04-26-13 LETTING ITEM 013

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATIONS

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

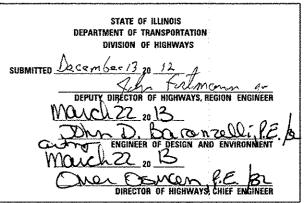
F.A.P. ROUTE 852 /US ROUTE 52 **OVER JACKSON CREEK SECTION: 18-B-4-R-2** PPC DECK BEAM REPLACEMENT PROJECT: **WILL COUNTY** C-91-269-11

PROJECT: NHPP-0852 (013)

R 10 E R 11 E US 52 BRIDGE OVER JACKSON CREEK 35 O.1 MI. SOUTH OF W. BAKER RD EXISTING BRIDGE LENGTH 62.68 FT STA. 452+26.70 TO STA, 452+89.30 W DELANEY RO PROJECT ENDS STA. 455+90 W BAKER RD PROJECT BEGINS STA. 448+82 ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION W MANHATTAN RO 1-800-892-0123 OR 811 MANHATTAN TOWNSHIP PROJECT MANAGER: ISSAM RAYYAN (847) 705-4178 *LOCATION MAP*

D-91-269-11





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS





FOR INDEX OF SHEETS, SEE SHEET NO. 2

MANHATTAN IN WILL COUNTY, IL

PROJECT LOCATED IN THE TOWNSHIP OF

DESIGN DESIGNATION OTHER PRINCIPAL ARTERIAL

0

0

0

0

POSTED SPEED LIMIT 55 MPH DESIGN SPEED LIMIT 60 MPH

EXISTING SN 099-0130 PROPOSED SN 099-0130

PROJECT ENGINEER: ROBERT BORO (847) 705-4237

CONTRACT NO. 60N20

NET AND GROSS LENGTH OF PROJECT = 708' = 0.134 MI

3000' 8000

STATE STANDARDS

SHEET NO.	<u>TITLE</u>	SHEET NO.	<u>TITLE</u>
1	TITLE SHEET	000001 -06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2	GENERAL NOTES, STATE STANDARDS AND INDEX OF SHEETS	001001 - 02	AREAS OF REINFORCEMENT REBARS
3-4	SUMMARY OF QUANTITIES	280001 - 07	TEMPORARY EROSION CONTROL SYSTEMS
5-6	TYPICAL SECTIONS	420401 - 09	BRIDGE APPROACH PAVEMENT CONNECTOR
7	STAGING TYPICAL SECTIONS	142201 - 03	CLASS C AND CLASS D PATCHES
8	ALIGNMENT TIES AND BENCHMARKS	482001 - 0Z	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
9	CONSTRUCTION STAGING PLAN - STAGE I	515001 - 03	NAME PLATE FOR BRIDGE
10	CONSTRUCTION STAGING PLAN - STAGE 2	542401 - 01	METAL END SECTION FOR PIPE CULVERTS
11	DEMOLITION AND UTILITY PLAN	630001 - 10	STEEL PLATE BEAM GUARD RAIL
12	PLAN AND PROFILE	630301 -00	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
13	PAVEMENT MARKING PLAN	631032 - 08	TRAFFIC BARRIER TERMINAL, TYPE 6A
14	EROSION CONTROL PLAN	635006 -03	REFLECTOR AND TERMINAL MARKER PLACEMENT
15-16	TEMPORARY TRAFFIC SIGNAL PLAN	635011 -02	REFLECTOR MARKER AND MOUNTING DETAILS
17	CABLE PLAN	701201 -04	LANE CLOSURE. 2L. 2W. DAY ONLY FOR SPEEDS > 45 MPH
18-33	STRUCTURAL PLANS	701301 -04	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
34	OUTLET FOR CONCRETE CURB AND GUTTER	701321 -13	LANE CLOSURE 2L, 2W, BRIDGE REPAIR WITH BARRIER
35	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701901 - 02	TRAFFIC CONTROL DEVICES
36	BUTT JOINT AND HMA TAPER DETAILS	704001 -07	TEMPORARY CONCRETE BARRIER
37	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS.	720001 -01	SIGN PANEL MOUNTING DETAILS
70	INTERSECTIONS, AND DRIVEWAYS	720006 -03	SIGN PANEL ERECTION DETAILS
38	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	720011 - 01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
39	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	728001 -01	TELESCOPING STEEL SIGN SUPPORT
40	PAVEMENT MARKING LETTERS AND SYMBOLS FOR	729001 -01	APPLICATION OF TYPES A & B METAL POSTS (FOR SIGN & MARKERS)
	TRAFFIC STAGING	780001 - 03	TYPICAL PAVEMENT MARKINGS
41	ARTERIAL ROAD INFORMATION SIGN		
42.44	CROSS-SECTIONS		

GENERAL NOTES

DIMENSIONS ARE IN ENGLISH UNITS UNLESS OTHERWISE NOTED.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

ANY REFERENCE TO STANDARDS IN THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT LISTED IN THE PLANS WITH THE LATEST NUMBERS.

THE RESIDENT ENGINEER SHALL CONTACT LAWRENCE HILL. AREA TRAFFIC ENGINEER, AT (815) 485-6475 AT A MINIMUM OF 2 WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE DIRECTED BY THE ENGINEER.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHING SHALL NOT EXCEED 1'2". WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL FO 3" MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

THE CONTRACTOR SHALL EXERCISE THE UTMOST CARE TO PREVENT ANY DEBRIS FROM THE BRIDGE REMOVAL WORK FROM DROPING INTO JACKSON CREEK. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EXISTING STRUCTURES PAY ITEM.

THE CONTRACTOR WILL NOT BE ALLOWED TO PROCEED WITH ANY WORK ON THIS PROJECT THAT REQUIRES A PERMANENT OR OVER-NIGHT LANE(S) OR SHOULDER(S) CLOSURE PRIOR TO APRIL 1, 2012. TEMPORARY DAY-TIME LANE/SHOULDER CLOSURES MAY BE ALLOWED BETWEEN THE HOURS OF 9:00 AM TO 3:00 PM WITH THE WRITTEN PERMISSION/APPROVAL OF THE ENGINEER AND THE BUREAU OF TRAFFIC OPERATIONS, THE COST TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT AND THIS RESTRICTION SHALL NOT BE CONSIDERED A BASIS FOR A TIME EXTENSION.

		**	
2	benesch	Alfred Beneech & Company 1560 Weit St. Suite 222	
		Naponillo, Minote 60563	-
	engineers - scientists - planners	530-677-9199 Job No. 10258-00	
-			Г

HIGHWAY STANDARDS

 DESIGNED	· ST	REVISED -
DRAWN	- \$T	REVISED -
 CHECKED	- MJY, SLV	REVISED -
DATE	- 12/11/2012	REVISED -

	SUMMARY OF QUANTITIES		80% FEDERAL, 20% STATE			SUMMARY OF QUANTITIES				80% FEDERAL, 20% STATE		
CODE NO.	TEM	UNIT	URBAN TOTAL	ROADWAY 0004	BRIDGE 0014	CODE NO.	ITÉM	UNIT	URBAN TOTAL	ROADWAY 0004	BRIDGE 0014	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	21	- 21		44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YO	965	965		
20200100	EARTH EXCAVATION	CU YD	50	50	enth veet elemeterishin the	44002208	HOT-MIX ASPHALT REMOVAL OVER PATCHES. 2"	SO YD	126	126		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YO	347	347	CONTRACTOR	44004250	PAVED SHOULDER REMOVAL	50 YD	672	672		
20400800	FURNISHED EXCAVATION	כע יים	600	600	essédent haránya kermének	44201749	CLASS D PATCHES, TYPE I, 9 INCH	50 YD	39	39		
20800150	TRENCH BACKFILL	cu ro	8	8	referentiele de la companya del companya del companya de la compan	44201753	CLASS D PATCHES, TYPE II. 9 INCH	so ro	75	75	:	
21101815	COMPOST FURNISH AND PLACE, 4°.	SO YD	4187	4187	A constitution of the second	48101498	AGGREGATE SHOULDERS, TYPE B 4"	SO YD	412	412	: : :	
25000310	SEEDING. CLASS 4	ACRE	0.9	0.9		48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SO YD	639	639	: :	
25100630	EROSION CONTROL BLANKET	SO YD	4187	4187		50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH-		demand to constitution of the constitution of	Ĭ	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	90	90		50,02400	CONCRETE REMOVAL	CU YD	3.2	and the second s	3.2	
28000305	TEMPORARY DITCH CHECKS	FOOT	348	- 348		50104000	BRIDGE RAIL REMOVAL	FOOT	128		128	
28000400	PERIMETER EROSION BARRIER	FOOT	1357	1357	derwerdserver	50,05220	PIPE CULVERT REMOVAL	FOOT	24	24		
31101400	SUBBASE GRANULAR MATERIAL. TYPE B 6"	so yo	639	639	nice the state of	50300225	CONCRETE STRUCTURES	CU YD	27.8		27.8	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	66	66	enterweeten	50300255	CONCRETE SUPERSTRUCTURE	cu ro	125.0		125.0	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	The second secon	, ,	***************************************	50300260	BRIDGE DECK GROOVING	so yo	6]]		611	
40600300	AGGREGATE (PRIME COAT)	TON	5	5	**************************************	50300300	PROTECTIVE COAT	SO YD	611		611	
40600400	MIXTURE FOR CRACKS. JOINTS AND FLANGEWAYS	TON	2	2	de special de la constitución de	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SO FT	2800		2800	
40600635	LEVELING BINDER (MACHINE METHOD) N70	TON	45	45	Parameter Property	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	38,180		38,180	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	so yo	26	26	nje manjenanjenije nje	50800515	BAR SPLICERS	EACH	292		292	
40600990	TEMPORARY RAMP	SO YD	49	49	Andrean desirent	50901050	STEEL RAILING, TYPE SM	FOOT	128		128	
10601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	J5	15	тенняльная	5/500/00	NAME PLATES	EACH	1		1	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	92	92	Angelessans	52000110	PREFORMED JOINT STRIP SEAL	FOOT	45		45	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SO YD	35	35	respondantes	542 <i>J</i> 5559 58700300	METAL END SECTIONS 24" CONCRETE SEALER	EACH SQ FT	2 280	2	280	
44000100	PAVEMENT REMOVAL	SO YD	93	93	ne grande de la constitución de la	59000200	EPOXY CRACK INJECTION	FOOT	130		130	

* SPECIALTY ITEMS

| DESIGNED - ST | REVISED - | STATE OF ILLINOIS | STATE OF ILLINOI

Rev.

	SUMMARY OF QUANTITIES			80% FEDERA	L. 20% STATE			SUMMARY OF QUANTITIES			80% FEDERA	AL. 20% STATE
CODE NO.	ITEM	UNIT	URBAN TOTAL	ROADWAY 0004	BRIDGE 0014		CODE NO.	ITEM	UNIT	URBAN TOTAL	ROADWAY 0004	BRIDGE 0014
60103900	PIPE DRAINS, CORRUGATED STEEL 24"	FOOT	26	26			78300100	PAVEMENT MARKING REMOVAL	SO FT	561	561	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A. 6 FOOT POST	FOOT	557	557			78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	7	. 33
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4-		*	x0327008	REMOVE AND RELOCATE SIGN (SPECIAL)	EACH	4	4	
63100167	TRAFFIC BARRIER TERMINAL, TYPE I (SPECIAL) TANGENT	EACH	2	2			x5030305	CONCRETE WEARING SURFACE, 5"	SO YD	312	The state of the s	312
63,00,169	TRAFFIC BARRIER TERMINAL, TYPE I (SPECIAL) FLAIRED	EACH	2	2			x7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		
63200310	GUARDRAIL REMOVAL	FOOT	821	821	-		x7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	2395	2395	
67000400	ENGINEER FIELD OFFICE, TYPE A	CAL MO	7	7		-	x7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	24	24	
67100100	MOBILIZATION	L SUM	1	1			20001900	ASBESTOS BEARING PAD REMOVAL	EACH	<i>1</i> 6	The second secon	16
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	24	21		:	Z0004552	APPROACH SLAB REMOVAL	SO YD	<i>196</i>	' 196	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	. 1	**			Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	27	THE PARTY OF THE P	27
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6			Z0013798	CONSTRUCTION LAYOUT	L SUM	. 1	The state of the s	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	4		,	20030850	TEMPORARY INFORMATION SIGNING	SO FT	200	200	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	839	839			20073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	The second secon	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	463	463	***		r-reformers restrictions that the				THE PERSON NAMED IN COLUMN TO THE PE	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	463	463			erkertiterenterenterenterenterenterenterent				THE PROPERTY OF THE PROPERTY O	
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2			According to the control of the cont				THE PARTY OF THE P	
70600332	IMPACT ATTEMUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	. 2	2			***************************************		Trained to Assess the second section of the section of		A Commission of the Commission	· ·
78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	1076	,1076			**************************************		And the second s			Lagrania Antono
78008210	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4"	FOOT	397	397			resisante Francisco de Carlos de Car					Annual management
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	: :	12			• • • • • • • • • • • • • • • • • • •	·	A PARTICULAR PROPERTY AND ADDRESS OF THE PARTICULAR PAR			The property of the control of the c
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6		6		ende makenines		***************************************			
78200530	BARRIER WALL MARKERS, TYPE C	EACH	74	74			Avezu unidaksen fallada sest termida				-	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	Annual Annua		ere for found control for the		1			

REVISED -Sbenesch 1000 Wel Gr. Surba 2022 hopeing finestry - ziclestlisty - pianetri 500-507-9100 John REVISED REVISED

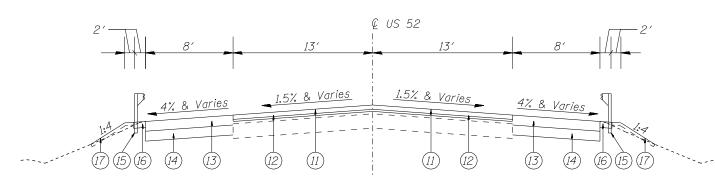
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
US ROUTE 52 OVER JACKSON CREEK SHEET NO. 2 OF 2 SHEETS STA. 448+82 TO STA. 455+90

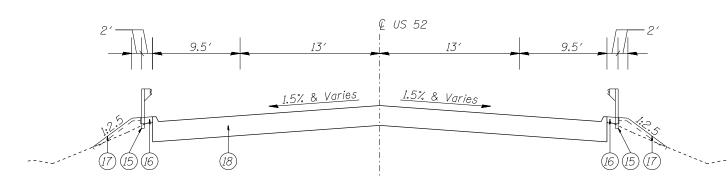
COUNTY SHEET NO.
WILL 44 4
CONTRACT NO. 60N20 F.A.P. RTE. 852 SECTION 852 18-8-4-R-2 D-91-269-11 FED. ROAD DIST. NO. ILLINOIS

Varies Varies Varies Varies Varies (6 5 4 3 10 1) OR (2 1) OR (2 10 3 4 5 6

EXISTING TYPICAL SECTION STA. 450+00 TO STA. 452+26.70 STA. 452+89.39 TO STA 455+10



PROPOSED TYPICAL SECTION STA. 450+00 TO STA. 451+96.87 STA. 453+19.22 TO STA 455+10



PROPOSED TYPICAL SECTION STA. 451+96.87 TO STA. 452+26.70 STA. 452+89.22 TO STA 453+19.22

LEGEND

- 1) EXISTING PAVEMENT, 9"
- (2) EXISTING BRIDGE APPROACH PAVEMENT
- (3) EXISTING HMA OVERLAY, 3"
- (4) EXISTING HMA SHOULDER TO BE REMOVED
- 5) EXISTING GUARDRAIL
- (6) EXISTING GROUND
- (10) PROPOSED HMA SURFACE REMOVAL, 2"
- 11) PROPOSED HMA SURFACE CSE., MIX "D", N70, 1 2"
- PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 3/4"
- (13) PROPOSED HMA SHOULDERS, 6"
- SUBBASE GRANULAR MATERIAL, TYPE B 6"
- 15) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A
- (16) PROPOSED AGGREGATE SHOULDER, TYPE B, 4"
- (17) PROPOSED COMPOST FURNISH AND PLACE, 4"
- (18) PROPOSED CONCRETE APPROACH SLAB

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	DESIGN AIR VOIDS	THICKNESS
ROADWAY RESURFACING		
HMA SURFACE COURSE, MIX "D", N70 (IL-9.5 mm) LEVELING BINDER (MACHINE METHOD), N70 (IL-9.5 mm)	4% @ 70 GYR 4% @ 70 GYR	1 ½" 34" MIN.
BRIDGE APPROACH PAVEMENT CONNECTOR FLEXIBLE, 15" - FULL DEPTH		
HMA SURFACE COURSE, MIX "D", N7O (IL-9.5 mm) HMA BINDER CSE, IL-19.0, N7O (4 LIFTS)	4% @ 70 GYR 4% @ 70 GYR	1 ½" 13 ½"
<u>SHOUL DE R</u>		
HMA SHOULDERS (HMA BINDER IL-19 MM) (2 LIFTS)	4% @ 50 GYR	6"
PAVEMENT PATCHING		
CLASS D PATCH (HMA BINDER IL-19 mm) HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR 4% @ 70 GYR	9" 2½"

NOTES:

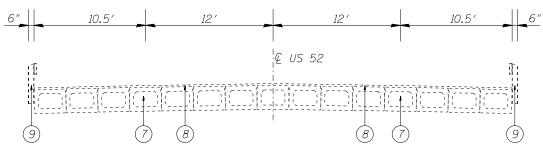
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS 112 LBS/SQ-YD/IN.

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

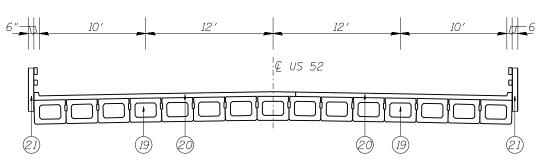
FOR "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

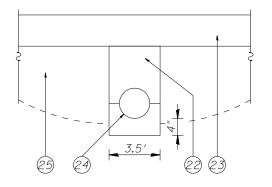
Alfred Benesch & Company	DESIGNED - ST	REVISED -	07477 05 111111010	TYPICAL SECTIONS				SECTION	COUNTY	SHEETS NO.
benesch 150 Wall St. Suic Company 150 Denesch 150 Denesc	DRAWN - ST	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER J		852	18-B-4-R-2	WILL	44 5
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	OF HOUSE OF OTHER SACROOM ONLIN			D-91-269-11		CONTRACT NO. 60N2	
	DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS	STA. 448+82 TO STA. 455+90	FED. ROA	D DIST. NO. ILLINOIS FED. A	AID PROJECT	



EXISTING TYPICAL SECTION STA. 452+26.87 TO STA. 452+89.22



PROPOSED TYPICAL SECTION STA. 452+26.87 TO STA. 452+89.22



PROPOSED DRIVEWAY SECTION STA. 448+82 TO STA. 449+18

LEGEND

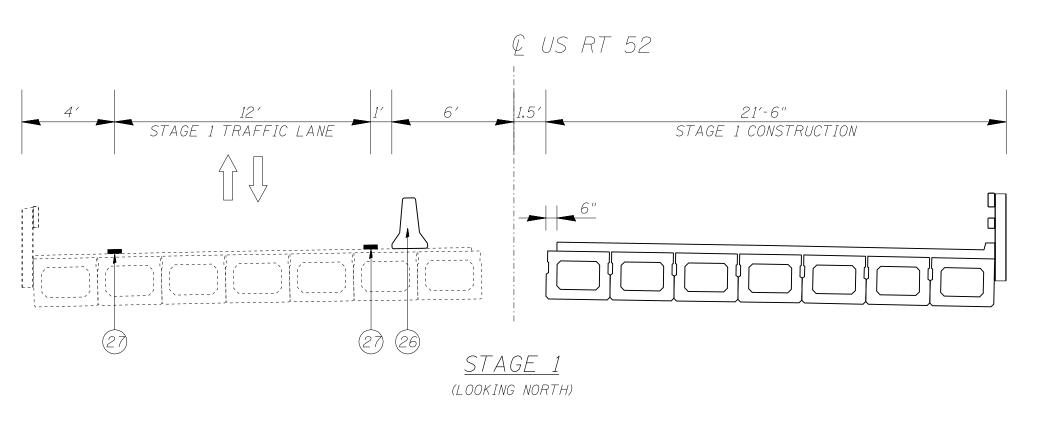
- (7) EXISTING PPC DECK BEAMS
- 8) EXISTING HMA WEARING SURFACE, 2"
- 9) EXISTING STEEL RAILING TO BE REMOVED
- (19) PROPOSED PPC DECK BEAMS (27" DEPTH)
- (20) PROPOSED CONCRETE WEARING SURFACE (5") WITH CONCRETE CURB
- 21) PROPOSED STEEL RAILING
- (22) PROPOSED TRENCH BACKFILL
- (23) PROPOSED AGGREGATE FOR DRIVEWAY MAINTENANCE, 10" MINIMUM
- 24) PROPOSED PIPE DRAINS, CORRUGATED STEEL, 24"
- (25) FURNISHED EXCAVATION

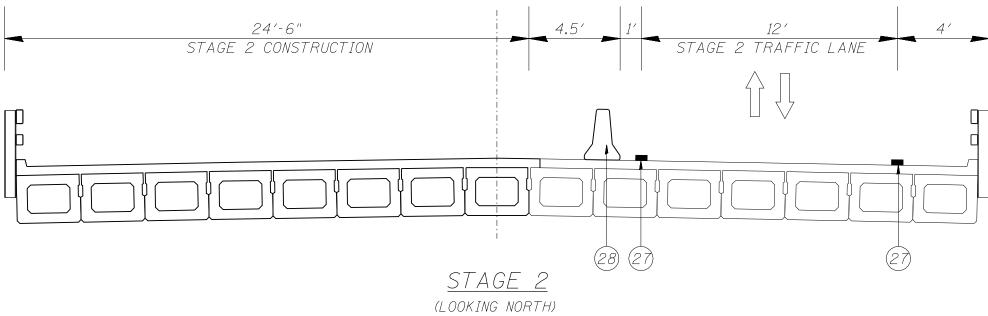
ROADWAY SUPERELEVATION TABLE

STATION	LEFT SHOULDER ELEVATION	LEFT EOP ELEVATION	CENTERLINE ELEVATION	RIGHT EOP ELEVATION	RIGHT SHOULDER ELEVATION
453+44.12	679.52	679.84	680.02	679.83	679.51
453+60	679.32	679.64	680.01	680.09	679.77
453+80	679.24	679.56	680.00	680.22	679.90
454+00	679.16	679.48	680.00	680.35	680.03
454+20	679.13	679.45	680.04	680.48	680.16
454+40	679.10	679.42	680.09	680.62	680.30
454+60	679.09	679.41	680.15	680.77	680.45
454+80	679.12	679.44	680.23	680.91	680.59
455+00	679.16	679.48	680.32	681.07	680.75
455+10	679.18	679.50	680.37	681.15	680.83

	EARTHWORK											
STAGE	LOCATION	EARTH EXCAVATION (CUT) CU YD	ADJ. EXCAVATION 15% CU YD	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (CUT) CU YD	EMBANKMENT (FILL) CU YD	FURNISHED EXCAVATION CU YD						
1 & 2	STA. 449+00 to 455+74	347	295	347	600	600						

Alfred Benesch & Company	DESIGNED - ST	REVISED -			TYPICAL SEC	TIONS	RTE.	SECTION	COUNTY SHEE	ETS NO.
benesch Affred Benesch & Company 1580 Well St. Sulte 222 Napperville, Illinois 80563	DRAWN - ST	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER J		852	18-B-4-R-2	WILL 44	.4 6
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, SLV REVISED -	DEPARTMENT OF TRANSPORTATION	OU HOUTE SE OVEH DAGROOM SHEEK			D-91-269-11		CONTRACT NO.	0. 60N2O	
	DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 2 OF 2 SHEETS	STA. 448+82 TO STA. 455+90	FED. ROA	AD DIST. NO. ILLINOIS FED. A	ID PROJECT	

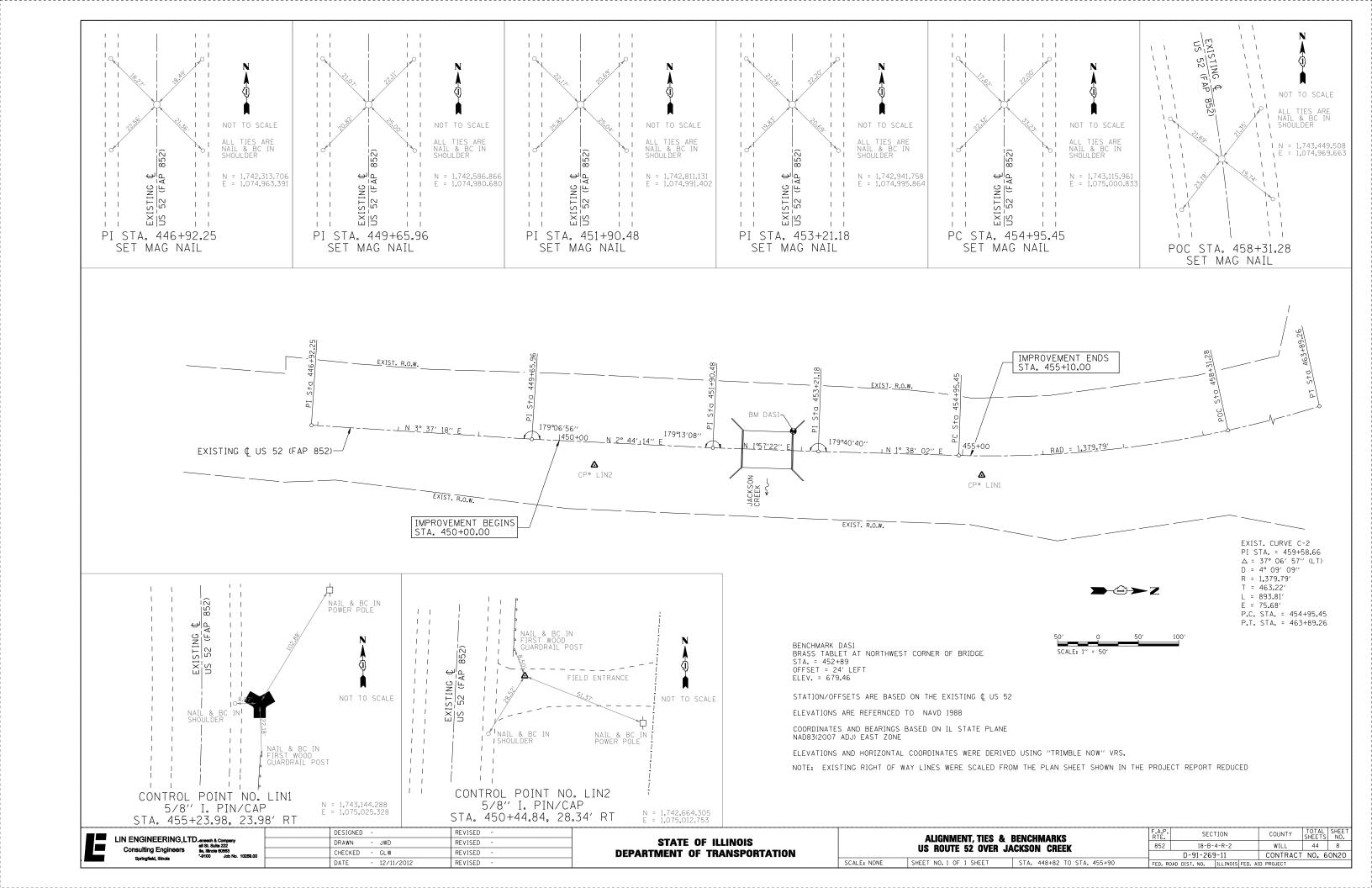


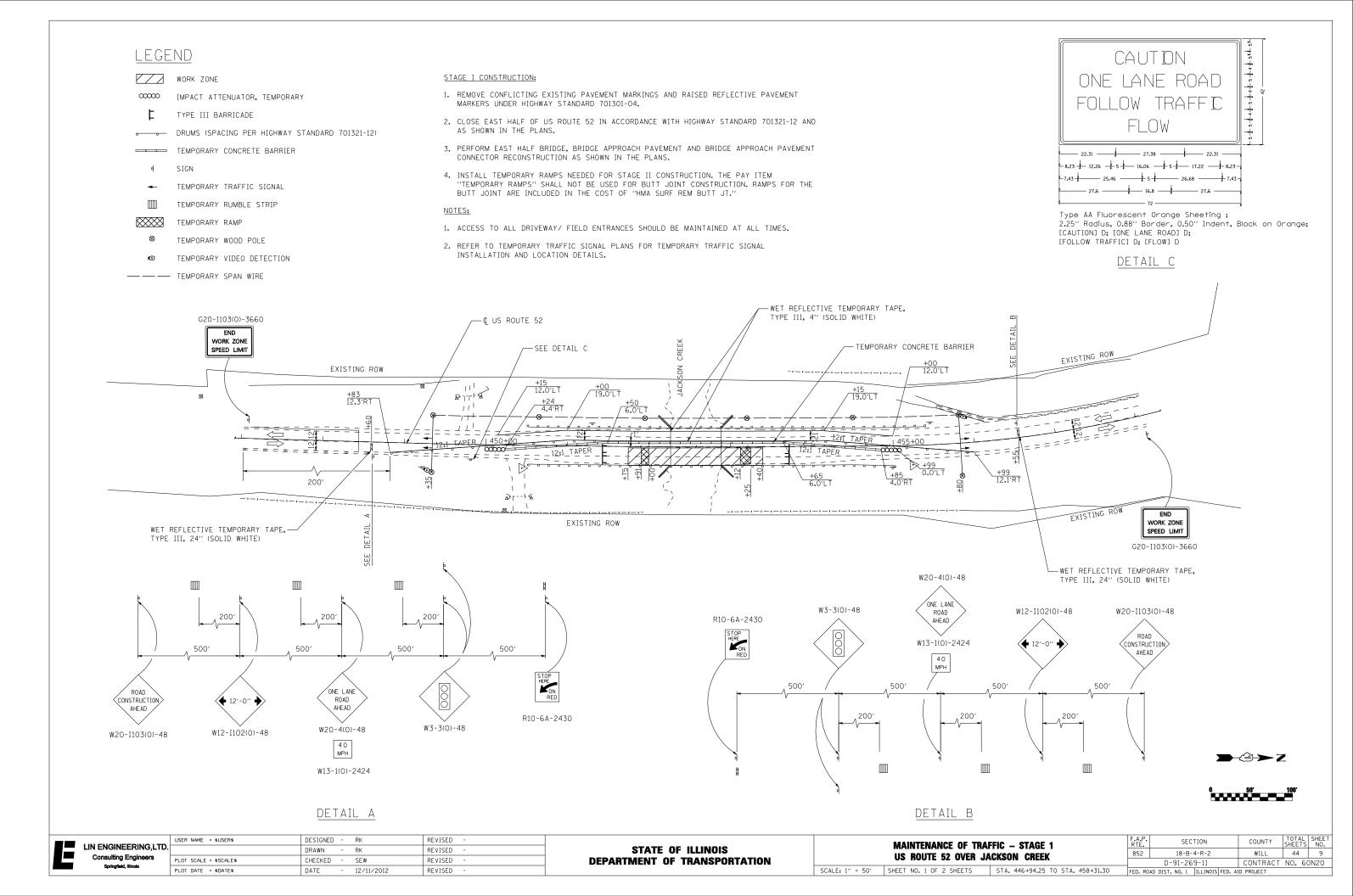


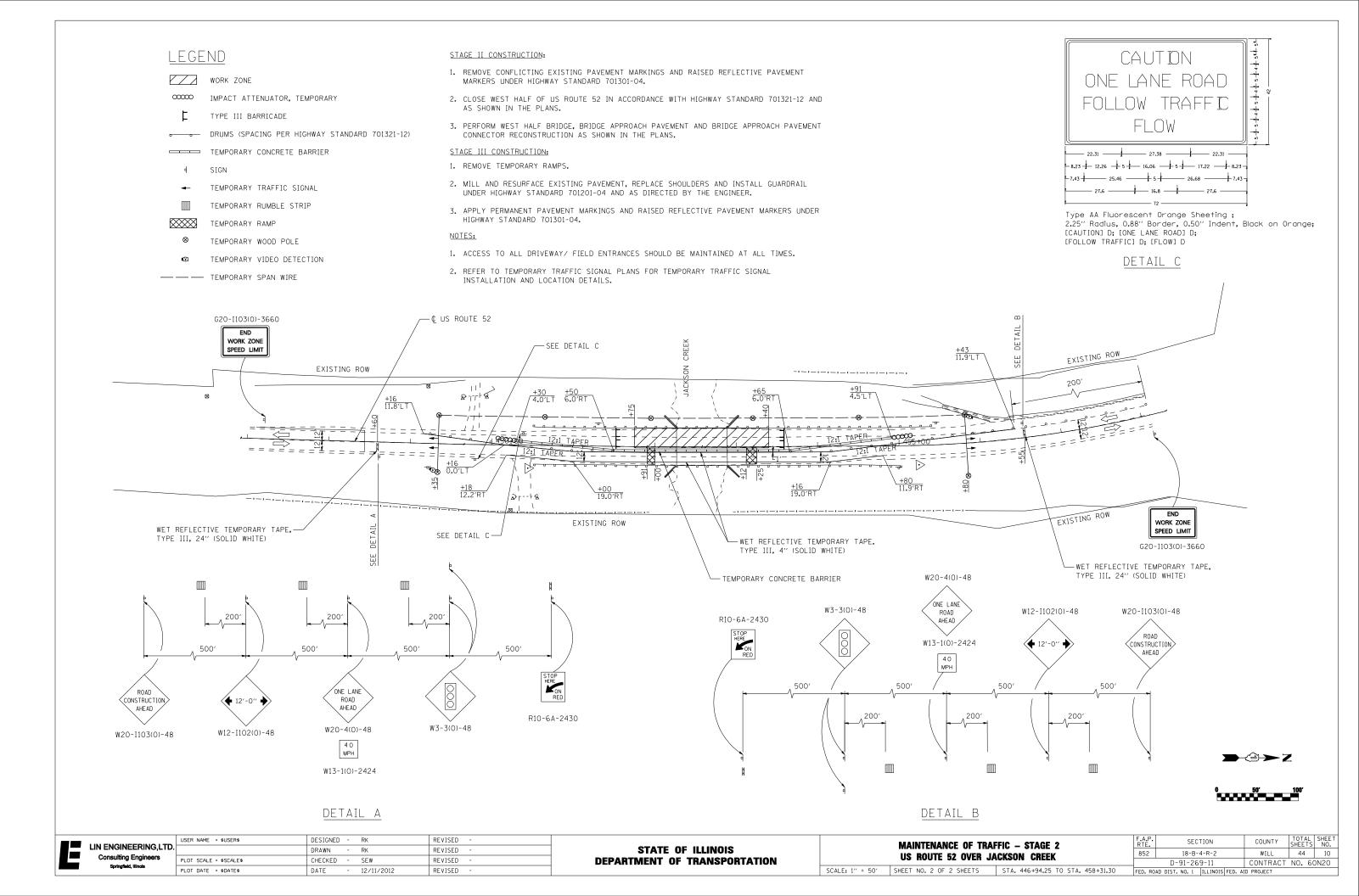
<u>LEGEND</u>

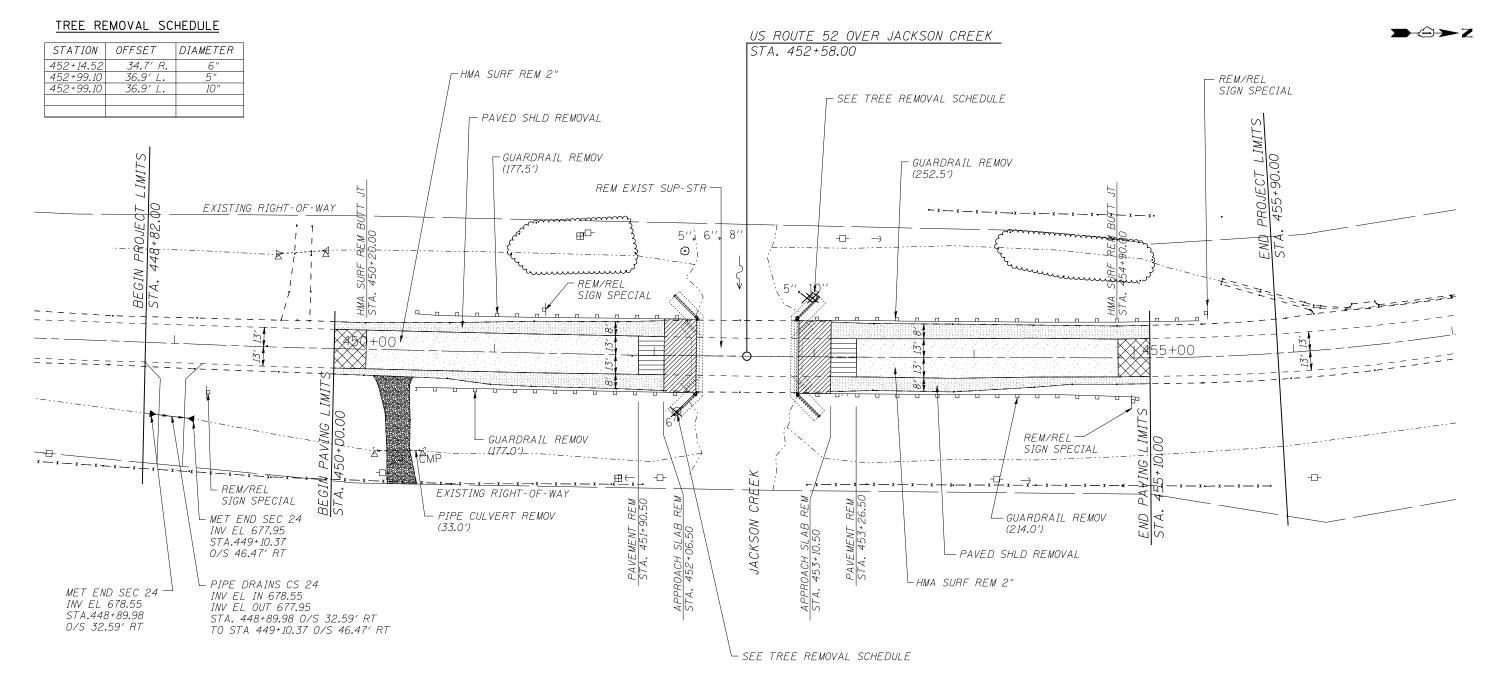
- (26) TEMPORARY CONCRETE BARRIER
- 27) WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4"
- (28) RELOCATE TEMPORARY CONCRETE BARRIER

Alfred Benesch & Company		KENIZED -	CTATE OF HIMMOR		STAGING TYPICA	RTE.	SECTION	COUNTY	SHEETS NO.	
550 Wall St. Suite 222	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER		852	18-B-4-R-2	WILL	44 7
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION	OU HOUTE SE CYEN DAGROOM SHEEK				D-91-269-11		T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEET	STA. 448+82 TO STA. 455+90	FED. ROA	D DIST. NO. ILLINOIS FED.	AID PROJECT	









LEGEND



- HMA SURF REM BUTT JT



HMA SURF REM 2



PAVED SHLD REMOVAL W/ EARTH EXCAVATION



EARTH EXCAVATION



- PAVEMENT REMOVAL



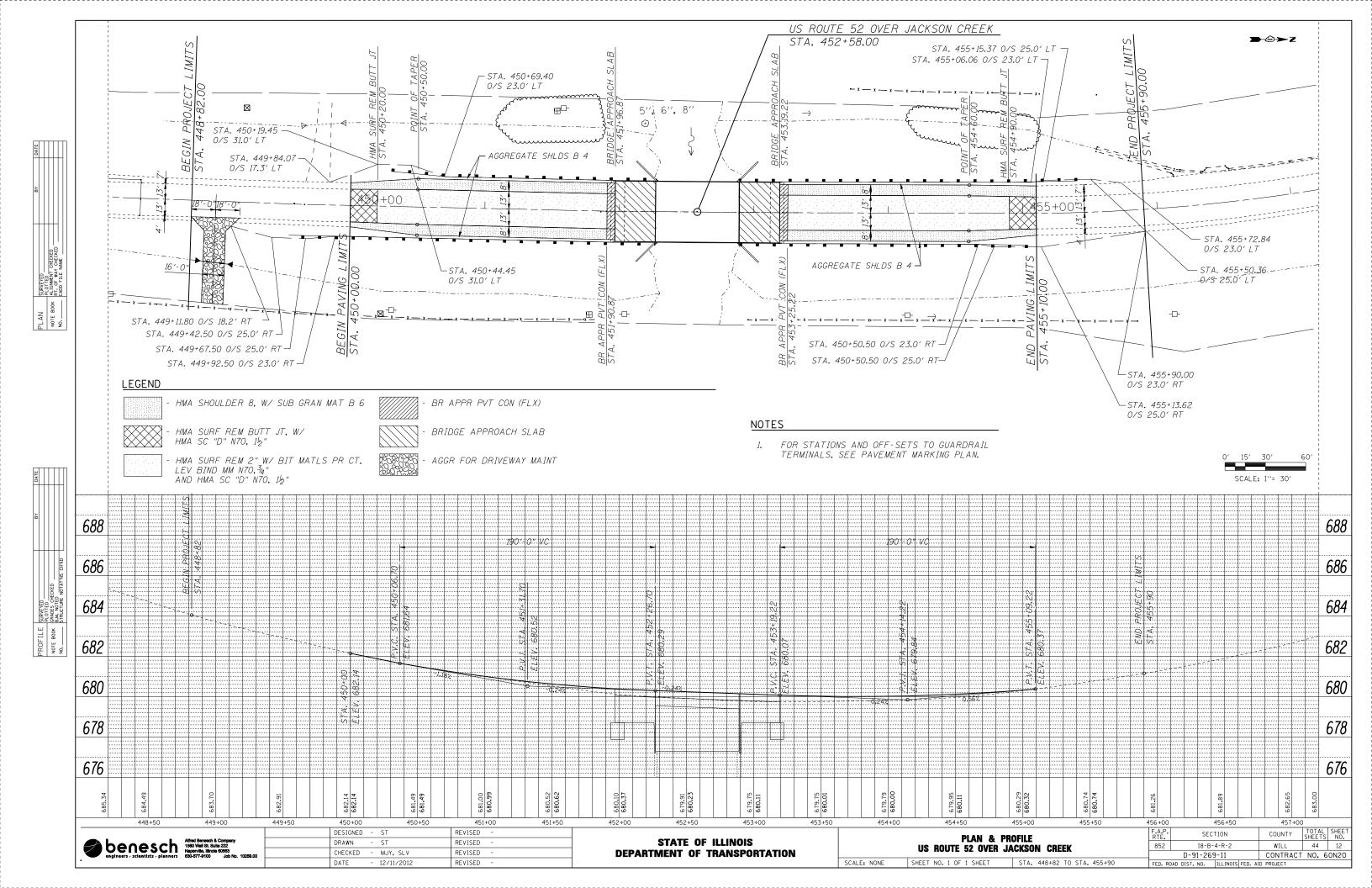
APPROACH SLAB REM

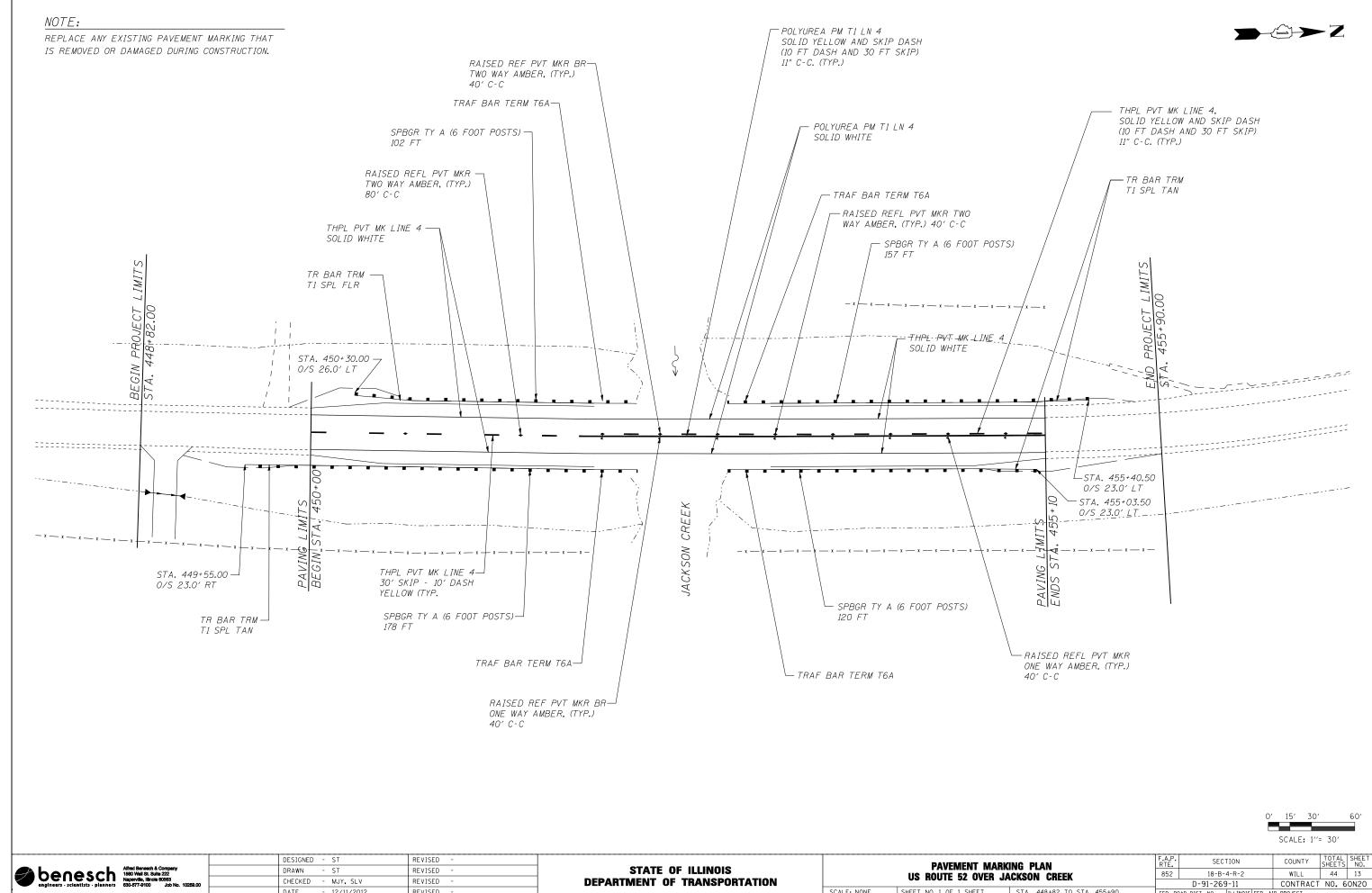
NOTES

- I. THE CONTRACTOR IS TO PROTECT AND MAINTAIN ALL EXISTING UTILITIES. THIS WORK WILL NOT BE PAID FOR SEPERATELY, THE COST OF PROTECTING AND MAINTAINING UTILITIES SHALL BE INCLUDED IN THE COST FOR CONCRETE SUPERSTRUCTURES.
- 2. THE CONTRACTOR IS TO PROTECT AND MAINTAIN ALL TREES WITHIN AND ADJACENT TO THE WORK ZONE FOR THIS PROJECT. THIS WORK WILL NOT BE PAID FOR SEPERATELY, BUT SHALL BE INCLUDED IN THE COST FOR CONCRETE SUPERSTRUCTURES.
- 3. FOR STATION AND OFF-SETS TO GUARDRAIL TERMINALS, SEE SHEET 14 PAVEMENT MARKING PLAN.



	DESIGNED - ST	REVISED -		DEMOLITION AND UTILITY PLAN	F.A.P. SECTION	COUNTY TOTAL SHEET
Affred Benesch & Company 1500 Wall Studie 22	DRAWN - ST	REVISED -	STATE OF ILLINOIS	US ROUTE 52 OVER JACKSON CREEK	852 18-B-4-R-2	WILL 44 11
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	US NUUTE 32 OVER JACKSUN CHEEK	D-91-269-11	CONTRACT NO. 60N20
i l	DATE - 12/11/2012	REVISED -		SCALE: 1" = 30' SHEET NO. 1 OF 1 SHEET STA. 448+82 TO STA. 455+90	FED. ROAD DIST. NO. TILLINGIS FED	AID PROJECT





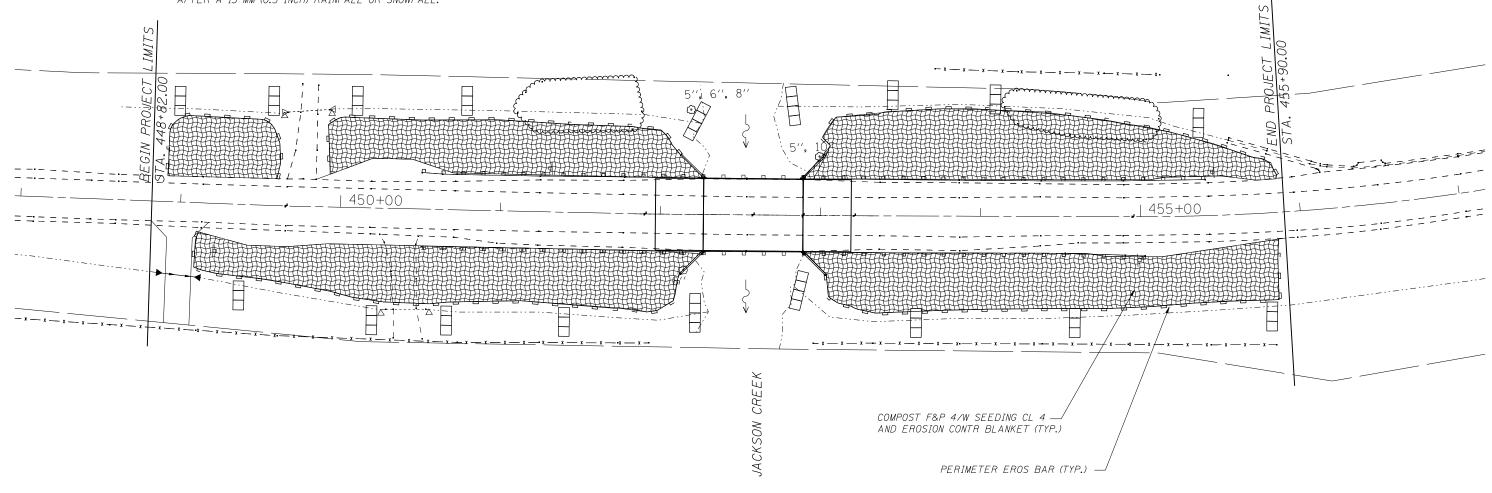
DESIGNED - ST	REVISED -	07475 05 11111010		PAVEMENT MAR	KING PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEE SHEETS NO
	REVISED -	DEPARTMENT OF TRANSPORTATION	US ROUTE 52 OVER JACKSON CREEK			852	18-B-4-R-2	WILL	44 13
CHECKED - MJY, SLV	REVISED -						D-91-269-11	CONTRAC	CT NO. 60N20
DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEET	STA. 448+82 TO STA. 455+90	FED. ROAD DIST. NO. ILLINOIS FED.		ID PROJECT	
	DESIGNED - ST DRAWN - ST CHECKED - MJY, SLV DATE - 12/11/2012	DRAWN - ST	DRAWN - ST REVISED - STATE OF ILLINOIS CHECKED - MJY, SLV REVISED - DEPARTMENT OF TRANSPORTATION	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - CHECKED - MJY, SLV REVISED - DEPARTMENT OF TRANSPORTATION	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MAR US ROUTE 52 OVER .	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING PLAN US ROUTE 52 OVER JACKSON CREEK	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - DEPARTMENT OF TRANSPORTATION STATE OF ILLINOIS US ROUTE 52 OVER JACKSON CREEK ETÉ. 852	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - DEPARTMENT OF TRANSPORTATION STATE OF ILLINOIS US ROUTE 52 OVER JACKSON CREEK DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING PLAN 852 18-8-4-R-2 D-91-269-11	DRAWN - ST REVISED - CHECKED - MJY, SLV REVISED - CHECKED - MJY, SLV REVISED - DEPARTMENT OF TRANSPORTATION STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING PLAN US ROUTE 52 OVER JACKSON CREEK 852 18-B-4-R-2 WILL D-91-269-11 CONTRAC

TEMPORARY EROSION CONTROL NOTES



- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER POLICY.
- 2. THE CONCTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION.
- 3. THE CONTRACTOR SHALL SURROUND ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.
- 4. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AT ALL TIMES. EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS OR WITHIN 24 HOURS AFTER A 13 MM (0.5 INCH) RAINFALL OR SNOWFALL.

5. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE BEEN CONCLUDED. AREAS THAT HAVE STEEP SLOPES OR WILL NOT RECIEVE PERMANENT LANDSCAPING SHALL BE TEMPORARILY SEEDED. ALL FLATTER AREAS OR AREAS WHERE NO FURTHER WORK IS TO OCCUR FOR ONE MONTH OR MORE SHALL BE SEEDED AND EXCELSIOR BLANKET WITHIN SEVEN (7) CALENDAR DAYS.



TEMPORARY EROSION CONTROL SEQUENCE OF CONSTRUCTION

- 1. ESTABLISH TEMPORARY EROSION CONTROL AND ERECT PERIMETER EROSION CONTROL BARRIER AS SHOWN ON THE THE PLANS PROIR TO EARTHWORK.
- 2. IMPLEMENT SEDIMENT AND EROSION CONTROL DEVICES FOR STOCKPILE AREAS AS REQUIRED.
- 3. INSTALL PERMANENT LANDSCAPING IN CONJUNCTION WITH CONSTRUCTION STAGING.
- 4. CLEAN DRAINAGE FACILITIES AND REMOVE TEMPORARY EROSION DEVICES WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED.

LEGEND

COMPOST FURNISH AND PLACE, 4"
W/ SEEDING, CL 4 AND EROSION
CONTROL BLANKET

TEMPORARY DITCH CHECKS



Alfred Benesch & Company	DESIGNED - ST	REVISED -	STATE OF ILLINOIS		EROSION CONTROL PLAN	RTI	SECTION	COUNTY	SHEETS NO.
benesch 1580 Wall St. Suite 222	DRAWN - ST	KEAIZED -			US ROUTE 52 OVER JACKSON CREEK	85	2 18-B-4-R-2	WILL	44 14
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, SLV	REVISED -	DEPARTMENT OF TRANSPORTATION		JO HOULE OF OVER ONORDON ONEEK		D-91-269-11	CONTRACT	T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEET STA. 448+82 TO STA. 455+90	FED	. ROAD DIST. NO. ILLINOIS FED.	AID PROJECT	

RESTORATION OF WORK AREA

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTES FOR TEMPORARY TRAFFIC SIGNALS

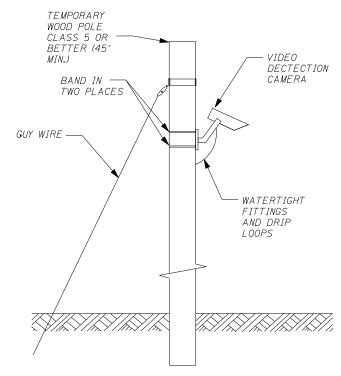
- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL (S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS, EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD. ALL SIGNAL HEADS SHALL BE L.E.D.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS.
 SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- CONTROLLER WITH STEEL BASE CABINET AND BATTERY BACK-UP CABINET SHALL BE MOUNTED ON A SERVICE ENTRANCE POLE.
- UN-INTERRUPTABLE POWER SUPPLY (UPS) SHALL BE INCLUDED IN "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION" PAY ITEM.
- 10 WOOD POLES INSTALLED BY THE TRAFFIC CONTRACTOR (SEE TEMPORARY TRAFFIC SIGNAL PLANS FOR LOCATIONS).

TEMPORARY LIGHTING NOTES

- TEMPORARY LUMINAIRE, SODIUM VAPOR, 400 WATT, 240V, HORIZONTAL-MOUNT, PHOTO-CELL, TYPE II DISTRIBUTION.
- TEMPORARY LIGHTING TO BE REMOVED AS DIRECTED BY IDOT WHEN ROADWAY CONSTRUCTION IS COMPLETE.
- ALL SYSTEMS ARE TO BE REQUIRED TO REMAIN OPERATIONAL DURING STAGED CONSTRUCTION.
- GROUND EVERY THIRD POLE WITH TEMPORARY LUMINAIRE UNLESS NOTED OTHERWISE ON PLAN.
- TEMPORARY POLES SHALL BE 60 FEET UNLESS OTHERWISE NOTED.

TEMPORARY TRAFFIC SIGNAL LEGEND

- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE NOMINAL 60 FT.,
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR



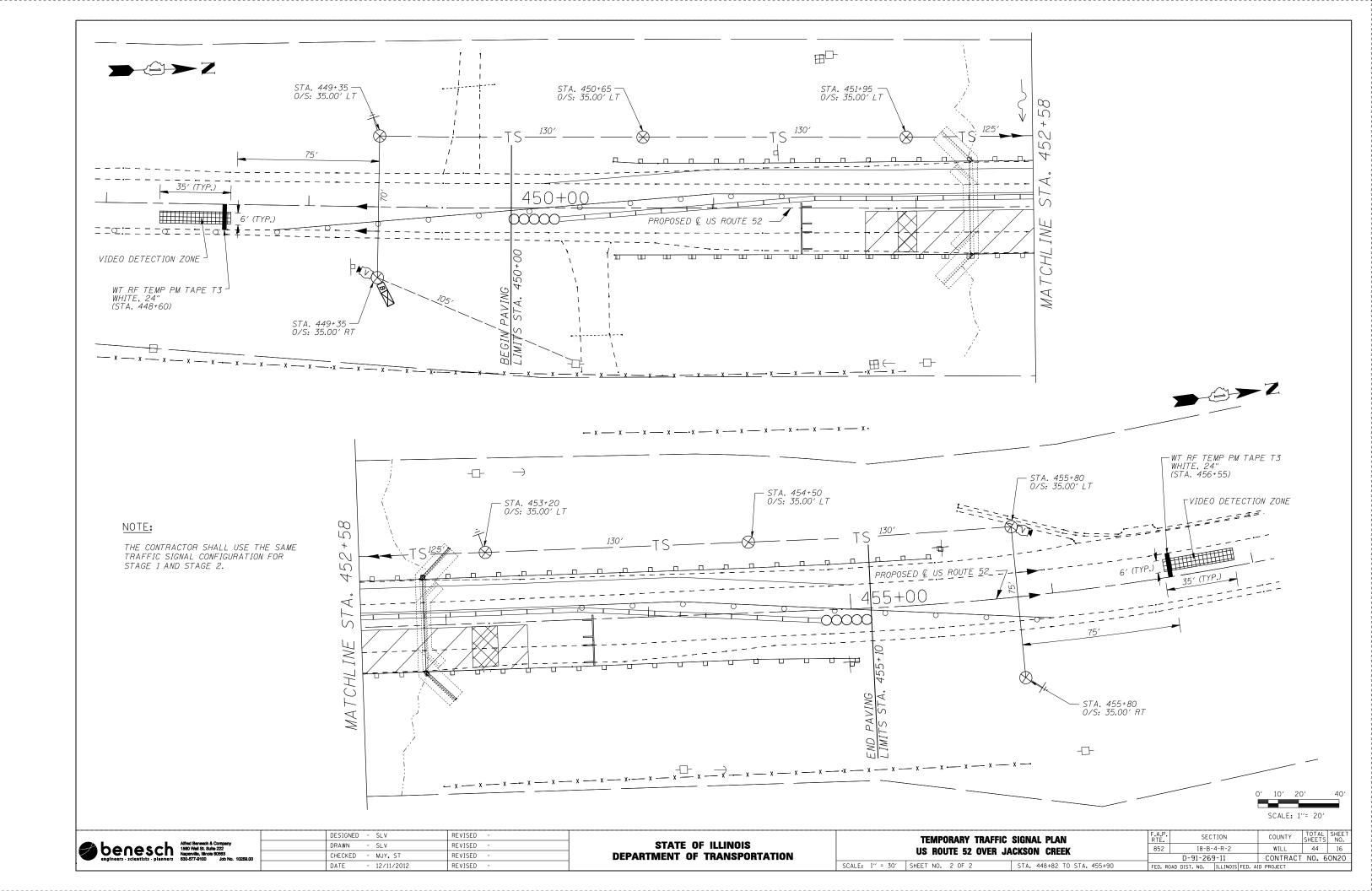
TEMPORARY VIDEO DETECTION MOUNTING DETAIL

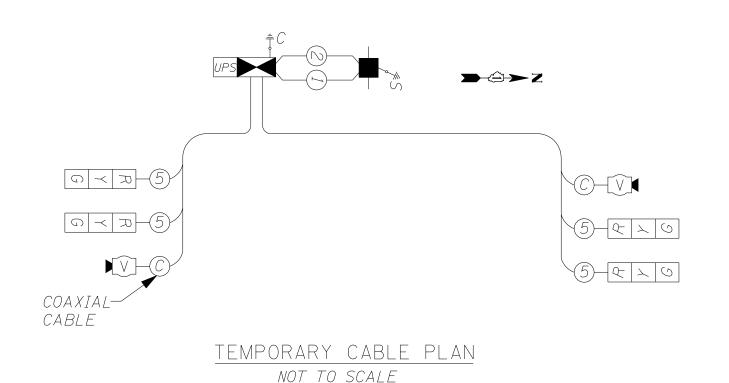
NOT TO SCALE



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

1	TEMPORARY TRAFFIC	SIGNAL PLAN	F.A.P. RTE.	SECTION	COUNTY TOTAL SHEET NO.		
ı	US ROUTE 52 OVER JA	852	18-B-4-R-2	WILL	44	15	
I			D-91-269-11	CONTRACT NO. 60N2O			
ı	SCALE: 1" = 30" SHEET NO. 1 OF 2	STA. 448+82 TO STA. 455+90	EED BC	AD DIST NO THEINOIS FED AT	D PROJECT		





I.D.O.T.
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

					TOT 4.1
TYPE	NO. LAMPS	WATT INCAND	AGE LED '	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	4	135	17	0.50	34.00
(YELLOW)	4	135	25	0.25	25.00
(GREEN)	4	135	<i>1</i> 5	0.25	15.00
VIDEO CAMERA	2	<i>1</i> 5	1	1.00	30.00
CONTROLLER	1	100	100	1.00	100.00
FNFRGY COST	т то:			TOTAL =	204

ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT

SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: MR. DALE BALLINGER

ENERGY COST TO:

PHONE: 815 724 5717 COMPANY: COM. EDISON

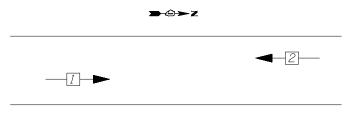
TEMPORARY CABLE LEGEND

- (5) INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- SIGNAL FACE
- "-S- TEMPORARY GROUND ROD AT POST OR MAST ARM POLE
- **III** ← C TEMPORARY GROUND ROD AT CONTROLLER

CONSTRUCTION NOTES

- (1) THE PHASING SHALL BE DEACTIVATED AS REQUIRED DURING CONSTRUCTION STAGING.
- (2) LED SIGNAL HEADS SHALL BE USED FOR ALL TEMPORARY TRAFFIC SIGNALS.

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM STAGE 1 AND STAGE 2

LEGEND * DUAL ENTRY PHASE

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
AERIAL CABLE, 2-1/C NO. 4 WITH MESSENGER WIRE	FOOT	1000
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
TEMPORARY ELECTRIC SERVICE CONNECTION	EACH	1
TEMPORARY ELECTRIC SERVICE INSTALLATION	EACH	1
REMOVAL OF TEMPORARY WOOD POLE, SALVAGE	EACH	8
COMBINATION POLE MOUNTED ELECTRIC SERVICE BOX	EACH	1
TEMPORARY WOOD POLE, 60 FOOT, CLASS 4	EACH	8
GROUND ROD, ⁵ 8" DIA, X 10 FEET	EACH	3

THIS WORK SHOWN IS FOR ESTIMATING PURPOSE ONLY. TEMPORARY LIGHTING WILL BE PAID UNDER "TEMPORARY BRIDGE TRAFFIC SIGNALS."

benesch a Company 1600 Wall St. Sulle 222 Napperille, Illinoie 00563 830-577-9100 Job No. 10259.00	DESIGNED - ST	REVISED -	OTATE OF HILIDIO		CABLE F		RTE.	SECTION	COUNTY	SHEETS 1	NO.
	DRAWN - SI	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SCALE: N	US ROUTE 52 OVER JACKSON CREEK			852	18-B-4-R-2	WILL	44	17
	CHECKED - MJY, SLV	REVISED -						D-91-269-11 CONTRAC		ACT NO. 60N20	
	DATE - 12/11/2012	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEET	STA. 448+82 TO STA. 455+90	FED. ROAD DIST. NO. ILLINOIS FED. AI		AID PROJECT		

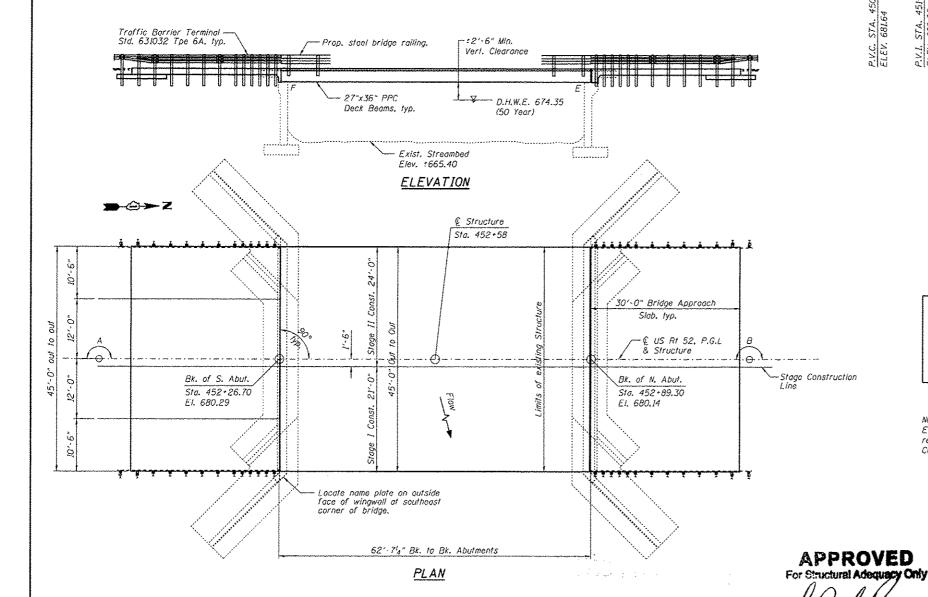
Benchmark: Benchmark #1 - Brass Tablet at northwest corner of bridge.

Sta = 452+89, 24' left, Elevation = 679.46'

Existing Structure: S.N. 099-0130 built in 1916 and widened and complete superstructure replacement in 1980 as a single span 27"x36" PPC Deck Beam bridge with 212" bituminous wearing surface on closed abutments on spread footings. The structure measures 62'-7'4" back to back abutments and 45'-0" out to out. Wingwalls were added in the 1980 widening to accommodate the new superstructure. Traffic is to be maintained utilizing stage construction. One lane of alternating two-way traffic is to be maintained using traffic signals.

Salvage:

Existing Steel Bridge Roll



WATERWAY INFORMATION

Exist. Low Grade Elev. = 679.32 ft. • Sta. 452+98 Prop. Low Grade Elev. = 679.56 ft. • Sta. 452+98 Drainage Area = 14.1 mi 2

Flood	Freq.	a	Opening	Sq. Ft.	Nat.	Head	· Ft.	Headwi	oter Ei,
F 1000	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
	10	1510	432	432	673.37	0.07	0.07	573.44	673.44
Design	50	2400	492	492	674.35	0.25	0.25	674.60	674.60
Base	100	2960	530	530	674.99	0.44	0.44	575.43	675.43
Overtopping	>500								
Max. Calc.	500	4220	596	596	676.09	0.73	0.73	676.82	676.82

IO-Yr Velocity through Existing Bridge * 3.5 fps IO-Yr Velocity through Proposed Bridge = 3.5 fps

LOADING HL-93

DESIGN SPECIFICATIONS (NEW CONST.)

2010 AASHTO LRFD Bridge Design Specifications, 5th Edition, with 2010 Interims

DESIGN STRESSES

FIELD UNITS (NEW CONST.)

f'c = 5000 psi (Concrete Wearing Surface)

Ty = 60000 psi (Reinforcement) FIELD UNITS (EXISTING)

f'c = 3.500 psi

f'c = 5000 psi (Concrete Wearing Surface)

PRECAST PRESTRESSED UNITS

f'c = 6000 psi

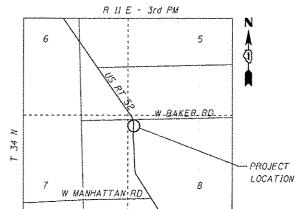
f'ci = 5000 psi

 $f_{pu} = 270,000 \text{ psi (I/2" } \phi \text{ low lax. strands)}$

fpbt = 201.960 psi (1/2" \$ low lax, strands)

SEISMIC DATA (EXISTING)

Seismic Performance Category (SPC) = A Bedrock acceleration coefficient (A) = .04g Site Coefficient (S) = 1.2



LOCATION SKETCH

SCOUR ELEVATION TABLE

Scour		N. Abul
Elevation (Ft.)	662.75	662.67

Elevations are the assumed bottom of footing elevations

-Structure Location

PROFILE GRADE

STATION 452+58

REBUILT 20_ _ BY

STATE OF ILLINOIS

F.A.P. ROUTE 852 SEC 18-B-4-R-2

LOADING HL-93

STRUCTURE NO. 099-0130

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

NOTE:

Come

Engineer of Bridges & Strectures

US 52 OVER JACKSON CREEK F.A.P RT. 852 SECTION 18-B-4-R-2 WILL COUNTY STA. 452+58

GENERAL PLAN AND ELEVATION

STRUCTURE NO. 099-0130

DENESCH 1500 Was 15. Sufe 222
1500 Was 15. Sufe 222
1500 Was 15. Sufe 222
1500 Was 15. Sufe 2023
1500 Was 15. Sufe 2024

KINK

NOTE: The roadway on the bridge is

built on a straight chord between kinks A & B.

DIMENSION

STATION

179°13′08" 451•90.48 179°40′40" 453+21.18

 DESIGNED	-	SLV	REVISED	•
CHECKED	-	MJM	REVISED	*
 DRAWN	*	SFA	REVISED	•
CHECKED	-	MJM	REVISED	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

STRUCTURE NO. 099-0130 SHEET NO. SI OF SIG SHEETS

	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18-B-4-R-2	WILL	44	18
			CONTRACT	NO. 6	0N20
i		ILLINOIS FED. AI	D PROJECT		

GENERAL NOTES

Reinforcement Bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The minimum thickness of the concrete overlay shall be 5" and varies as required to adjust for the new profile grade and camber.

Repair of the substructure shall be completed prior to placement of the new

No in-stream work will be allowed on this project.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the existing or new deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Superstructure.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated conditon with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

SCOPE OF WORK

The scope of work for this project consists of an in-kind PPC Deck Beam Superstructure Replacement for an existing single-span bridge. The work includes replacing the existing beams and existing 3 inch HMA wearing surface with new 27 inch PPC deck beams and a 5 inch concrete wearing surface. Repairs to the existing abutments are required. Also included in the scope of work is replacing the approach pavement and relief joints. The project is to be designed to maintain 3R and bridge rehabilitation standards. Staged construction with use of a temporary traffic signal, guard rail improvements, pavement marking and soils erosion are included in the roadway plans.

INDEX OF SHEETS

- S1. General Plan and Elevation S2. General Data & Bill of Material S3. Stage Construction Details
- S4. Temporary Concrete Barrier for Stage Construction
- S5. Top of South Approach Slab Elevations
- Top of North Approach Slab Elevations
- S7. Superstructure
- S8. Superstructure Details
- *S9*. Steel Railing, Type SM with Concrete Wearing Surface
- S10. Bridge Approach Slab Details 1 of 2
- S11. Bridge Approach Slab Details 2 of 2 S12. 27"x36" PPC Deck Beams
- S13. 27"x36" PPC Deck Beam Details
- S14. South Abutment Details S15. North Abutment Details
- S16. Bar Splicer Assembly Details

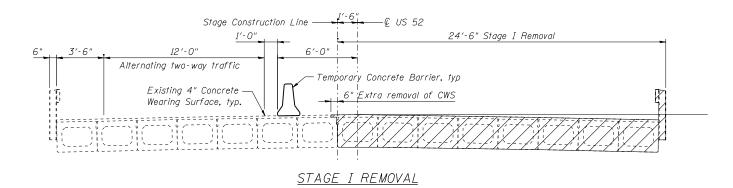
TOTAL BILL OF MATERIAL

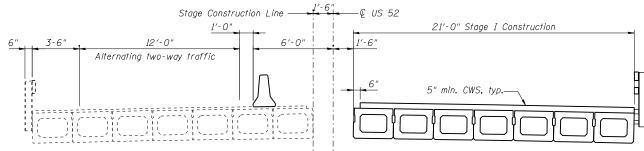
ITEM	UNIT	SUPER	SUB	APPR. SLAB	TOTAL
Removal of Exisitng Superstructures	Each	1			1
Concrete Removal	Cu. Yd.		3.2		3.2
Bridge Rail Removal	Foot	128			128
Concrete Structures	Cu. Yd.			27.8	27.8
Concrete Superstructure	Cu. Yd.			125.0	125.0
Bridge Deck Grooving	Sq. Yd.	311		300	611
Protective Coat	Sq. Yd.	311		300	611
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. ft.	2800			2800
Reinforcement Bars, Epoxy Coated	Pound	3970	300	33340	37610
Bar Splicers	Each	63		222	285
Steel Railing, Type SM	Foot	128			128
Name Plates	Each	1			1
Preformed Joint Strip Seal	Foot	45			45
Epoxy Crack Injection	Foot		130		130
Concrete Wearing Surface, 5"	Sq. Yd.	312			312
Asbestos Bearing Pad Removal	Each	16			16
Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)	Sq. Ft.		27		27

	DESIGNED -	SLV	REVISED -
Alfred Benesch & Company 1580 Wall St. Suite 222	CHECKED -	MJM	REVISED -
benesch 1580 Wall St. Sulle 222 Naperville, Illinois 60563 nengineers - scientists - planners 640-77-9100 Job No. 10259.00	DRAWN -	SLV	REVISED -
	CHECKED -	MJM	REVISED -

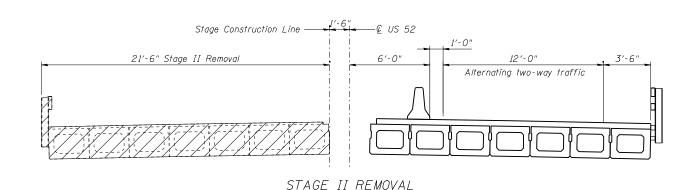
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

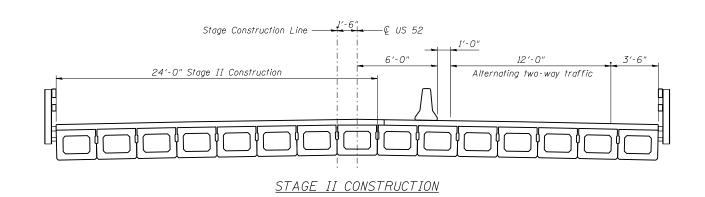
GENERAL DATA AND BILL OF MATERIAL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL	44	19
31NOUIONE NO. 055-0130			CONTRACT	NO. 6	ON20
SHEET NO SO OF SIG SHEETS		THE THOTAL FED. AL	D DDO IECT		

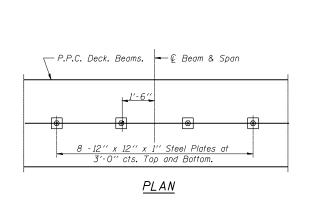


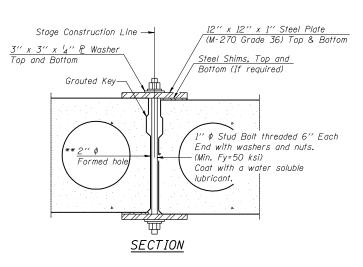


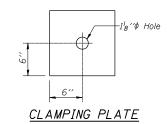
STAGE I CONSTRUCTION











SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

Cost included with Precast Prestressed Concrete Deck Beams.

See Stage Construction Details for traffic lanes.

** Cast semicircular recesses in the sides of each beam adjacent to the stage construction line. These recesses should align to form a hole at the appropriate locations for the clamping device bolts.

NOTES

All Cross Sections looking North.

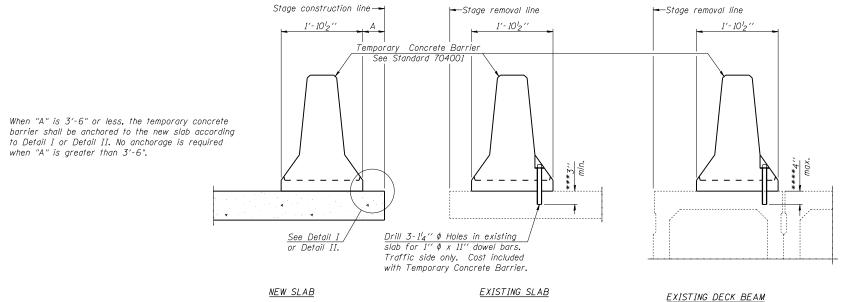
Hatched area indicates Removal of Existing Superstructures. Cost of removing existing bituminous wearing surface and joints in deck are included in the cost of Removal of

Existing Superstructures.

The removal of the exist bridge rail shall be included in the cost of Bridge Rail Removal. Care shall be taken by the Contractor as to not damage the existing bridge rail. The existing bridge rail

shall be stored at a location specified by the Engineer. For quantity of Temporary Concrete Barrier see Roadway Plans. For Temporary Concrete Barrier details see Sheet S4 of S16.

Alfred Benesch & Company	DESIGNED - SLV	REVISED -	CTATE OF HANGIO	STAGE CONSTRUCTION DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
benesch 1560 Wall St. Suite 222	CHECKED - MJM	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL	44	20
engineers - scientists - planners 630-577-9100 Job No. 10259.00	DRAWN - SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	200000000000000000000000000000000000000			CONTRAC	T NO. 6	60N20
	CHECKED - MJM	REVISED -		SHEET NO. S3 OF S16 SHEETS		ILLINOIS FED	. AID PROJECT		



NOTES

Detail I - With Bar Splicer or Couplers: Connect one (1) I'' x 7' 'x ''W'' steel P_L to the top layer of couplers with $2^{-5}8''$ ϕ bolts screwed to coupler at approximate © of each barrier panel.

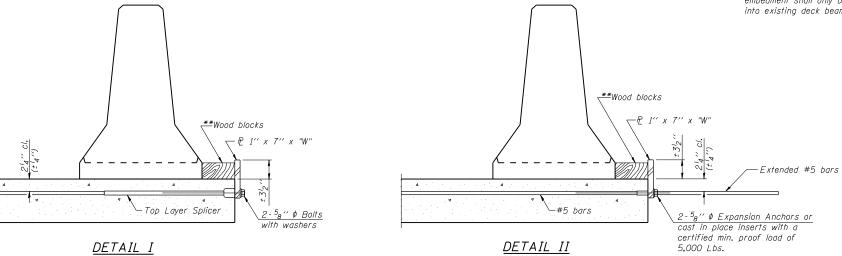
Detail II - With Extended Reinforcement Bars:

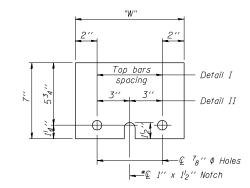
Connect one (1) 1" x 7" x "W" steel ₱ to the concrete slab or concrete wearing surface with $2^{-5}8''$ ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate © of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.
The I'' x 7'' x 'W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM

- *** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- **** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.





STEEL RETAINER P 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

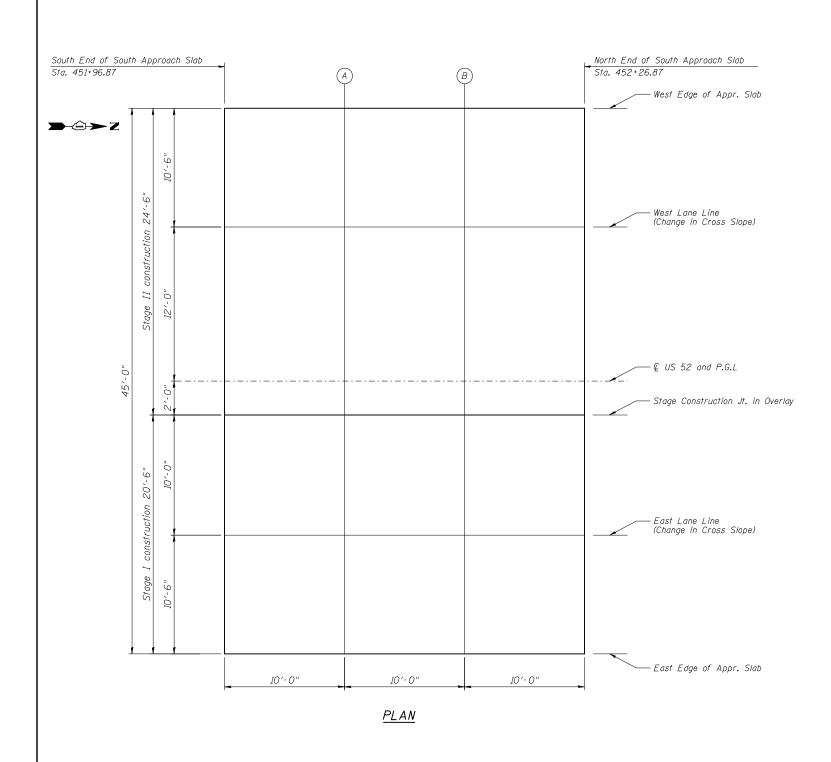
"W" = Top bars spacing + 4"

R-27 7 - 1 - 10

benesch & Company 1500 Wal St. Sulta 222 Napowille, Illinois 800583 360-977-9100 360 No. 10259.00	DESIGNED - SLV CHECKED - MJM DRAWN - SLV	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATI
engineers - scientists - planners 650-077-9100 500 No. 10206.00	CHECKED - MJM	REVISED -	

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 099-0130	
SHEET NO. S4 OF S16 SHEETS	

TION



West Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	-22.50′	679.97
А	452+06.87	-22.50′	679.94
В	452+16.87	-22.50′	679.91
N, End S. Appr Slab	452+26.87	-22.50′	679.88

Stage Const. Jt. in overlay

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	2.00′	680.35
А	452+06.87	2.00′	680.32
В	452+16.87	2.00′	680.29
N. End S. Appr Slab	452+26.87	2.00′	680.26

West Lane Line (Change in Cross Slope)

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	- 12.00′	680.19
А	452+06.87	- 12.00′	680.16
В	452+16.87	- 12.00′	680.13
N. End S. Appr Slab	452+26.87	- 12.00′	680.10

East Lane Line (Change in Cross Slope)

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	12.00′	680.19
А	452+06.87	12.00′	680.16
В	452+16.87	12.00′	680.13
N. End S. Appr Slab	452+26.87	12.00′	680.10

<u>€ US 52 & P.G.L.</u>

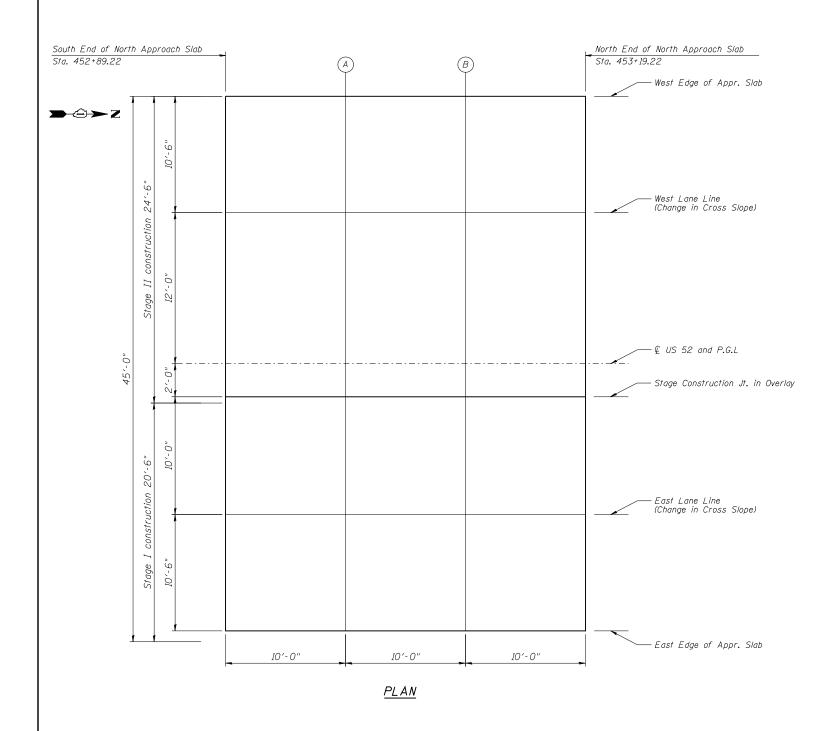
Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	0.00′	680.38
Α	452+06.87	0.00′	<i>680.3</i> 5
В	452+16.87	0.00′	680.32
N. End S. Appr Slab	452+26.87	0,00′	680.29

East Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr Slab	451+96.87	22.50′	679.97
Α	452+06.87	22.50′	679.94
В	452+16.87	22.50′	679.91
N. End S. Appr Slab	452+26,87	22,50′	679.88

	DESIGNED -	SLV	REVISED -
	CHECKED -	MJM	REVISED -
	DRAWN -	SLV	REVISED -
	CHECKED -	MJM	REVISED -

TOP OF SOUTH APPROACH SLAB ELEVATIONS	F.A.P. RTE.	SEC
STRUCTURE NO. 099-0130	852	18-B-
SHEET NO. S5 OF S16 SHEETS		



West Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	-22.50′	679.74
Α	452+99.22	-22.50′	679.71
В	453+09.22	-22.50′	679.69
N. End N. Appr Slab	453+19.22	-22.50′	679.66

Stage Const. Jt. in overlay

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	2.00′	680.11
А	452+99.22	2.00′	680.09
В	453+09.22	2.00′	680.06
N. End N. Appr Slab	453+19.22	2.00′	680.04
·			· · · · · · · · · · · · · · · · · · ·

West Lane Line (Change in Cross Slope)

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	- 12.00′	679 . 95
Α	452+99,22	- 12.00′	679.93
В	453+09.22	- 12.00′	679.91
N. End N. Appr Slab	453+19.22	- 12.00′	679.88

East Lane Line (Change in Cross Slope)

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	12.00′	679.95
А	452+99,22	12.00′	679.93
В	453+09.22	12.00′	679.91
N. End N. Appr Slab	453+19.22	12.00′	679.88

<u>€</u> US 52 & P.G.L.

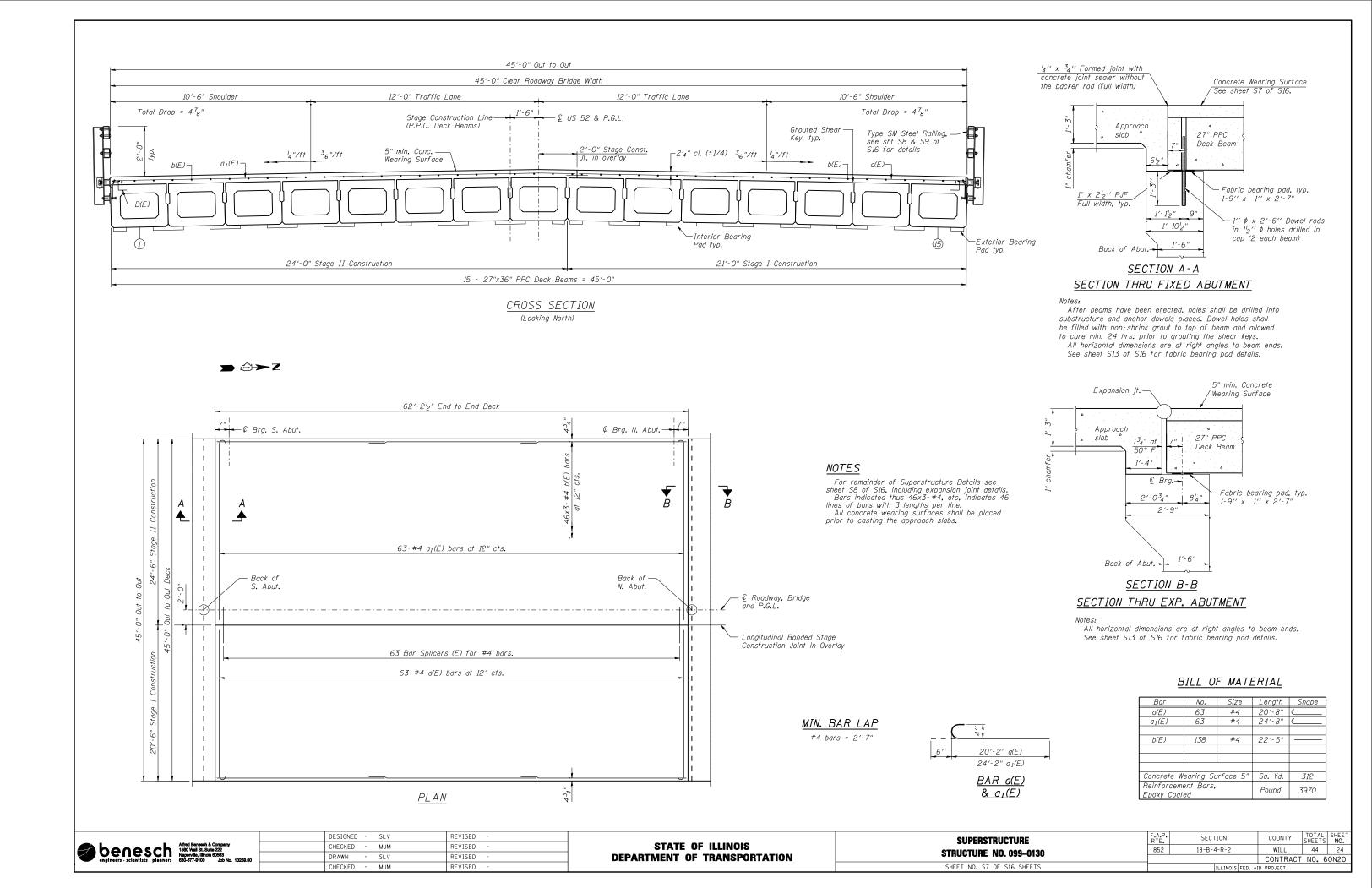
Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	0.00′	680.14
Α	452+99.22	0.00′	680.12
В	453+09.22	0.00′	680.09
N. End N. Appr Slab	453+19.22	0.00′	680.07

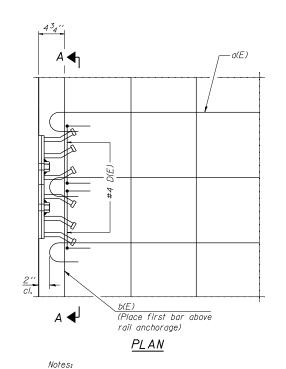
East Edge of Slab

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr Slab	452+89.22	22 . 50′	679.74
Α	452+99.22	22.50′	679.71
В	453+09.22	22.50′	679.69
N. End N. Appr Slab	453+19.22	22.50′	679.66

	DESIGNED -	SLV	REVISED -	
	CHECKED -	MJM	REVISED -	
.	DRAWN -	SLV	REVISED -	
	CHECKED -	MJM	REVISED -	
	CHECKED -	MJM	REVISED -	

TOP OF NORTH APPROACH SLAB ELEVATIONS	F.A.P. RTE.	SECTION
STRUCTURE NO. 099-0130	852	18-B-4-R-
0111001011L 140. 033-0130		
SHEET NO. S6 OF S16 SHEETS		ILLI



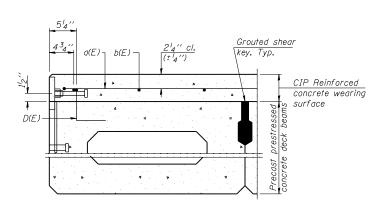


Formwork necessary for the wearing surface

may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast

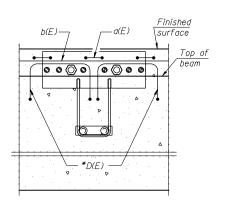
← End of Beam

into the beam.

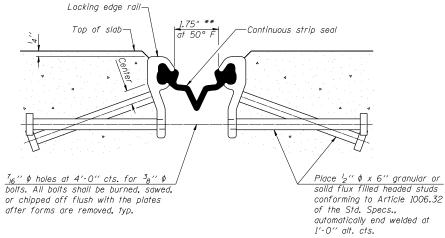


SECTION THRU FASCIA BEAM

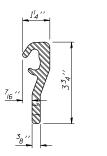
End of Beam -

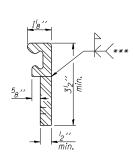


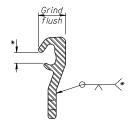
SECTION A-A



SECTION THRU STRIP SEAL JOINT







WELDED RAIL

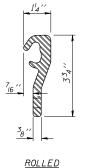
LOCKING EDGE RAIL SPLICE

Rolled rail shown, welded

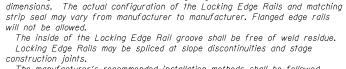
LOCKING EDGE RAIL

- * Omit weld at seal opening.
- ** The minimum dimension shall be $1^l2^{\prime\prime}$ for installation purposes.
- *** Back gouge not required if complete joint penetration is verified by mock-up.

FOR OVERLAY OVER DECK BEAMS



(EXTRUDED) RAIL



The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of

The height and thickness of the Locking Edge Rails shown are minimum

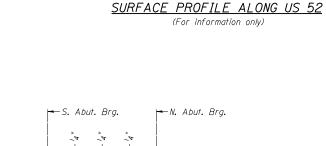
the Locking Edge Rails.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to

Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 316'', sealed with a suitable sealant

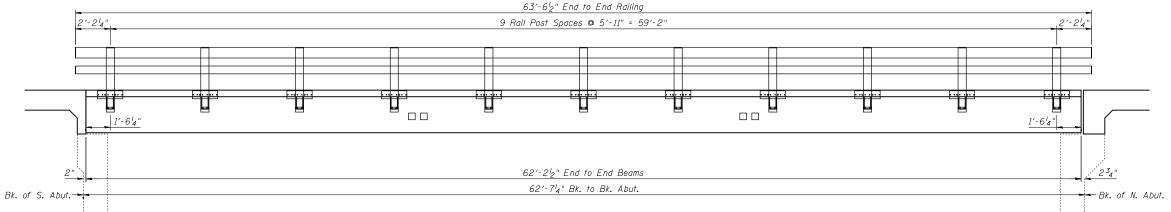


ANTICIPATED REINFORCED CONCRETE WEARING

DEAD LOAD DEFLECTION DIAGRAM

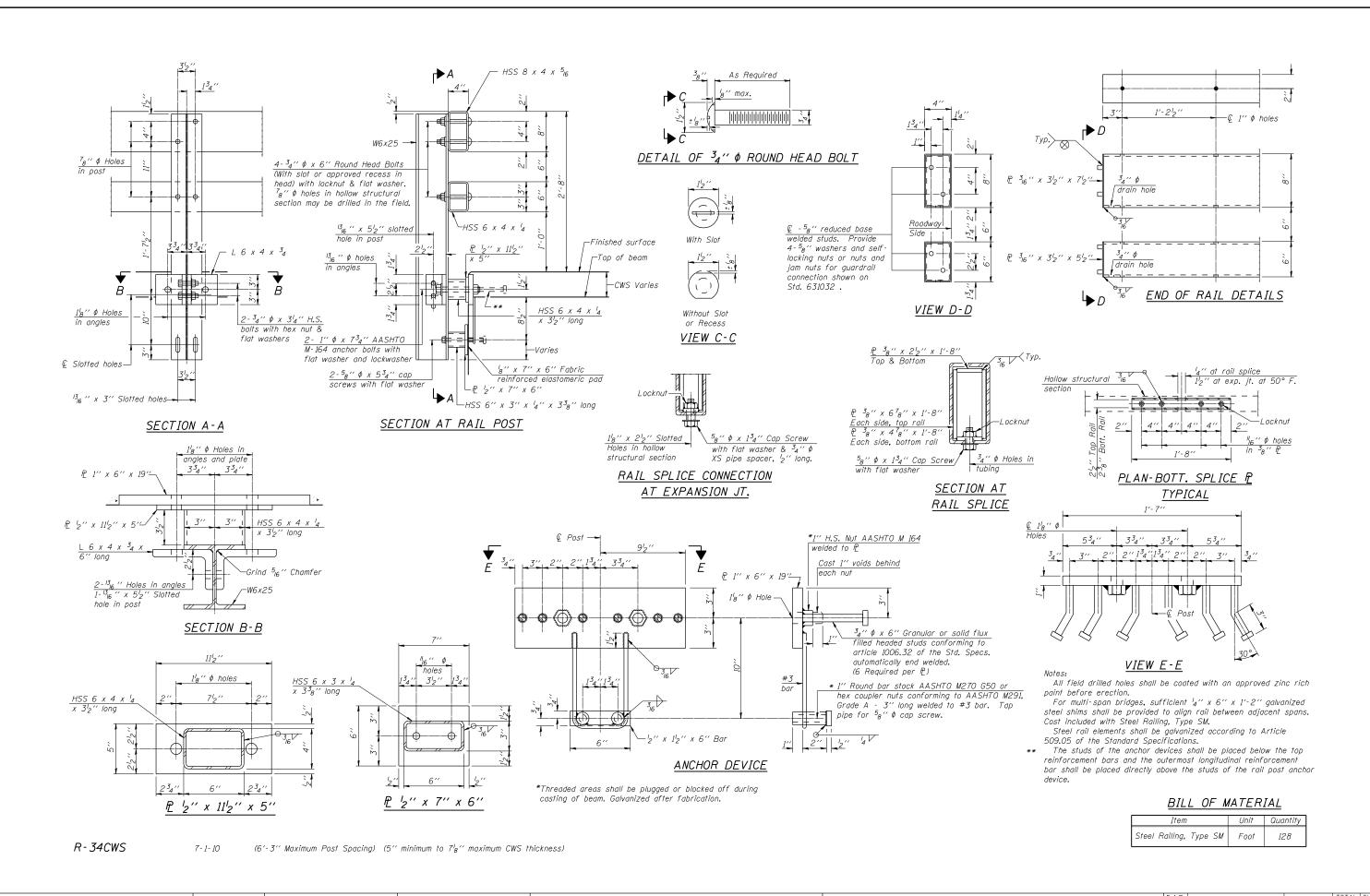
4 spaces @ 15'-3'₈

(Includes weight of CWS only.)

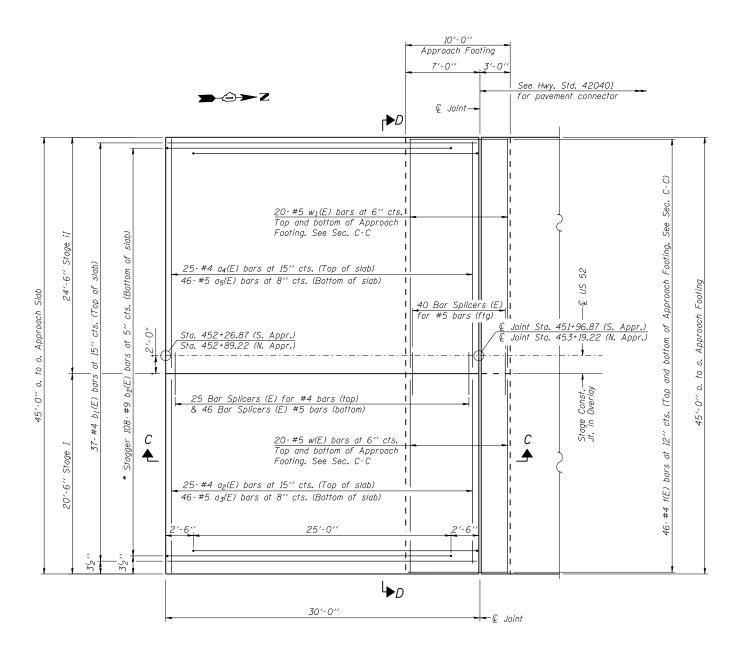


BRIDGE RAIL ELEVATION

Alfred Benesch & Company	DESIGNED - SLV	REVISED -	07475 05 11111010	SUPERSTRUCTURE DETAILS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
benesch 1580 Wall St. Suite 222 Naperville, Illinois 80563	CHECKED - MJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 099-0130	852 18-B-4-R-2	WILL 44 25
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJM	REVISED -	DEFARIMENT OF TRANSFORTATION	SHEET NO. S8 OF S16 SHEETS	ILLINOIS F	ED. AID PROJECT



TOTAL SHEET NO. DESIGNED - SLV REVISED SECTION COUNTY STEEL RAILING, TYPE SM WITH CONCRETE WEARING SURFACE STATE OF ILLINOIS benesch Affred Benesch & Compan 1580 Wall St. Sulte 222 Naporville, Illinois 80563 CHECKED -MJM REVISED 852 18-B-4-R-2 WILL **STRUCTURE NO. 099-0130** DRAWN SLV REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60N20 SHEET NO. S9 OF S16 SHEET! CHECKED REVISED M.JM



APPROACH SLAB PLAN

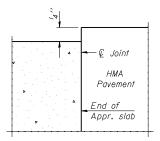
(North approach slab shown, South approach slab similar)

* Tilt #9 $b_2(E)$ bars as required to maintain clearance.

Notes:

See sheet S11 of S16 for Sections C-C & D-D. $a_2(E)$, $a_3(E)$, $a_4(E)$, $a_5(E)$, w(E) and $w_1(E)$ bar spacings measured parallel to Q Rdwy.

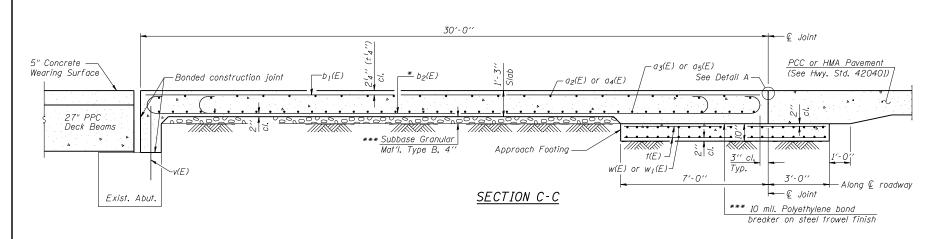
COUNTY TOTAL SHEET NO. WILL 44 27 CONTRACT NO. 60N2O

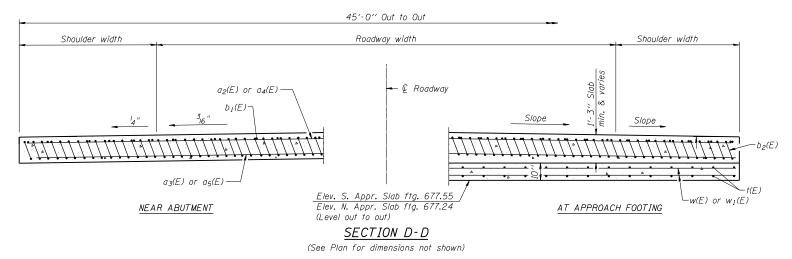


<u>FLEXIBLE PAVEME</u>NT

DETAIL A

Alfred Benesch & Company	DESIGN	NED - SLV	REVISED -		BRIDGE APPROACH SLAB DETAILS (1 OF 2)	RTE.	SECTION	COUNTY
benesch 1580 Wall St. State 222	CHECKE	ED - MJM	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL
engineers - scientists - planners 630-577-9100 Job No. 10259.00	DRAWN	I - SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	SINGUIONE NO. 055-0150			CONTRACT
	CHECKE	ED - MJM	REVISED -		SHEET NO. S10 OF S16 SHEETS		ILLINOIS FED.). AID PROJECT





Note

See sheet S10 of S16 for Detail A.

Approach slab concrete shall be paid for as Concrete Superstructure.

Approach footing concrete shall be paid for as Concrete Structures.

Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.

For v(E) bar details, see sheet S14 & S15 of S16.

The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

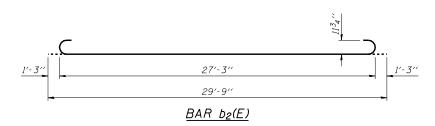
For bar splicer details, see sheet S16 of S16.

Cost of excavation for approach footing included with Concrete Structures.

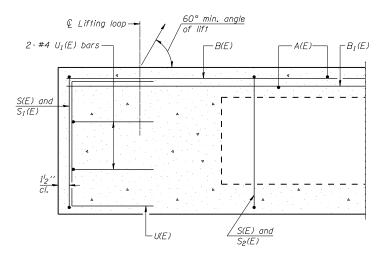
- * Tilt #9 $b_2(E)$ bars as required to maintain clearance.
- *** Cost included with Concrete Superstructure.

TWO APPROACHES BILL OF MATERIAL

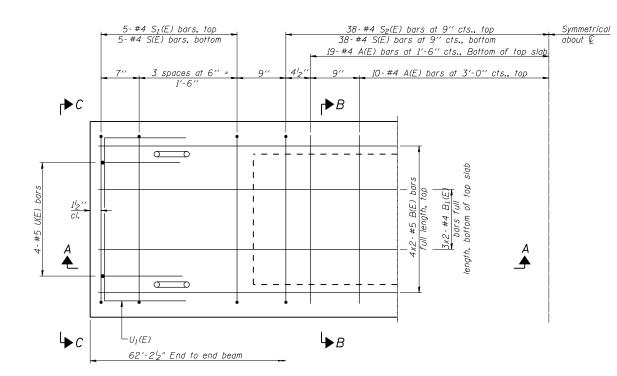
Bar	No.	Size	Length	Shape
a2(E)	50	#4	20'-2"	-
a3(E)	92	#5	20'-2"	
04(E)	50	#4	24'-2"	
a5(E)	92	#5	24'-2"	
b (F)	7.1	#4	00/ 0"	
b1(E)	74		29'-8"	
b2(E)	216	#9	29'-9"	
t(E)	92	#4	9′-8"	
w(E)	80	#5	20'-2"	
$w_1(E)$	80	#5	24'-2"	
	1			
Concrete	Superstr	ucture	Cu. Yd.	125.0
Concrete	Structure	95	Cu. Yd.	27.8
Reinforce Epoxy Co	ement Bar pated	s,	Pound	33340



Alfred Benesch & Company	DESIGNED - SLV	REVISED -	0747F 0F 1111010	BRIDGE APPROACH SLAB DETAILS (2 OF 2)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
benesch 1560 Wall St. Suite 222	CHECKED - MJM	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL	44 28
engineers - scientists - planners 630-577-8100 Job No. 10258.00	DRAWN - SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	0111001011L 140. 033-0130			CONTRAC	T NO. 60N20
	CHECKED - MJM	REVISED -		SHEET NO. S11 OF S16 SHEETS		ILLINOIS FED	, AID PROJECT	



SECTION A-A

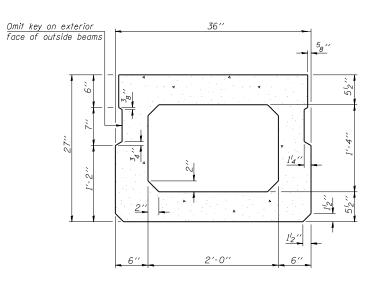


PLAN VIEW

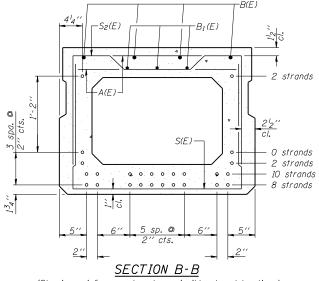
Notes:

Spacing of S(E) and $S_2(E)$ bars may be adjusted up to 4'' in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.



<u>SECTION B-B</u> (Showing dimensions)

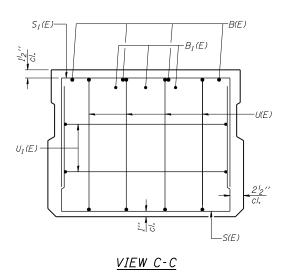


(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP

#4 bar = 2′-0′′ #5 bar = 2′-6′′



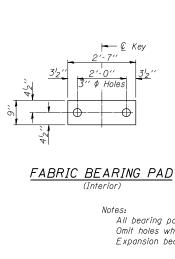
<u>BAR LIST</u> <u>ONE BEAM ONLY</u>

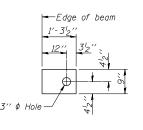
	(For information only)								
Bar	No.	Size	Length	Shape					
A(E)	58	#4	2'-7"						
B(E)	8	#5	30'-11"						
$B_1(E)$	6	#4	30′-8"						
D(E)*	22	#4	2'-9''						
S(E)	86	#4	6'-5"	ш					
S ₁ (E)	10	#4	5′-11′′						
$S_2(E)$	76	#4	6'-2"						
U(E)	8	#5	4'-6''						
$U_{1}(F)$	4	#4	5'-0"						

Note: See sheet S13 of S16 for additional details and Bill of Material.

*Bar D(E) is for exterior beams only. See sheet S8 & S13 for more details.

Alfred Benesch & Company	DESIGNED - SLV	REVISED -		27" X 36" PPC DECK BEAMS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
560 Wall St. Suite 222	CHECKED - MJM	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 099-0130	852 18-B-4-R-2	WILL 44 29
engineers - scientists - planners 630-577-9100 Job No. 10259.00	DRAWN - SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTORE NO. 033-0130	·	CONTRACT NO. 60N2O
	CHECKED - MJM	REVISED -		SHEET NO. S12 OF S16 SHEETS	ILLINOIS FED.	AID PROJECT

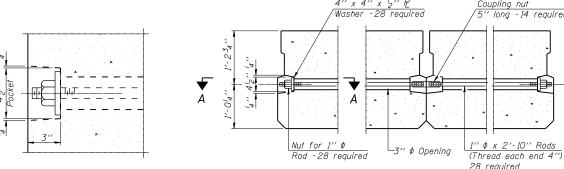




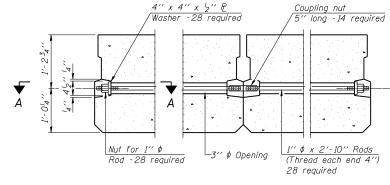
FABRIC BEARING PAD

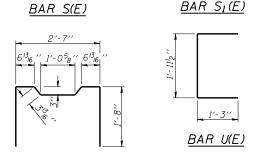
FIXED

All bearing pads shall be 1" thick. Omit holes when using expansion bearings. Expansion bearing pad shall be bonded to the substructure.

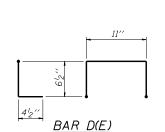


TYPICAL TRANSVERSE TIE ASSEMBLY

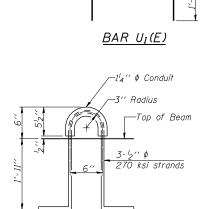




BAR S2(E)



* Place 2-#4 D(E) bars in beam at each post location as shown on sheet S8. D(E) bar included in cost of beam.



2'-6"

LIFTING LOOP DETAIL

BILL OF MATERIAL

Conc. Deck Bms. (27" depth) Sq. Ft. 2800 Precast Prestressed

20'-9" 20'-812' 20′-9′′ tie diaphragm 1'-3'' £ Lifting loops 2 each end tie assemblies 0 L _ _ ₩ 101 | 1¹¹1 ПП 0 101 : 101 Ш IIII іПі ПП : 100^{-1} 101111 101 ! 101 1))1 101 101 ± 101 $1^{\rm H_1}$ $\stackrel{1}{\cdot}$ 100/## ! | || || || # $\mathbf{I}^{\mathrm{H}}\mathbf{I}^{-\frac{1}{2}}\mathbf{I}^{-1}\mathbf{I}$ -1.1۱ ۰ o | 0 10 ± 1.1 $\pm 1.1 \pm 10$ holes top $\frac{3_4^{\prime\prime}}{holes}$ bott. 1111 1.1 л^нг | т. г. 1.1 Π - i∯i ¦ iji 1.1 ПП **₩** '广' / h | 🖶 $\frac{3^{\prime\prime}}{typ}$. Exterior '. € 2" ¢ Holes for dowel bearing expansion ! rods at fixed ends only ends only 2'-6" 17'-3'' 18'-8'2" 2'-0" 17'-3'' 2'-6" 62'-212'

SECTION A-A

PLAN VIEW

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be '2' and the nominal cross-sectional area shall be 0.153 sq. in.

The 1' \$\phi\$ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Two l_8 " fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum $2^l_2{}''$ ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used

in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

benesch & Company
1500 Wall St. Stute 222
Nagerville, Illinote 00563
830-77-9100 Job No.

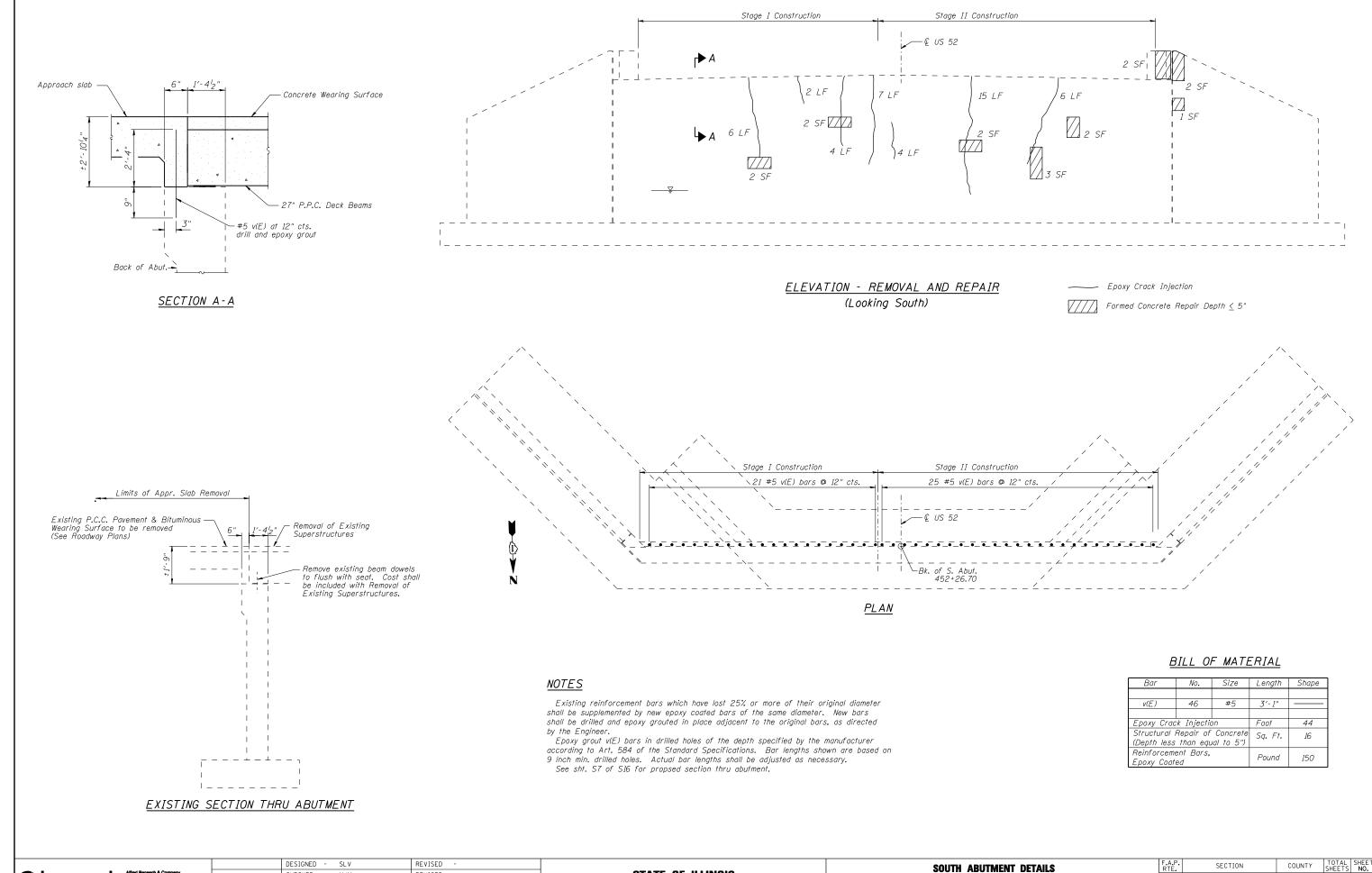
Note: Connect beams in pairs with the

transverse tie configuration shown.

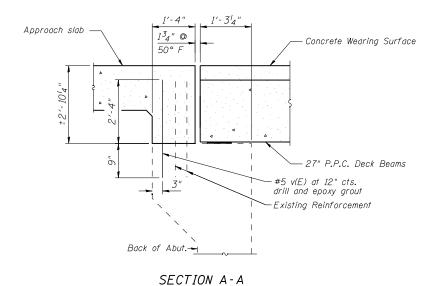
DESIGNED -	SLV	REVISED -
CHECKED -	MJM	REVISED -
DRAWN -	SLV	REVISED -
CHECKED -	MJM	REVISED -

STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

27" X 36" PPC DECK BEAM DETAILS	F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL	44	30
5111001011E 140. 033-0130			CONTRACT	NO. 6	0N20
SHEET NO. S13 OF S16 SHEETS		ILLINOIS FED. AI	D PROJECT		



Alfred Benesch & Company		DEGIGINED				SOUTH ABUTMENT DETAILS	RTE.	SECTION	i COUNTT I	SHEETS	S NC	
1580 Wall St. Suite 222		CHECKED -	- MJM	REVISED -	STATE OF ILLINOIS	CTRUCTURE NO COO CASO	852	18-B-4-R-2	WILL	44	3.	ľ
engineers - scientists - planners 630-577-9100 Job No. 10259.00		DRAWN -	- SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 099-0130			CONTRACT	T NO /	60N2	ō
Chymnes Strends Strends Costs Costs		CHECKED -	- MJM	REVISED -	1	SHEET NO. S14 OF S16 SHEETS		ILLINOIS FED. A	ID PROJECT	11101	00112	-
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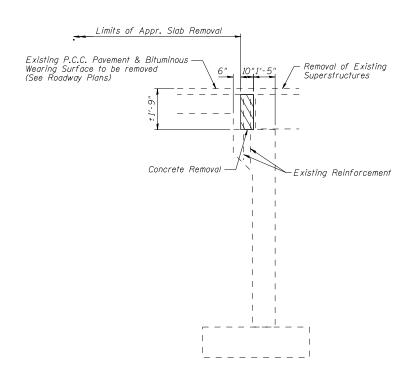


<u>NOTES</u>

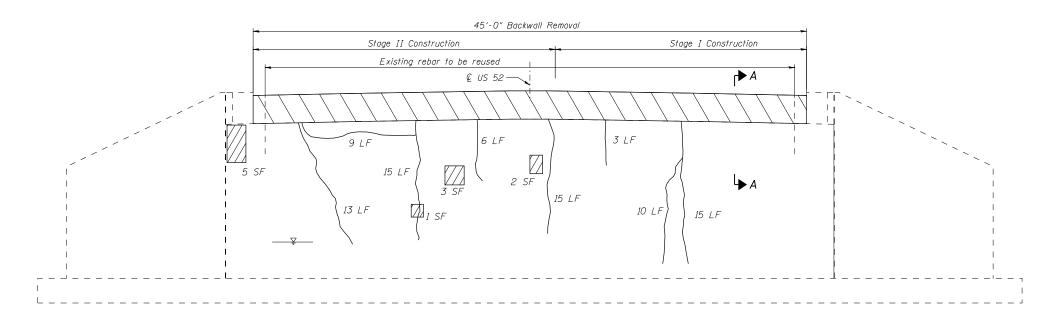
Existing reinforcement shall be cleaned, straightened (if required) and incorporated into the new construction. Cost included with Concrete Removal. Existing reinforcement bars which have lost 25% or more of their original diameter shall be supplemented by new epoxy coated bars of the same diameter. New bars shall be drilled and epoxy grouted in place adjacent to the original bars, as directed by the Engineer.

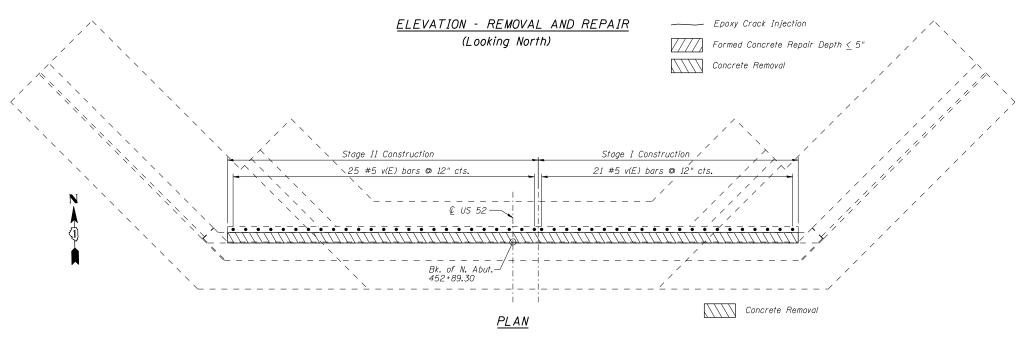
Epoxy grout v(E) bars in drilled holes of the depth specified by the manufacturer according to Art. 584 of the Standard Specifications. Bar lengths shown are based on 9 inch min. drilled holes. Actual bar lengths shall be adjusted as necessary.

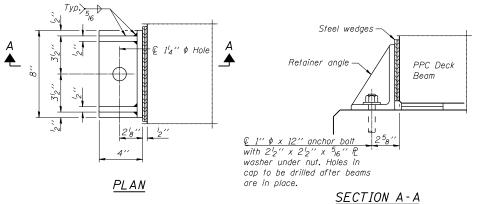
See sht. S7 of S16 for propsed section thru abutment.



EXISTING SECTION THRU ABUTMENT







...

Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams. Equivalent rolled angle with stiffeners will be allowed

in lieu of welded plates.

The side retainers shall be galvanized after shop fabrication according to AASHTO M III and ASTM 385.

Anchor bolts and plate washers shall be galvanized according to AASHTO M 232.

After the notch or concrete overlay are poured and cured, the steel wedges shall be removed.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
v(E)	46	#5	3′-1"	
Concrete R	emoval	Cu. Yd.	3.2	
Epoxy Crac	k Injectio	nc	Foot	86
Structural . (Depth less		Sq. Ft.	11	
Reinforcem Epoxy Coat	,		Pound	150

SECTION

18-B-4-R-2

852

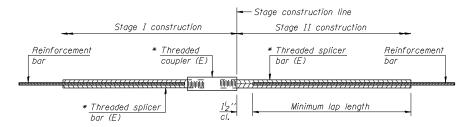
TOTAL SHEET NO.

CONTRACT NO. 60N20

COUNTY

WILL

Alfred Benesch & Company 18690 Wei St. Stuff 2029 18690 Wei St. Stuff 2029		DESIGNED - CHECKED -	SLV MJM	REVISED - REVISED -	STATE OF ILLINOIS	NORTH ABUTMENT DETAILS
engineers - scientists - planners 630-577-9100 Job No.	259.00	DRAWN -	SLV	REVISED -	DEPARTMENT OF TRANSPORTATION	STRUCTURE NO. 099-0130
		CHECKED -	M.IM	REVISED -	7	SHEET NO SIS OF SIG SHEETS



STANDARD BAR SPLICER ASSEMBLY

	Minimum Lap Lengths							
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6		
3, 4	1'-5''	1'-11''	2'-1''	2'-4"	2'-7''	2'-11''		
5	1'-9''	2'-5"	2'-7"	2'-11''	3'-3''	3'-8''		
6	2'-1''	2'-11''	3'-1''	3′-6′′	3′-10′′	4′-5′′		
7	2'-9''	3′-10′′	4'-2''	4'-8''	5′-2′′	5′- <i>10′′</i>		
8	3′-8′′	5′-1′′	5′-5′′	6'-2''	6′-9′′	7′-8′′		
9	4'-7''	6′-5′′	6′-10′′	7′-9′′	8′-7′′	9′-8′′		

Table 1: Black bar, 0.8 Class C Table 2: Black bar, Top bar lap, 0.8 Class C Table 3: Epoxy bar, 0.8 Class C

Table 4: Epoxy bar, Top bar lap, 0.8 Class C

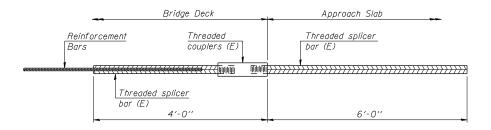
Table 5: Epoxy bar, Class C

Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1^{l}_{2} " + thread length

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

Location	Bar	No. assemblies	Table for minimum
Location	size	required	lap length
Concrete Wearing Surface	#4	63	Table 5
Top of Approach Slabs	#4	50	Table 3
Bottom of Approach Slabs	#5	92	Table 3
Approach Footings	#5	80	Table 3

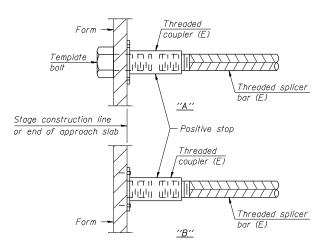


BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = N/A

BSD-1 1-27-12

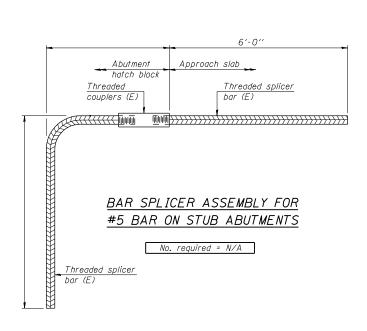


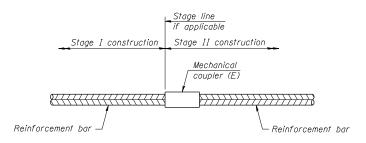


INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.





STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

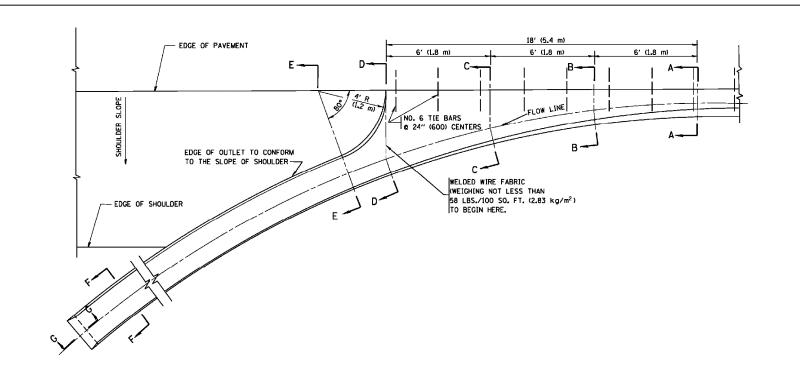
NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

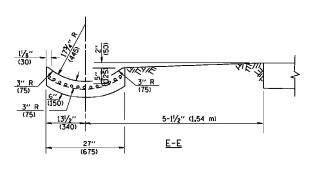
	DESIGNED -	SLV	REVISED -
benesch Affred Benesch & Company 1600 Well St. Stude Naporville, Illinois 60563	CHECKED -	MJM	REVISED -
engineers - scientists - planners 630-577-9100 Job No. 10259.00	DRAWN -	SLV	REVISED -
	CHECKED -	MJM	REVISED -

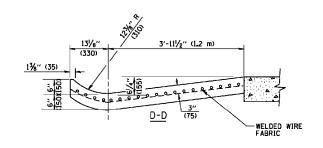
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NO. 099-0130	852	18-B-4-R-2	WILL	44	33
511100101L 140: 033-0130			CONTRACT	NO. 6	50N20
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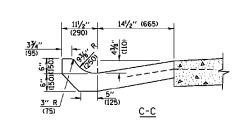


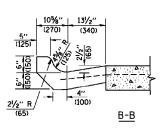


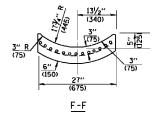
* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.

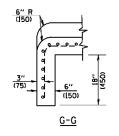












REVISED	-	R. SHAH 09-09-94
REVISED	-	R. SHAH 10-25-94
REVISED	-	E. GOMEZ 12-21-00
REVISED	-	

GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS UNLESS OTHERWISE SHOWN.

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

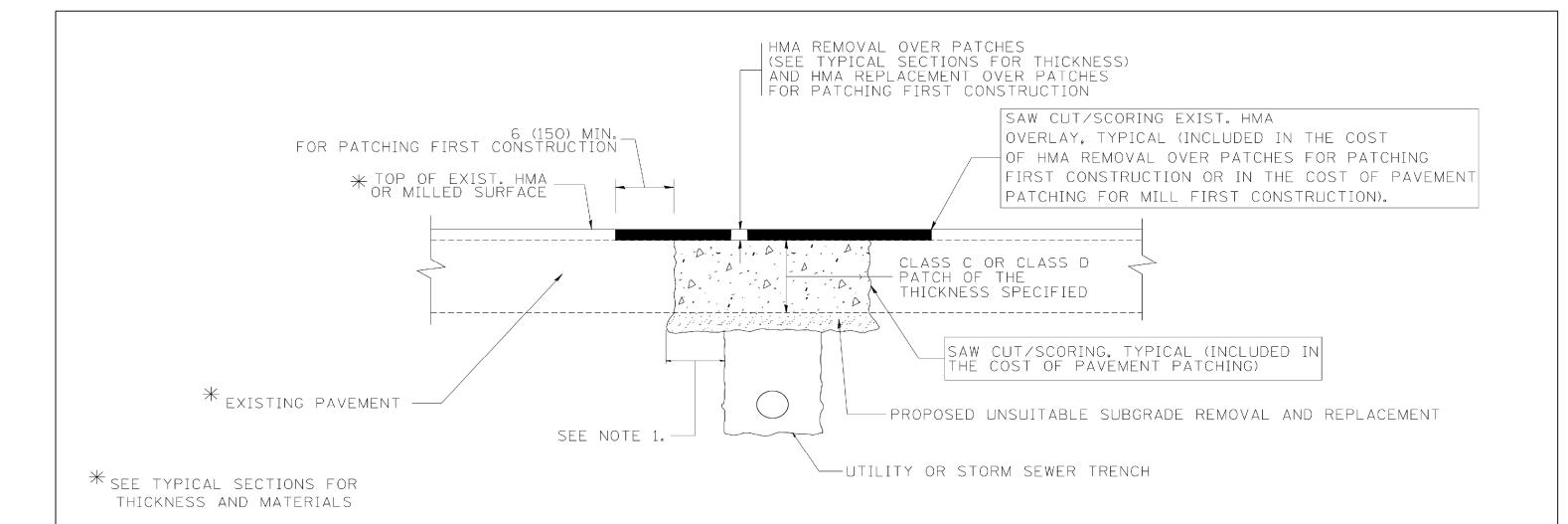
QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU. YDS. (0.96 m³) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAY'T.
1.27 CU. YDS. (0.96 m³) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAY'T.
FOR SECTION F-F=
0.045 CU. YDS. (0.03 m³) CLASS SI CONCRETE PER ft. (m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

OUTLET FOR CONCRETE CURB AND GUTTER

Alfred Benesch & Company	DESIGNED - SLV	REVISED -			DISTRICT ONE DETA	AIL SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
benesch 1560 Wall St. Suite 222	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JA		852	18-B-4-R-2	WILL	44	34
engineers - scientists - planners 630-577-9100 Job No. 10259.00	DATE - 12/11/2012	REVISED -	DEPARTMENT OF TRANSPORTATION	SCALE:	SHEET NO. 1 OF 8 SHEETS	STA. 448+82 TO STA. 455+90	FED. ROAD	D-91-269-11	CONTRACT	T NO. 6)N20



NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

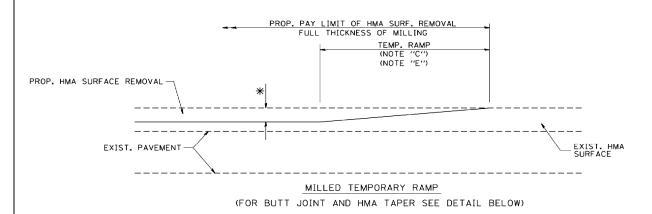
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

REVISED	-	A. ABBAS 04-27-98
REVISED	-	R. BORO 01-01-07
REVISED	-	R. BORO 09-04-07
REVISED	-	K. ENG 10-27-08

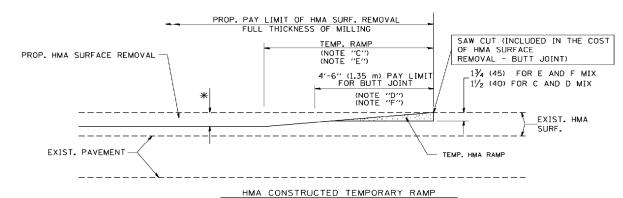
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

Alfred Benesch & Company	DESIGNED - SLV	REVISED -	AT AT		DISTRICT ONE DETAIL SHEETS	RTE.	SECTION	COUNTY	SHEETS NO.
benesch 1580 Wall St. Sulfa 222 Naporville, Illinois 60563	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JACKSON CREEK	852	18-B-4-R-2	WILL	44 35
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION	US NUUTE 32 UVEN JACKSUN CHEEK			D-91-269-11	CONTRACT	T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE:	SHEET NO. 2 OF 8 SHEETS STA. 448+82 TO STA. 455+90	FED. RO	AD DIST. NO. ILLINOIS FED. 4	AID PROJECT	



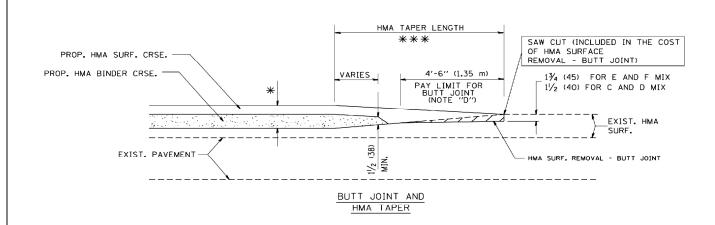
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

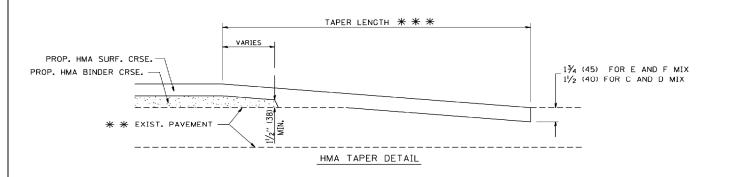
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

REVISED	-	R. SHAH 10-25-94
REVISED	-	A. ABBAS 03-21-97
REVISED	-	M. GOMEZ 04-06-01
REVISED	-	R. BORO 01-01-07

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30'-0" (9.0 m) (NOTE "A") 15'-0" (4.5 m) (NOTE "B") (NOTE "D") ** * EXIST. PAVEMENT BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- # SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** ** * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

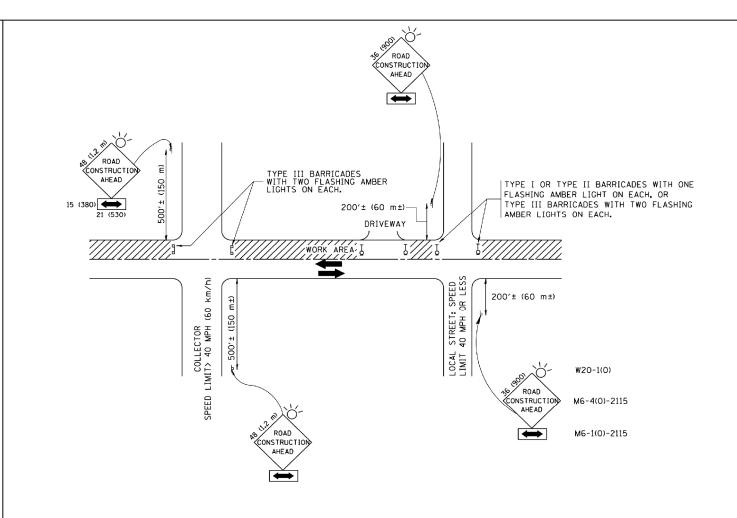
BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BUTT JOINT AND HMA TAPER DETAILS

	DESIGNED - SLV	REVISED -			DISTRICT ONE DET	AII CHEETC	F.A.P.	SECTION	COUNTY	TOTAL SHEET
Alfred Benesch & Company 1580 Well St. Suite 222	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JA		852	18-B-4-R-2	WILL	44 36
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION	US NUUTE 32 UVEN JACKSUN CHEEK				-91-269-11	CONTRACT	T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE:	SHEET NO. 3 OF 8 SHEETS	STA. 448+82 TO STA. 455+90	FED. ROAD DIS	ST. NO. ILLINOIS FED. A	AID PROJECT	



NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

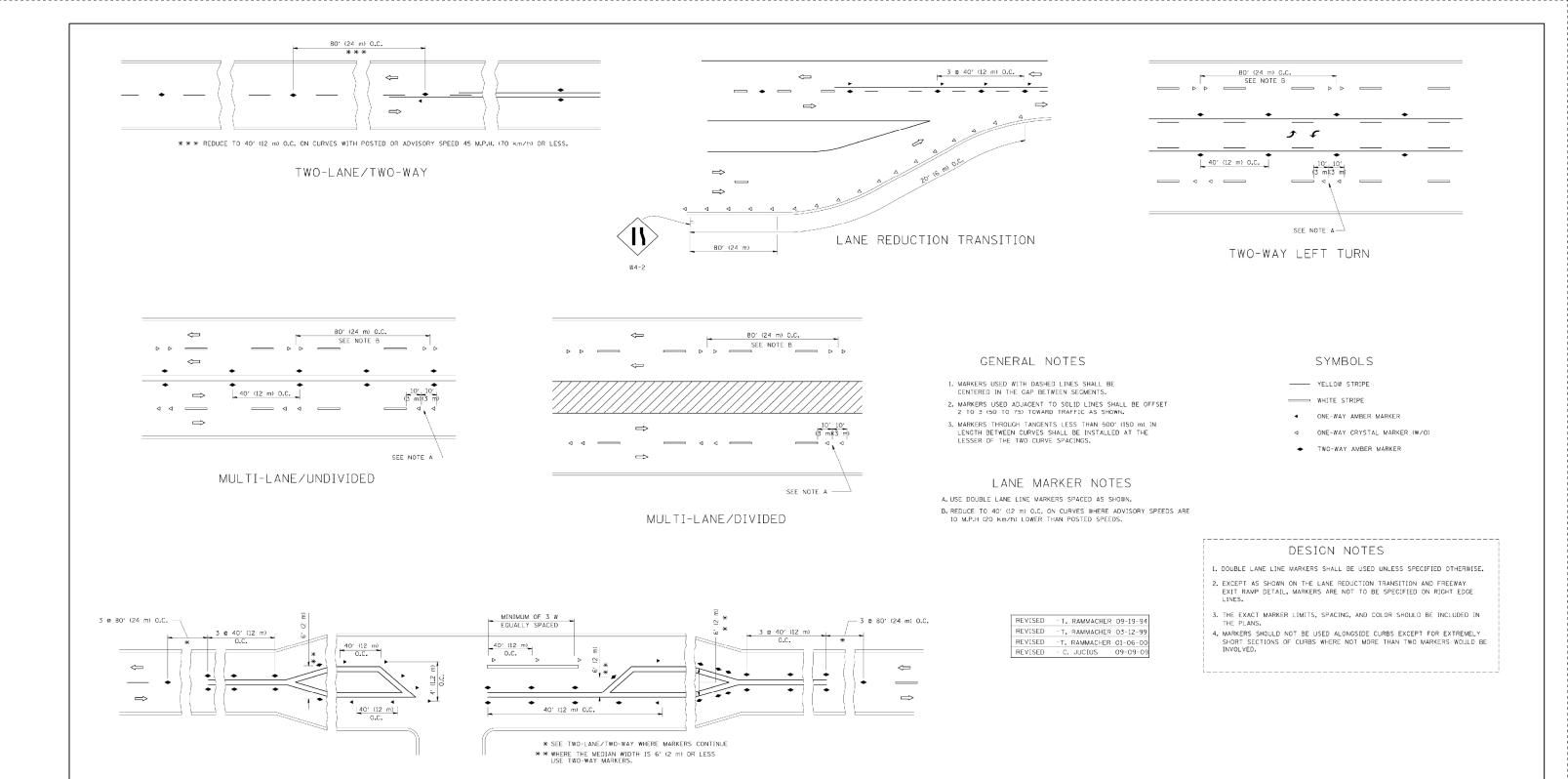
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY LINLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

REVISED	-	J. OBERLE 10-18-95
REVISED	-	A. HOUSEH 03-06-96
REVISED	-	A. HOUSEH 10-15-96
REVISED	- T	. RAMMACHER 01-06-0

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

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

	DESIGNED -	- SLV	REVISED -			DISTRICT ONE DET	AII CHEFTC	F.A.P. RTF.	SECTION	COUNTY	TOTAL	SHEET NO.
Affred Benesch & Company 1560 Weal St. Stutle 2022 Nanogeritle 1 Studie 2022 Nanogeritle 1 Studie 2022	DRAWN -	- SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JA		852	18-B-4-R-2	WILL	44	37
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED -	- MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION		00 11001E 32 0VEH 07	ORDOIT GILLER		D-91-269-11	CONTRACT	ſ NO. 6	0N20
	DATE -	- 12/11/2012	REVISED -		SCALE:	SHEET NO. 4 OF 8 SHEETS	STA, 448+82 TO STA, 455+90	FFD. ROAD	DIST. NO. ILLINOIS FE), AID PROJECT		

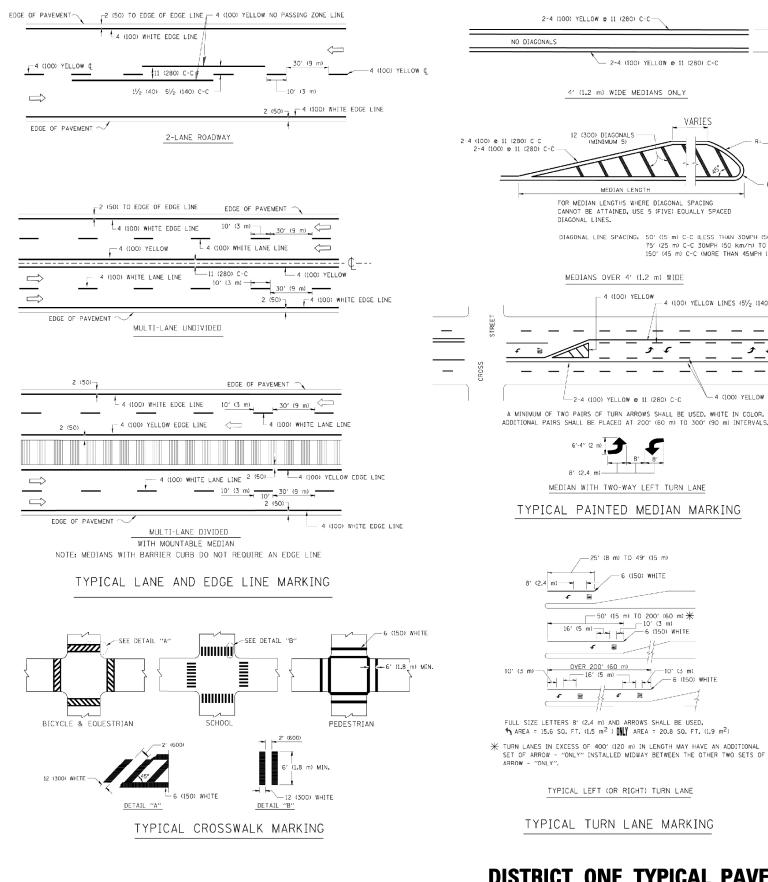


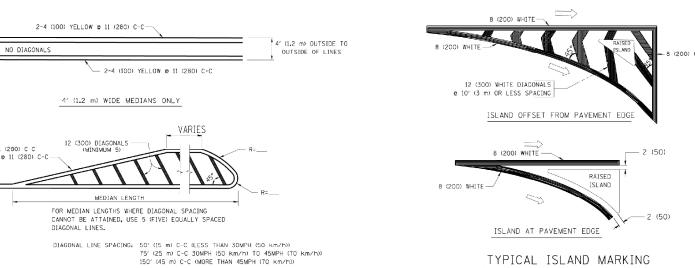
All dimensions are in inches (millimeters) unless otherwise shown.

RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

LEFT TURN

	DESIGNED - SLV	REVISED -			DISTRICT ONE DETAIL SHEETS	F.A.P.	SECTION	COUNTY TOTAL SHE	ĒΤ
Alfred Benesch & Company 1600 Wall \$1. Suite 222	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JACKSON CREEK	852	18-B-4-R-2	WILL 44 38	3
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION		OS HOUTE SE OFEN SACRSON CHEEK		D-91-269-11	CONTRACT NO. 60N2	:0
i i	DATE - 12/11/2012	REVISED -		SCALE:	SHEET NO. 5 OF 8 SHEETS STA. 448+82 TO STA. 455+90	FED. ROAD	DIST. NO. ILLINOIS FED.	AID PROJECT	\neg





TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 ml LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

MEDIANS OVER 4' (1.2 m) WIDE

MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

OVER 200' (60 m) 10' (3 m)

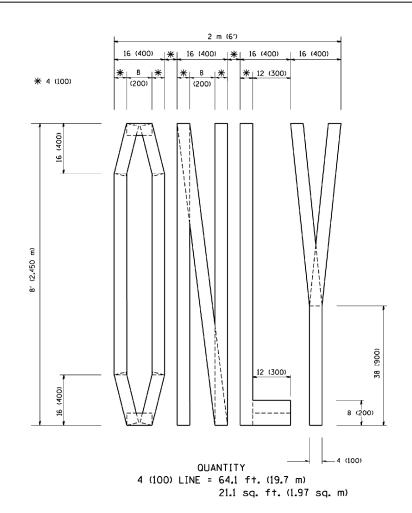
-4 (100) YELLOW LINES (51/2 (140) C-C)

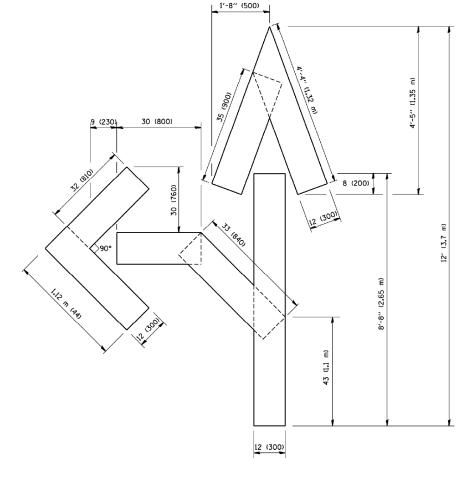
4 (100) YELLOW LINES (51/2 (140) C-C)

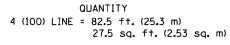
REVISED	-T.	RAMMACHER	10-27-94
REVISED	- C.	JUCIUS	09-09-09
REVISED	-		
REVISED	-		

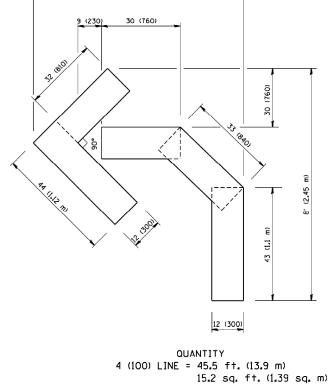
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

	DESIGNED - SLV	REVISED -			DISTRICT ONE DETAIL SHEETS			SECTION	COUNTY	TOTAL SHEET SHEET NO.
Affred Benesch & Company 1500 Mills St. Studie 222 1500 Mills Illinois (1958)	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JA		852	18-B-4-R-2	WILL	44 39
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION					D-91-269-11	CONTRACT	T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE: SHEET NO. 6 OF 8 SHEETS STA. 448+82 TO STA. 455+90			FED. ROA	FED. ROAD DIST. NO. ILLINOIS FED. AID P		









6'-8" (2.030 m)

 REVISED
 -T. RAMMACHER 06-05-96

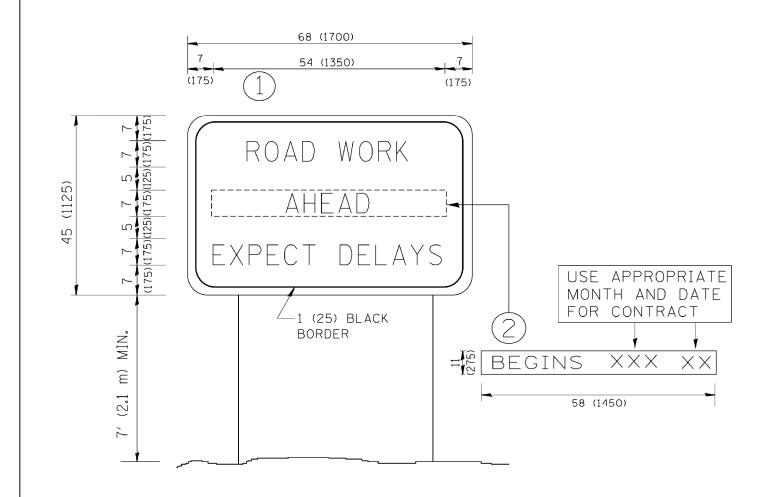
 REVISED
 -T. RAMMACHER 11-04-97

 REVISED
 -T. RAMMACHER 03-02-98

 REVISED
 -E. GOMEZ 08-28-00

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

Alfred Beneach & Company	DESIGNED - SLV	REVISED -			DISTRICT ONE DETAIL SHEETS	RTE.	SECTION	COUNTY	SHEETS NO.
benesch 1580 Wall St. Blinois 60563	DRAWN - SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JACKSON CREEK	852	18-B-4-R-2	WILL	44 40
engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION		OU HOUTE 32 OFER DADROOM ONLER		D-91-269-11	CONTRACT	T NO. 60N20
	DATE - 12/11/2012	REVISED -		SCALE:	SHEET NO. 7 OF 8 SHEETS STA. 448+82 TO STA. 455+90	FED. RO	AD DIST. NO. ILLINOIS FED. 4	AID PROJECT	



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

REVISED	- R. MIRS 09-15-97
REVISED	- R. MIRS 12-11-97
REVISED	-T. RAMMACHER 02-02-99
REVISED	- C. JUCIUS 01-31-07

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

ARTERIAL ROAD INFORMATION SIGN

	Alfred Benesch & Company	DESIGNED - S	SLV	REVISED -	OTATE OF HIMMOO		DISTRICT ONE DETAIL SHEETS	RTE.	SECTION	4 COI	UNTY SHEE	ZETS NO.
	benesch 1560 Well St. Sulto 222 Naporville, Illinois 60563	DRAWN - S	SLV	REVISED -	STATE OF ILLINOIS		US ROUTE 52 OVER JACKSON CREEK	852	18-B-4-R-	2 W	ILL 44	44 41
	engineers - scientists - planners 630-577-9100 Job No. 10259.00	CHECKED - N	MJY, ST	REVISED -	DEPARTMENT OF TRANSPORTATION		OU HOUTE SE OFER GASKOUN SHEEK		D-91-269-11	I CON	NTRACT NO	0. 60N2O
ľ		DATE - 1	12/11/2012	REVISED -		SCALE:	SHEET NO. 8 OF 8 SHEETS STA. 448+82 TO STA. 455+90	FED. RO	JAD DIST. NO. ILLI	INOIS FED. AID PROJ	ECT	

