

04-27-2018 LETTING ITEM 081

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	48	1
		ILLINOIS	CONTRACT NO. 66E24	

INDEX OF SHEETS

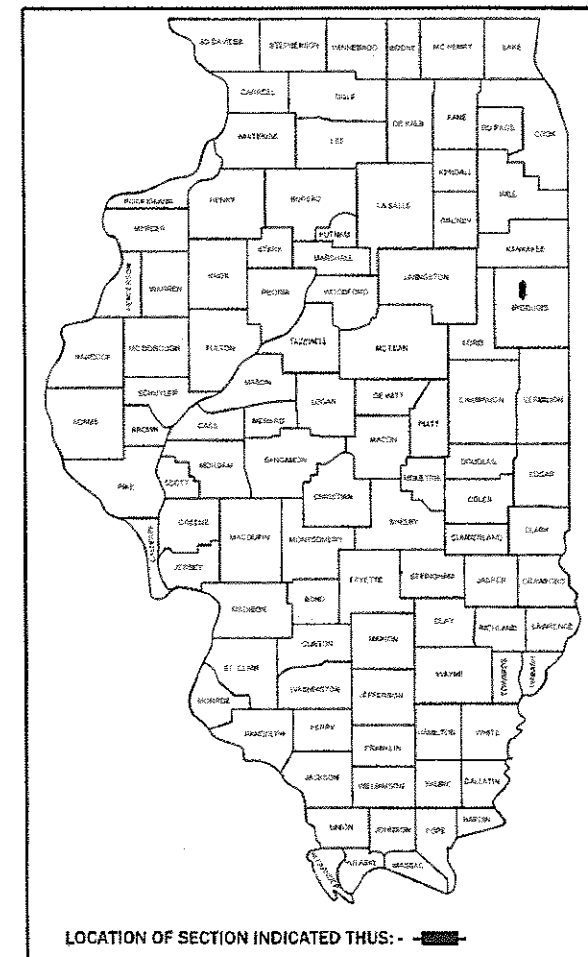
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FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

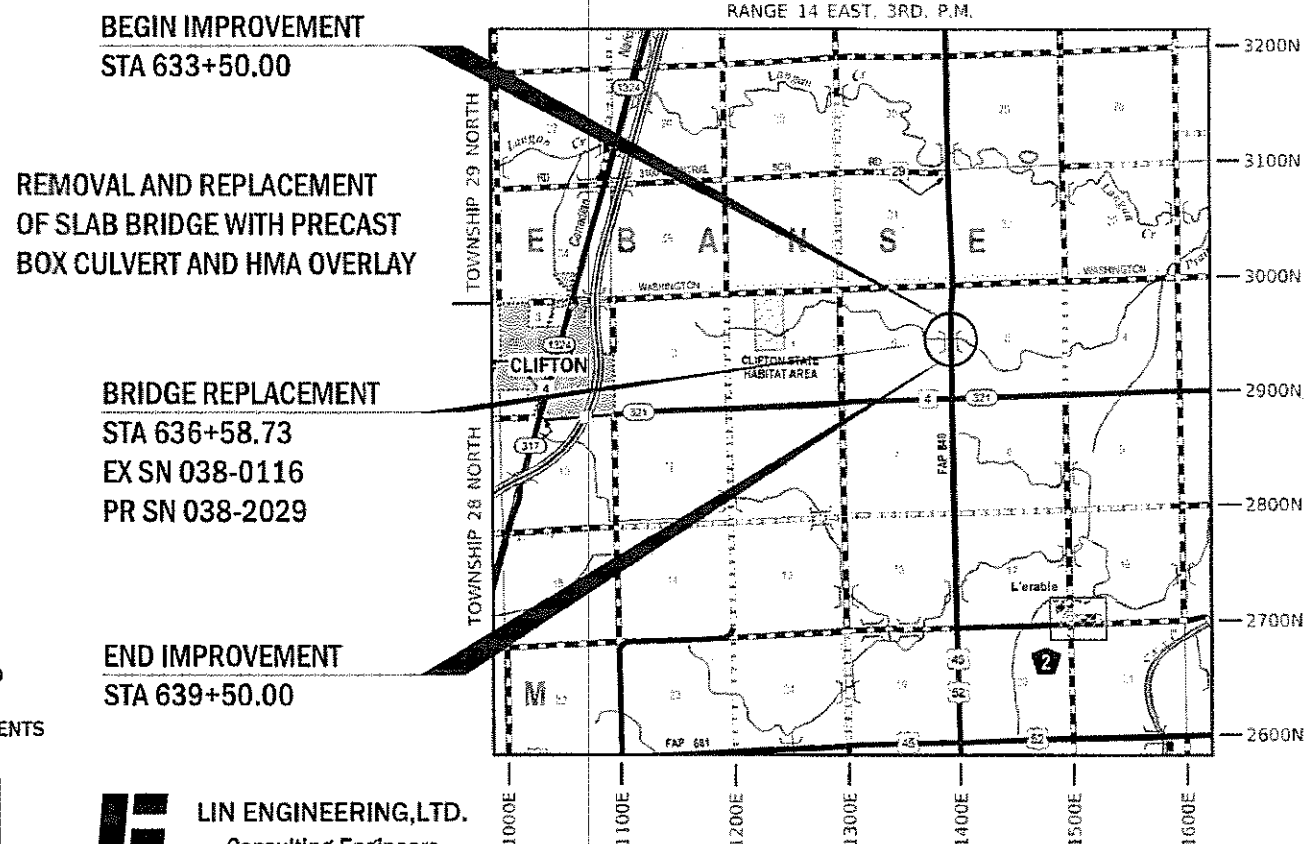
FAP ROUTE 840 (US 45/52)
SECTION (138 BR-1)BR
PROJECT STP-TPOQ(367)
STRUCTURE REPLACEMENT
IROQUOIS COUNTY

P-93-019-15
D-93-044-17

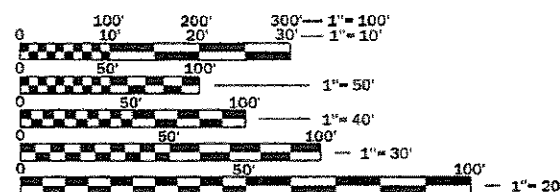


C-93-079-17

RANGE 14 EAST, 3RD. P.M.



FUNCTIONAL CLASSIFICATION
RURAL MINOR ARTERIAL
2015 ADT = 3,700
P.V.=84.2% S.U.=3.3% M.U.=12.5%



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.

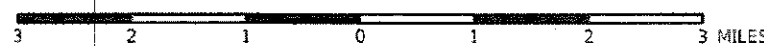
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: BRAD DUNCAN, PE
UNIT CHIEF: JESSY JEAN
CONTRACT NO. 66E24

Lin Engineering, Ltd.
Consulting Engineers
Westmont, Illinois

Farnsworth Group
2709 McGraw Drive
Bloomington, Illinois 61704
309/663-8435, 309/663-1571 fax

LOCATION MAP



GROSS LENGTH = 600 FT. = 0.114 MILE
NET LENGTH = 600 FT. = 0.114 MILE



SIGNATURE: *Eric R. Bachman*
EXPIRES: 11/30/2019
DATE: 01/12/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED: 2-1-2018
K. Marshall
REGIONAL ENGINEER

Max 23 2018
gus
ENGINEER OF DESIGN AND ENVIRONMENT

Mar 23 2018
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

1\2016\0160134.01 - LIN IDOT DISTRICT 3 US 45-52

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
630001-12	STEEL PLATE BEAM GUARDRAIL
630101-10	STRONG POST GUARDRAIL ATTACHED TO CULVERT
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-08	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
642006	SHOULDER RUMBLE STRIPS, 8 IN.
666001-01	RIGHT-OF-WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-07	TRAFFIC CONTROL DEVICES
701001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

THE CONTRACTOR SHALL VERIFY AND CONFIRM WITH THE ENGINEER PRIOR TO ORDERING PIPE DRAIN 12" AND STORM SEWER PROTECTED, CLASS A, 12" MATERIALS.

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

- FRONTIER COMMUNICATIONS
- EASTERN ILLINI ELECTRIC

THE CONTRACTOR SHALL CONTACT JULIE, AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

COMMITMENTS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

REVIEWED BY: Paul Brouil (e)
DISTRICT STUDIES & PLANS ENGINEER

DATE: 02/02/18

EXAMINED BY: Ryan Vidage AH
DISTRICT CONSTRUCTION ENGINEER

Michael A. Shea
DISTRICT MATERIALS ENGINEER

Tom Ferguson
DISTRICT OPERATIONS ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES
OF CONSTRUCTION: _____

INSPECTORS: _____

HMA MIXTURE REQUIREMENT TABLE

LOCATION(S):	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	HMA LEVEL BINDER	HMA SURFACE & TOP LIFT SHOULDER	SHLD BOTTOM LIFTS & BASE COURSE	HMA BINDER (GRADE RAISE)
BINDER GRADE (PG):	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE:	MIXTURE C			
MIXTURE WEIGHT:	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN	112.0 LBS/SQ YD/IN
QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA	QC/QA
SUBLOT SIZE:	N/A	N/A	N/A	N/A
DENSITY TEST METHOD:	SATISFACTION OF ENGINEER	CORES	CORES	CORES

CONTRACT 66E24

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FEDERAL = 80%	STATE = 20%
				0010	S.N. 038-2029
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	57	57	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	70	70	
20200100	EARTH EXCAVATION	CU YD	1,124	1,124	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	49	49	
20400800	FURNISHED EXCAVATION	CU YD	1,514	1,514	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	456	456	
25000210	SEEDING, CLASS 2A	ACRE	1.5	1.5	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	136	136	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	136	136	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	136	136	
25100630	EROSION CONTROL BLANKET	SQ YD	6,970	6,970	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	432	432	
28000305	TEMPORARY DITCH CHECKS	FOOT	144	144	
28000400	PERIMETER EROSION BARRIER	FOOT	1,180	1,180	

* SPECIALTY ITEM

Farnsworth GROUP
 2709 McGRATH DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-8435 / info@fw.com

USER NAME = jaarl	DESIGNED - JJO	REVISED -
PLOT SCALE = 2.0000" / 1"	DRAWN - JJO	REVISED -
PLOT DATE = 2/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)
 SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	3
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FEDERAL = 80%	STATE = 20%
				0010	
				S.N. 038-2029	
28100107	STONE RIPRAP, CLASS A4	SQ YD	549	549	
28200200	FILTER FABRIC	SQ YD	549	549	
31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	184	184	
31100910	SUBBASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	195	195	
35501317	HOT-MIX ASPHALT BASE COURSE, 8 1/4"	SQ YD	184	184	
35600708	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	SQ YD	690	690	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	794	794	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3,124	3,124	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	1	1	
40600525	LEVELING BINDER (HAND METHOD), N50	TON	1	1	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	148	148	
40600990	TEMPORARY RAMP	SQ YD	36	36	
40603080	HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N50	TON	599	599	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	230	230	

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* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FEDERAL = 80%	STATE = 20%
				0010	S.N. 038-2029
44000100	PAVEMENT REMOVAL	SQ YD	324	324	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	2,371	2,371	
44004250	PAVED SHOULDER REMOVAL	SQ YD	32	32	
48101600	AGGREGATE SHOULDERS, TYPE B, 8"	SQ YD	284	284	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	489	489	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1	
51500100	NAME PLATES	EACH	1	1	
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	261	261	
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	2	
60100945	PIPE DRAIN 12"	FOOT	50	50	
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	100	100	
61100605	MISCELLANEOUS CONCRETE	CU YD	6	6	
61101013	STORM SEWER PROTECTED, CLASS A, 12"	FOOT	50	50	
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA.	EACH	2	2	

M

* SPECIALTY ITEM

Farnsworth GROUP
 2709 McGRAN DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-8435 / info@f-w.com

USER NAME = jeanj	DESIGNED - JJO	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 2/1/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)
 SUMMARY OF QUANTITIES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	5
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FEDERAL = 80%	STATE = 20%
				0010	S.N. 038-2029
61133200	FIELD TILE JUNCTION VAULTS, 3' DIA.	EACH	2	2	
61133300	FIELD TILE JUNCTION VAULTS, 4' DIA.	EACH	2	2	
61140200	STORM SEWERS (SPECIAL), 12"	FOOT	50	50	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	187.5	187.5	
* 63000030	STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	62.5	62.5	
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	722	722	
64200108	SHOULDER RUMBLE STRIPS, 8"	FOOT	960	960	
* 66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	8	8	
* 66700205	PERMANENT SURVEY MARKERS, TYPE 1	EACH	1	1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	LSUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	1	

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* SPECIALTY ITEM



USER NAME = [ear]	DESIGNED - JJO	REVISED -
	DRAWN - JJO	REVISED -
PLOT SCALE = 2,000' / 1"	CHECKED - PSA/ERB	REVISED -
PLOT DATE = 2/12/2018	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)
SUMMARY OF QUANTITIES

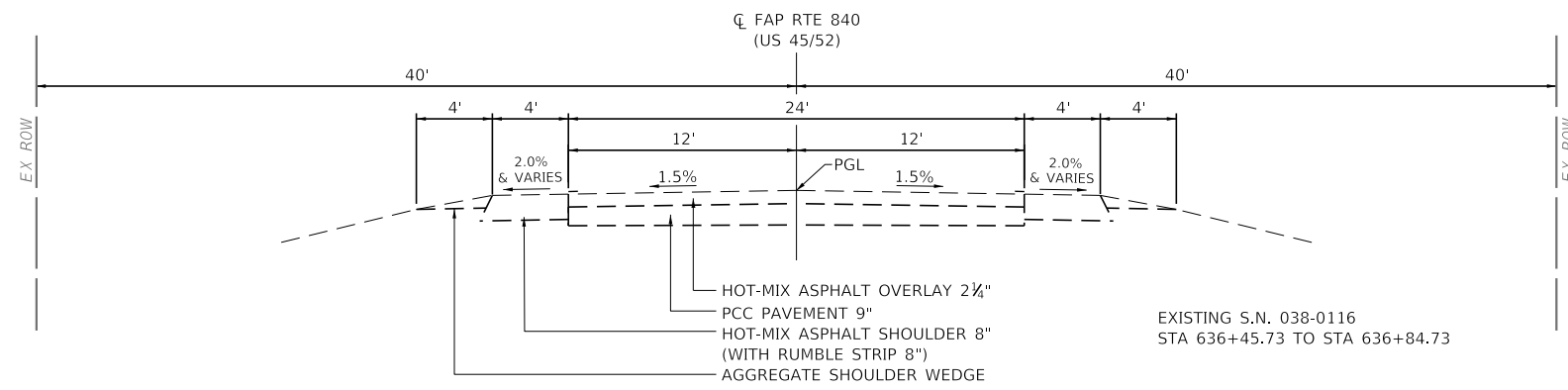
SCALE: NTS SHEET 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	6
CONTRACT NO. 66E24			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				FEDERAL = 80%	STATE = 20%
				0010	S.N. 038-2029
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	LSUM	1	1	
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	LSUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	15	15	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	72	72	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	24	24	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	875	875	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	875	875	
70600280	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3	EACH	2	2	
70600370	IMPACT ATTENUATORS, RELOCATE (SEVERE USE, NARROW), TEST LEVEL 3	EACH	2	2	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2,400	2,400	
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	300	300	

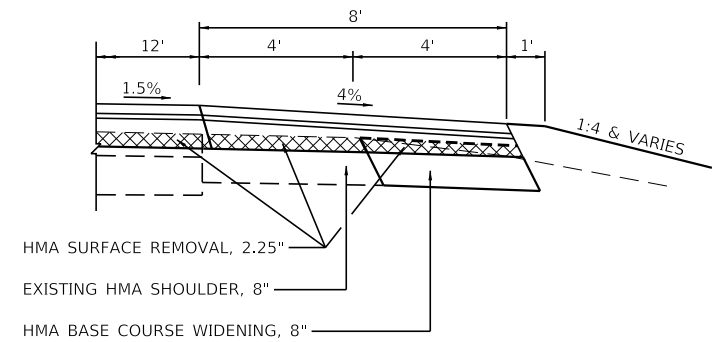
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* SPECIALTY ITEM



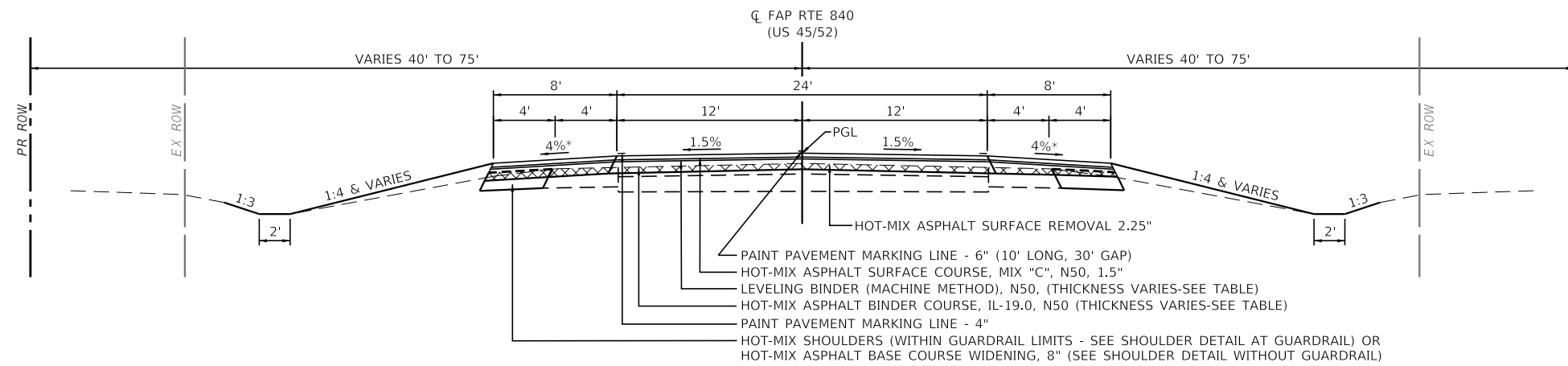
EXISTING TYPICAL CROSS SECTION

(LOOKING SOUTH)
F.A.P. RTE. 840 (U.S. 45/52)
STA 633+50 TO STA 639+50



SHOULDER DETAIL WITHOUT GUARDRAIL

F.A.P. RTE. 840 (U.S. 45/52)

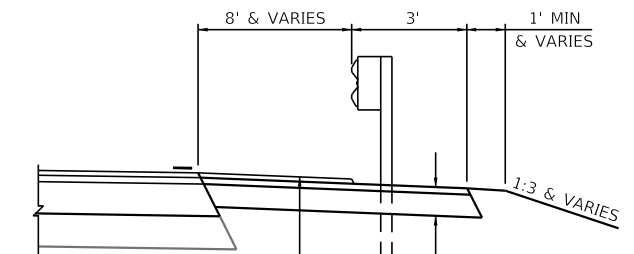


PROPOSED TYPICAL CROSS SECTION 1

(LOOKING SOUTH)
F.A.P. RTE. 840 (U.S. 45/52)
STA 633+50 TO STA 636+25.47
STA 636+91.91 TO STA 639+50

* LT SHOULDER SLOPE
TRANSITIONS FROM
STA 633+50.00 (EX 2.0% TYP)
TO STA 633+70.00 (4.0%)
AND STA 639+30.00 (4.0%)
TO STA 639+50.00 (EX 2.0% TYP)

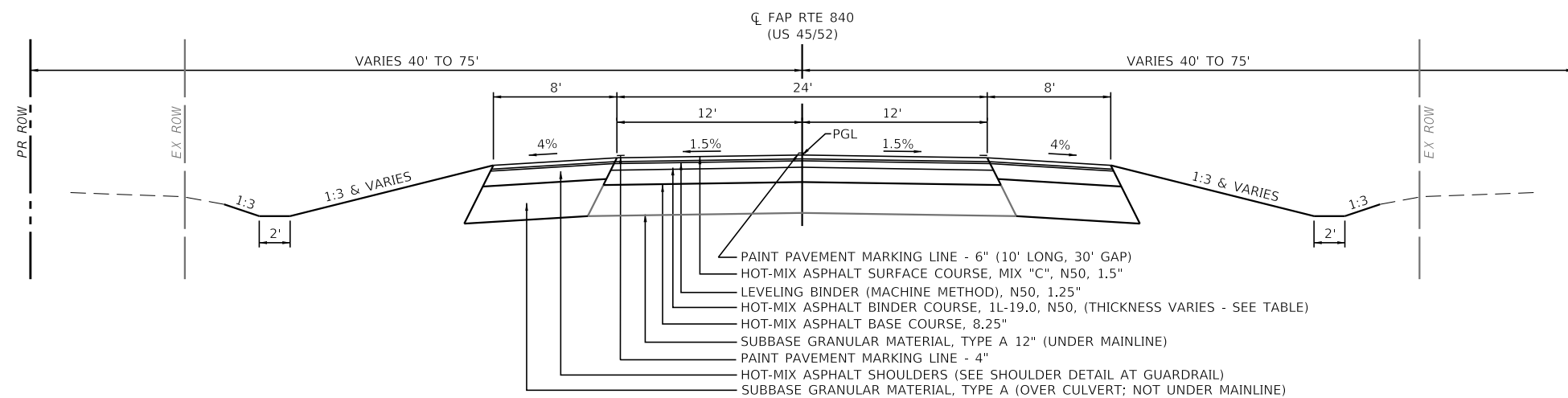
* RT SHOULDER SLOPE
TRANSITIONS FROM
STA 633+50.00 (EX 2.0% TYP)
TO STA 633+70.00 (4.0%)
AND STA 639+30.00 (4.0%)
TO STA 639+50.00 (EX 2.0% TYP)



HOT-MIX ASPHALT SURFACE COURSE, 1.5"
STEEL PLATE BEAM GUARDRAIL, TYPE A,
6 FOOT POSTS
HOT-MIX ASPHALT SHOULDERS
(HMA BINDER COURSE / HMA SURFACE COURSE)

SHOULDER DETAIL AT GUARDRAIL

F.A.P. RTE. 840 (U.S. 45/52)



PROPOSED TYPICAL CROSS SECTION 2

(LOOKING SOUTH)
F.A.P. RTE. 840 (U.S. 45/52)
STA 636+25.47 TO STA 636+91.91

GUARDRAIL	LOCATION
TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	STA 635+18.10 RT TO STA 635+68.10 RT
	STA 635+74.35 LT TO STA 636+24.35 LT
	STA 636+93.10 RT TO STA 637+43.10 RT
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STA 637+49.35 LT TO STA 637+99.35 LT
	STA 635+68.10 RT TO STA 636+43.10 RT
	STA 636+24.35 LT TO STA 636+43.10 LT
	STA 636+74.35 RT TO STA 636+93.10 RT
STRONG POST GUARDRAIL ATTACHED TO CULVERT	STA 636+74.35 LT TO STA 637+49.35 LT
	STA 636+43.10 RT TO STA 636+74.35 RT
	STA 636+43.10 LT TO STA 636+74.35 LT

TREE REMOVAL			
LOCATION		TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
		20100110	20100210
STATION	OFFSET	UNIT	UNIT
632+97.00	35.0' RT		40
633+92.15	39.1' LT	6	
634+02.02	39.1' LT	8	
636+10.00	34.3' RT		30
636+11.00	27.7' RT	7	
636+11.16	37.5' LT	6	
636+13.30	27.7' RT	6	
636+13.40	29.5' RT	7	
637+03.70	48.7' RT	8	
637+14.70	34.5' RT	9	
TOTAL		57	70

SCHEDULE OF EARTHWORK				
LOCATION	EARTH EXCAVATION	ESTIMATED CUT MATERIAL FOR EMBANKMENT ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	FURNISHED EXCAVATION
	20200100			20400800
STATION TO STATION	CU YD	CU YD	CU YD	CU YD
631+88.00 TO 633+50.00 (TEMP. WIDENING)	38	28		
633+00.00 TO 640+00.00 (MAINLINE IMPROVEMENT)	1,049	787	2,357	1,514
639+50.00 TO 641+12.00 (TEMP. WIDENING)	37	28		
TOTAL	1,124	843	2,357	1,514

LANDSCAPING ITEMS					SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
					25000210	25000400	25000500	25000600
STATION	OFFSET	TO	STATION	OFFSET	ACRE	POUND	POUND	POUND
633+00.00	LT		640+00.00	LT	0.75	68	68	68
633+00.00	RT		640+00.00	RT	0.75	68	68	68
TOTAL					1.5	136	136	136

SCHEDULE OF EROSION CONTROL					
LOCATION	EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	
	25100630	28000250	28000305	28000400	
STATION TO STATION	OFFSET	SQ YD	POUND	FOOT	FOOT
633+00.00 TO 640+00.00	LT	3,485	216		
633+00.00 TO 640+00.00	RT	3,485	216		
633+10.00 TO 636+33.00	RT				329
633+10.00 TO 636+33.00	LT				329
634+00.00	LT/RT			24	
635+00.00	LT/RT			24	
636+20.00	LT/RT			24	
636+84.00 TO 639+40.00	LT				261
636+84.00 TO 639+40.00	RT				261
637+00.00	LT/RT			24	
638+00.00	LT/RT			24	
639+00.00	LT/RT			24	
TOTAL		6,970	432	144	1,180

REMOVAL ITEMS										
LOCATION	PAVMENT REMOVAL	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT REMOVAL, 2 1/4"	GUARDRAIL REMOVAL	RAISED REFLECTIVE PAVMENT MARKER REMOVAL	APPROACH SLAB REMOVAL				
	44000100	44004250	44000158	63200310	78300200	Z0004552				
STATION	OFFSET	TO	STATION	OFFSET	SQ YD	SQ YD	SQ YD	FOOT	EACH	SQ YD
631+88.00	RT		633+50.00	RT	72					
631+88.00	LT		633+50.00	LT	72					
633+50.00			636+25.50				1224			
633+50.00			639+50.00						9	
634+31.70	23.9' RT		637+91.00	22.9' RT				360		
635+16.70	20.0' LT		638+78.10	22.7' RT				362		
635+57.89	LT		638+15.81	LT						
636+25.47			636+43.73		20	16				37
636+73.73			636+91.91		20	16				38
636+91.91			639+50.00				1147			
639+50.00	LT		641+03.00	LT	68					
639+50.00	RT		641+12.00	RT	72					
TOTAL					324	32	2371	722	9	75

PAVEMENT ITEMS												
LOCATION	HOT-MIX ASPHALT BASE COURSE, 8 1/4"	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	LEVELING BINDER (HAND METHOD), N50	LEVELING BINDER (MACHINE METHOD), N50	TEMPORARY RAMP	HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	HOT-MIX ASPHALT SHOULDERS	SHOULDER RUMBLE STRIPS, 8"
	35501317	35600708	40600275	40600290	40600400	40600525	40600625	40600990	40603080	40603310	48203100	64200108
STATION TO STATION	SQ YD	SQ YD	POUND	POUND	TON	TON	TON	SQ YD	TON	TON	TON	FOOT
631+88.00 TO 636+43.73 (RT)		203										
631+88.00 TO 635+57.90 (LT)		164										
633+50.00 TO 636+25.47									103			
633+50.00 TO 639+50.00				2,671	1	1	148	36	599			960
635+01.64 TO 637+59.56 (RT)				226							245	
635+57.89 TO 638+15.81 (LT)				227							244	
636+25.47 TO 636+91.91	184		794							30		
636+73.73 TO 641+12.00 (RT)		195										
636+91.91 TO 639+50.00										97		
638+15.80 TO 641+00.00 (LT)		128										
TOTAL	184	690	794	3,124	1	1	148	36	599	230	489	960

AGGREGATE ITEMS			
LOCATION	SUBBASE GRANULAR MATERIAL, TYPE A	SUBBASE GRANULAR MATERIAL, TYPE A, 12"	AGGREGATE SHOULDERS, TYPE B, 8"
	31100100	31100910	48101600
STATION TO STATION	TON	SQ YD	SQ YD
631+88.00 TO 633+50.00 (RT)			72
631+88.00 TO 633+50.00 (LT)			72
636+25.47 TO 636+91.91	184	195	
639+50.00 TO 641+12.00 (RT)			72
639+50.00 TO 641+03.00 (LT)			68
TOTAL	184	195	284



USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 2,000' = 1" IN	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP ROUTE 840 (US 45/52)
SCHEDULE OF QUANTITIES

SCALE: NTS SHEET 1 OF 2 SHEETS STA. 633+50 TO STA. 639+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	11
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

GUARDRAIL ITEMS										
LOCATION					STEEL PLATE GUARDRAIL, TYPE A, 6 FOOT POSTS	STRONG POST GUARDRAIL ATTACHED TO CULVERT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	TERMINAL MARKER, DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE B	
STATION	OFFSET	TO	STATION	OFFSET	FOOT	FOOT	EACH	EACH	EACH	
635+18.10	RT		635+68.10	RT			1	1	1	
635+68.10	RT		636+43.10	RT	75				2	
635+74.35	LT		636+24.35	LT			1	1		
636+24.35	LT		636+43.10	LT	18.75				1	
636+43.10	RT		636+74.35	RT		31.25				
636+43.10	LT		636+74.35	LT		31.25			1	
636+74.35	RT		636+93.10	RT	18.75				1	
636+74.35	LT		637+49.35	LT	75				2	
636+93.10	RT		637+43.10	RT			1	1		
637+49.35	LT		637+99.35	LT			1	1		
TOTAL					187.5	62.5	4	4	8	

TEMPORARY PAVEMENT MARKING							
LOCATION					SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL - WATER BLASTING
STATION	OFFSET	TO	STATION	OFFSET	FOOT	SQ FT	SQ FT
633+50.00	LT/RT		639+50.00	LT/RT	72	24	475
TOTAL					72	24	475

IMPACT ATTENUATOR ITEMS		
LOCATION	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (SEVERE USE, NARROW), TEST LEVEL 3
STATION	EACH/OS	EACH/OS
632+12.50	1/LT	1/RT
640+87.50	1/LT	1/RT
TOTAL		

PAVEMENT MARKING ITEMS								
LOCATION						PAINT PAVEMENT MARKING - LINE 4"	PAINT PAVEMENT MARKING - LINE 6"	RAISED REFLECTIVE PAVEMENT MARKER
STATION	OFFSET	TO	STATION	OFFSET	DESCRIPTION	FOOT	FOOT	EACH
633+50.00	CL		639+50.00	CL	YELLOW SKIP		300	9
633+50.00	LT/RT		639+50.00	LT/RT	WHITE EDGE LINE	2,400		
TOTAL						2,400	300	9

2 APPLICATIONS OF PAINT PAVEMENT MARKING PAY ITEMS

TEMPORARY TRAFFIC CONTROL								
LOCATION					TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER
STATION	OFFSET	TO	STATION	OFFSET	EACH	EACH	FOOT	FOOT
STAGE I CONSTRUCTION					70106500	70106700	70400100	70400200
613+37.00	RT		623+37.00	RT		3		
630+87.00	RT				1*			
631+12.00	LT				1*			
632+12.50	LT		640+87.50	LT			875	
641+18.00	LT				1*			
641+32.00	RT				1*			
641+79.00	RT				1*			
642+04.00	LT				1*			
649+54.00	LT		659+54.00	LT		3		
STAGE II CONSTRUCTION								
613+43.00	RT		623+43.00	RT		3		
630+93.00	RT				1*			
631+18.00	LT				1*			
632+12.50	RT		640+87.50	RT			875	
641+18.00	LT				1*			
641+32.00	RT				1*			
641+91.00	RT				1*			
642+16.00	LT				1*			
649+66.00	LT		659+66.00	LT		3		
TOTAL					1	12	875	875

* SPECIFIES LOCATION OF SIGNALS

PINNING TEMPORARY CONCRETE BARRIER			
LOCATION			X7040125
STATION	TO	STATION	EACH
STAGE I CONSTRUCTION			
632+12.50		632+25.00	6
632+25.00		632+50.00	3
635+87.50		636+12.50	3
636+12.50		637+00.00	21
637+00.00		637+25.00	3
640+50.00		640+75.00	3
640+75.00		640+87.50	6
STAGE II CONSTRUCTION			
632+12.50		632+25.00	6
632+25.00		632+50.00	3
635+87.50		636+12.50	3
636+12.50		637+00.00	21
637+00.00		637+25.00	3
640+50.00		640+75.00	3
640+75.00		640+87.50	6
TOTAL			90



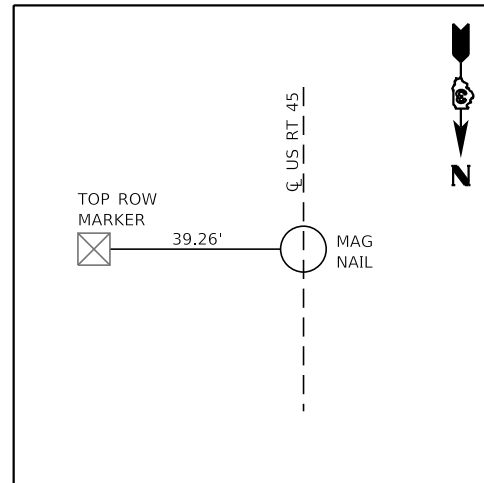
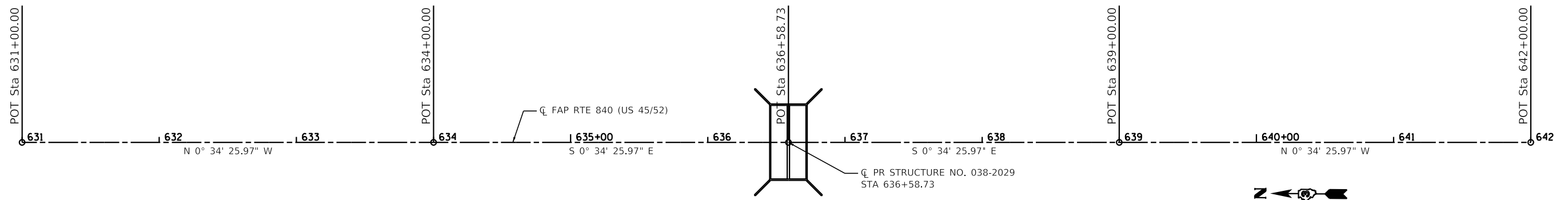
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PLOT SCALE = 2,000' = 1" IN	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

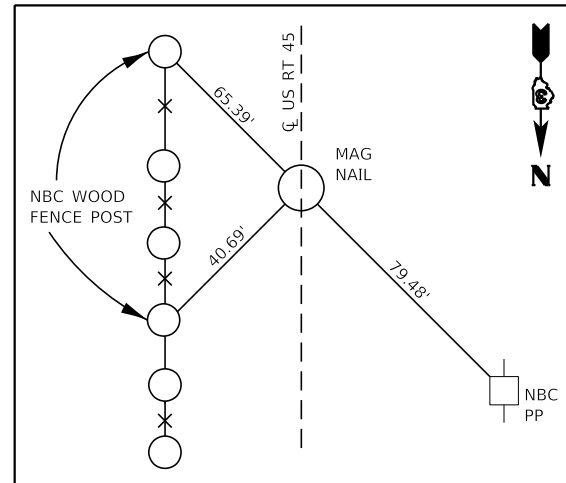
FAP ROUTE 840 (US 45/52)
SCHEDULE OF QUANTITIES

SCALE: NTS SHEET 2 OF 2 SHEETS STA. 633+50 TO STA. 639+50

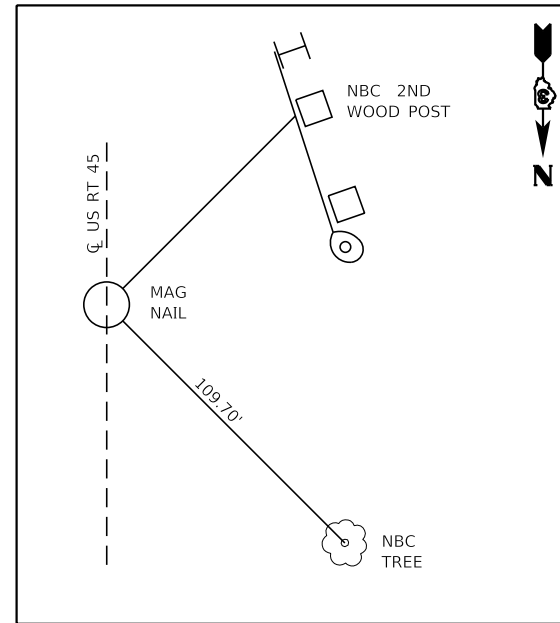
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	12
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



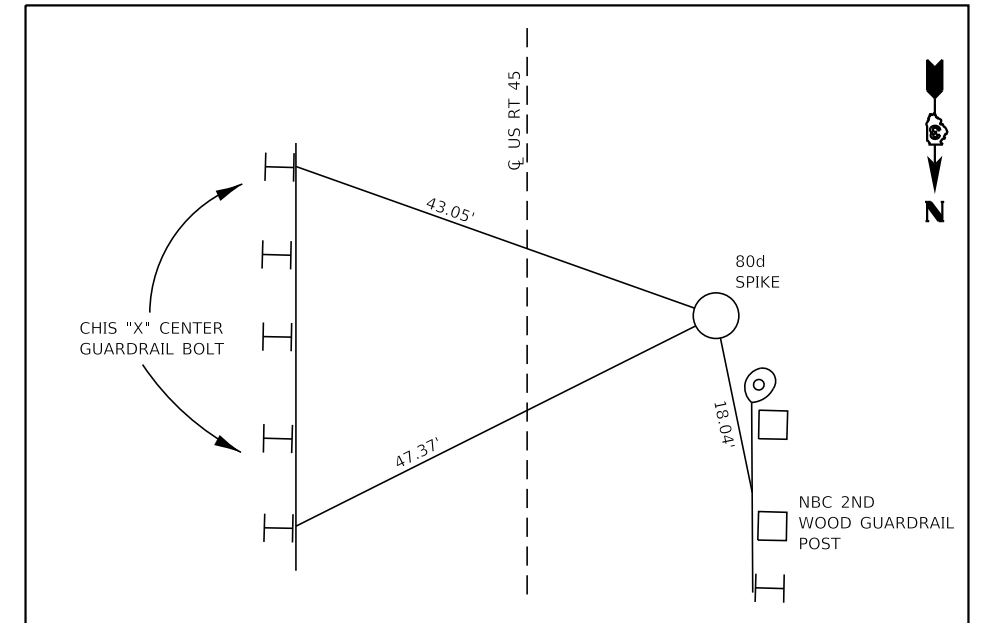
POT STA. 627+26.48
 N 1556945.7700
 E 1113159.0462



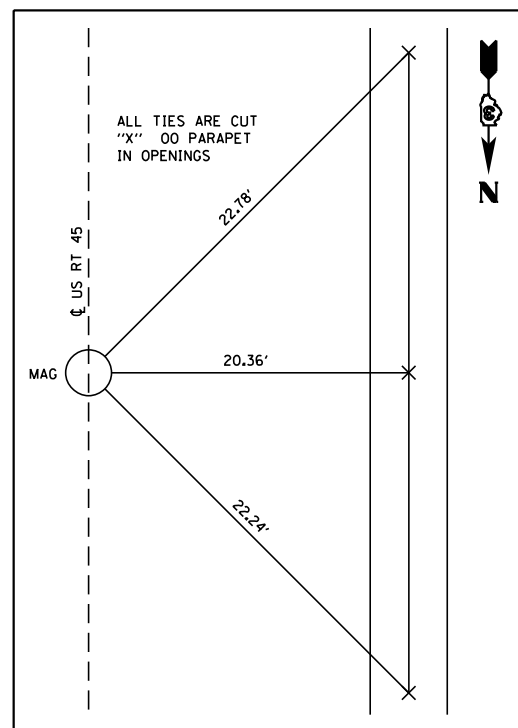
POT STA. 631+00.00
 N 1556572.2687
 E 1113162.7873



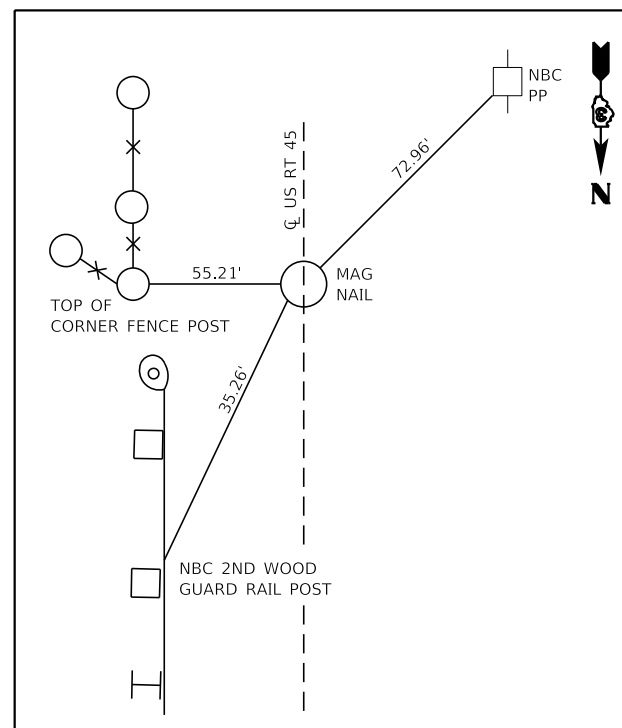
POT STA. 634+00.00
 N 1556272.2838
 E 1113165.7921



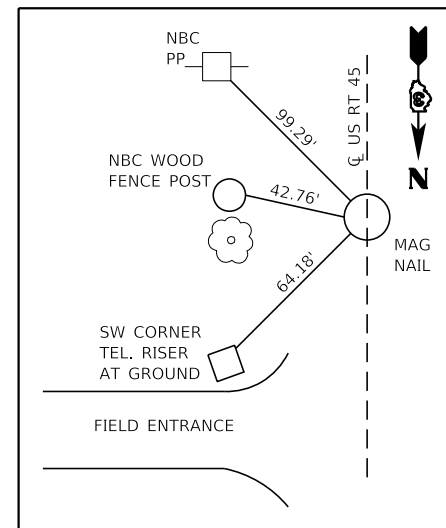
CONTROL POINT #45525
 80d SPIKE
 STA. 638+02.95/20.94' RT.
 N 1555869.1410
 E 1113148.8870
 ELEV. 635.475



POT STA. 636+58.73
 N 1556013.5667
 E 1113168.3835



POT STA. 639+00.00
 N 1555772.3088
 E 1113170.8001



POT STA. 642+00.00
 N 1555472.3239
 E 1113173.8048

BENCHMARK #2
 ELEV. 636.20

CUT "□" TOP EAST CONCRETE HEADWALL,
 15" RCCP UNDER OLD ROAD.
 APPROX. STA. 618+12/8.8' LT.
 APPROX. 1845' NORTH OF CL STRUCTURE

BENCHMARK #5
 ELEV. 634.16

RAILROAD SPIKE IN POWER POLE,
 STA. 632+54.21/37.85' RT.

BENCHMARK #7
 ELEV. 635.92

CUT "□" TOP NORTHWEST
 WINGWALL S.N. 038-0116,
 STA. 636+46.03/22.04' RT.

US RTES 45/52 LOCATION: DRAINAGE DITCH, 3.5 MILES NORTH OF US 52 IROQUOIS COUNTY CONTRACT NO. 66E24

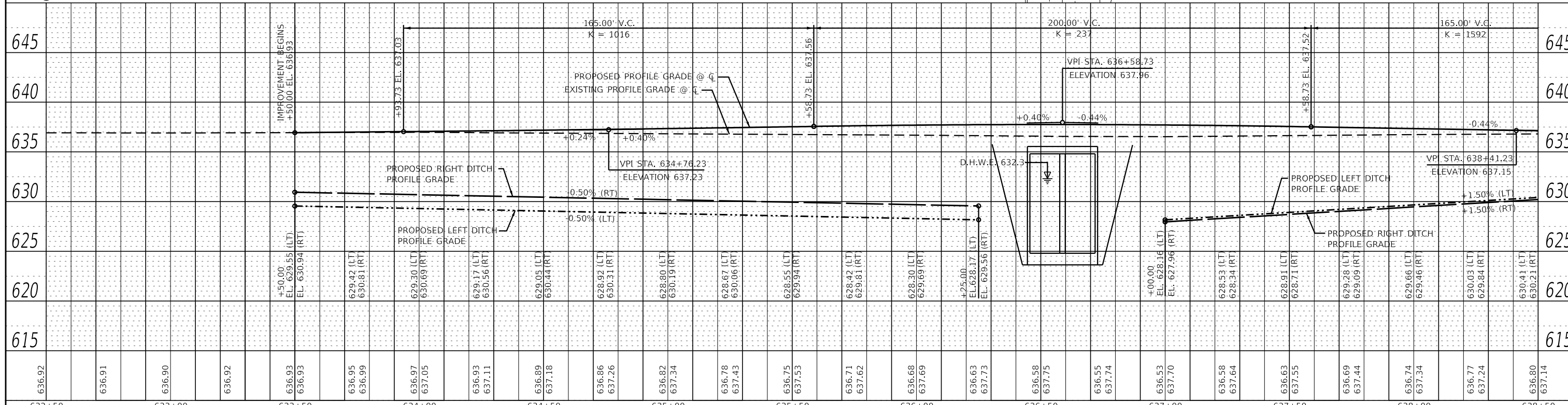
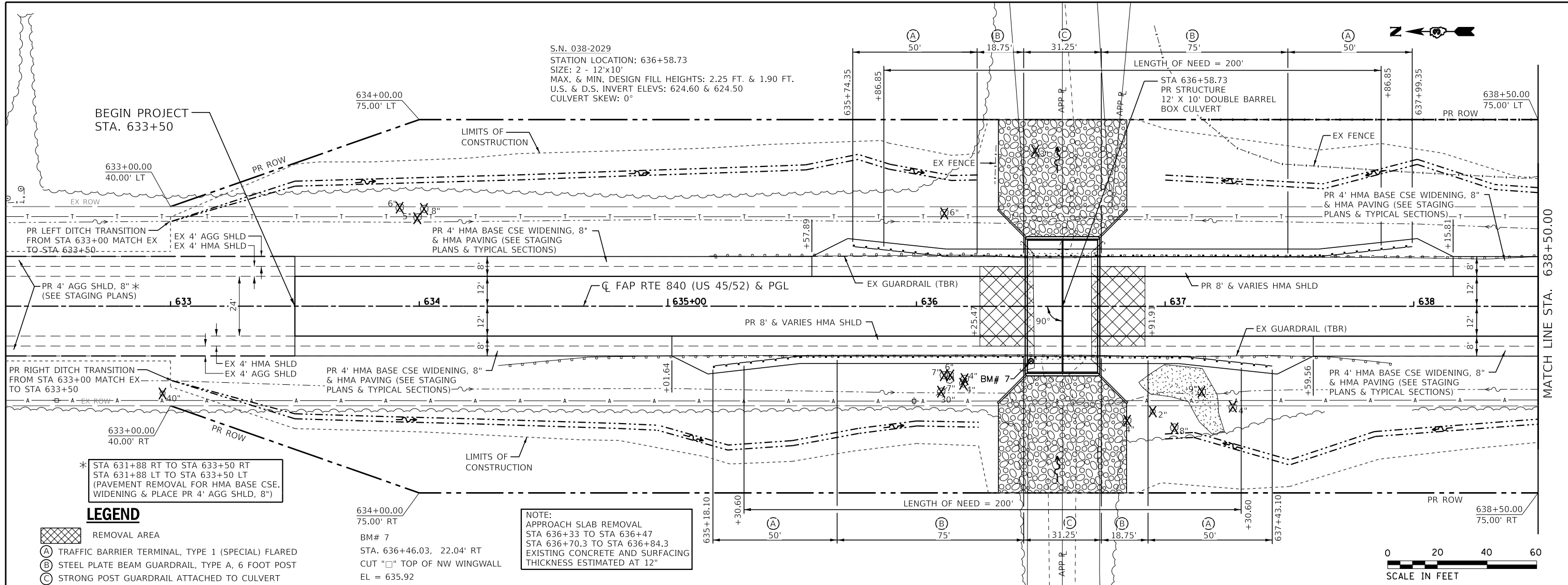
INDEX NUMBER	DESCRIPTION	EXISTING MONUMENT TYPE	PROPOSED MONUMENT TYPE	MONUMENT RECORD TO BE RECORDED	RESPONSIBILITY
045101	W QTR COR SECTION 5, T28N, R13W, 2ND PM	NONE	TYPE 1	YES	1

COORDINATE FOR LISTED MONUMENT IS KNOWN. PRE CONSTRUCTION TIES BY THE R.E. ARE NOT REQUIRED. THE R.E. MUST TIE AND BRING TO THE ATTENTION OF THE PLATS AND PLANS MANAGER ANY ADDITIONAL UNLISTED MONUMENTS FOUND. UPON PAVING COMPLETION, THE R.E. WILL DIRECT THE PLATS AND PLANS MANAGER TO STAKE THE LOCATION FOR MONUMENT CORING. PLATS AND PLANS WILL PREPARE AND RECORD THE REQUIRED MONUMENT RECORD.

- RESPONSIBILITY:
- 1) RESIDENT TO RE-ESTABLISH MONUMENT (PAY ITEM REQUIRED. PERMANENT SURVEY MARKER, TYPE 1)
 - 2) PLATS AND PLANS TO RE-ESTABLISH MONUMENT

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	

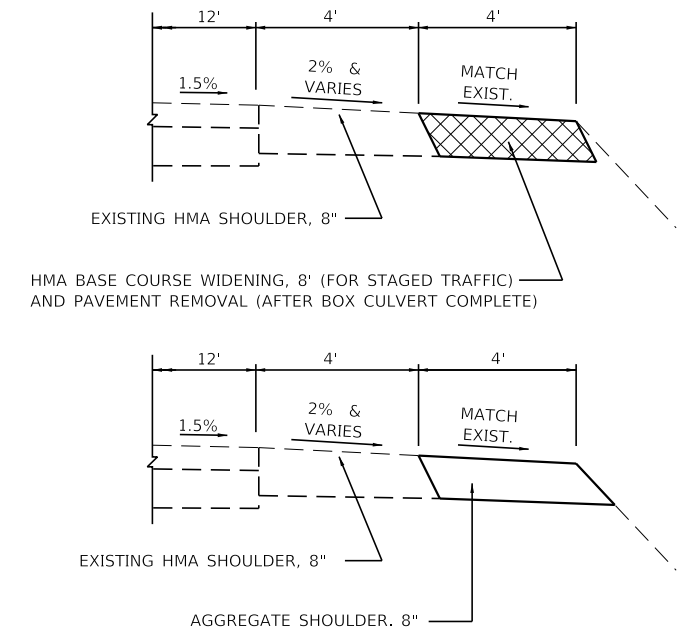
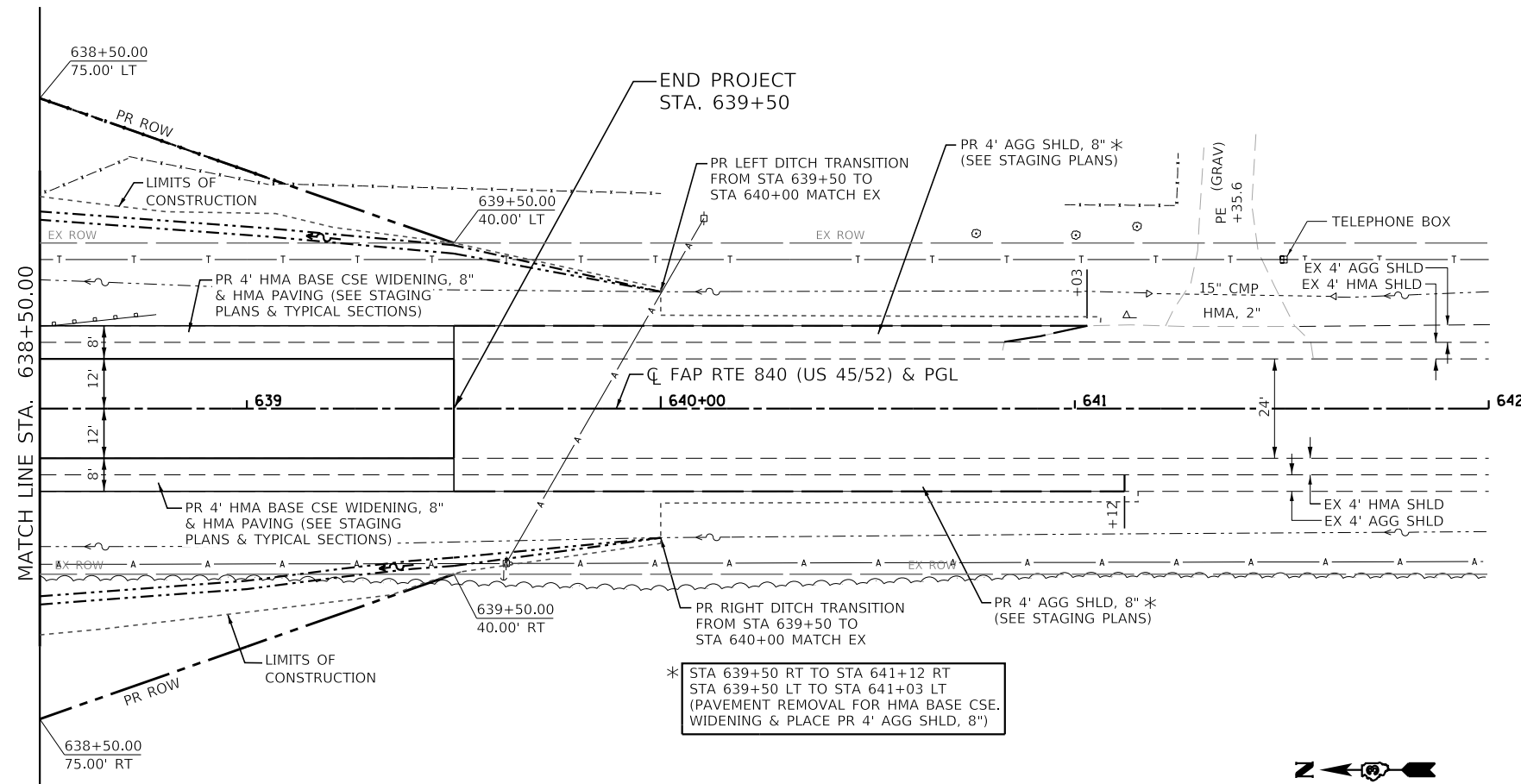
DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



632+50	633+00	633+50	634+00	634+50	635+00	635+50	636+00	636+50	637+00	637+50	638+00	638+50																																	
636.92	636.91	636.90	636.92	636.93	636.93	636.95	636.99	636.97	637.05	636.93	637.11	636.89	637.18	636.86	637.26	636.82	637.34	636.78	637.43	636.75	637.53	636.71	637.62	636.68	637.69	636.63	637.73	636.58	637.75	636.55	637.74	636.53	637.70	636.58	637.64	636.63	637.55	636.69	637.44	636.74	637.34	636.77	637.24	636.80	637.14

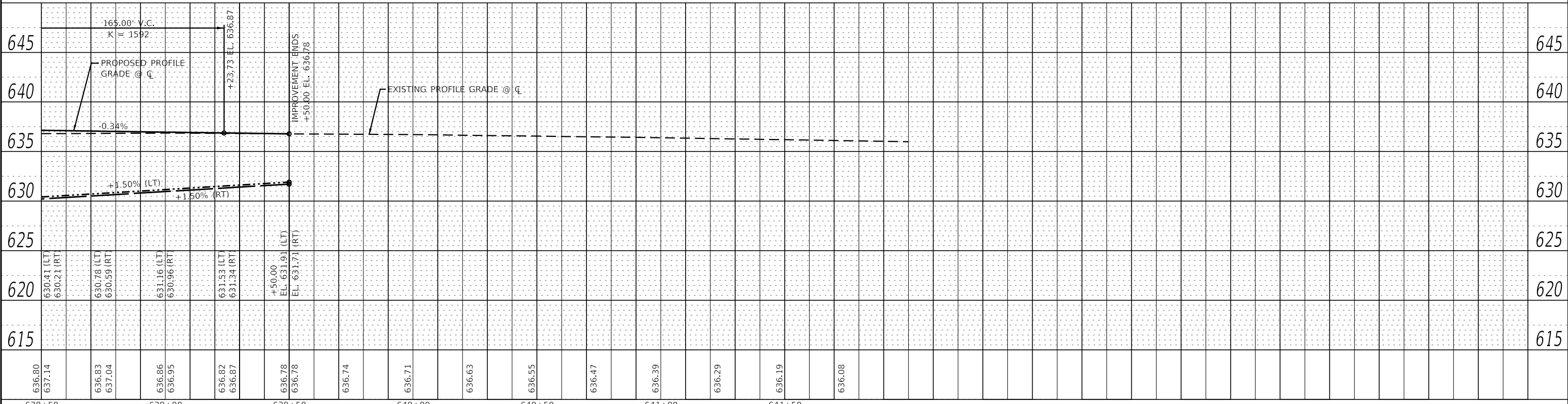
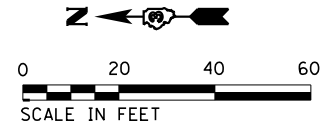
DATE	
BY	
REVIEWED	
PLANNED	
ALIGNED	
CHECKED	
NO. _____	
NOTE BOOK	
NO. _____	
FILE NAME	

DATE	
BY	
REVIEWED	
PLANNED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO. _____	
NOTE BOOK	
NO. _____	
FILE NAME	



DETAIL WITH AGGREGATE SHOULDER OUTSIDE PROJECT LIMITS

F.A.P. RTE. 840 (U.S. 45/52)
 STA 631+88 TO STA 633+50 LT/RT
 STA 639+50 TO STA 641+12 RT
 STA 639+50 TO STA 641+03 LT



<p>Farnsworth GROUP 2708 McGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-9435 / info@f-w.com</p>	USER NAME = dmeyer DESIGNED - JJO DRAWN - JJO PLOT SCALE = 40,000.00' / in. CHECKED - PSA/ERB DATE = 01/12/18 REVISIONS -	DESIGNED - JJO DRAWN - JJO CHECKED - PSA/ERB DATE = 01/12/18 REVISIONS -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">FAP ROUTE 840 (US 45/52) PLAN & PROFILE</p>	F.A.P. RTE. 840 SECTION (138 BR-1)BR COUNTY IROQUOIS TOTAL SHEETS 46 SHEET NO. 15 CONTRACT NO. 66E24 ILLINOIS FED. AID PROJECT
	SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 638+50.00 TO STA. 639+50.00				

**PINNING TEMPORARY
CONCRETE BARRIER – STAGE I**

A.	STA 632+12.5 TO STA 632+25	6 EACH (END SECTION)
B.	STA 632+25 TO STA 632+50	3 EACH (TRANSITION)
C.	STA 635+87.5 TO STA 636+12.5	3 EACH (TRANSITION)
D.	STA 636+12.5 TO STA 637+00	21 EACH (DROP OFF LIMITS)
E.	STA 637+00 TO STA 637+25	3 EACH (TRANSITION)
F.	STA 640+50 TO STA 640+75	3 EACH (TRANSITION)
G.	STA 640+75 TO STA 640+87.50	6 EACH (END SECTION)
STAGE I TOTAL		45 EACH

NOTES FOR SUGGESTED STAGES OF CONSTRUCTION:

PRE-STAGE:

1. CONSTRUCT HMA BASE COURSE WIDENING FOR STAGE 1 TRAFFIC ALONG WEST EDGE OF EXISTING HMA SHOULDER PAVEMENT.
2. INSTALL PAVEMENT MARKINGS AND SIGNAGE, TEMPORARY CONCRETE BARRIER, ATTENUATORS AND SIGNALS FOR TRAFFIC TO TRAVEL IN THE SOUTHBOUND LANE.

STAGE I:

1. COMPLETE PROPOSED WORK FOR THE EAST HALF OF THE PROJECT: REMOVE EXISTING STRUCTURE, INSTALL PROPOSED BOX CULVERT, BACKFILL AROUND STRUCTURE, COMPLETE DITCH EXCAVATION AND EMBANKMENT PLACEMENT AND GRADING, INSTALL RIP RAP, PLACE SUBBASE GRANULAR MATERIAL AT CULVERT, PLACE HMA BASE COURSE AT CULVERT, CONSTRUCT HMA BASE COURSE WIDENING FOR STAGE 2 TRAFFIC ALONG THE EAST EDGE OF EXISTING HMA SHOULDER PAVEMENT TO THE NORTH AND SOUTH OF THE NEW GUARDRAIL AS SHOWN ON THE STAGING PLAN, COMPLETE HMA SURFACE REMOVAL 2 1/4" WITHIN STAGE I WORK AREA PAVING LIMITS OF EXISTING MAINLINE AND EXISTING SHOULDER & HMA BASE COURSE WIDENING, PLACE HMA PAVING SURFACES AT MAINLINE AND HMA SHOULDER / HMA BASE COURSE WIDENING AREAS AND INSTALL GUARDRAIL. INSTALL TEMPORARY PAVEMENT MARKINGS AND SIGNAGE, AND RELOCATE TEMPORARY CONCRETE BARRIER, ATTENUATORS AND SIGNALS FOR TRAFFIC TO TRAVEL IN THE NORTHBOUND LANE, AND SWITCH TRAFFIC TO NORTHBOUND LANE.

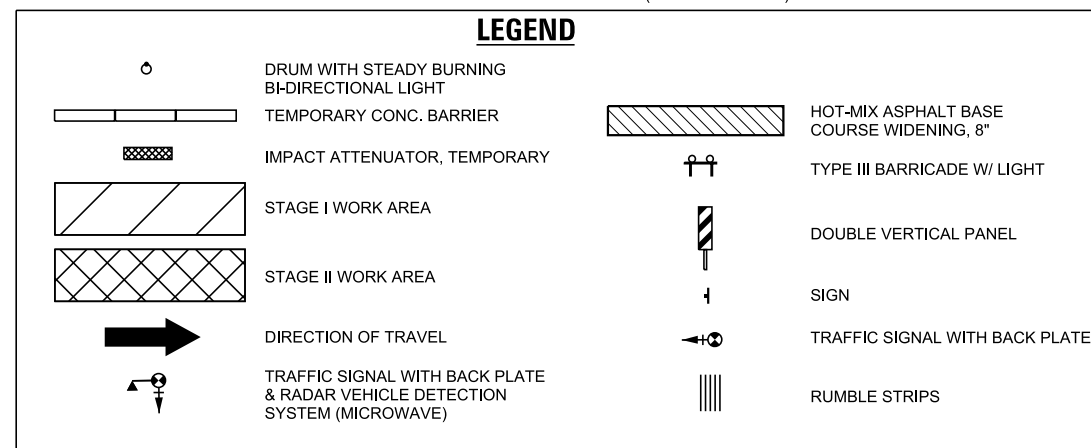
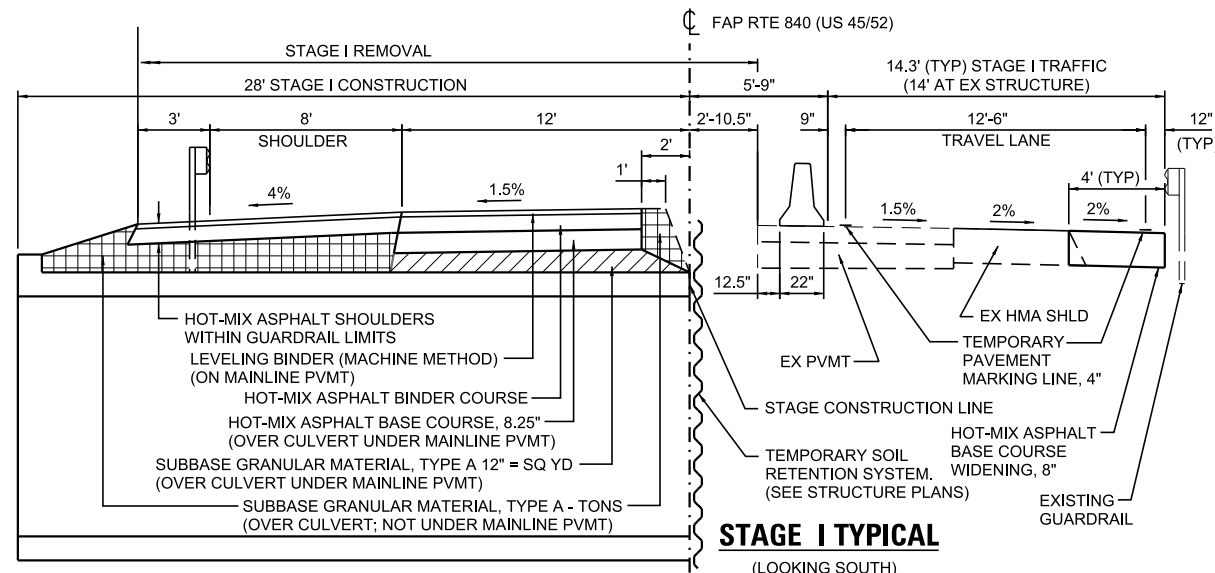
STAGE II:

1. COMPLETE PROPOSED WORK FOR THE WEST HALF OF THE PROJECT: REMOVE EXISTING STRUCTURE, INSTALL PROPOSED BOX CULVERT, BACKFILL AROUND STRUCTURE, COMPLETE DITCH EXCAVATION AND EMBANKMENT PLACEMENT AND GRADING, INSTALL RIP RAP, PLACE SUBBASE GRANULAR MATERIAL AT CULVERT, PLACE HMA BASE COURSE AT CULVERT, COMPLETE HMA SURFACE REMOVAL 2 1/4" WITHIN STAGE 2 WORK AREA PAVING LIMITS OF EXISTING MAINLINE AND EXISTING HMA SHOULDER & HMA BASE COURSE WIDENING, PLACE HMA PAVING SURFACES AT MAINLINE AND HMA SHOULDER / HMA BASE COURSE WIDENING AREAS AND INSTALL GUARDRAIL.

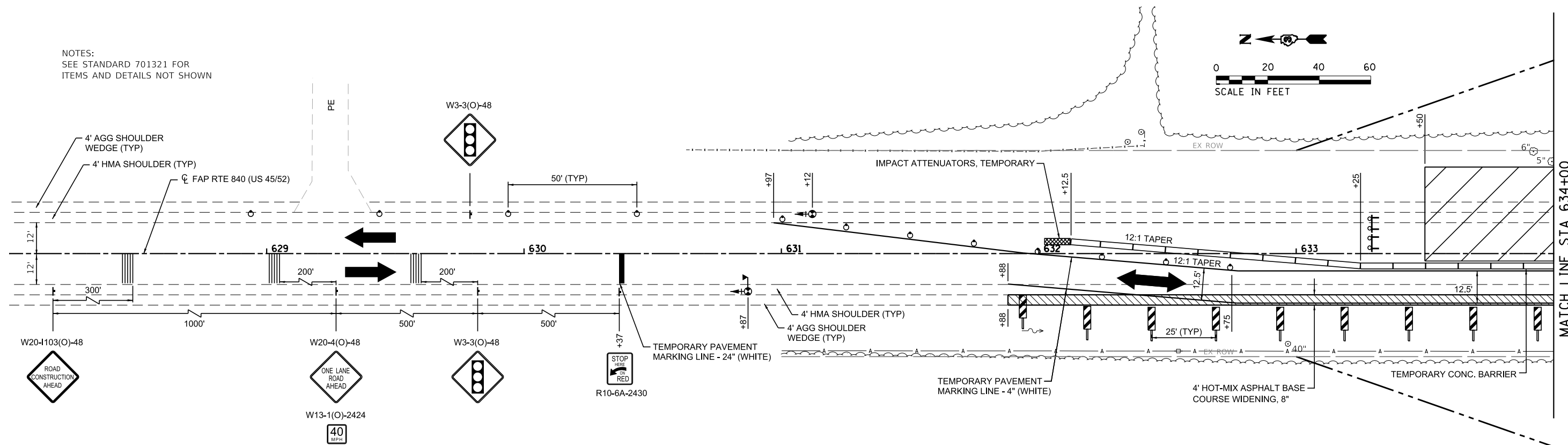
2. REMOVE TEMPORARY CONCRETE BARRIER, ATTENUATORS, SIGNALS AND TEMPORARY SIGNAGE, AND INSTALL SHORT TERM PAVEMENT MARKINGS TO RESUME TWO-WAY TRAFFIC.

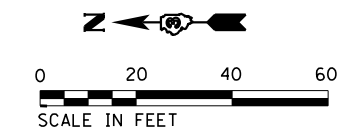
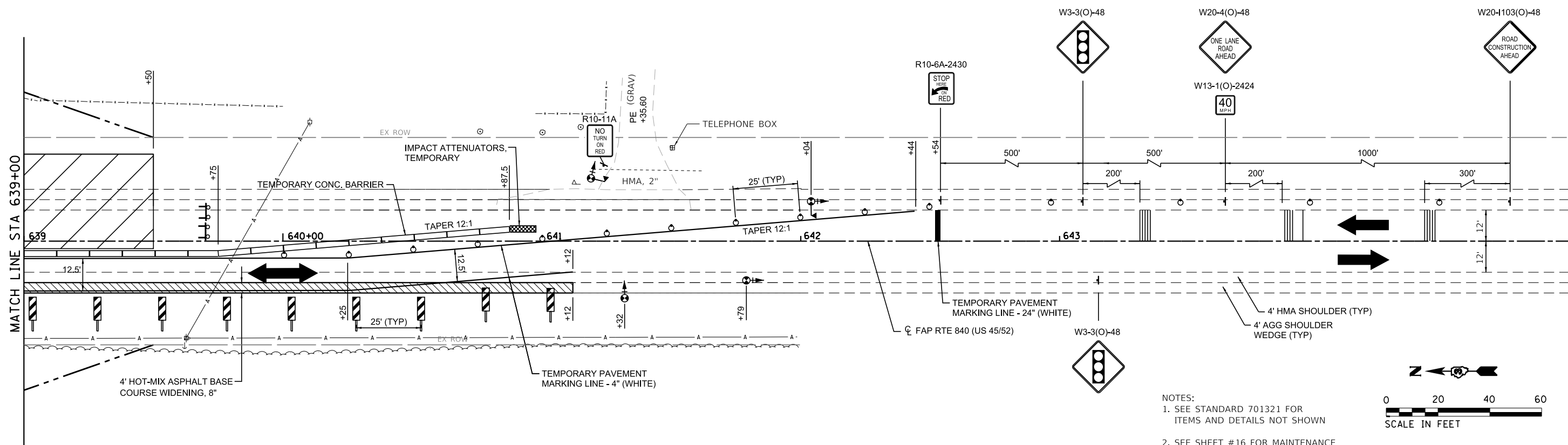
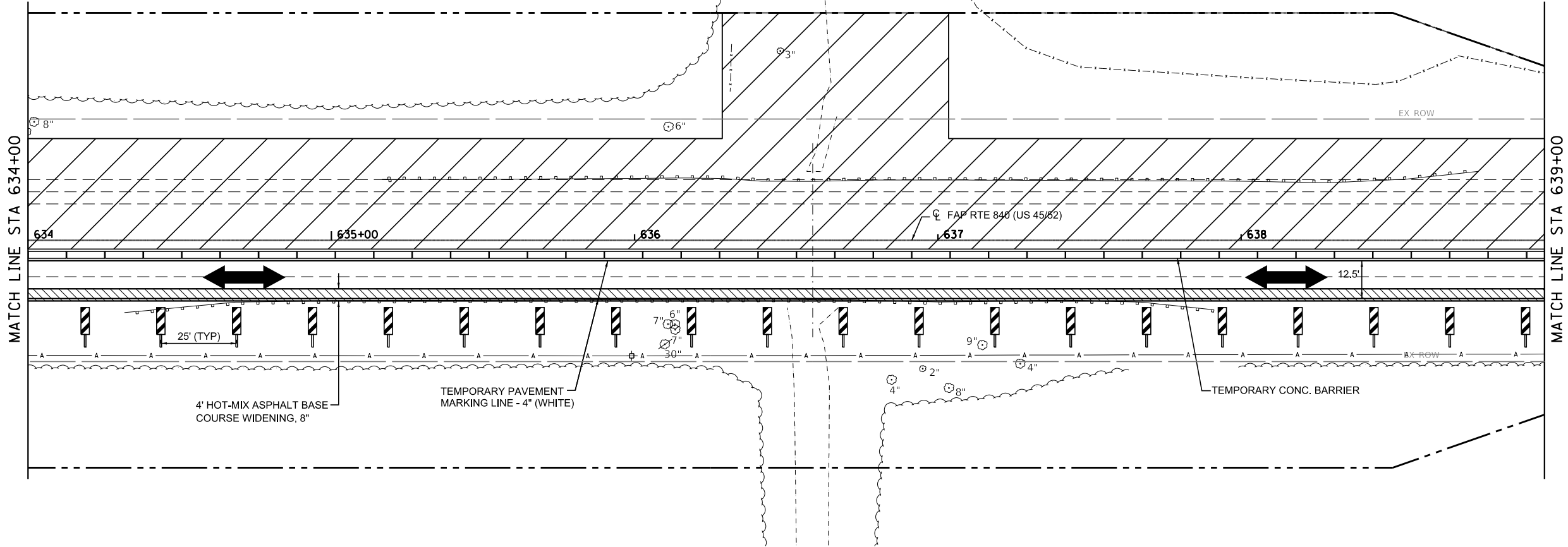
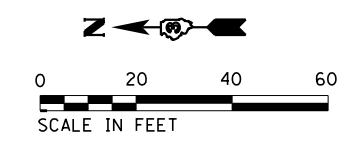
POST-STAGE:

1. POST-STAGE WORK SHALL BE COMPLETED UNDER DAY-TIME LANE CLOSURES.
2. REMOVE STAGE 1 AND STAGE 2 HMA BASE COURSE WIDENING LOCATED IN AREAS OUTSIDE PAVING PROJECT LIMITS. PLACE AGGREGATE SHOULDERS IN THESE LOCATIONS.
3. PLACE HMA SURFACE COURSE ON MAINLINE AND SHOULDERS WITHIN PAVING LIMITS.
4. COMPLETE SEEDING AND RESTORATION WORK.
5. INSTALL PERMANENT PAVEMENT MARKINGS, RAISED REFLECTIVE PAVEMENT MARKERS, AND SHOULDER RUMBLE STRIPS.



NOTES:
SEE STANDARD 701321 FOR
ITEMS AND DETAILS NOT SHOWN





NOTES:
 1. SEE STANDARD 701321 FOR ITEMS AND DETAILS NOT SHOWN
 2. SEE SHEET #16 FOR MAINTENANCE OF TRAFFIC LEGEND.

Farnsworth GROUP
 2708 MCGRAW DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-9435 / info@f-w.com

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)
 MAINTENANCE OF TRAFFIC PLAN - STAGE I**

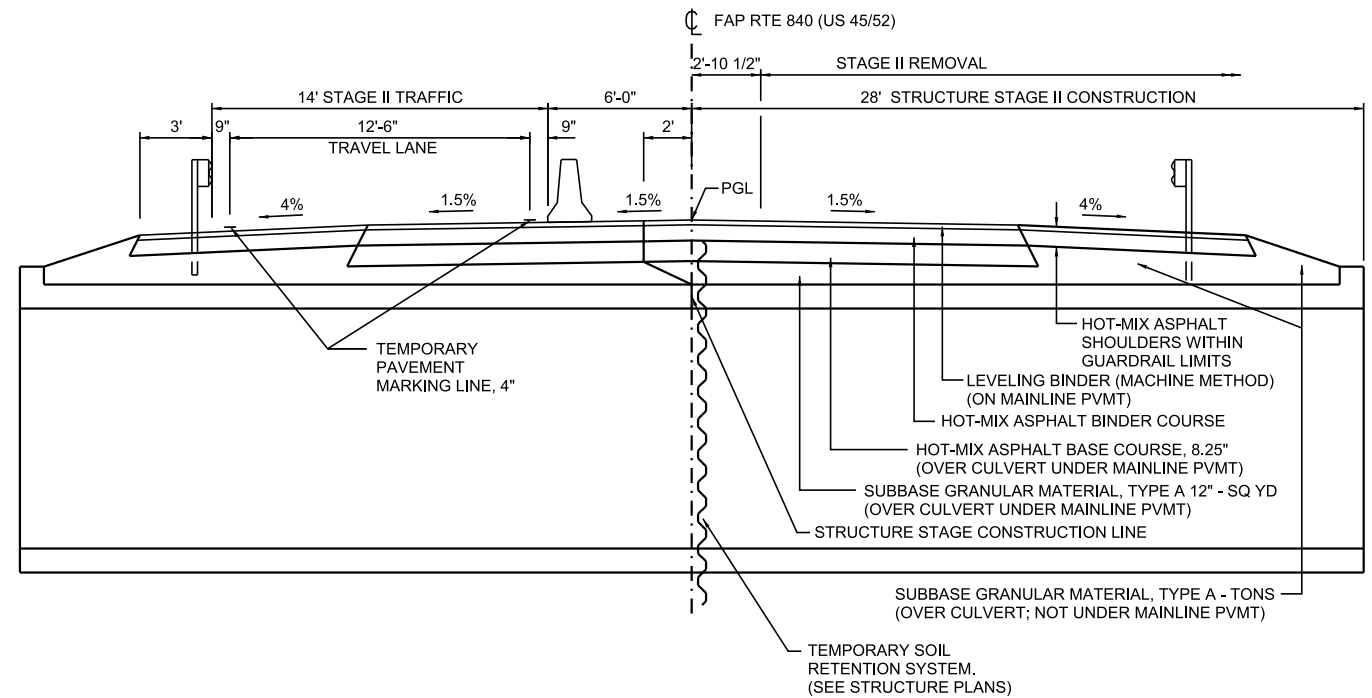
SCALE: 1"=20' SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 17
CONTRACT NO. 66E24				
		ILLINOIS	FED. AID PROJECT	

LEGEND	
	DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
	TEMPORARY CONC. BARRIER
	IMPACT ATTENUATOR, TEMPORARY
	STAGE I WORK AREA
	STAGE II WORK AREA
	DIRECTION OF TRAVEL
	TRAFFIC SIGNAL WITH BACK PLATE & RADAR VEHICLE DETECTION SYSTEM (MICROWAVE)
	HOT-MIX ASPHALT BASE COURSE WIDENING, 8"
	TYPE III BARRICADE W/ LIGHT
	DOUBLE VERTICAL PANEL
	SIGN
	TRAFFIC SIGNAL WITH BACK PLATE
	RUMBLE STRIPS

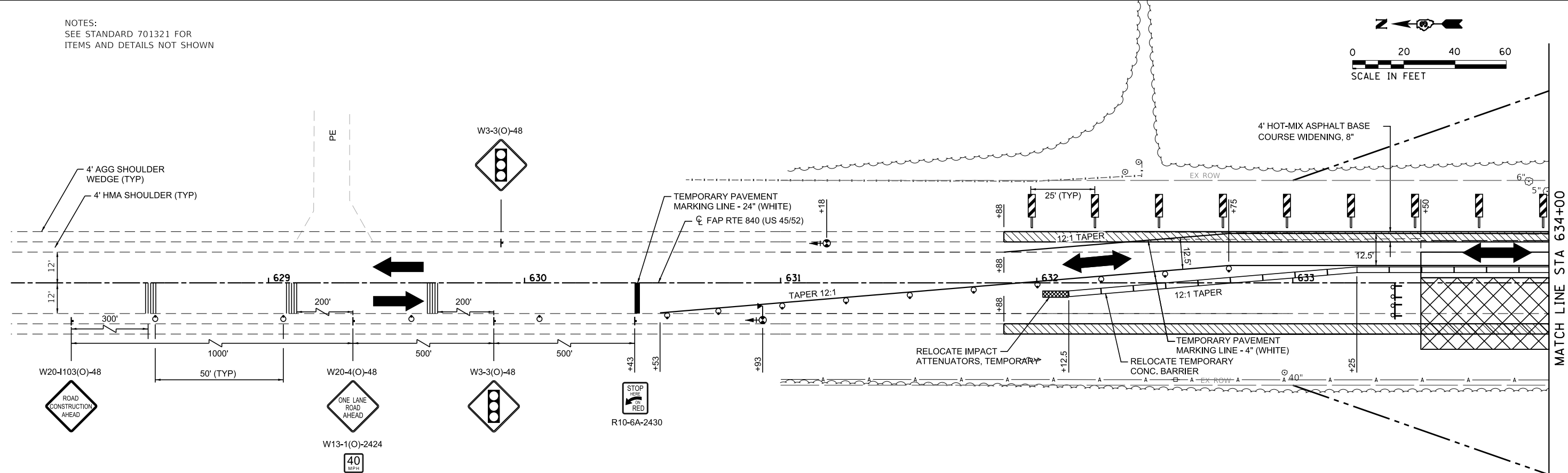
PINNING TEMPORARY CONCRETE BARRIER – STAGE II

A.	STA 632+12.5 TO STA 632+25	6 EACH (END SECTION)
B.	STA 632+25 TO STA 632+50	3 EACH (TRANSITION)
C.	STA 635+87.5 TO STA 636+12.5	3 EACH (TRANSITION)
D.	STA 636+12.5 TO STA 637+00	21 EACH (DROP OFF LIMITS)
E.	STA 637+00 TO STA 637+25	3 EACH (TRANSITION)
F.	STA 640+50 TO STA 640+75	3 EACH (TRANSITION)
G.	STA 640+75 TO STA 640+87.50	6 EACH (END SECTION)
STAGE II TOTAL		45 EACH



STAGE II TYPICAL
(LOOKING SOUTH)

NOTES:
SEE STANDARD 701321 FOR
ITEMS AND DETAILS NOT SHOWN



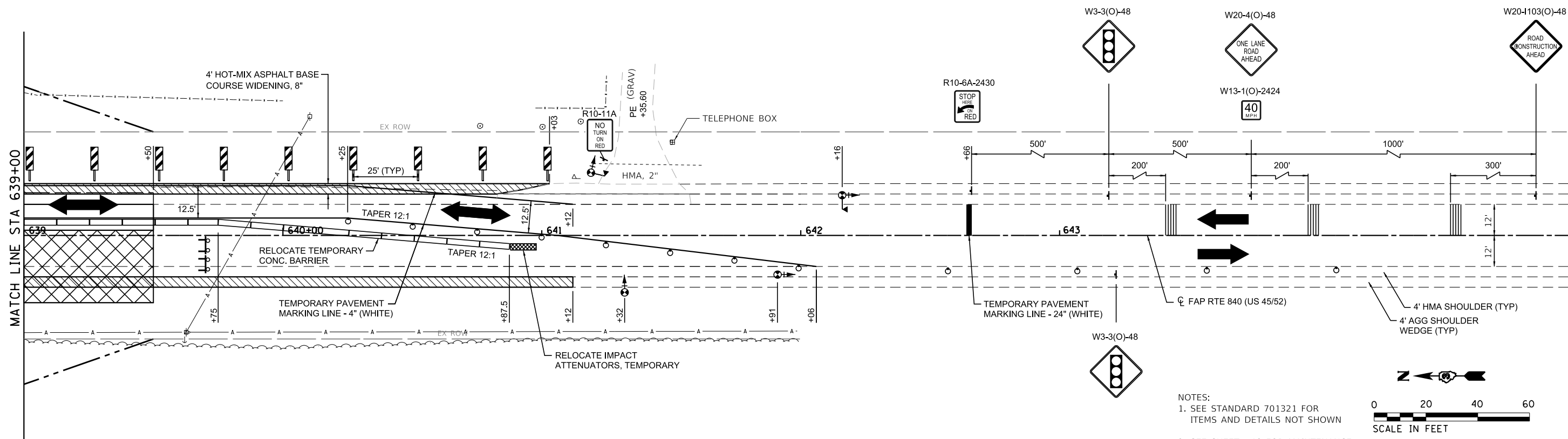
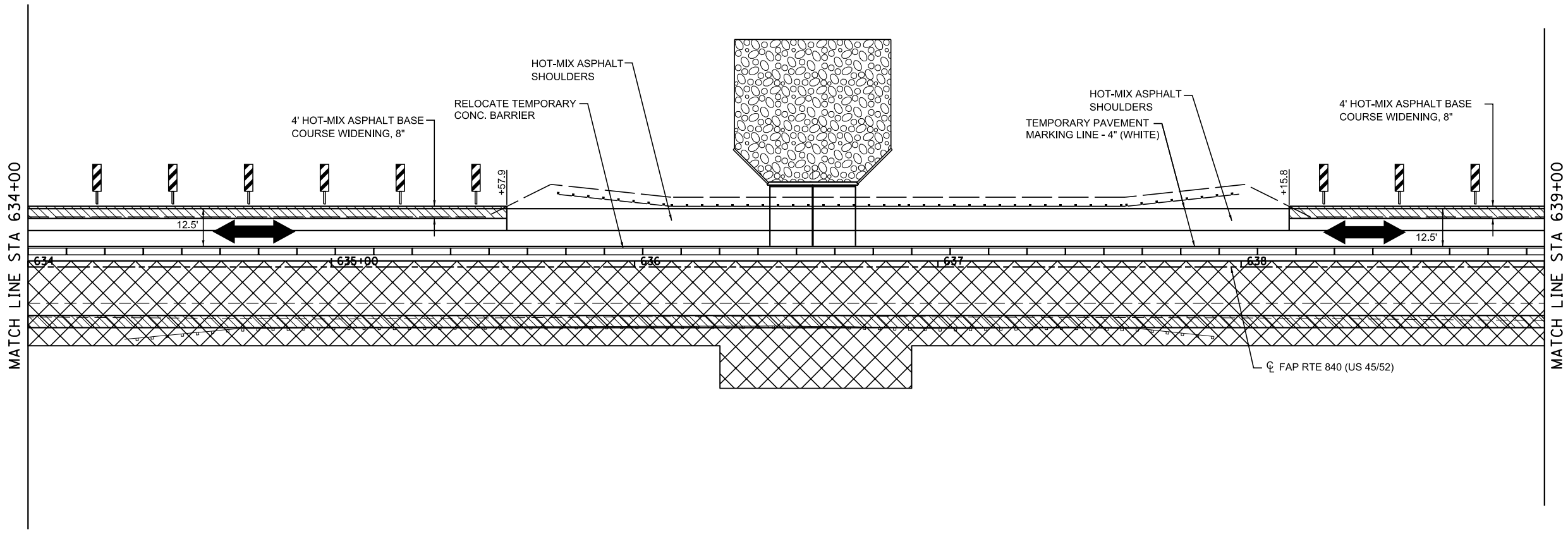
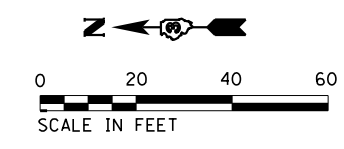
Farnsworth GROUP
2709 MCGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-9435 / info@f-w.com

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

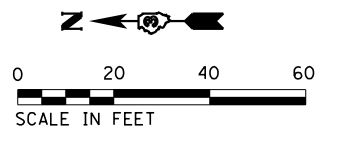
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)
MAINTENANCE OF TRAFFIC PLAN - STAGE II**
SCALE: 1"=20' SHEET 3 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	18
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



NOTES:
 1. SEE STANDARD 701321 FOR ITEMS AND DETAILS NOT SHOWN
 2. SEE SHEET #18 FOR MAINTENANCE OF TRAFFIC LEGEND.



Farnsworth GROUP
 2709 McGRAW DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-9435 / info@f-w.com

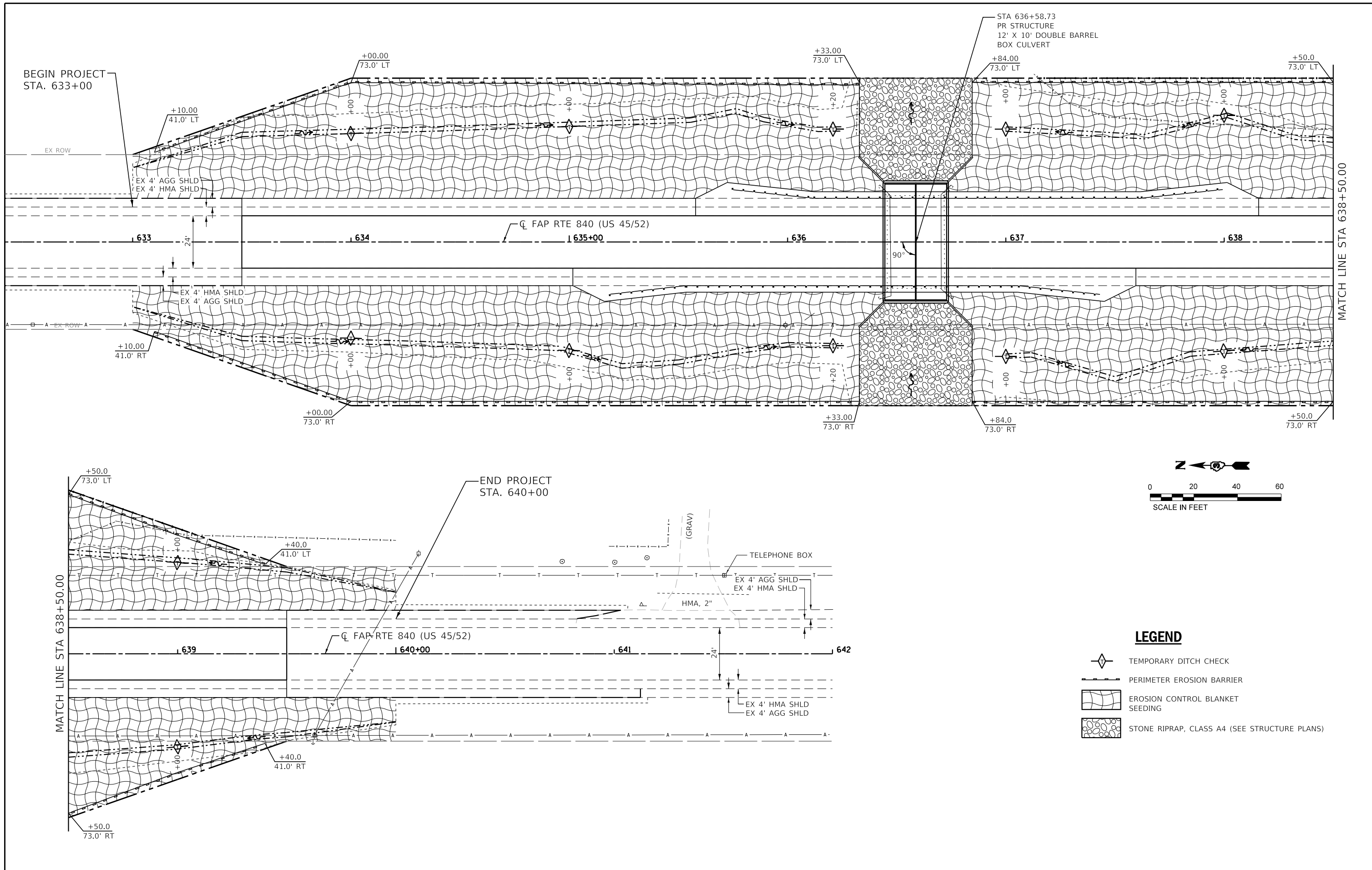
USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**





**FAP ROUTE 840 (US 45/52)
 MAINTENANCE OF TRAFFIC PLAN - STAGE II**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	19
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



LEGEND

-  TEMPORARY DITCH CHECK
-  PERIMETER EROSION BARRIER
-  EROSION CONTROL BLANKET SEEDING
-  STONE RIPRAP, CLASS A4 (SEE STRUCTURE PLANS)

Farnsworth GROUP
 2709 MCGRAW DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 663-9435 / info@f-w.com

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - JJO	REVISED -
PLOT DATE = 1/12/2018	CHECKED - PSA/ERB	REVISED -
	DATE - 01/12/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAP ROUTE 840 (US 45/52)
 EROSION AND SEDIMENT CONTROL PLAN**
 SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 633+00 TO STA. 640+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	20
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

NW 1/4 OF SECTION 5, T. 28 N., R. 13 W., 2ND. P.M.

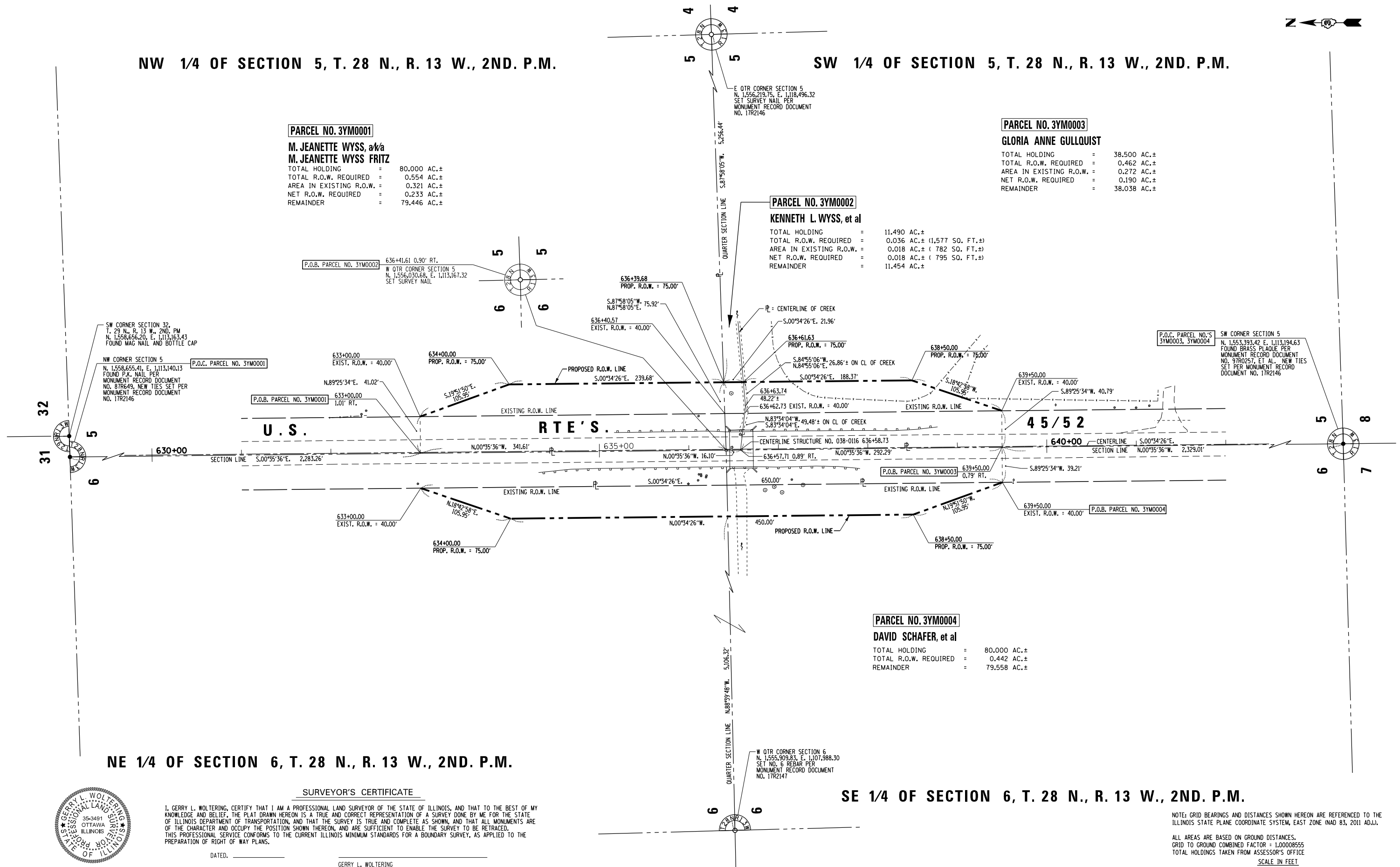
SW 1/4 OF SECTION 5, T. 28 N., R. 13 W., 2ND. P.M.

PARCEL NO. 3YM0001
M. JEANETTE WYSS, aka
M. JEANETTE WYSS FRITZ
 TOTAL HOLDING = 80.000 AC.±
 TOTAL R.O.W. REQUIRED = 0.554 AC.±
 AREA IN EXISTING R.O.W. = 0.321 AC.±
 NET R.O.W. REQUIRED = 0.233 AC.±
 REMAINDER = 79.446 AC.±

PARCEL NO. 3YM0003
GLORIA ANNE GULLQUIST
 TOTAL HOLDING = 38.500 AC.±
 TOTAL R.O.W. REQUIRED = 0.462 AC.±
 AREA IN EXISTING R.O.W. = 0.272 AC.±
 NET R.O.W. REQUIRED = 0.190 AC.±
 REMAINDER = 38.038 AC.±

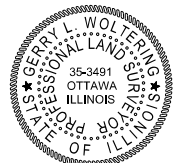
PARCEL NO. 3YM0002
KENNETH L. WYSS, et al
 TOTAL HOLDING = 11.490 AC.±
 TOTAL R.O.W. REQUIRED = 0.036 AC.± (1,577 SO. FT.±)
 AREA IN EXISTING R.O.W. = 0.018 AC.± (782 SO. FT.±)
 NET R.O.W. REQUIRED = 0.018 AC.± (795 SO. FT.±)
 REMAINDER = 11.454 AC.±

PARCEL NO. 3YM0004
DAVID SCHAFER, et al
 TOTAL HOLDING = 80.000 AC.±
 TOTAL R.O.W. REQUIRED = 0.442 AC.±
 REMAINDER = 79.558 AC.±



NE 1/4 OF SECTION 6, T. 28 N., R. 13 W., 2ND. P.M.

SE 1/4 OF SECTION 6, T. 28 N., R. 13 W., 2ND. P.M.



SURVEYOR'S CERTIFICATE

I, GERRY L. WOLTERING, CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, AND THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE PLAT DRAWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY DONE BY ME FOR THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN, AND THAT ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY, AS APPLIED TO THE PREPARATION OF RIGHT OF WAY PLANS.

DATED: _____

GERRY L. WOLTERING
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3491
 LICENSE RENEWAL DATE 11-30-2018

NOTE: GRID BEARINGS AND DISTANCES SHOWN HEREON ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83, 2011 ADJ.).

ALL AREAS ARE BASED ON GROUND DISTANCES.
 GRID TO GROUND COMBINED FACTOR = 1.00008555
 TOTAL HOLDINGS TAKEN FROM ASSESSOR'S OFFICE

SCALE IN FEET



USER NAME = duncanbd	DESIGNED -	REVISED - 05-11-17 ADDED M.R, Nos. G.W.
	DRAWN - GW	REVISED - 08-12-17 REV. PAR. 3 TOPO G.W.
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - 08-12-17 REV. PAR. 3 AREA G.W.
PLOT DATE = 1/16/2018	DATE - 05-11-17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS

PROJECT	JOB NO. R93-006-17
SCALE: 1" = 50'	SHEET 1 OF 1 SHEETS
STA. 633+00.00	TO STA. 639+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	21
CONTRACT NO. 66E24				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

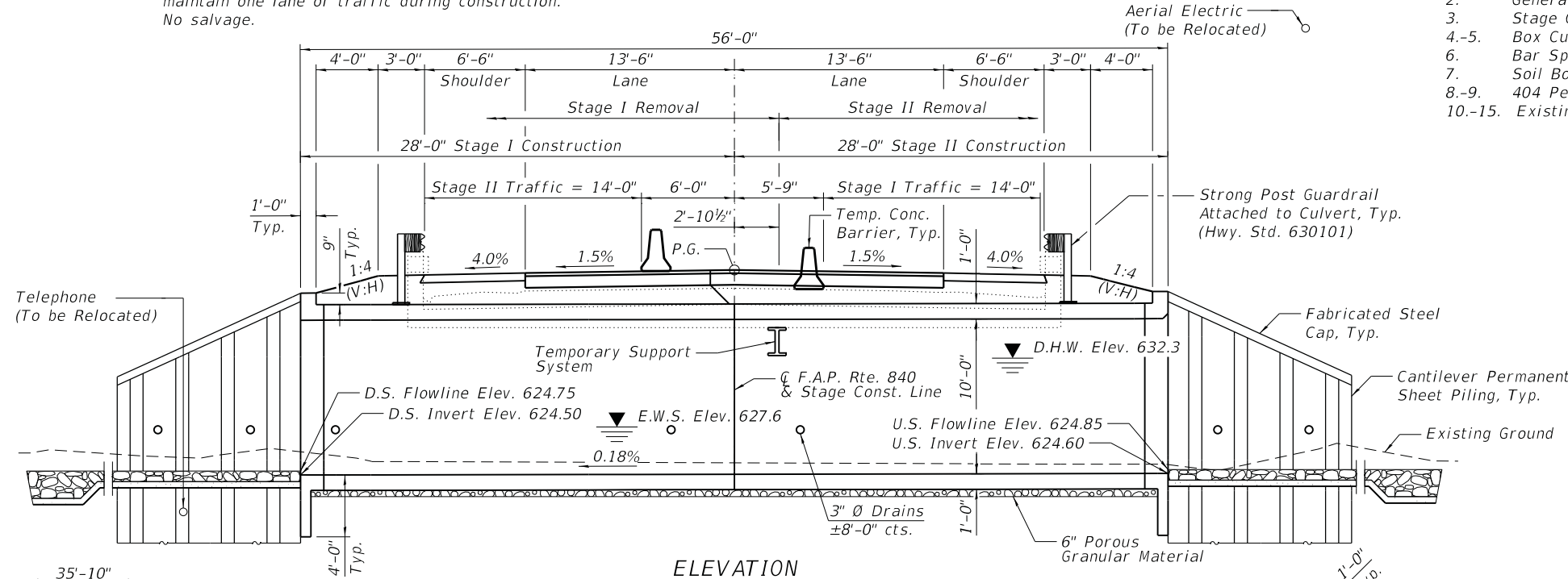
Benchmark: BM 7 - Cut square on top of NW wingwall on S.N. 038-0116 over Langan Creek Sta. 636+46.03, 22.04' Rt., Elev. 635.92.
 Existing Structure: S.N. 038-0116 was built in 1928 under SBI 49, Section 138-B at Sta. 632+85. The wearing surface was modified under three different contracts between 1970 and 2000. Existing structure is a single span slab bridge with a deck thickness of 30.5", 26'-0" bk. to bk. abutments, 42'-2" out to out deck with no skew. The Contractor shall remove and replace the existing structure. Stage Construction shall be utilized to maintain one lane of traffic during construction.
 No salvage.

INDEX OF SHEETS

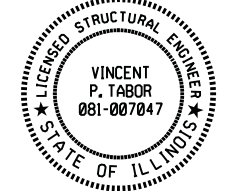
1. General Plan and Elevation
2. General Data
3. Stage Construction Details
- 4.-5. Box Culvert End Section Details
6. Bar Splicer Details
7. Soil Boring Logs
- 8.-9. 404 Permit Causeway/Work Pad
- 10.-15. Existing Structure Plans

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	49
Porous Granular Embankment	Cu. Yd.	456
Stone Riprap, Class A4	Sq. Yd.	549
Filter Fabric	Sq. Yd.	549
Removal of Existing Structures	Each	1
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	261
Box Culvert End Sections, Culvert No. 1	Each	2
Strong Post Guardrail Attached to Culvert	Foot	62.5
Membrane Waterproofing for Buried Structures	Sq. Yd.	182
Precast Concrete Box Culverts 12'x10' (Special)	Foot	106.0
Temporary Support System	Each	1



*Limits of removal and replacement of hard till soils with porous granular material meeting the gradation requirements of Std. Specifications Section 540.02, Note 1. 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. Cost of furnishing and installing the porous granular material shall be included in the cost of the end section.



Vincent P. Tabor 12/21/2017
 Vincent P. Tabor
 Licensed Structural Engineer
 State of Illinois No. 081-007047
 Expires 11/30/2018

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

LOADING HL-93

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

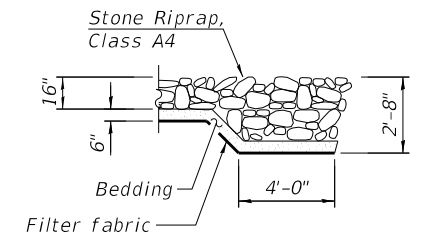
DESIGN STRESSES

PRECAST UNITS

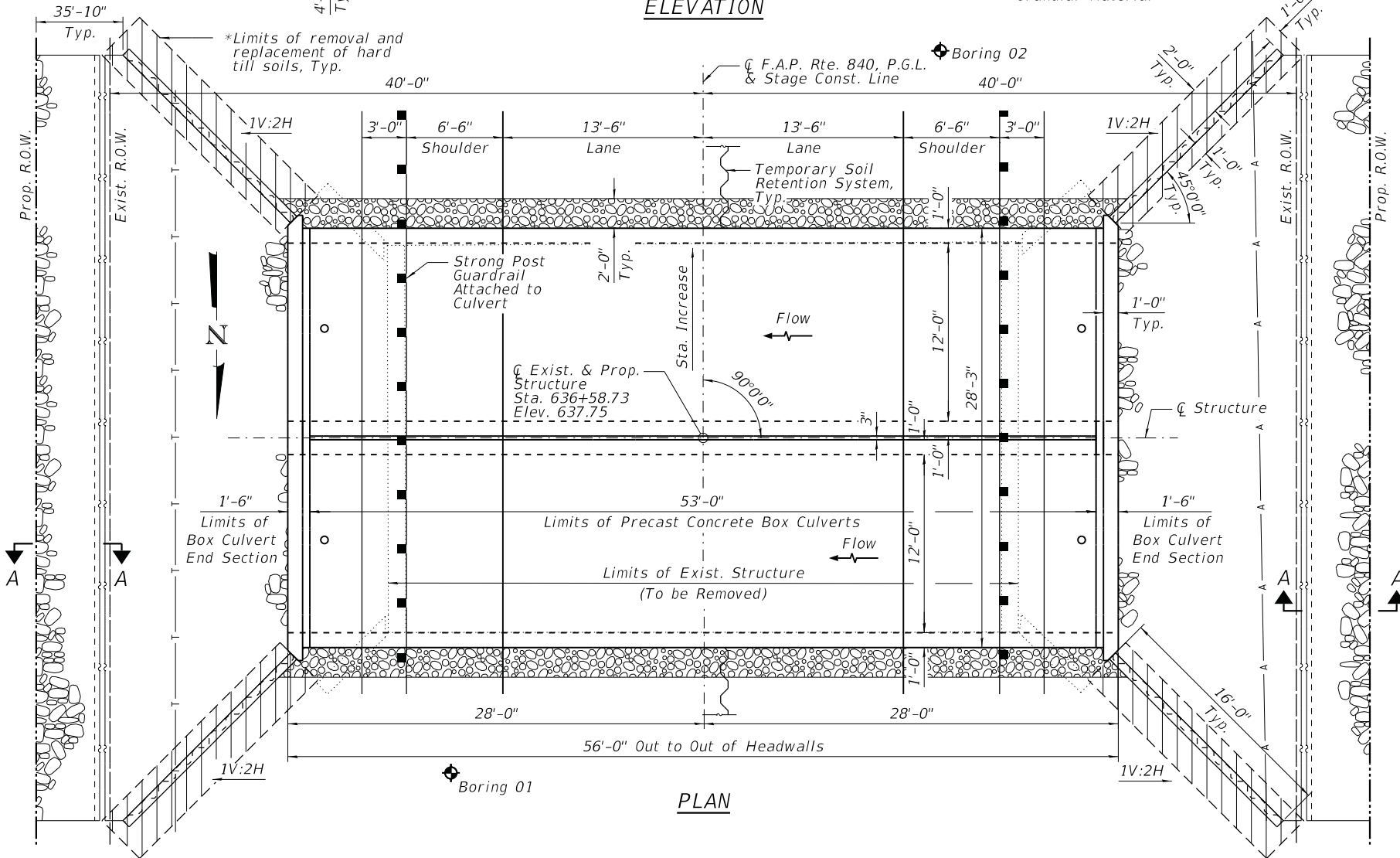
f'c = 5,000 psi
 fy = 65,000 psi (Welded Wire Rein.)

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (Sheet Piling)



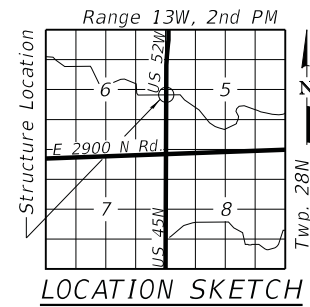
SECTION A-A



WATERWAY INFORMATION

Drainage Area = 2.64 sq. mi. Low Grade Elev. = 635.39 @ Sta. 642+90

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	277	137	167	631.6	0.0	0.0	631.6	631.6
Base	50	439	155	185	632.3	0.3	0.2	632.6	632.5
Scour	100	524	162	192	632.6	0.4	0.3	633.0	632.9
Overtopping	200	593	166	196	632.8	0.4	0.3	633.2	633.1
Max. Calc.	500	690	172	202	633.0	0.6	0.4	633.6	633.4



GENERAL PLAN AND ELEVATION
US 45 / 52 OVER LANGAN CREEK TRIB.
F.A.P. RTE. 840 SEC. (138 BR-1)BR
IROQUOIS COUNTY
STATION 636+58.73
S.N. 038-2029



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:54:23 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

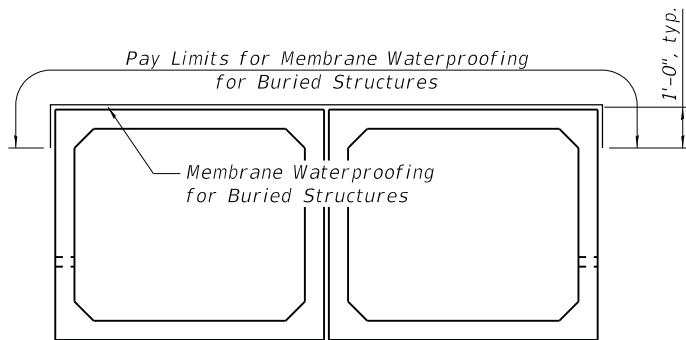
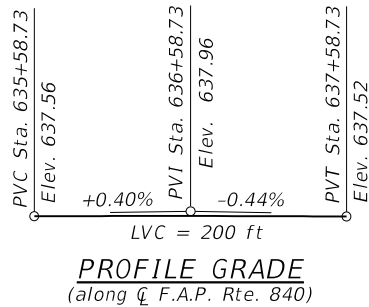
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 15 SHEETS

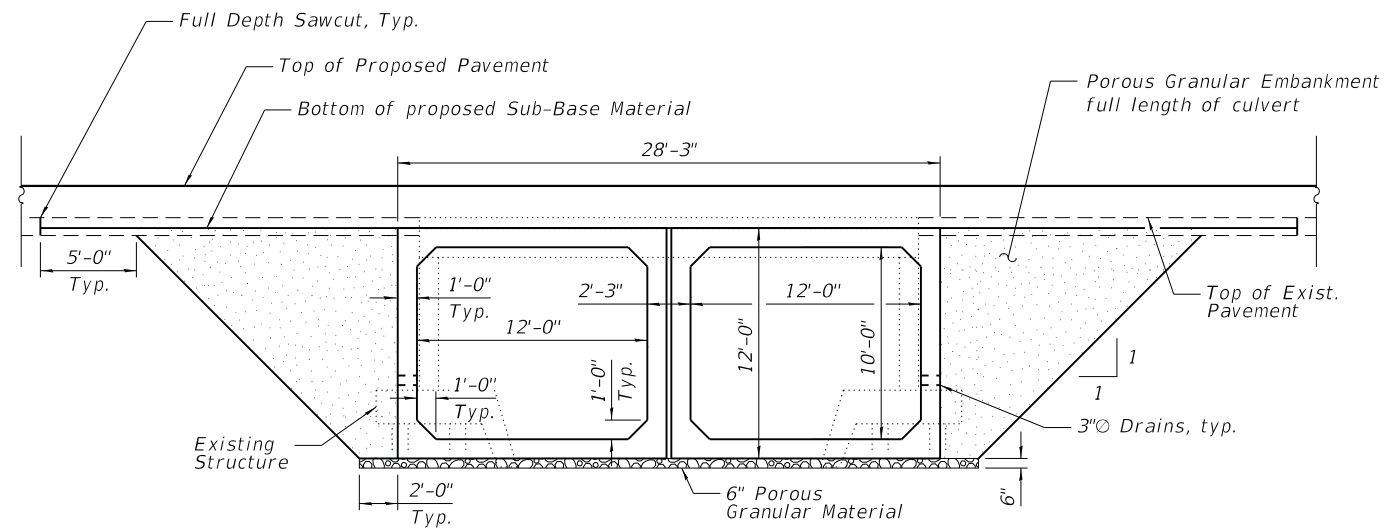
F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 22
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

STATION 636+58.73
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.P. RTE. 840 SEC. (138 BR-1)BR
 LOADING HL-93
 STR. NO. 038-2029

NAME PLATE
 See Std. 515001



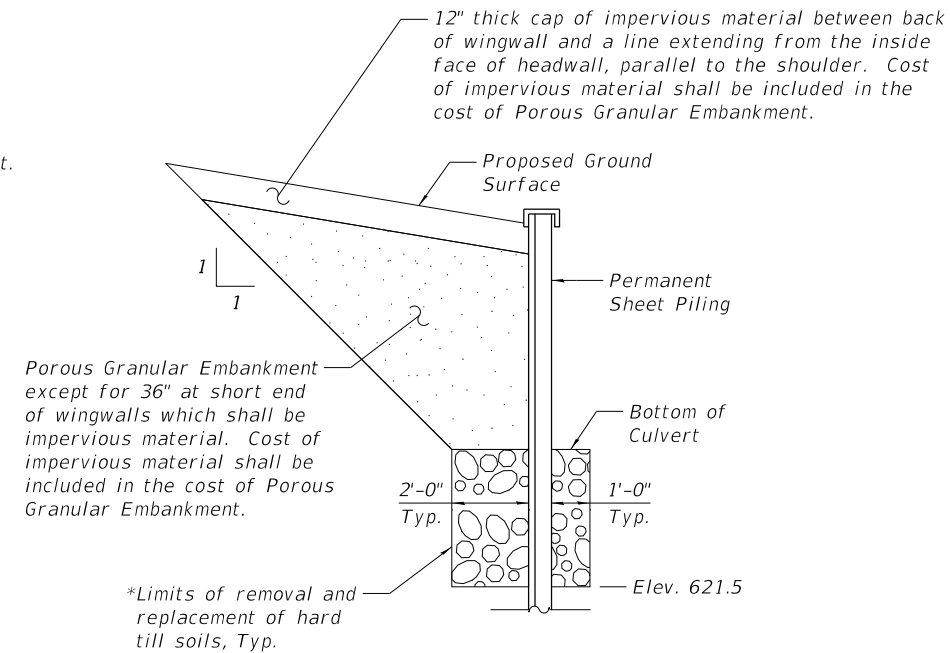
LIMITS OF MEMBRANE WATERPROOFING



SECTION THROUGH PRECAST BOX CULVERT

WINGWALL CONSTRUCTION SEQUENCE

1. Remove hard till soils above elevation 621.5.
2. Install steel sheet pile wingwalls.
3. Place porous granular material up to the bottom of culvert and complete grading in front of the sheet pile wingwalls.
4. Place porous granular material on the back side of the sheet pile wingwalls up to the bottom of culvert.
5. Install weep holes in the sheet pile wingwalls.
6. Complete backfill and grading on the back side of the sheet pile wingwalls.



SECTION THROUGH WING WALL

*Limits of removal and replacement of hard till soils with porous granular material meeting the gradation requirements of Std. Specifications Section 540.02, Note 1. 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. Cost of furnishing and installing the porous granular material shall be included in the cost of the end section. A sheet pile section depth of 12" was assumed in order to estimate the quantity of Removal and Disposal of Unsuitable Material.

GENERAL NOTES

The design fill height for this box varies between 1.90 ft minimum and 2.25 ft maximum. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

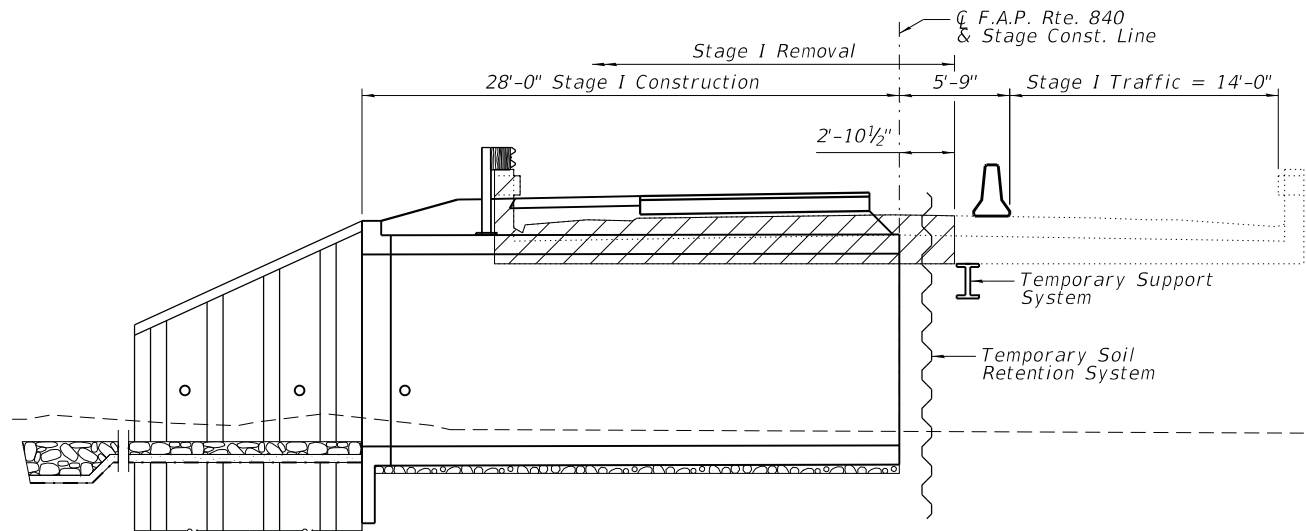
Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specifications.

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

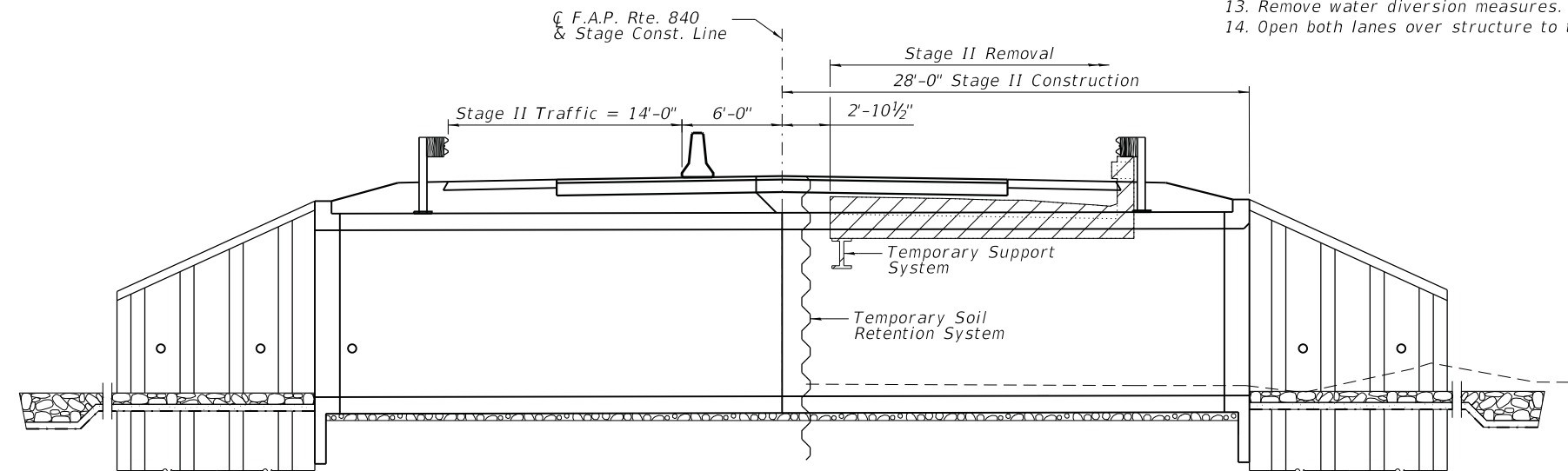
All hardware required for mounting of guardrail to top of culvert shall be included in the cost of Strong Post Guardrail Attached to Culvert.

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FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:54:26 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

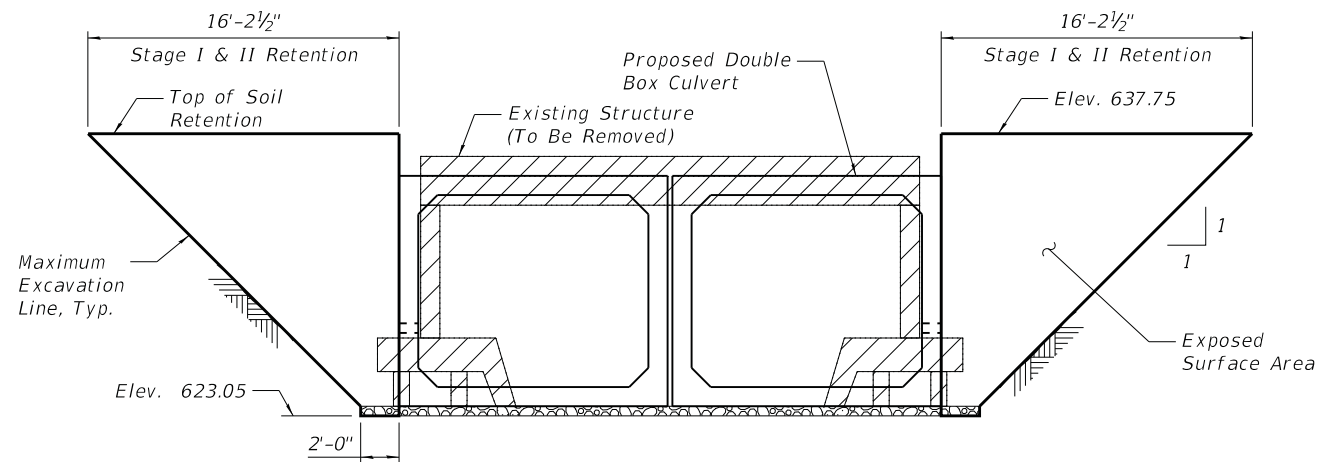
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IRROQUOIS	46	23
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



STAGE I REMOVAL & CONSTRUCTION



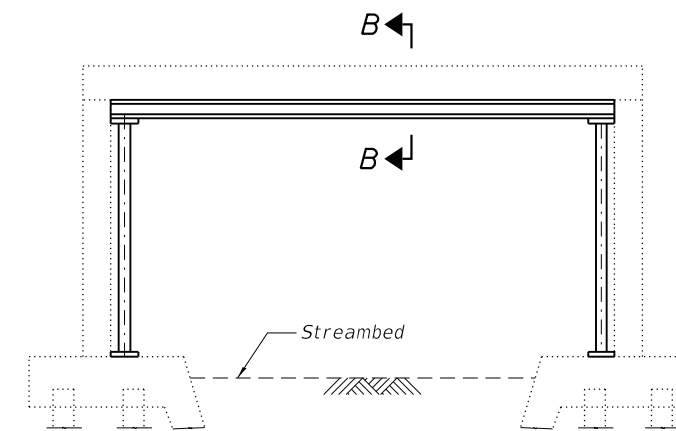
STAGE II REMOVAL & CONSTRUCTION



TEMPORARY SOIL RETENTION SYSTEM
(Dimensions along Stage Construction Line)

CULVERT CONSTRUCTION SEQUENCE

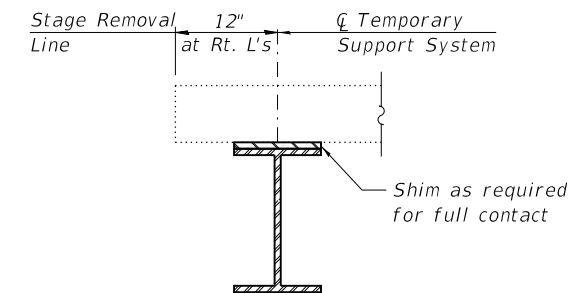
1. Close Stage I construction zone to traffic and restrict vehicles to the Stage I traffic zone.
2. Install Temporary Soil Retention System.
3. Divert water from construction area.
4. Install Temporary Support System.
5. Perform Stage I removal of existing structure.
6. Perform Stage I construction of replacement structure.
7. Open Stage II traffic zone to vehicles and close the Stage II construction zone.
8. Adjust Temporary Soil Retention System at stage construction line if necessary.
9. Remove Temporary Support System.
10. Perform Stage II removal of existing structure.
11. Perform Stage II construction of replacement structure.
12. Remove Temporary Soil Retention System.
13. Remove water diversion measures.
14. Open both lanes over structure to traffic.



TEMPORARY SUPPORT SYSTEM

Notes:

1. Place Temporary Support System prior to Stage I Removal.
2. Place Temporary Support System along skew.
3. Temporary Support System shall not be painted.



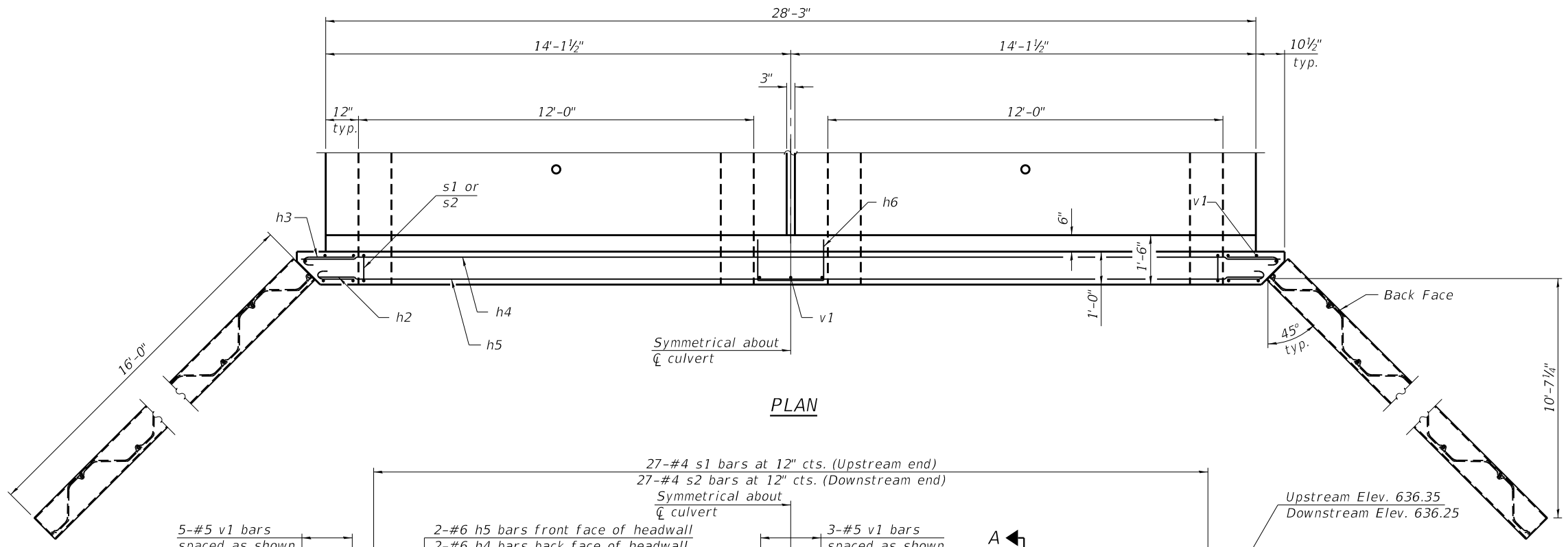
SECTION B-B

Notes:

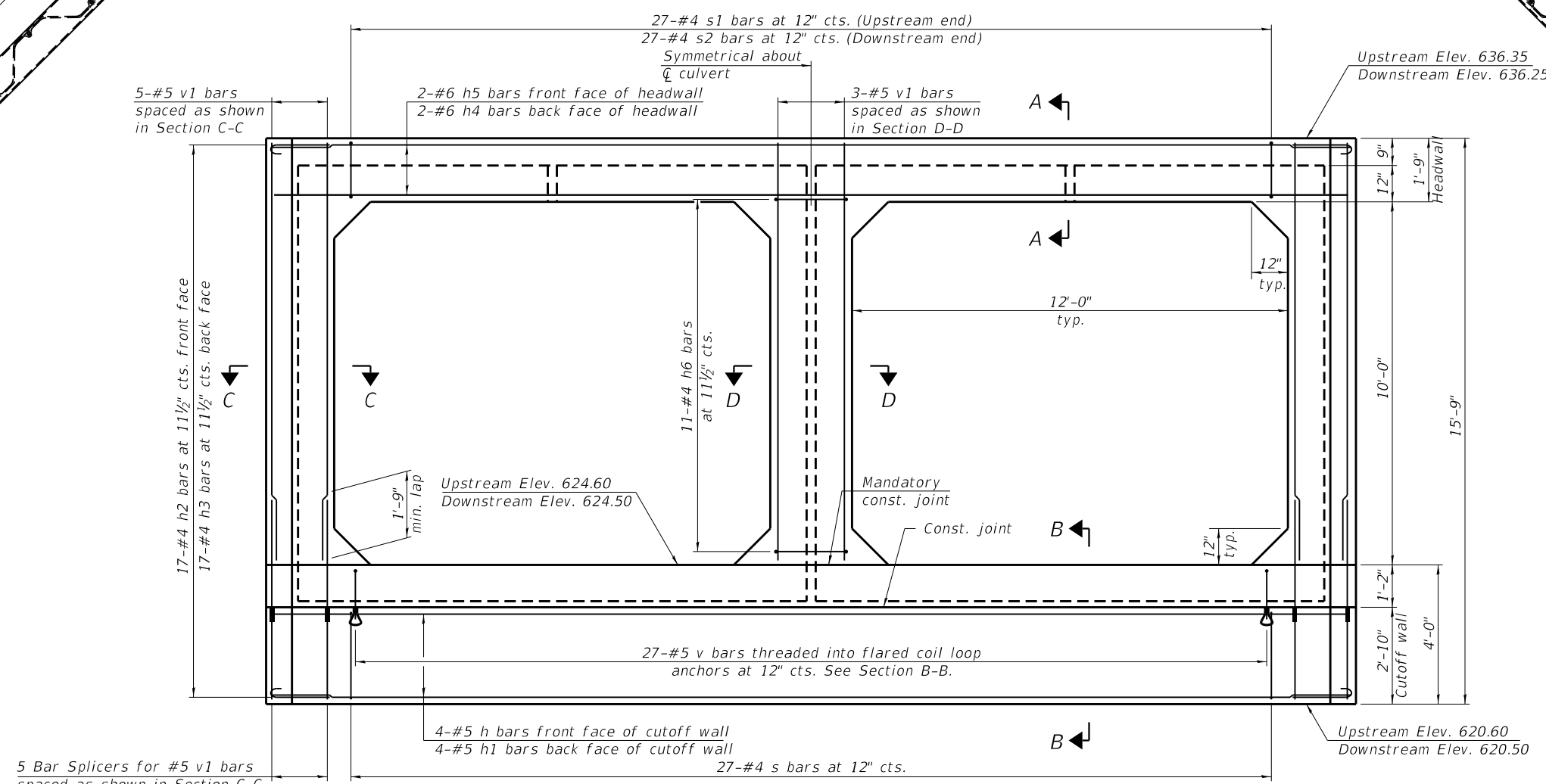
1. All staging cross sections are looking south.
2. All dimensions are at Rt. L's to $\text{\textcircled{C}}$ of roadway unless noted otherwise.
3. For quantity of temporary concrete barrier, see roadway plans.
4. A cantilevered sheet piling design does not appear feasible and additional members or other 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.

USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:54:29 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	24
CONTRACT NO. 66E24				



PLAN



END ELEVATION

(Wingwalls omitted in this view for clarity.)

Notes:

The design fill height for this structure varies between 1.90 ft minimum and 2.25 ft maximum. The precast concrete box culvert sections shall conform to the standard designs of ASTM C 1577.

The box culvert end section shall be built in the field and a precast option is not allowed except the cutoff wall may be precast. If the Contractor elects to use a precast cutoff wall, shop drawings and a proposed construction sequence shall be submitted to the Engineer for approval.

Areas of the precast box culvert in contact with cast-in-place concrete shall be sandblasted, cleaned, and wetted prior to placing concrete in the field according to Article 503.09(b).

The ends of the precast box sections adjacent to the end section shall be formed without male and female shapes.

The joints between precast box sections shall be sealed, all voids filled with a mastic joint sealer. In addition, the joints shall be externally sealed on all four sides with a 13 inch wide external sealing band. The seal shall be centered over the joint, secured in place and protected during the backfilling process.

Tilt h2 and h3 bars as required to maintain clearance.

Extend precast concrete box culvert welded wire fabric into end section. Bend as necessary to provide 1" clear cover.

See sheet 3 of 15 for culvert construction sequence. See sheet 5 of 15 for Section A-A, B-B, C-C and D-D. See sheet 5 of 15 for additional wing wall details.

BILL OF MATERIAL

Item	Unit	Total
Box Culvert End Sections, Culvert No. 1	Each	2

(Sheet 1 of 2)



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 3:26:31 PM	DRAWN - CGY	REVISED -
PLOT DATE = 3/23/2018	CHECKED - VPT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

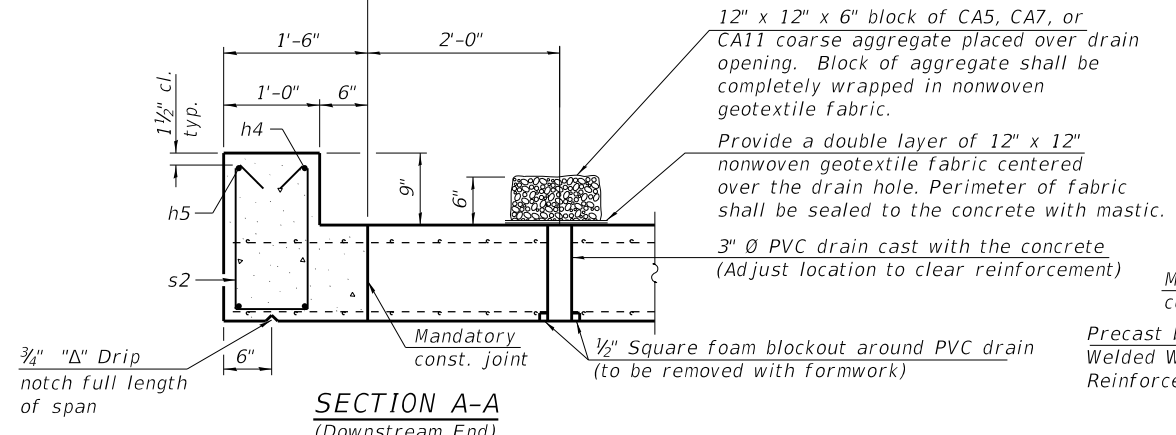
BOX CULVERT END SECTION DETAILS
STRUCTURE NO. 038-2029

SHEET NO. 4 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	25
CONTRACT NO. 66E24				

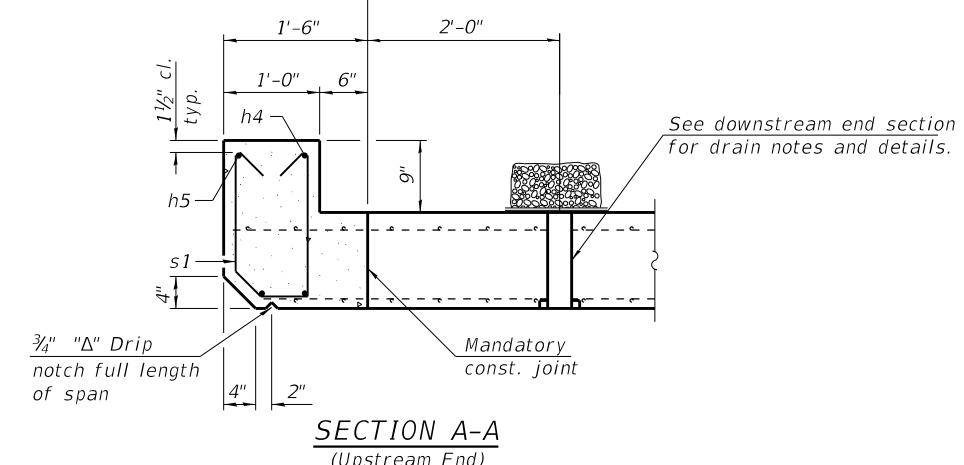
ILLINOIS FED. AID PROJECT

Pay Limits for Box Culvert End Sections Pay Limits for Precast Concrete Box Culverts

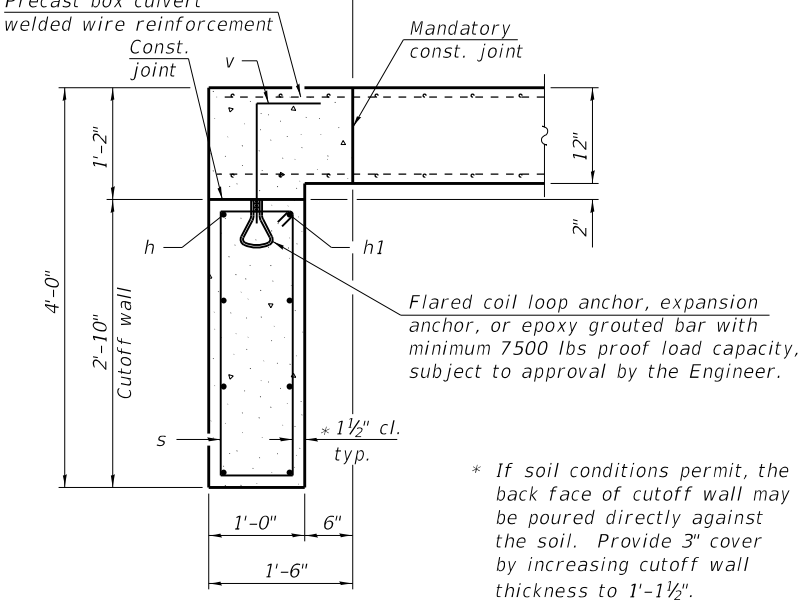


(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

Pay Limits for Box Culvert End Sections Pay Limits for Precast Concrete Box Culverts



Pay Limits for Box Culvert End Sections Pay Limits for Precast Concrete Box Culverts

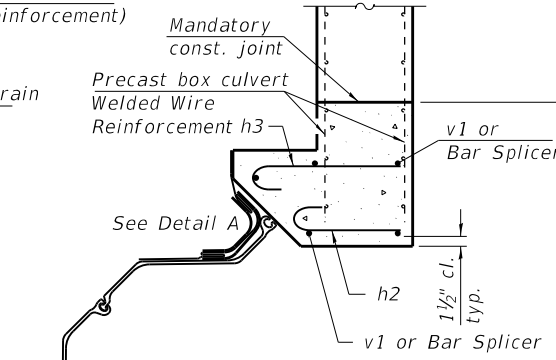


1/4" x 12" wide Fabric reinforced elastomeric mat per Section 1028 of the Standard Specifications.

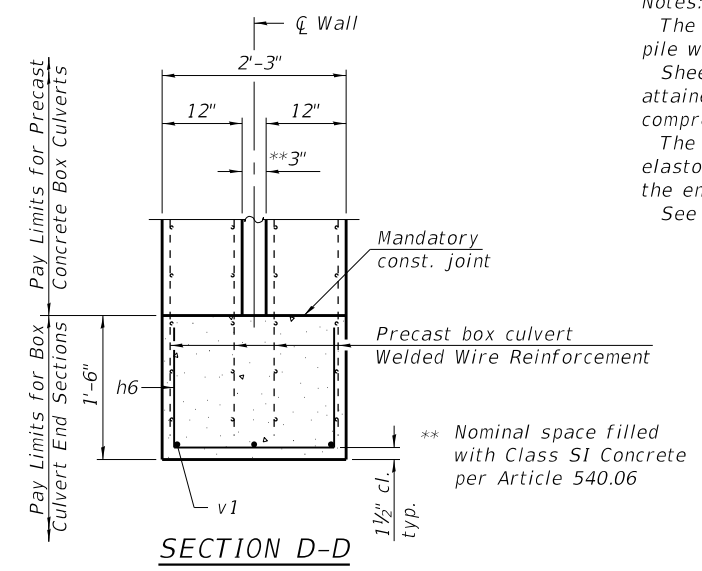
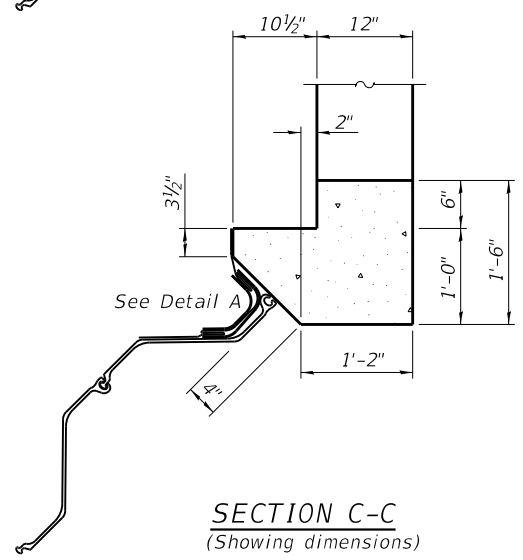
Geosynthetic filter fabric per Section 1080.01 of the Standard Specifications. Minimum weight shall be 4 oz./sq. yd. Fold as shown.



SECTION C-C (Showing reinforcement)



SECTION C-C (Showing dimensions)

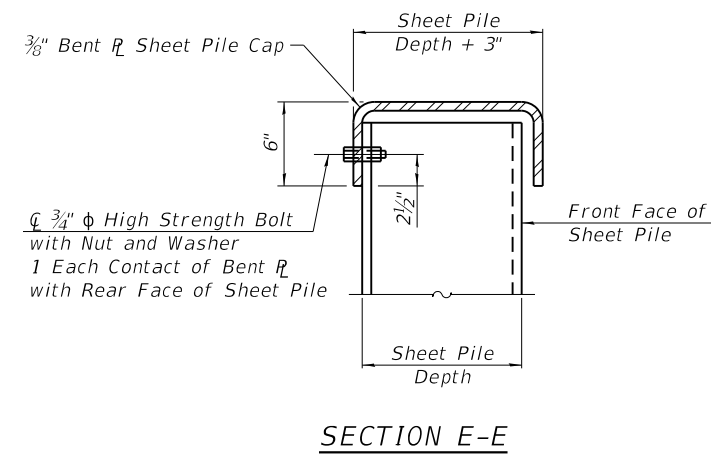
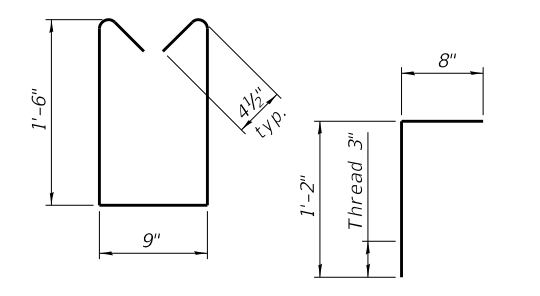
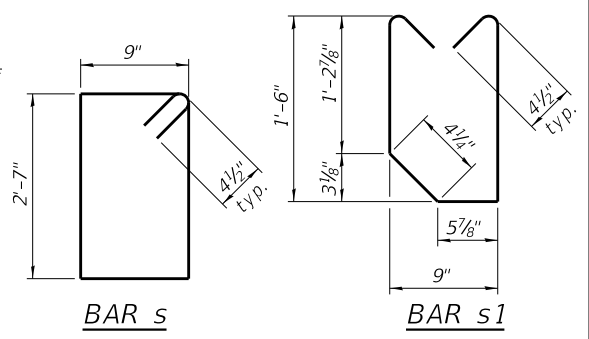
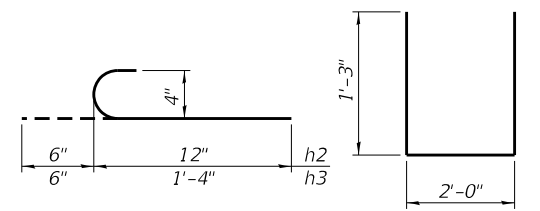
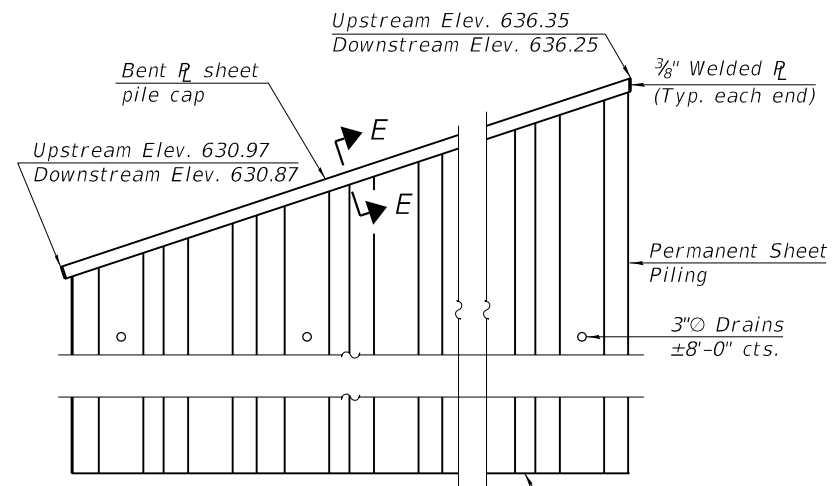


Notes:
 The minimum effective section modulus of the permanent sheet pile wall shall be 54.6 in.³/ft.
 Sheet piling shall not be driven until the concrete strength has attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
 The cost of furnishing and installing the bent R sheet pile cap, elastomeric mat, and filter fabric shall be included in the cost of the end section.
 See sheet 3 of 15 for culvert construction sequence.

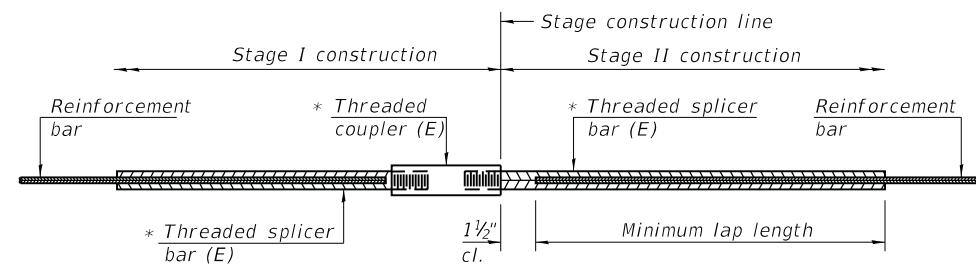
ONE END SECTION BILL OF MATERIAL

(For information only)

Bar	No.	Size	Length	Shape
h	4	#5	28'-5"	—
h1	4	#5	29'-8"	—
h2	34	#4	1'-6"	—
h3	34	#4	1'-10"	—
h4	2	#6	29'-8"	—
h5	2	#6	28'-5"	—
h6	11	#4	4'-6"	—
s	27	#4	7'-5"	—
s1	27	#4	4'-4"	—
s2	27	#4	4'-6"	—
v	27	#5	1'-10"	—
v1	13	#5	11'-6"	—
Concrete Box Culverts	Cu. Yd.		10.5	
Reinforcement Bars	Pound		950	
Bar Splicers	Each		10	
Permanent Sheet Piling	Sq. Ft.		890	



(Sheet 2 of 2)

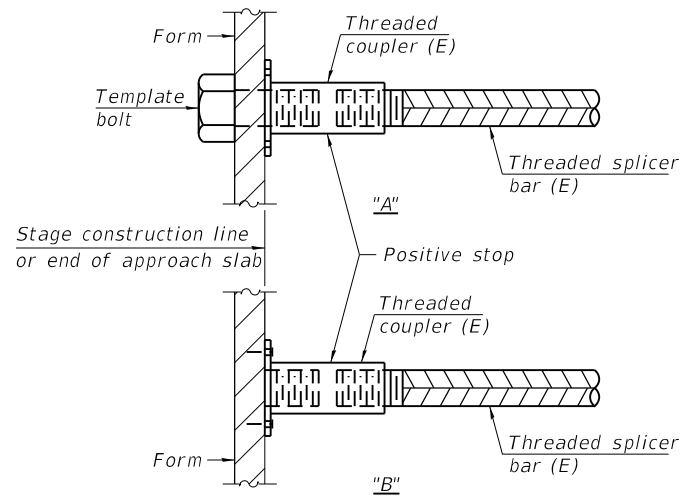


STANDARD BAR SPLICER ASSEMBLY

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
Cutoff Wall	#5	20	1'-9"

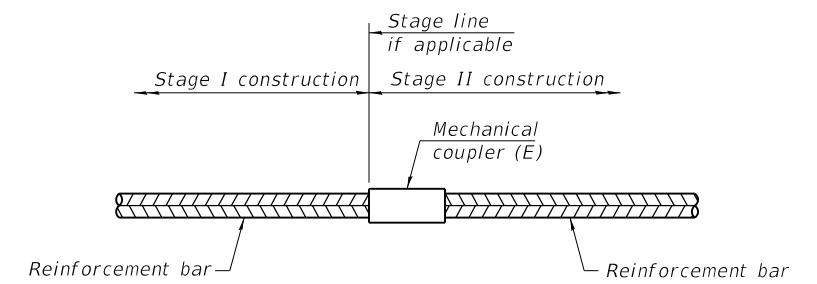


INSTALLATION AND SETTING METHODS

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

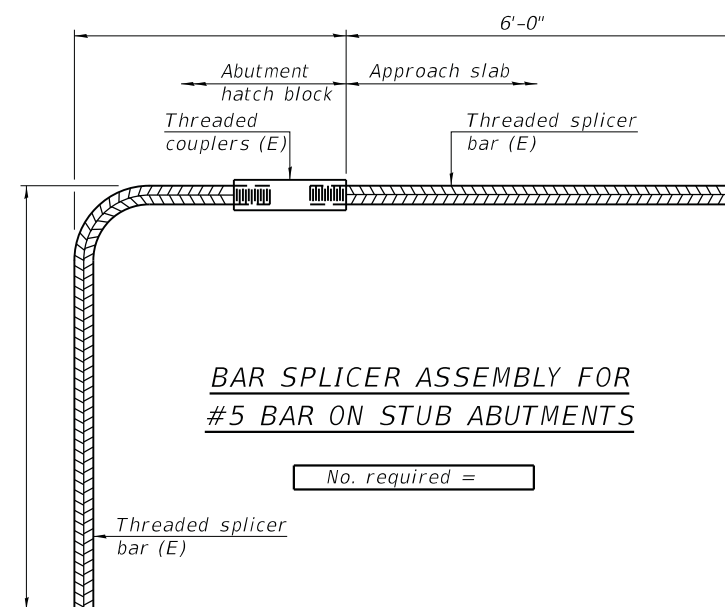
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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.

BSD-1

2-17-2017



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:54:37 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 038-2029**

SHEET NO. 6 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	27
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 9/30/15

ROUTE FAP 840 (US 45/52) DESCRIPTION US 45/52 over a Drainage Ditch, 3.52 miles North of US 52 LOGGED BY Larry Myers

SECTION 138BR LOCATION NW 1/4, SEC. 5, TWP. 28N, RNG. 13W, 2nd PM,

Latitude 40.93822, Longitude -87.866673

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 038-0116 (Exist.)
Station 636+58.73

BORING NO. 01 (N.E. Quad.)
Station 636+24
Offset 16.0 ft Lt.
Ground Surface Elev. 636.15 ft

Surface Water Elev. 625.78 ft
Stream Bed Elev. 624.58 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
Augered Shoulder Stone, Black Silty Clay Loam / Silty Loam Fill	633.65				Stiff Gray Silty Clay Loam Till (continued)	2			
						3	1.4	21	
						4	B		
Stiff Black Silty Clay Loam / Silty Clay Fill	633.65	2				2			
		3	1.5	18		2	1.5	22	
		3	P			4	B		
		-5				-25			
		2				1			
		2	2.0	29		2	1.2	22	
		3	P			3	B		
Hard Brown & Gray Silty Clay Loam Till	628.65	3				1			
		4	*	19		3	1.3	22	
		3				4	B		
* Sample 7.5' - 9.0' ribboned inside the split spoon									
		-10				-30			
		4				1			
		7	8.8	18		3	1.2	22	
		9	S			3	B		
		5							
		6	7.4	19					
		8	S						
Very Stiff Brown Silt with some Clay	621.65	-15				-35			
		3				2			
		3	2.5	21		4	2.0	21	
		4	P			5	B		
Stiff Gray Silty Clay Loam Till	619.15								
		3							
		4	2.0	22					
		5	P						
		-20				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, form 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
IDOT

SOIL BORING LOG

Page 1 of 1

Date 9/30/15

ROUTE FAP 840 (US 45/52) DESCRIPTION US 45/52 over a Drainage Ditch, 3.52 miles North of US 52 LOGGED BY Larry Myers

SECTION 138BR LOCATION NE 1/4, SEC. 6, TWP. 28N, RNG. 13W, 2nd PM,

Latitude 40.938031, Longitude -87.866796

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 038-0116 (Exist.)
Station 636+58.73

BORING NO. 02 (S.W. Quad.)
Station 636+91
Offset 17.0 ft Rt.
Ground Surface Elev. 635.95 ft

Surface Water Elev. 625.78 ft
Stream Bed Elev. 624.82 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)	Description	Depth (ft)	Blow Count (/6")	UCS (tsf)	Moisture (%)
Augered Shoulder Stone, Black & Brown Silty Clay Loam Fill	633.45				Very Stiff Gray Silty Clay Loam Till (continued)	3			
						4	3.2	21	
						5	B		
Stiff Black & Brown Silty Clay Loam Fill	633.45	2				2			
		3	1.5	25		3	2.5	21	
		3	P			5	B		
		-5				611.45			
		3				-25			
		2				2			
		2	2.0	21		2	2.0	22	
		3	P			3	B		
Very Stiff Brown & Gray Silty Clay Loam Till	628.45	2				2			
		3	3.1	20		2	1.8	21	
		4	B			2	B		
		-10				-30			
		3				1			
		4	3.9	20		2	1.9	22	
		5	B			3	B		
Hard Gray & Brown Silty Clay Loam Till	623.95	5							
		9	8.9	17					
		14	S						
		-15				-35			
		3				1			
		4	4.5	20		2	2.0	19	
		5	B			3	B		
Very Stiff Gray Silty Clay Loam Till	618.95								
		3							
		4	3.0	21					
		5	B						
		-20				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, form 137 (Rev. 8-99)



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FILE NAME =	CHECKED - MTH	REVISED -
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PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

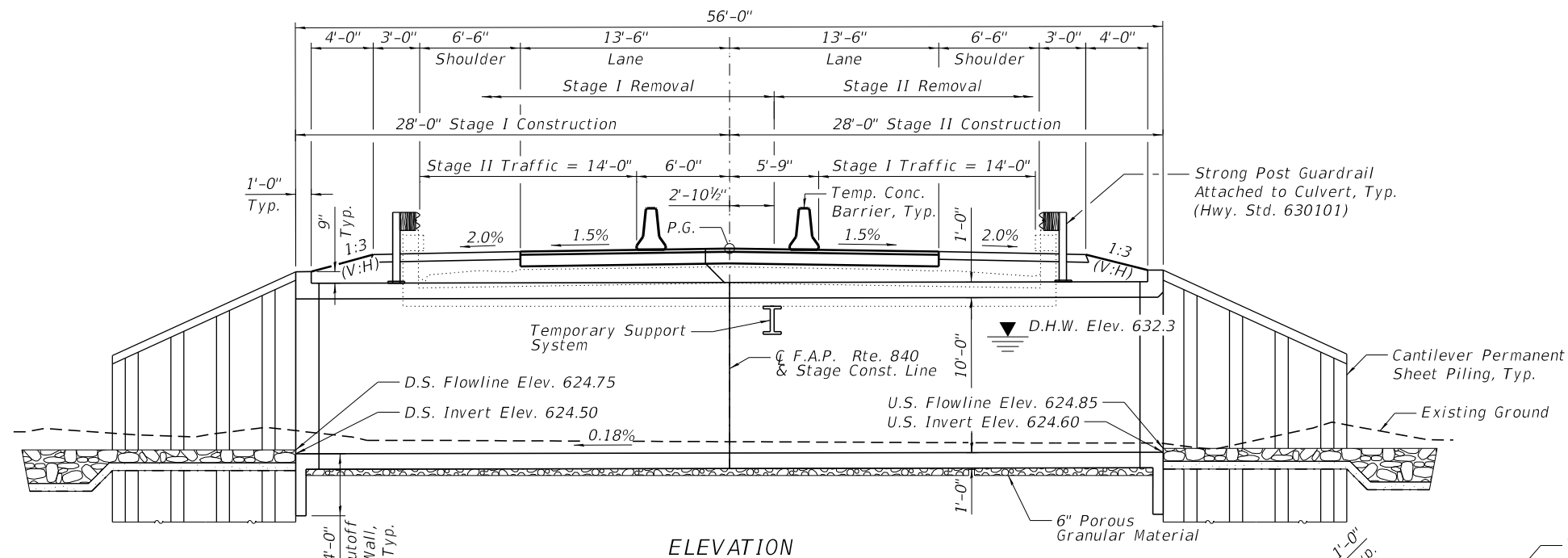
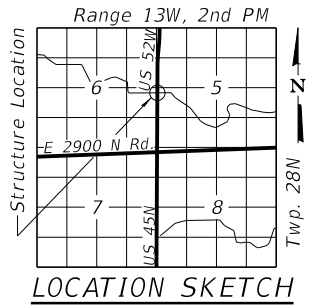
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 038-2029

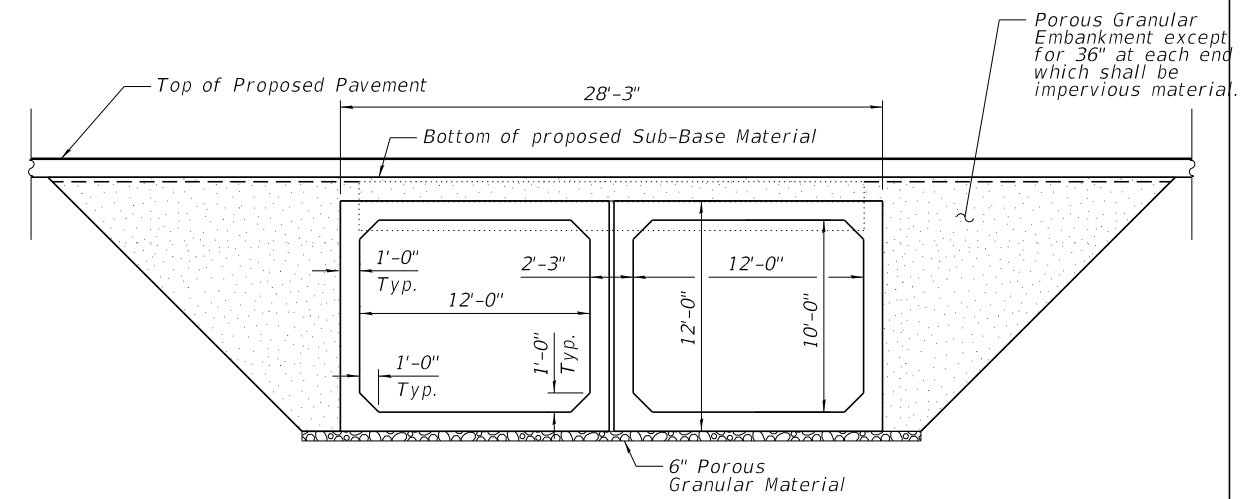
SHEET NO. 7 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	28
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

EXHIBIT

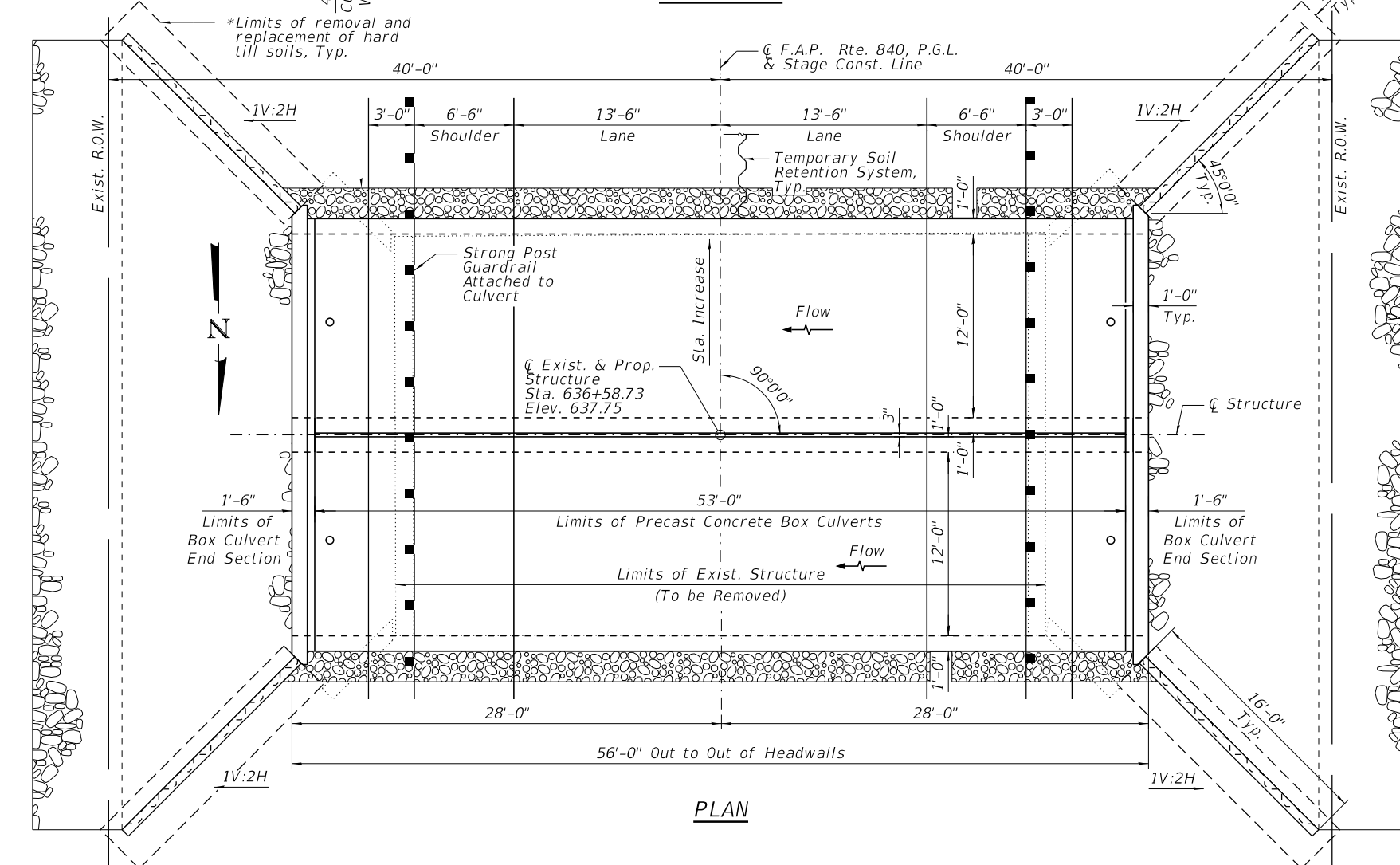


ELEVATION



SECTION THROUGH PRECAST BOX CULVERT

FOR INFORMATION ONLY

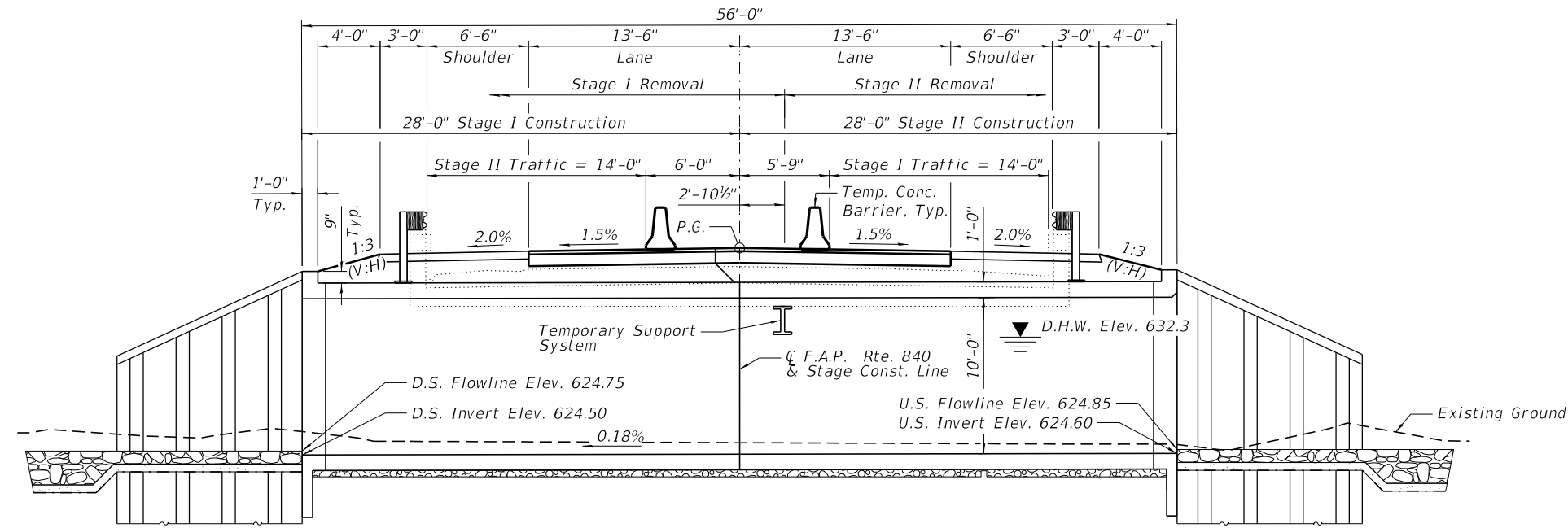
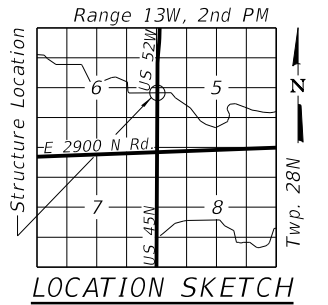


PLAN

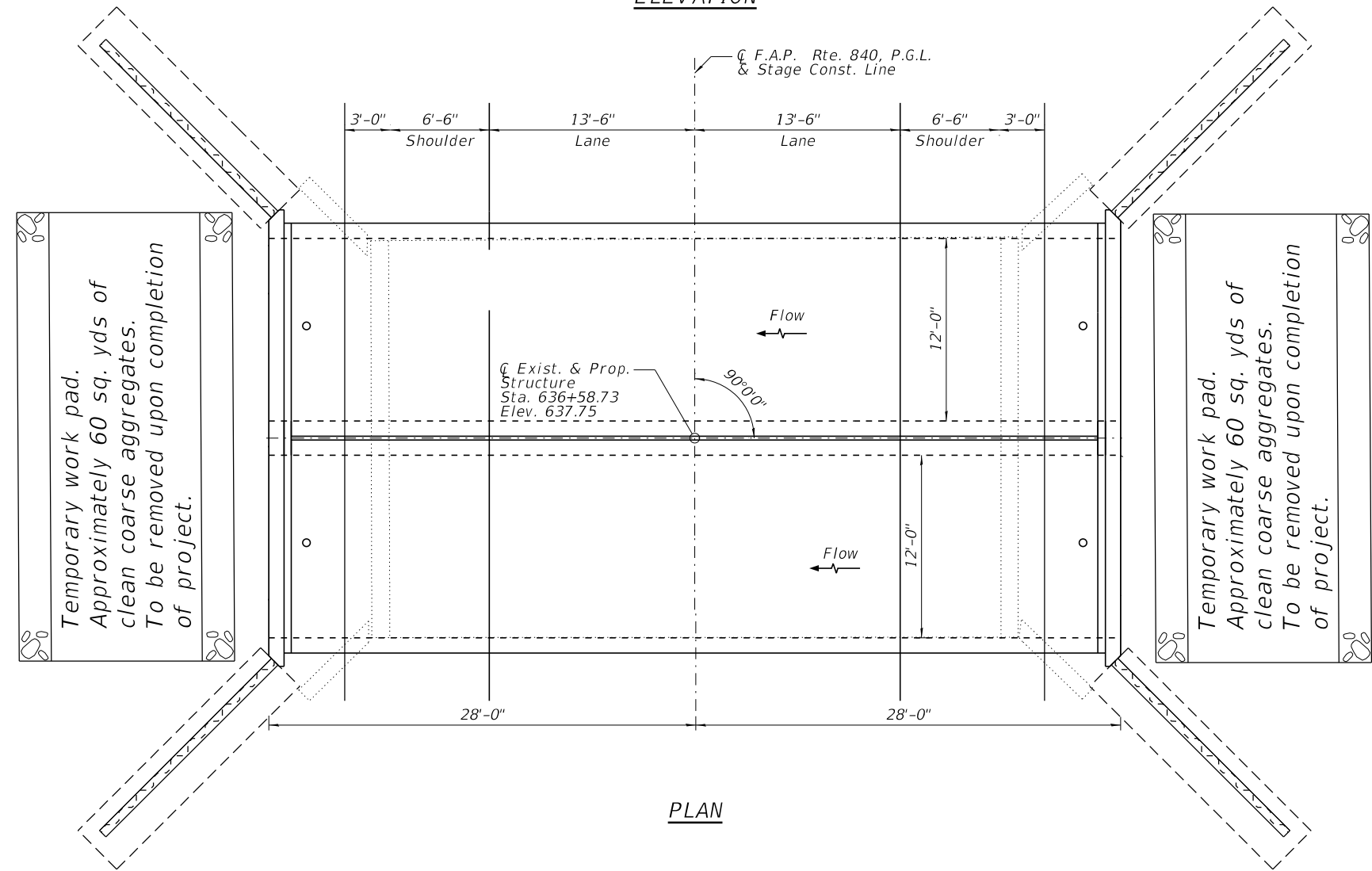
GENERAL PLAN AND ELEVATION
 US 45 / 52 OVER LANGAN CREEK TRIB.
 F.A.P. RTE. 840 SEC. (138 BR-1)BR
 IROQUOIS COUNTY
 STATION 636+58.73
 EXISTING S.N. 038-0116
 PROPOSED S.N. 038-2029

Not to Scale	USER NAME =	DESIGNED - VPT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING S.N. 038-0116 404 PERMIT CAUSEWAY / WORK PAD PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE =	CHECKED - VPT	REVISED -			ILLINOIS FED. AID PROJECT					

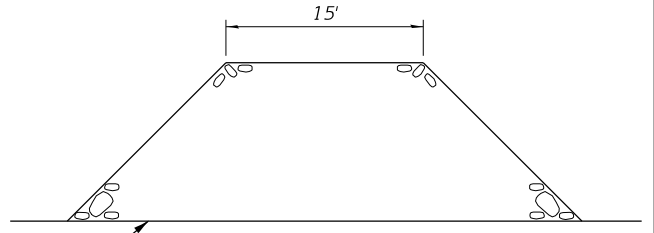
EXHIBIT



ELEVATION



PLAN



Temporary work pad.
To be removed upon completion
of project.

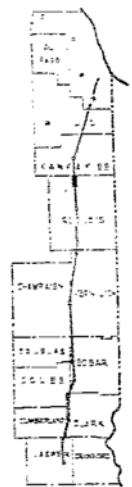
Temporary work pad.
Approximately 60 sq. yds of
clean coarse aggregates.
To be removed upon completion
of project.

Temporary work pad.
Approximately 60 sq. yds of
clean coarse aggregates.
To be removed upon completion
of project.

FOR INFORMATION ONLY

GENERAL PLAN AND ELEVATION
US 45 / 52 OVER LANGAN CREEK TRIB.
F.A.P. RTE. 840 SEC. (138 BR-1)BR
IROQUOIS COUNTY
STATION 636+58.73
EXISTING S.N. 038-0116
PROPOSED S.N. 038-2029

Not to Scale	USER NAME =	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING S.N. 038-0116 404 PERMIT CAUSEWAY / WORK PAD PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE =	DRAWN - CGY	REVISED -			CONTRACT NO. 66E24					
	PLOT DATE =	CHECKED - VPT	REVISED -			ILLINOIS FED. AID PROJECT					



INDEX TO SHEETS

Sheet No. - Title Page

- 2 - Standard Cross Section No. 1257
- 2 - Detail Sketch of Intersection S.A. Route 4 & S.B.I. Rt. 49
- 2 - Detail Sketch of Intersection S.B.I. Rt. 116 & S.B.I. Rt. 49
- 3 - Plan & Profile Station 396+77 to Sta. 446+00
- 4 - Station 446+00 to Sta. 506+00
- 5 - Station 506+00 to Sta. 566+00
- 6 - Station 566+00 to Sta. 626+00
- 7 - Station 626+00 to Sta. 686+00
- 8 - Station 686+00 to Sta. 746+00
- 9 - Station 746+00 to Sta. 806+00
- 10 - Station 806+00 to Sta. 827+00
- 11-35 Inclusive - Cross Sections
- 36 - Standard Culvert Design No. 828-1, 828-3, 1204-1
- 36 - Special Culvert Design Sta. 443+87, 450+60
- 37 - Sta. 476+00, 529+00, 618+12, 715+78, 794+00
- 37 - Sta. 559+83, 608+00, 610+20
- 38 - Sta. 662+47, 701+00, 737+64, 680+67, 822+00
- 39 - Sta. 822+50
- 39 - Special Bridge Design Sta. 632+85 (Sheets 1, 2 & 3 of 3 sheets)
- 40 - Sta. 550+22 (Sheet 1 of 4 sheets)
- 41 - Sta. 550+22 (Sheet 2 of 4 sheets)
- 42 - Sta. 550+22 (Sheet 3 of 4 sheets)
- 43 - Sta. 550+22 (Sheet 4 of 4 sheets)
- 44 - Sta. 752+43 (Sheet 1 of 2 sheets)
- 45 - Sta. 752+43 (Sheet 2 of 2 sheets)
- 45 - Sta. 412+24 (Sheets 1 & 2 of 2 sheets)
- 46 - Standard No. 845, 1203
- 47 - Standard No. 1162, 1178

Route 49, Sections 138 & 138-B, Iroquois Co.

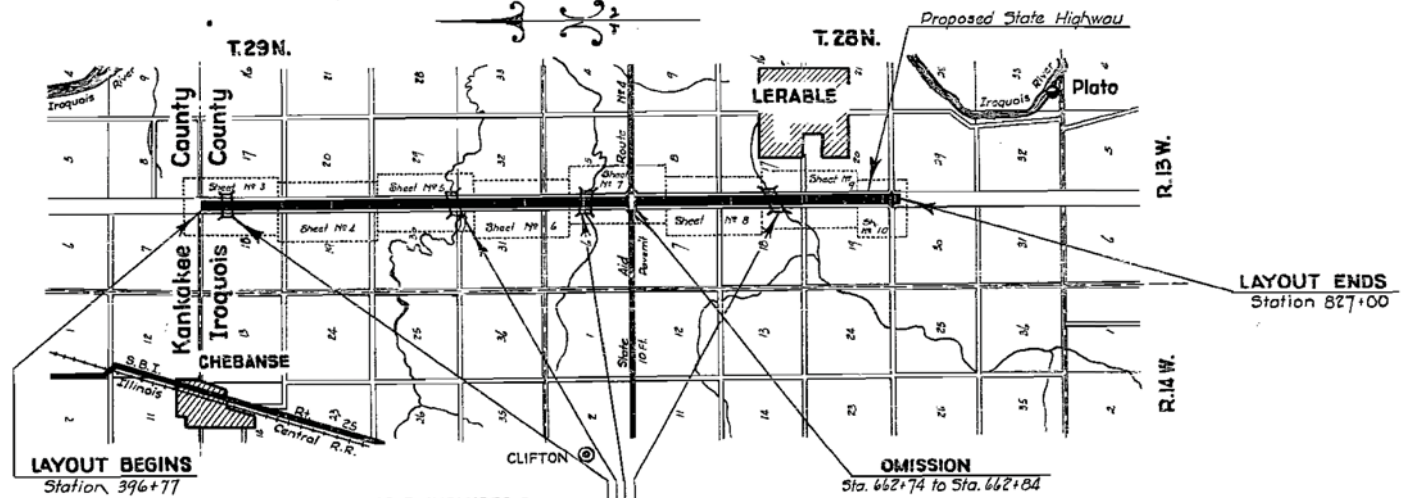
From a point near the N.E. corner of Sec. 18, T. 29 N., R. 13 W. of the 2nd Prime Meridian to a point near the N.E. corner of Sec. 30, T. 28 N., R. 13 W. of the 2nd D.M.

SUMMARY OF QUANTITIES

SECTION - 138	SECTION 138-B
44481 - Cu.Yds. Class A Excavation	730.2 - Cu.Yds. Class A Concrete
15098 - Cu.Yds. Borrow Excavation	103.1 - Cu.Yds. Class B Concrete
1164 - Rods Hedge Pulling	332.0 - Cu.Yds. Class X Concrete (Footings)
86697 - Sq.Yds. Pavement	6.9 - Cu.Yds. Class X Concrete (Rail)
160 - Each Setting Right of Way Markers	143710 - Pounds Reinforcing Steel
104620 - Sq.Yds. Earth Shoulders	3390 - Lin. Ft. Piling (10 Ton Untr.)
366.3 - Cu.Yds. Class A Concrete	1160 - Lin. Ft. Piling (12 Ton Untr.)
27300 - Pounds Reinforcing Steel	2200 - Lin. Ft. Piling (15 Ton Untr.)
	5059 - Pounds Rockers and Plates
	730 - Pounds Structural Steel (Exp)
	3 - Each Name Plates

SUMMARY OF CONCRETE

SECTION 138	SECTION 138-B
41 - Standard Culvert Design No. 828-1-3	77.9
1 - No. 828-3-3	2.2
4 - No. 1204-1-3	18.8
2 - No. 1204-1-5	11.2
1 - No. 1204-1-8	7.4
Special Culvert Design Station 443+87	12.0
Station 450+60	12.0
Station 476+00	6.7
Station 529+00	6.7
Station 559+83	20.6
Station 608+00	8.9
Station 610+20	11.6
Station 618+12	6.7
Station 662+47	18.1
Station 680+67	39.1
Station 701+00	25.1
Station 715+78	6.7
Station 737+64	22.1
Station 794+00	6.7
Station 822+00	39.1
Station 822+50	6.7
Total Cu.Yds. Concrete	366.3



SECTION 138-B INCLUDES

- 1 R.C. Slab Bridge, 1 span @ 16'-0" at Sta. 412+24
- 1 R.C. Girder Bridge, 2 spans @ 60'-0" on @ Sta. 550+22
- 1 R.C. Slab Bridge, 1 span @ 24'-0" at Station 632+85
- 1 R.C. Girder Bridge, 1 span @ 60'-0" at Station 752+43

LAYOUT
Approximate Scale: 1 inch = 1 mile.
Net Length of Layout = 43010.4 Feet = 8.146 Mi.

SECTION 138-B

CLASS A	CLASS B	CL. X (FOOTINGS)	CL. X (RAIL)
Special Bridge Des. Sta. 412+24	58.7	39.7	2.9
Sta. 550+22	397.4	103.1	164.2
Sta. 632+85	87.4	42.5	4.0
Sta. 752+43	186.7	85.6	
Total Cu.Yds. Concrete	730.2	103.1	332.0

SUMMARY

Station to Station	Width of Pavement	Gross Length Along Transit Line	Corrections for Curves		Corrections for Relocations		Net Length of Layout Along Final Center Line	Omissions	Net Length to be Improved in Feet		Pavement Over Bridges		Sq. Yds. of Pavement	
			Feet	Sta. of P.I.	Feet	Sta. = Sta.			Feet	Sta. to Sta.	Feet	18 Ft. Total	Feet	18 Ft. Total
396+77	500+00	18	10313				10323		10323	10323	412+24	18	20644	20644
500+00	620+00	18	12000	610+00	1.7		11998.3		11998.3	11998.3	550+22	127.8	23996.6	24039.2
620+00	700+00	18	8000	622+20	0.9		7999.1	662+74	7989.1	7989.1	632+85	26	15975.2	16202.2
700+00	760+00	18	6000				6000	662+84	6000	6000	752+43	63	12000	12021
760+00	827+00	18	6700				6700		6700	6700			388	13400
TOTALS			43023		2.6		43020.4		43010.4	43010.4		2348	675.6	86020.8

* - Widening over Bridges.

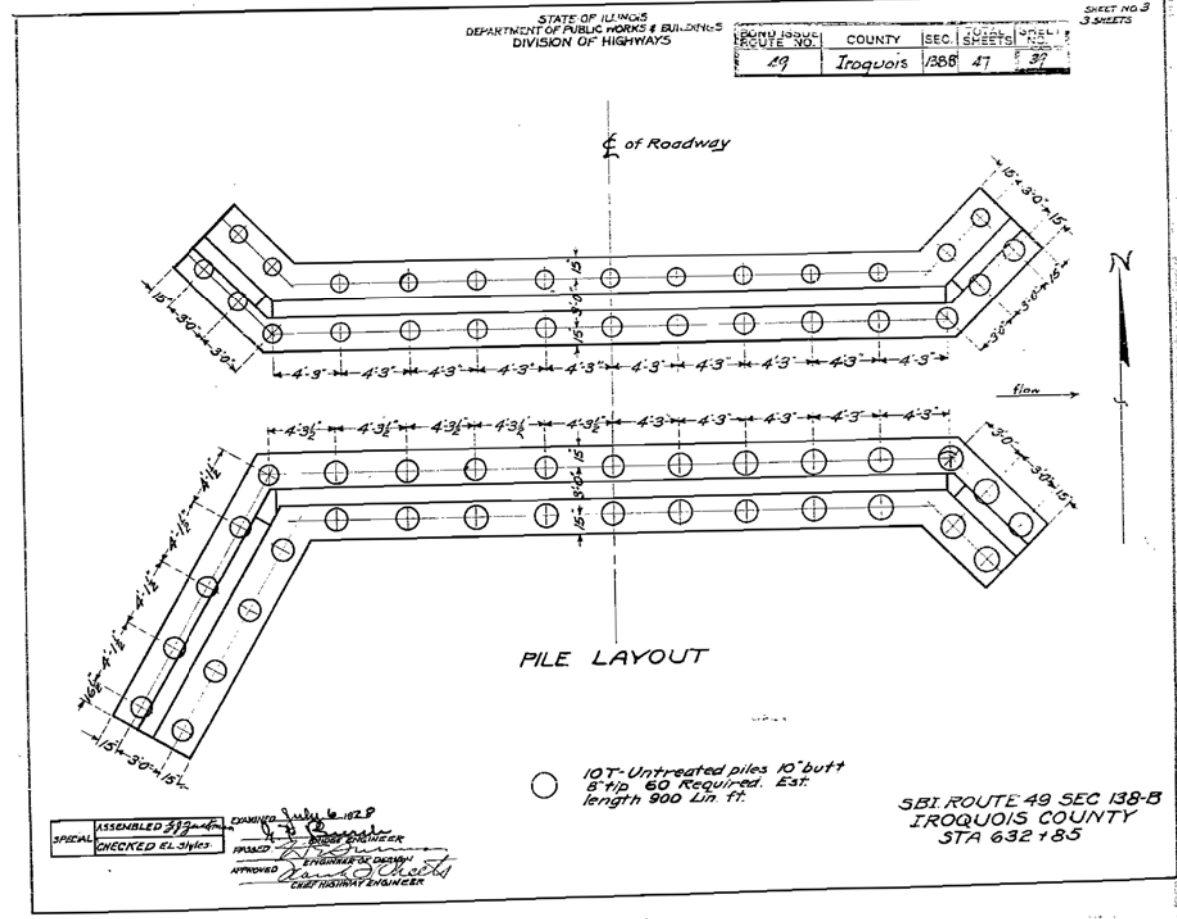
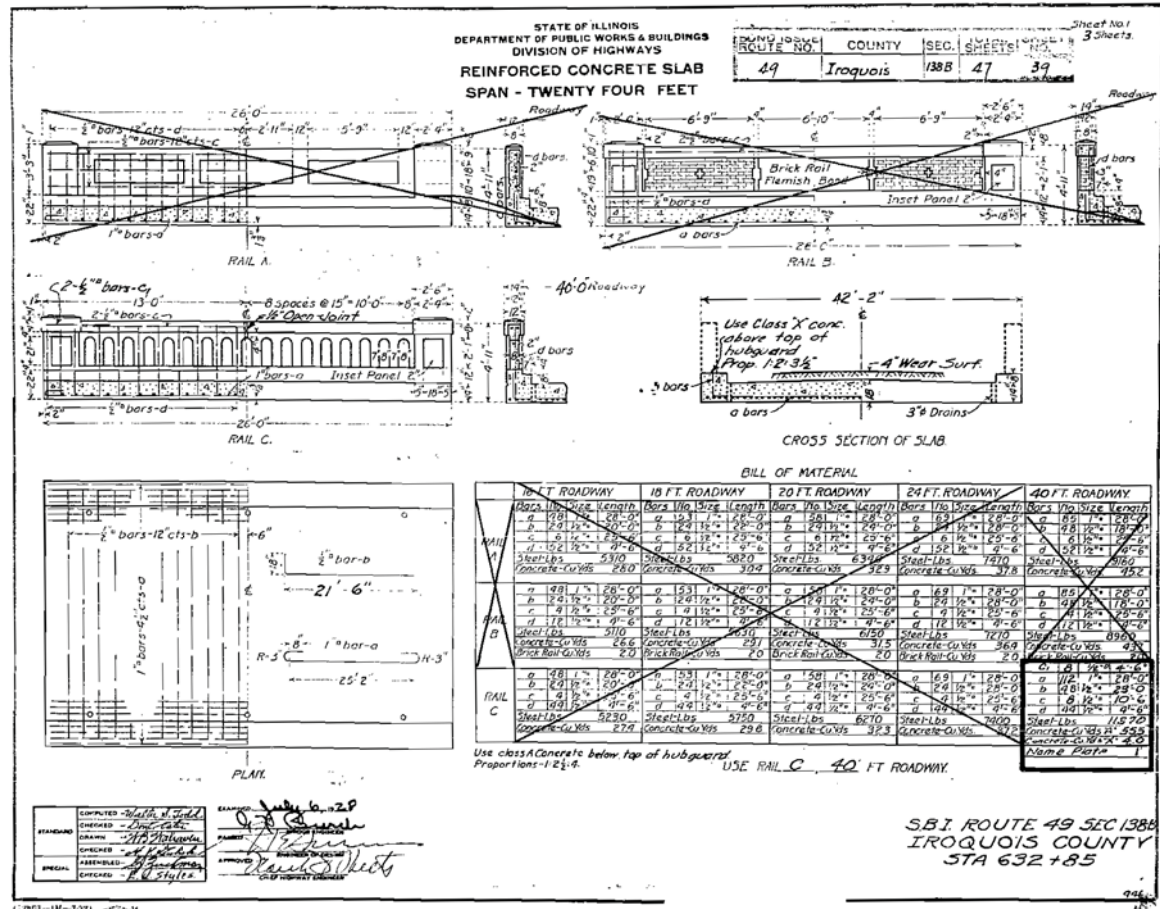
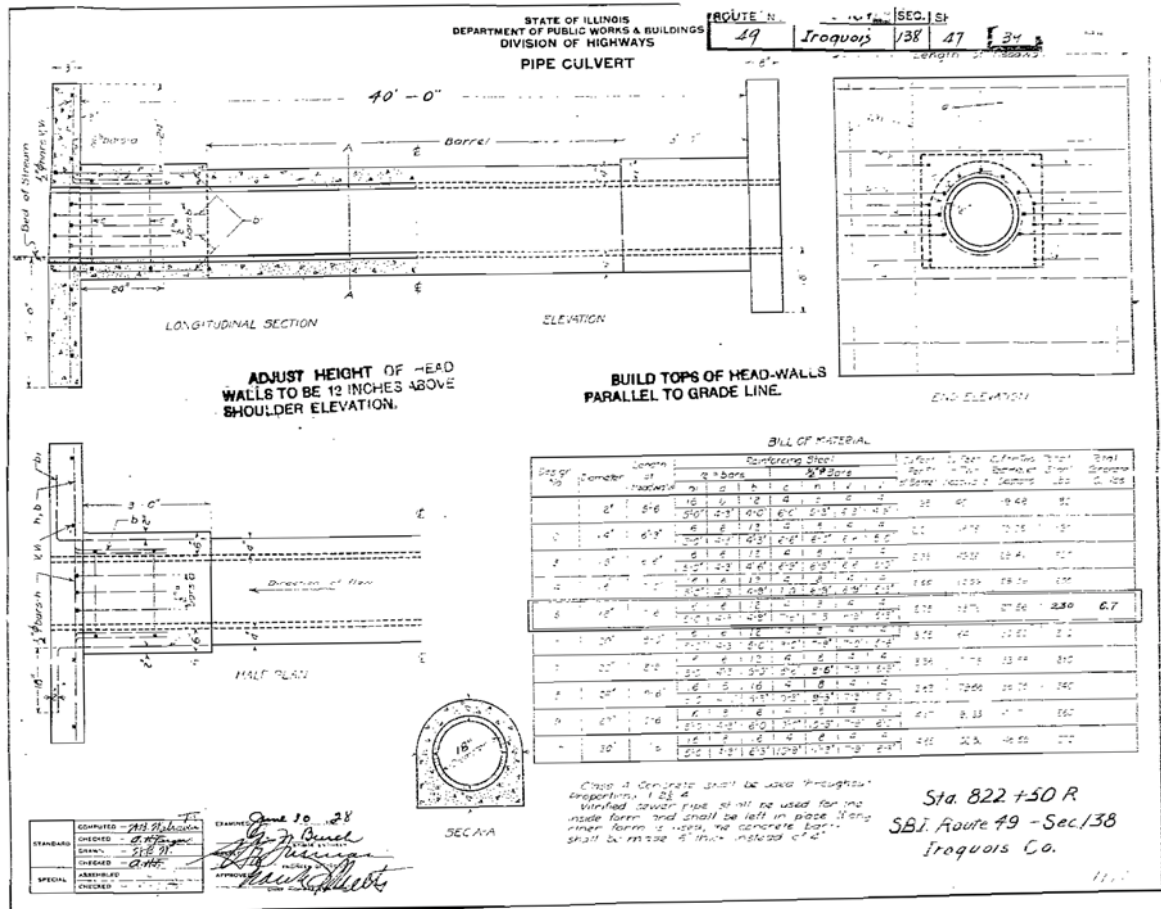
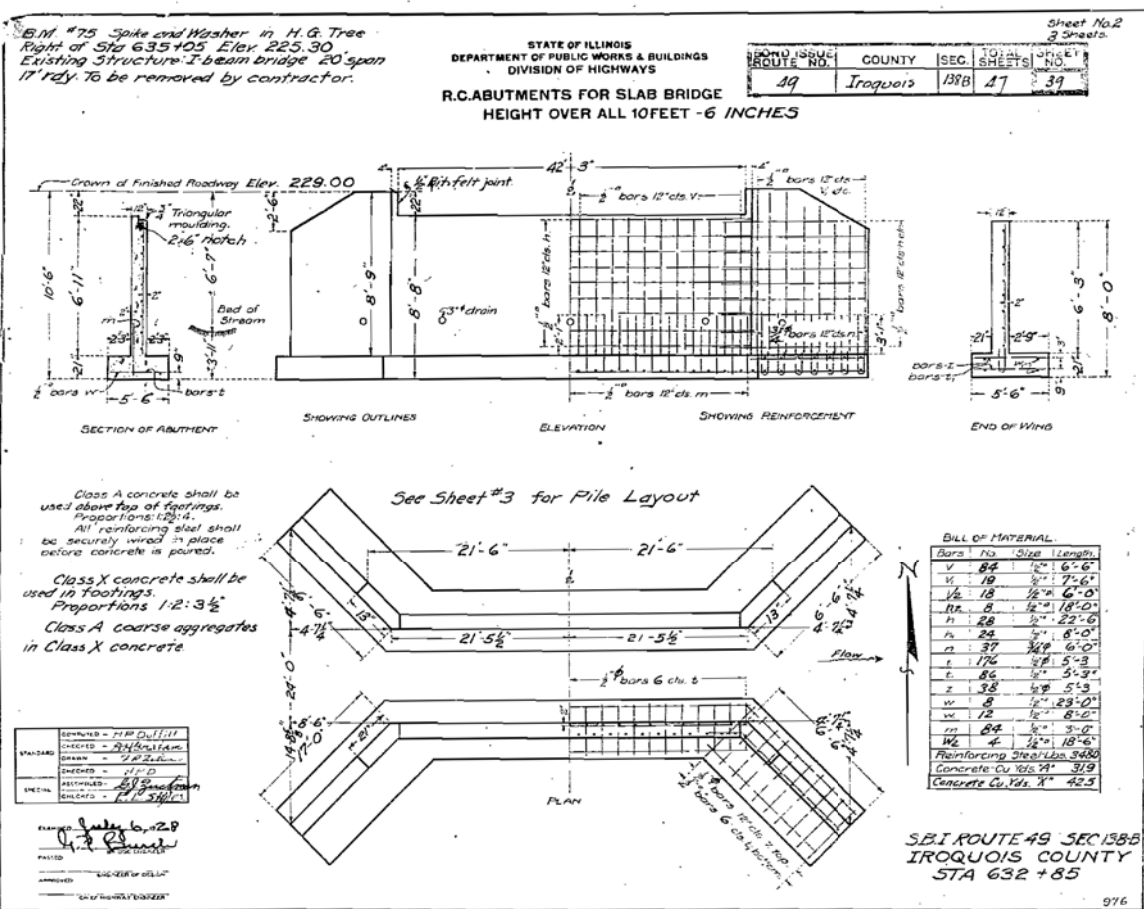
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
DIVISION OF HIGHWAYS

June 25 1922
M. J. Fleming

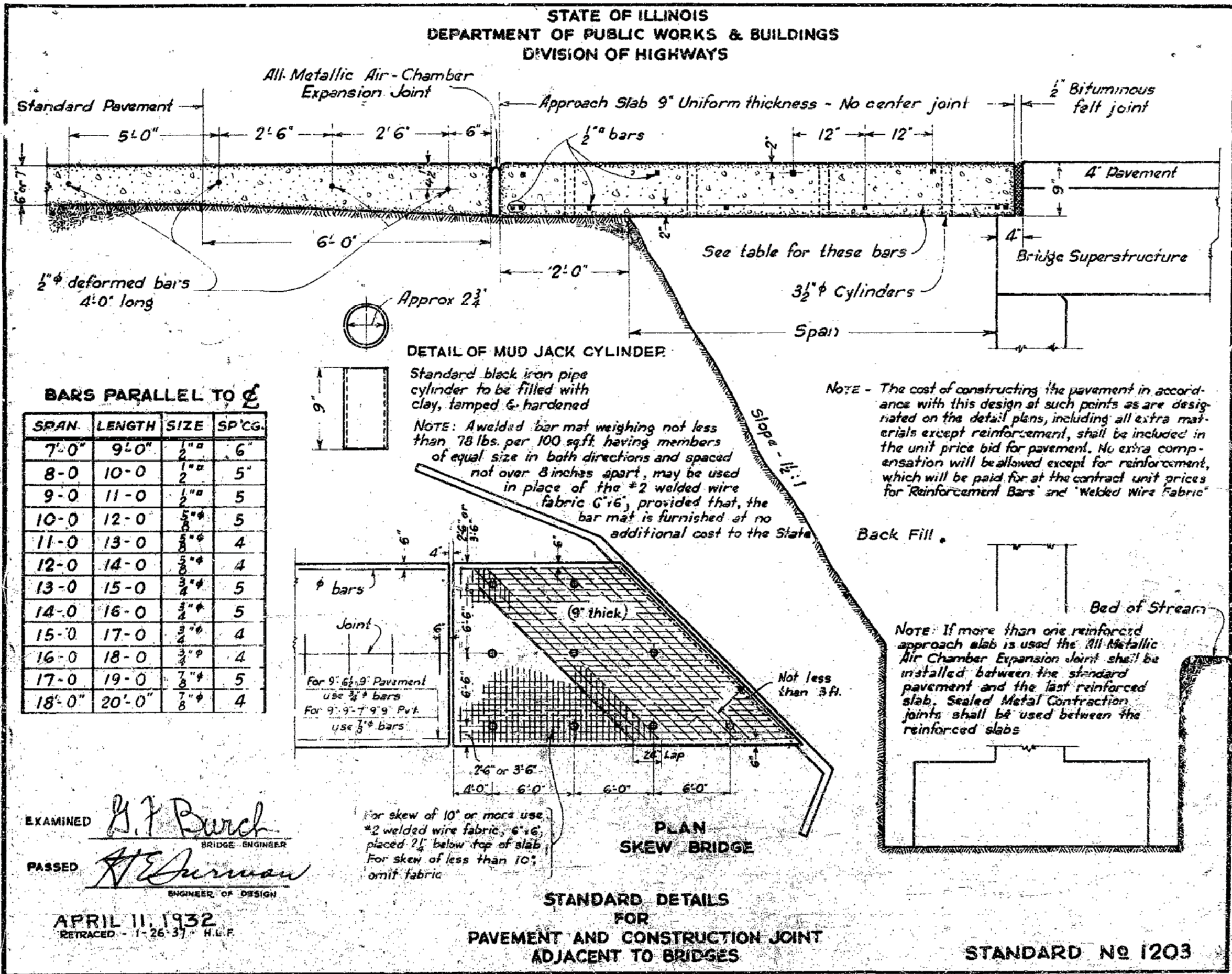
June 25 28
K. J. Fleming

June 25 28
M. J. Fleming

June 25 28
C. J. Fleming



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



BARS PARALLEL TO ϕ

SPAN	LENGTH	SIZE	SP'CG.
7-0"	9-0"	2" ϕ	6"
8-0"	10-0"	2" ϕ	5"
9-0"	11-0"	2" ϕ	5"
10-0"	12-0"	5/8" ϕ	5"
11-0"	13-0"	5/8" ϕ	4"
12-0"	14-0"	5/8" ϕ	4"
13-0"	15-0"	3/4" ϕ	5"
14-0"	16-0"	3/4" ϕ	5"
15-0"	17-0"	3/4" ϕ	4"
16-0"	18-0"	3/4" ϕ	4"
17-0"	19-0"	7/8" ϕ	5"
18-0"	20-0"	7/8" ϕ	4"

DETAIL OF MUD JACK CYLINDER.

Standard black iron pipe cylinder to be filled with clay, tamped & hardened

NOTE: A welded bar mat weighing not less than 78 lbs. per 100 sqft. having members not over 8 inches apart, may be used in place of the #2 welded wire fabric 6"x6", provided that, the bar mat is furnished at no additional cost to the State

NOTE - The cost of constructing the pavement in accordance with this design at such points as are designated on the detail plans, including all extra materials except reinforcement, shall be included in the unit price bid for pavement. No extra compensation will be allowed except for reinforcement, which will be paid for at the contract unit prices for "Reinforcement Bars" and "Welded Wire Fabric"

EXAMINED *G. F. Burch*
BRIDGE ENGINEER
PASSED *A. E. Durman*
ENGINEER OF DESIGN

APRIL 11, 1932
RETRACED - 1-26-37 H.G.F.

**STANDARD DETAILS
FOR
PAVEMENT AND CONSTRUCTION JOINT
ADJACENT TO BRIDGES**

STANDARD No 1203

SHEET NO.	DESCRIPTION
1	COVER SHEET
2-3	TYPICAL SECTIONS & TAPERS
4	SUMMARY OF QUANTITIES & GENERAL NOTES
5-6	SCHEDULE OF QUANTITIES
7-9	CULVERT SCHEDULE
10	GUARDRAIL SCHEDULE
11	SCHEMATIC LAYOUT OF PORTABLE SCALE TURNOUT
12-26	AERIAL VIEWS
27-28	BOX CULVERT EXTENSION STA 450+05 (TR 7A)
29-30	CULVERT EXTENSION DETAILS
31	PRECAST CONCRETE BOX SECTION & GRATING DETAILS
32	PRECAST CONCRETE BOX CULVERT END SECTION
33	HEADWALL & GRATE DETAIL FOR CROSS ROAD CULVERT RT STA 607+85
34	SLOPE WALL DETAIL FOR PE LT STA 629+95
35-40	DETAILS
41	CROSS SECTIONS FOR PORTABLE SCALE TURNOUT
42-43	ROW INFORMATION

STANDARDS

1527-9	MANHOLE, TYPE A
1683-4	INLET, TYPE A
1686-4	SYMBOLS AND ABBREVIATIONS
1744-4	RIGHT-OF-WAY MARKERS
2135	PERMANENT SURVEY MARKERS
2171	MAILBOX TURNOUT
2179-14	24' P.C.C. PAVEMENT
2213-4	FRAME AND LIDS, TYPE 1
2217-3	GRATE, TYPE 8
2228-4	METAL END SECTION FOR PIPE CULVERTS
2229-5	METAL END SECTION FOR PIPE ARCHES
2230-15	STEEL PLATE BEAM GUARDRAIL
2262-4	REINFORCED CONCRETE ELBOW AND PRECAST REINFORCED CONCRETE FLARED END SECTION
2298-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-10	DESIGN OF TRAFFIC CONTROL DEVICES
2300-3	FLAGMAN TRAFFIC CONTROL SIGN
2301-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2302-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2303-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY
2305-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES RURAL, MOVING OPERATION, DAY
2307-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES SHORT-TIME OPERATION, DAY OR NIGHT
2308-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE VIII), RURAL, MOVING OPERATION, MULTILANE DIV., DAY
2309-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, BRIDGE, DAY OR NIGHT
2311-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WIDENING, DAY OR NIGHT
2312-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WORK IN SERIES, DAY OR NIGHT
2323-10	PAVEMENT JOINTS
2336-4	TRAFFIC BARRIER TERMINAL, TYPE 1 AND 1A
2340-4	TRAFFIC BARRIER TERMINAL, TYPE 5 & 5A
2347-4	PAVEMENT FABRIC FOR FULLY REINFORCED JOINTED P.C.C. PAVEMENT
2354-1	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
2359-2	WIDENING AND SHOULDERS FOR PAVEMENT RESURFACING (WITH AGGREGATE SHOULDERS)
2381	TEMPORARY EROSION CONTROL SYSTEMS
2399-1	STEEL RAIL RETROFIT FOR BRIDGES
2427	CLASS C AND D PATCHES

MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE
 ON THE FOLLOWING SHEETS _____

JULIE, 1-800-892-0123
PROJECT ENGINEER: LYLE SCHAUB
SQUAD LEADER: BOB LITTLE
TOWNSHIP: CHEBANSE & ASHKUM

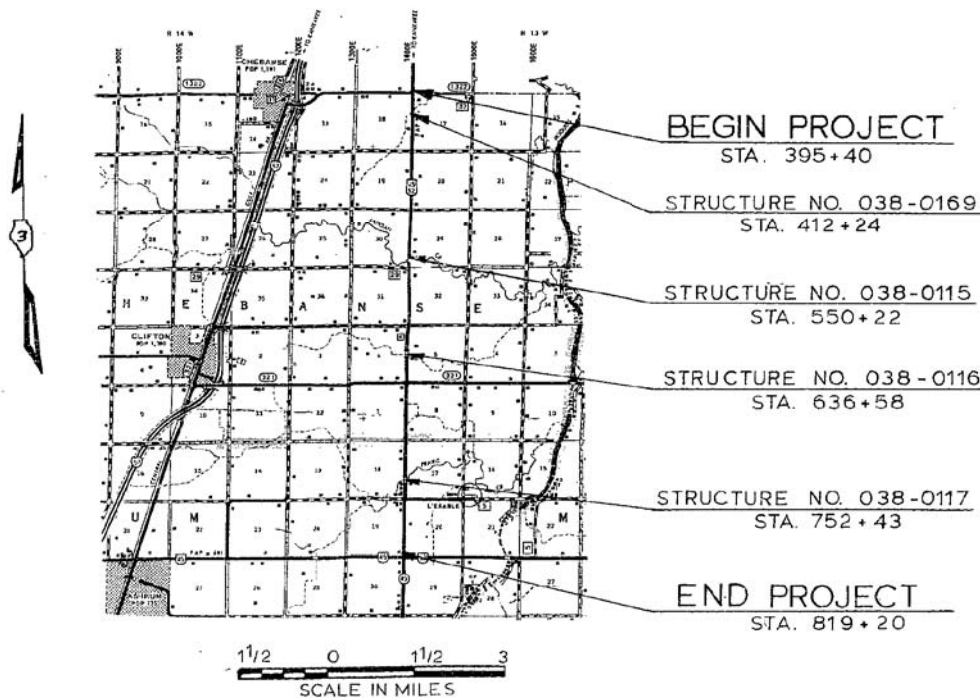
CONTRACT NO. 86024

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAY PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A. ROUTE 840 (U.S. 45/52)
 SECTION 138 RS-2

IROQUOIS COUNTY

C-93-011-89



GROSS AND NET LENGTH OF PROJECT = 42,380.0 FEET = 8.026 MILES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	138 RS-2	IROQUOIS	46	34

P-93-027-87



LOCATION OF SECTION INDICATED THUS: [Hatched Box]

DESIGN DESIGNATION

1988 ADT 2500
 PC 89.3%, SU 2.7%, MU 8.0%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED OCT 31 1988
R.H. Blasius DISTRICT ENGINEER
 EXAMINED DEC 16 1988
Harry A. Gould ENGINEER OF PLANS AND CONTRACTS
 PASSED DEC 16 1988
J.L. Wolcott ENGINEER OF DESIGN
 APPROVED DEC 16 1988
John J. Thompson DIRECTOR, DIVISION OF HIGHWAYS



USER NAME	DESIGNED	REVISED
VPT	VPT	VPT
MTH	MTH	MTH
CGY	CGY	CGY
VPT	VPT	VPT

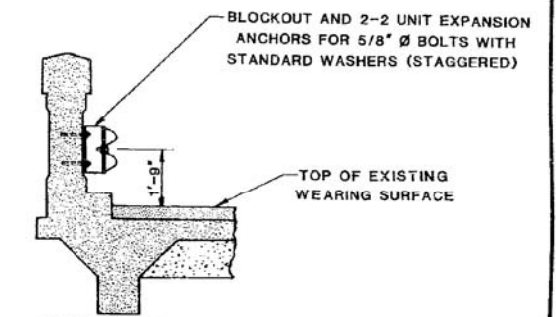
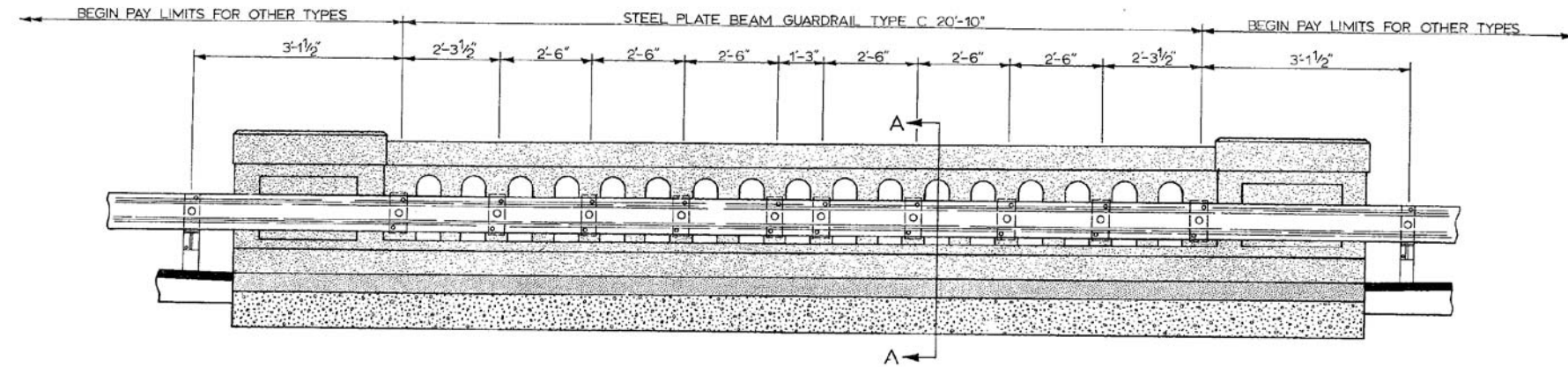
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - FOR INFORMATION ONLY
 STRUCTURE NO. 038-2029

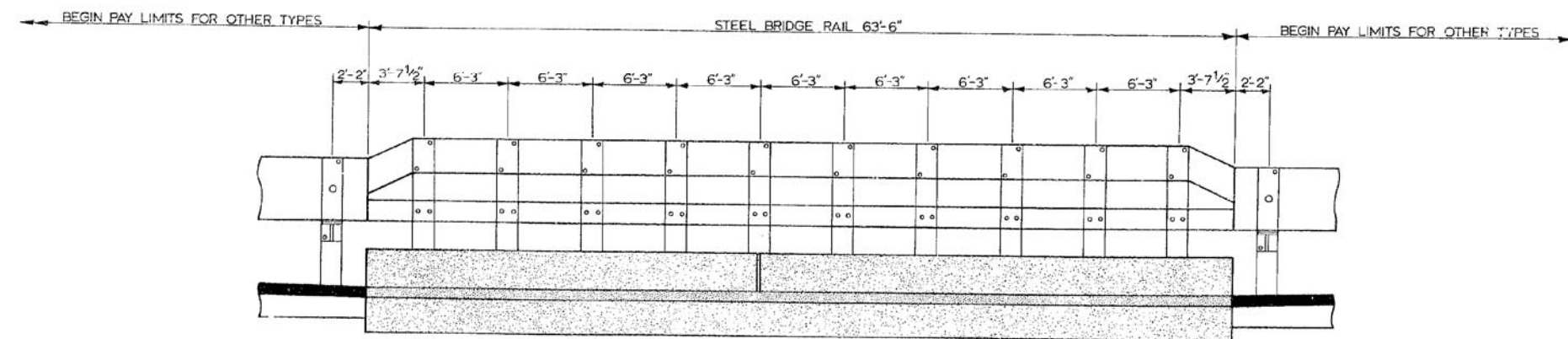
SHEET NO. 13 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	34
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAP 840	138 RS-2	IROQUOIS		36
F.H.W.A. REG. 4 ILLINOIS PROJECT				



GUARDRAIL ATTACHED TO EXISTING BRIDGE RAIL
 STRUCTURE NO. 038-0116
 STATION 636+58



STEEL BRIDGE RAIL ATTACHED TO EXISTING CURB
 STRUCTURE NO. 038-0117
 STATION 752+43

GUARDRAIL DETAILS



USER NAME =	DESIGNED - VPT	REVISED -
FILE NAME =	CHECKED - MTH	REVISED -
PLOT TIME = 7:55:27 AM	DRAWN - CGY	REVISED -
PLOT DATE = 12/21/2017	CHECKED - VPT	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

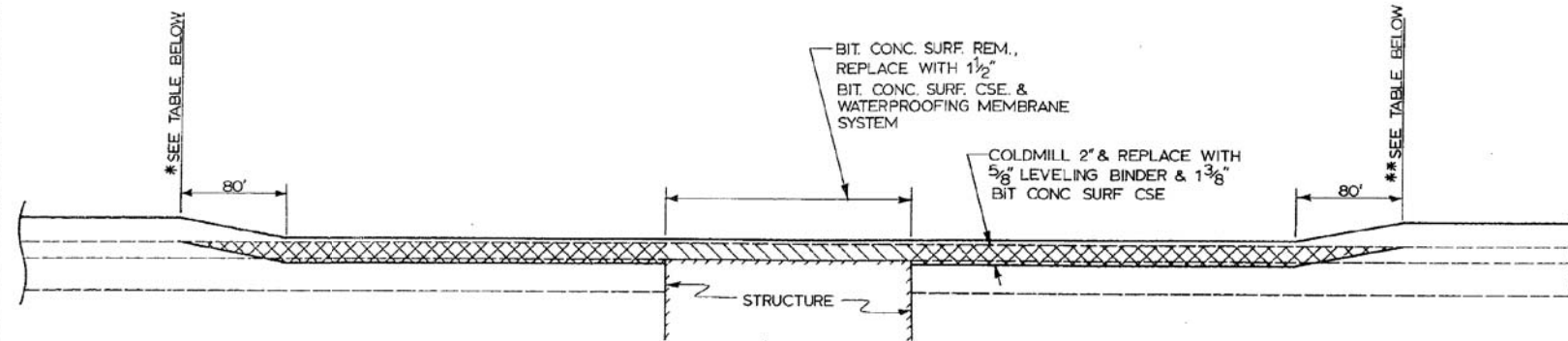
**EXISTING PLANS - FOR INFORMATION ONLY
 STRUCTURE NO. 038-2029**

SHEET NO. 14 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	35
CONTRACT NO. 66E24				

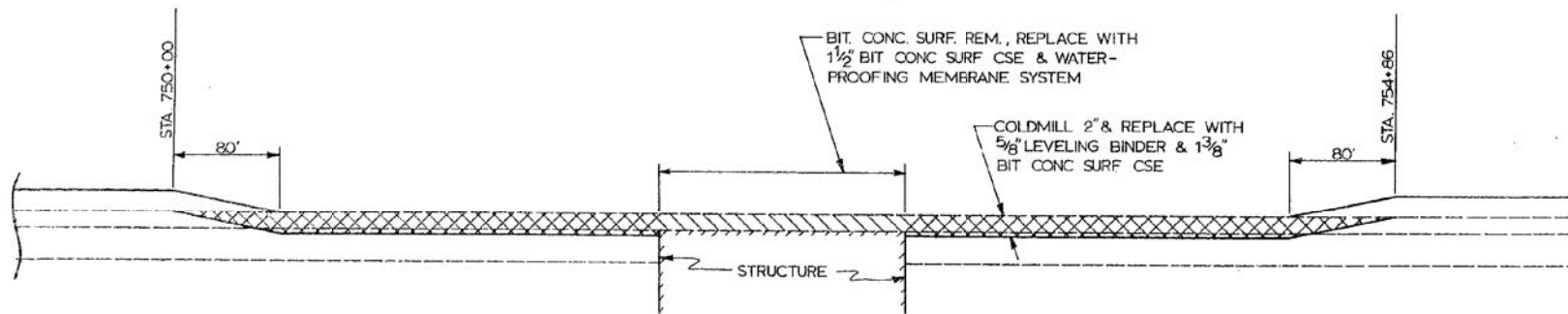
ILLINOIS FED. AID PROJECT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
F.A.P. 840	138 RS-2	IROQUOIS	46	37
F.H.W.A. REG. 4 ILLINOIS PROJECT				



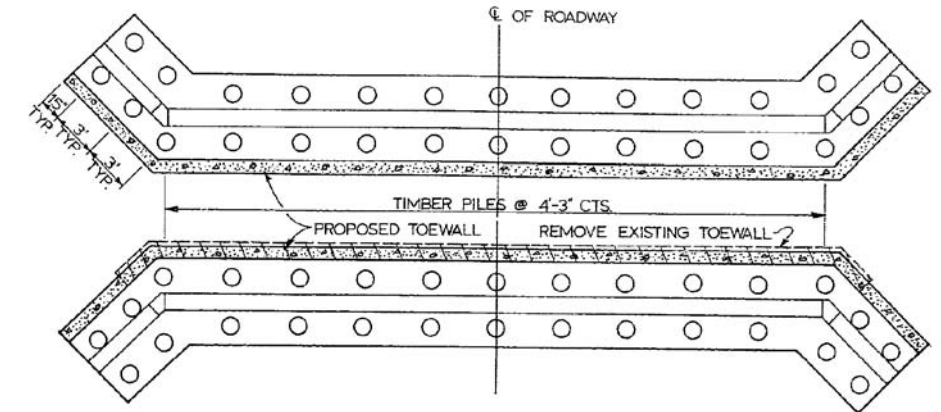
COLDMILLING DETAIL

STRUCTURE NO. 038-0169 - *STA. 408+80 TO **STA. 414+50
 STRUCTURE NO. 038-0115 - *STA. 548+00 TO **STA. 552+00
 STRUCTURE NO. 038-0116 - *STA. 634+00 TO **STA. 638+20

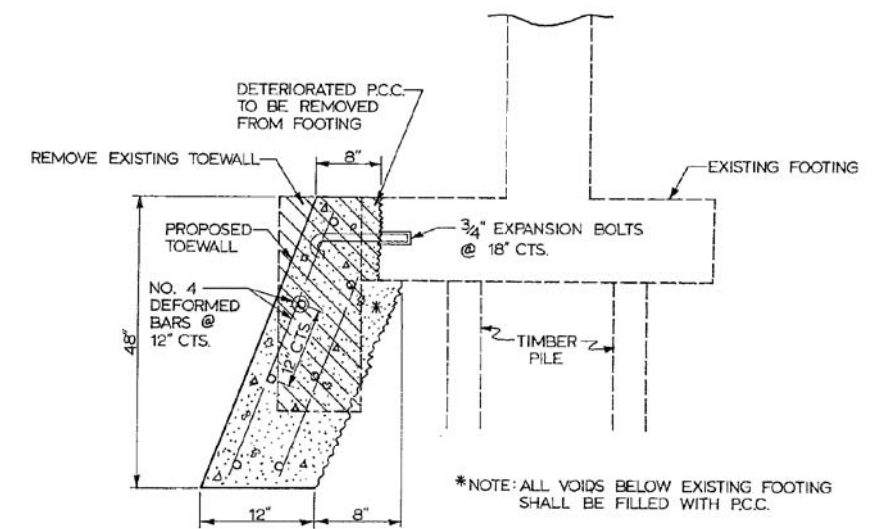


COLDMILLING DETAIL

STRUCTURE NO. 038-0117



PILE LAYOUT



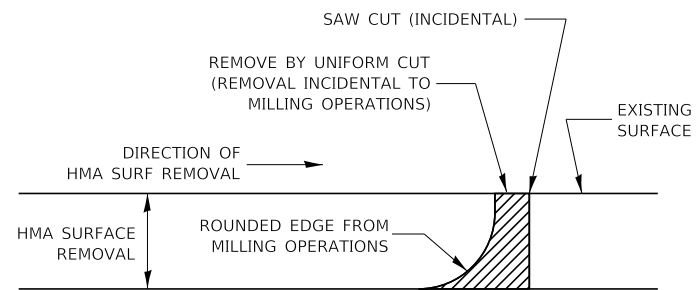
TOEWALL DETAIL @ STRUCTURE #038-0116

STA. 636+58

TOEWALL QUANTITIES*				
BAR	SIZE	NUMBER	LENGTH	SHAPE
h	#4	14	23'-0"	—
h ₁	#4	14	9'-0"	—
v	#4	116	3'-0"	—
3/4" EXPANSION BOLTS		EACH	42	
CLASS X CONCRETE		CU YD	8.0	
REINFORCEMENT BARS		LBS	532	
CONCRETE REMOVAL		CU YDS	6.2	

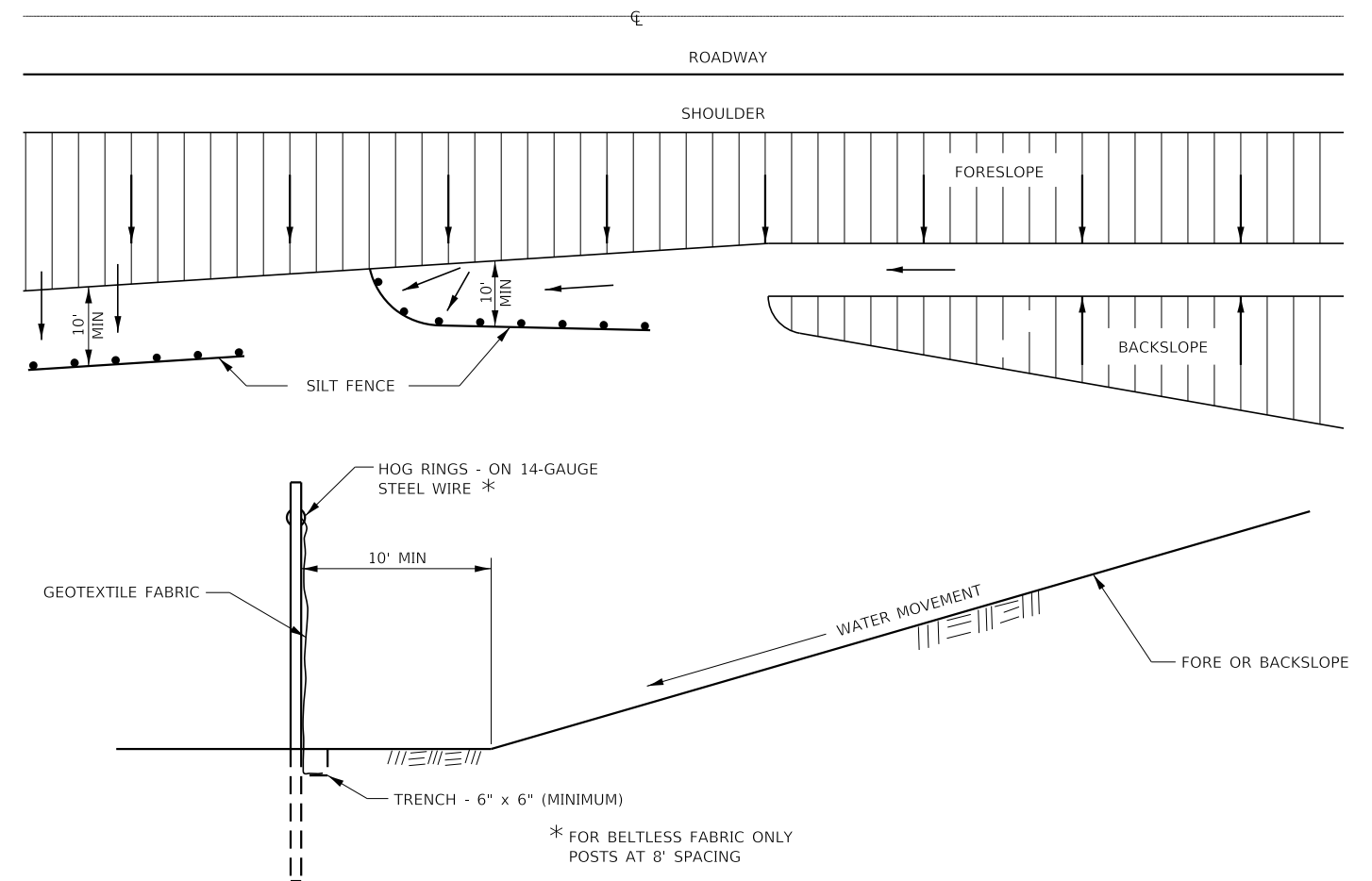
*QUANTITIES ARE FOR ONE WALL ONLY.

COLDMILLING & TOEWALL DETAILS



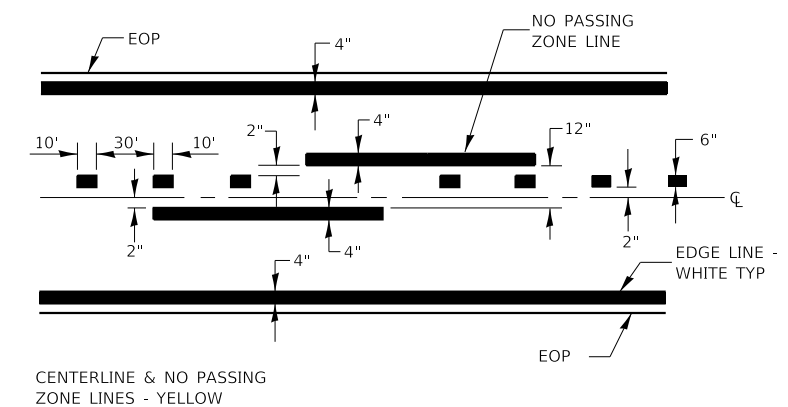
NOTE:
 WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

HMA DETAIL AT BUTT JOINTS



DETAILS OF SILT FENCE

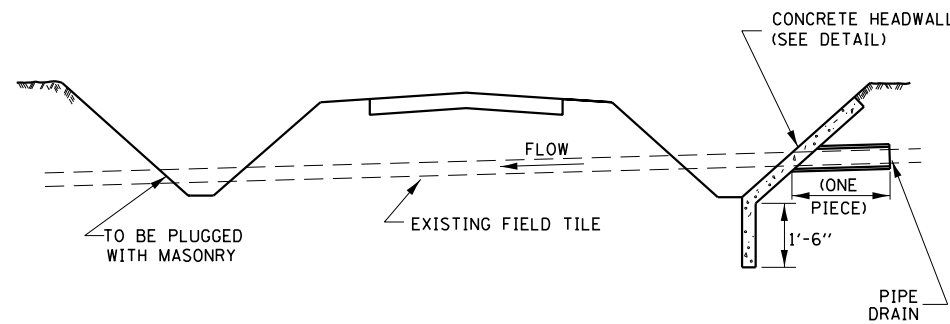
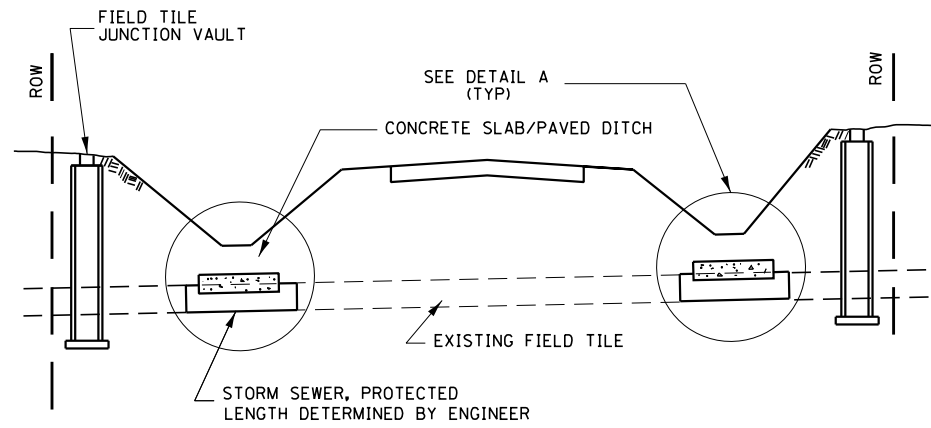
EROSION CONTROL DETAILS FOR SILT FENCE



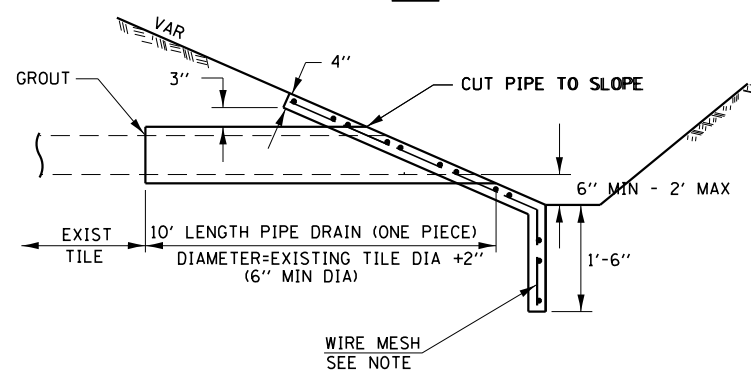
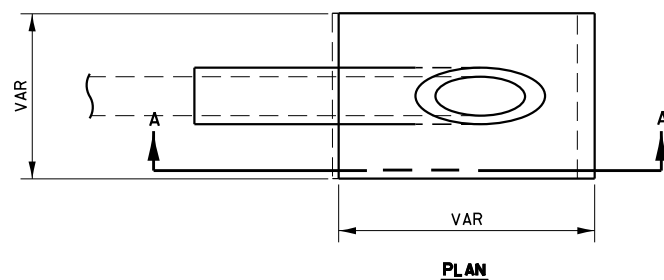
PAVEMENT MARKING

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
	DRAWN - JJO	REVISED -
PLOT SCALE = 2,000' = 1" in.	CHECKED - PSA/ERB	REVISED -
PLOT DATE = 1/12/2018	DATE - 01/12/18	REVISED -

F.A.P. RTE. 840	SECTION (138 BR-1)BR	COUNTY IROQUOIS	TOTAL SHEETS 46	SHEET NO. 37
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

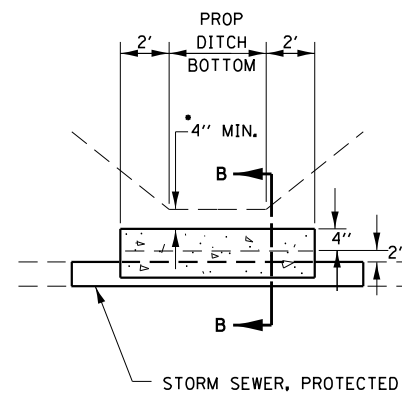


FIELD TILE REPLACEMENT



SECTION A-A

CLASS SI CONCRETE HEADWALLS



DETAIL A

NO SCALE

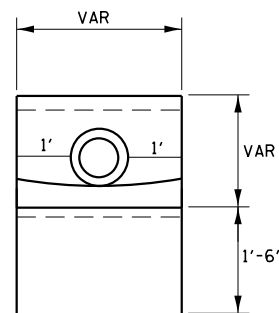
* IF A 4" COVER CAN NOT BE PROVIDED A PAVED DITCH SHALL BE CONSTRUCTED AS SHOWN IN DETAIL C.

NOTES

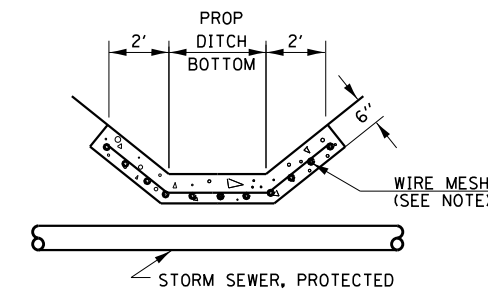
1. WIDTH OF CONCRETE SLAB SHALL BE THE SAME AS THE TRENCH WIDTH IN ACCORDANCE WITH SECTION 550 OF THE STD. SPECIFICATIONS, OR 3' MIN.
2. CONCRETE FOR SLAB, HEADWALL AND PAVED DITCH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "MISCELLANEOUS CONCRETE."
3. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT

NOTES

1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT

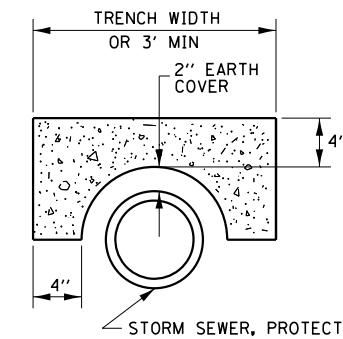


END VIEW

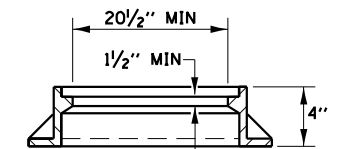
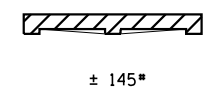
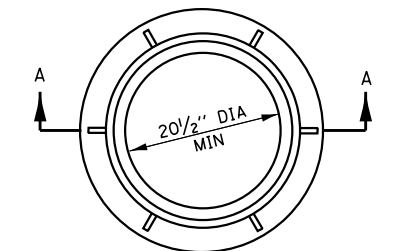
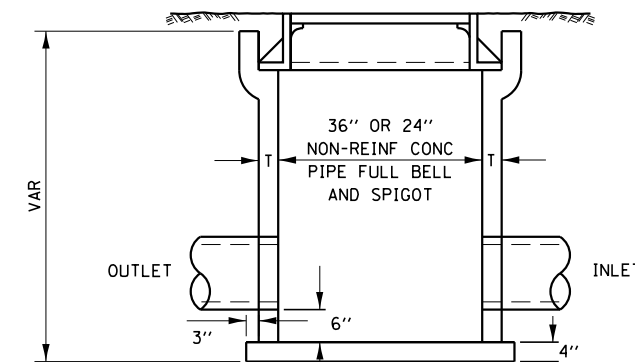


DETAIL C

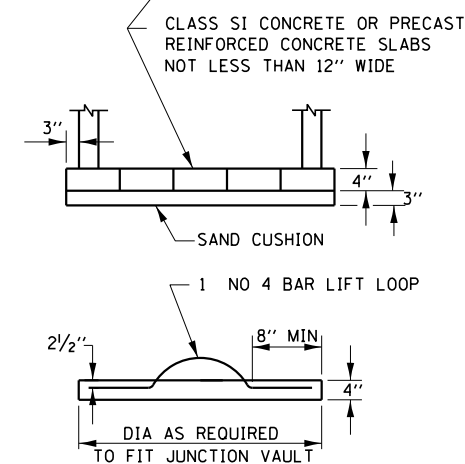
NO SCALE



SECTION B-B



SECTION A-A



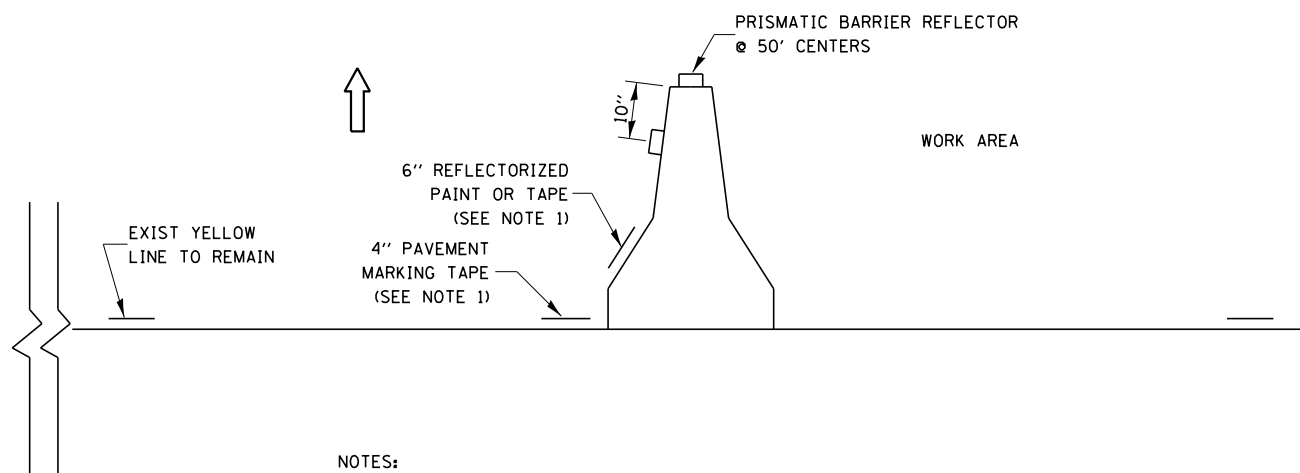
FIELD TILE JUNCTION VAULT

ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RISERS	4"
CONCRETE MASONRY UNIT	5"
MONOLITHIC CONCRETE	6"
BUILDING BRICK, GRADE SW FROM CLAY OR SHALE	8"
CONCRETE BUILDING BRICK, GRADE A	8"

NOTES

1. THE CONTRACT UNIT PRICE FOR FIELD TILE JUNCTION VAULT SHALL INCLUDE THE COST OF FURNISHING AND PLACING THE FRAME AND GRATE OR PRECAST CONCRETE LID AND WHEN REQUIRED, THE SAND CUSHION.
2. ALL FIELD TILE JUNCTION VAULTS SHALL BE 2'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.

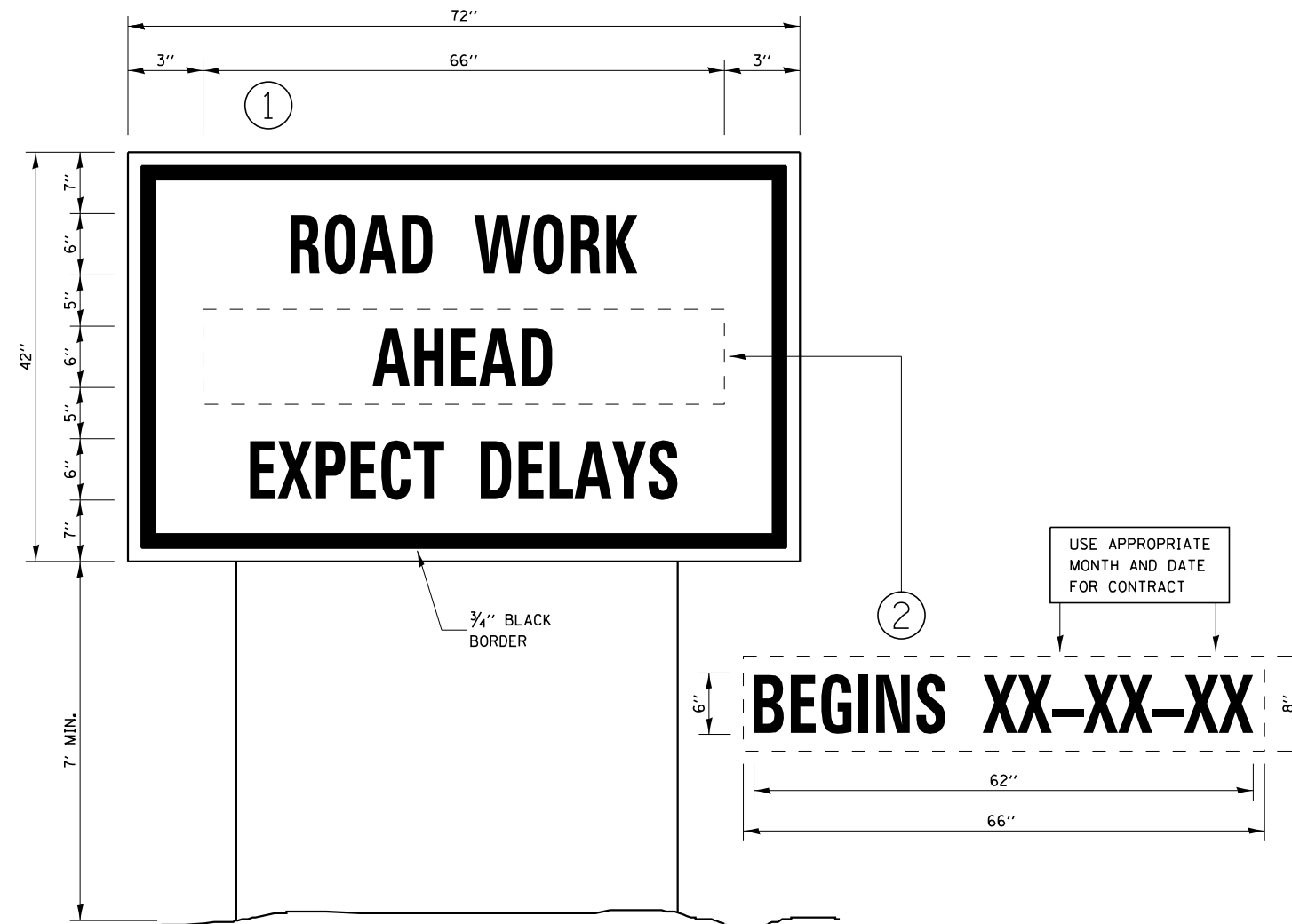
☉ RDWY.



NOTES:

1. THE CONTRACTOR HAS THE OPTION OF USING EITHER THE LINE ON THE TEMPORARY CONCRETE BARRIER OR ON THE PAVEMENT.
2. THE COLOR OF THE REFLECTORS AND PAVEMENT/BARRIER MARKING LINE WILL VARY WITH STAGING AND SHALL MATCH THE EXISTING LINE IN THE WORK AREA.
3. THE COST OF THE REFLECTORS AND THE PAVEMENT/BARRIER MARKING LINE IS INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER.

TRAFFIC CONTROL DETAIL
FOR TEMPORARY CONCRETE BARRIER



TEMPORARY INFORMATION SIGNING

NOTES:

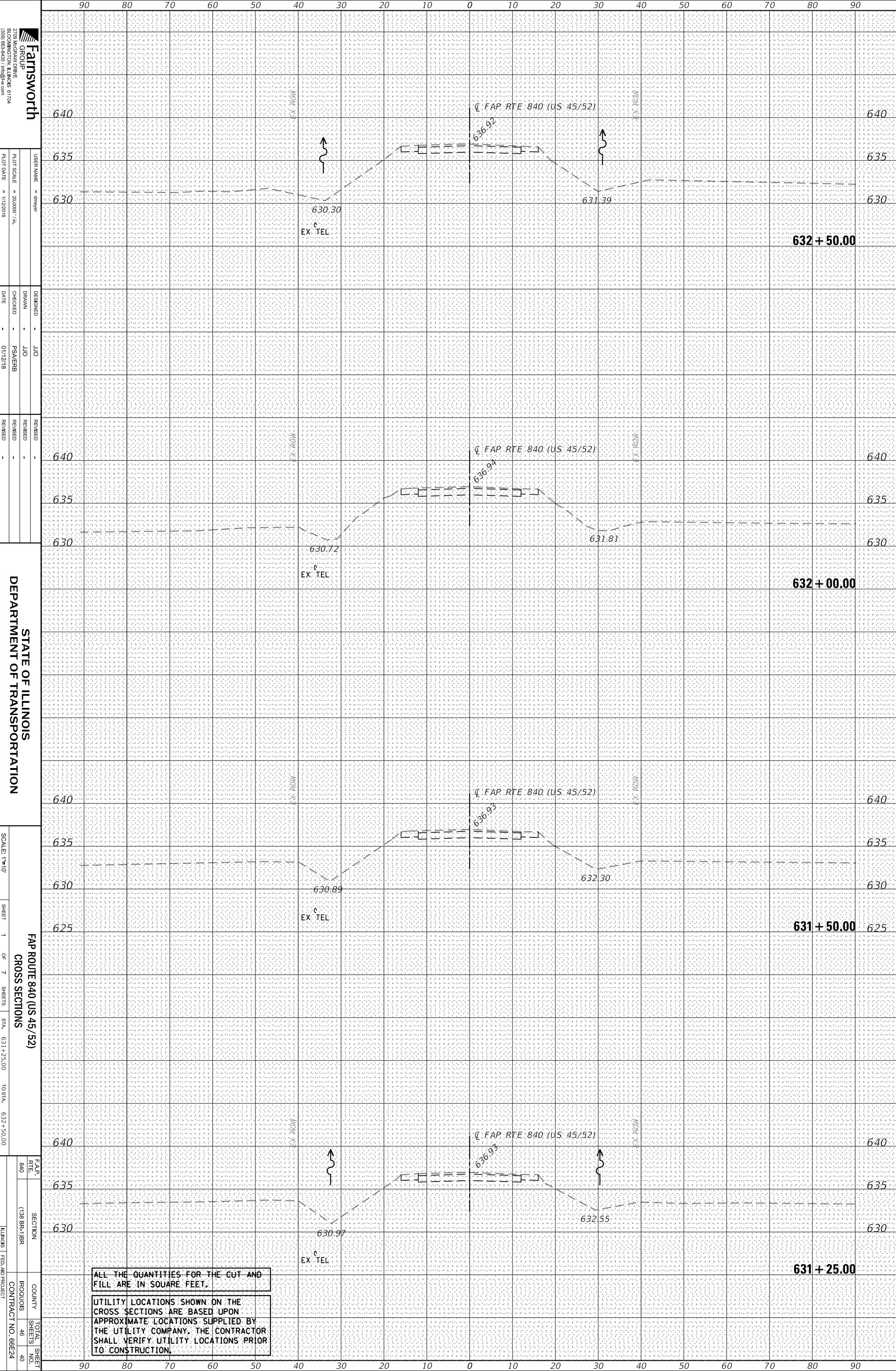
1. USE 6" D BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND.
2. ERECT SIGNS AT LOCATIONS IN ADVANCE OF THE "ROAD CONSTRUCTION AHEAD" SIGNS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② A MINIMUM OF ONE WEEK PRIOR TO THE START OF THE LANE CLOSURE.
4. REMOVE PANEL ② ON THAT DATE.
5. SEE SPECIAL PROVISION "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. WILL BE PAID FOR PER SQ FT AS "TEMPORARY INFORMATION SIGNING". EACH SIGN = 21 SQ FT AND THE DATE PANEL ② WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

USER NAME = dmeyer	DESIGNED - JJO	REVISED -
	DRAWN - JJO	REVISED -
PLOT SCALE = 2,000' = 1" IN.	CHECKED - PSA/ERB	REVISED -
PLOT DATE = 1/12/2018	DATE - 01/12/18	REVISED -

F.A.P. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
840	(138 BR-1)BR	IROQUOIS	46	39
CONTRACT NO. 66E24				
ILLINOIS FED. AID PROJECT				

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth
 GROUP
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-9435 | info@fw.com

USER NAME = dmeyer
 DRAWN - JJO
 CHECKED - PSALERS
 DATE - 01/12/18

DESIGNED - JJO
 REVISIONS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10'
 SHEET 1 OF 7 SHEETS STA. 631+25.00 TO STA. 632+50.00

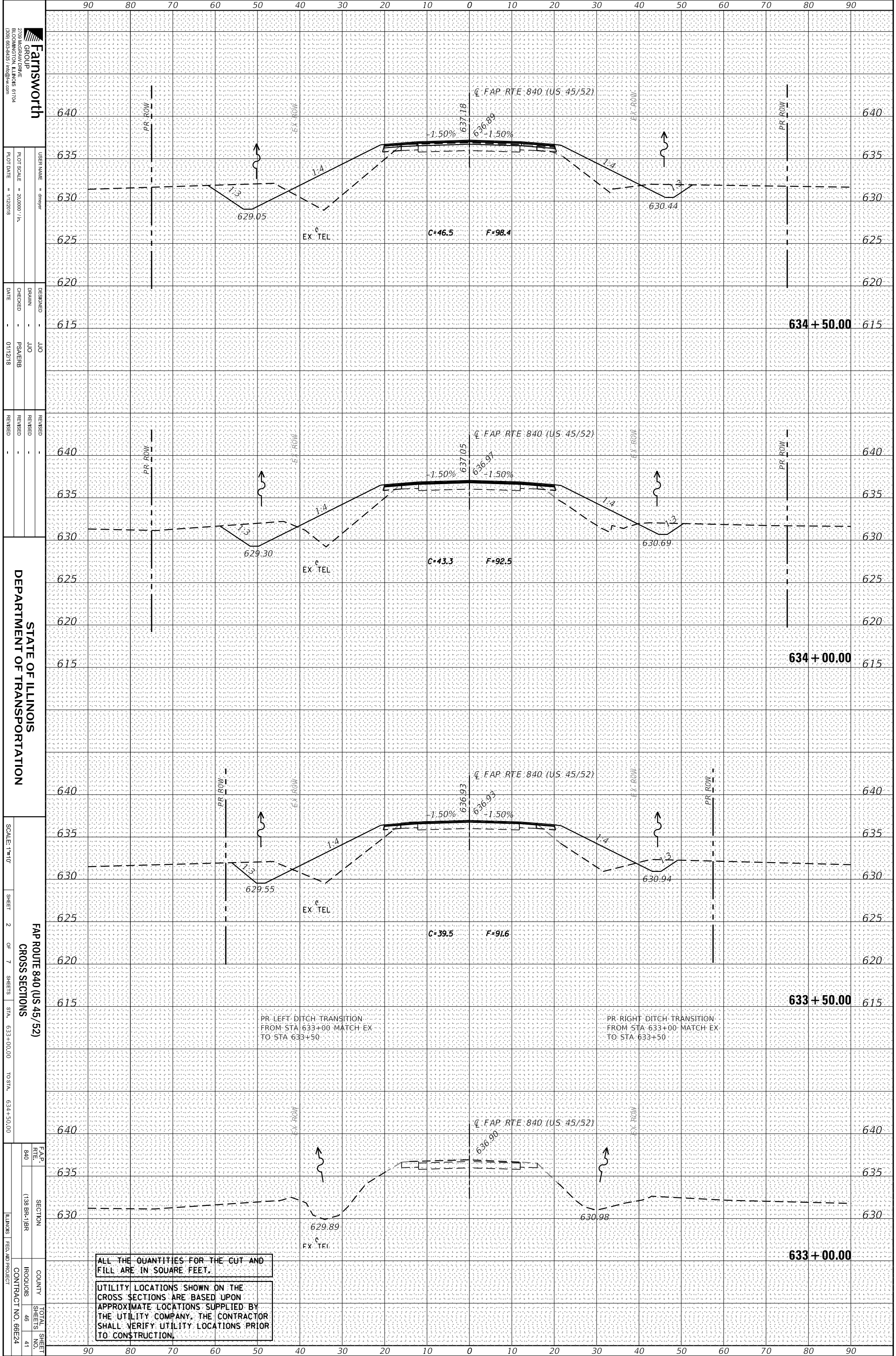
FAP RTE. 840
 SECTION (138 BR-1)PR
 COUNTY IROQUOIS
 SHEETS 46
 TOTAL SHEET NO. 40
 CONTRACT NO. 66E24
 ILLINOIS FED. AID PROJECT

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth GROUP
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-9433 | info@faw.com

USER NAME = dmev
 DESIGNED - JJO
 DRAWN - JJO
 CHECKED - PS/NERB
 DATE - 01/12/18

REVISIONS
 1
 2

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10'
 SHEET 2 OF 7 SHEETS STA. 633+00.00 TO STA. 634+50.00

FAP ROUTE 840 (US 45/52)
 CROSS SECTIONS

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS
840	(138 BR-1)BR	ILLINOIS	46
			41

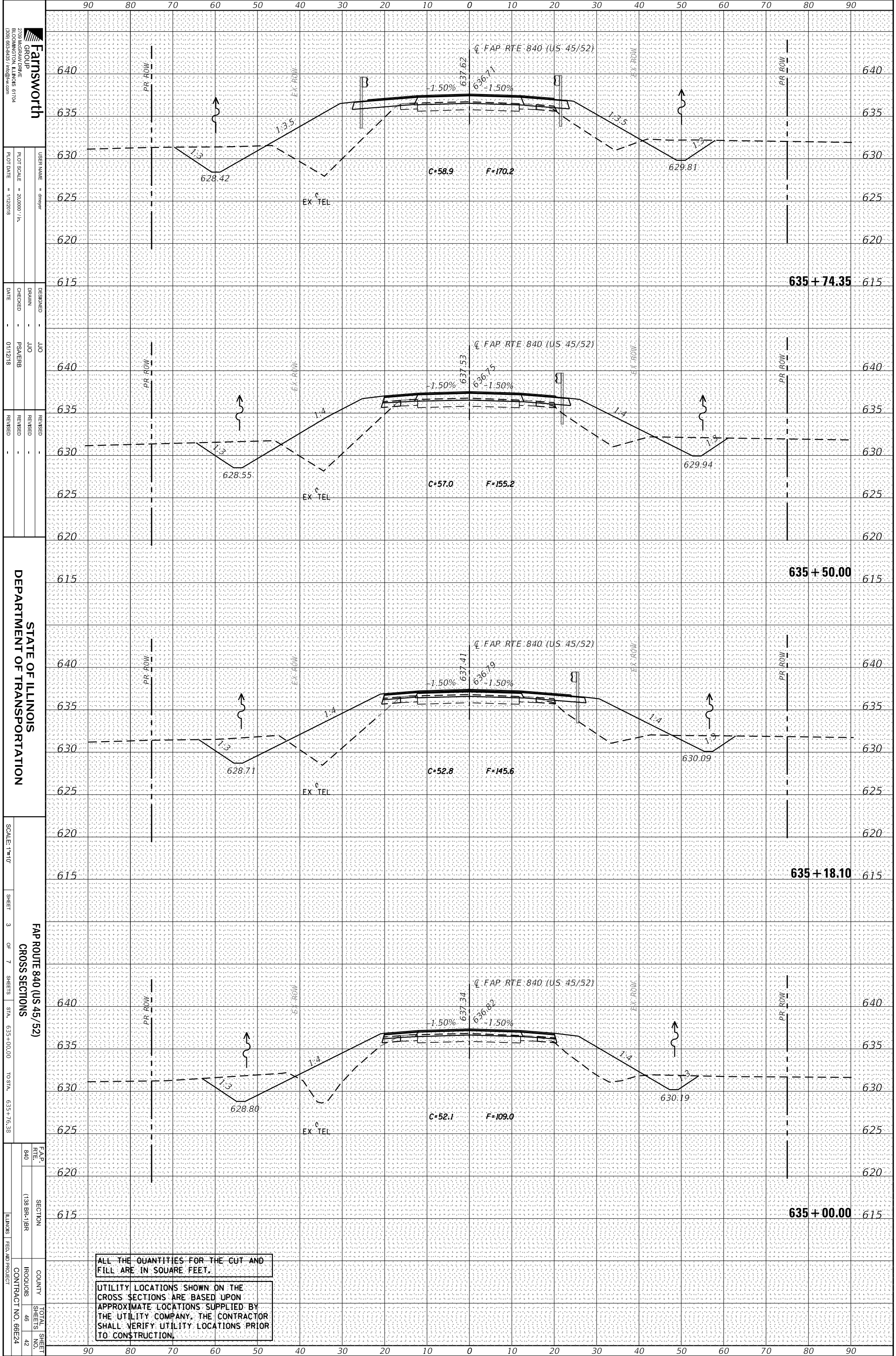
CONTRACT NO. 66224
 FED. AID PROJECT

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth
 GROUP
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-9435 info@faw.com

DESIGNED BY: JJO
 DRAWN BY: JJO
 CHECKED BY: PS/NERB
 DATE: 01/12/18

REVISIONS:
 1. REVISED
 2. REVISED
 3. REVISED

SCALE: 1"=10'

SHEET 3 OF 7 SHEETS STA. 635+00.00 TO STA. 635+76.38

FAP RTE 840 (US 45/52)
 CROSS SECTIONS

SECTION NO. 138 BR-1BR
 COUNTY IROQUOIS
 ILLINOIS
 CONTRACT NO. 66E24
 FED. AID PROJECT

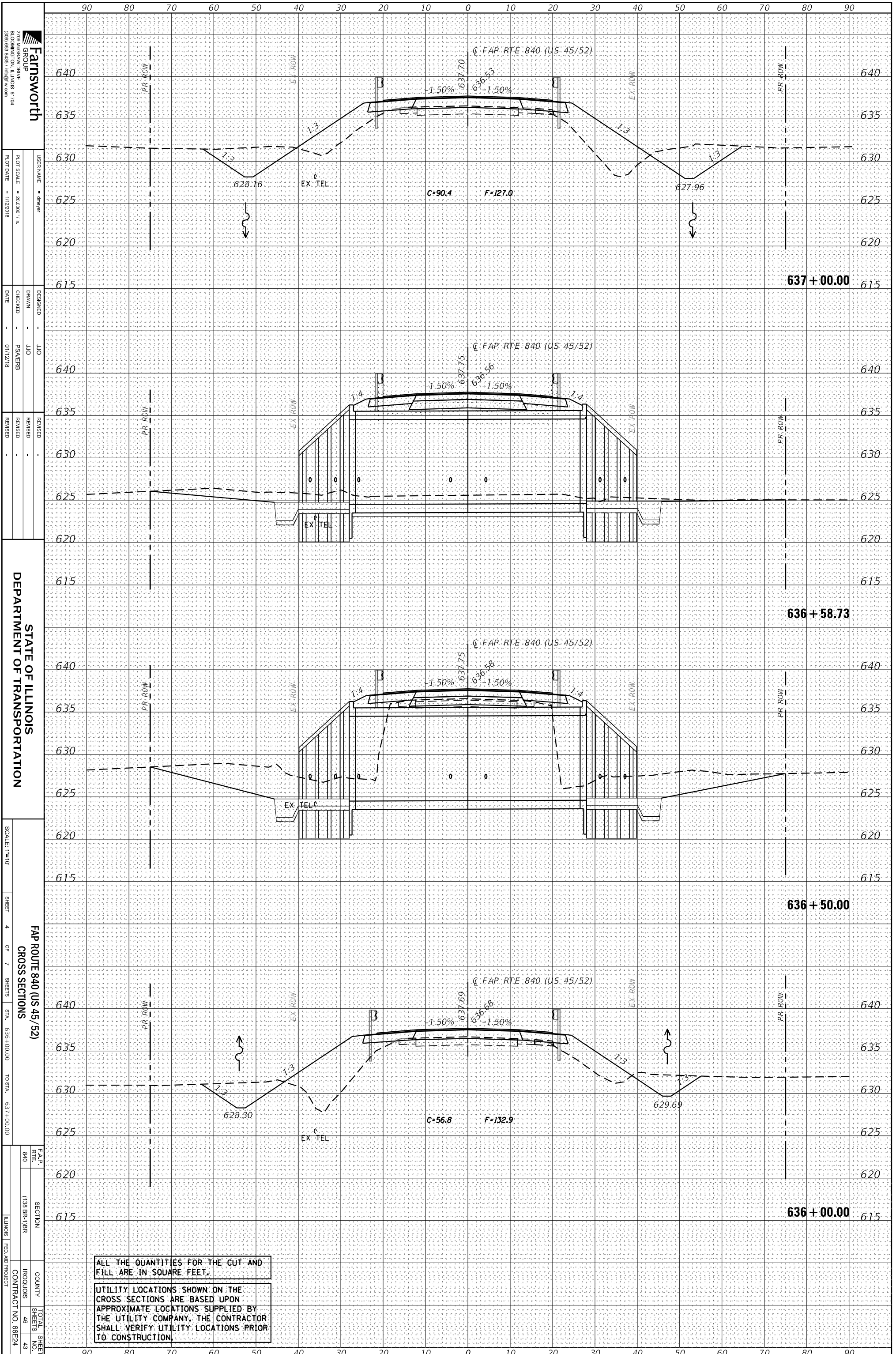
ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

FAP RTE	SECTION	COUNTY	TOTAL SHEETS
840	138 BR-1BR	IROQUOIS	46
		ILLINOIS	42
		CONTRACT NO. 66E24	
		FED. AID PROJECT	

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth
 GROUP, INC.
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 893-9435 farn@fwn.com

USER NAME = dmeper
 DESIGNED - JJO
 DRAWN - JJO
 CHECKED - PS/ENB
 DATE - 01/12/18

REVISIONS
 REVISED -
 REVISED -
 REVISED -

SCALE: 1"=10'
 SHEET 4 OF 7 SHEETS STA. 636+00.00 TO STA. 637+00.00

FAP ROUTE 840 (US 45/52)
 CROSS SECTIONS

FAP RTE. 840
 SECTION (138 BR-1)PR
 COUNTY IROQUOIS
 TOTAL SHEET NO. 46
 SHEETS 43
 CONTRACT NO. 66E24
 ILLINOIS FED. AID PROJECT

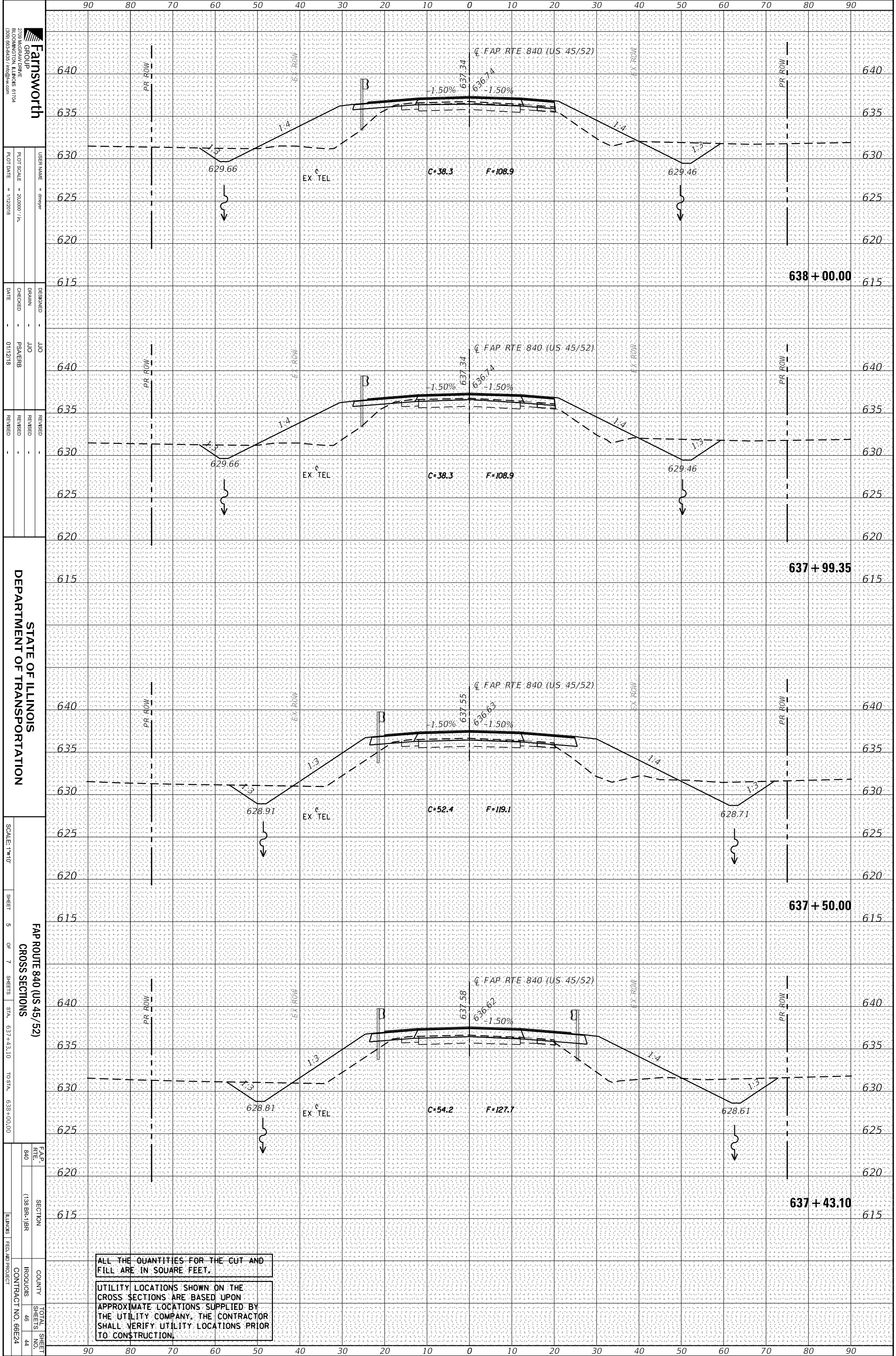
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

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

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



Farnsworth
 GROUP
 2709 HARRISON DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-9435 fhw@fhw.com

USER NAME = dmev
 DESIGNED - JJO
 DRAWN - JJO
 CHECKED - PS/ENB
 DATE - 01/12/18

REVISIONS
 REVISED -
 REVISED -
 REVISED -

SCALE: 1"=10'
 SHEET 5 OF 7 SHEETS STA. 637+43.10 TO STA. 638+00.00

FAP ROUTE 840 (US 45/52)
 CROSS SECTIONS

FAP RTE. 840
 SECTION (138 BR-1)PR
 COUNTY IROQUOIS
 TOTAL SHEET NO. 46
 SHEETS 44
 ILLINOIS FED. AID PROJECT CONTRACT NO. 66624

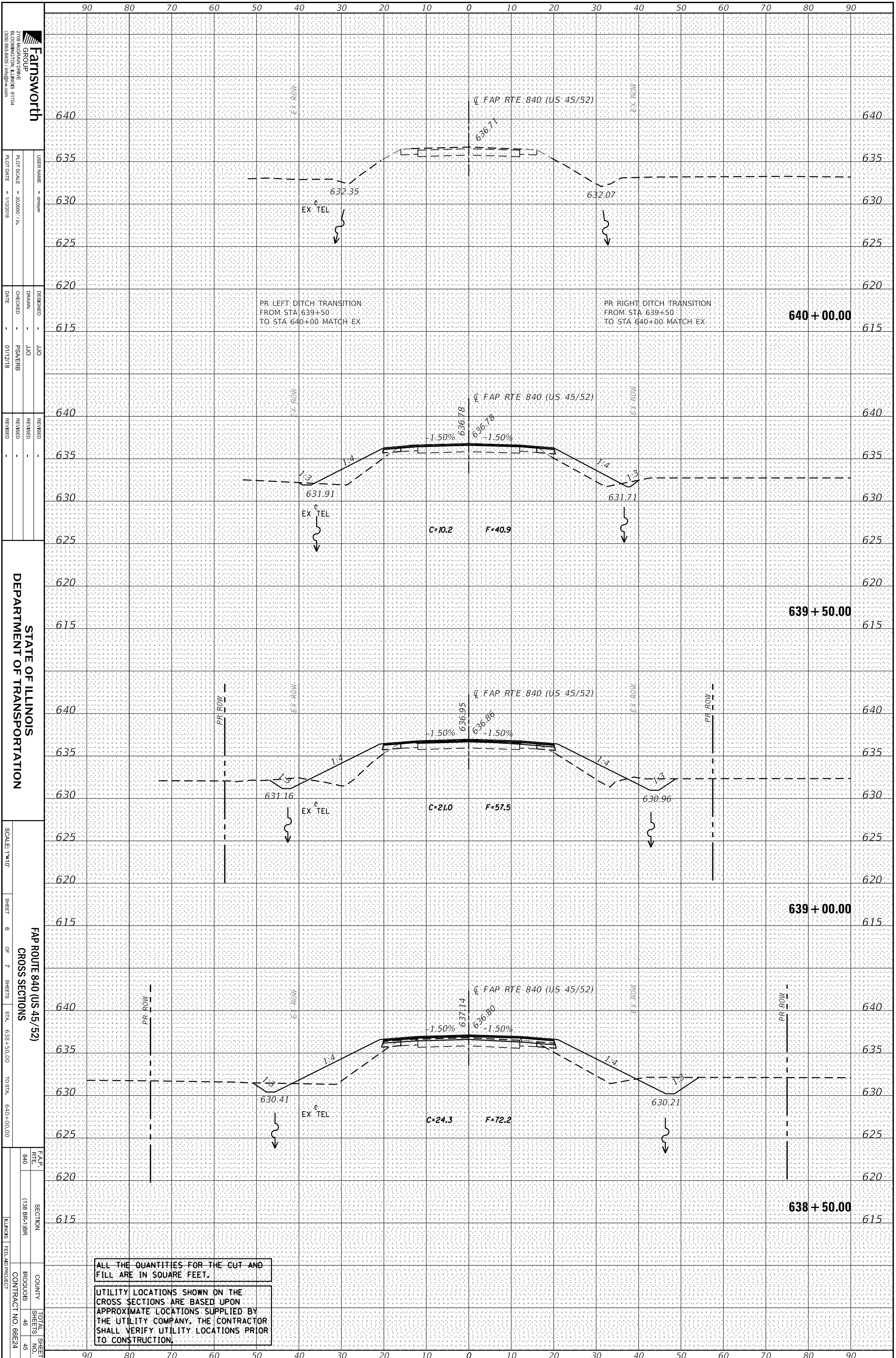
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth GROUP
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61704
 (309) 863-9435 info@faw.com

USER NAME = dmev
 DESIGNED - JJO
 DRAWN - JJO
 CHECKED - PSMEERB
 DATE - 01/12/18

REVISIONS
 REVISION NO. DATE DESCRIPTION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10'

SHEET 6 OF 7 SHEETS STA. 638+50.00 TO STA. 640+00.00

FAP ROUTE 840 (US 45/52)
CROSS SECTIONS

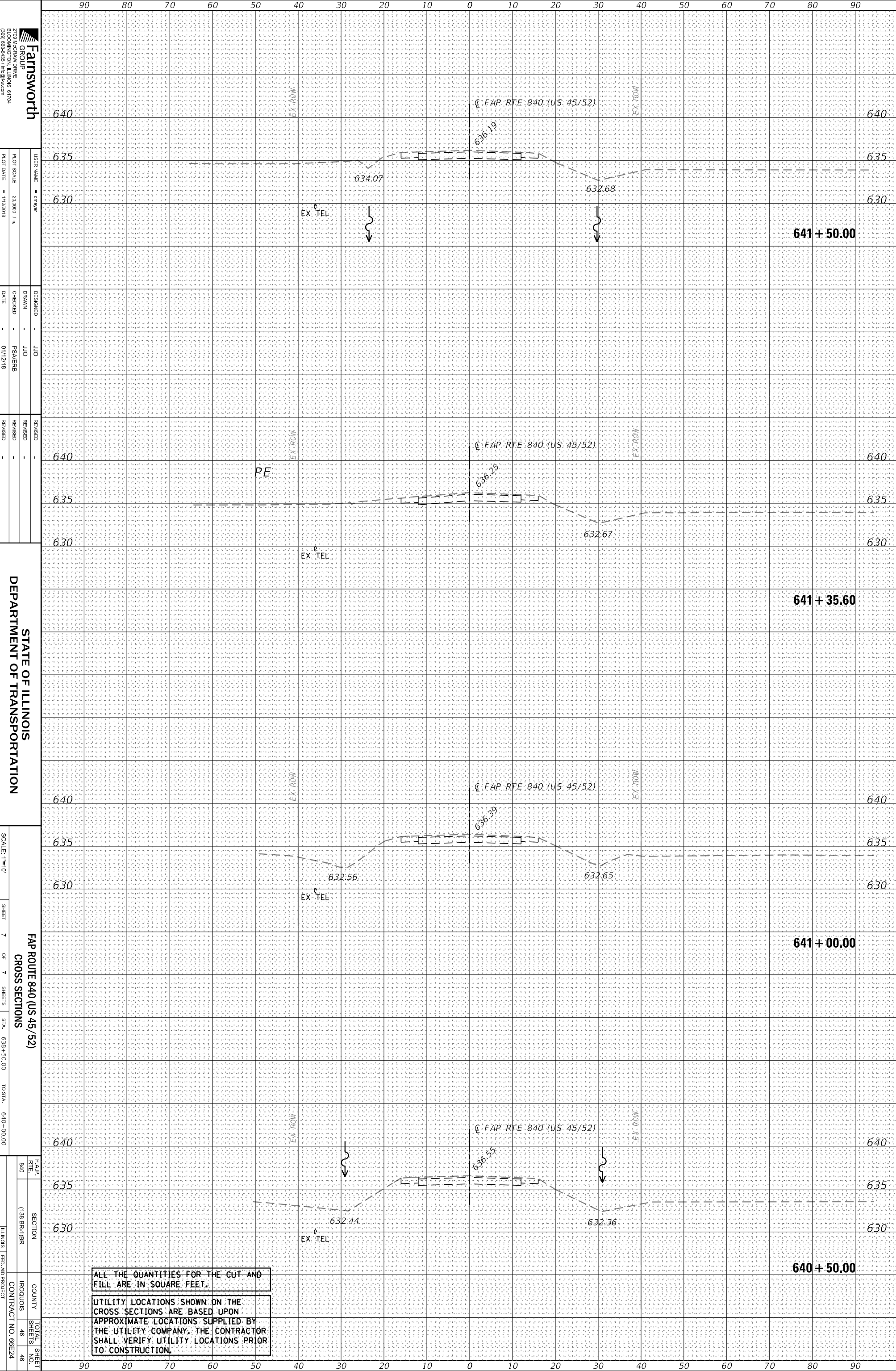
FAP RTE.	SECTION	COUNTY	TOTAL SHEETS
840	(138 BR-1)BR	ROCKFORD	46
			45
		CONTRACT NO. 66E24	
		ILLINOIS FED. AID PROJECT	

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



Farnsworth
 GROUP, INC.
 2709 HANCOCK DRIVE
 BLOOMINGTON, ILLINOIS 61714
 (309) 863-9435 info@fwi.com

USER NAME = dmev
 DESIGNED - JJO
 DRAWN - JJO
 CHECKED - PS/NERB
 DATE - 01/12/18

REVISIONS
 NO. DESCRIPTION DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10'
 SHEET 7 OF 7 SHEETS STA. 638+50.00 TO STA. 640+00.00

FAP ROUTE 840 (US 45/52)
CROSS SECTIONS

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS
840	(138 BR-1)BR	IROQUOIS	46
			46
		CONTRACT NO. 66E24	
		ILLINOIS FED. AID PROJECT	

ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.