ◆ TEMPORARY DITCH CHECK
- ⊞ STONE DUMPED RIPRAP
- PERIMETER EROSION BARRIER  
SILT FILTER FENCE OR OTHER  
AS APPROVED BY THE ENGINEER

**EROSION CONTROL NOTES**

TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT TWO SEPARATE OCCASIONS AT A RATE OF 100 POUNDS/ACRE PER APPLICATION. THE CONTRACTOR SHALL APPLY AS DIRECTED BY THE ENGINEER IN THE FIELD.



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PLOT DATE = 8/7/2020	CHECKED -	REVISED -
	DATE -	REVISED -

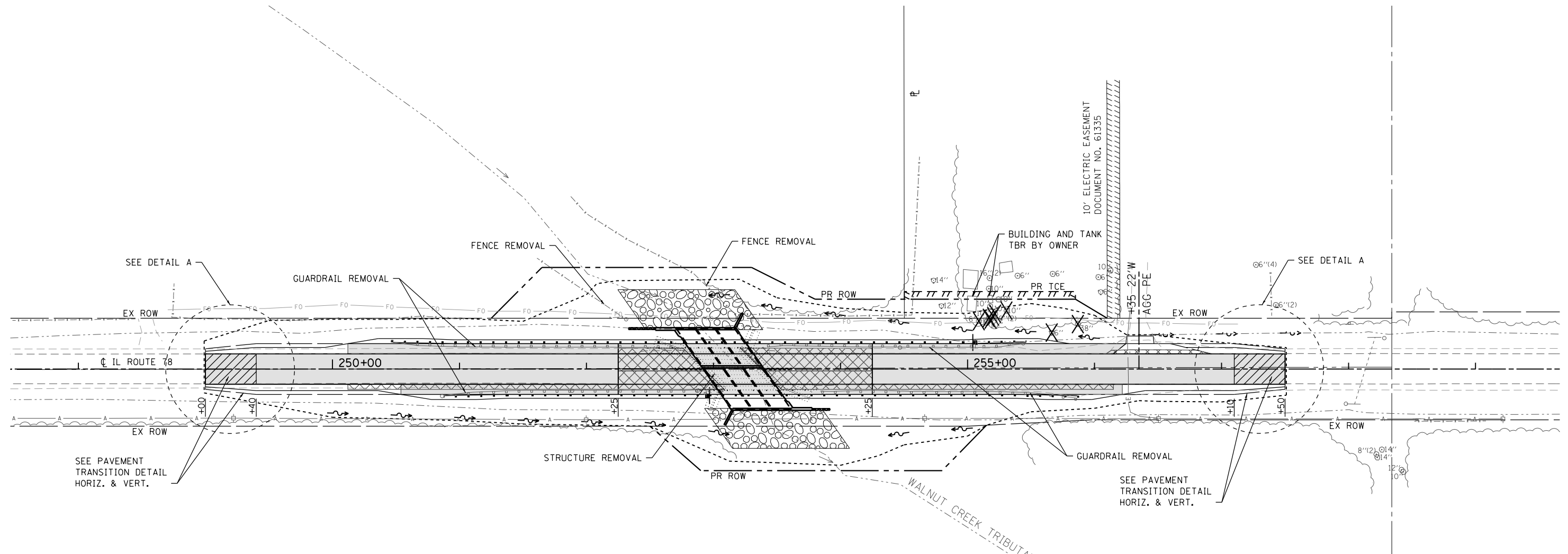
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL AND PAVEMENT MARKING SHEET  
IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: 1" = 40'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 21
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

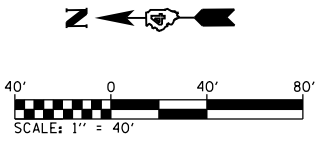
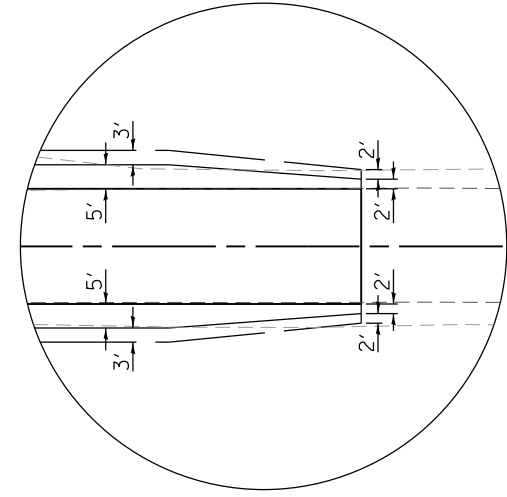
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 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



**REMOVAL LEGEND**

- HMA SURF REM
- PAVEMENT REM
- HMA SURF REM BUTT JT
- X TREE REM

NOTE: EXISTING STRUCTURE REMOVAL PAID FOR AS REMOVAL OF EXISTING STRUCTURES.



USER NAME = stephanie.jee	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 80.0000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/7/2020	DATE -	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>REMOVAL PLAN SHEET</b>			
<b>IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: 1" = 40'	SHEET 1 OF 1 SHEETS	STA. TO STA.	

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 22
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

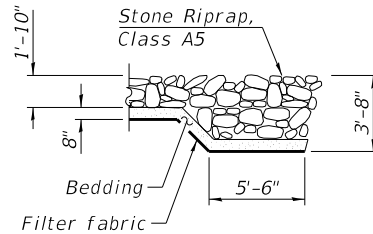
Benchmark: TBM-5 Chiseled square on top of southeast wingwall, Sta. 253+26.64, 17.33' LT., Elev. 663.37.

Existing Structure: S.N. 088-0012 was originally built in 1927 as S.B.I. Route 78, Section 128B. The superstructure was replaced in 1984 as F.A. Route 22, Section (128B)BR. The structure consists of a single span precast prestressed concrete deck beam superstructure supported by concrete closed abutments founded on timber pile supported spread footings. The back to back abutment length is 46'-8" and the out to out width is 33'-0". Structure to be removed and replaced with a culvert.

Traffic Control: One lane of traffic will be maintained utilizing stage construction.

Salvage: None

D.H.W. Elev. 661.9  
E.W.S. Elev. 657.1



SECTION A-A

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. The Rockfill shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Porous Granular Embankment.

WATERWAY INFORMATION

Drainage Area = 9.72 sq. mi.		Existing Overtopping Elev. = 665.4 @ Sta. 253+00		Proposed Overtopping Elev. = 665.4 @ Sta. 253+00					
Flood	Freq. Yr.	Q C.F.S.	Opening Ft <sup>2</sup>		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	2,440	214.7	234.8	661.9	3.5	2.0	665.4	663.9
Base	100	2,860	223.6	245.6	662.2	3.4	2.7	665.6	664.9
Scour Design Check	200	3,254	232.3	256.4	662.5	3.4	3.1	665.9	665.6
Overtopping Existing	75	2,650	220.6		662.1	3.5		665.6	
Overtopping Proposed	160	3,096		252.8	662.4		2.9		665.3
Max. Calc.	500	3,850	244.3	270.8	662.9	3.3	2.9	666.2	665.8

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Culvert Top and Bottom Slab
6. Culvert Sections
7. Wingwall Details
8. Culvert Details
9. Sheet Pile Wing Extensions
10. Bar Splicer Assembly and Mechanical Splicer Details
11. Soil Boring Logs
12. Soil Boring Logs

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

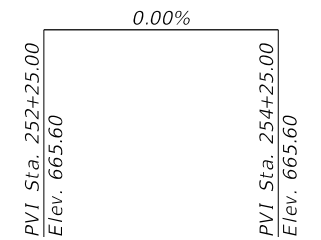
DESIGN STRESSES

FIELD UNITS

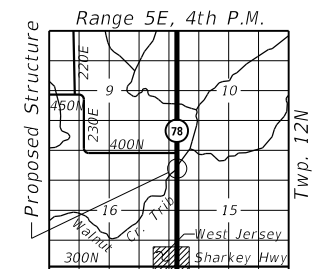
f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>y</sub> = 50,000 psi (Sheet Piling)

LOADING HL-93

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



PROFILE GRADE (Along  $\bar{C}$  Roadway)

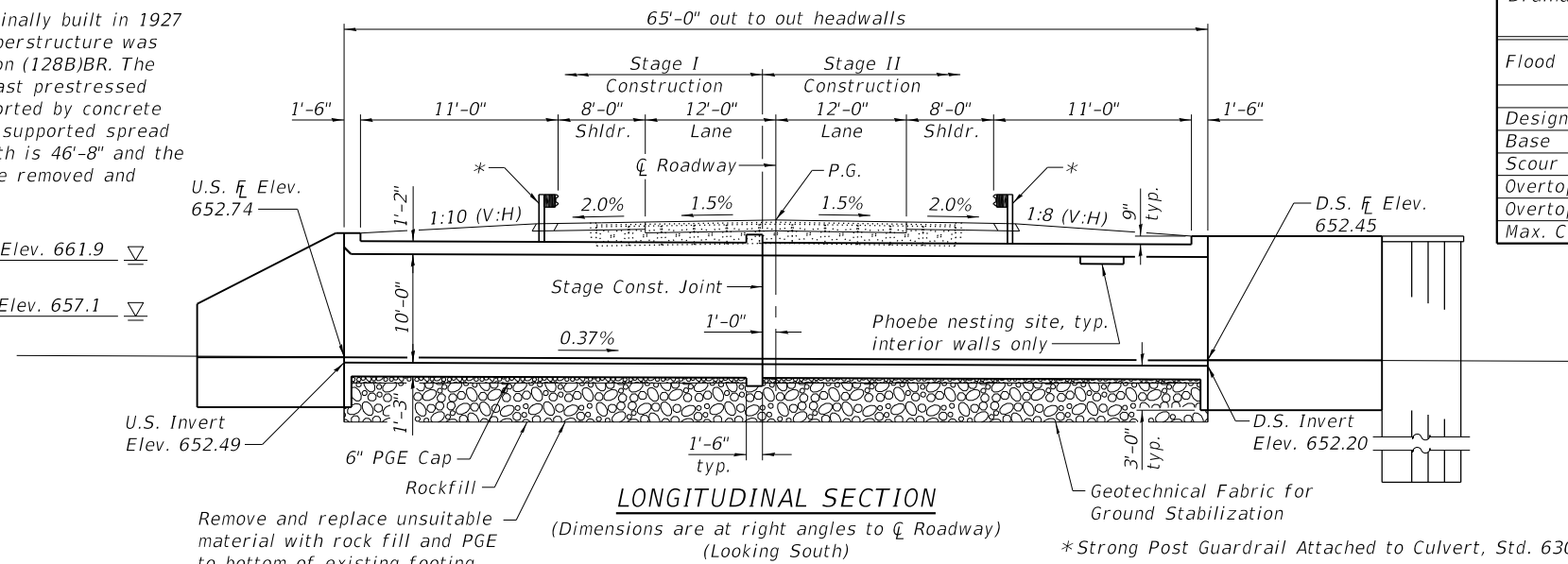


LOCATION SKETCH

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 78  
OVER WALNUT CREEK TRIBUTARY  
F.A.P. RTE. 22 - SEC. (128B)BR-2

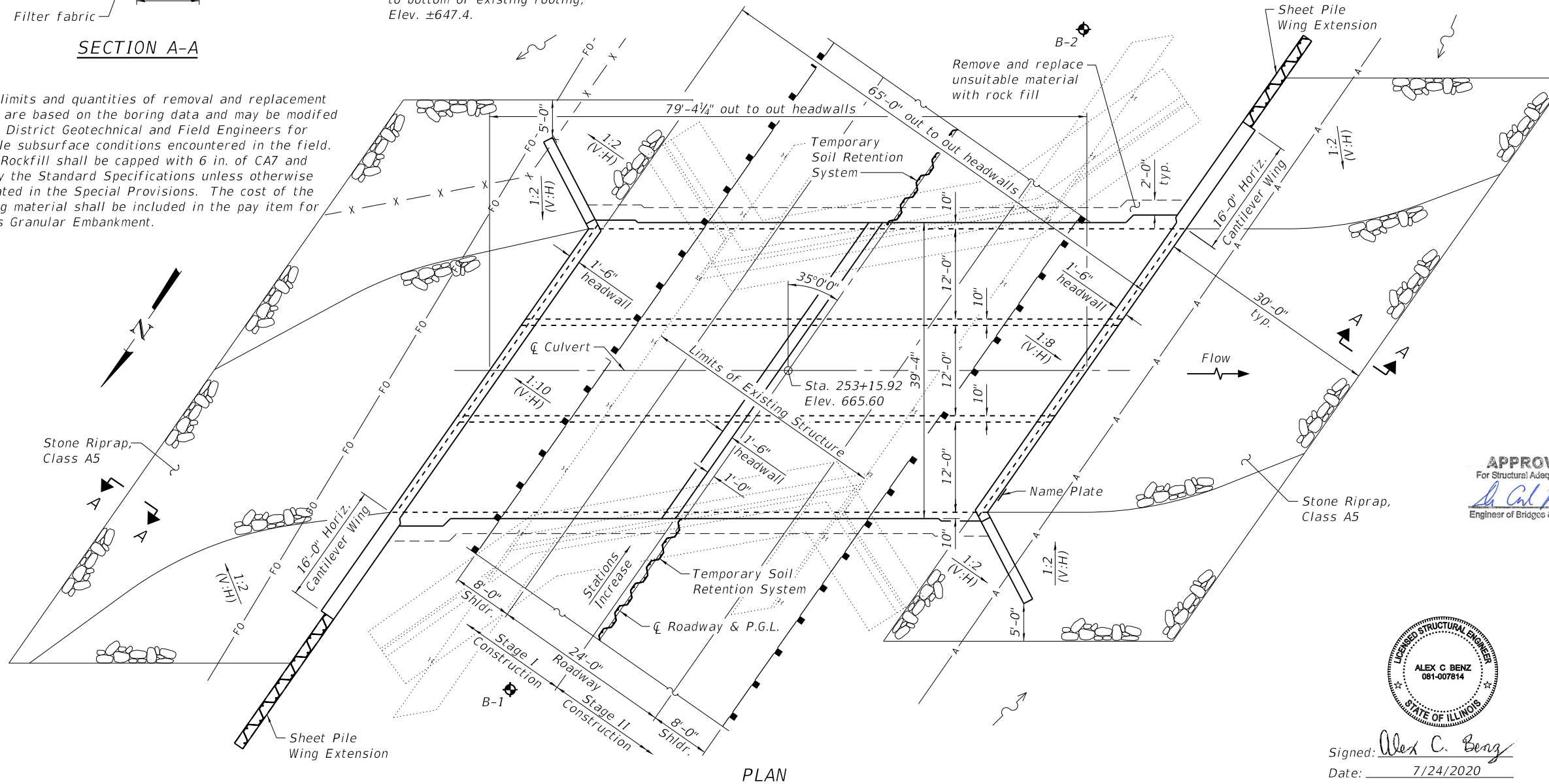
STARK COUNTY  
STATION 253+15.92  
STRUCTURE NO. 088-2503



LONGITUDINAL SECTION

(Dimensions are at right angles to  $\bar{C}$  Roadway) (Looking South)

\* Strong Post Guardrail Attached to Culvert, Std. 630101



PLAN

APPROVED  
For Structural Adequacy Only  
*Alex C. Benz*  
Engineer of Bridges & Structures



Signed: *Alex C. Benz*  
Date: 7/24/2020  
License Expires: 11/30/2020

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

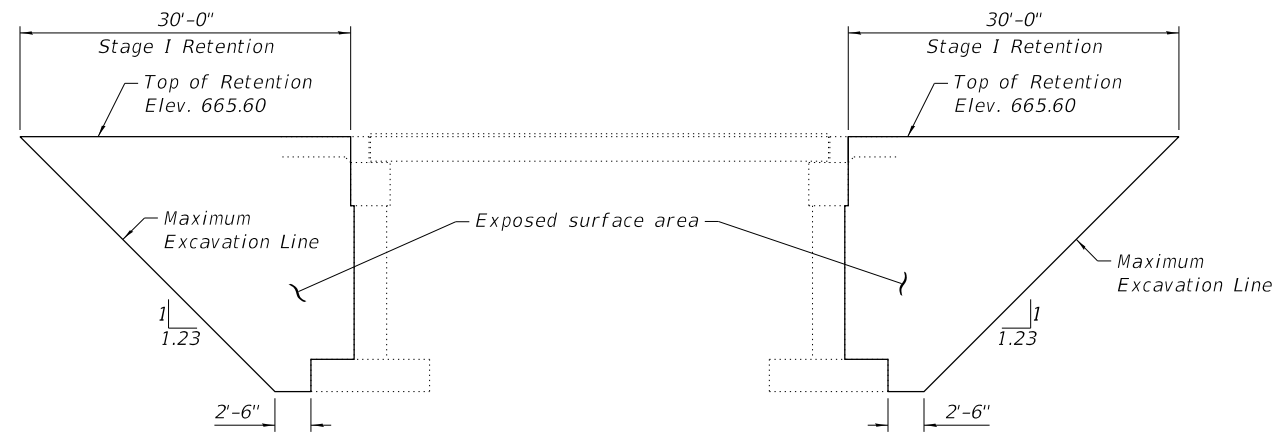
GENERAL PLAN & ELEVATION  
STRUCTURE NO. 088-2503

SHEET 1 OF 12 SHEETS

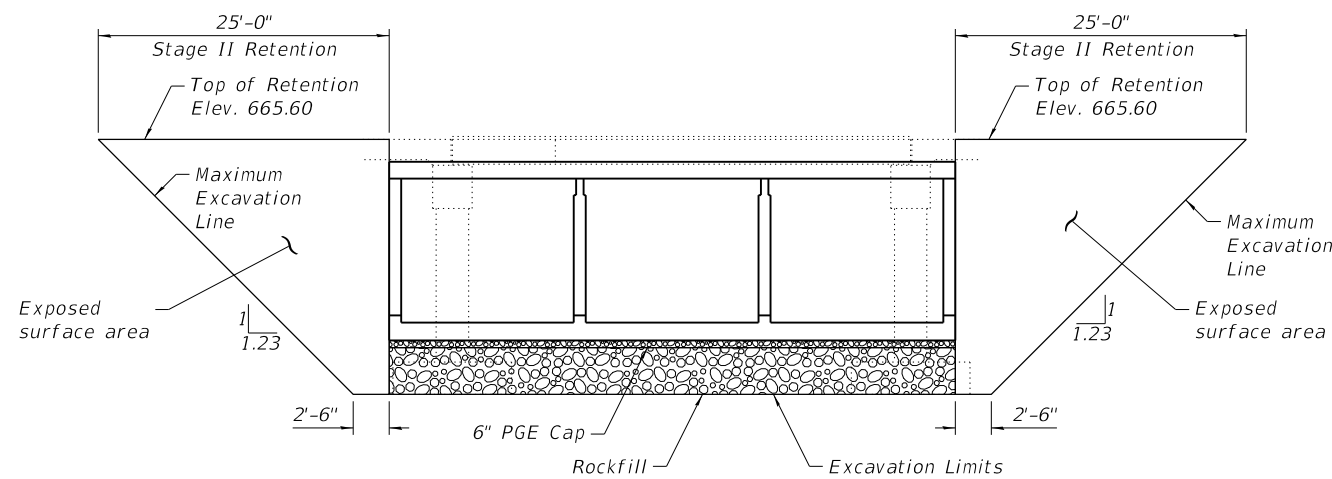
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	23
CONTRACT NO. 68897				

ILLINOIS FED. AID PROJECT

USER NAME = ABenz	DESIGNED - ACB	REVISED -
PLOT SCALE = 0.1667"/in.	CHECKED - CDL	REVISED -
PLOT DATE = 7/24/2020	DRAWN - ACB	REVISED -
	CHECKED - CDL	REVISED -



**STAGE I SOIL RETENTION SYSTEM**  
(All dimensions along  $\bar{C}$  Roadway)



**STAGE II SOIL RETENTION SYSTEM**  
(All dimensions along  $\bar{C}$  Roadway)

Notes:  
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.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	257
Geotechnical Fabric for Ground Stabilization	Sq. Yd.	386
Stone Riprap, Class A5	Sq. Yd.	650
Filter Fabric	Sq. Yd.	650
Removal of Existing Structures	Each	1
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	850
Reinforcement Bars, Epoxy Coated	Pound	87,230
Bar Splicers	Each	246
Name Plates	Each	1
Permanent Sheet Piling	Sq. Ft.	735
Temporary Soil Retention System	Sq. Ft.	683
Concrete Box Culverts	Cu. Yd.	448.2
Geocomposite Wall Drain	Sq. Yd.	339
Membrane Waterproofing System for Buried Structures	Sq. Yd.	339
Rock Fill	Ton	623

**GENERAL NOTES**

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
Reinforcement bars designated (E) shall be epoxy coated.  
Precast alternate is not allowed.

STATION 253+15.92  
BUILT BY  
STATE OF ILLINOIS  
F.A.P. RTE 22 - SEC. (128B)BR-2  
LOADING HL-93  
STRUCTURE NO. 088-2503

**NAME PLATE**  
See Std. 515001

MODEL: Default  
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**EFK Moen**  
Civil Engineering Design

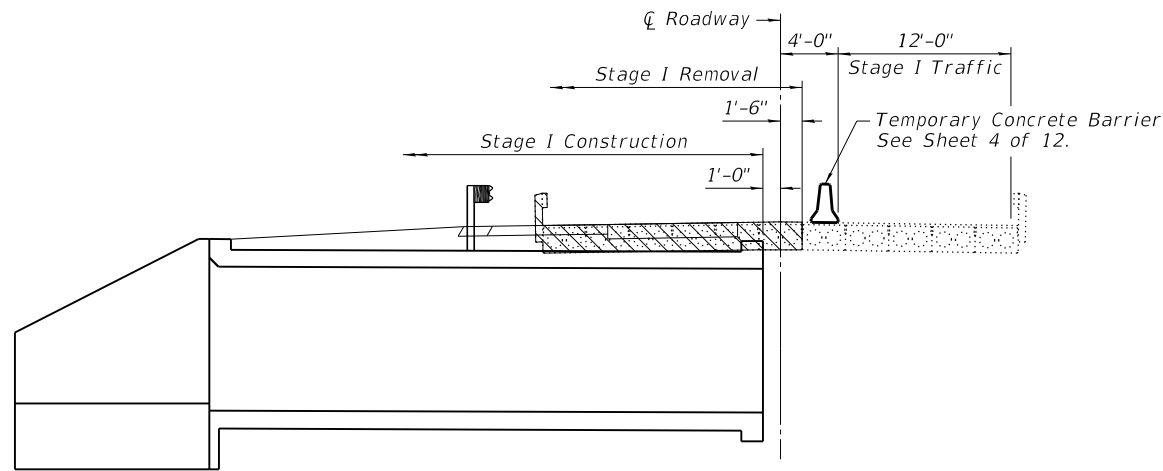
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PLOT DATE = 7/24/2020	CHECKED - CDL	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

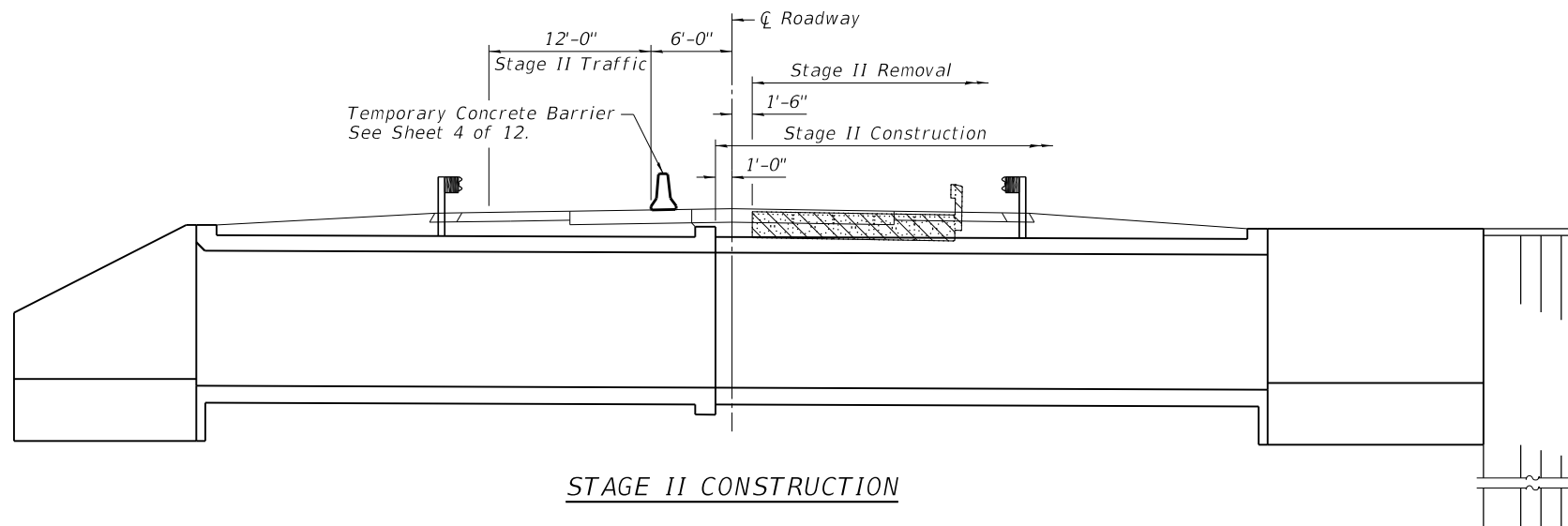
**GENERAL DATA**  
**STRUCTURE NO. 088-2503**

SHEET 2 OF 12 SHEETS

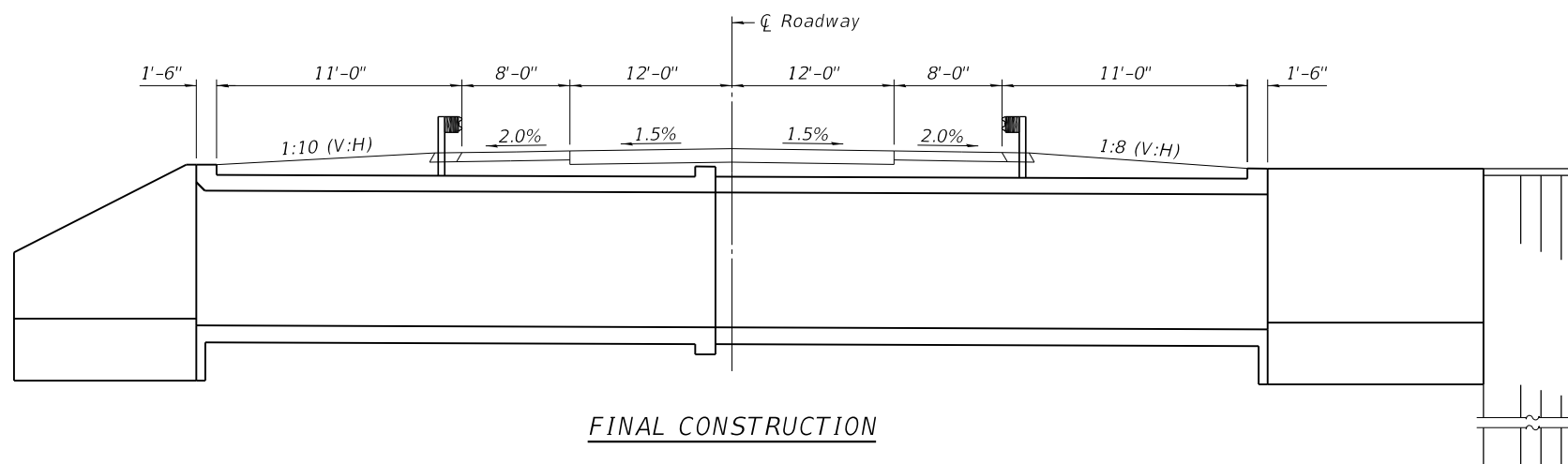
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	24
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION



FINAL CONSTRUCTION

Notes:  
 Hatched areas indicate removal of existing structures.  
 For quantity of temporary concrete barrier, see Roadway Plans.  
 All cross sections are looking South.  
 Dimensions for Stage Construction details are at right angles to the CL Roadway.

MODEL: Default  
 FILE NAME: 0882503-68897-003-Stage\_Construction\_Details.dgn

**EFK•Moen**  
 Civil Engineering Design

USER NAME = ABenz  
 PLOT SCALE = 0.1667"/in.  
 PLOT DATE = 7/24/2020

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 CHECKED - CDL  
 DRAWN - ACB  
 CHECKED - CDL

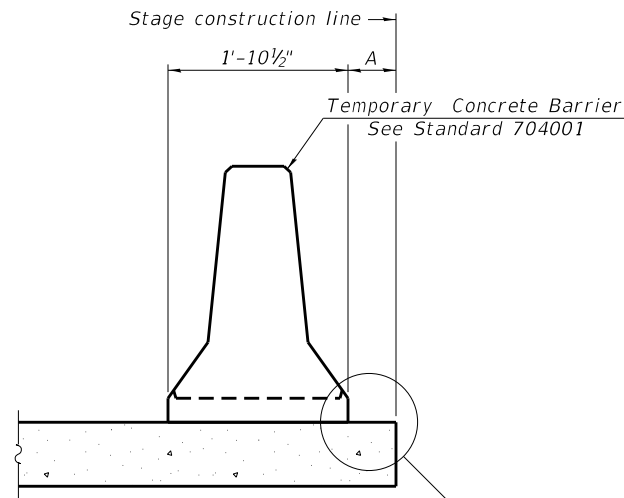
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS  
 STRUCTURE NO. 088-2503

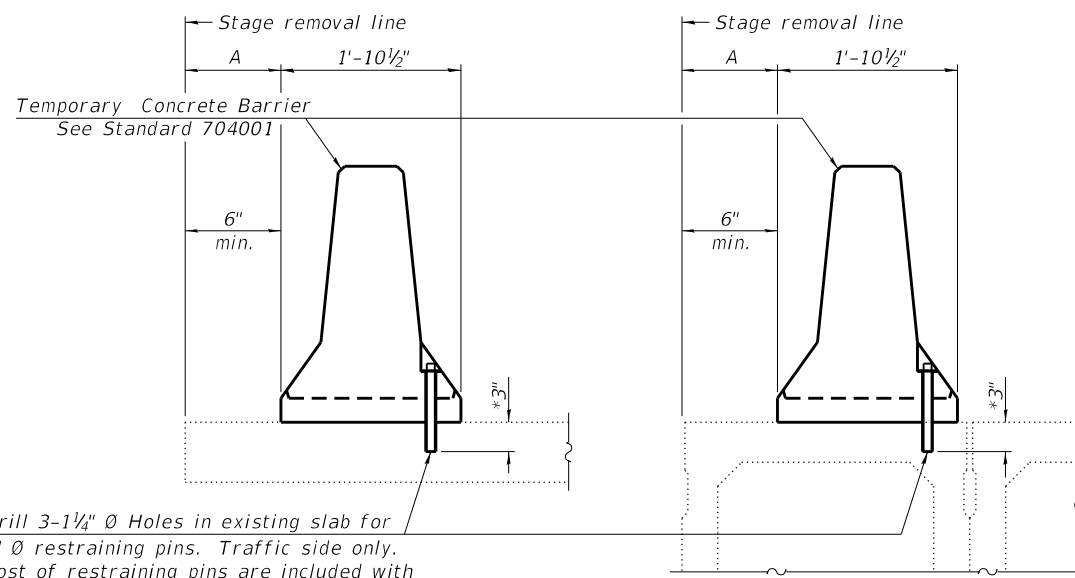
SHEET 3 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	25
CONTRACT NO. 68897				
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



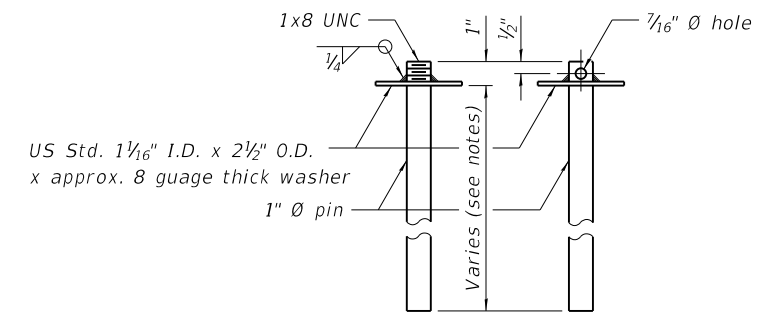
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

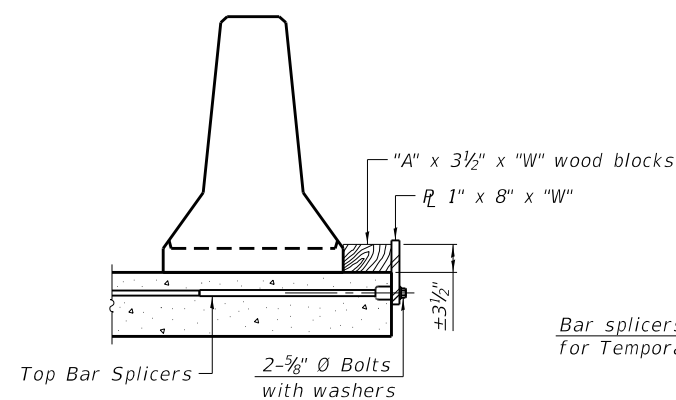
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

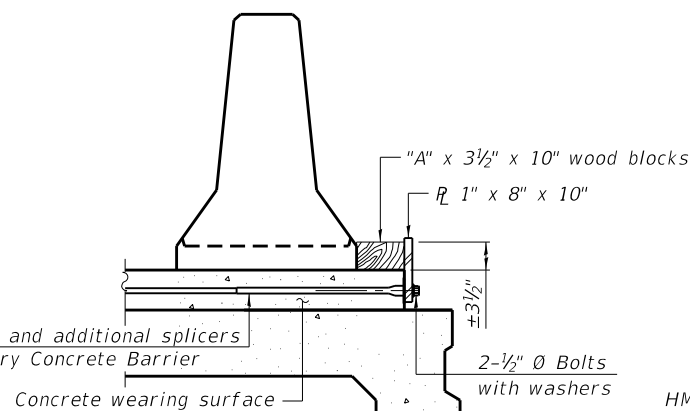
SECTIONS THRU SLAB OR DECK BEAM



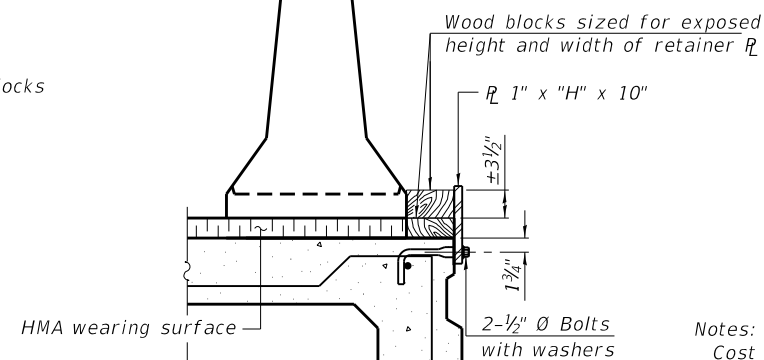
RESTRAINING PIN



DETAIL I

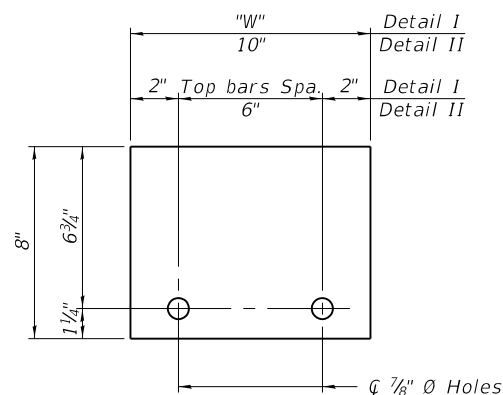


DETAIL II

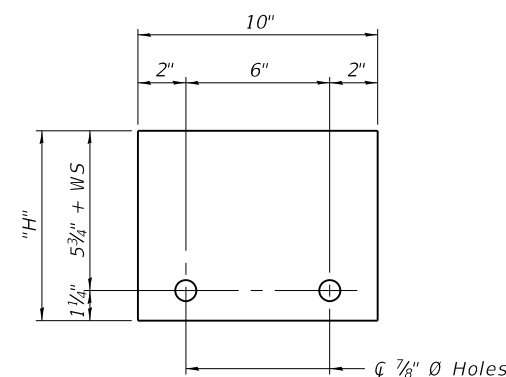


DETAIL III

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.

MODEL: Default  
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R-27 2-17-2017

**EFK•Moen**  
 Civil Engineering Design

USER NAME =	A-Benz
PLOT SCALE =	0.1667 / 1 in.
PLOT DATE =	7/24/2020

DESIGNED -	ACB
CHECKED -	CDL
DRAWN -	ACB
CHECKED -	CDL

REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

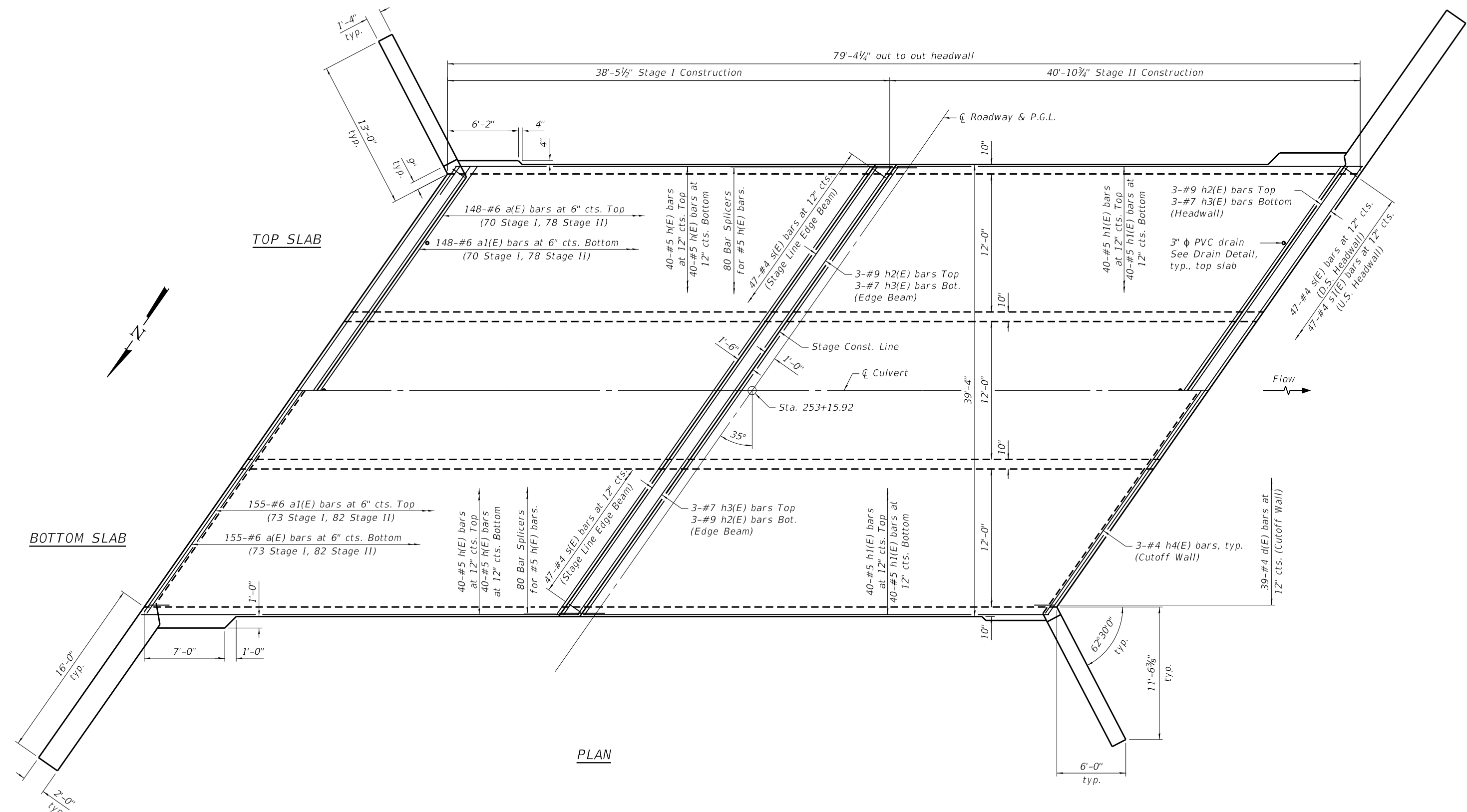
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
 STRUCTURE NO. 088-2503

SHEET 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	26
CONTRACT NO. 68897				

ILLINOIS FED. AID PROJECT

MODEL: Default  
 FILE NAME: 0882503-68897-005-Culvert Top and Bottom Slab.dgn



PLAN



USER NAME = ABenz	DESIGNED - ACB	REVISED -
PLOT SCALE = 0.1667"/in.	CHECKED - CDL	REVISED -
PLOT DATE = 7/24/2020	DRAWN - ACB	REVISED -
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

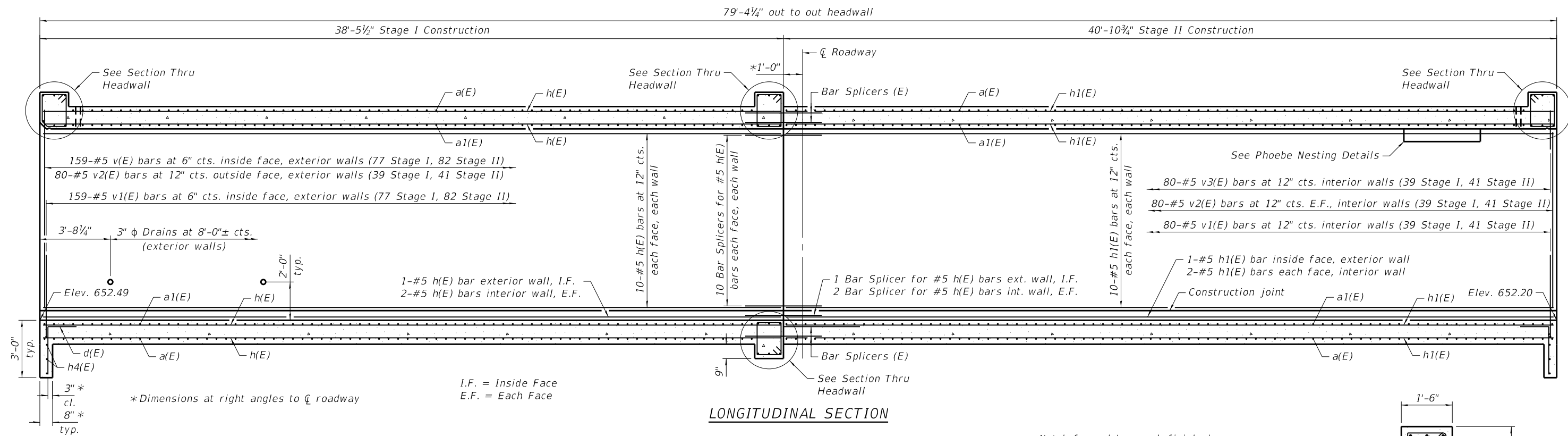
CULVERT TOP AND BOTTOM SLAB  
 STRUCTURE NO. 088-2503

SHEET 5 OF 12 SHEETS

F.A.P. RTE. 22	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 27
CONTRACT NO. 68897				

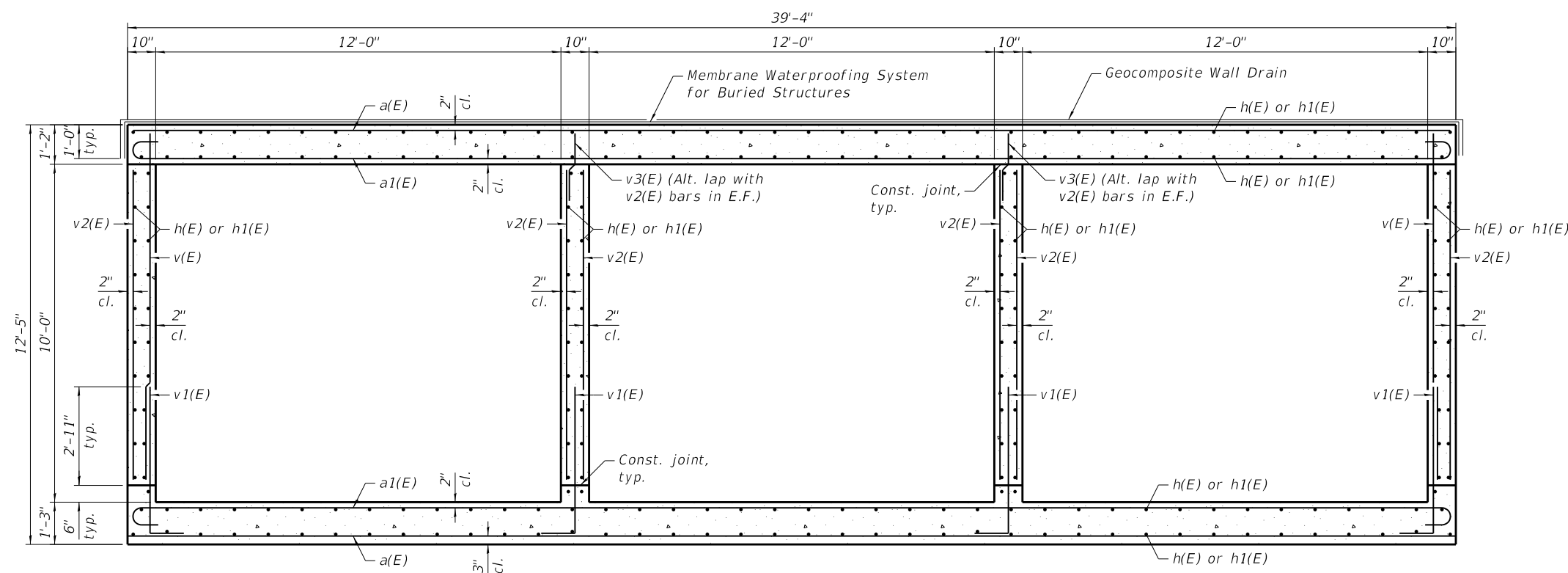
ILLINOIS FED. AID PROJECT





**LONGITUDINAL SECTION**

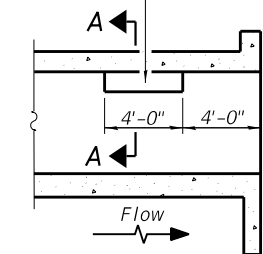
Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



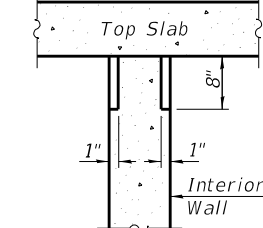
**SECTION THRU BARREL**

(Horizontal dimensions are at right angles to  $\bar{C}$  Culvert)

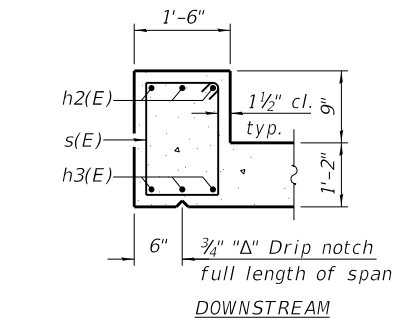
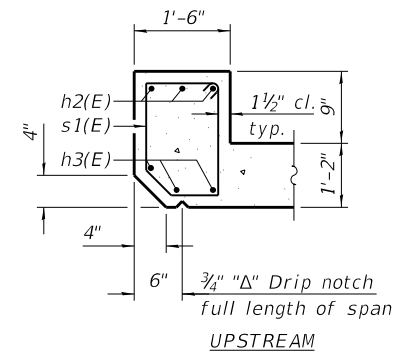
Note:  
Geocomposite Wall Drain shall be according to Section 591 of the Standard Specifications, except that concrete nails shall not be used in areas where it overlaps Membrane Waterproofing System for Buried Structures.



**LONGITUDINAL SECTION**



**SECTION A-A  
PHOEBE NESTING  
SITE DETAILS  
(Downstream End Only)**



**SECTION THRU HEADWALL**

MODEL: Default  
FILE NAME: 0882503-68897-006-Culvert Sections.dgn

**EFK Moen**  
Civil Engineering Design

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PLOT SCALE = 0.1667"/in.	CHECKED - CDL	REVISD -
PLOT DATE = 7/24/2020	DRAWN - ACB	REVISD -
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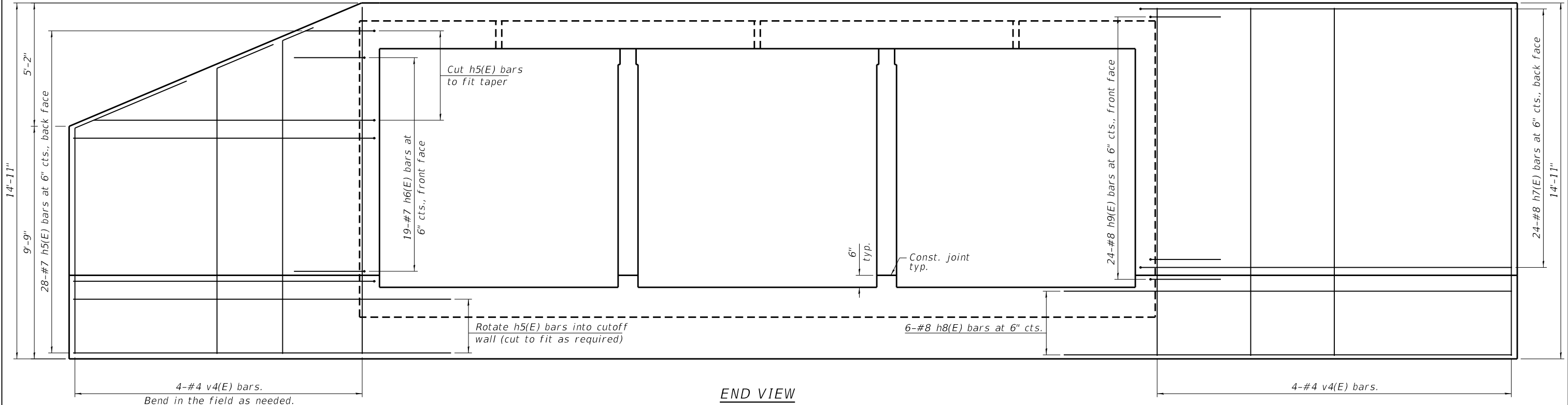
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT SECTIONS  
STRUCTURE NO. 088-2503**

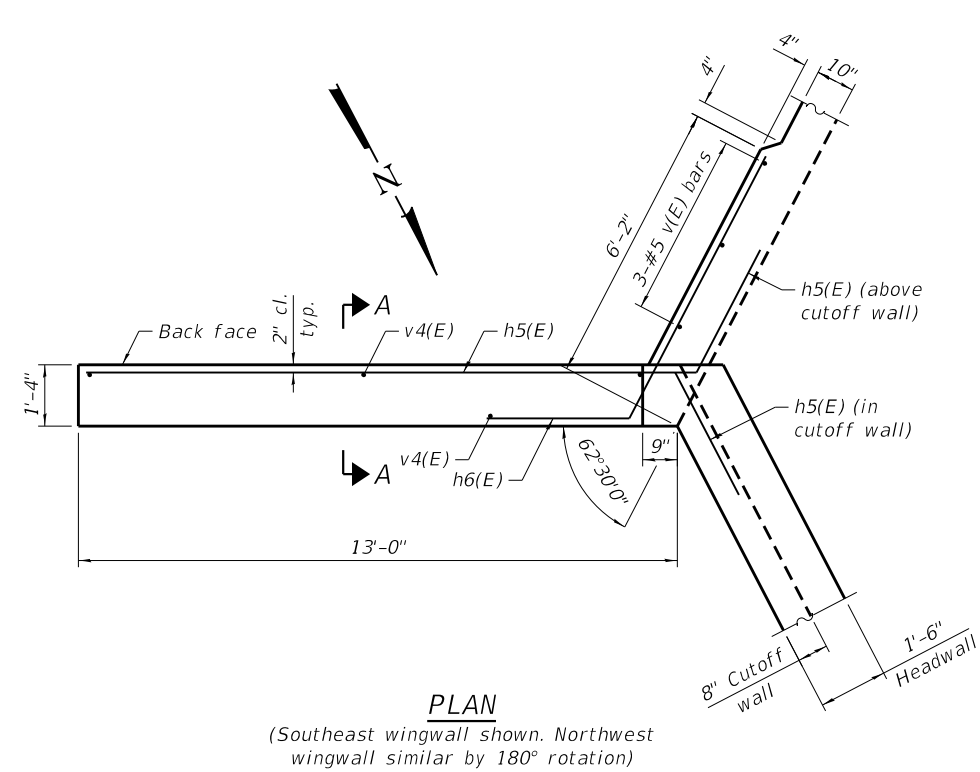
SHEET 6 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	28
CONTRACT NO. 68897				

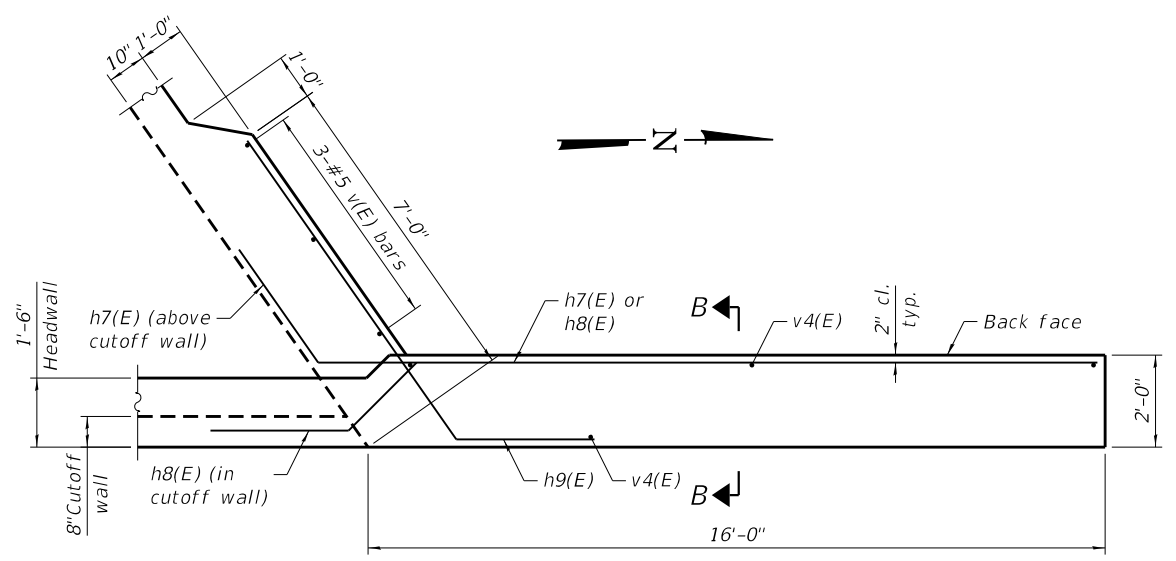
ILLINOIS FED. AID PROJECT



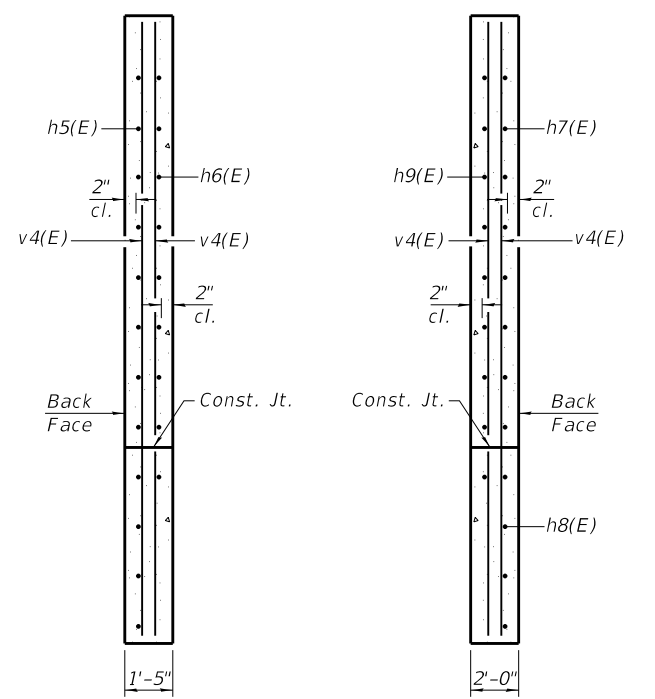
END VIEW



PLAN  
(Southeast wingwall shown. Northwest wingwall similar by 180° rotation)



PLAN  
(Northeast wingwall shown. Southwest wingwall similar by 180° rotation)



SECTION A-A

SECTION B-B

MODEL: Default  
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**EFK Moen**  
Civil Engineering Design

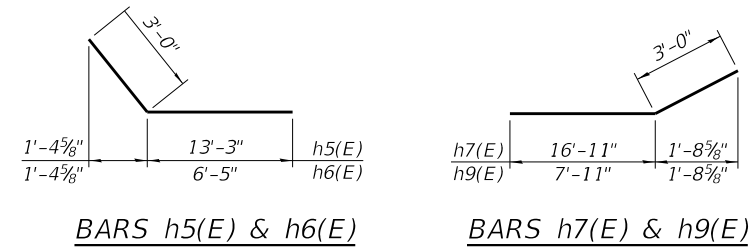
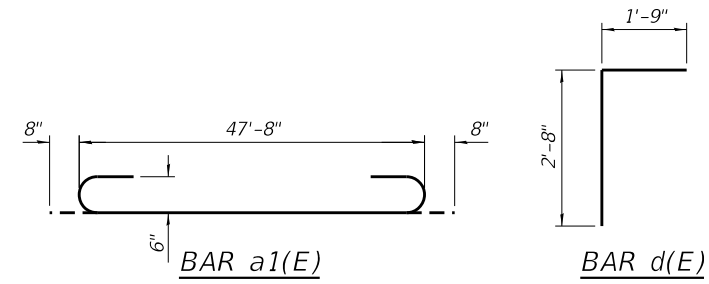
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

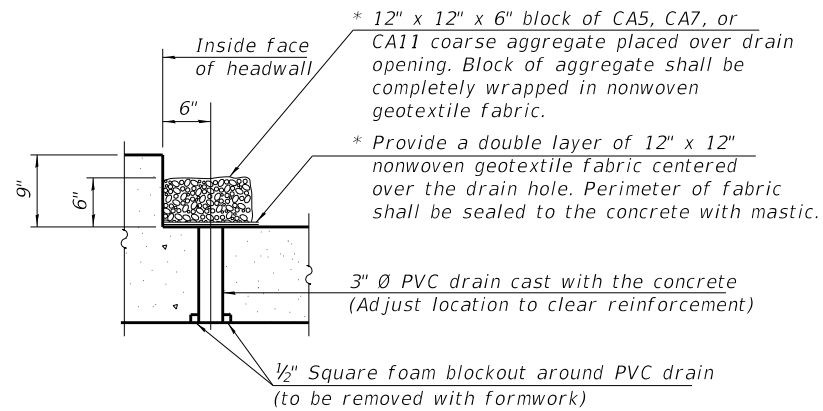
WINGWALL DETAILS  
STRUCTURE NO. 088-2503

SHEET 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	29
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

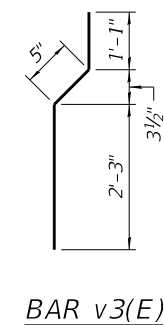
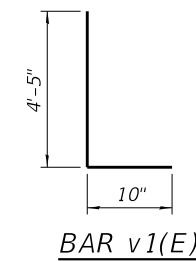
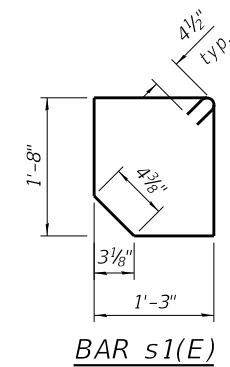
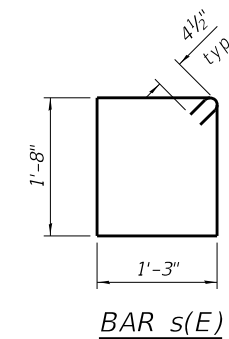
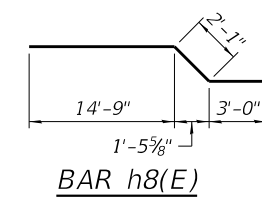


\* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



**DRAIN DETAIL**

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



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	303	#6	47'-8"	—
a1(E)	303	#6	49'-0"	⌋
d(E)	78	#4	4'-5"	└
h(E)	246	#5	38'-1"	—
h1(E)	246	#5	40'-6"	—
h2(E)	12	#9	47'-8"	—
h3(E)	12	#7	47'-8"	—
h4(E)	6	#4	47'-8"	—
h5(E)	56	#7	16'-3"	└
h6(E)	38	#7	9'-5"	└
h7(E)	48	#8	19'-11"	└
h8(E)	12	#8	19'-10"	└
h9(E)	48	#8	10'-11"	└
s(E)	141	#4	6'-7"	□
s1(E)	47	#4	6'-5"	□
v(E)	330	#5	10'-4"	—
v1(E)	478	#5	5'-3"	└
v2(E)	480	#5	9'-2"	—
v3(E)	160	#5	3'-9"	└
v4(E)	16	#4	14'-7"	—
Concrete Box Culverts	Cu. Yd.		448.2	
Reinforcement Bars, Epoxy Coated	Pound		87,230	
Permanent Sheet Piling	Sq. Ft.		735	

MODEL: Default  
FILE NAME: 0882503-68897-008-Culvert\_Details.dgn

**EFK Moen**  
Civil Engineering Design

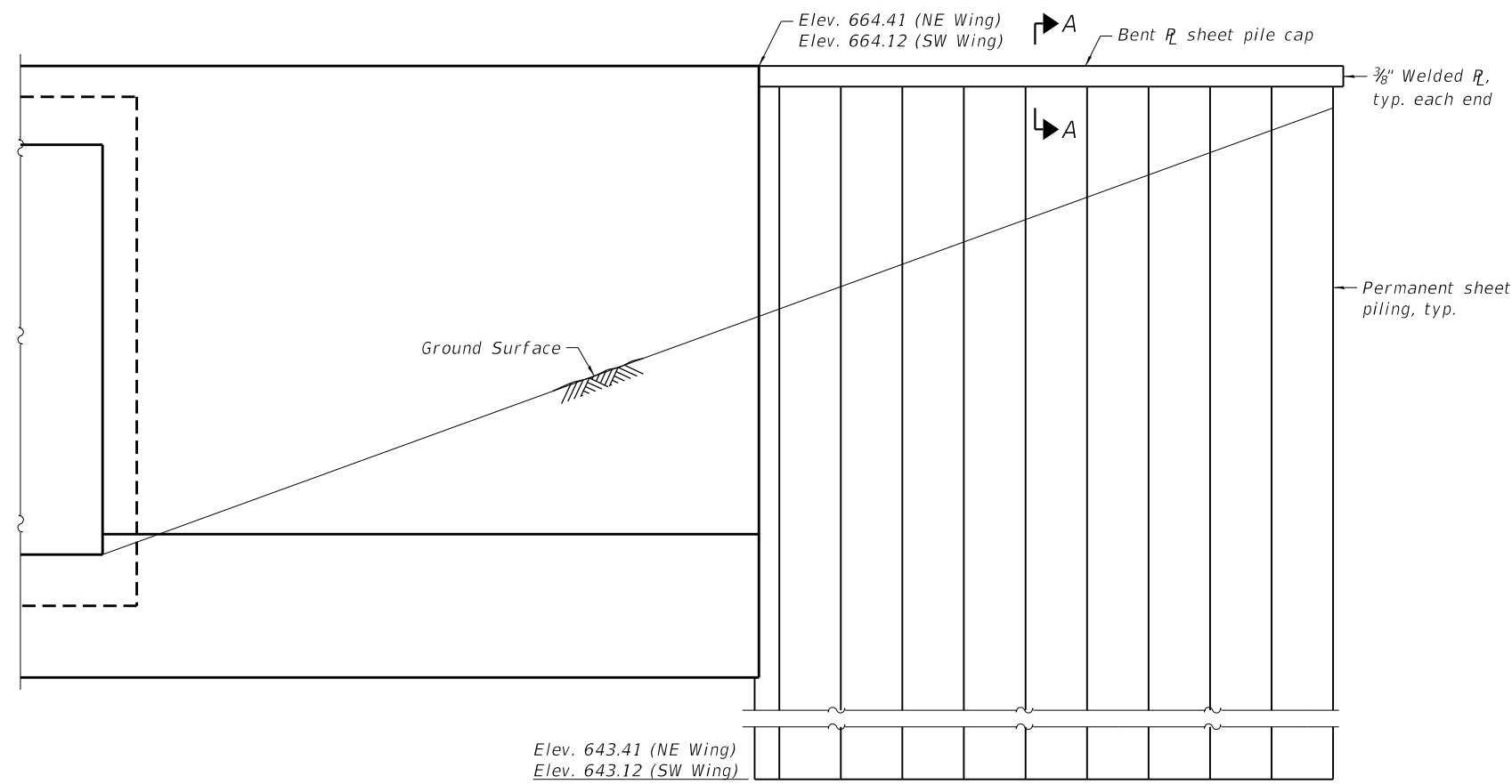
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	CHECKED - CDL	REVISED -
PLOT SCALE = 0.1667' / 1"	DRAWN - ACB	REVISED -
PLOT DATE = 7/24/2020	CHECKED - CDL	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

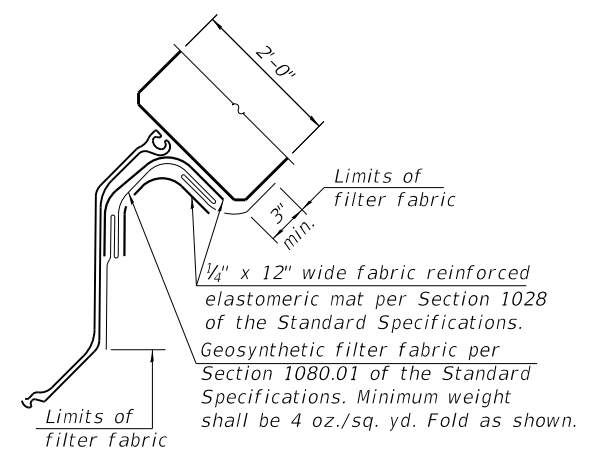
CULVERT DETAILS  
STRUCTURE NO. 088-2503

SHEET 8 OF 12 SHEETS

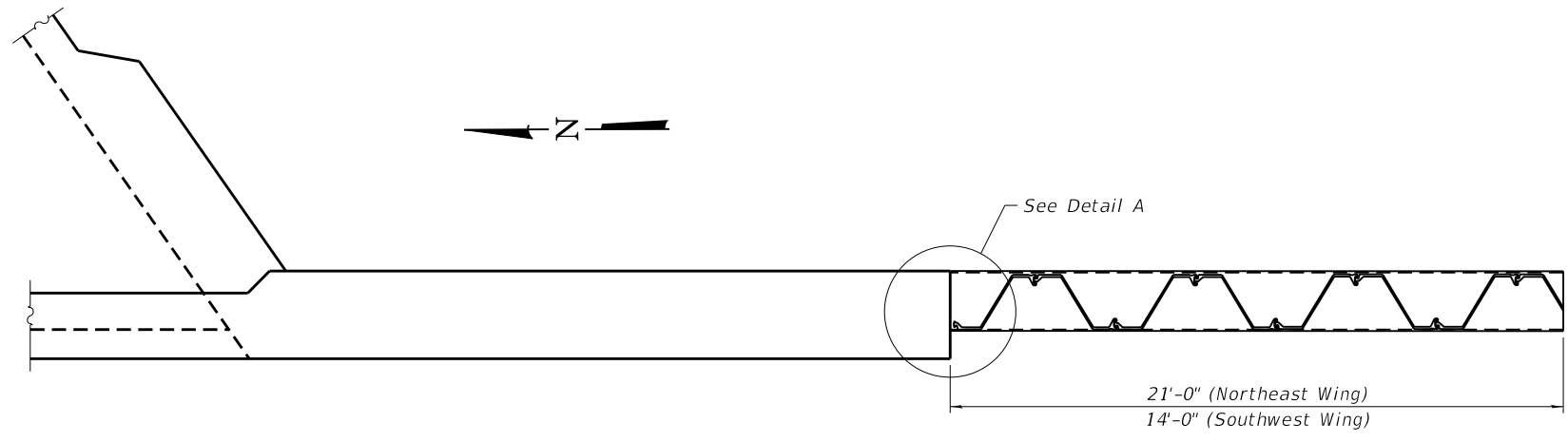
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	30
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				



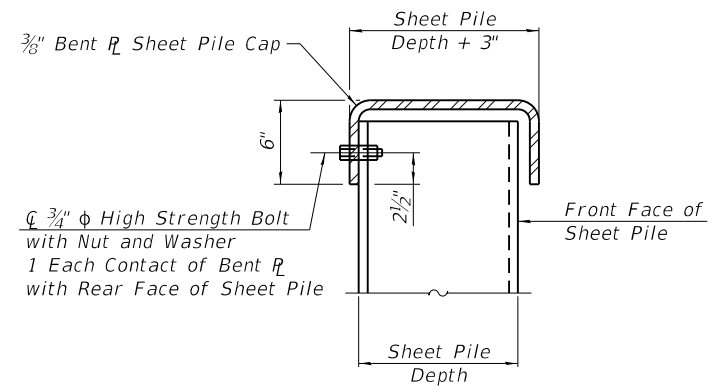
**END VIEW**  
(Southwest wingwall shown. Northeast wingwall similar)



**DETAIL A**



**PLAN**  
(Southwest wingwall shown. Northeast wingwall similar by 180° rotation)



**SECTION A-A**

**Notes:**  
 The minimum effective section modulus of the permanent steel sheet pile wall shall be 8.4 in.<sup>3</sup>/ft.  
 Sheet piling shall not be driven until the concrete strength has attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.  
 The cost of furnishing and installing the bent sheet pile cap, elastomeric mat, and filter fabric shall be included in the cost of Permanent Sheet Piling.

MODEL: Default  
 FILE NAME: 0882503-68897-009-Sheet\_Pile\_Wing\_Extensions.dgn

**EFK•Moen**  
 Civil Engineering Design

USER NAME = ABenz	DESIGNED - ACB	REVISED -
	CHECKED - CDL	REVISED -
PLOT SCALE = 0.1667"/in.	DRAWN - ACB	REVISED -
PLOT DATE = 7/24/2020	CHECKED - CDL	REVISED -

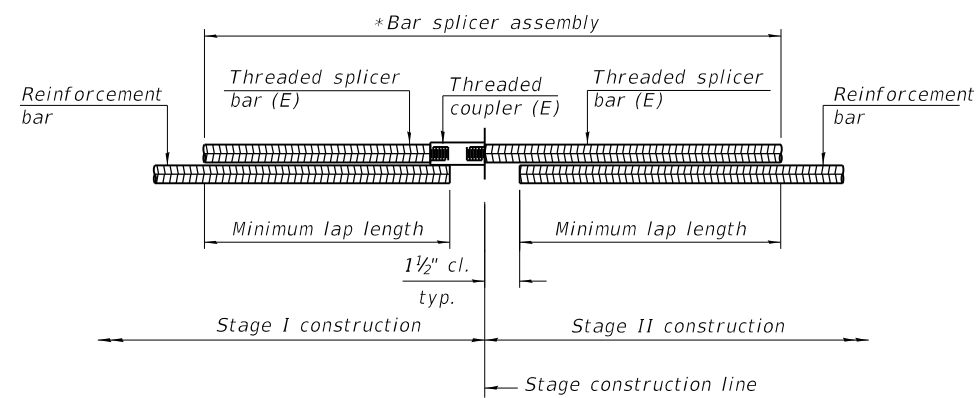
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SHEET PILE WING EXTENSIONS**  
**STRUCTURE NO. 088-2503**

SHEET 9 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	31
CONTRACT NO. 68897				

ILLINOIS FED. AID PROJECT

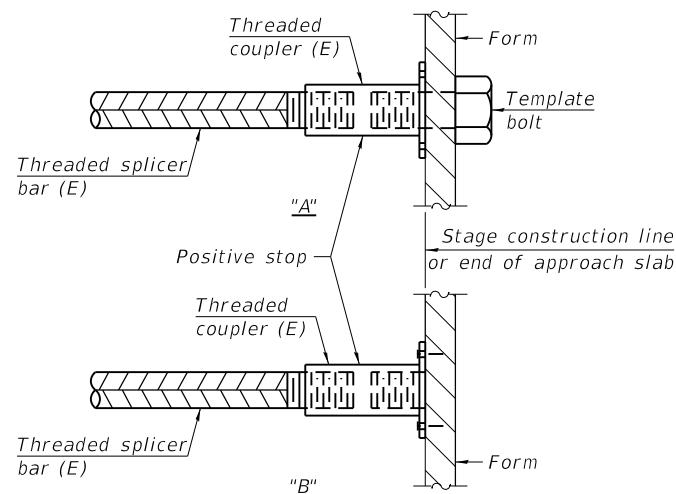


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
(All components shall be provided from one supplier)

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

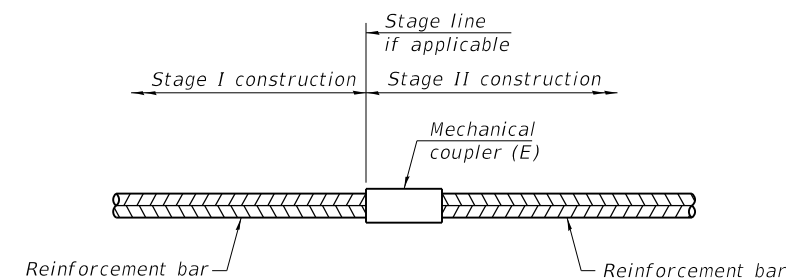
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top Slab	#5	80	3'-7"
Bottom Slab	#5	80	3'-7"
Wall	#5	86	3'-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.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODEL: Default  
FILE NAME: 0882503-68897-010-Bar-Splicer-Assembly and Mechanical Splicer Details.dgn

BSD-1

1-1-2020

**EFK•Moen**  
Civil Engineering Design

USER NAME = ABenz	DESIGNED - ACB	REVISED -
PLOT SCALE = 0.1667" / in.	CHECKED - CDL	REVISED -
PLOT DATE = 7/24/2020	DRAWN - ACB	REVISED -
	CHECKED - CDL	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS**  
**STRUCTURE NO. 088-2503**

SHEET 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	32
CONTRACT NO. 68897				

ILLINOIS FED. AID PROJECT





## SOIL BORING LOG

Page 1 of 2

Date 11/06/17

ROUTE FAP 22 (SBI 78) DESCRIPTION SN088-0012 Replacement LOGGED BY SCI

SECTION (128B)BR LOCATION Northing Easting

COUNTY Stark DRILLING METHOD HSA HAMMER TYPE Automatic

STRUCT. NO. 088-0012  
Station 249+92 to 256+38  
BORING NO. B-2  
Station 253+79  
Offset 6 ft Rt  
Ground Surface Elev. 665.6 ft

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)
0				18 inches ASPHALTIC CONCRETE				
664.1	50/5"		1	FILL: Crushed asphalt, fine to coarse sand and gravel, A-1				
661.6	2	3.5 B/20	24	FILL: Greenish-gray, clay, stiff, A-7				
659.1	1	1.5 P	21	FILL: Dark brown, silty clay loam, medium stiff, A-7-6 (26)				
637.6	2	>4.5 P	18	CLAY: Gray, trace fine sand seams, medium stiff, with shaley layering A-7				
	1	0.5 P	26	Becomes soft				
650.6	2	1.2 B/20	15	LOAM: Gray, medium stiff, with fine to coarse chert gravel, A-4 (2)				
	2	1.1 S/15	29	CLAY: Gray, trace fine sand seams, medium stiff, with shaley layering A-7				
	2	1.2 B/20	15	Becomes dark gray, trace organics				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)



## SOIL BORING LOG

Page 2 of 2

Date 11/06/17

ROUTE FAP 22 (SBI 78) DESCRIPTION SN088-0012 Replacement LOGGED BY SCI

SECTION (128B)BR LOCATION Northing Easting

COUNTY Stark DRILLING METHOD HSA HAMMER TYPE Automatic

STRUCT. NO. 088-0012  
Station 249+92 to 256+38  
BORING NO. B-2  
Station 253+79  
Offset 6 ft Rt  
Ground Surface Elev. 665.6 ft

DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BULGE (in)	UCS (tsf)	MOISTURE (%)
				LOAM: Gray, medium stiff, with fine to coarse chert gravel, A-4 (2)				
				Trace fine gravel				
				Gravel becomes fine to coarse				
	9	>4.5 P	19	CLAY: Dark gray, trace fine sand seams, medium stiff, with shaley layering, trace organics A-7				
	10			(Continued)				
	32			With fine to coarse gravel layer				
618.1				SHALE: Gray, trace coarse gravel, A-7				
615.6	50/4"		16	Sample recovered was not in tact, so moisture content may not be representative due to drilling mud.				
-50				Boring terminated at 50.0 ft.				
				Boring grouted to 50 ft.				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
AASHTO Classifications are based on visual classifications unless otherwise noted BBS, form 137 (Rev. 8-99)

MODEL: Default  
FILE NAME: 0882503-68897-012-Soil Boring\_Logs.dgn

**EFK Moen**  
Civil Engineering Design

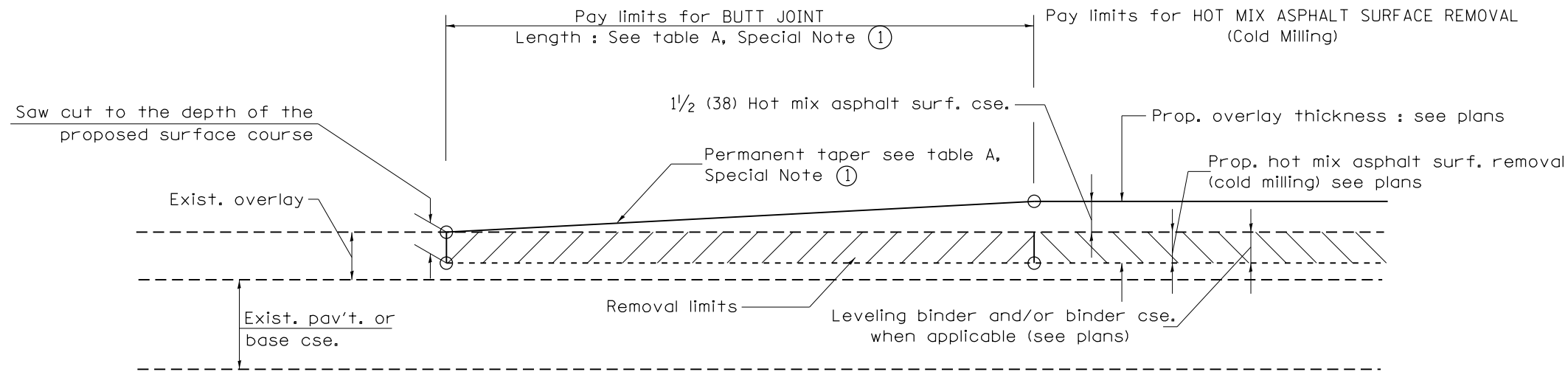
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CHECKED - CDL	REVISED -	
PLOT SCALE = 0.1667 1/in	DRAWN - ACB	REVISED -
PLOT DATE = 7/24/2020	CHECKED - CDL	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS  
STRUCTURE NO. 088-2503

SHEET 12 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	(128B)BR-2	STARK	52	34
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				



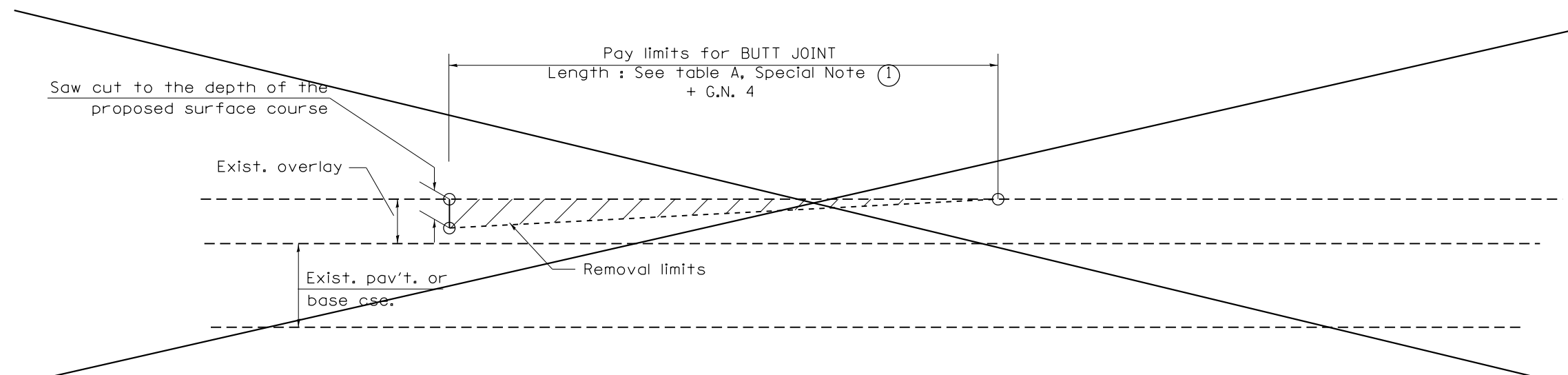
**CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)**

**TABLE A  
TAPER RATES**

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	BUTT JOINT TAPER RATE	1:480	1:240
②	TEMPORARY RAMP TAPER RATE	1:80	1:40

**GENERAL NOTES**

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.



**CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)**

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.	08-21-13	MAJOR MODIFICATIONS	R.D.
04-01-97	CORRECTION TO DEPTH	J.A.	02-29-16	MINOR CORRECTIONS	R.D.
09-15-05	REVISED DESIGNER NOTE	M.M.A.	04-12-16	MINOR CORRECTIONS	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.	02-14-17	ADDED NOTE 5	R.D.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

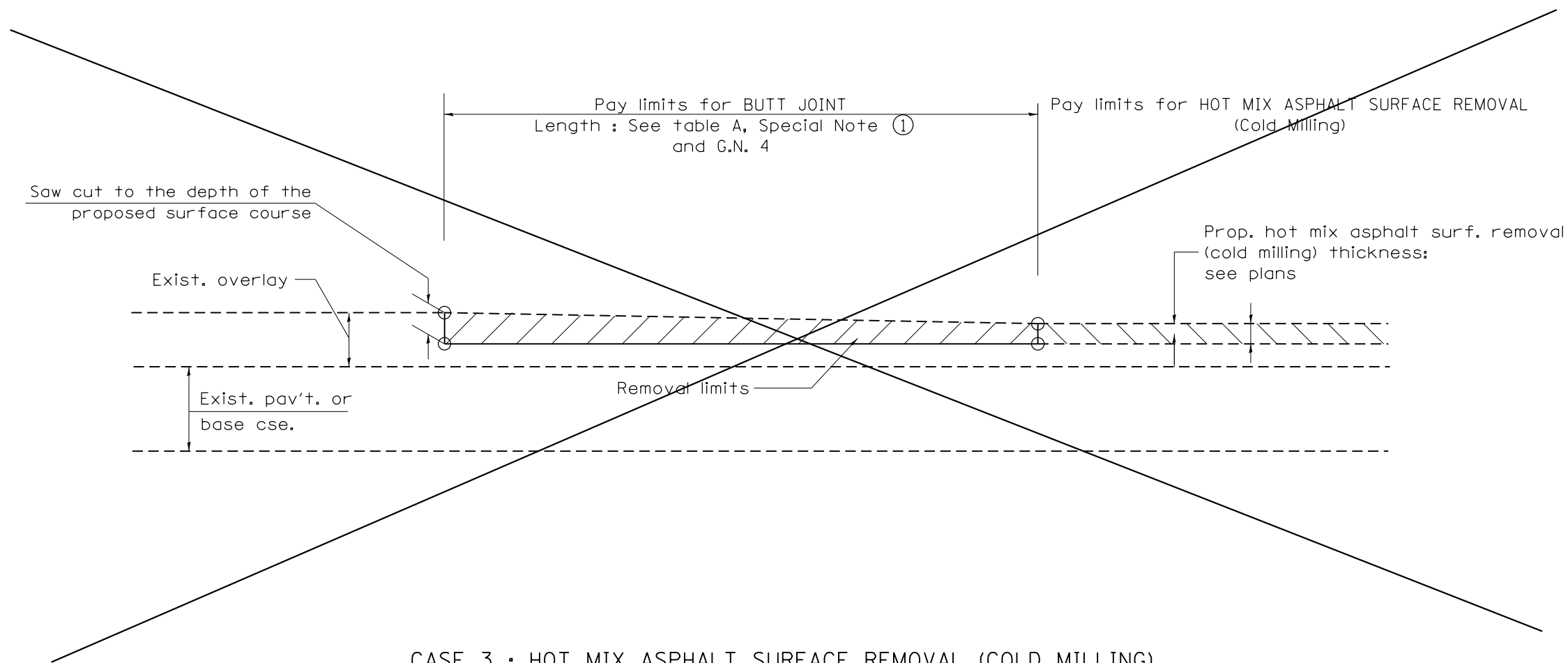
NOT TO SCALE

**DISTRICT 4 STANDARDS  
BUTT JOINTS**

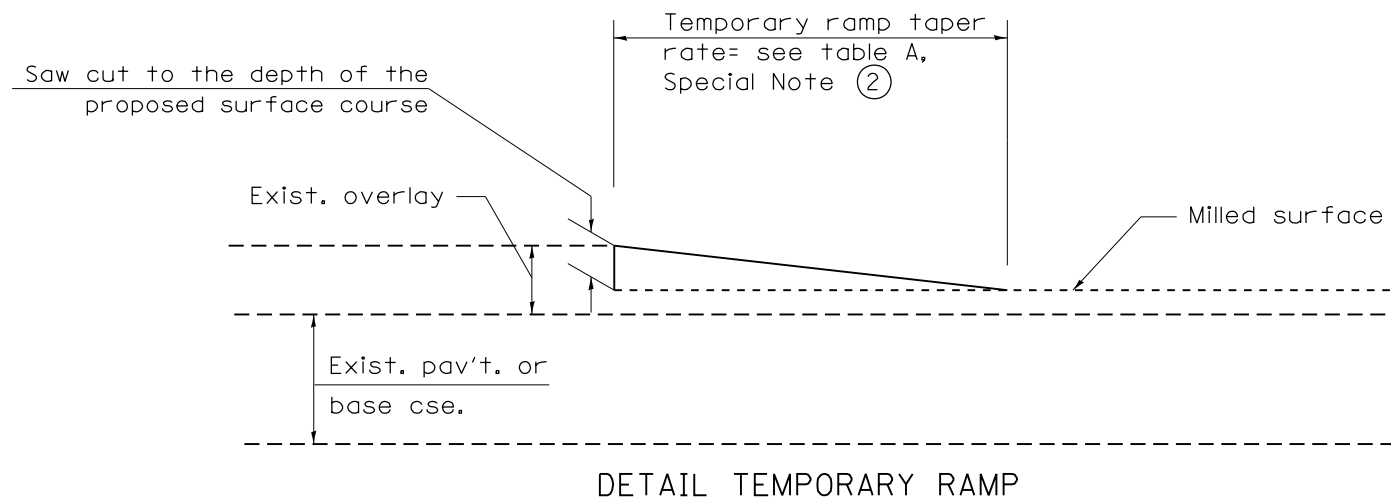
SHT. 1 OF 3  
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	35
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68897	





CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

All dimensions are in inches (millimeters) unless otherwise noted.

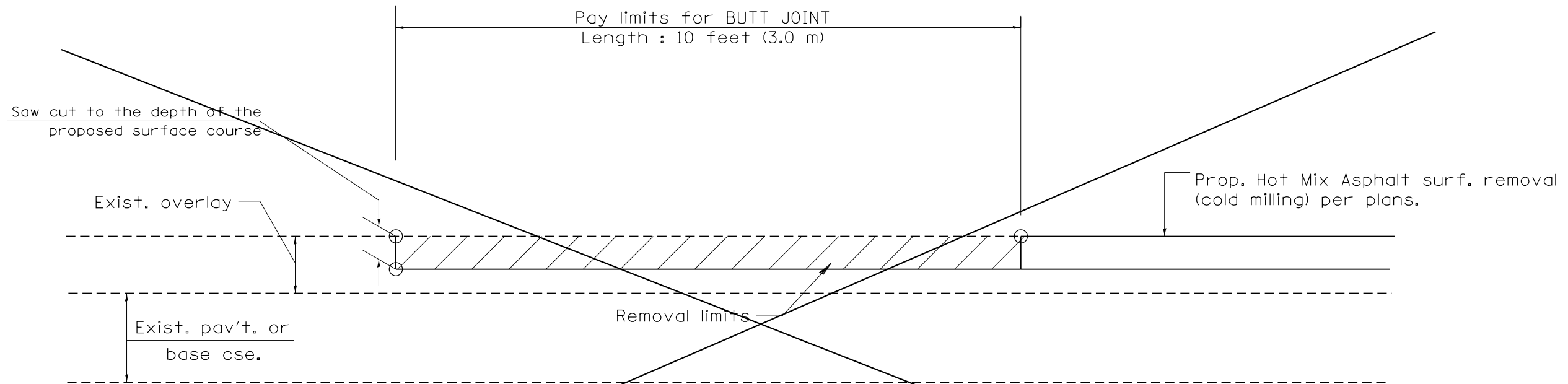

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

**DISTRICT 4 STANDARDS  
BUTT JOINTS**

SHT. 2 OF 3  
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	36
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68897	



CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH  
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER

All dimensions are in inches (millimeters) unless otherwise noted.

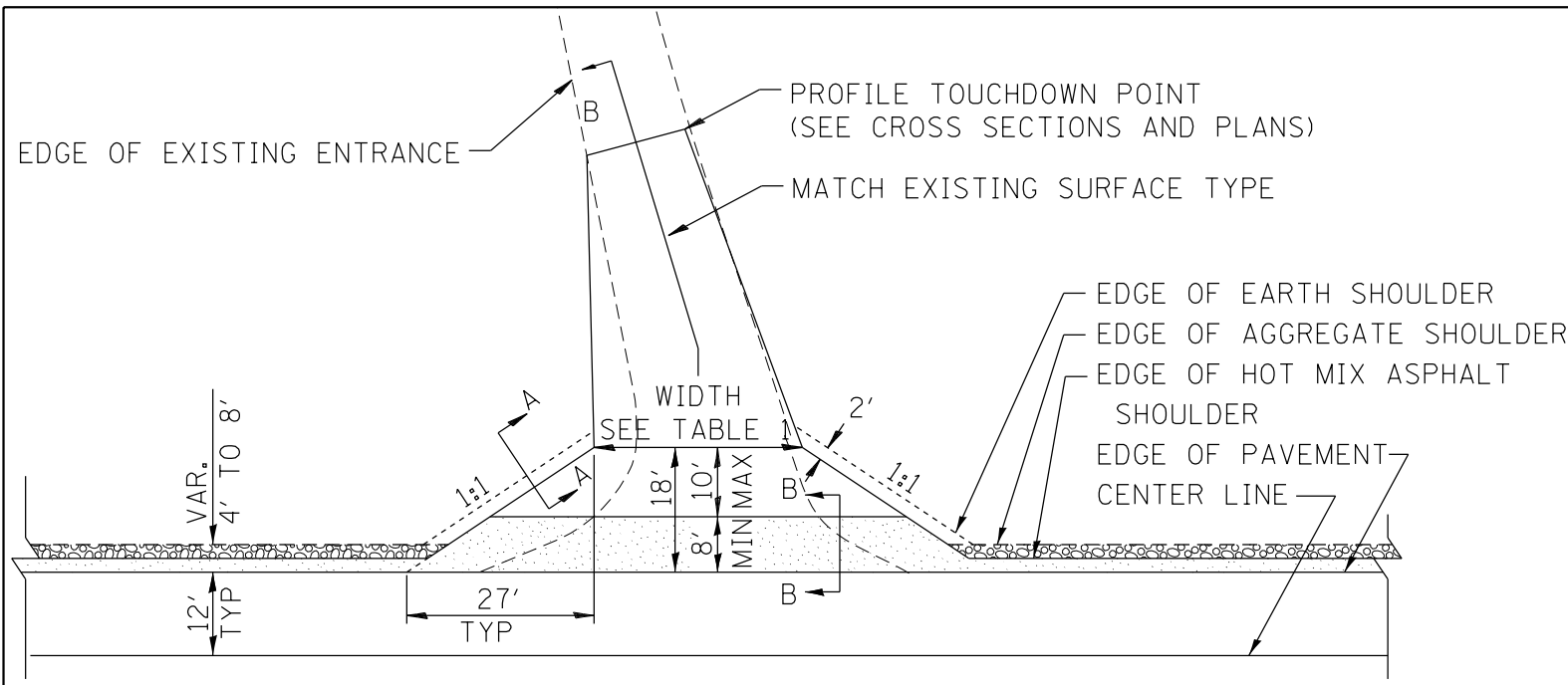

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



NOT TO SCALE

DISTRICT 4 STANDARDS  
BUTT JOINTS

SHT. 3 OF 3  
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	37
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 68897				



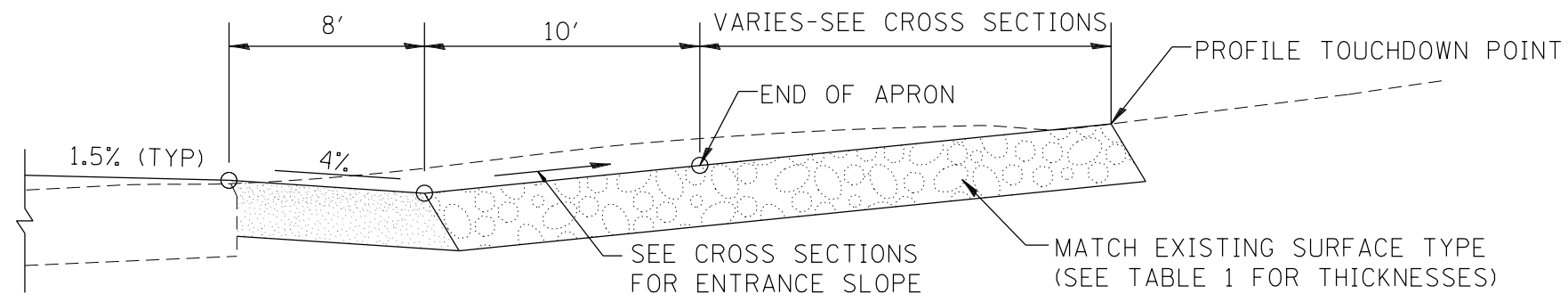
 HOT MIX ASPHALT SHOULDER, 8"  
 AGGREGATE SHOULDER, TYPE B, 6"

**PLAN**

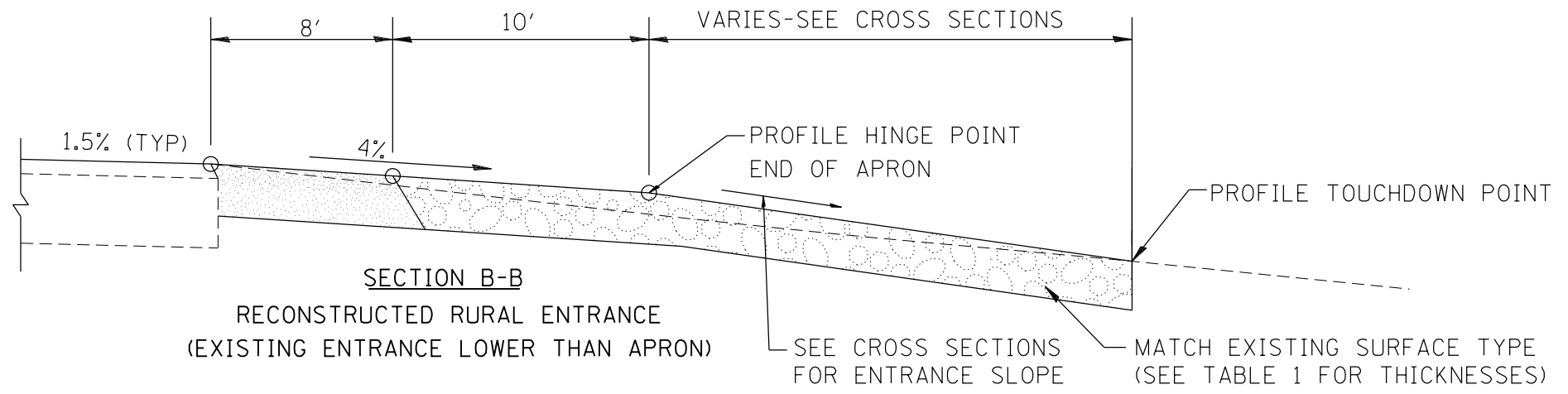
COMMERCIAL / FARM-RELATED ENTRANCE

TABLE 1					
RURAL ENTRANCE DESIGN					
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT	COMMERCIAL	
				1-WAY OPERATION	2-WAY OPERATION
WIDTH (W)	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Min.	14'(4.3m) Min.	24'(7.2m) Max.
FLARE					1:1.5
MAX. GRADE (G)	12%		12%		10%

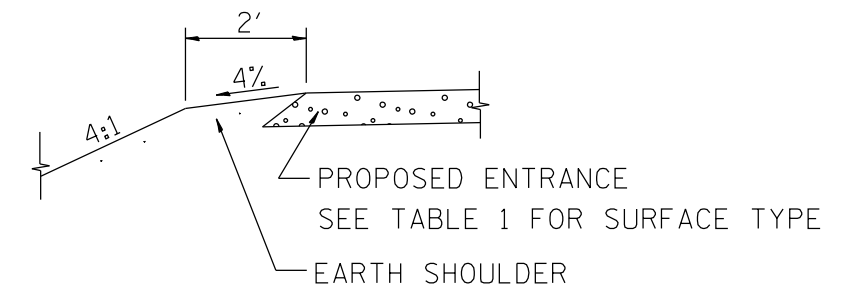
SURFACE TYPE			
INCIDENTAL HOT MIX ASPHALT SURFACING	6"	—	8"
AGGREGATE SURFACE COURSE	6"	8"	—
PCC DRIVEWAY PAVEMENT	6"	—	7"



SECTION B-B  
RECONSTRUCTED RURAL ENTRANCE  
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B  
RECONSTRUCTED RURAL ENTRANCE  
(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A  
SHOULDER TREATMENT FOR RURAL ENTRANCES

GENERAL NOTES

- ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.
- A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.
- A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-103.06, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
07-01-97	REVISE DESIGNER NOTES	J.A.	9-15-15	UPDATED TABLE 1	R.D.
01-17-03	ADJUST DESIGN, CHANGE ENTRANCE	JATR	2-29-16	MINOR CORRECTIONS	R.D.
09-15-05	RADIUS FOR FLARE	M.M.A.	5-9-17	CHANGED TAPER RATE	R.D.

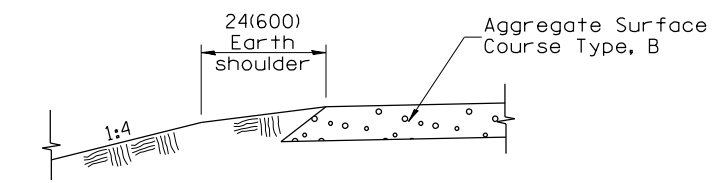
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

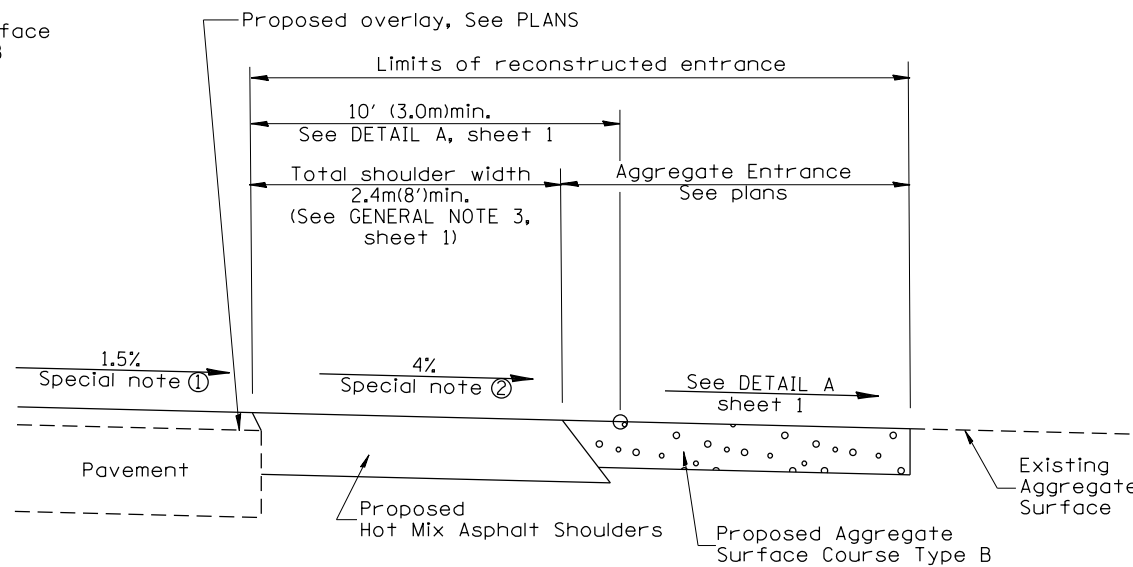
**DISTRICT 4 STANDARDS  
RURAL ENTRANCES FOR "3R" PROJECTS**

SHT. 1 OF 2  
CADD STD. 406301-D4

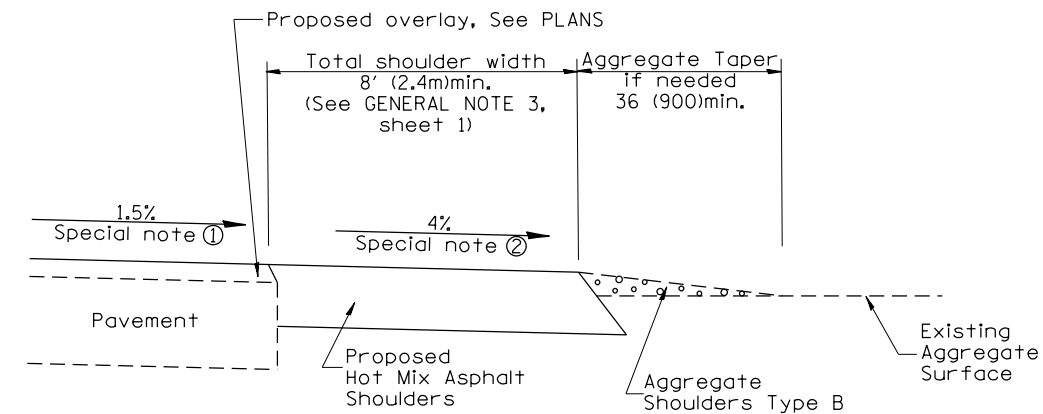
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	38
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68897	



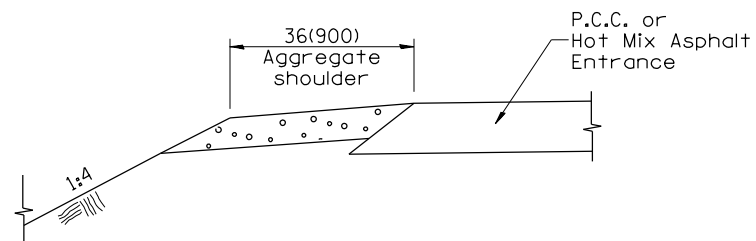
**SECTION A-A**  
SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



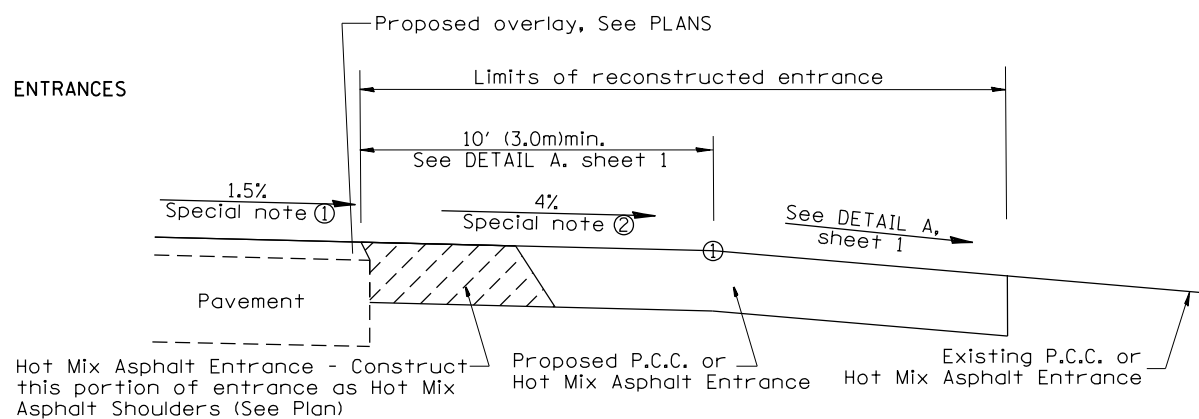
**SECTION B-B**  
RECONSTRUCTED AGGREGATE ENTRANCE



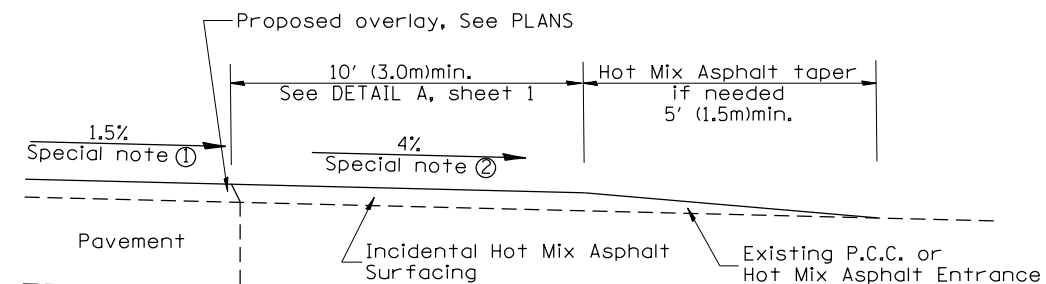
**SECTION B-B**  
EXISTING AGGREGATE ENTRANCE



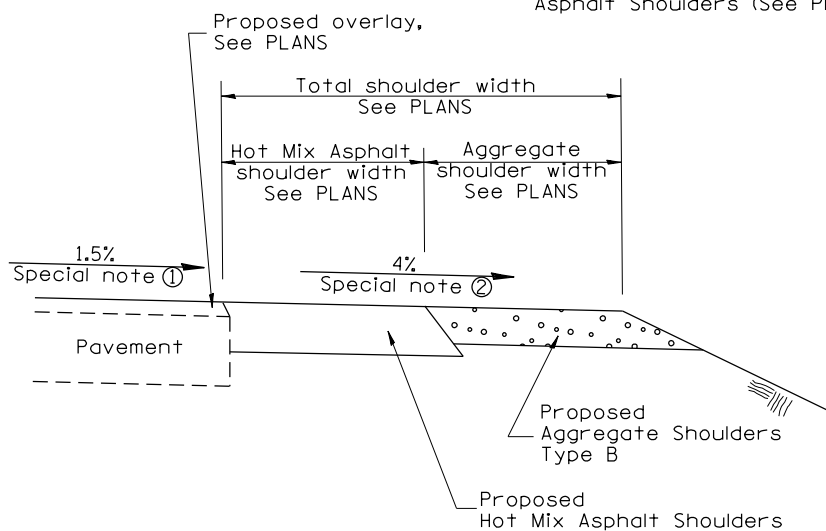
**SECTION C-C**  
SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



**SECTION D-D**  
RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



**SECTION D-D**  
EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE



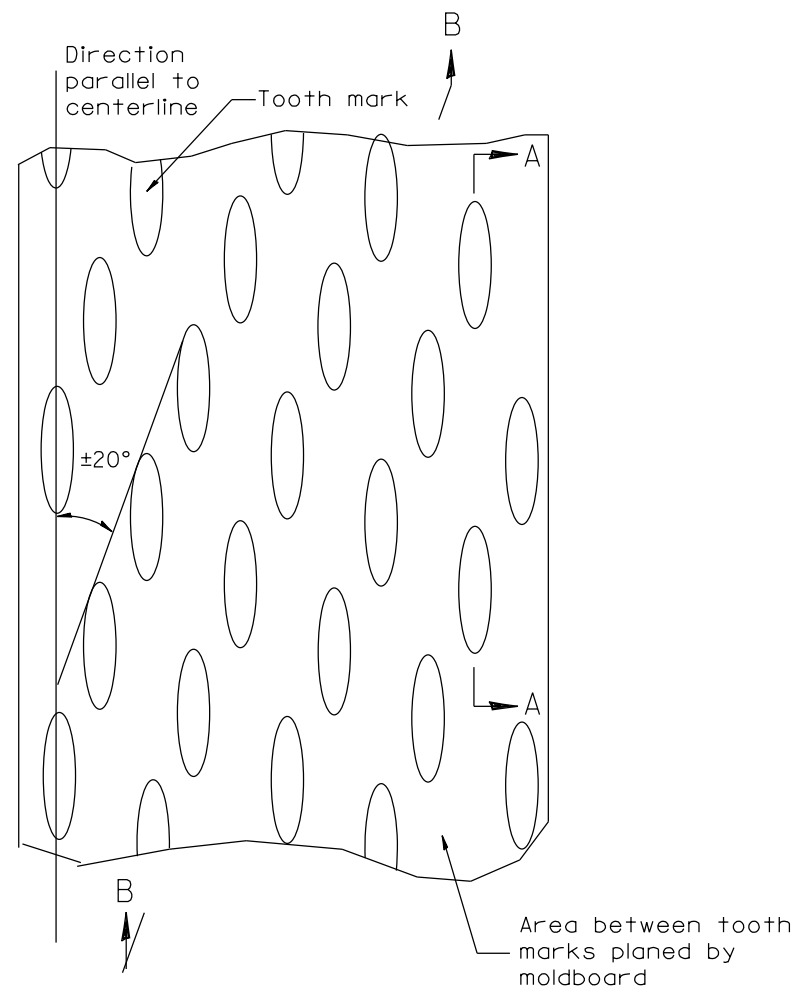
**SECTION E-E**  
MAINLINE SHOULDER TREATMENT

**SPECIAL NOTES**

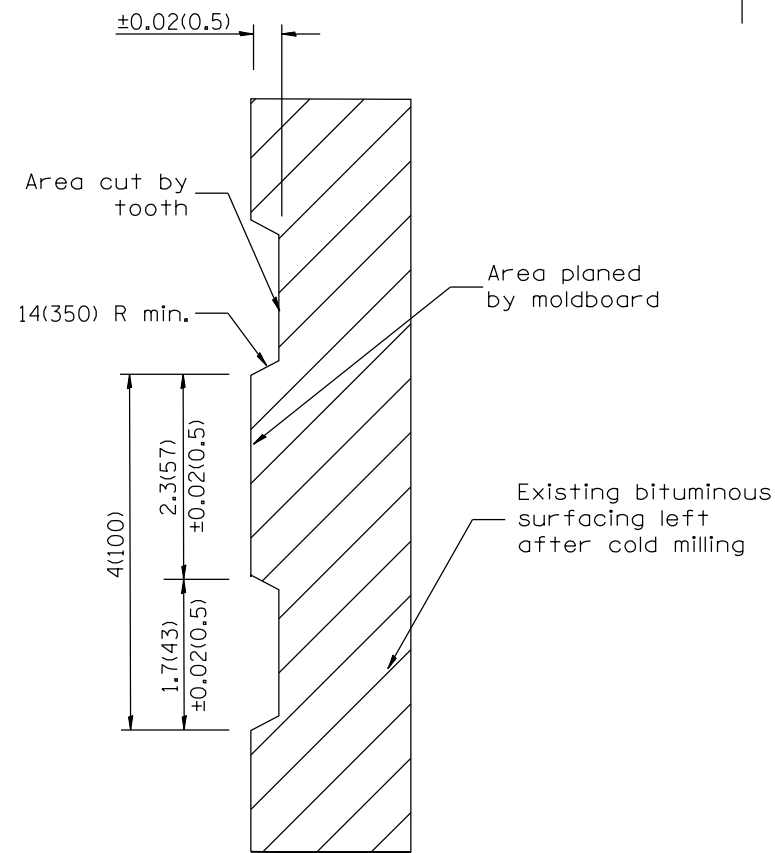
- ① The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on super-elevated horizontal curves.
- ② The shoulder slope shall control the entrance profile for a distance of 10' (3.0m) minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through super-elevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' (1.8m) and wider and 12% for shoulders 4' (1.2m) and less. Where 12' (366cm) paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

All dimensions are in inches (millimeters) unless otherwise noted.

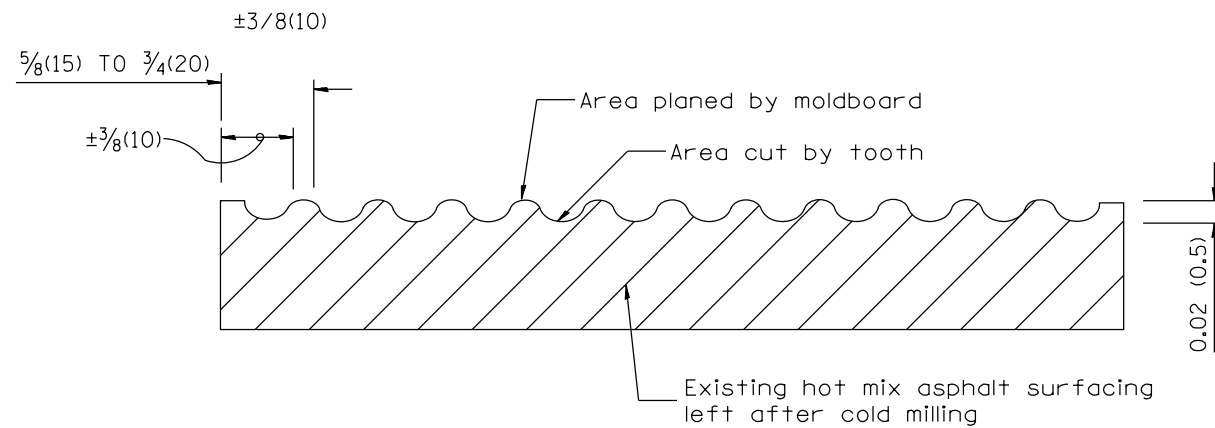
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				DISTRICT 4 STANDARDS RURAL ENTRANCES FOR "3R" PROJECTS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
								0022	(128B)BR-2	STARK	52	39
NOT TO SCALE				SHT. 2 OF 2 CADD STD. 406301-D4				CONTRACT NO. 68897				
								FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLAN



SECTION A-A



SECTION B-B PROJECTED  
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

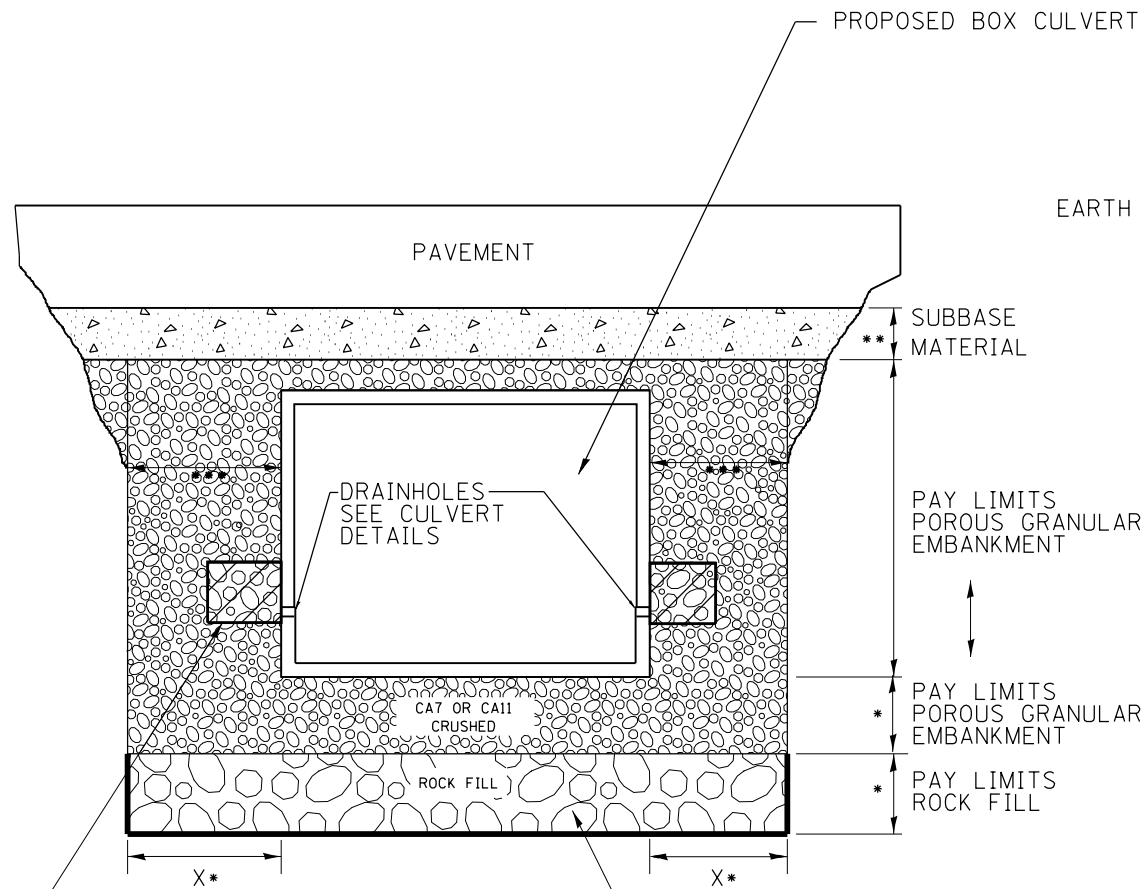
DISTRICT 4 STANDARDS  
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)  
NOT TO SCALE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	40
CONTRACT NO. 68897				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

CADD STD. 440001-D4

1. IF DESIGN FILL IS < 2 FEET, CONTINUE PGE UP TO THE SUBBASE.  
 2. IF DESIGN FILL IS ≥ 2 FEET AND ≤ 8 FEET OR DEPTH OF FILL ≤ SPAN OF LARGEST BOX IN CONFIGURATION, CONTINUE BACKFILLING WITH PGE.

### ROADWAY PROFILE VIEW

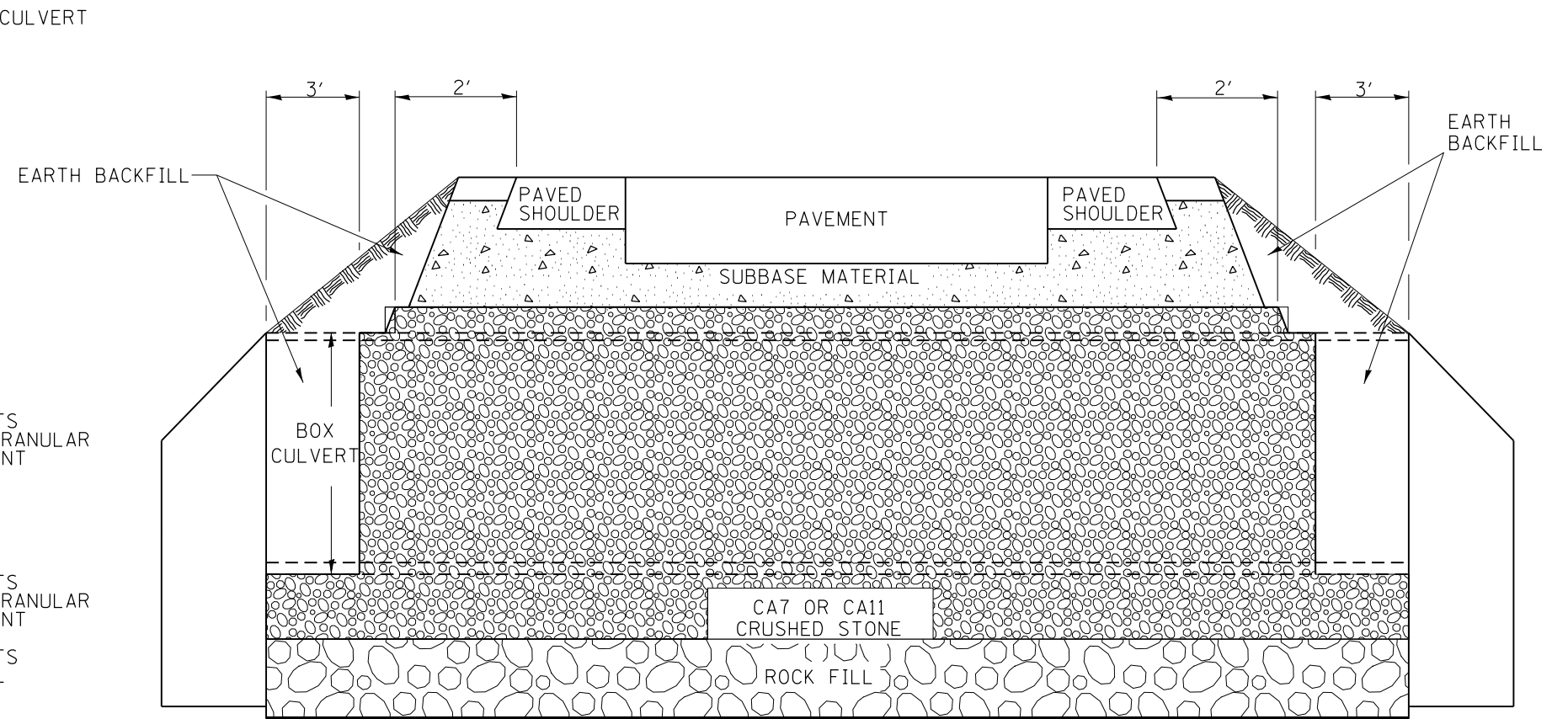


2' x 2' x 2' DEPOSIT OF CA 5, 7, OR 11 IN FABRIC ENVELOPE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS (TYPICAL)

(IF UNDERCUT IS REQUIRED) PROPOSED REMOVAL & DISPOSAL OF UNSUITABLE, AND REPLACE WITH ROCK FILL WITH GEOTECHNICAL FABRIC FOR GROUND STABILIZATION. PAID FOR BY RESPECTIVE PAY ITEMS.

- \* IF APPLICABLE, SEE UNDERCUT DETAIL FOR DEPTHS AND WIDTHS. IF THERE IS NO UNDERCUT, X = 2 FEET AND SEE NOTE 3 THIS SHEET.
- \*\* SUBBASE SHALL BE 6" MINIMUM LAYER OF CA6 CRUSHED STONE OR OTHER MATERIAL AS SPECIFIED IN THE PLANS.
- \*\*\* PAY LIMITS OF POROUS GRANULAR EMBARKMENT SHALL BE 2 FEET UNLESS OTHERWISE SHOWN IN THE PLANS.

### ROADWAY CROSS SECTION VIEW



(IF UNDERCUT IS REQUIRED) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

#### NOTES:

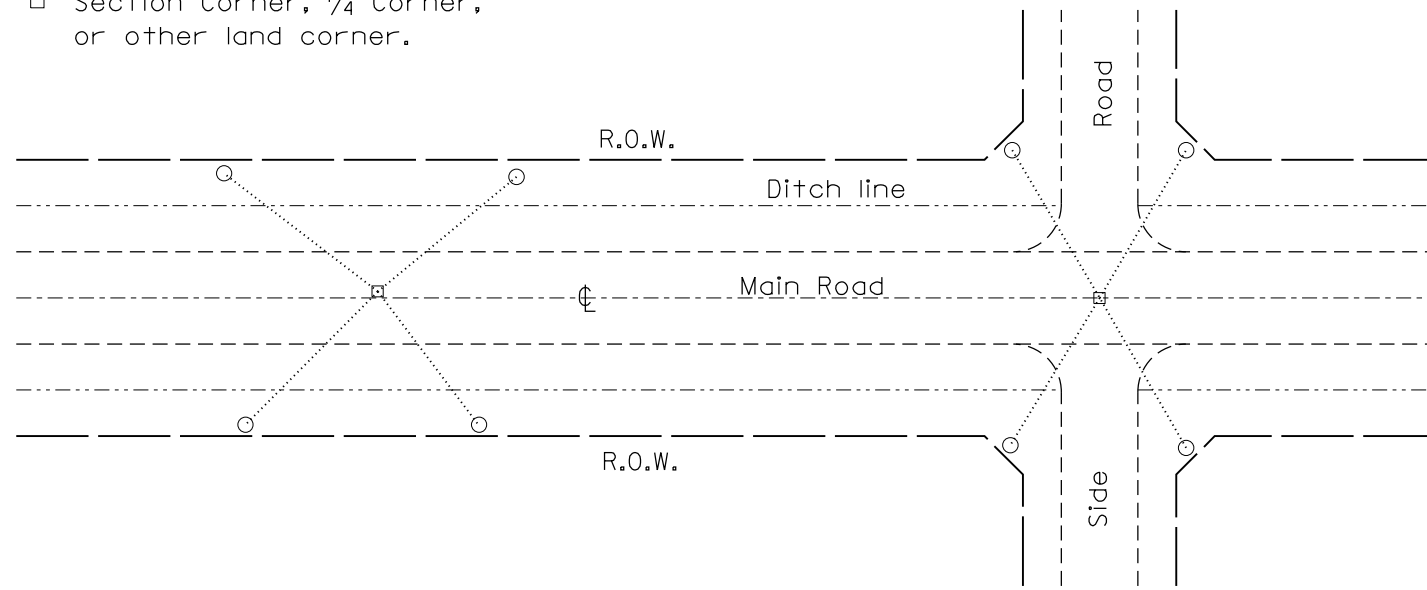
1. EXCEPT AS SPECIFIED IN THIS DETAIL, THE PLACEMENT AND COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.
2. POROUS GRANULAR EMBARKMENT SHALL BE PLACED IN ACCORDANCE WITH SECTION 207 OF THE STANDARD SPECIFICATIONS.
3. IF NO UNDERCUT IS REQUIRED, A 6" MINIMUM LAYER OF POROUS GRANULAR EMBARKMENT SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF BOX CULVERT.

All dimensions are in inches (millimeters) unless otherwise noted.

6-12-12	CREATED NEW STD.	R.D.															
<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>											<b>DISTRICT 4 STANDARDS DETAIL OF EXCAVATION AND BACKFILL FOR BOX CULVERTS</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
											NOT TO SCALE		0022	(128B)BR-2	STARK	52	41
											CADD STD. 540000-D4		CONTRACT NO. 68897				
											ILLINOIS FED. AID PROJECT						

**PERMANENT SURVEY TIES**

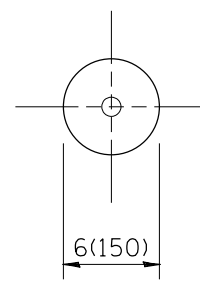
- Permanent Survey Tie
- Section Corner, 1/4 Corner, or other land corner.



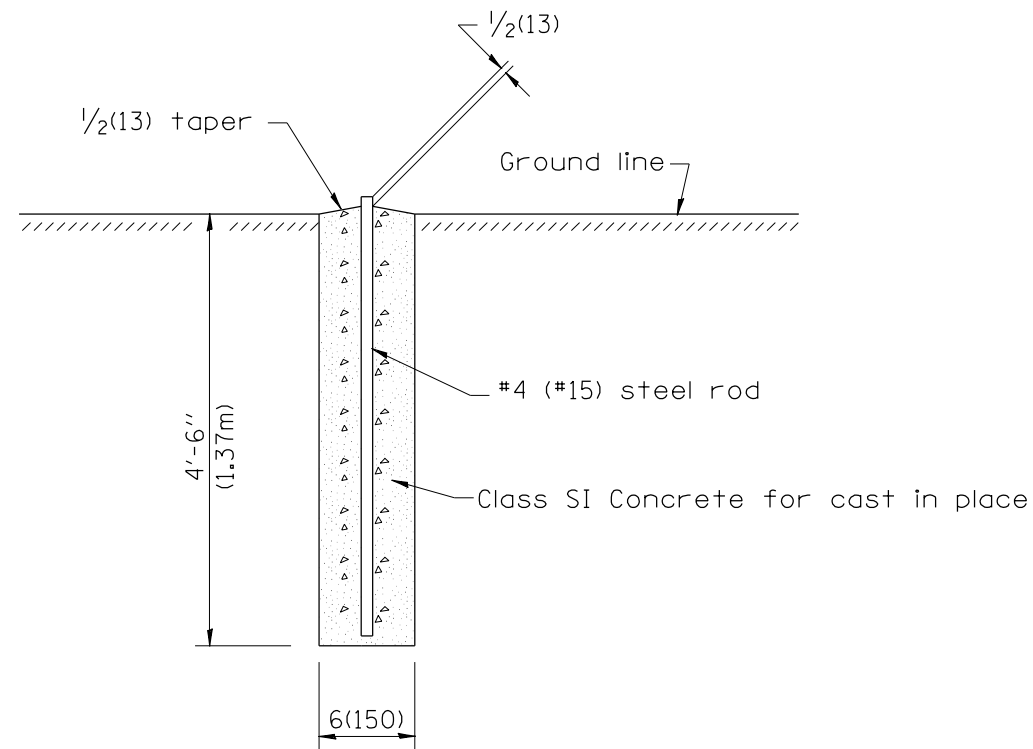
**TYPICAL APPLICATION**

**GENERAL NOTES**

1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS

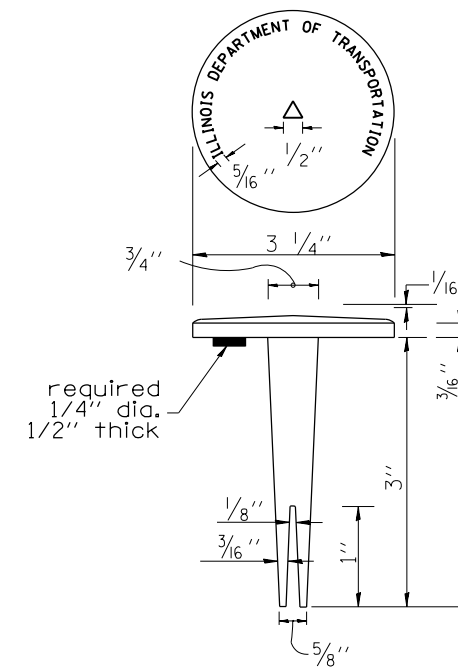


**PLAN**

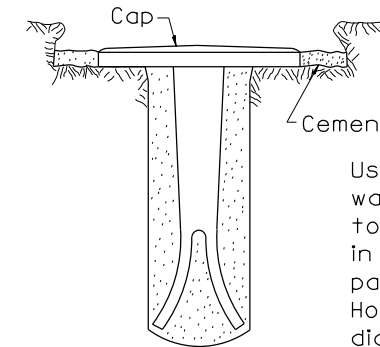


**SECTION**

**PERMANENT SURVEY MARKERS**

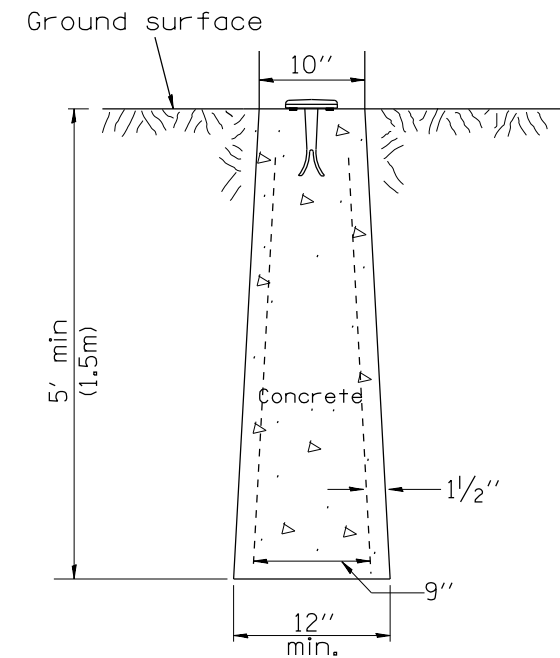


**BRASS TABLET**



Tablet constructed in rock ledge or concrete.

**TYPE I**



**TYPE II  
CAST-IN-PLACE MARKER**

**GENERAL NOTES**

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTES:  
 1. ADD DISTRICT SPECIAL PROVISION IF PLACING A TYPE I MARKER ON A STRUCTURE.  
 2. MODIFIES STATE STD 667101. DON'T USE STATE STD IF USING CADD STANDARD  
 3. PERMANENT SURVEY MARKERS SHALL BE PLACED TO PERPETUATE THE SURVEY LINES OF DIVIDED HIGHWAYS AND THE CENTERLINE OF ALL OTHERS WHERE THESE LINES HAVE BEEN ESTABLISHED BY SURVEY.  
 4. PERMANENT SURVEY MARKERS SHALL BE PLACED AT ALL LAND SECTION CORNERS WITHIN THE STATE R.O.W. WHERE THE MONUMENTS HAVE BEEN FOUND OR RELOCATED BY SURVEY.

01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.	08-21-13	CHANGED MIN. DIAMETER	R.D.
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.	08-25-15	REVISED MATERIAL	R.D.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

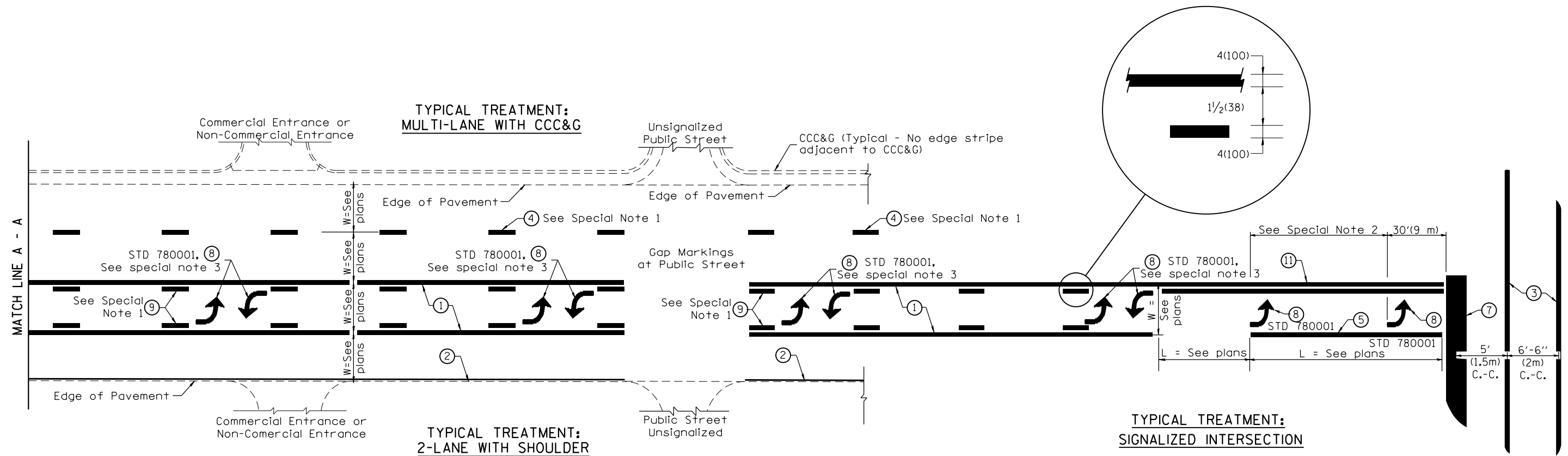
NOT TO SCALE

**DISTRICT 4 STANDARDS  
PERMANENT SURVEY TIE &  
PERMANENT SURVEY MARKERS TY.I - TY.II**

CADD STD. 667101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	42
CONTRACT NO. 68897				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DESIGNER NOTES:  
1. Include State Standard 780001 (Typical Pavement Markings)



**FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE  
WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION**

**TYPICAL PAVEMENT MARKING LEGEND**

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)  
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

**SPECIAL NOTES**

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
  - A. A minimum of two (2) arrows is required.
  - B. The maximum spacing between arrows is 80' (24 m).
  - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
  - A. A minimum of two (2) arrow pairs is required.
  - B. The maximum spacing between arrow pairs is 200' (61 m).
  - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
  - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

**GENERAL NOTES**

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
4. Areas are grooved 1" beyond each edge for the following symbols:
  - Through Arrow= 14.8 sq. ft.
  - Large Left or Right Arrow= 21.9 sq. ft.
  - 2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
  - Wrong Way Arrow= 29.5 sq. ft.
  - Railroad Crossing Symbol= 69.8 sq. ft.
 (For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.D.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.			
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

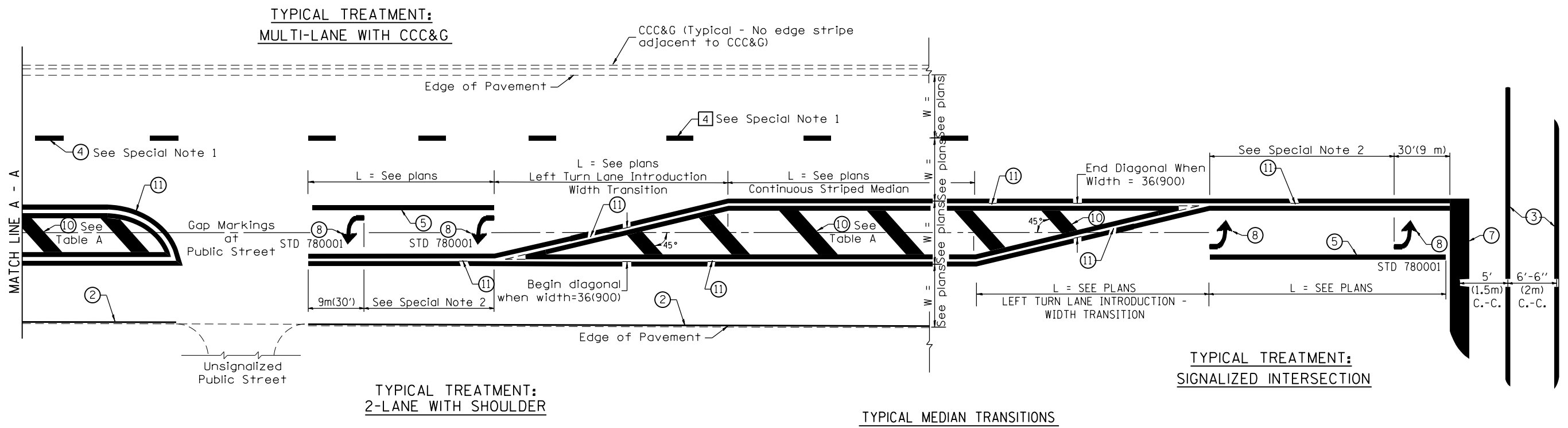
NOT TO SCALE

**DISTRICT 4 STANDARDS  
TYPICAL PAVEMENT MARKINGS**

SHT. 1 OF 2  
CADD STD. 780001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0022	(128B)BR-2	STARK	52	43
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 68897	

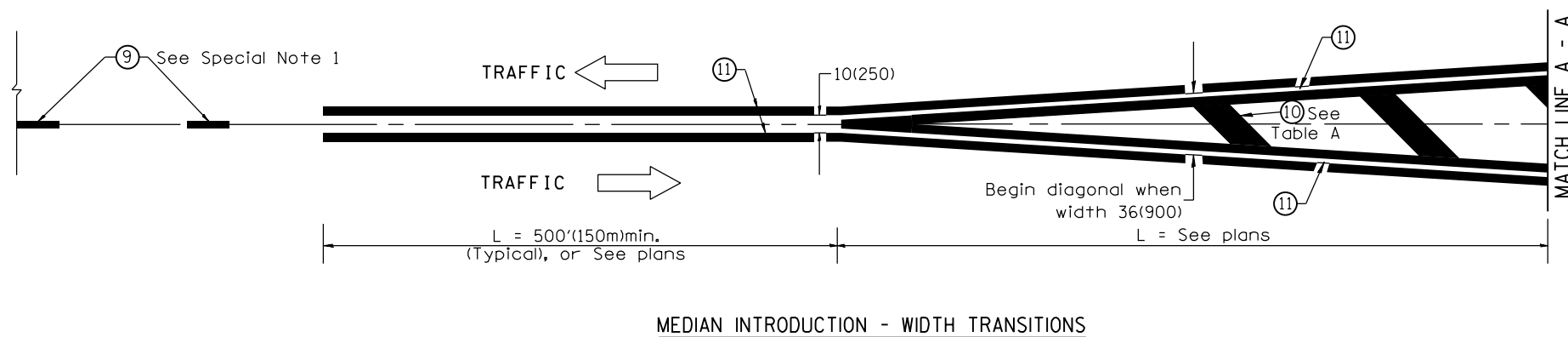




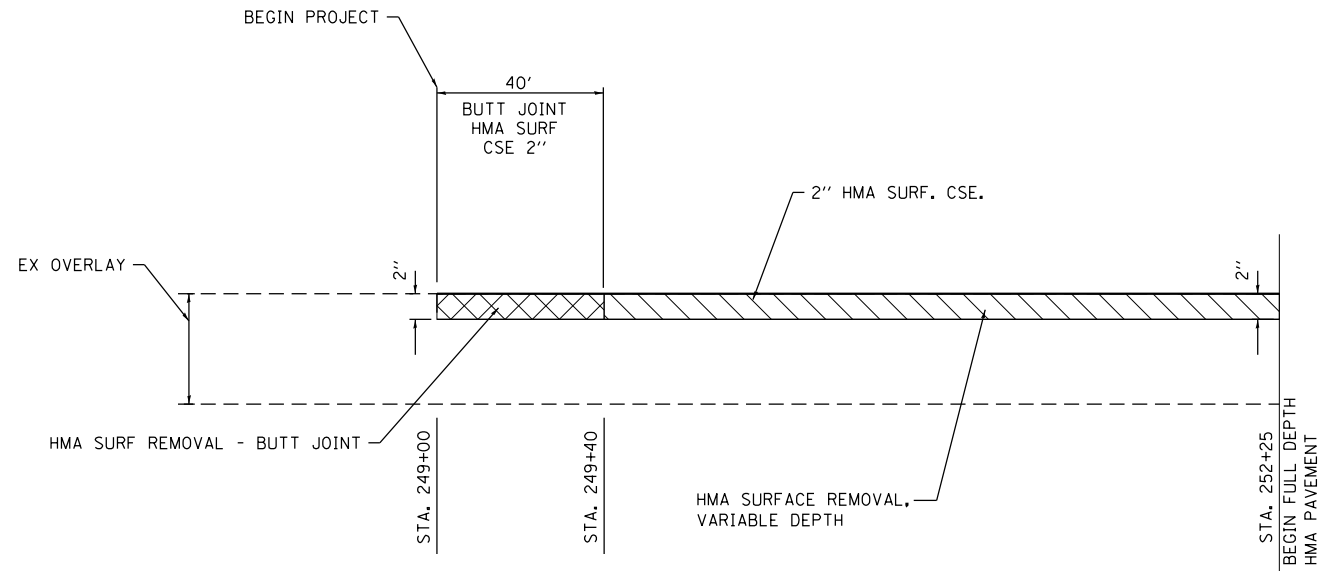
**FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE**

**TABLE A**  
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



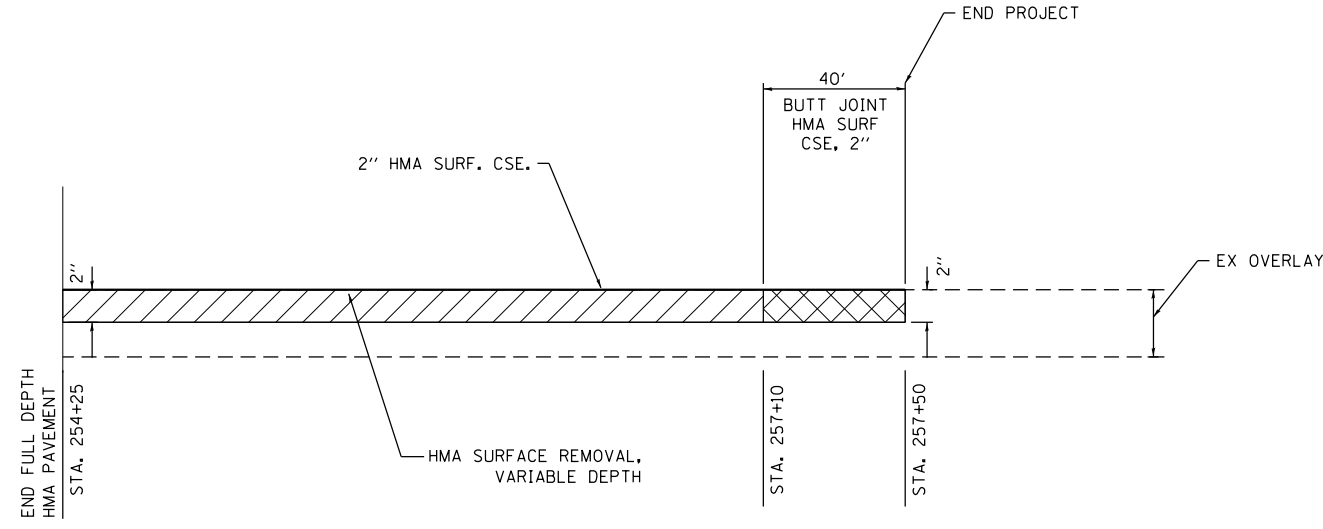
All dimensions are in inches (millimeters) unless otherwise noted.



**HMA PAVEMENT THICKNESS TAPER DETAIL – NORTH OF BRIDGE**  
NOT TO SCALE

**LEGEND**

	HMA SURFACE REMOVAL BUTT JOINT
	HMA SURFACE REMOVAL, VARIABLE DEPTH



**HMA PAVEMENT THICKNESS TAPER DETAIL – SOUTH OF BRIDGE**  
NOT TO SCALE

MODEL: Default; FILE NAME: I:\1229048\1\10 15 5\0808-0012 IL 78 over Walnut Creek Trib. Phase 2\CADD\Microstation\CADD Drawings\0468897-sh-contdetail.dgn



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PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/7/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION DETAILS  
IL 78 OVER WALNUT CREEK TRIBUTARY**

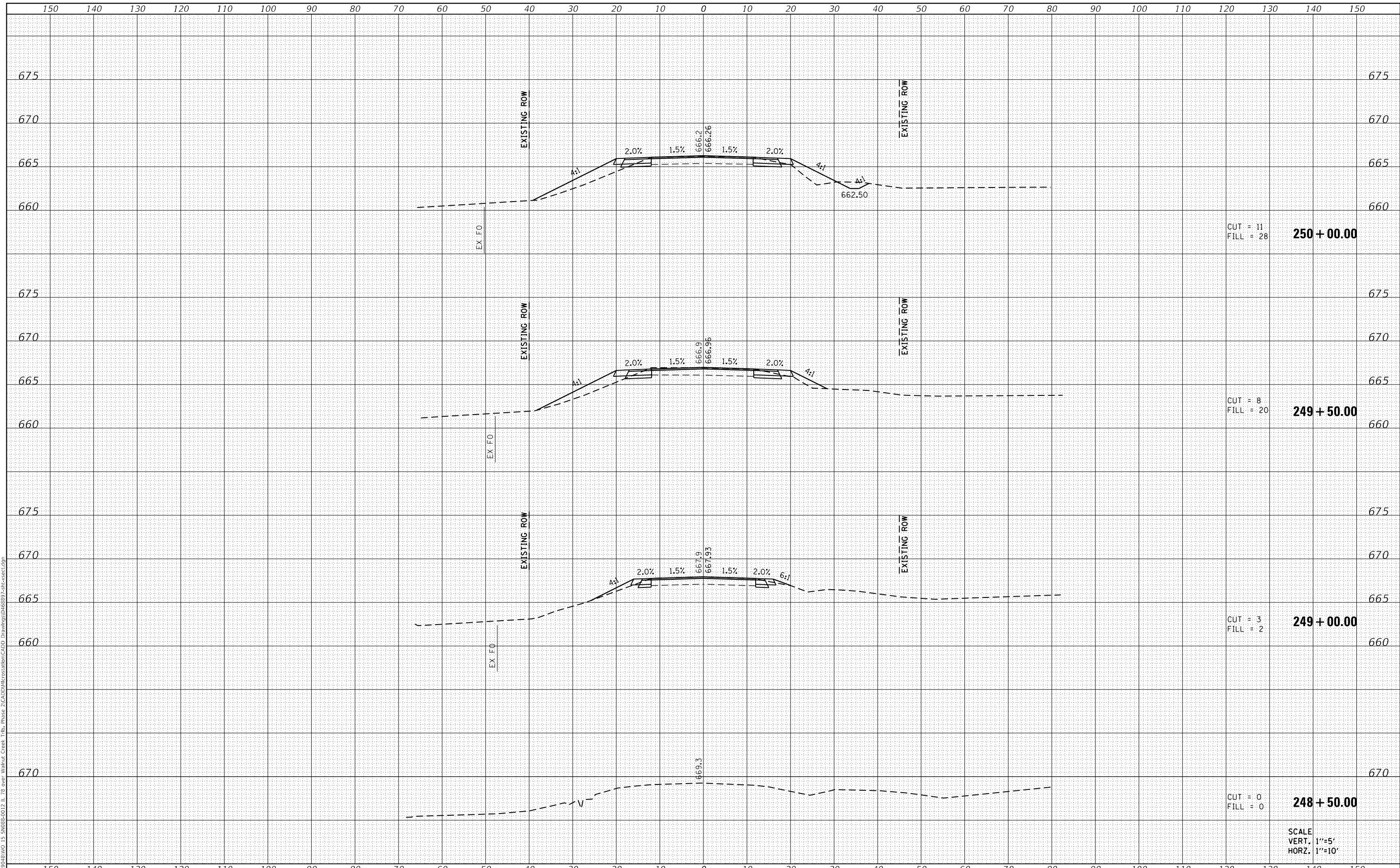
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CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

DATE	
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FINAL SURVEY NO.	
NOTE BOOK NO.	
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NOTE BOOK NO.	
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**OATES ASSOCIATES**  
 ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115

USER NAME = stephanie.jee	DESIGNED -	REVISED -
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PLOT DATE = 8/7/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

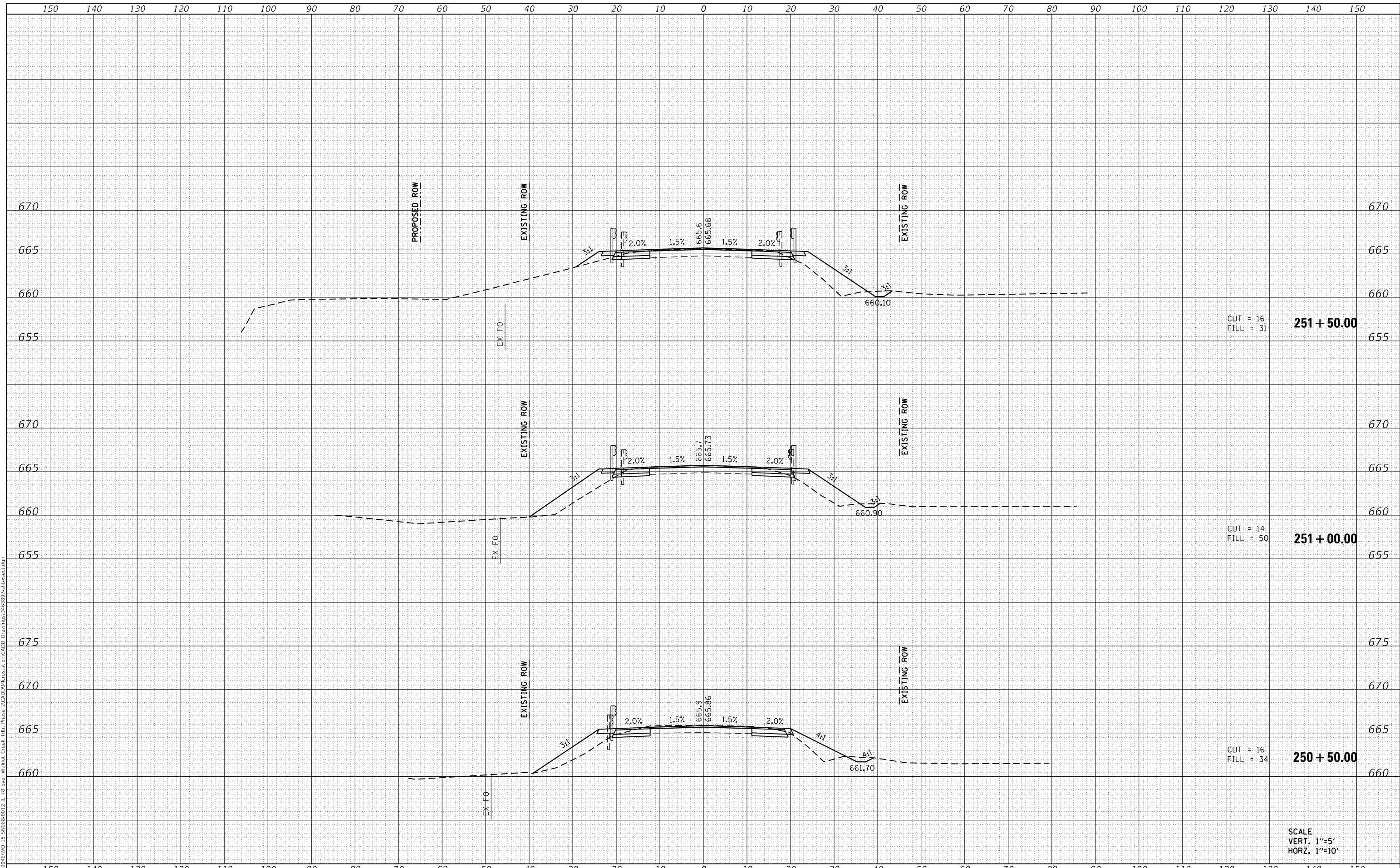
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 STA. 248+50.00 TO STA. 250+00.00

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 46
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

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

ORIGINAL SURVEY NO.	SURVEYED	DATE
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AREAS CHECKED	TEMPLATE	
	AREAS CHECKED	

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CUT = 16  
 FILL = 31  
**251 + 50.00**

CUT = 14  
 FILL = 50  
**251 + 00.00**

CUT = 16  
 FILL = 34  
**250 + 50.00**

SCALE  
 VERT. 1"=5'  
 HORZ. 1"=10'



USER NAME = stephanie.jee	DESIGNED -	REVISED -
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

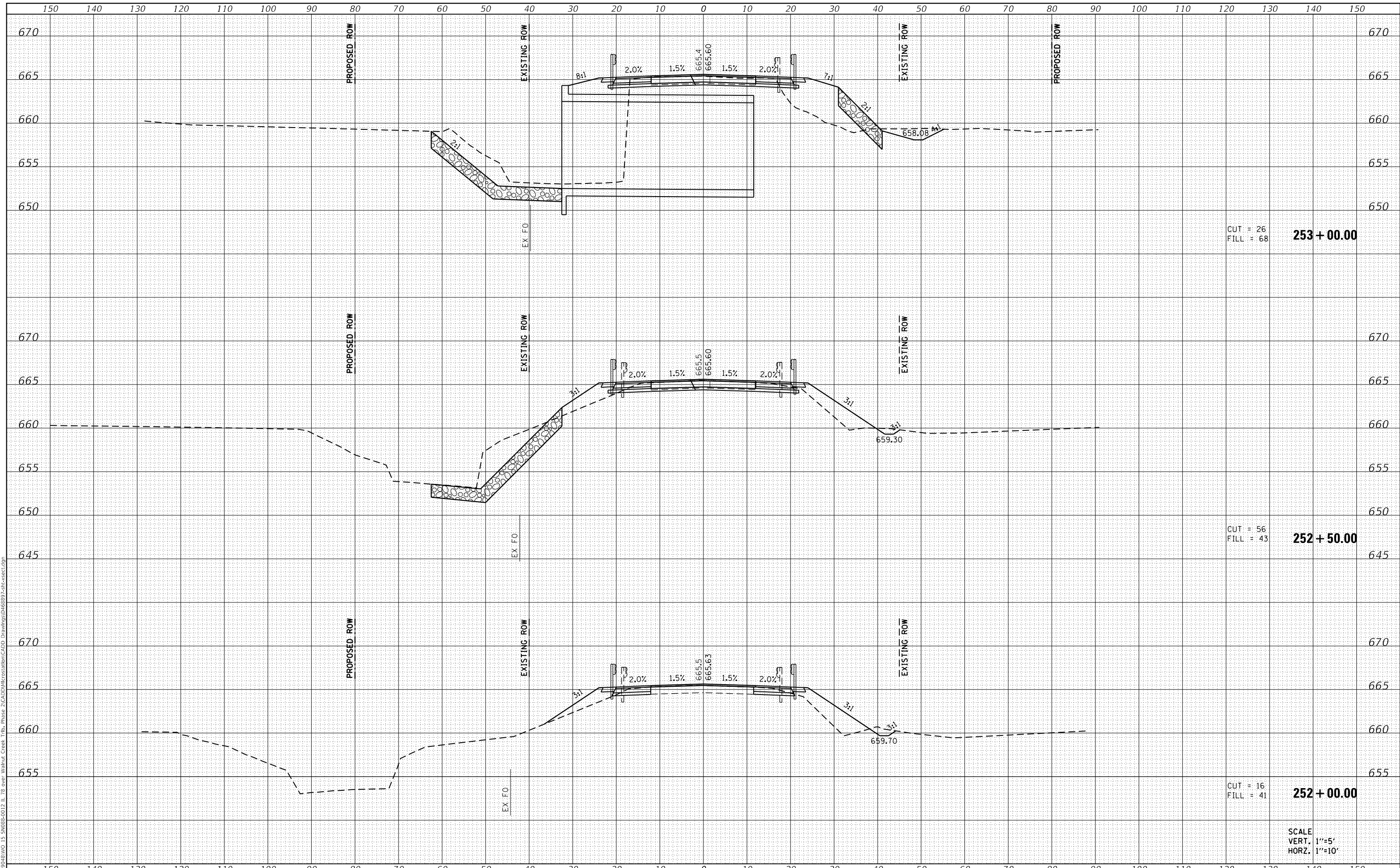
CROSS SECTIONS	
IL 78 OVER WALNUT CREEK TRIBUTARY	
SCALE: 1" = 10'	SHEET 2 OF 7 SHEETS
STA. 250+50.00	TO STA. 251+50.00

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 47
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	

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NOTE BOOK	PLOTTED
NO.	TEMPLATE
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DATE	
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	AREAS CHECKED

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

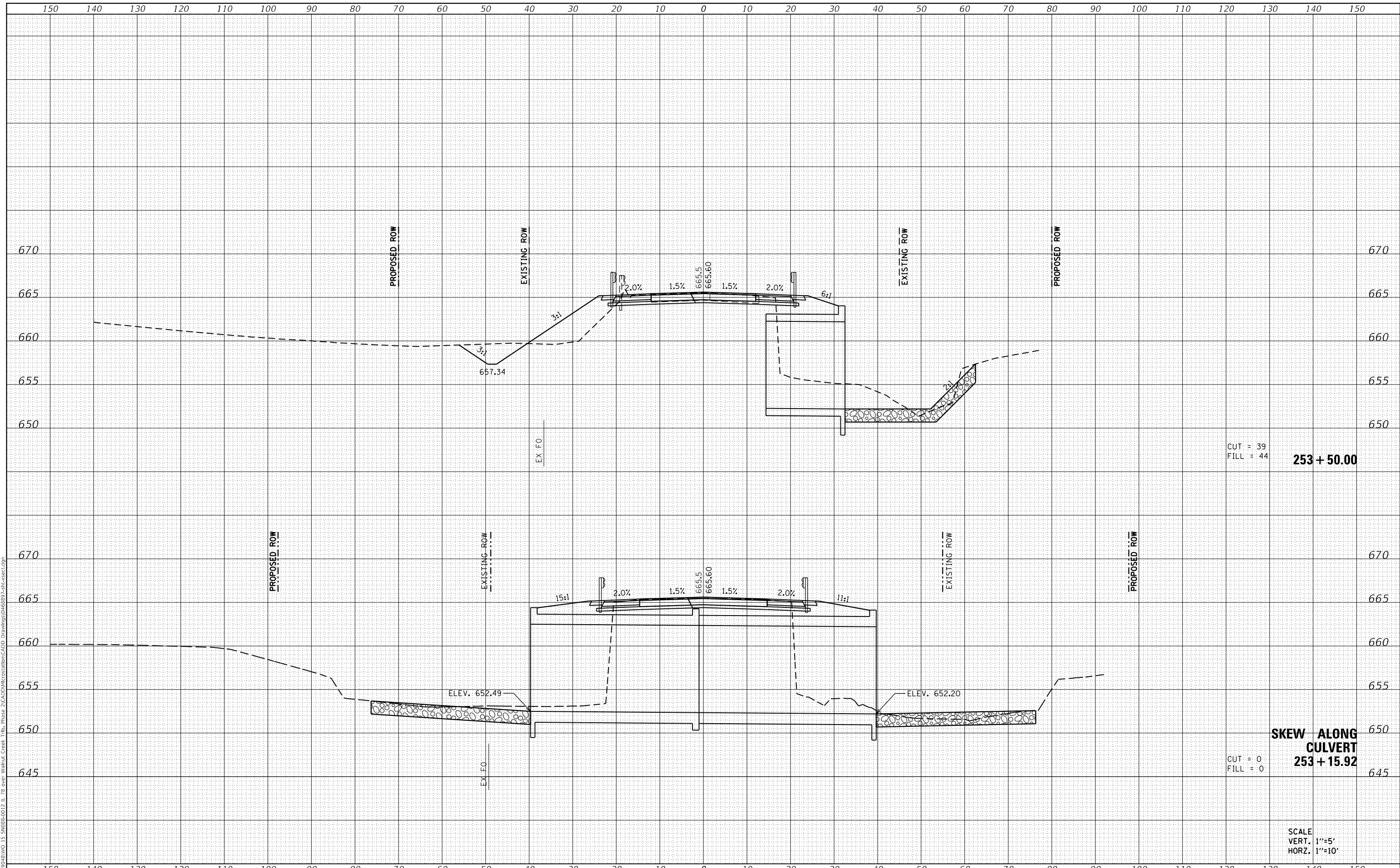
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<b>IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: 1" = 10'	SHEET 3 OF 7 SHEETS	STA. 252+00.00 TO STA. 253+00.00	

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 48
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68897	

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: 1" = 10'    SHEET 4 OF 7 SHEETS    STA. 253+15.92 TO STA. 253+50.00

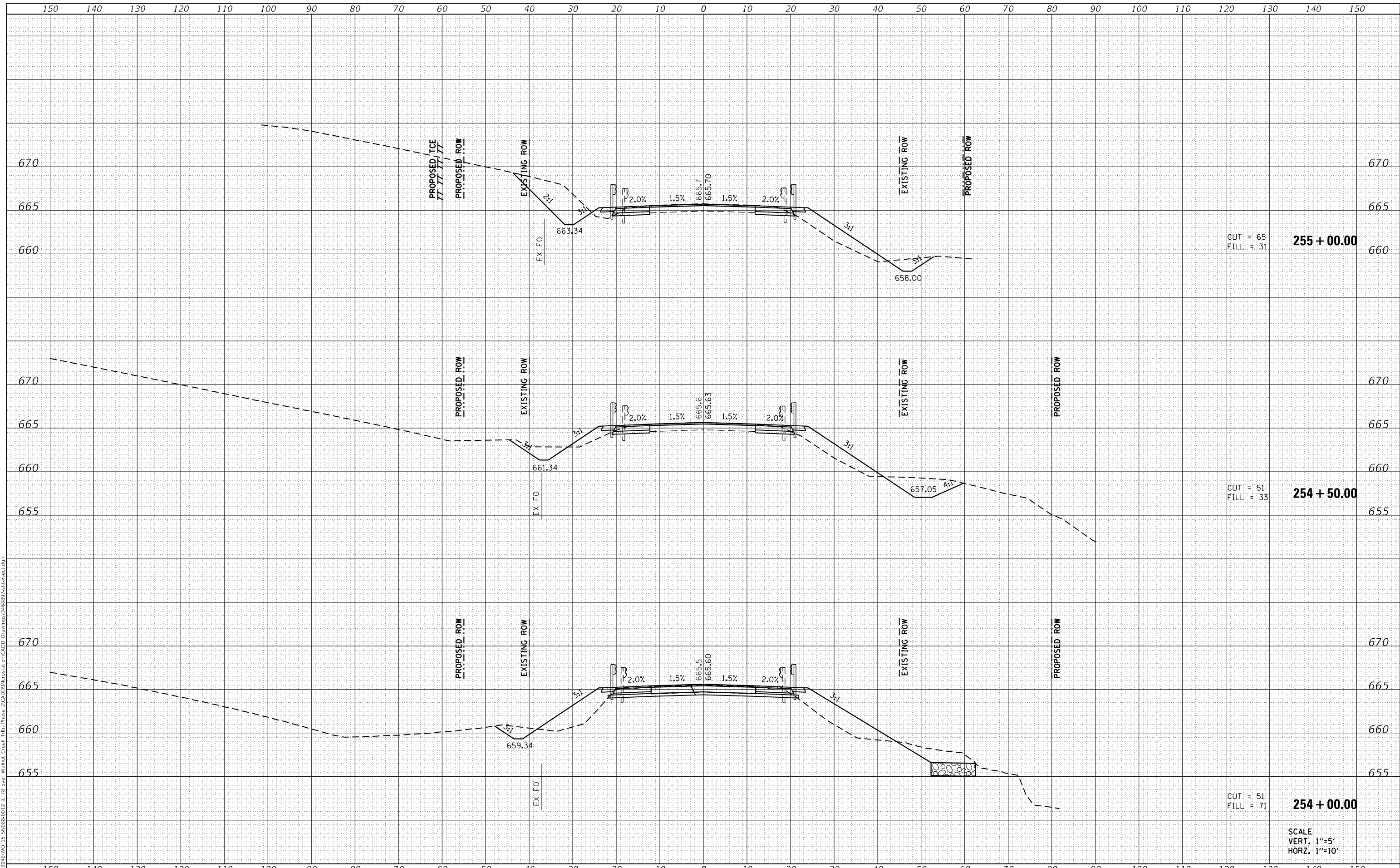
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CONTRACT NO. 68897				ILLINOIS FED. AID PROJECT



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

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NOTE BOOK	PLOTTED
NO.	TEMPLATE
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SCALE  
 VERT. 1"=5'  
 HORZ. 1"=10'



USER NAME = stephanie.jee	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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PLOT DATE = 8/7/2020	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

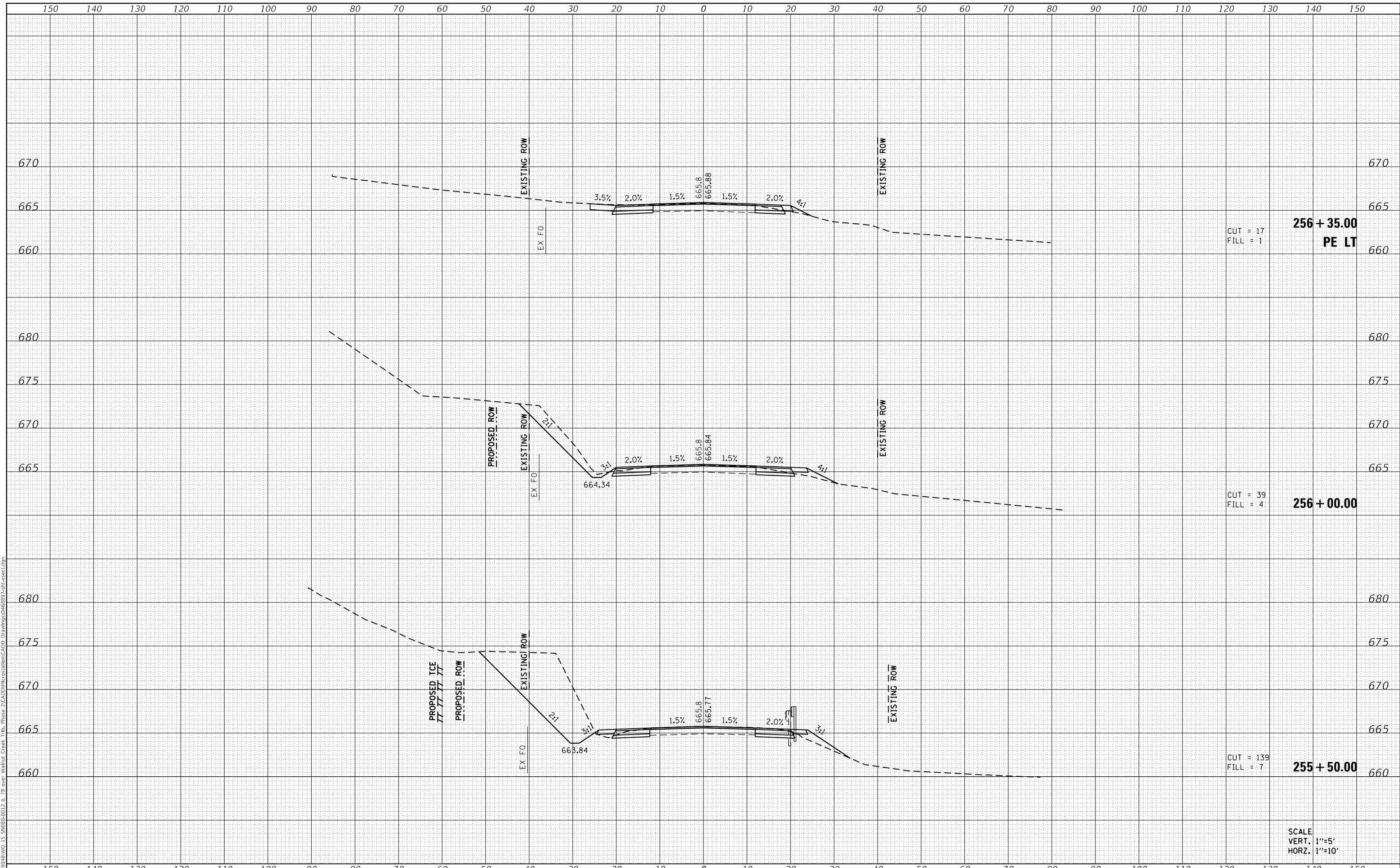
<b>CROSS SECTIONS</b>			
<b>IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: 1" = 10'	SHEET 5 OF 7 SHEETS	STA. 254+00.00 TO STA. 255+00.00	

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 50
CONTRACT NO. 68897				
ILLINOIS FED. AID PROJECT				

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	AREAS CHECKED

DATE	
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NOTE BOOK	PLOTTED
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	AREAS CHECKED
	AREAS CHECKED

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 FILL = 1  
**256 + 35.00**  
**PE LT**

CUT = 39  
 FILL = 4  
**256 + 00.00**

CUT = 139  
 FILL = 7  
**255 + 50.00**

SCALE  
 VERT. 1"=5'  
 HORZ. 1"=10'



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	DRAWN -	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/7/2020	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS**  
**IL 78 OVER WALNUT CREEK TRIBUTARY**

SCALE: 1" = 10' SHEET 6 OF 7 SHEETS STA. 255+50.00 TO STA. 256+35.00

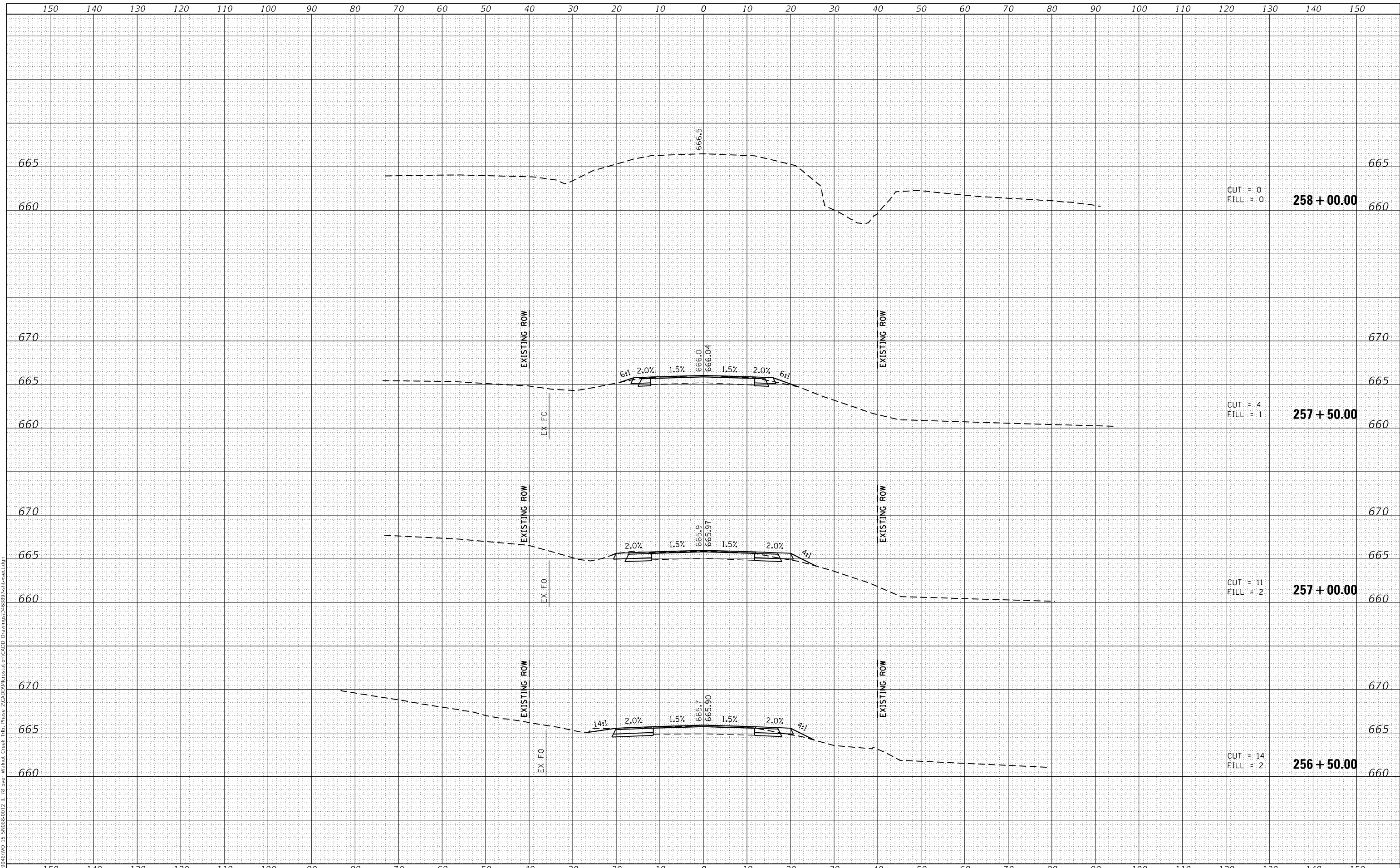
F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 51
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	



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

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

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PLOT DATE = 8/7/2020	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CROSS SECTIONS</b>			
<b>IL 78 OVER WALNUT CREEK TRIBUTARY</b>			
SCALE: 1" = 10'	SHEET 7 OF 7 SHEETS	STA. 256+50.00 TO STA. 258+00.00	

F.A.P. RTE. 0022	SECTION (128B)BR-2	COUNTY STARK	TOTAL SHEETS 52	SHEET NO. 52
CONTRACT NO. 68897			ILLINOIS FED. AID PROJECT	