

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	1
		ILLINOIS	CONTRACT NO. 61D98	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

2014 ADT: 11,100

DESIGN DESIGNATION: MAJOR COLLECTOR

POSTED SPEED: 25 MPH
DESIGN SPEED: 30 MPH

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

**FAU 2760 (SHERMER ROAD) OVER WEST FORK,
NORTH BRANCH, CHICAGO RIVER
BRIDGE REHABILITATION
SECTION NO. 14-00161-00-BR
FEDERAL PROJECT NO. BRS-4003(383)
VILLAGE OF NORTHBROOK
COOK COUNTY
JOB NO. C-91-444-14**



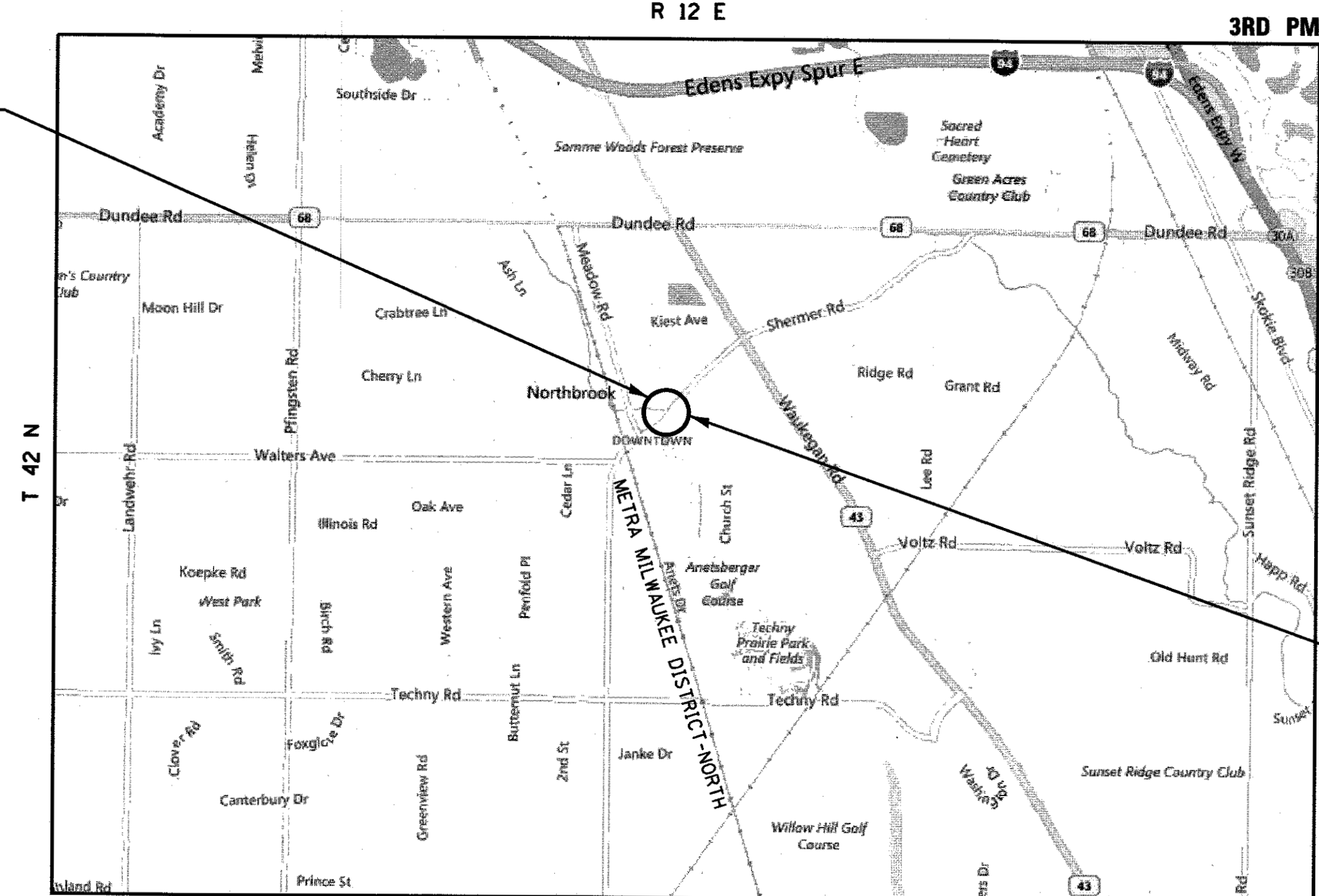
Arthur J. Nowak
ARTHUR J. NOWAK, S.E.
EXP. NOVEMBER 30, 2018
DATE: 04/21/17
SHT NO. 13-29



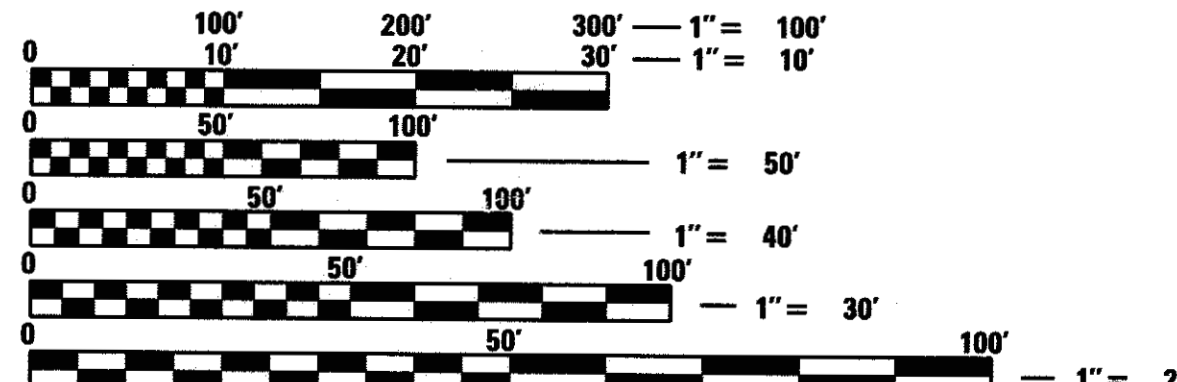
Mark F. Buwen
MARK F. BUWEN, P.E.
EXP. NOVEMBER 30, 2017
DATE: 04/21/17
PROJECT MANAGER



BEGIN IMPROVEMENT
STA 15+33.27 @ SHERMER RD.
END IMPROVEMENT
STA 18+23.22 @ SHERMER RD.



BRIDGE REPLACEMENT
STA. 16+11.58
EXISTING SN 016-0812
PROPOSED SN 016-0812



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

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

NORTHFIELD TOWNSHIP LOCATION MAP N.T.S.

GROSS AND NET LENGTH = 289.95 FT. = 0.055 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED *Matt James* May 2 20 17
VILLAGE ENGINEER

PASSED *Chris Holt* MAY 23 20 17
DISTRICT 1 ENGINEER LOCAL ROADS AND STREETS

RELEASED FOR BID
BASED ON LIMITED
REVIEW
Anthony J. Quigley MAY 24 20 17
REGIONAL ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

Bowman CONSULTING
Bowman Consulting
440 S. LaSalle Street, Suite 3000A
Chicago, Illinois 60605

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406 SCHAUMBURG, IL

INDEX OF SHEETS

SHEET NO.	DWG NO.	DESCRIPTION
1		COVER SHEET
2		INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS
3-7		SUMMARY OF QUANTITIES
8		TYPICAL SECTIONS
9		ALIGNMENTS, TIES, AND BENCHMARKS
10		EXISTING AND PROPOSED PLAN AND PROFILE
11		SUGGESTED MAINTENANCE OF TRAFFIC PLAN
12		DETOUR PLAN
13		EROSION AND SEDIMENT CONTROL GENERAL NOTES, STRATEGY AND PLAN
14	S-1	GENERAL PLAN & ELEVATION
15	S-2	GENERAL NOTES & SUMMARY OF QUANTITIES
16	S-3	REMOVAL DETAILS
17	S-4	PROPOSED DECK DETAILS
18	S-5	21" X 48" PPC DECK BEAM DETAILS - PART 1
19	S-6	21" X 48" PPC DECK BEAM DETAILS - PART 2
20	S-7	SIDEWALK AND PARAPET DETAILS
21	S-8	SOUTH APPROACH SLAB
22	S-9	NORTH APPROACH SLAB
23	S-10	APPROACH SLAB DETAILS
24	S-11	SIDEWALK ON GRADE DETAILS
25	S-12	SOUTH ABUTMENT REPAIRS
26	S-13	NORTH ABUTMENT REPAIRS
27	S-14	EXISTING BRIDGE RAIL DETAILS-1
28	S-15	EXISTING BRIDGE RAIL DETAILS-2
29	S-16	EXISTING BRIDGE RAIL DETAILS-3
30-34		DISTRICT ONE DETAILS

HIGHWAY STANDARDS

STANDARD NO.	TITLE
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-09	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
515001-03	NAME PLATE FOR BRIDGES
606001-06	CURB AND GUTTER
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-ROAD MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

IDOT DISTRICT 1 STANDARDS

STANDARD NO.	TITLE
BD-24	CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND HMA TAPER
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKING
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS.

GENERAL NOTES

- THE CONTRACTOR SHALL PERFORM ALL WORK IN THIS CONTRACT IN A MANNER THAT CONFORMS WITH THE NORTHBROOK MUNICIPAL CODE. THE CONTRACTOR'S ATTENTION IS DRAWN SPECIFICALLY TO THE PROVISIONS OF THE MUNICIPAL CODE REGARDING CONSTRUCTION EQUIPMENT TRACKING MUD ON PUBLIC STREETS (SEC. 16-1) AND DUST CONTROL (SEC. 16-25).
- "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AND ITS SUPPLEMENTAL REFERENCES, PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE "STANDARDS AND SPECIFICATIONS FOR PUBLIC AND PRIVATE IMPROVEMENTS", PUBLISHED BY THE VILLAGE OF NORTHBROOK, SHALL BE INCORPORATED BY REFERENCE INTO THIS CONTRACT. ANY CONTRADICTION BETWEEN THESE REFERENCES UNRESOLVED BY THE SPECIAL PROVISIONS SHALL BE INTERPRETED BY THE ENGINEER.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APRIL 1, 2016 EDITION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AND IN ACCORDANCE WITH IDOT'S "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2017. THE ENGINEER WILL RESOLVE ANY CONFLICTS WHICH MAY EXIST BETWEEN THESE SPECIFICATIONS.
- ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED AS THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES WHICH HAVE FACILITIES PRESENT IN THE PROJECT AREA BEFORE ANY WORK IS STARTED. ALL UTILITY COMPANIES AND LOCAL POLICE AND FIRE DEPARTMENTS SHOULD BE NOTIFIED BY THE CONTRACTOR AT LEAST 3 DAYS PRIOR TO THE START OF CONSTRUCTION. ALL UTILITIES MUST BE STAKED PRIOR TO CONSTRUCTION.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE, COUNTY, OR MUNICIPAL PROPERTY WITHOUT WRITTEN PERMISSION FROM THE JURISDICTIONAL AGENCY OR MUNICIPALITY.
- MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: COMED, NICOR GAS, WIDE OPEN WEST, TDS METROCOM, VERIZON (MCI), AT&T, AND THE VILLAGE OF NORTHBROOK SEWERS AND WATER MAINS.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, VILLAGE OF NORTHBROOK, AND COOK COUNTY.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- THE LOCATIONS AND DEPTHS OF EXISTING DRAINAGE STRUCTURES, STORM SEWER, WATER MAIN, SANITARY SEWER, AND OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE PER ARTICLES 105.07 AND 107.31 OF THE STANDARD SPECIFICATIONS.
- ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LIMITS SHOWN ON THE PLANS SHALL BE REPLACED.
- ALL ROADWAY DIMENSIONS ARE FROM EDGE-TO-EDGE UNLESS OTHERWISE INDICATED. ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE INDICATED.
- RECORD DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE VILLAGE OF NORTHBROOK'S REQUIREMENTS AND SHALL BE SUBMITTED IN ELECTRONIC FORMAT.

EARTHWORK AND PAVING

- 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER WORK TO EXISTING CURBS & GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN.
- WHERE THE PROPOSED BITUMINOUS SURFACE MEETS AN EXISTING SURFACE, THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, WILL CONSTRUCT A BUTT JOINT BY SAWING AND GRINDING THE EXISTING BITUMINOUS SURFACE.

COMMITMENTS

- TREES ARE NOT TO BE CLEARED DURING CONSTRUCTION OPERATIONS. ACCESS FOR THE IN-STREAM WORK WILL BE ALLOWED AFTER THE SUPERSTRUCTURE IS REMOVED.
- VEHICULAR AND PEDESTRIAN ACCESS WILL BE MAINTAINED FOR ALL RESIDENCES AND BUSINESSES DURING CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH STEVEN WEINSTOCK, OF PACE, 10 DAYS PRIOR TO INITIATING TRAFFIC DETOUR OPERATIONS. MR. WEINSTOCK MAY BE REACHED AT 847-228-2339, OR STEVEN.WEINSTOCK@PACEBUS.COM.

FILE NAME =	USER NAME = jdzienzo	DESIGNED - JWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES AND COMMITMENTS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 2,0000' / in.	DRAWN - JWM	REVISED -			2760	14-00161-00-BR	COOK	34	2	
Default	PLOT DATE = 5/24/17	CHECKED - MFB	REVISED -			CONTRACT NO. 61D98					
		DATE - 5/24/17	REVISED -			SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.

CONSTRUCTION TYPE CODES

FEDERAL PARTICIPATION
80% FEDERAL FUNDS - 20% LOCAL MATCH

NON-PARTICIPATION
100% LOCAL FUNDS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	FEDERAL PARTICIPATION 80% FEDERAL FUNDS - 20% LOCAL MATCH				NON-PARTICIPATION 100% LOCAL FUNDS
				STP-BR ROADWAY 0004	STP-BR SN 016-0812 0014	STP-BR TRAFFIC SIGNALS 0021	TRAINEES 0042	LOCAL FUNDS ROADWAY 0004
20101000	TEMPORARY FENCE	FOOT	150	150				
20101100	TREE TRUNK PROTECTION	EACH	10	10				
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9				
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	9	9				
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9				
20200100	EARTH EXCAVATION	CU YD	50	50				
25000300	SEEDING, CLASS 3	ACRE	0.25	0.25				
25100630	EROSION CONTROL BLANKET	SQ YD	20	20				
28000400	PERIMETER EROSION BARRIER	FOOT	90	90				
28000510	INLET FILTERS	EACH	2	2				
28100107	STONE RIPRAP, CLASS A4	SQ YD	401		401			
28200200	FILTER FABRIC	SQ YD	401		401			
S 40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	430	30				400
S 40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	142	64				78

S = SPECIAL PROVISION, PLAN NOTE, OR DETAIL HAS BEEN PROVIDED
* = SPECIALTY ITEM

FILE NAME :	USER NAME = jdzienzo	DESIGNED - JWM	REVISED -
Default	PLOT SCALE = 2.0000' / 1" =	DRAWN - JWM	REVISED -
	PLOT DATE = 5/30/17	CHECKED - MFB	REVISED -
		DATE - 5/30/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET 1 OF 5 SHEETS	STA.	TO STA.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				2760	14-00161-00-BR	COOK	34	3
								CONTRACT NO. 61098
ILLINOIS FED. AID PROJECT								

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES					NON-PARTICIPATION 100% LOCAL FUNDS
				FEDERAL PARTICIPATION 80% FEDERAL FUNDS - 20% LOCAL MATCH					
				STP-BR ROADWAY 0004	STP-BR SN 016-0812 0014	STP-BR TRAFFIC SIGNALS 0021	TRAINEES 0042	LOCAL FUNDS ROADWAY 0004	
S	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	81	6				75
	42001300	PROTECTIVE COAT	SQ YD	201	8	193			
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	839	839				
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	133	50	83			
	44000600	SIDEWALK REMOVAL	SQ FT	818	818				
	50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1			
	50102400	CONCRETE REMOVAL	CU YD	50.7		50.7			
* S	50104000	BRIDGE RAIL REMOVAL	FOOT	176		176			
S	50201101	COFFERDAM (TYPE 1) (LOCATION-1)	EACH	2		2			
S	50300225	CONCRETE STRUCTURES	CU YD	28.0		28.0			
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	48.4		48.4			
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	75.2		75.2			
S	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	2,640		2,640			
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	22,590		22,590			

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FILE NAME =	USER NAME = jdzienzo	DESIGNED - JWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE - 5/24/17	REVISED -		ILLINOIS FED. AID PROJECT							

CONSTRUCTION TYPE CODES

FEDERAL PARTICIPATION
80% FEDERAL FUNDS - 20% LOCAL MATCH

NON-PARTICIPATION
100% LOCAL FUNDS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODES				LOCAL FUNDS ROADWAY 0004
				STP-BR ROADWAY 0004	STP-BR SN 016-0812 0014	STP-BR TRAFFIC SIGNALS 0021	TRAINEES 0042	
50800530	MECHANICAL SPLICERS	EACH	1,176		1,176			
51500100	NAME PLATES	EACH	1		1			
58700300	CONCRETE SEALER	SQ FT	442		442			
59000200	EPOXY CRACK INJECTION	FOOT	11		11			
60255500	MANHOLES TO BE ADJUSTED	EACH	8	2				6
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	50	50				
S 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	50		50			
S 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1		1			
S 66900530	SOIL DISPOSAL ANALYSIS	EACH	3		3			
67100100	MOBILIZATION	LSUM	1		1			
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	500		500			
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,080	63	336			681
S LR430040	PAVING BRICK SIDEWALK	SQ YD	334	94	240			
S X0323078	REMOVE AND RE-ERECT EXISTING BRIDGE RAIL	FOOT	162		162			
S X0325712	RELOCATE EXISTING ELECTRICAL SYSTEM	LSUM	1		1			

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		DRAWN - JWM	REVISED -
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	PLOT DATE = 5/24/17	DATE - 5/24/17	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET 3	OF 5 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	5
CONTRACT NO. 61D98				
ILLINOIS FED. AID PROJECT				

CONSTRUCTION TYPE CODES

FEDERAL PARTICIPATION
80% FEDERAL FUNDS - 20% LOCAL MATCH

NON-PARTICIPATION
100% LOCAL FUNDS

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP-BR ROADWAY 0004	STP-BR SN 016-0812 0014	STP-BR TRAFFIC SIGNALS 0021	TRAINEES 0042	LOCAL FUNDS ROADWAY 0004
S X0326817	STANDARD BRICK VENEER	SQ FT	484		484			
S X0326864	BRICK SIDEWALK REMOVAL	SQ FT	3,004	849	2,155			
S X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	220	220				
S X0327985	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	167	167				
S X1200064	GEOTECHNICAL FABRIC, SPECIAL	SQ YD	334	94	240			
S X2030300	CHANNEL EXCAVATION (SPECIAL)	CU YD	793		793			
S X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	50	50				
S X4240800	DETECTABLE WARNINGS (SPECIAL)	SQ FT	12	12				
S X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1				
S X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	270	270				
* S XX003067	CONCRETE BRIDGE RAIL (SPECIAL)	FOOT	176		176			
S Z0004552	APPROACH SLAB REMOVAL	SQ YD	288		288			
S Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	157		157			
S Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	157		157			
S Z0010400	CLEANING BRIDGE SEATS	SQ FT	442		442			

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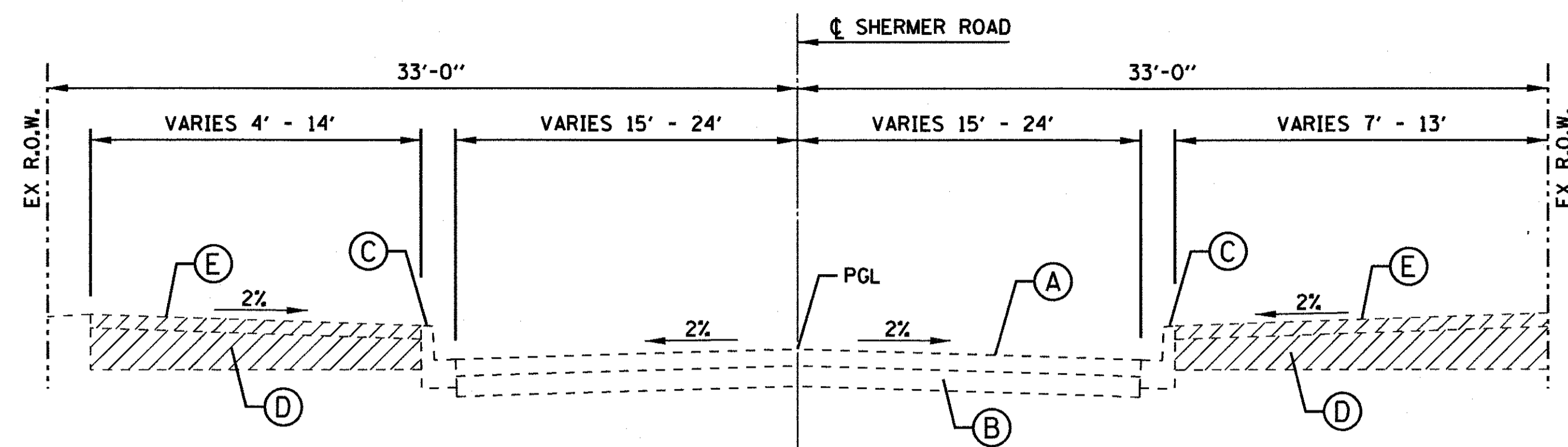
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Default	PLOT DATE = 5/24/17	DATE - 5/24/17	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

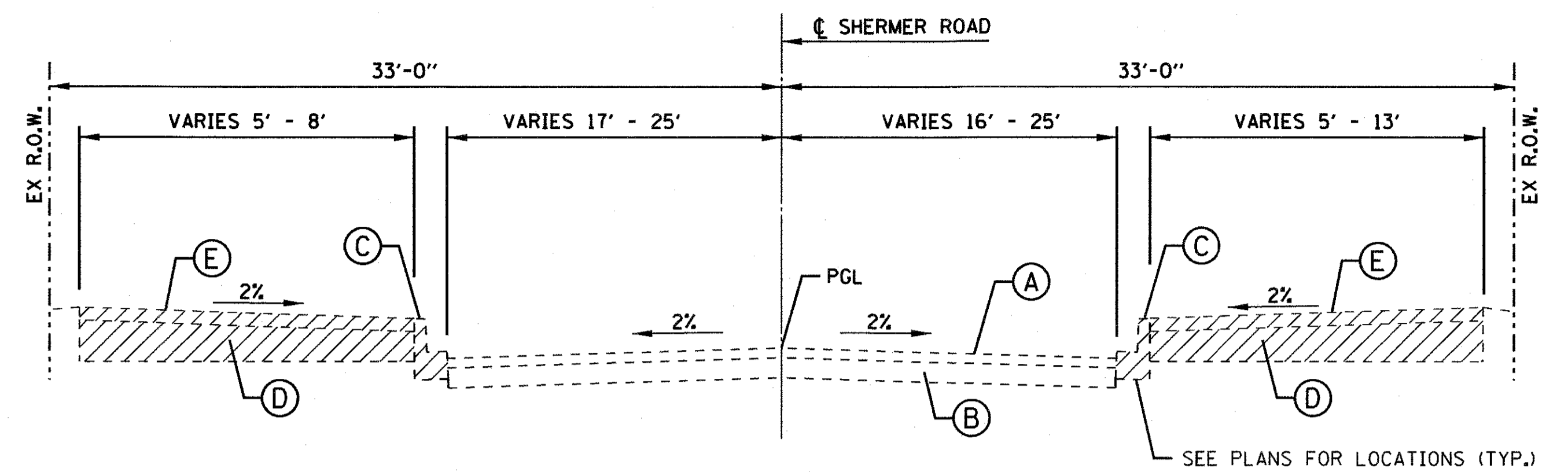
SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.U. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 6
				CONTRACT NO. 61D98
ILLINOIS FED. AID PROJECT				



EXISTING SHERMER ROAD

STA. 15+33.27 TO STA. 15+69.22

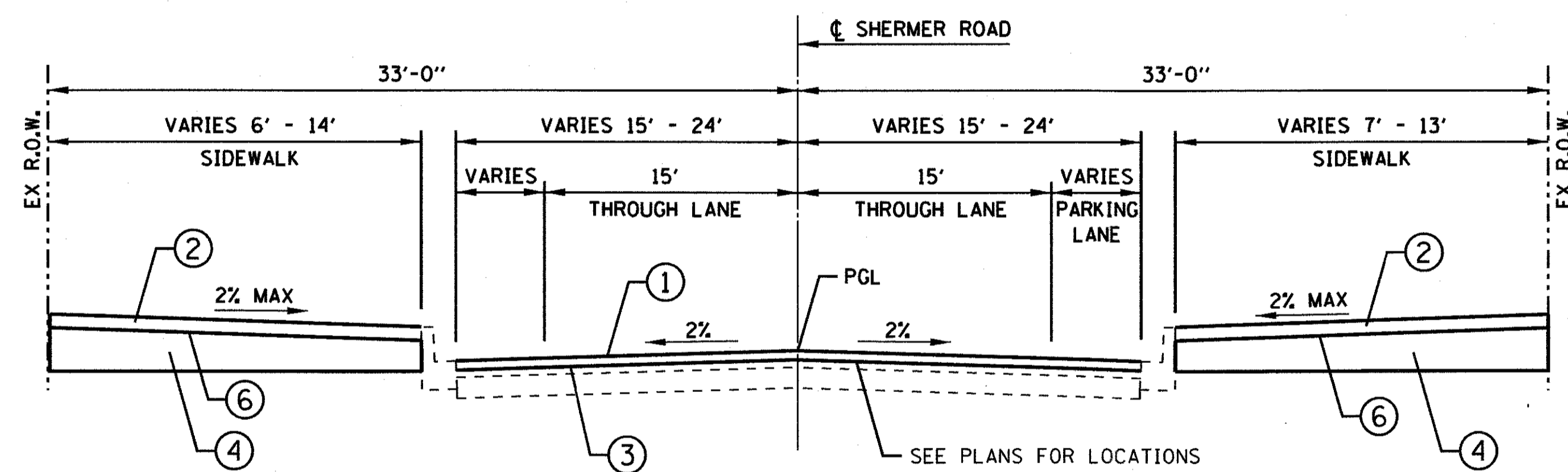


EXISTING SHERMER ROAD

STA. 16+53.22 TO STA. 18+23.22

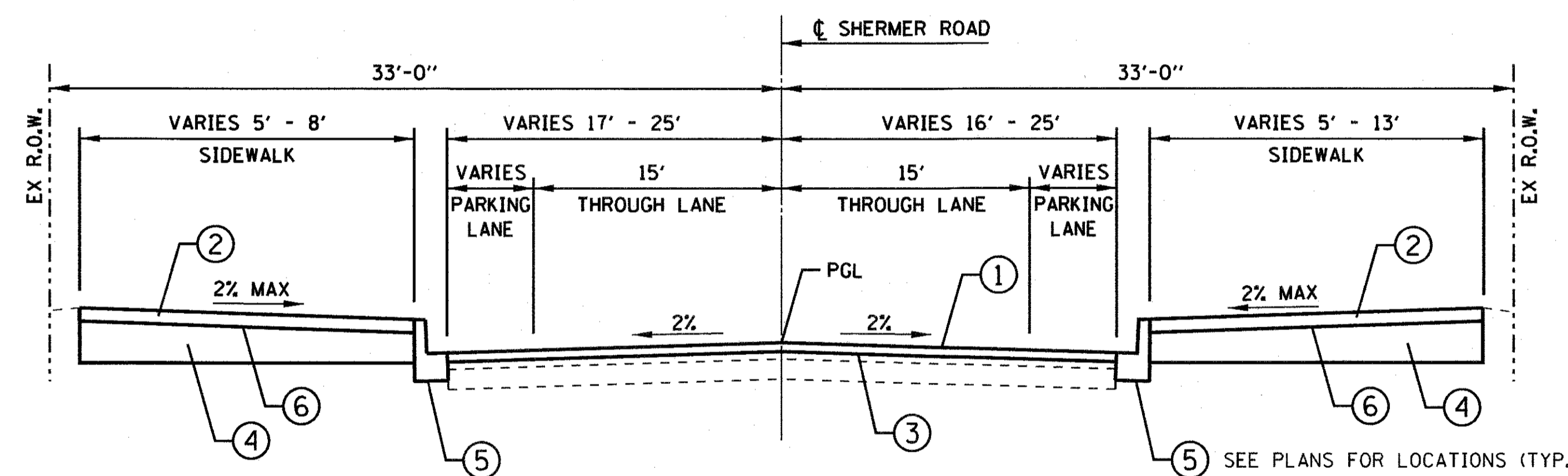
LEGEND - EXISTING

- (A) BITUMINOUS PAVEMENT
- (B) AGGREGATE BASE
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) CONCRETE SIDEWALK
- (E) BRICK PAVERS
- REMOVAL ITEM



PROPOSED SHERMER ROAD

STA. 15+33.27 TO STA. 15+69.22



PROPOSED SHERMER ROAD

STA. 16+53.22 TO STA. 18+23.22

LEGEND - PROPOSED

- (1) HMA SURFACE COURSE, MIX "D", N70, 1.5"
- (2) PAVING BRICK SIDEWALK
- (3) BITUMINOUS MATERIALS (TACK COAT)
- (4) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- (5) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (6) GEOTECHNICAL FABRIC, SPECIAL

NOTES

- 1. NOTE: BRIDGE WORK OMISSION STA 15+69.22 TO STA 16+53.22

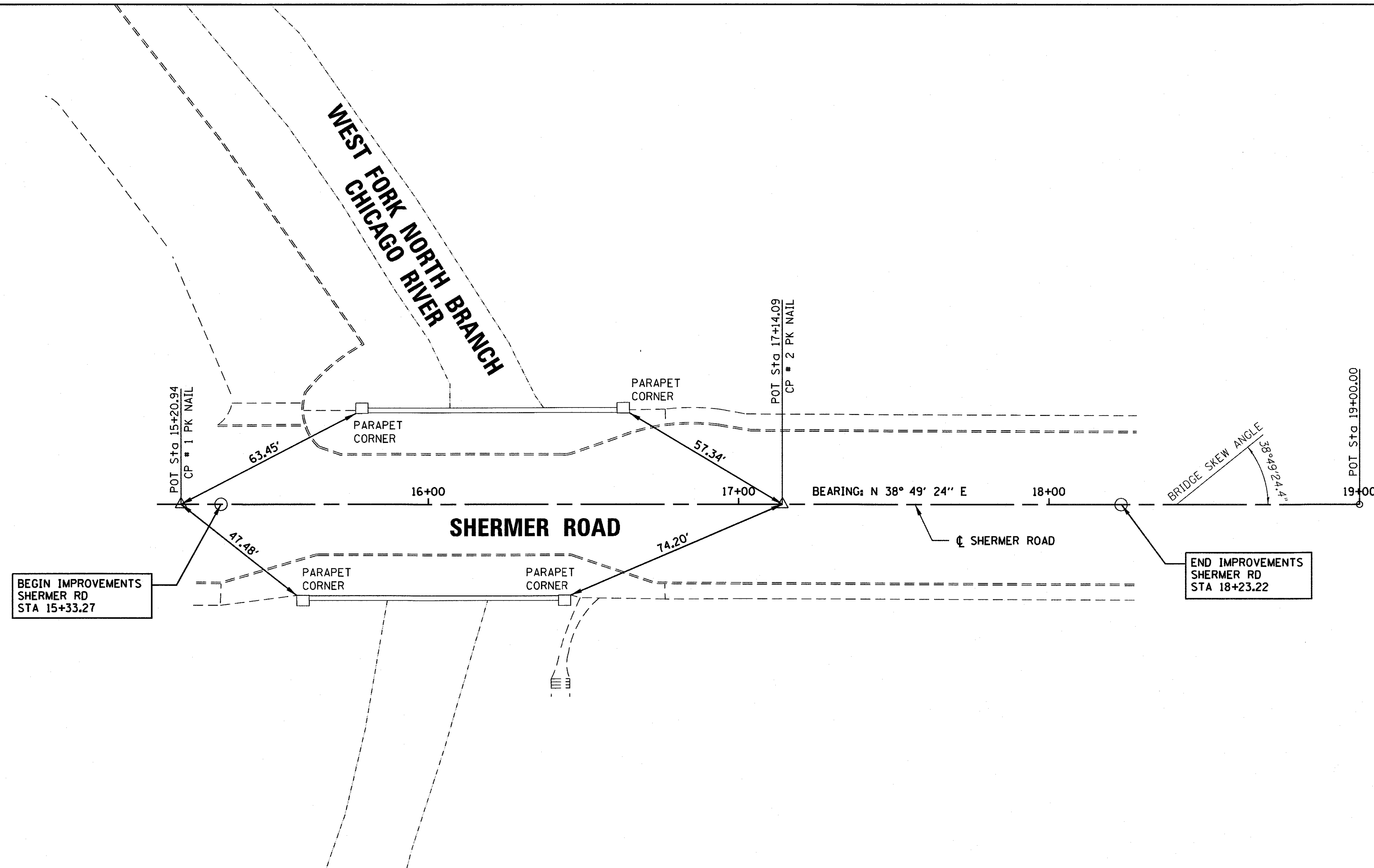
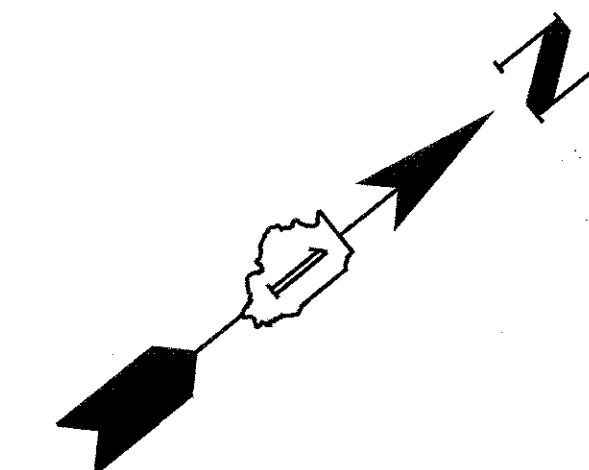
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS
PAVEMENT HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 1.5"	4% @ 70 Gyr.

- THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS.
- FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

FILE NAME =	USER NAME = jdszenzo	DESIGNED - JD	REVISED -
		DRAWN - JD, JWM	REVISED -
	PLOT SCALE = 20:0.000001' / 1"	CHECKED - MFB	REVISED -
	PLOT DATE = 5/24/17	DATE - 5/24/17	REVISED -

F.A.U. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 8
CONTRACT NO. 61D98				
ILLINOIS FED. AID PROJECT				



BENCHMARKS

BENCHMARK NUMBER	DESCRIPTION	ELEVATION*
1	PK NAIL SET IN THE CENTERLINE OF SHERMER RD. LOCATED APPROXIMATELY 50' SOUTH OF THE BRIDGE AT STA 15+20.94.	645.17
2	PK NAIL SET IN THE CENTERLINE OF SHERMER RD. LOCATED APPROXIMATELY 60' NORTH OF THE BRIDGE AT STA 17+14.09.	646.10
42	SOUTHEAST FLANGE BOLT ON THE FIRE HYDRANT AT THE NORTHEAST CORNER OF SHERMER RD AND OAK AVE.	644.56

HORIZONTAL CONTROL POINTS

CONTROL POINT NO.	STATION	O/S	N	E
1	POT 15+20.94	0'	1990162.40	1121904.03
2	POT 17+14.09	0'	1990313.27	1122025.43

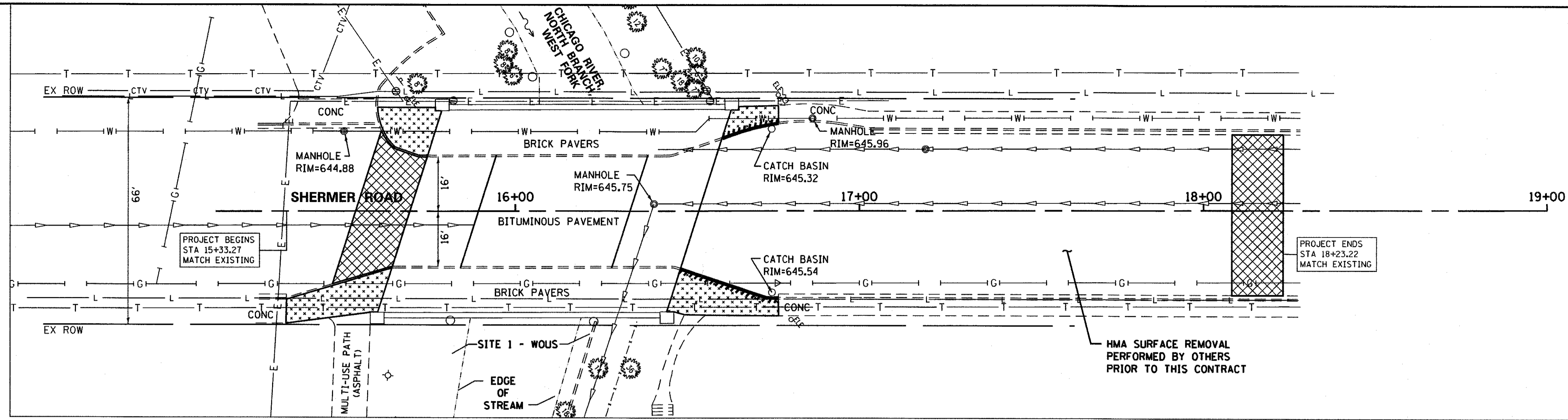
*DATUM=NAVD 88

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440 S. LaSalle Street, Suite 2000, Chicago, Illinois 60605

FILE NAME =	USER NAME = jdzienzo	DESIGNED - JD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENTS, TIES, AND BENCHMARKS			F.A.U. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 9
Default	PLOT SCALE = 2000.000001' / in.	DRAWN - JD, JWM	REVISED -					SCALE: 1"=10'	SHEET 1 OF 1 SHEETS	STA. TO STA.	CONTRACT NO. 61D98	
	PLOT DATE = 5/24/17	CHECKED - MFB	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE - 5/24/17	REVISED -									

DATE	
BY	
SURVEYED	
ALIGNMENT	
CHECKED	
PT. OF WAY	
CHECKED	
PAID FILE NAME	
PLAN	
NOTE BOOK	
NO.	

DATE	
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GRADES	
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B.M. NOTED	
STRUCTURE	
NOTATIONS	
ORD'D	
PROFILE	
NOTE BOOK	
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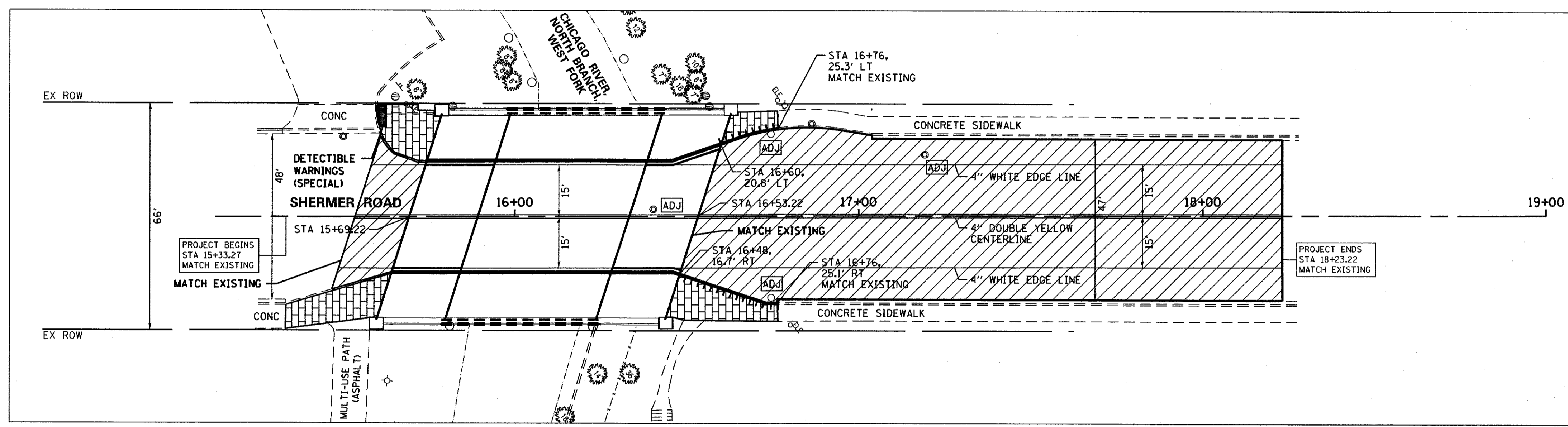


EXISTING CONDITIONS AND REMOVALS

REMOVAL LEGEND

	BRICK SIDEWALK REMOVAL / SIDEWALK REMOVAL
	CURB AND GUTTER REMOVAL
	HMA SURFACE REMOVAL - BUTT JOINT

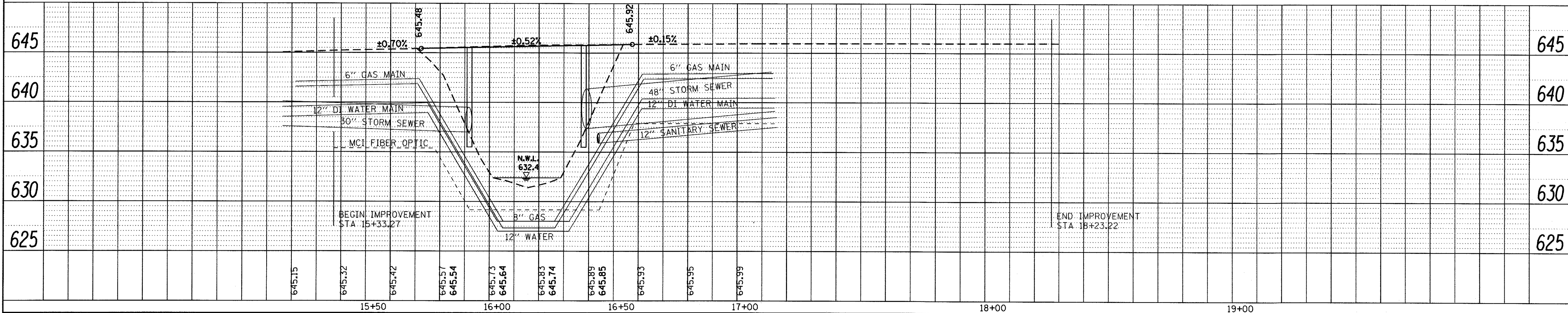
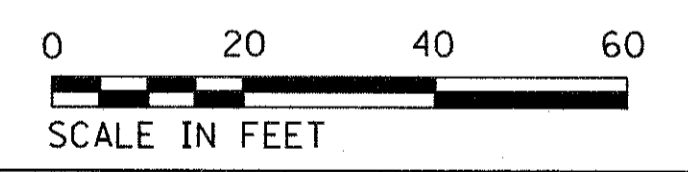
NOTE: BRIDGE WORK OMISSION STA 15+69.22 TO STA 16+53.22



PROPOSED IMPROVEMENTS

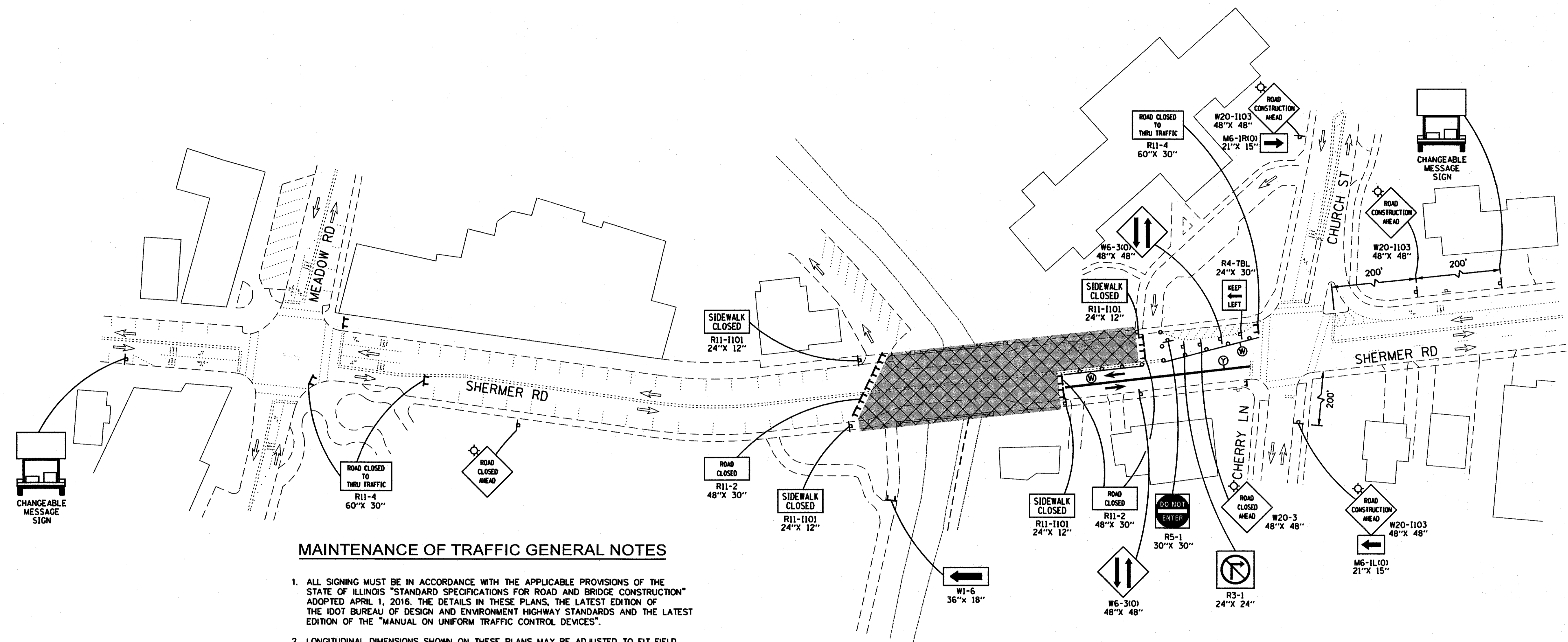
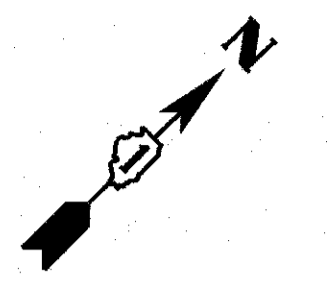
PROPOSED LEGEND

	PAVING BRICK SIDEWALK / PCC SIDEWALK 5 INCH
	HMA SURFACE COURSE, MIX "D", N70
	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12



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Chicago, Illinois 60605

FILE NAME =	USER NAME = jdzienzo	DESIGNED - JWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED PLAN AND PROFILE SHERMER ROAD			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILELs#	PLOT SCALE = 40.0000' / 1"	DRAWN - JWM	REVISED -					2760	14-00161-00-BR	COOK	34	10
Default	PLOT DATE = 5/24/17	CHECKED - MBL	REVISED -		SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 61D98		ILLINOIS FED. AID PROJECT		
		DATE - 5/24/17	REVISED -									

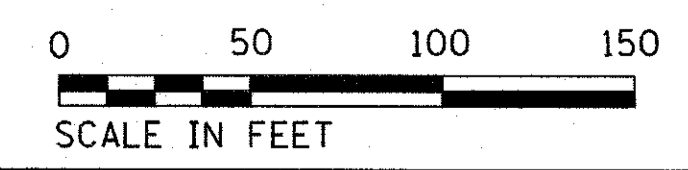


MAINTENANCE OF TRAFFIC GENERAL NOTES

1. ALL SIGNING MUST BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016. THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE IDOT BUREAU OF DESIGN AND ENVIRONMENT HIGHWAY STANDARDS AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
2. LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR MUST BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THIS CONSTRUCTION IS IN EFFECT.
4. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE CONSTRUCTION IS IN EFFECT MUST BE COMPLETELY COVERED BY THE CONTRACTOR.
5. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS MUST BE AS REQUIRED BY THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
6. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED MUST MEET THE REQUIREMENTS FOR TYPE A - LOW INTENSITY FLASHING LIGHTS IN ARTICLE 702.04 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION MUST BE USED.
7. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL DRIVEWAYS DURING CONSTRUCTION.
8. CLOSED SIDEWALKS MUST BE APPROPRIATELY BARRICADED. USE IDOT STANDARD 701801.
9. ALL HAZARDS, DITCHES, TRENCHES, EXCAVATIONS, ETC. NEAR OR ADJACENT TO WALKWAYS MUST BE CLEARLY DELINEATED AND ADEQUATELY PROTECTED.
10. PROPOSED MAINTENANCE OF TRAFFIC SIGNING MUST BE COVERED OR REMOVED WHEN NOT REQUIRED DURING A SPECIFIC STAGE OF CONSTRUCTION.
11. SEE DETOUR PLAN FOR ADDITIONAL SIGNING.

LEGEND

- PROPOSED WORK ZONE
- PROPOSED TRAFFIC DIRECTION
- EXISTING TRAFFIC DIRECTION
- TEMPORARY TRAFFIC SIGN
- DRUM FOR 2-WAY TRAFFIC
- CHANNELIZATION WITH STEADY BURN BI-DIRECTIONAL LIGHTS
- TYPE III BARRICADE WITH TWO FLASHING LIGHTS
- 4" DOUBLE YELLOW AT 11" C-C TY. III TAPE
- 4" SOLID WHITE TY. III TAPE



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Chicago, Illinois 60605

FILE NAME =	USER NAME = jdzienzo	DESIGNED - JDW	REVISED -
		DRAWN - JDW	REVISED -
	PLOT SCALE = 100.0000' / 1"	CHECKED - MFB	REVISED -
Default	PLOT DATE = 5/26/17	DATE - 5/26/17	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUGGESTED MAINTENANCE OF TRAFFIC PLAN
SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.J. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 11
				CONTRACT NO. 61D98
ILLINOIS FED. AID PROJECT				

EROSION AND SEDIMENT CONTROL GENERAL NOTES

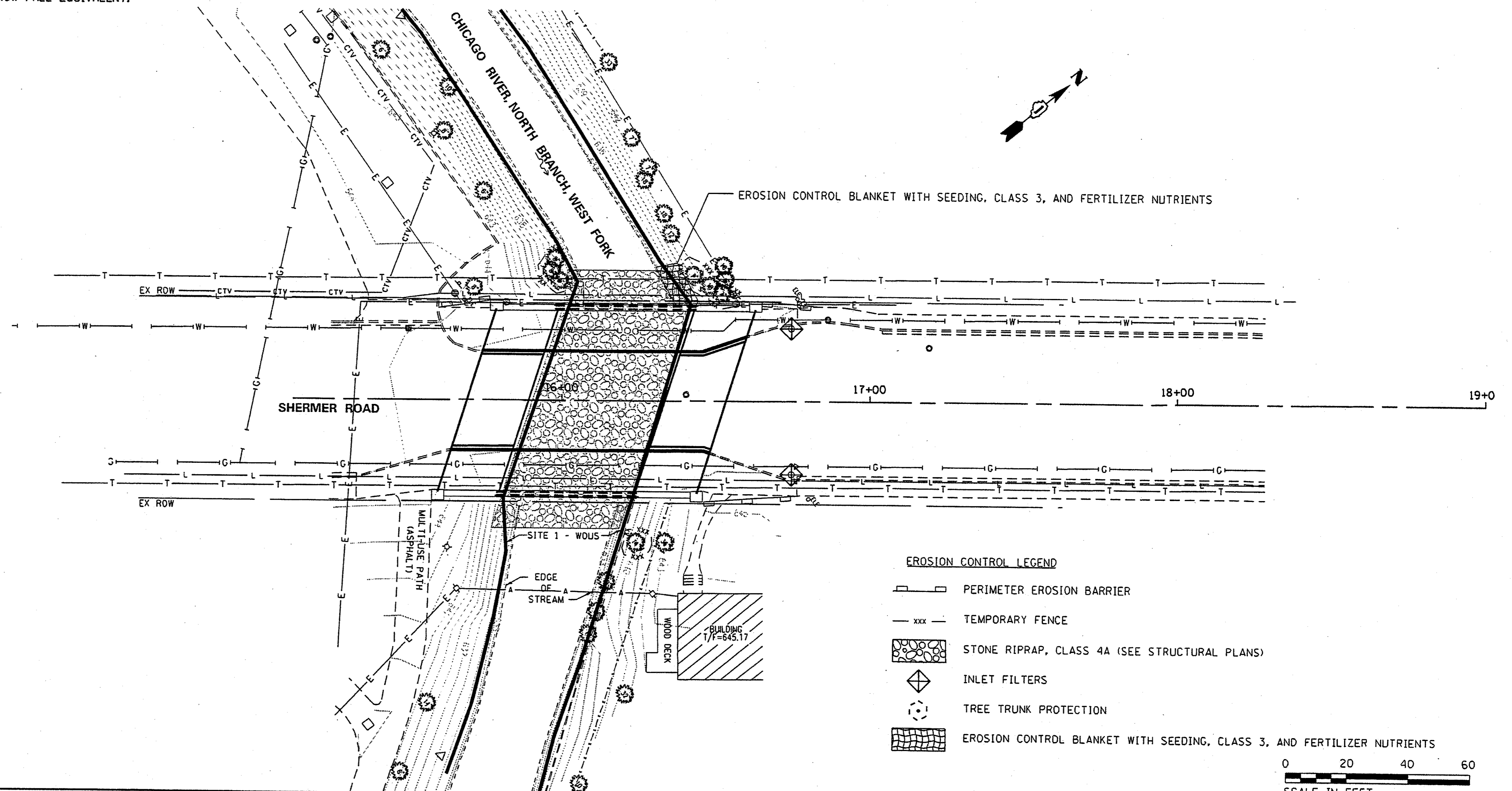
- THE PURPOSE OF THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDED FOR THIS PROJECT IS TO LIMIT THE SEDIMENT POLLUTION IMPACT OF ANY STORM WATER DISCHARGES THAT ORIGINATE ON THIS SITE OR OFF-SITE FLOWS THAT FLOW OVER THE DISTURBED AREAS ON DOWNSTREAM AREAS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT.
- TO THE MAXIMUM EXTENT POSSIBLE, ALL FLOWS ORIGINATING OFF THE CONSTRUCTION SITE WILL BE DIVERTED AROUND DISTURBED AREAS OR WILL BE CONVEYED THROUGH THE SITE IN A MANNER THAT UNTREATED ON-SITE RUNOFF DOES NOT MIX WITH THE OFF-SITE RUNOFF.
- ALL RUNOFF ORIGINATING ON DISTURBED AREAS ASSOCIATED WITH THIS PROJECT WILL PASS THROUGH ONE OR MORE MEASURES THAT WILL MINIMIZE THE OFF-SITE SEDIMENT IMPACTS OF THE CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL DESIGNATE ONE OF HIS EMPLOYEES AS RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN ON ALL DISTURBED AREAS. THIS PERSON IS TO BE KNOWLEDGEABLE ABOUT INSTALLATION AND MAINTENANCE OF THE REQUIRED MEASURES AND IS TO HAVE TAKEN AN APPROVED EROSION AND SEDIMENT CONTROL COURSE. THIS EMPLOYEE IS TO HAVE THE AUTHORITY TO CARRY OUT THE IMPLEMENTATION OF ANY INSTRUCTIONS CONCERNING THE EROSION AND SEDIMENT CONTROL PLAN GIVEN BY THE ENGINEER. ALL MEASURES WILL BE INSPECTED BY THIS INDIVIDUAL AND THE ENGINEER ON A REGULAR BASIS (AT LEAST ONCE EVERY 7 DAYS) AND AFTER RAINFALL EVENTS GREATER THAN 0.5 INCH, OR SNOW FALL EQUIVALENT.
- THE CONTRACTOR IS ADVISED THAT IN-STREAM WORK IS REQUIRED TO PLACE THE RIP RAP. SEDIMENT LADEN DEWATERING DISCHARGE MUST BE DIRECTED TO AN APPROVED SEDIMENT TRAPPING MEASURE PRIOR TO RELEASE FROM THE SITE. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AN IN-STREAM WORK PLAN PRIOR TO STARTING CONSTRUCTION.
- WORK IN THE WATERWAY SHOULD BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS. LOW FLOW CONDITION ARE FLOW AT OR BELOW THE NORMAL WATER ELEVATION.
- THE ISOLATED AREA WITH COFFERDAM SHALL BE THE MINIMUM NECESSARY TO COMPLETE THE WORK. LIMIT TO 1/2 THE CHANNEL WIDTH, TO MINIMIZE EROSION ON THE OPPOSITE SIDE OF THE BANK.
- THE NORTH COOK COUNTY SOIL WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING, ONE WEEK PRIOR TO COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO FINAL INSPECTION.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING BODY.
- IF RIPRAP INSTALLATION TAKES MORE THAN TWO DAYS, CONTACT THE NORTHERN COOK COUNTY SOIL WATER CONSERVATION DISTRICT FOR FURTHER INSTRUCTION.
- RIPRAP IS TO BE PLACED AT AN ELEVATION BELOW THE EXISTING STREAMBED ELEVATION, AND THEN BACKFILLED TO PRESERVE THE NATURAL CHANNEL BOTTOM. SEE STRUCTURAL PLANS FOR DETAILS.
- COFFERDAM SHALL BE CONSTRUCTED FROM THE UPLAND, AND NO CONSTRUCTION EQUIPMENT SHALL ENTER THE WATER WAY UNTIL THE COFFERDAM HAS BEEN CONSTRUCTED AND DEWATERING HAS OCCURED.

EROSION AND SEDIMENT CONTROL STRATEGY

DISTURBED AREA: 0.12 ACRES

RECEIVING WATERS: CHICAGO RIVER, NORTH BRANCH, WEST FORK

- INSTALL PERIMETER EROSION BARRIER AND INLET AND PIPE PROTECTION
- INSTALL TREE TRUNK PROTECTION AND TEMPORARY FENCE
- INSTALL COFFERDAM
- INSTALL RIPRAP, SEEDING, AND FERTILIZER NUTRIENTS
- INSTALL EROSION CONTROL BLANKET
- REMOVE TREE TRUNK PROTECTION, TEMPORARY FENCE, PERIMETER EROSION BARRIER, AND INLET AND PIPE PROTECTION



EROSION CONTROL LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY FENCE
- STONE RIPRAP, CLASS 4A (SEE STRUCTURAL PLANS)
- INLET FILTERS
- TREE TRUNK PROTECTION
- EROSION CONTROL BLANKET WITH SEEDING, CLASS 3, AND FERTILIZER NUTRIENTS



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40 S. LAKE STREET, SUITE 2000
CHICAGO, ILLINOIS 60606

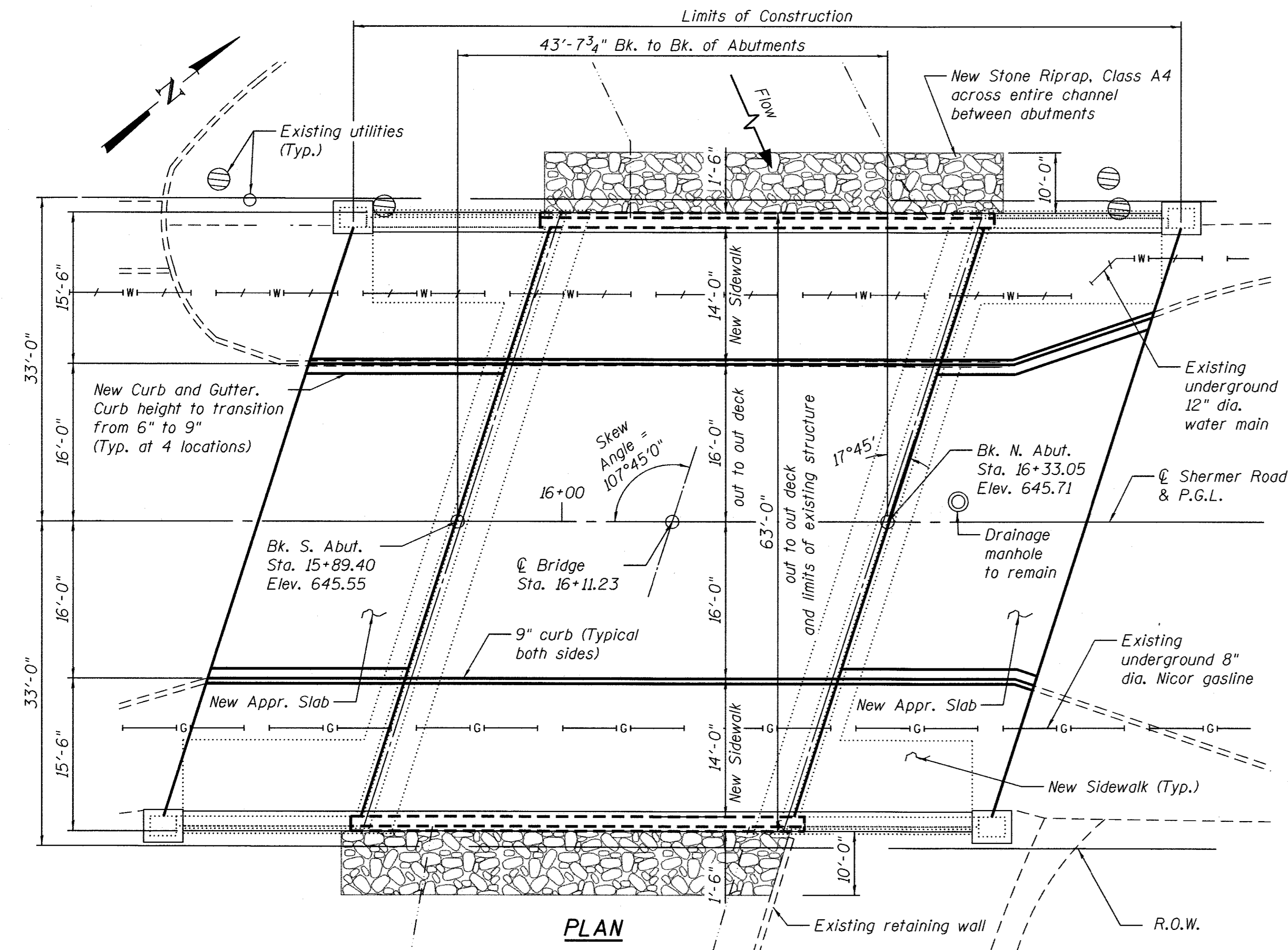
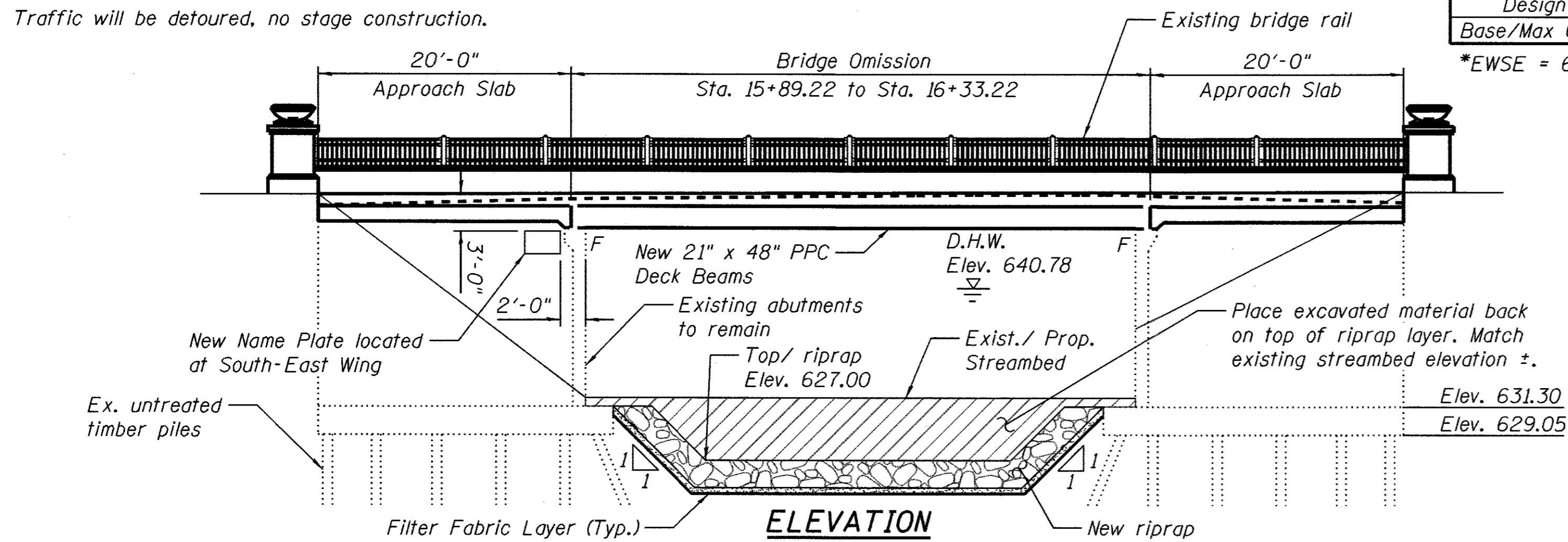
FILE NAME =	USER NAME = jdzienzo	DESIGNED - JWM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION AND SEDIMENT CONTROL GENERAL NOTES, STRATEGY AND PLAN	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	PLOT SCALE = 48,0000' / 1" =	DRAWN - JWM	REVISED -			216D	14-00161-00-BR	COOK	34	13	
	PLOT DATE = 5/30/17	CHECKED - MFB	REVISED -			CONTRACT NO. 61098					
		DATE - 5/30/17	REVISED -			ILLINOIS FED. AID PROJECT					

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

BENCH MARK:
B.M. #42 Northeast quad of Shermer RD & Oak Ave.; Southeast flange bolt of eastern fire hydrant. Elev. 644.56

Existing Structure:
S.N. 016-0812 carrying Shermer Road over the Chicago River, North Branch, West Fork was built in 1979. The structure consists of a simple span with Precast Prestressed Concrete (PPC) Deck Beams. The Length is 43'-7³/₄" back to back abutments, the span from Brg. to Brg. is measured at 42'-9¹/₄". Out to out is 63'-1". The structure is supported on reinforced concrete closed abutments founded on spread footings.

Traffic will be detoured, no stage construction.



WATERWAY INFORMATION

Drainage Area = 12.7		Low Grade Elev. 643.17 @ Sta. 16+11.23							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
In-Stream Work	2	174	n/a	n/a	638.24	0.00	0.00	638.24	638.24
Design	50	718	330	330	640.78	0.01	0.01	640.79	640.79
Base/Max Calc.	100	848	348	348	641.20	0.01	0.01	641.21	641.21

*EWSE = 638.24

NORTH BRANCH, WEST FORK
RE-BUILT 2018 BY
VILLAGE OF NORTHBROOK
SEC. 14-00161-00-BR
F.A. RT. 2760 STA. 16+11.23
STR. NO. 016-0812 LOADING HL93

LETTERING FOR NEW NAME PLATE

LOADING HL-93 (NEW CONSTRUCTION ONLY)

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

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

FIELD UNITS

New Construction

f'c = 3,500 psi
f'c = 24,000 psi (UHPC joint closure pour between PPC deck beams)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SHOP-PRESTR. BEAMS

New Construction

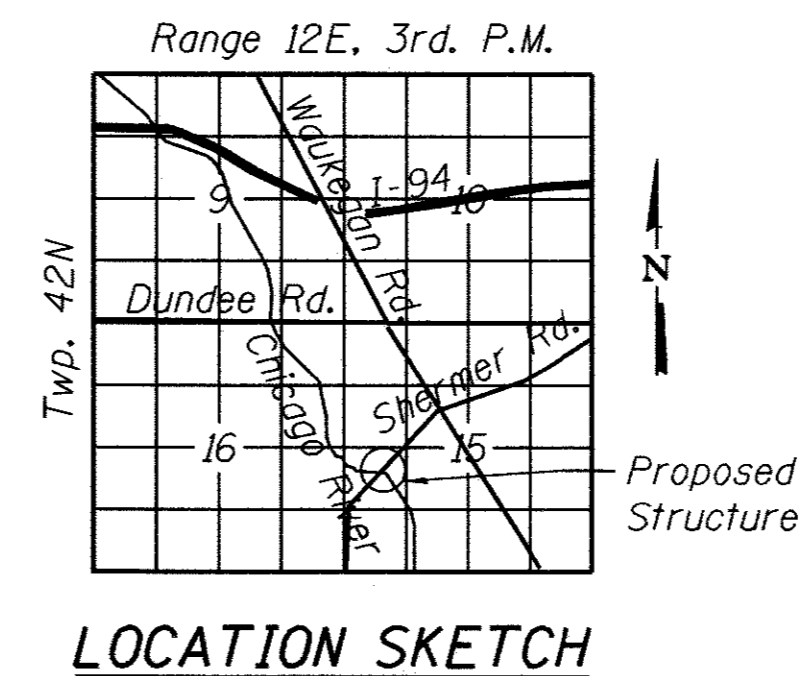
f'c = 6,000 psi
f'cl = 5,000 psi
fpu = 270,000 psi (0.5 inch low relaxation strand)
fppt = 202,500 psi (0.75 fpu) - Initial tension
f's = 177,410 psi - final tension

Existing Construction - Abutments

fs = 24,000 psi
fc = 1,400 psi

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)	Item	
	W. Abut.	E. Abut.
Q100	629.05	629.05
Q200	629.05	629.05



SCOPE OF WORK:

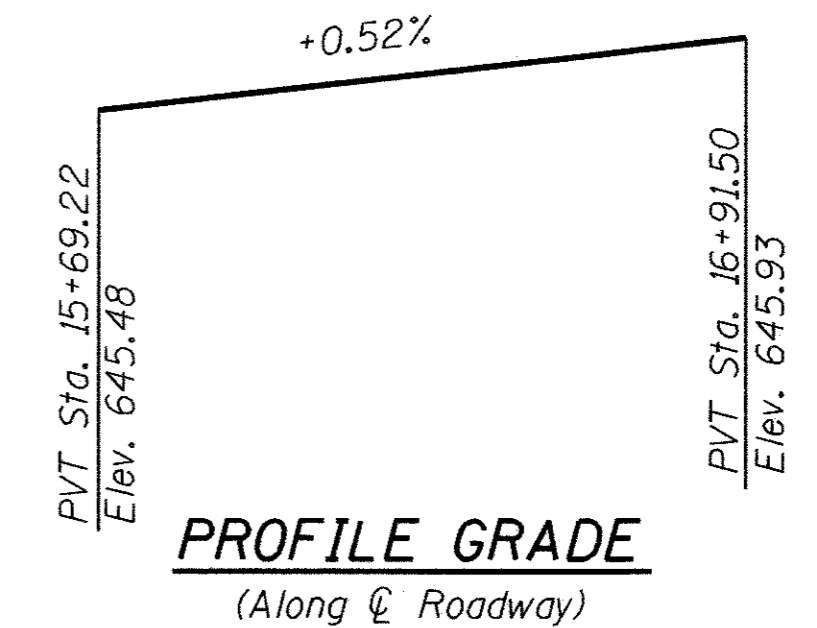
1. Remove and salvage bridge metal railings, posts and flower planters.
2. Remove brick from bridge rail system.
3. Remove brick pavers from sidewalks.
4. Remove all precast concrete bridge rail elements.
5. Remove and dispose existing bituminous bridge overlay, waterproofing material and remaining elements of bridge rail and sidewalks not described above.
6. Remove and dispose existing 21"x48" Precast Prestressed Concrete (PPC) Deck Beams.
7. Install cofferdams.
8. Clean bridge seats and apply concrete sealer.
9. Install stone riprap across entire channel between abutments.
10. Repair substructure.
11. Install new 21"x48" Precast Prestressed Concrete (PPC) Deck Beams with the UHPC closure pour joints.
12. Install sidewalks and parapets.
13. Install 2¹/₄" latex concrete overlay.
14. Remove and replace bridge approach slabs.
15. Reinstall existing railings, posts and flower planters.
16. Install new brick pavers, new brick veneer and new precast concrete bridge rail elements.

SEISMIC DATA

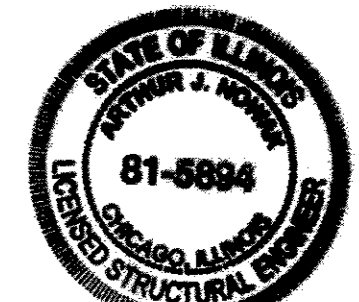
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.07g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.12g
Soil Site Class = C

HIGHWAY CLASSIFICATION

F.A.U. Rte. 2760
Functional Class: Major Collector
ADT: 9000 (2012); 11,000 (2016)
ADTT: 540 (2012); 660 (2016)
DHW: 900
Design Speed: 30 m.p.h.
Posted Speed: 25 m.p.h.
Two-Way Traffic (2 lanes)
Directional Distribution: 50:50



BOWMAN CONSULTING GROUP, LTD.
ARTHUR NOWAK, SE



Arthur Nowak
ARTHUR NOWAK, SE
081-005894

EXP 11/30/2018

DATE 05/24/2017

I certify that to the best of knowledge, information, and belief, this bridge rehabilitation is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the AASHTO Standard Specifications for Highway Bridges.

GENERAL PLAN AND ELEVATION
SHERMER ROAD BRIDGE OVER THE CHICAGO RIVER, NORTH BRANCH, WEST FORK
F.A.U. RTE. 2760 - SECTION 14-00161-00-BR
COOK COUNTY VILLAGE OF NORTHBROOK
STATION 16+11.23
STRUCTURE NO. 016-0812



USER NAME =	DESIGNED - KJH	REVISED -
PLOT SCALE =	CHECKED - AJN	REVISED -
PLOT DATE = 5/24/17	DRAWN - JL	REVISED -
	CHECKED - AJN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 016-0812

SHEET NO. S-1 OF S-16 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	14
CONTRACT NO. 61D98				

ILLINOIS FED. AID PROJECT

GENERAL NOTES

Cast-In-Place Concrete

- All exposed concrete edges shall have a 3/4" x 45° chamfer, except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of one foot below finished ground level.
- Cast counter weights at least 48 hours in advance of placing deck slab.

Reinforcement Bars

- Reinforcement bars, including epoxy-coated reinforcement bars, shall conform to the requirements of AASHTO M-31 (ASTM A706), Grade 60, deformed bars.
- Reinforcement bars designated "(E)" shall be epoxy coated.
- Reinforcement bar bending details shall be in accordance with the latest "Manual of Standard Practice for Detailing Reinforced Concrete Structures", ACI 315.
- Reinforcement bar bending dimensions are out to out.
- Bars noted thus, 3x2-#5 indicates 3 lines of bars with 2 lengths of bars per line.
- Cover from the face of concrete to face of reinforcement bars shall be 3" for surfaces formed against earth and 2" for all other surfaces unless otherwise shown.

Construction

- Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. The contractor shall field verify the proposed PPC beam lengths and order the beam fabrication during the winter months prior to the work start date. Such variations shall not be cause for additional compensation for a change in the scope of work; however, the Contractor shall be paid for the quantity actually furnished at the unit price for the work.
- Contractor shall not scale dimensions from the Contract Plans for construction purposes. Scales shown are for information only.
- No construction joints except those shown on the plans shall be allowed unless approved by the Engineer.
- No concrete cutting shall be permitted until the cutting limits have been outlined by the Contractor and approved by the Engineer.
- It shall be the Contractor's responsibility to verify the location of all utilities prior to starting construction. Contact J.U.L.I.E., 800-892-0123.
- It shall be the Contractor's responsibility to verify the location of all fiber optic utilities prior to starting construction.
- The Contractor shall use care when excavating around existing foundations. Any damage to the existing structure and/or supporting foundation shall be repaired or replaced at the Contractor's expense at no additional cost to the Village of Northbrook.
- The fabricator, the Contractor and the beam transportation company shall provide adequate bracing and support for the PPC deck beams during handling, transporting, storing and erecting.
- Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

Demolition Plan

- The Contractor shall submit a demolition plan to the Engineer for review and acceptance, detailing the proposed methods of demolition and the amount, location(s) and type(s) of equipment to be used.

Erection Plan

- The contractor shall provide beam erection plan. The erection plan shall be complete in detail for all phases, stages, and conditions anticipated during erection. The erection plan shall include structural calculations and supporting documentation necessary to completely describe and document the means, methods, crane positioning and movement, means of access, pick points, temporary support positions, and loads necessary to safely erect the beams.
- The erection plans and procedures shall be submitted to the Engineer for review and acceptance prior to starting the work. Review, acceptance and/or comments by the Engineer shall not be construed to guarantee the safety or final acceptability of the work or compliance with all applicable specifications, codes, or contract requirements, and shall neither relieve the Contractor of the responsibility and liability to comply with these requirements, nor create liability for the Village of Northbrook.

TOTAL BILL OF MATERIAL

ITEM NO.	CODE NO.	ITEM	UNIT	TOTAL
1	28100107	Stone Riprap, Class A4	Sq. Yd.	401
2	28200200	Filter Fabric	Sq. Yd.	401
3	42001300	Protective Coat	Sq. Yd.	193
4	44000500	Combination Curb and Gutter Removal	Foot	83
5	50101500	Removal of Existing Superstructure	Each	1
6	50102400	Concrete Removal	Cu. Yd.	50.7
7	50104000	Bridge Rail Removal	Foot	176
8	50201101	Cofferdam (Type 1) (Location-1)	Each	2
9	50300225	Concrete Structures	Cu. Yd.	28.0
10	50300255	Concrete Superstructure	Cu. Yd.	48.4
11	50301350	Concrete Superstructure (Approach Slab)	Cu. Yd.	75.2
12	50400405	Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	2,640
13	50800205	Reinforcement Bars, Epoxy Coated	Pound	22,590
14	50800530	Mechanical Splicers	Each	1,176
15	51500100	Name Plates	Each	1
16	58700300	Concrete Sealer	Sq. Ft.	442
17	59000200	Epoxy Crack Injection	Foot	11
18	LR430040	Paving Brick Sidewalk	Sq. Yd.	240
19	X0323078	Remove and Re-Erect Existing Bridge Rail	Foot	162
20	X0326817	Standard Brick Veneer	Sq. Ft.	484
21	X0326864	Brick Sidewalk Removal	Sq. Ft.	2,155
22	X1200064	Geotechnical Fabric, Special	Sq. Yd.	240
23	X2030300	Channel Excavation (Special)	Cu. Yd.	793
24	XX003067	Concrete Bridge Rail (Special)	Foot	176
25	Z0004552	Approach Slab Removal	Sq. Yd.	288
26	Z0004556	Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	157
27	Z0006012	Bridge Deck Latex Concrete Overlay, 2 1/4 Inches	Sq. Yd.	157
28	Z0010400	Cleaning Bridge Seats	Sq. Ft.	442
29	Z0012754	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	34
30		Ultra-High Performance Concrete (UHPC) Joints	Cu. Ft.	153

LIST OF DRAWINGS

- S-1 General Plan & Elevation
- S-2 General Notes & Summary of Quantities
- S-3 Removal Details
- S-4 Proposed Deck Details
- S-5 21" x 48" PPC Deck Beam Details - Part 1
- S-6 21" x 48" PPC Deck Beam Details - Part 2
- S-7 Sidewalk and Parapet Details
- S-8 South Approach Slab
- S-9 North Approach Slab
- S-10 Approach Slab Details
- S-11 Sidewalk on Grade Details
- S-12 South Abutment Repairs
- S-13 North Abutment Repairs
- S-14 Existing Bridge Rail Details-1
- S-15 Existing Bridge Rail Details-2
- S-16 Existing Bridge Rail Details-3

ABBREVIATIONS:

abut.	abutment	NW	north west
B.F.	back face	no.	number
Ⓟ	baseline	O.F.	outside face
brg.	bearing	PJF	preformed joint filler
Ⓞ	centerline	PJS	preformed joint sealer
cl.	clearance	PG	profile grade
conc.	concrete	prop.	proposed
const.	construction	req'd	required
⌀	diameter	rte.	route
E.	expansion bearings	SB	south bound
EA	east abutment	SE	south east
EB	east bound	SW	south west
E.F.	each face	sect.	section
elev.	elevation	spa.	spaces
exist.	existing	spec.	specification
F.	fixed bearings	sta.	station
F.F.	front face	std.	standard
I.F.	inside face	struct.	structure
jt.	joint	typ.	typical
long.	longitudinal	UNO	unless noted otherwise
max.	maximum	WA	west abutment
min.	minimum	WB	west bound
NB	north bound	WW	wingwall
NE	north east		



USER NAME =	DESIGNED - KJH	REVISED -
	CHECKED - AJN	REVISED -
PLOT SCALE =	DRAWN - JL	REVISED -
PLOT DATE = 5/24/17	CHECKED - AJN	REVISED -

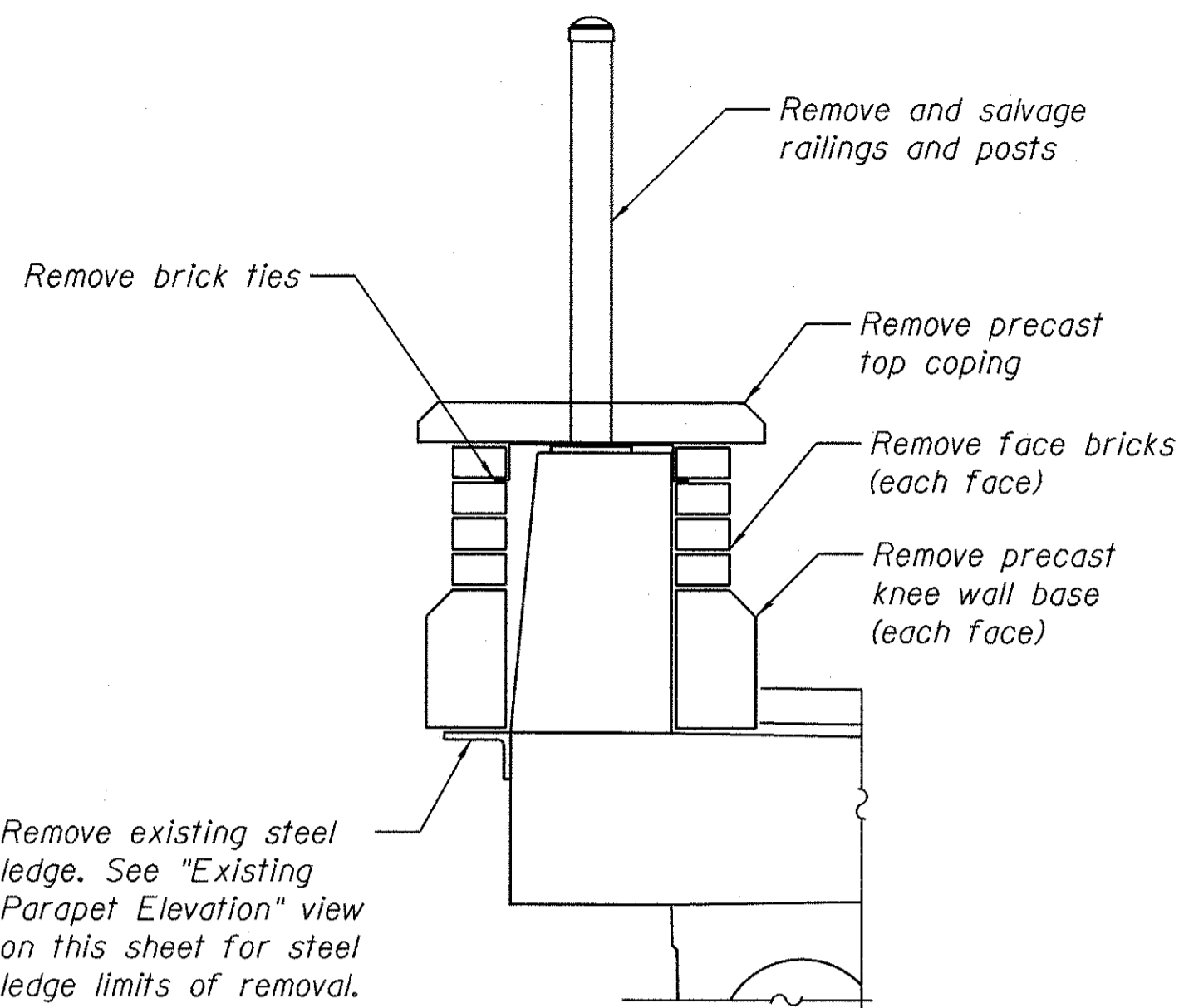
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES & SUMMARY OF QUANTITIES
STRUCTURE NO. 016-0812

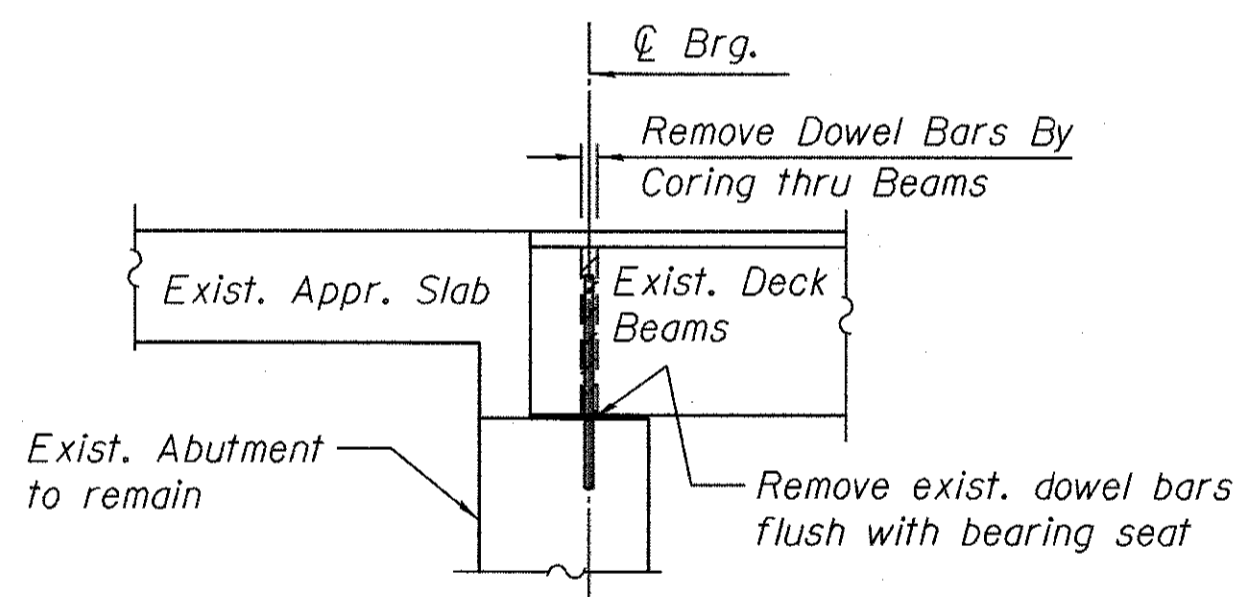
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	15
CONTRACT NO. 61D98				

SHEET NO. S-2 OF S-16 SHEETS

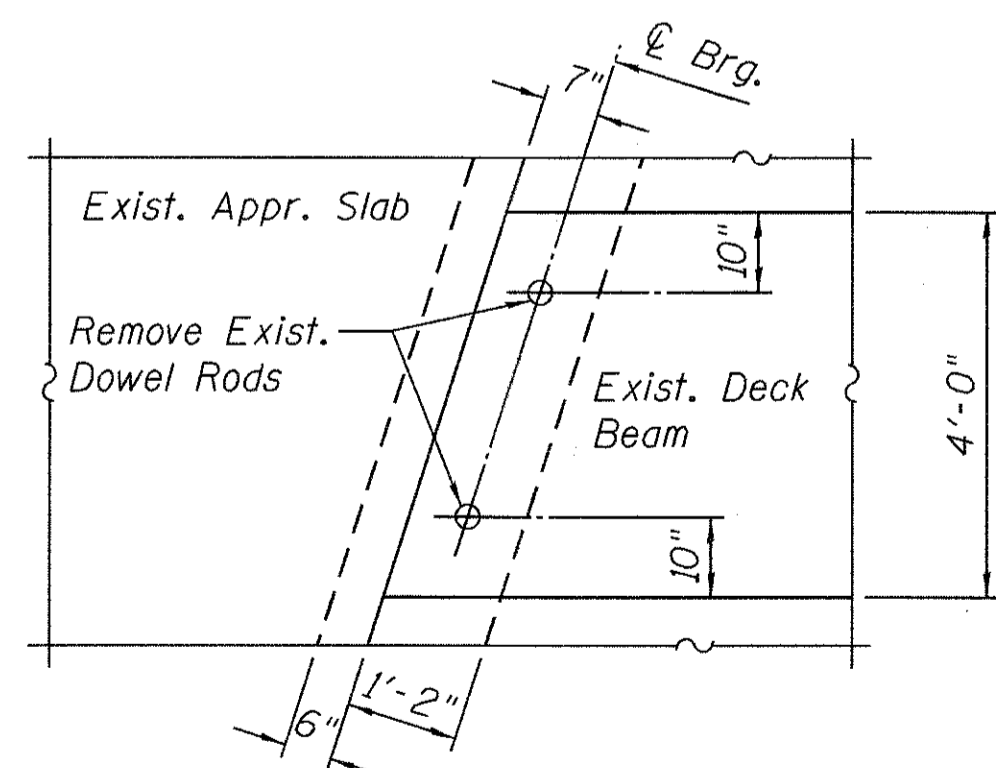
ILLINOIS FED. AID PROJECT



DETAIL 1 - MASONRY/RAIL REMOVAL & SALVAGE

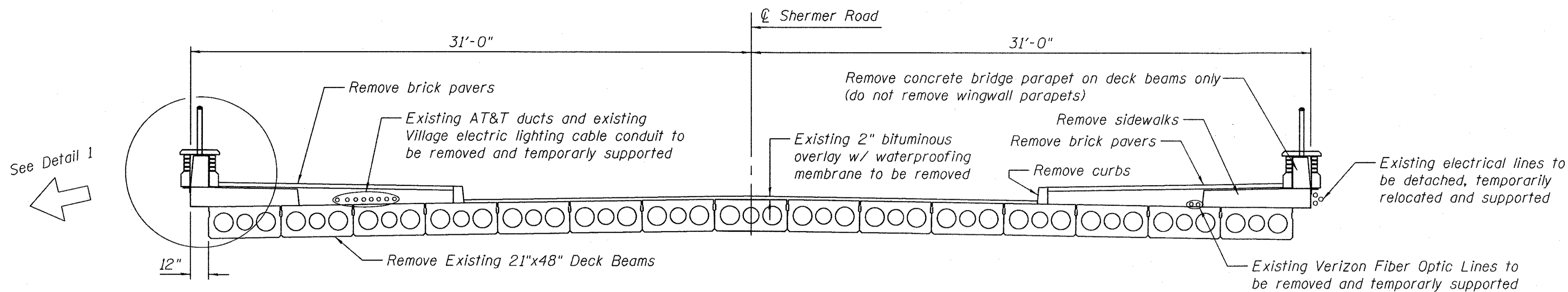


SECTION



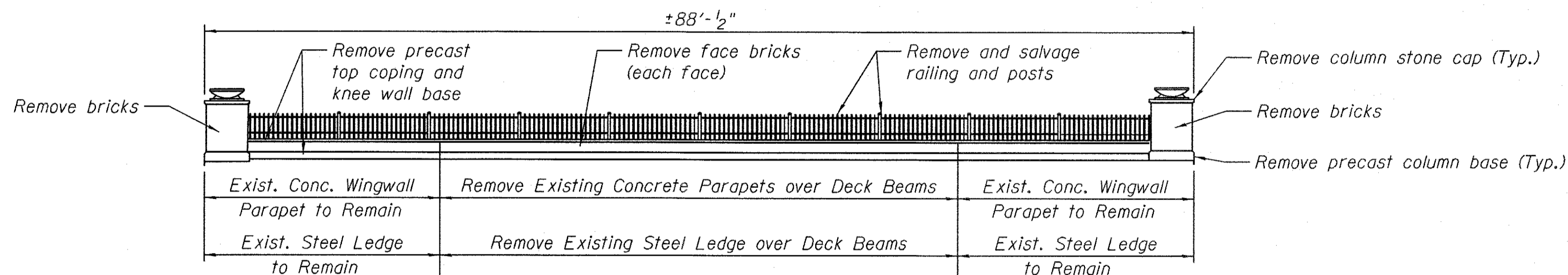
PLAN

DETAIL 2 - DECK BEAM REMOVAL

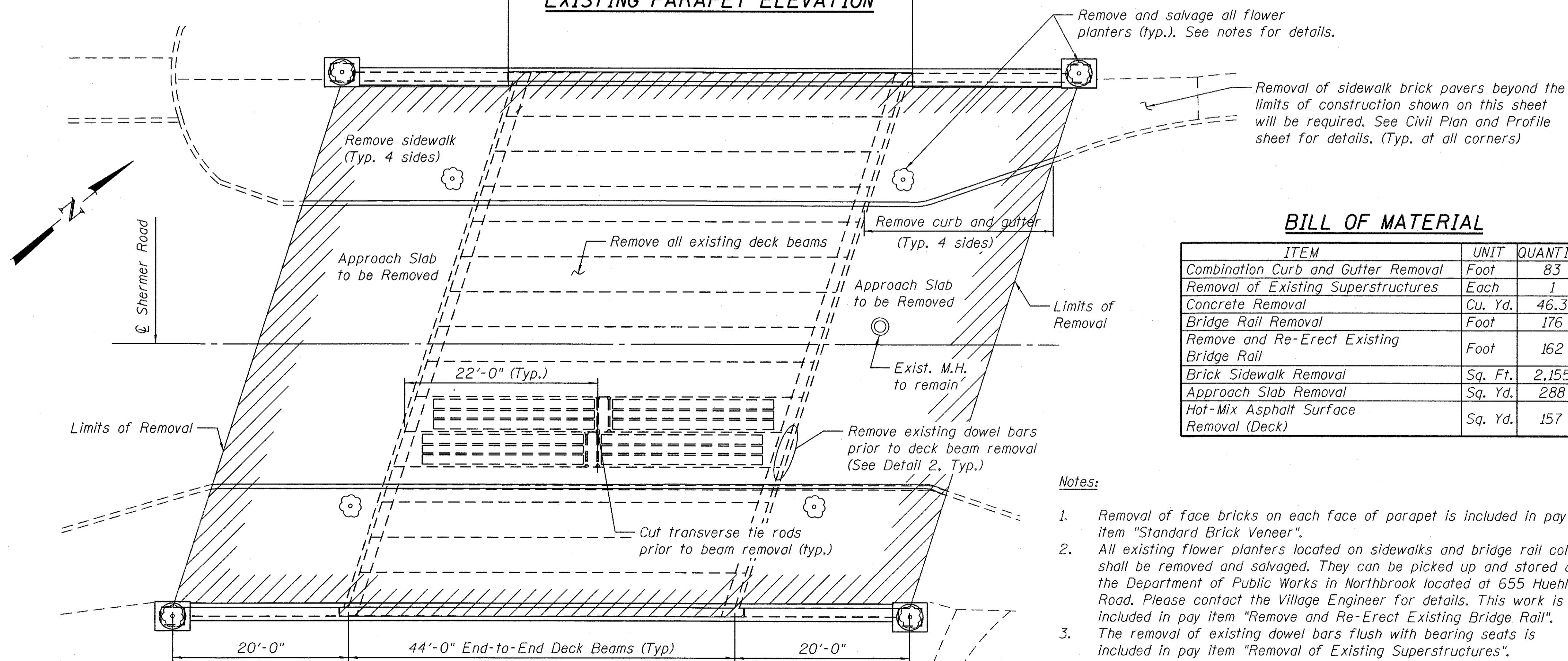


EXISTING DECK CROSS-SECTION

(Looking Southwest)



EXISTING PARAPET ELEVATION



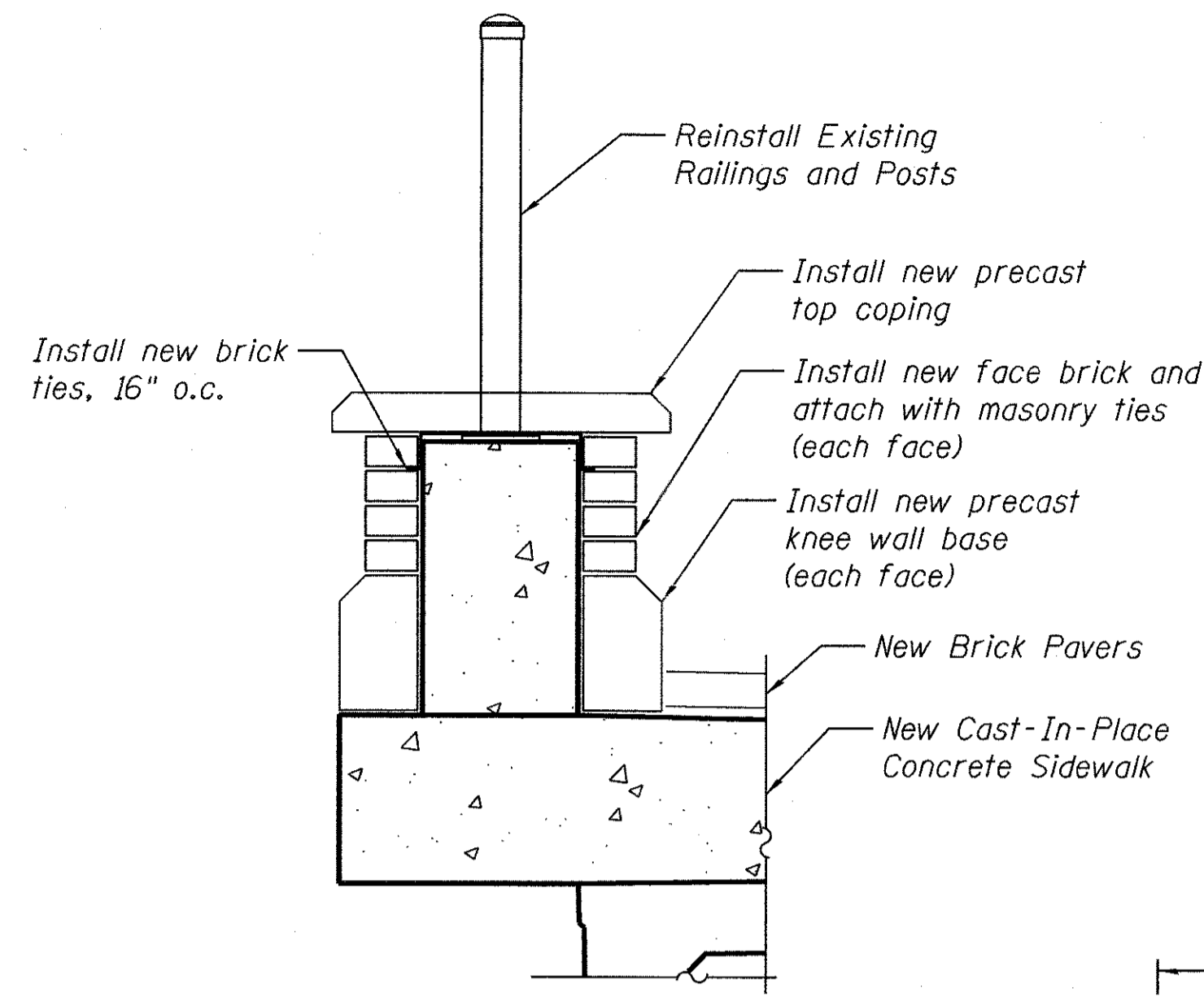
EXISTING PLAN - SHOWING REMOVAL

BILL OF MATERIAL

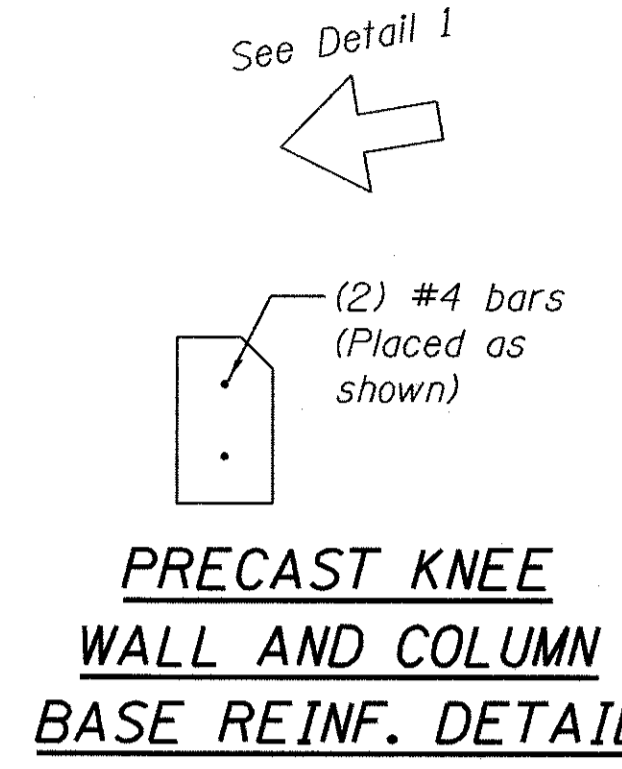
ITEM	UNIT	QUANTITY
Combination Curb and Gutter Removal	Foot	83
Removal of Existing Superstructures	Each	1
Concrete Removal	Cu. Yd.	46.3
Bridge Rail Removal	Foot	176
Remove and Re-Erect Existing Bridge Rail	Foot	162
Brick Sidewalk Removal	Sq. Ft.	2,155
Approach Slab Removal	Sq. Yd.	288
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	157

Notes:

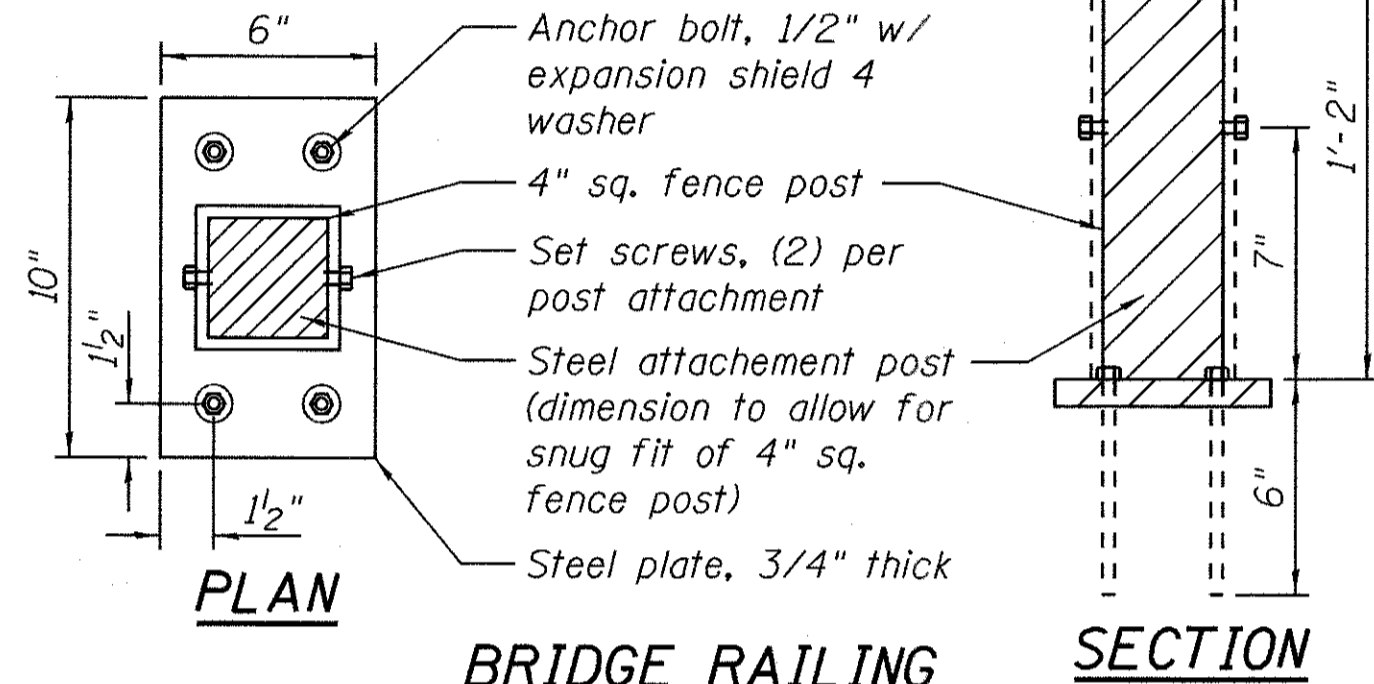
1. Removal of face bricks on each face of parapet is included in pay item "Standard Brick Veneer".
2. All existing flower planters located on sidewalks and bridge rail columns shall be removed and salvaged. They can be picked up and stored at the Department of Public Works in Northbrook located at 655 Huehl Road. Please contact the Village Engineer for details. This work is included in pay item "Remove and Re-Erect Existing Bridge Rail".
3. The removal of existing dowel bars flush with bearing seats is included in pay item "Removal of Existing Superstructures".
4. All the existing utilities to be removed by others.
5. The concrete removal pay item will include the following items: side walls at outside fascia of PPC deck beams, sidewalks inside the limits of removal and parapets on top of bridge deck.



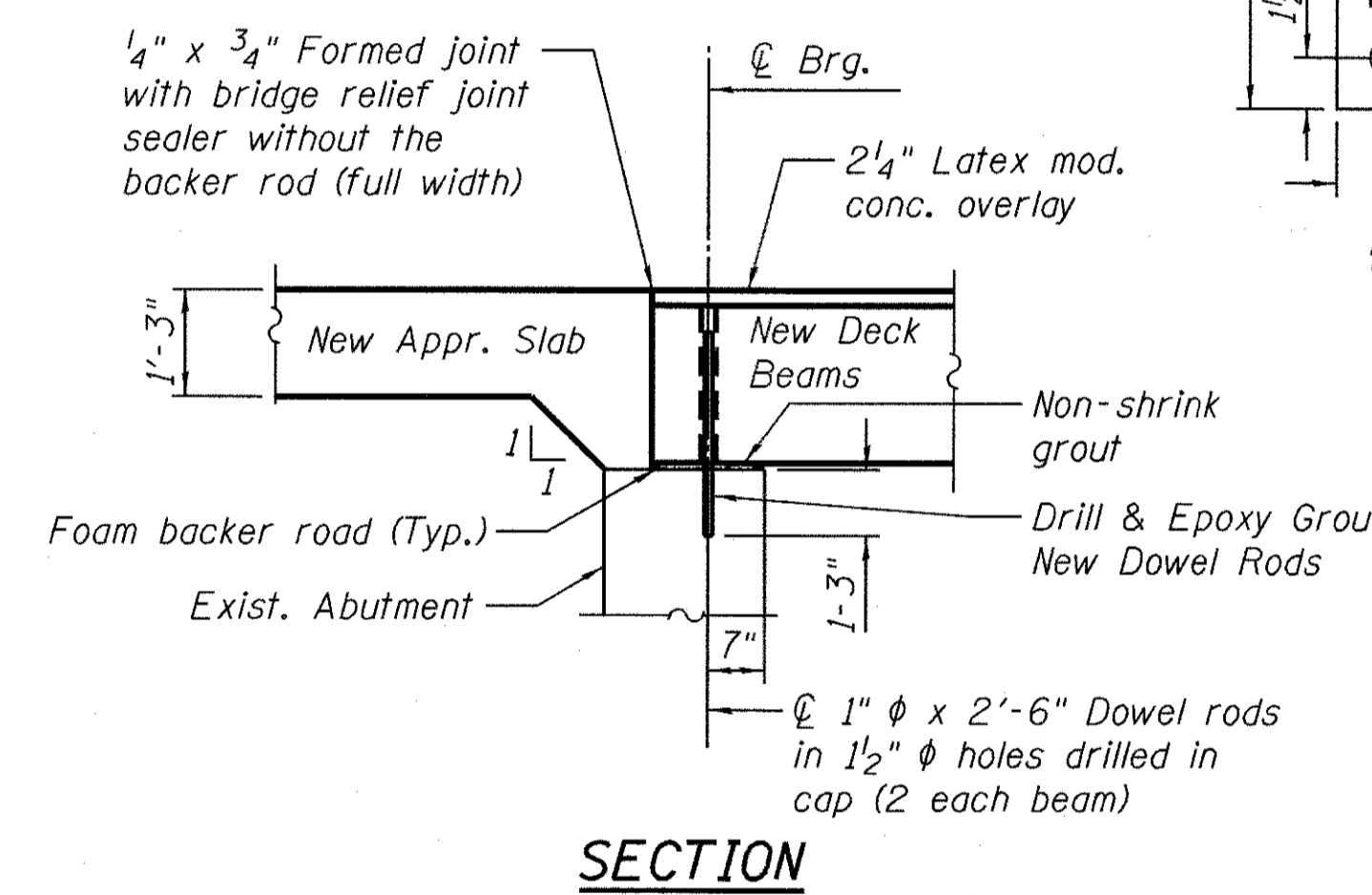
**DETAIL 1 - MASONRY/RAILS
INSTALLATION**



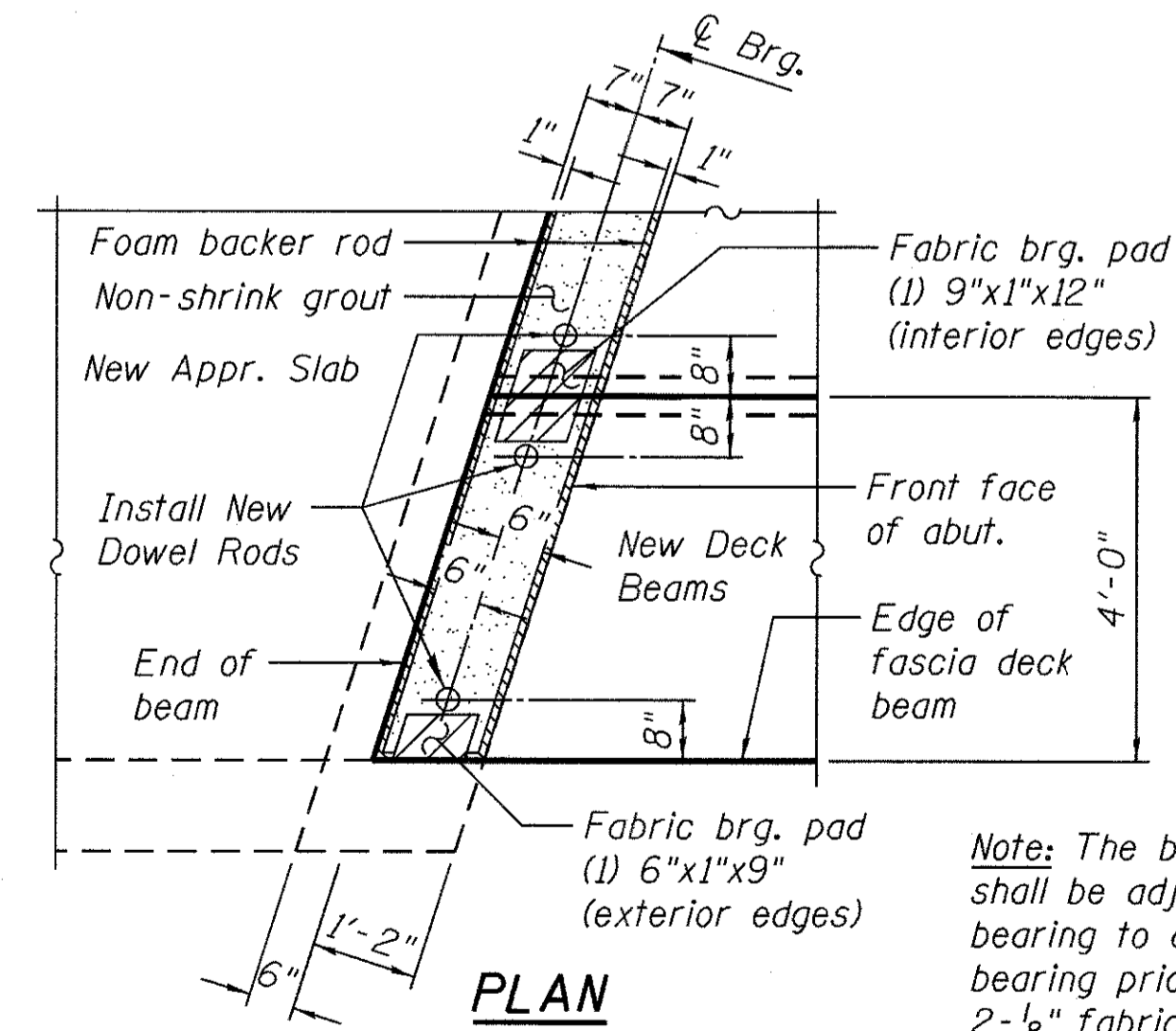
**PRECAST KNEE
WALL AND COLUMN
BASE REINF. DETAIL**



**BRIDGE RAILING
POST ATTACHMENT**

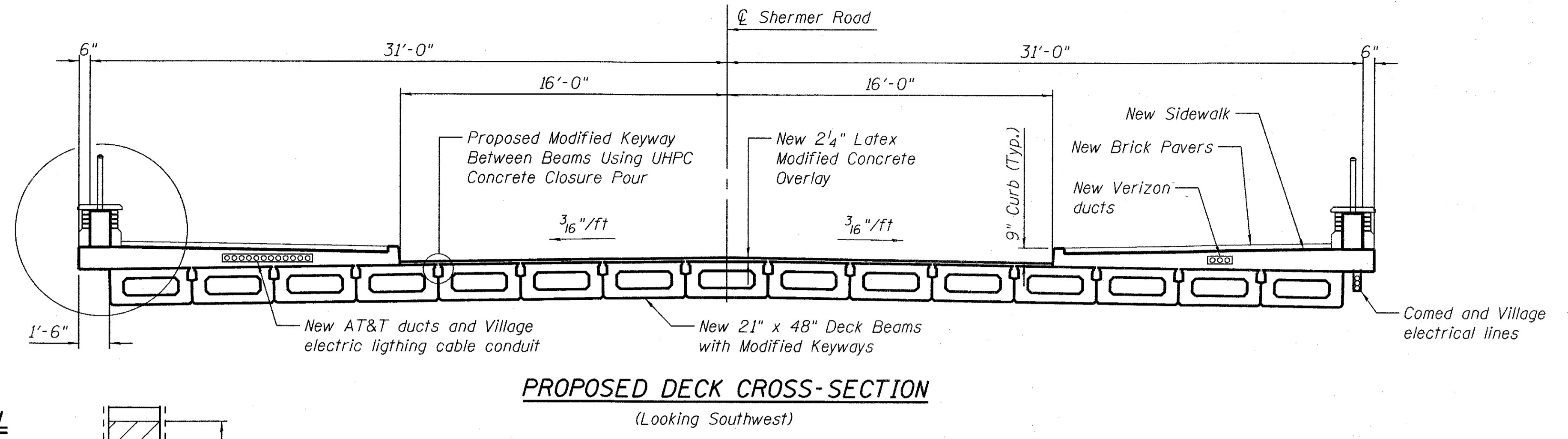


SECTION

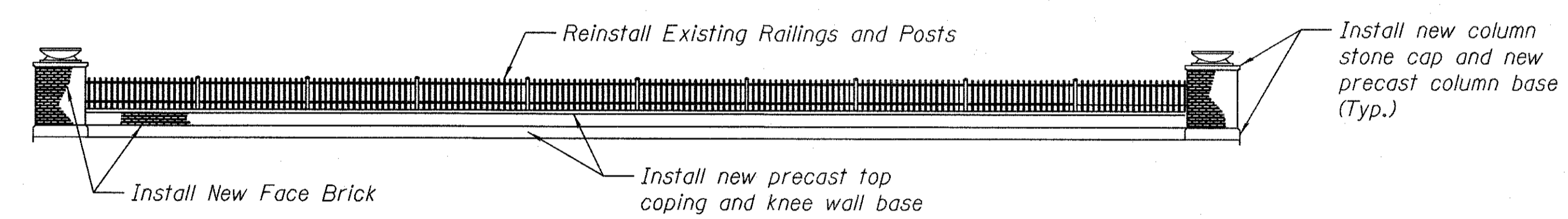


DETAIL 2 - NEW DECK BEAMS

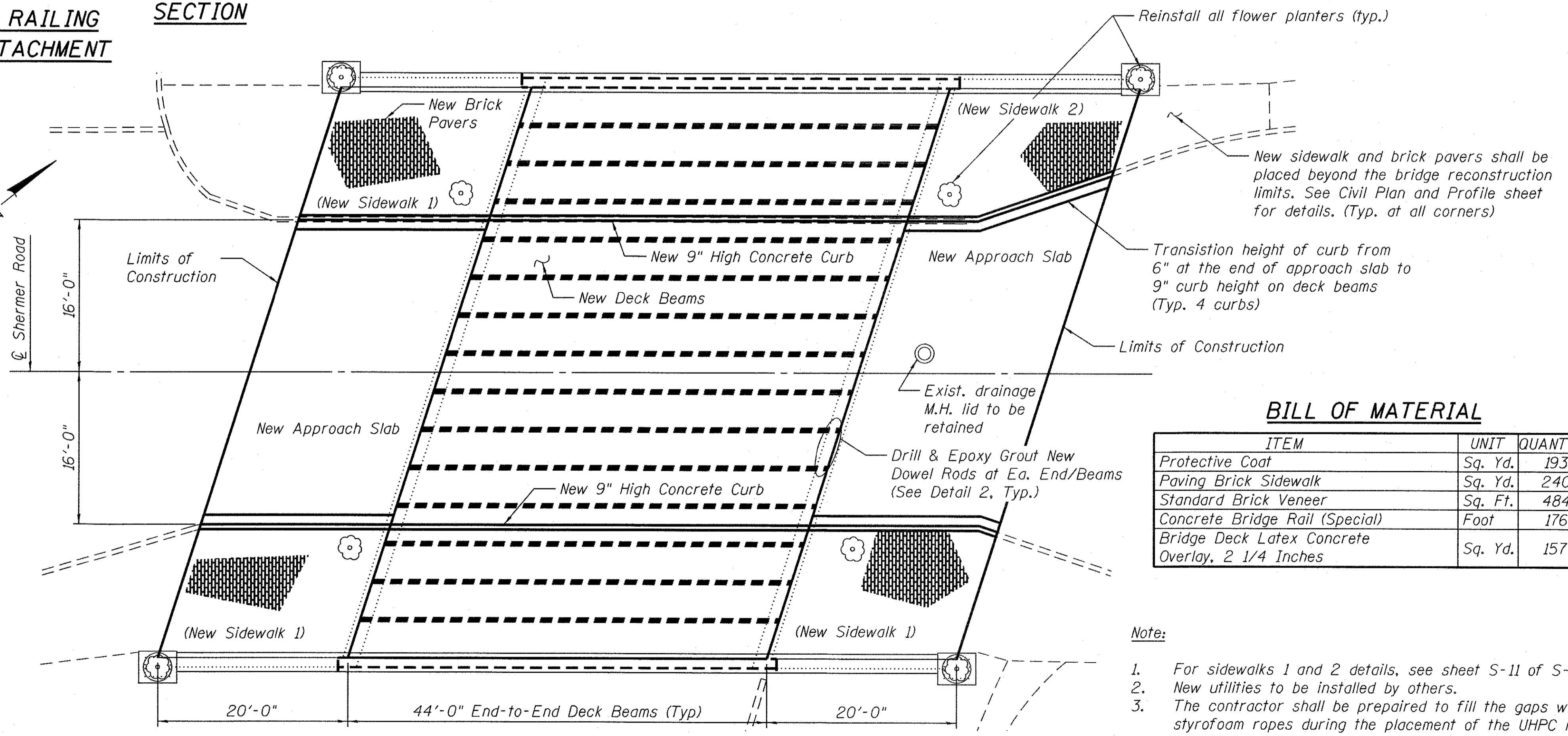
Note: The bearing seat surfaces shall be adjusted by shimming the bearing to assure firm and even bearing prior to placement of grout. 2-1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shown shall be provided for each bearing.



**PROPOSED DECK CROSS-SECTION
(Looking Southwest)**



ELEVATION - RAILING RECONSTRUCTION

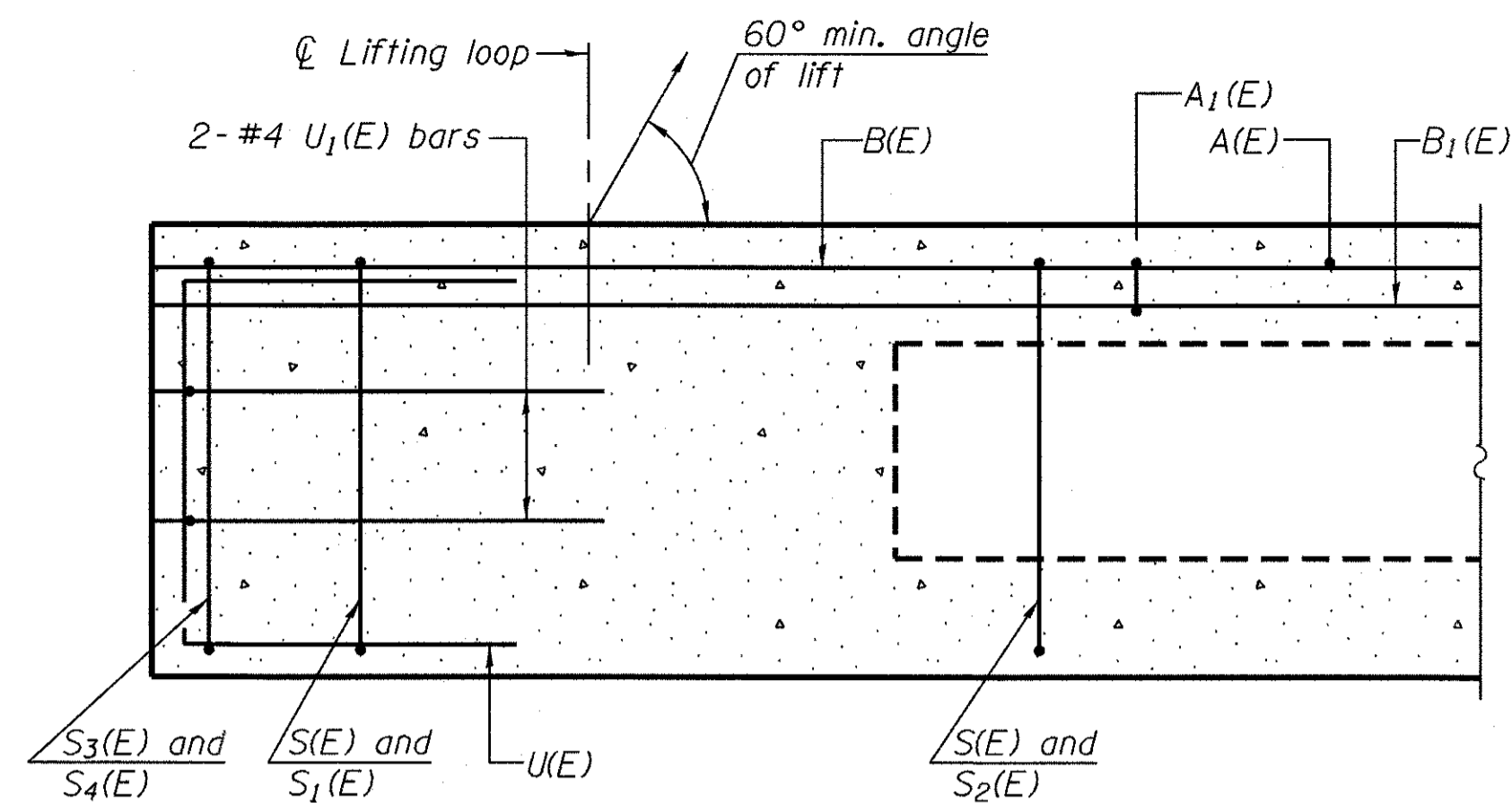


PLAN - SHOWING PROPOSED CONSTRUCTION

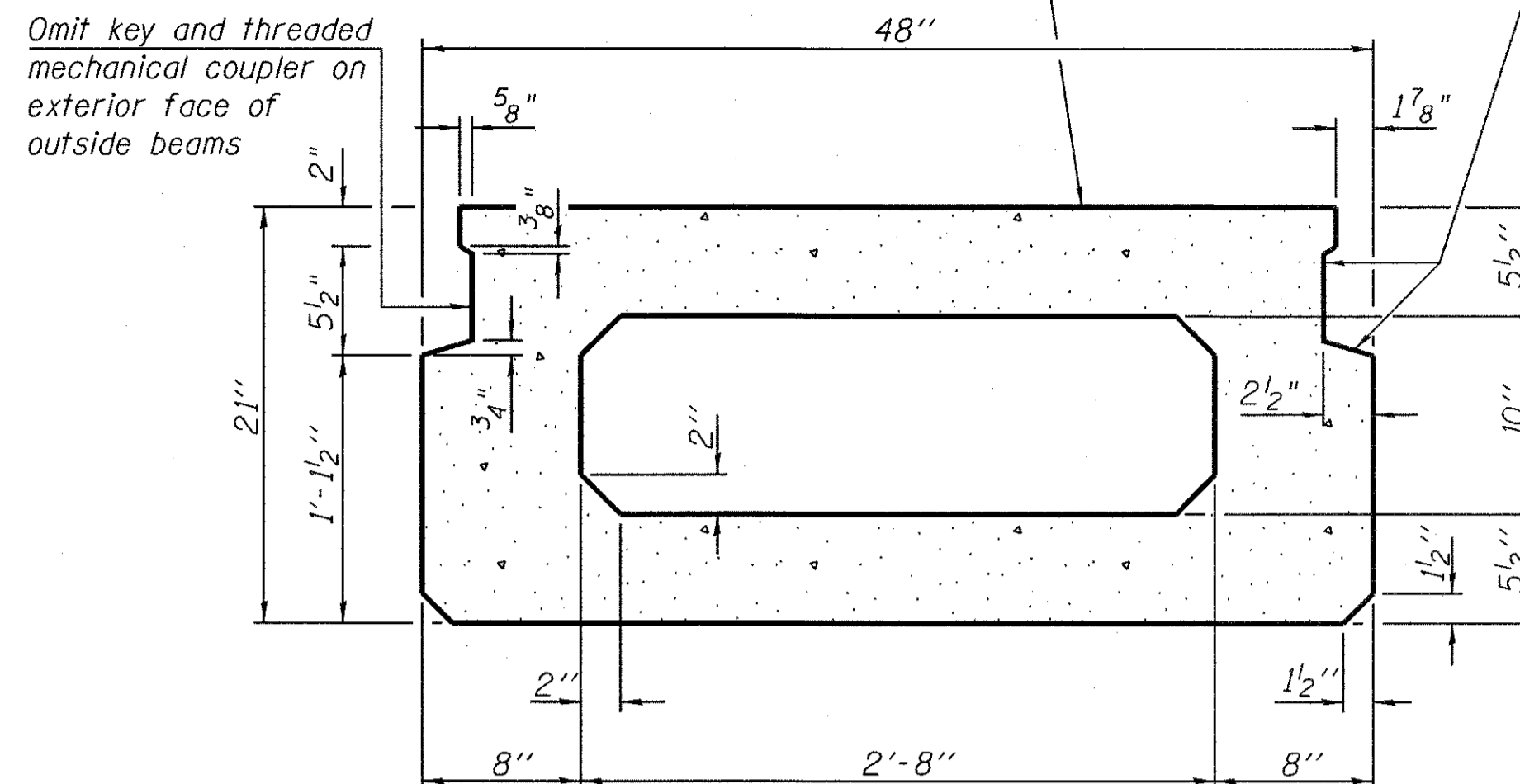
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Protective Coat	Sq. Yd.	193
Paving Brick Sidewalk	Sq. Yd.	240
Standard Brick Veneer	Sq. Ft.	484
Concrete Bridge Rail (Special)	Foot	176
Bridge Deck Latex Concrete Overlay, 2 1/4 Inches	Sq. Yd.	157

- Note:*
- For sidewalks 1 and 2 details, see sheet S-11 of S-16.
 - New utilities to be installed by others.
 - The contractor shall be prepared to fill the gaps with styrofoam ropes during the placement of the UHPC mix.

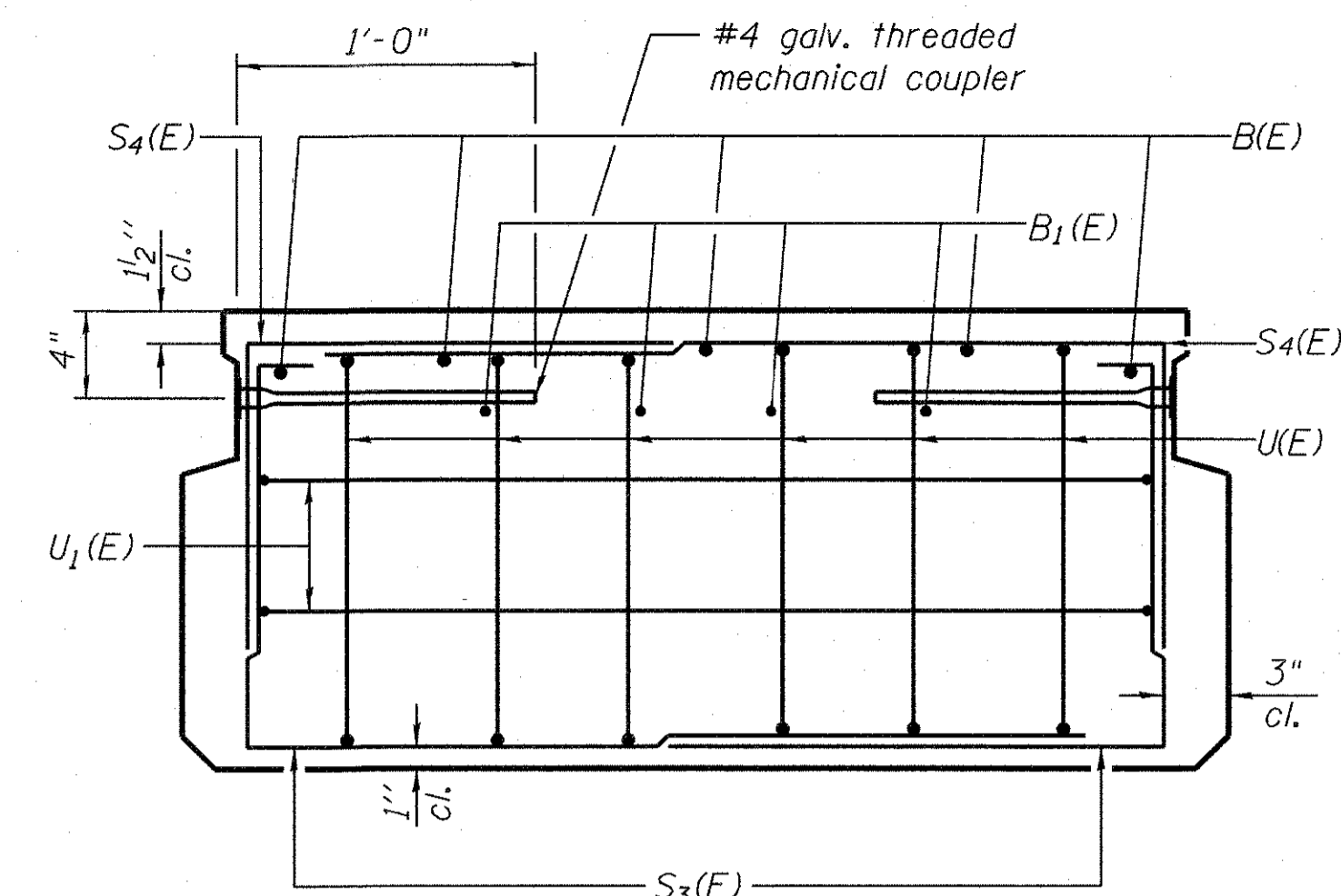


SECTION A-A

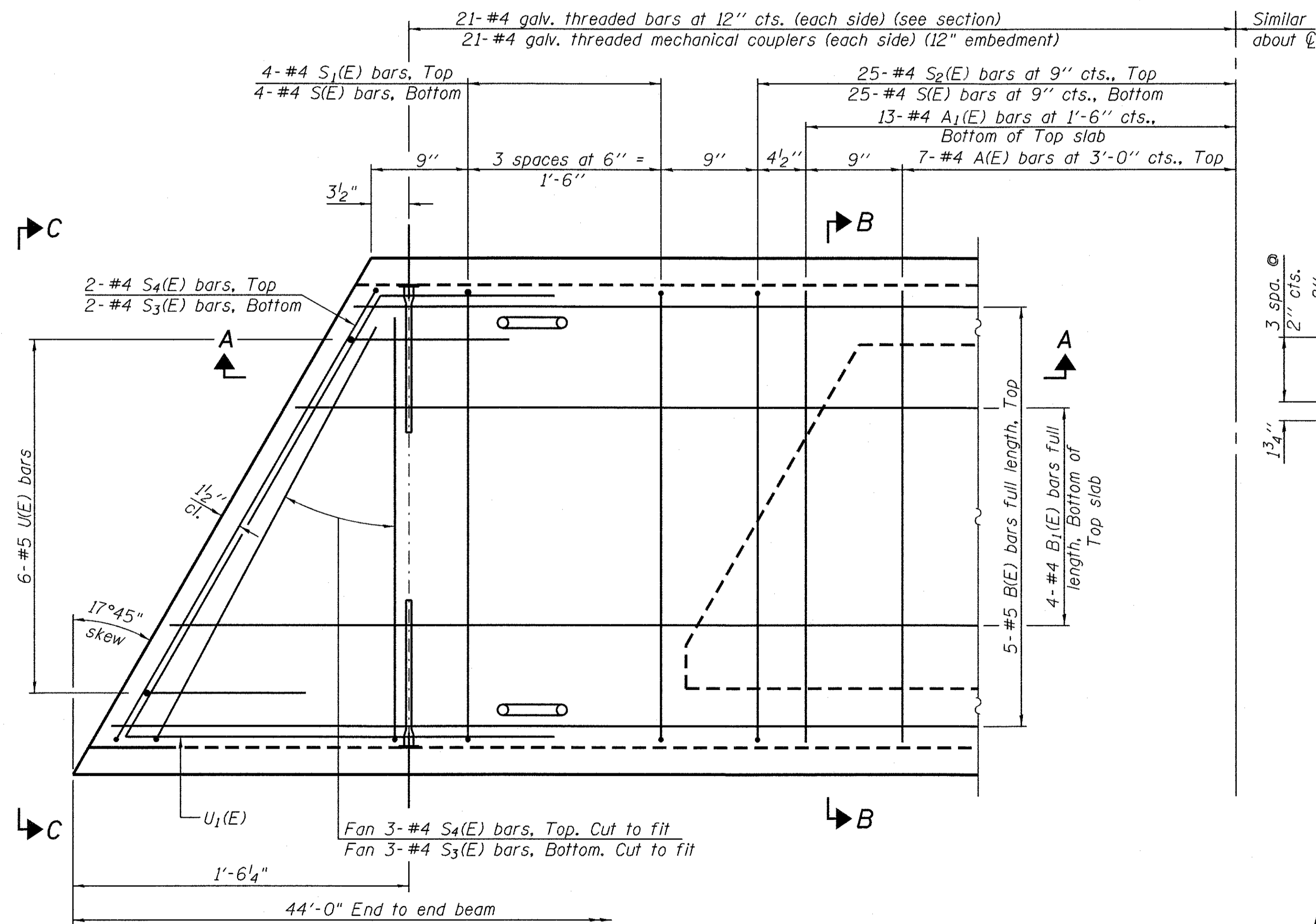


SECTION B-B

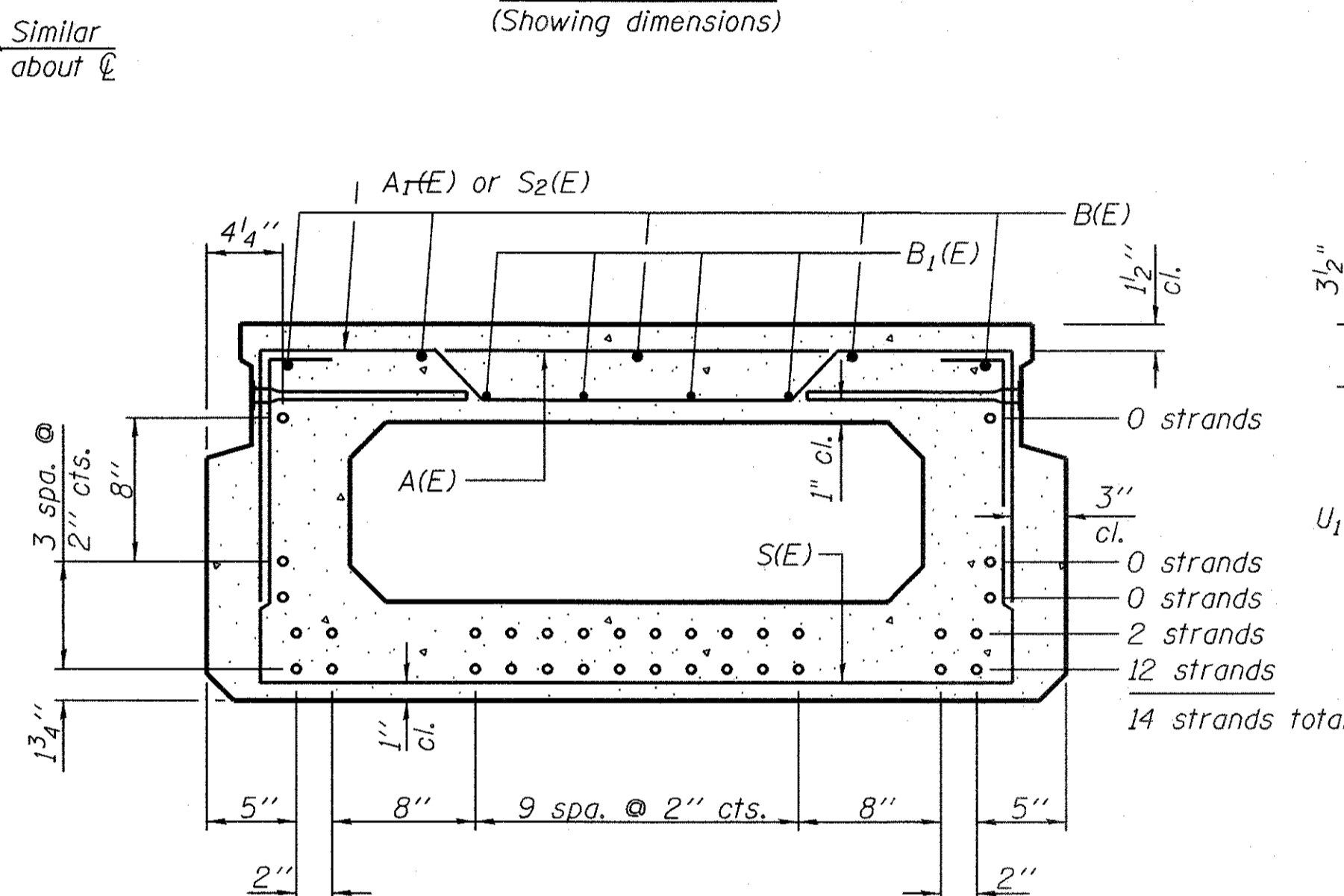
(Showing dimensions)



VIEW C-C



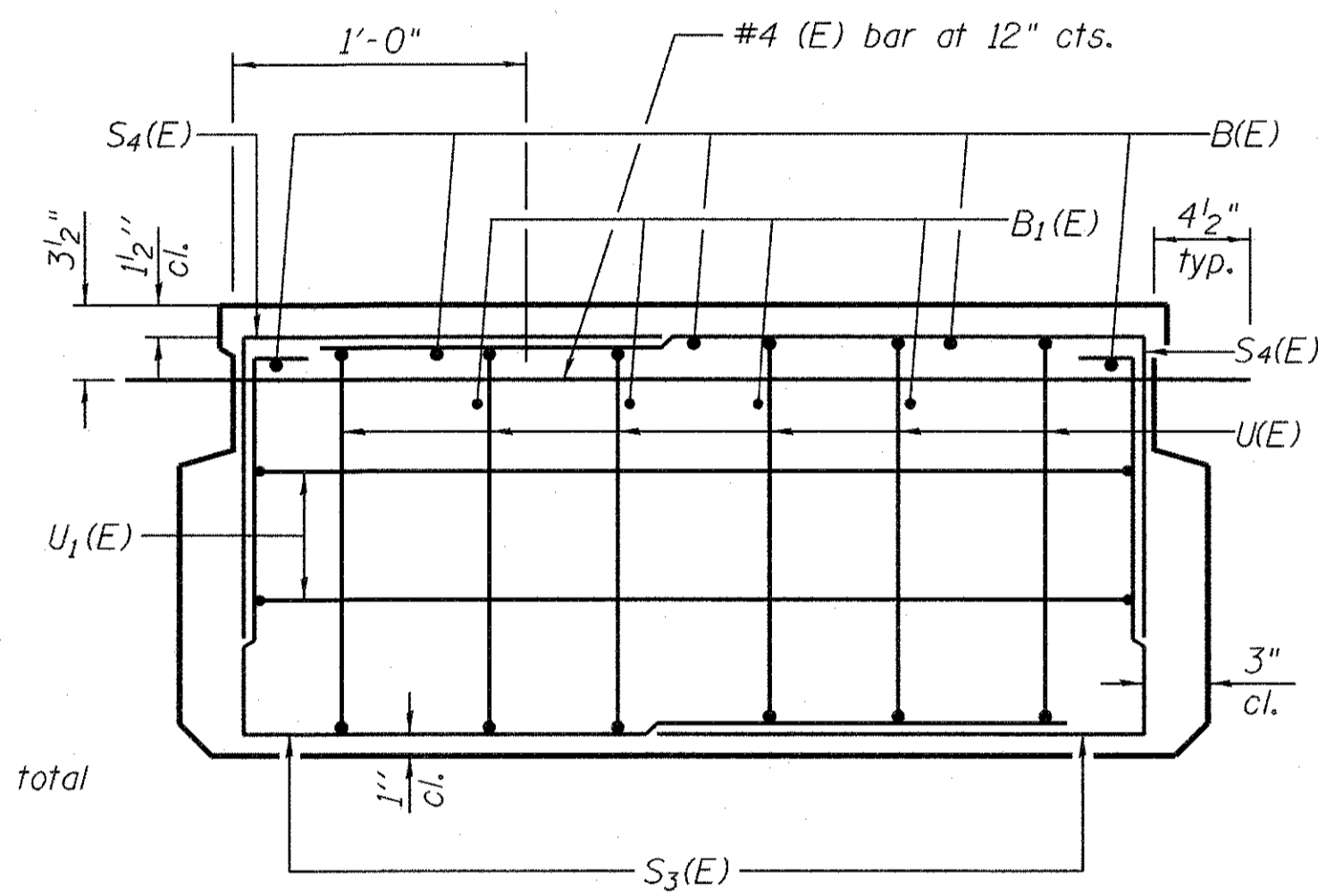
PLAN VIEW



SECTION B-B

(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.



VIEW C-C - OPTIONAL

(The cost for this option is not included in the bill of material)

MINIMUM BAR LAP

#4 bar = 1'-11"
#5 bar = 2'-6"

Notes:

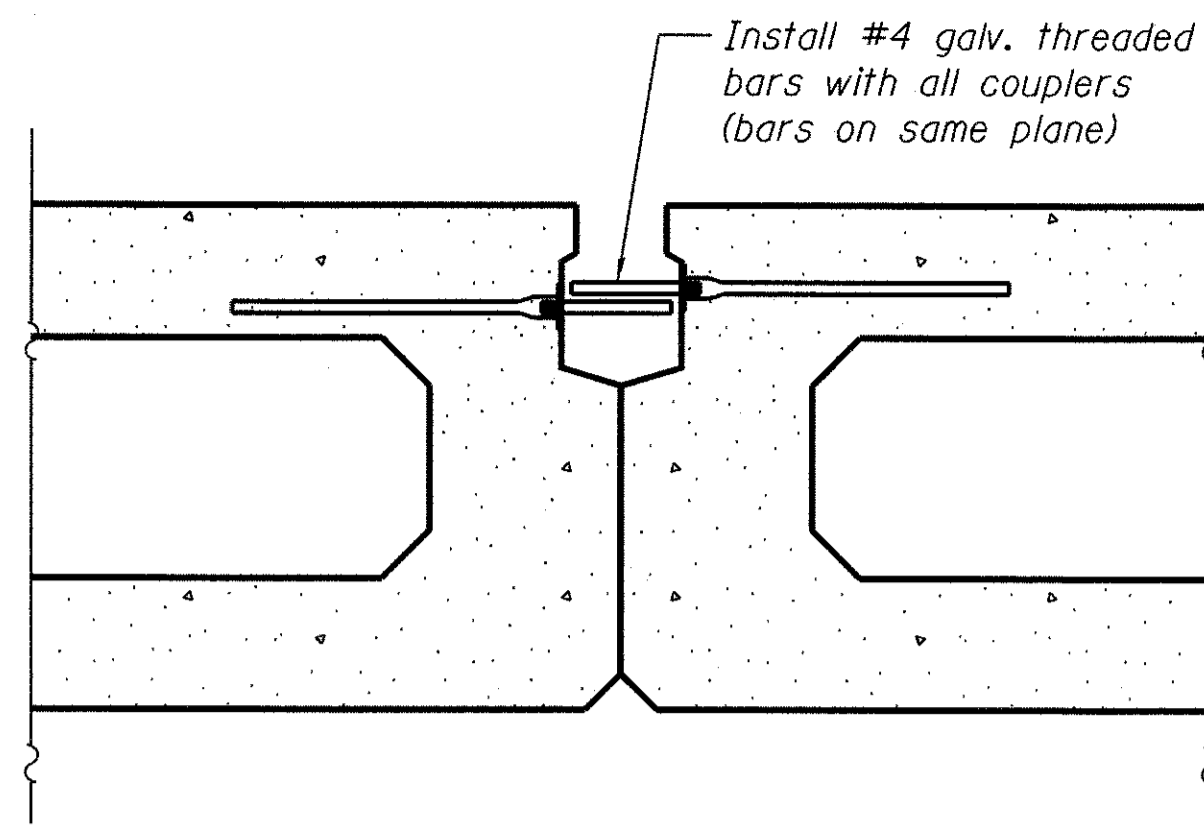
- Standard shear key details has been modified. See section B-B on this sheet for modifications.
- #4 galv. threaded mechanical coupler at 12" centers.
- No couplers are required at the exterior face of the outside beams.

BAR LIST
ONE BEAM ONLY

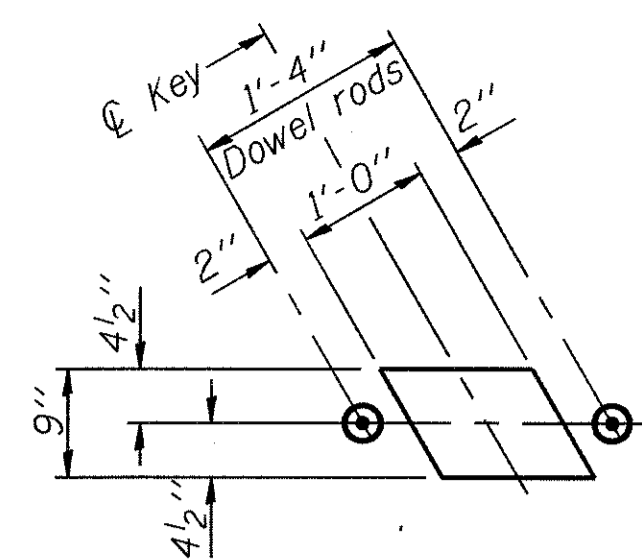
(For information only)

Bar	No.	Size	Length	Shape
A(E)	14	#4	3'-6"	—
A1(E)	26	#4	3'-9"	—
B(E)	5	#5	43'-8"	—
B1(E)	4	#4	43'-8"	—
S(E)	58	#4	7'-4"	U
S1(E)	8	#4	5'-10"	U
S2(E)	50	#4	6'-1"	U
S3(E)	5	#4	5'-7"	U
S4(E)	5	#4	4'-10"	U
U(E)	12	#5	4'-0"	U
U1(E)	4	#4	7'-2"	U

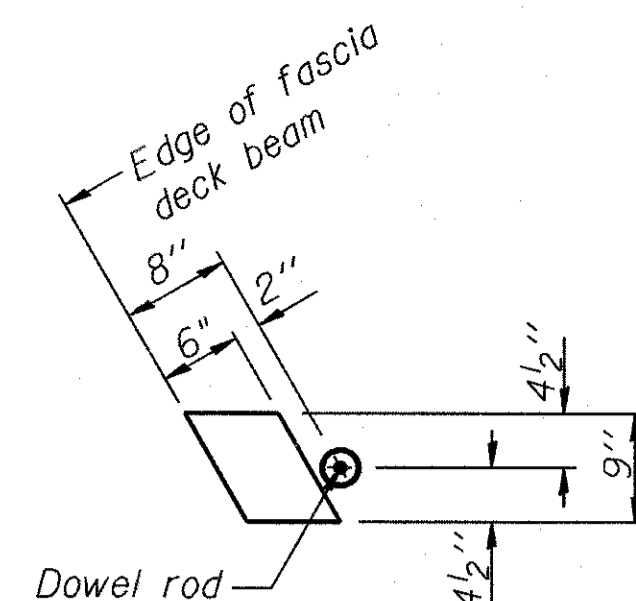
Note: See sheet S-6 of S-16 for additional details and Bill of Material.



SECTION D-D



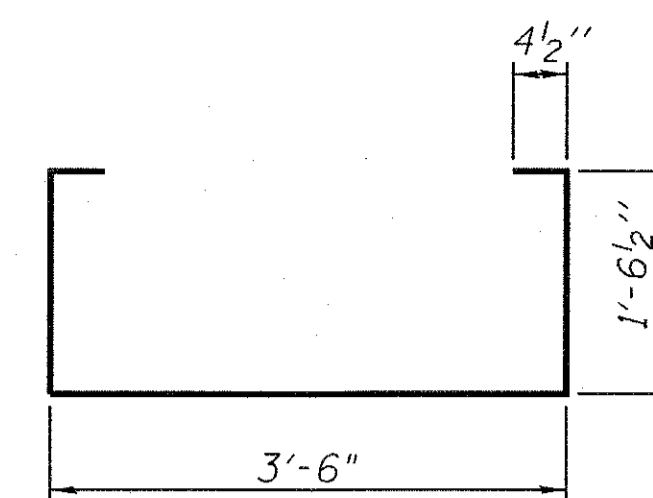
FABRIC BEARING PAD
(Interior)



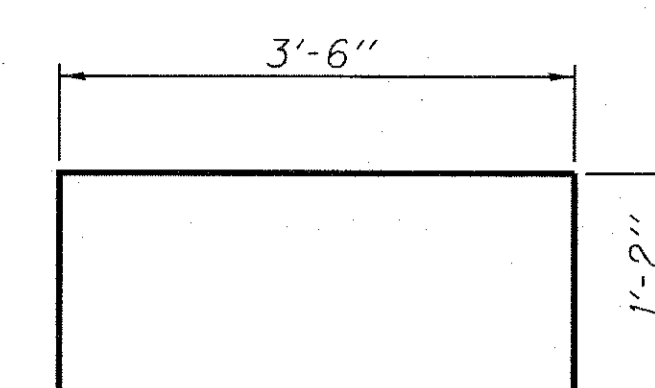
FABRIC BEARING PAD
(Exterior)

ALTERNATE FIXED

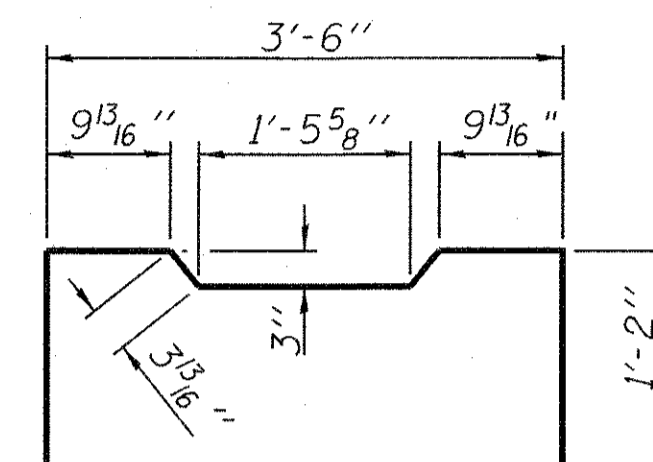
Note:
All bearing pads shall be 1" thick.



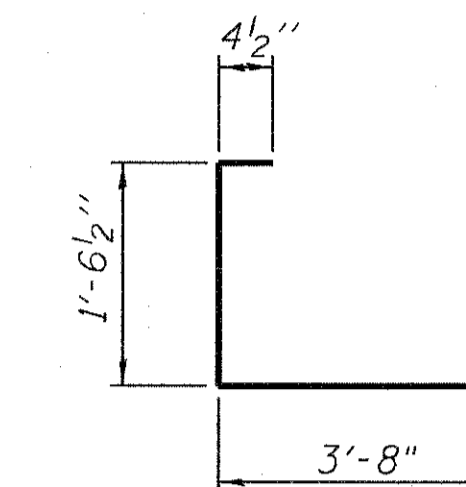
BAR S(E)



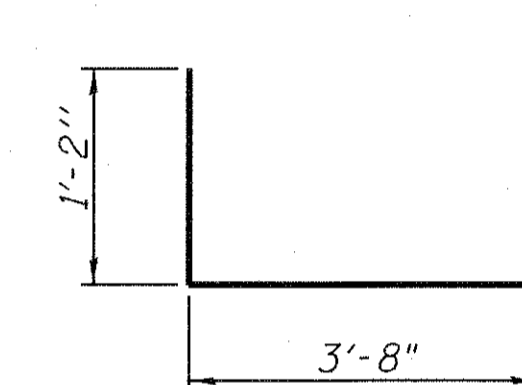
BAR S1(E)



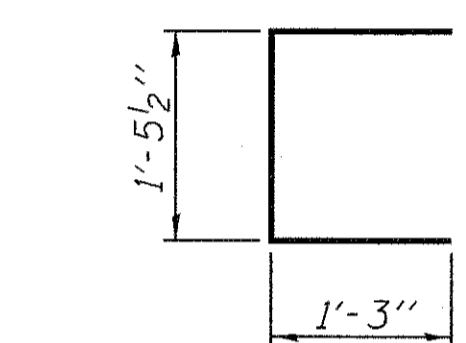
BAR S2(E)



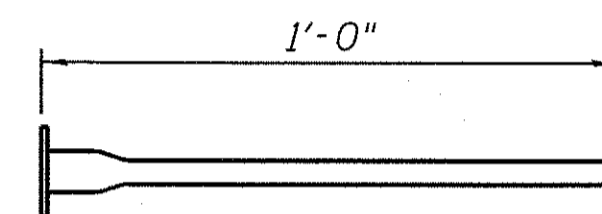
BAR S3(E)



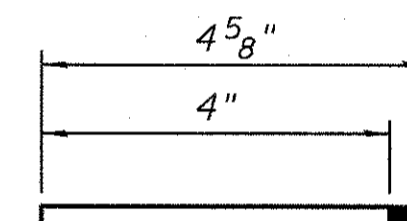
BAR S4(E)



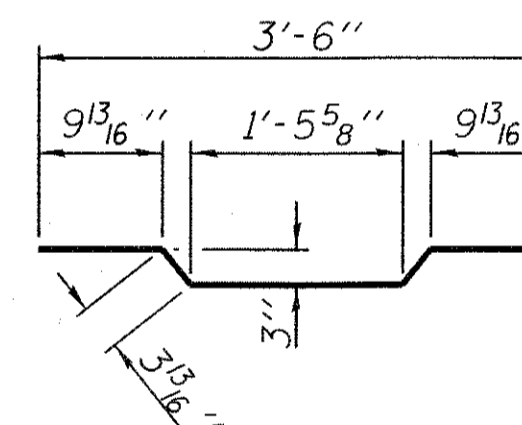
BAR UE



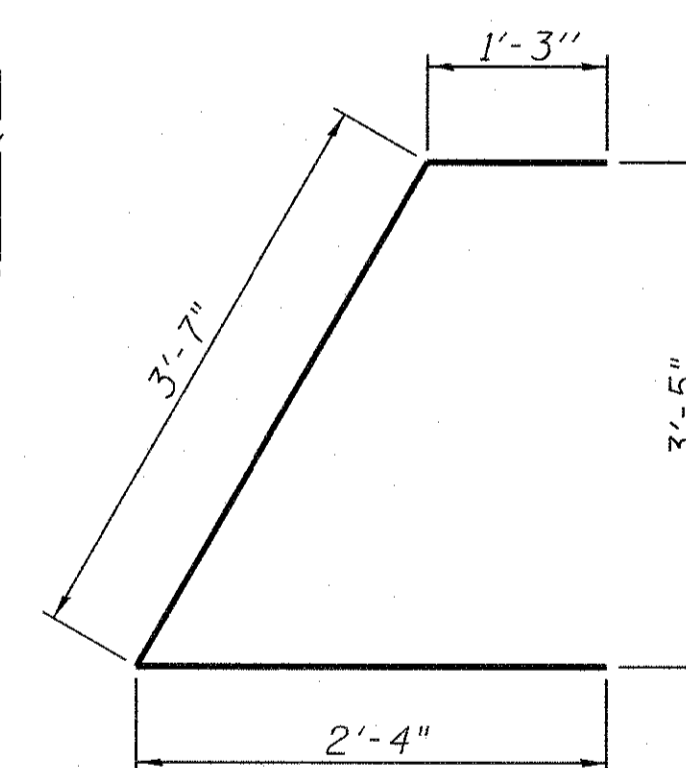
#4 GALV. THREADED MECHANICAL COUPLER DETAIL



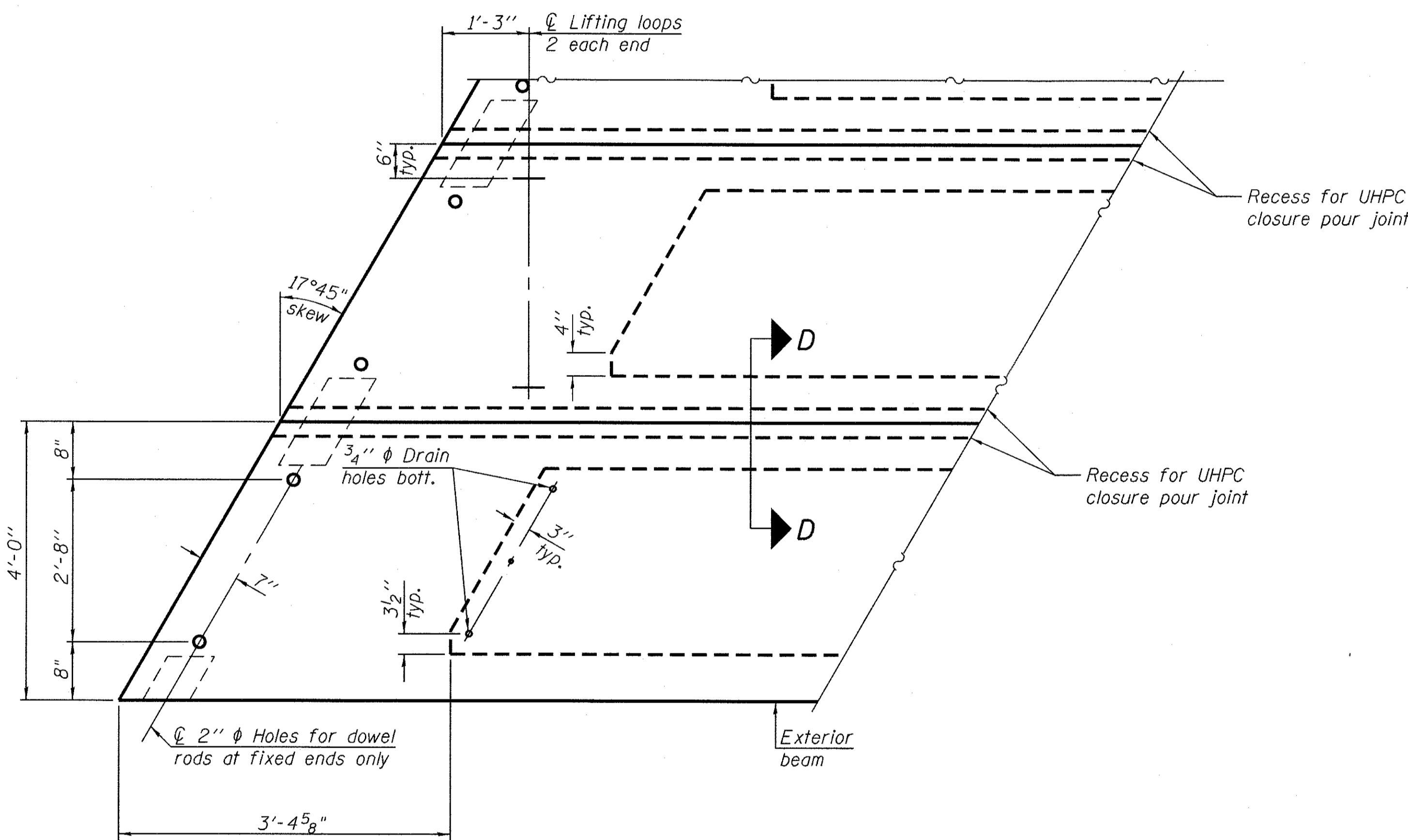
#4 GALV. THREADED BAR DETAIL



BAR A1(E)



BAR U1(E)

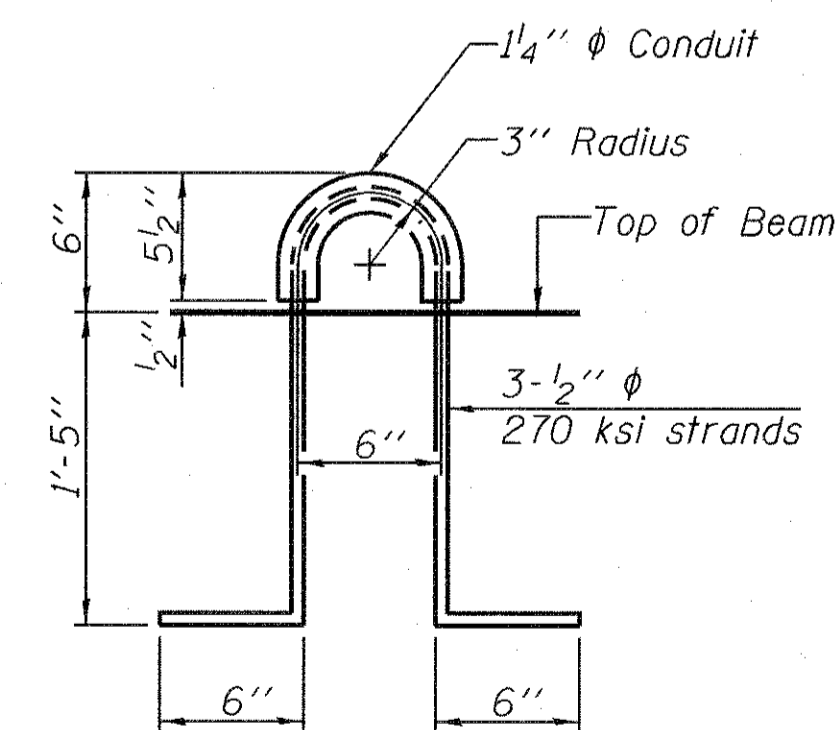


PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" ϕ 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 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 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.

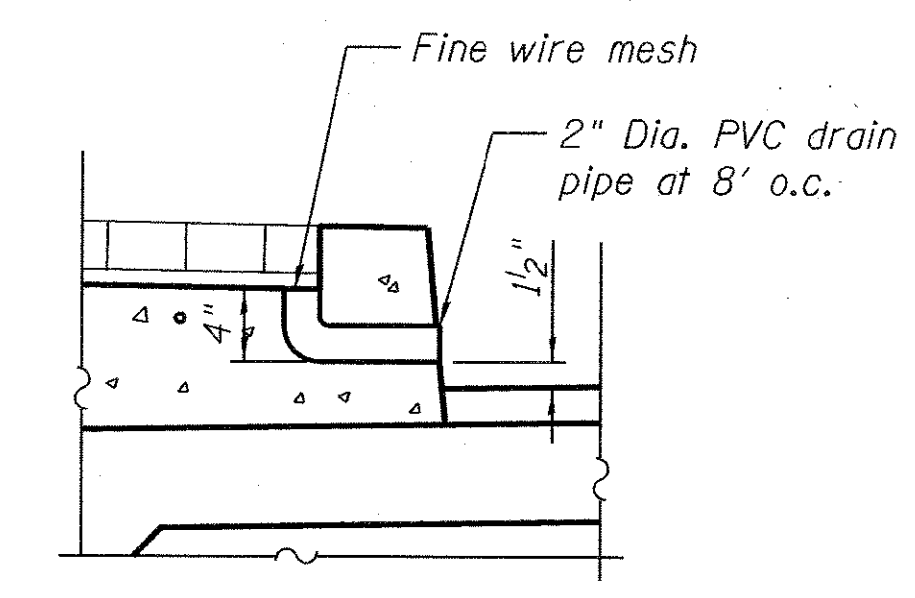
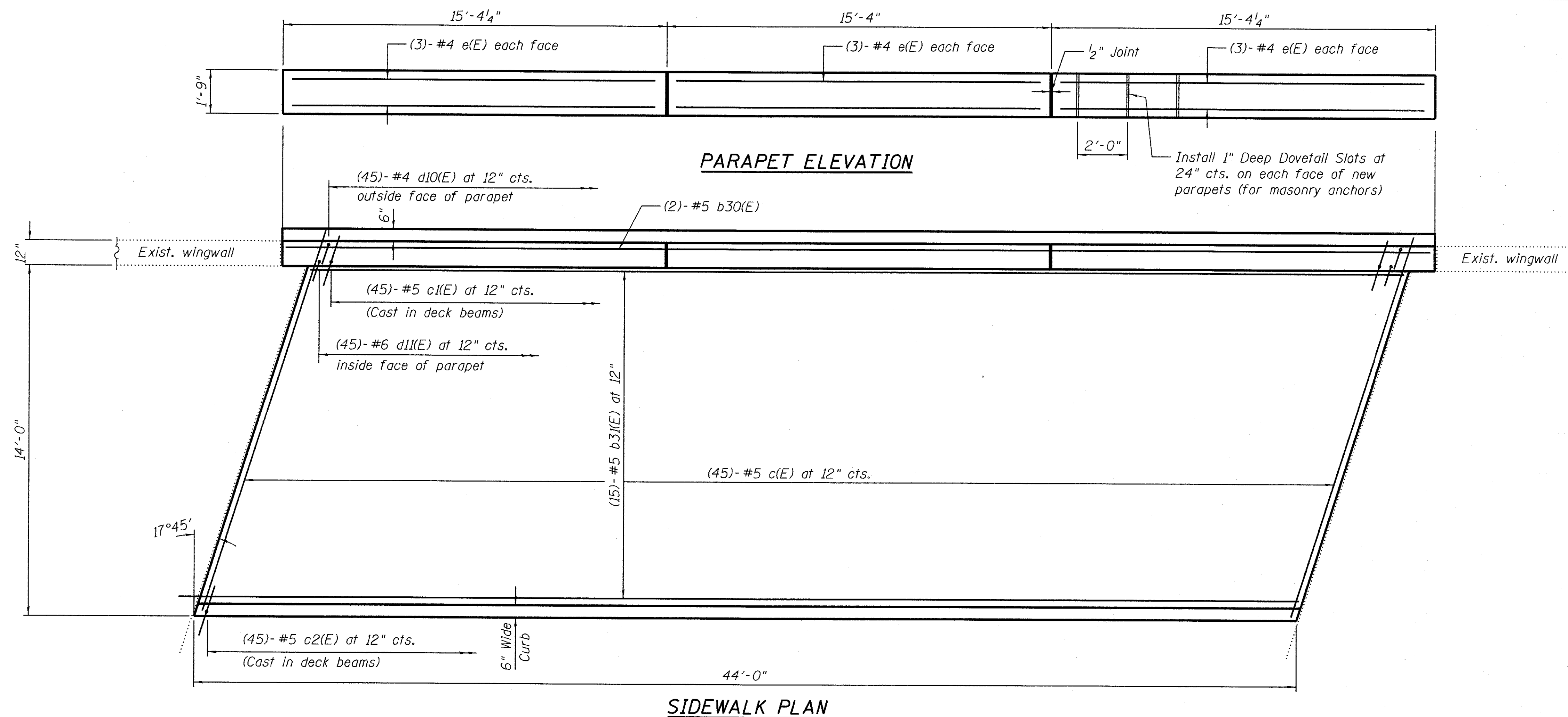


LIFTING LOOP DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	2,640
Mechanical Splicers	Each	1,176
Ultra High Performance Concrete (UHPC) Joints	Cu. ft.	161

Note: The cost of #4 threaded bars shall be included with the cost of #4 threaded mechanical couplers shown in section D-D.



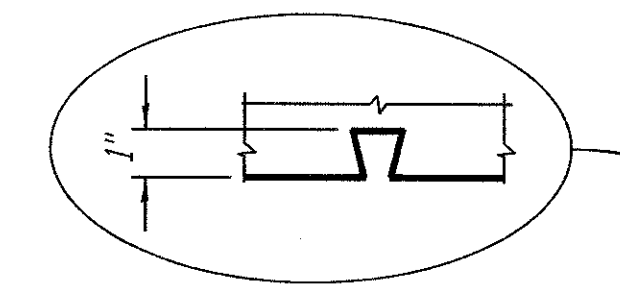
DETAIL 1

TWO PARAPET WALL AND TWO SIDEWALKS
BILL OF MATERIAL

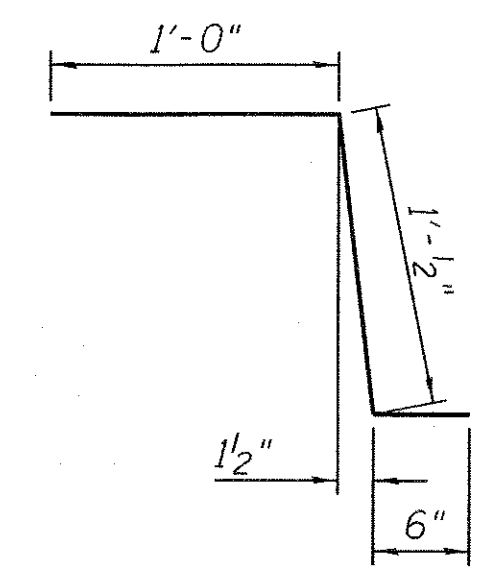
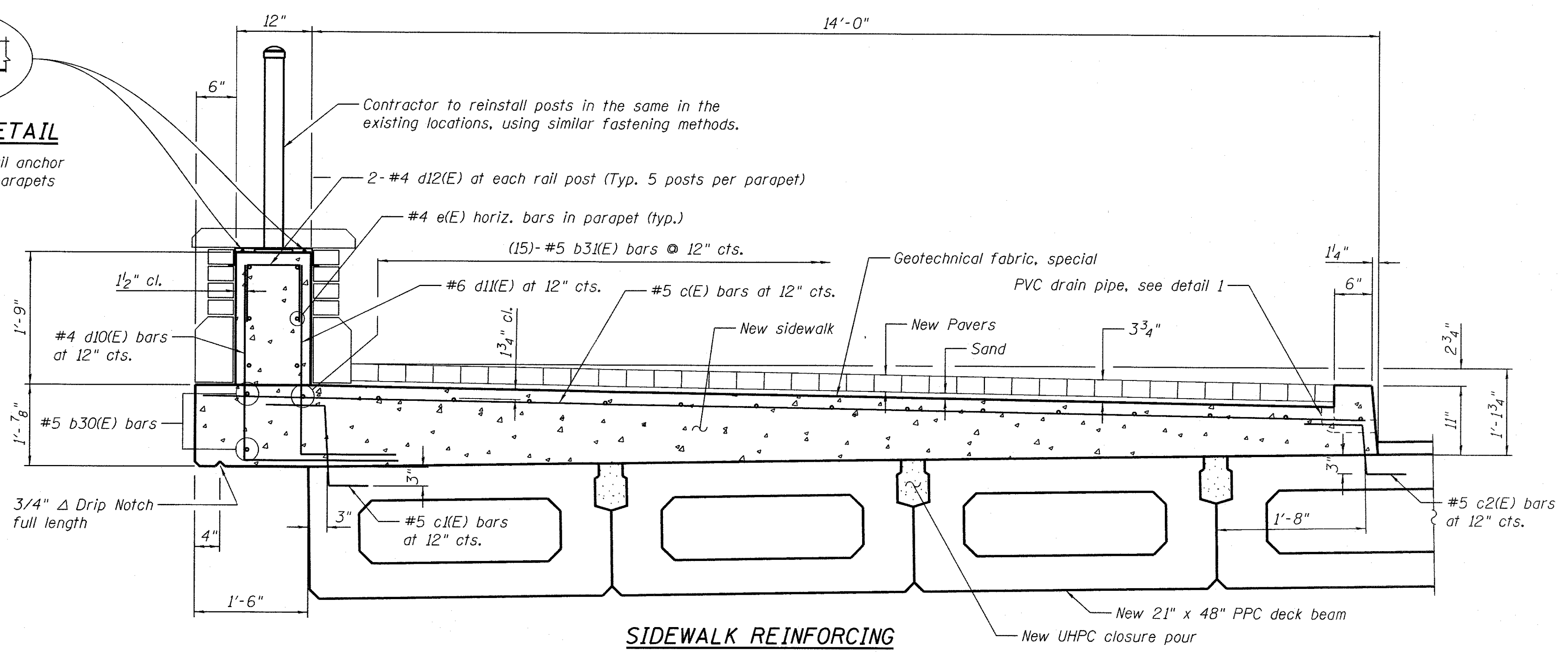
Bar	No.	Size	Length	Shape
b ₃₀ (E)	4	#5	45'-8 1/2"	—
b ₃₁ (E)	30	#5	43'-8"	—
c(E)	90	#5	15'-11"	—
c ₁ (E)	90	#5	2'-6 1/2"	⌋
c ₂ (E)	90	#5	2'-1 3/4"	⌋
d ₁₀ (E)	90	#4	4'-6"	⌋
d ₁₁ (E)	90	#6	3'-6"	⌋
d ₁₂ (E)	20	#4	2'-2"	⌋
e(E)	36	#4	15'-0"	—
Concrete Superstructure			Cu. Yd.	48.4
Reinforcement Bars, Epoxy Coated			Pound	4,630

Note:

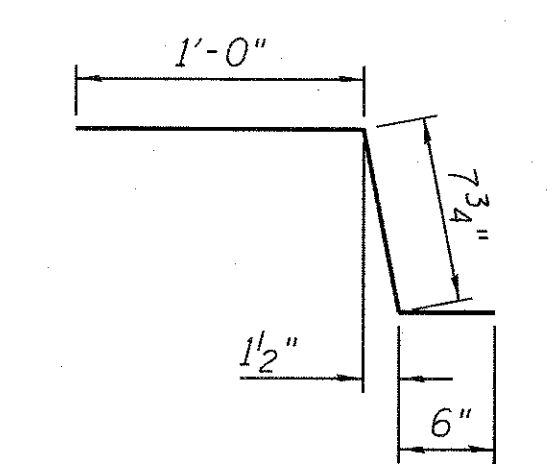
1. Installation of 2" dia. drain pipe is included in the cost of concrete structure.
2. All brick pavers shall be replaced in-kind. The contractor shall coordinate with the Engineer and brick pavers supplier for color and type of brick to be consistent with the existing color and types of brick pavers.



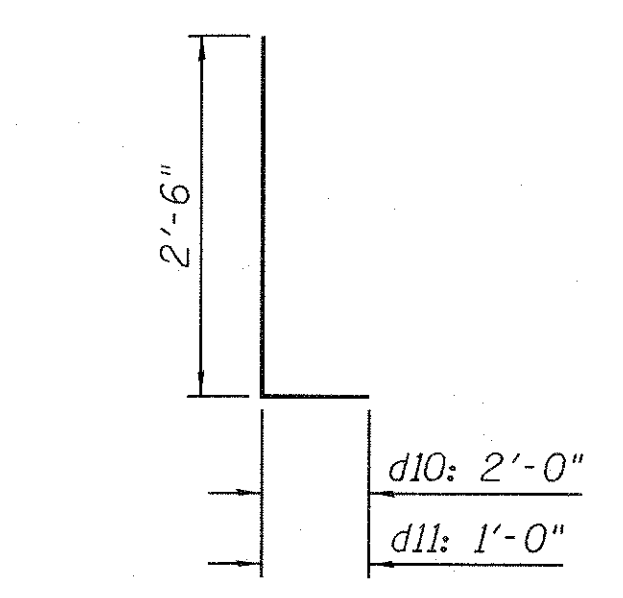
DOVETAIL SLOT DETAIL
Use standard masonry dovetail anchor slots on each face of new parapets



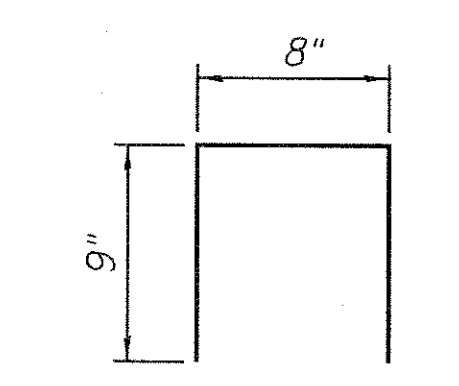
BAR c1(E)



BAR c2(E)

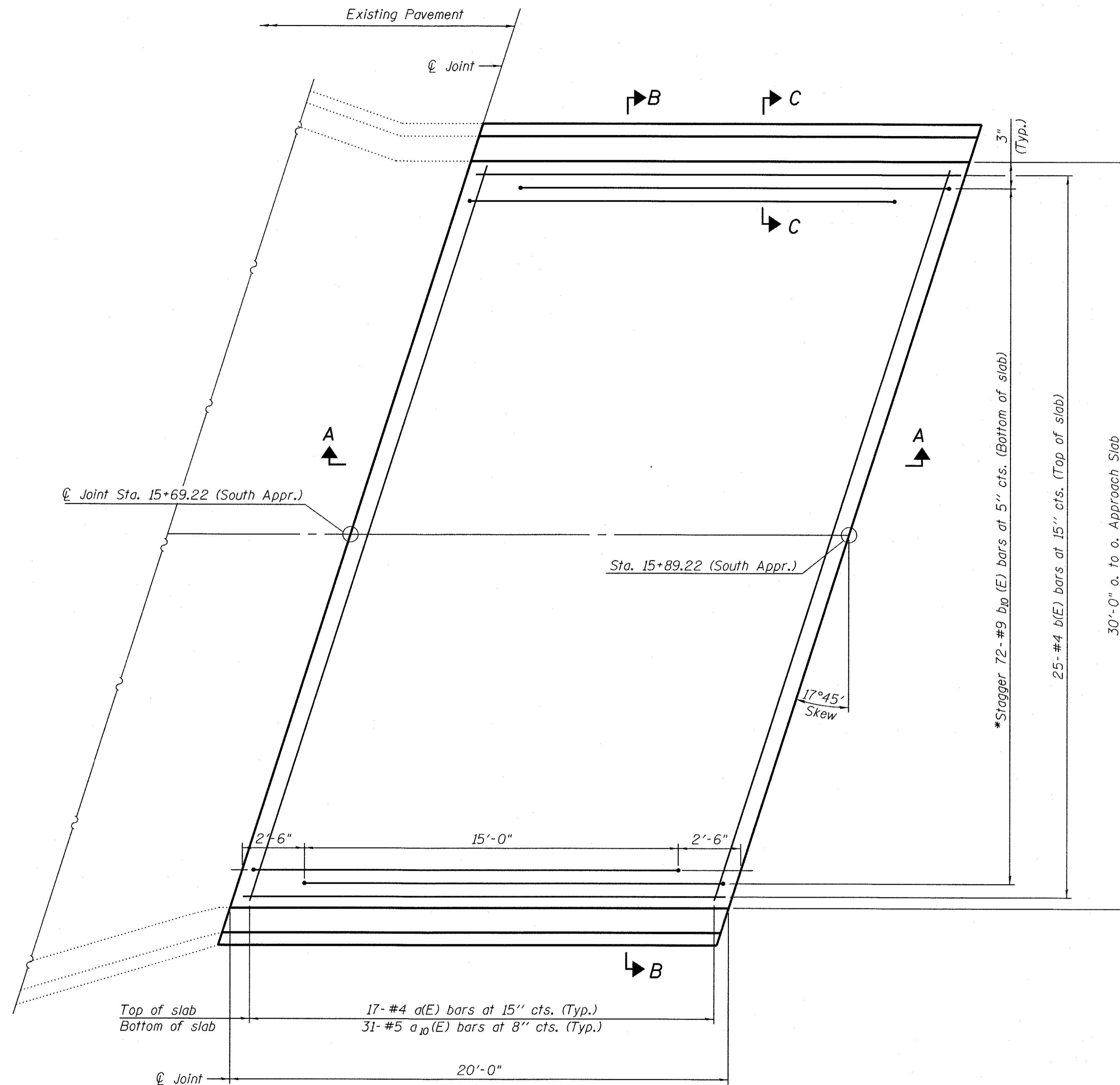


BAR d10 and d11(E)



BAR d12(E)

Notes:
 See sheet S-10 of S-16 for Sections A-A, B-B and C-C.
 d(E) and a₁₀(E) bar spacings measured along \hat{C} Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2' for installation purposes.



PLAN

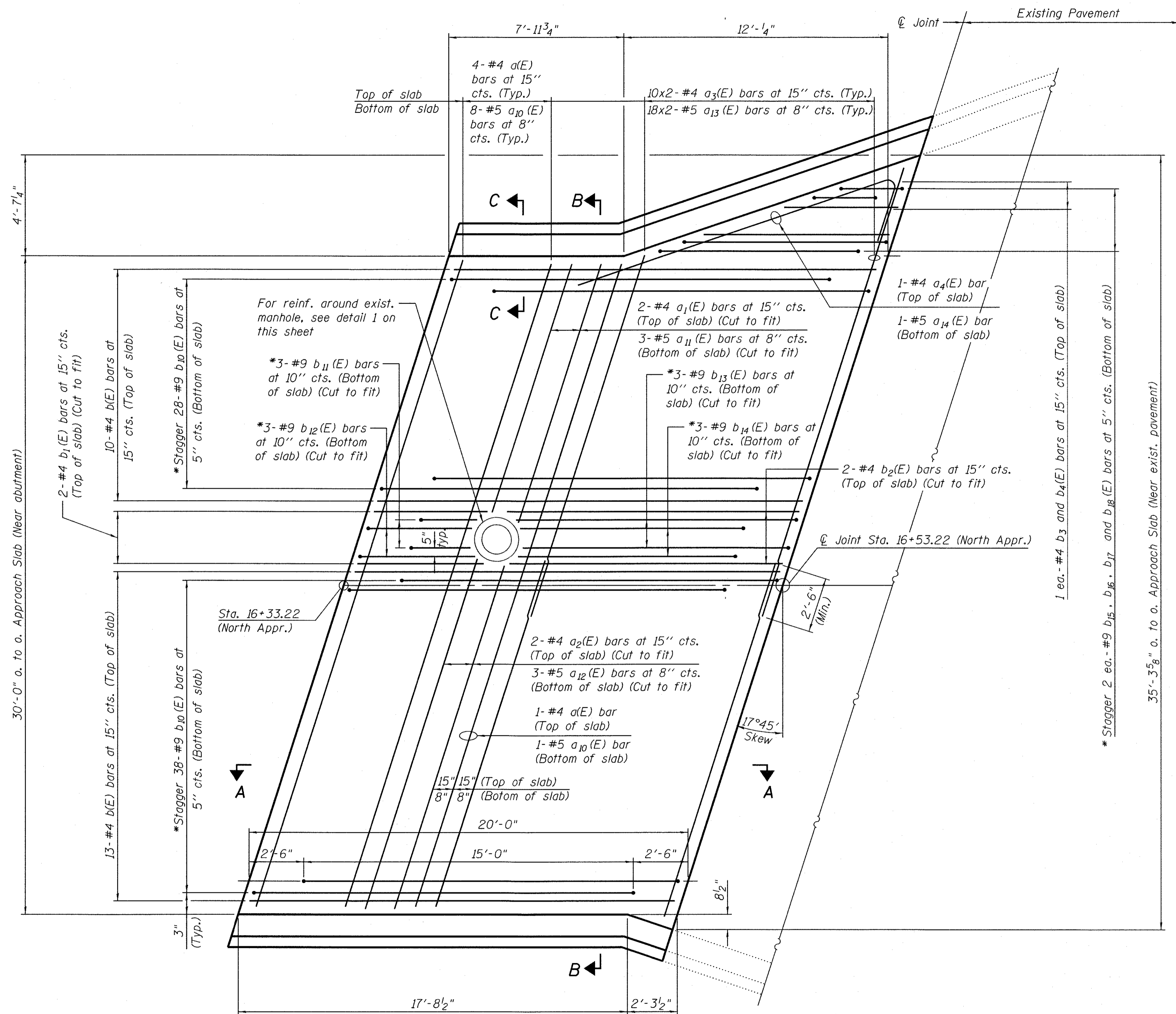
* Tilt #9 b₁₀(E) bars as required to maintain clearance.

USER NAME =	DESIGNED - KJH	REVISED -
PLOT SCALE =	CHECKED - AJN	REVISED -
PLOT DATE = 5/24/17	DRAWN - JL	REVISED -
	CHECKED - AJN	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	21
				CONTRACT NO. 61D98
ILLINOIS FED. AID PROJECT				

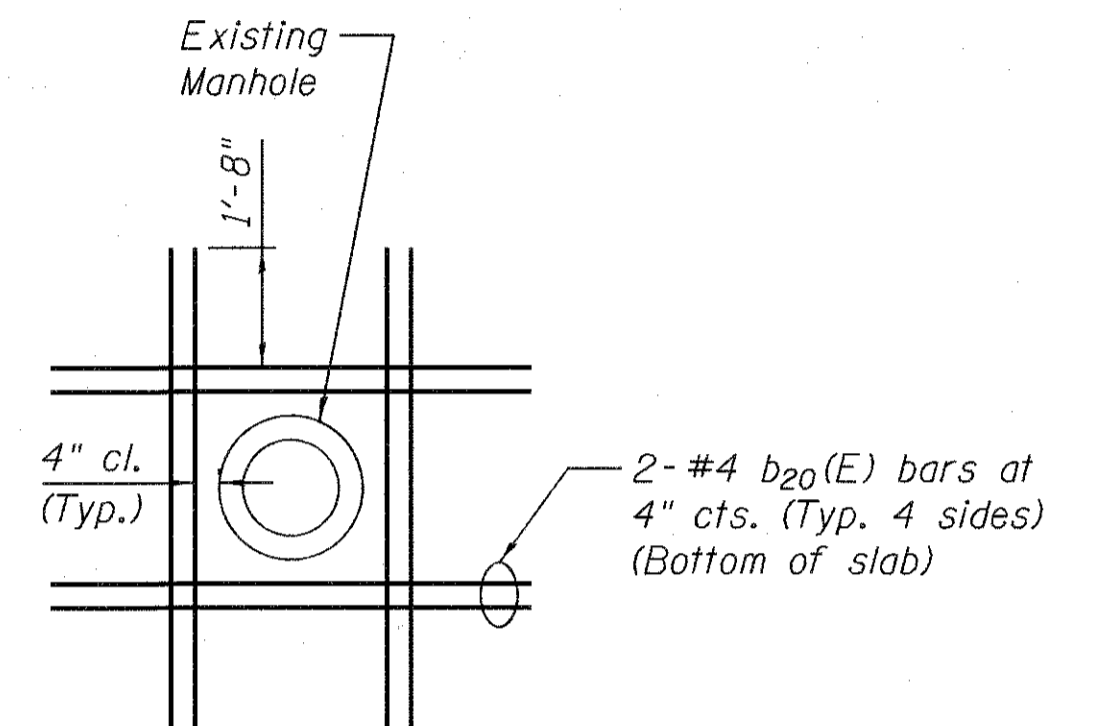
Notes:

See sheet S-10 of S-16 for Sections A-A, B-B and C-C.
 $a_1(E)$ to $a_4(E)$ and $a_{10}(E)$ to $a_{14}(E)$ bar spacings measured along ϕ Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be $1\frac{1}{2}$ " for installation purposes.
 Any bars cut in field must be epoxy coated at cut ends.



PLAN

*Tilt #9 b_{10} to $b_{18}(E)$ bars as required to maintain clearance.

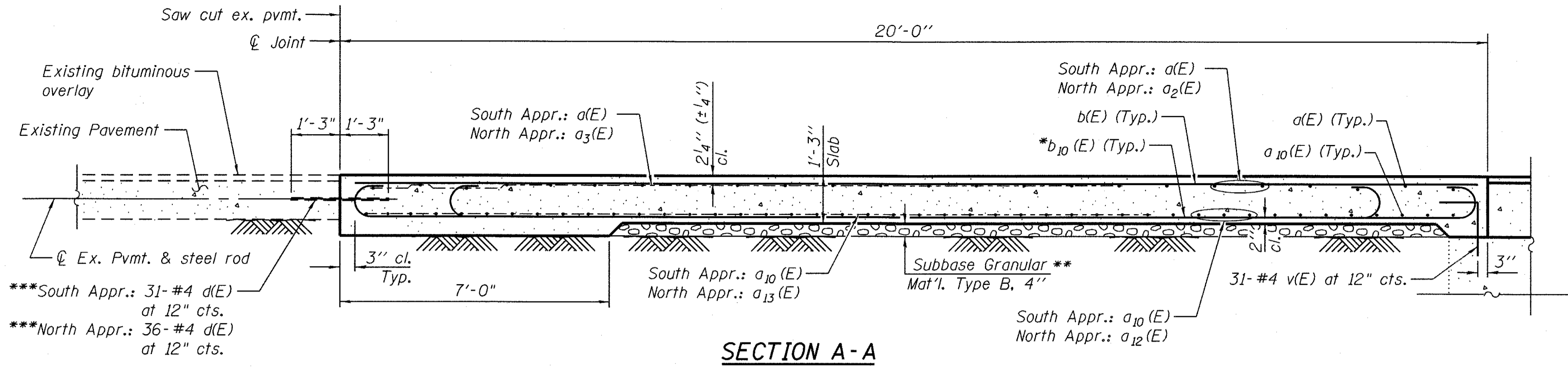


**DETAIL 1 - Reinforcement
Around Existing Manhole**

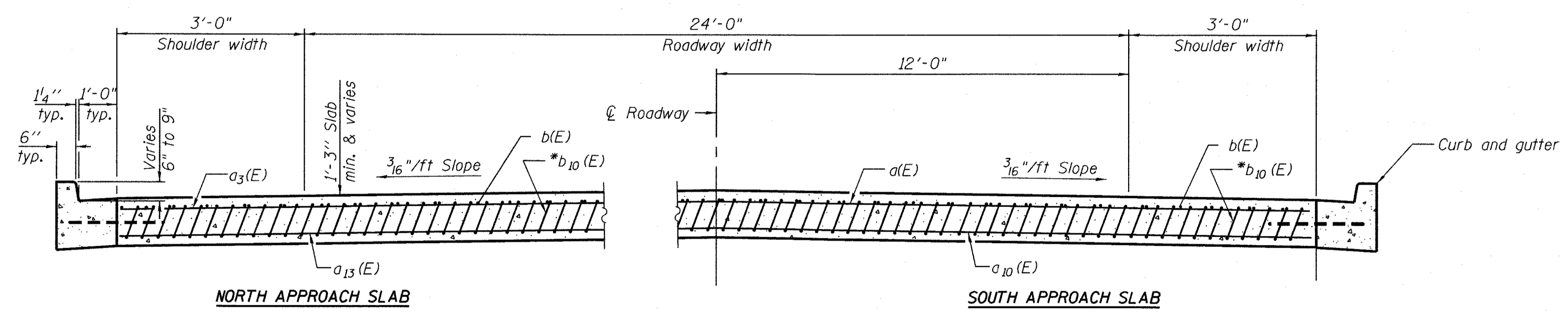
Note:

1. Any bars cut must be epoxy coated at cut ends.

Notes:
 Approach slab concrete shall be paid for as Concrete Superstructure (Approach Slab).
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 The cost of subbase granular material is included with the placement of approaches.
 The cost of curb and gutter is included under Concrete Structures pay item.
 Drill and Epoxy Grout v(E) bars in existing abutment.



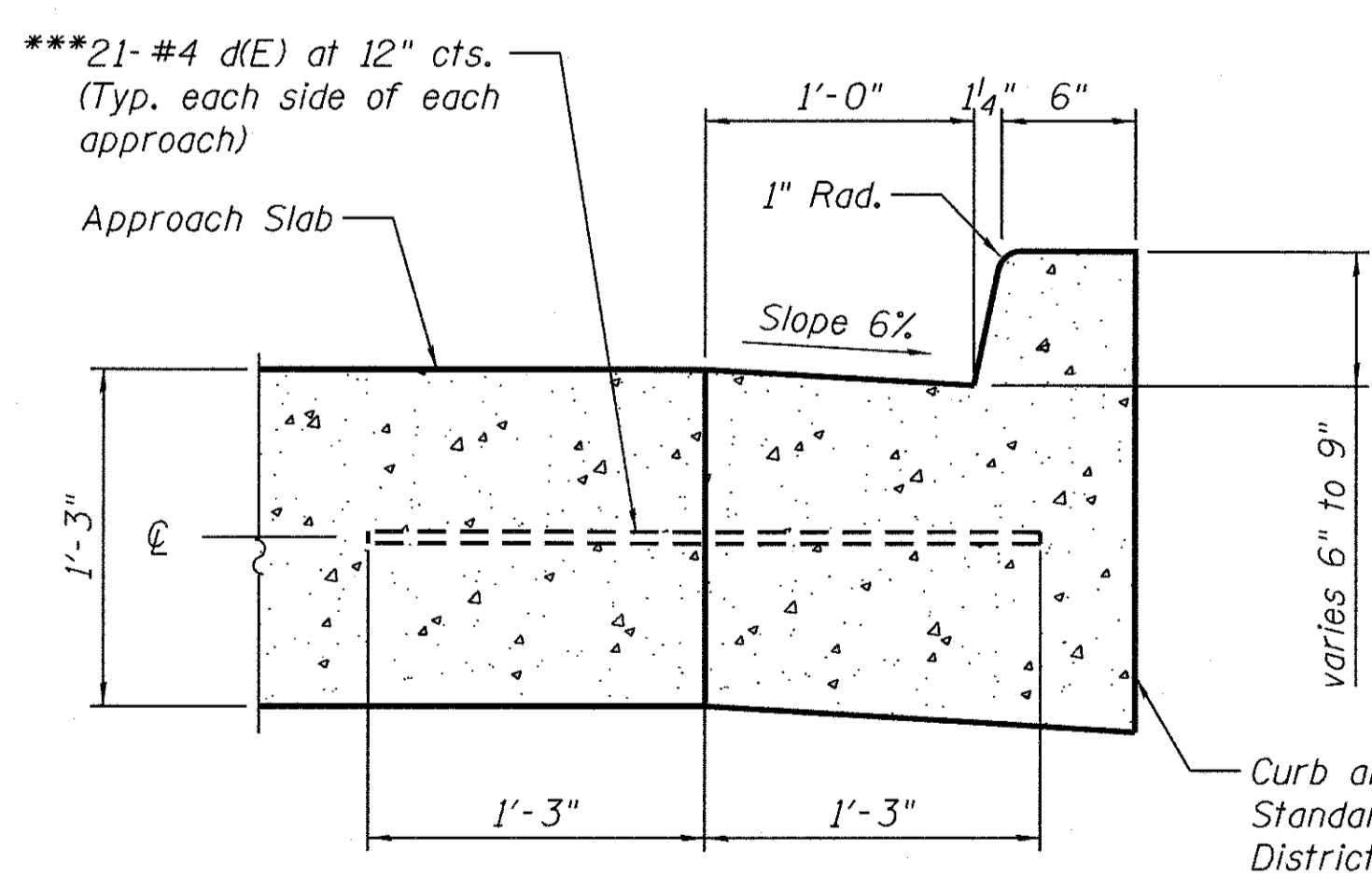
SECTION A-A



SECTION B-B

(See Plan for dimensions not shown)

* Tilt #9 b10(E) bars as required to maintain clearance.
 ** Cost included with Concrete Superstructure (Approach Slab).

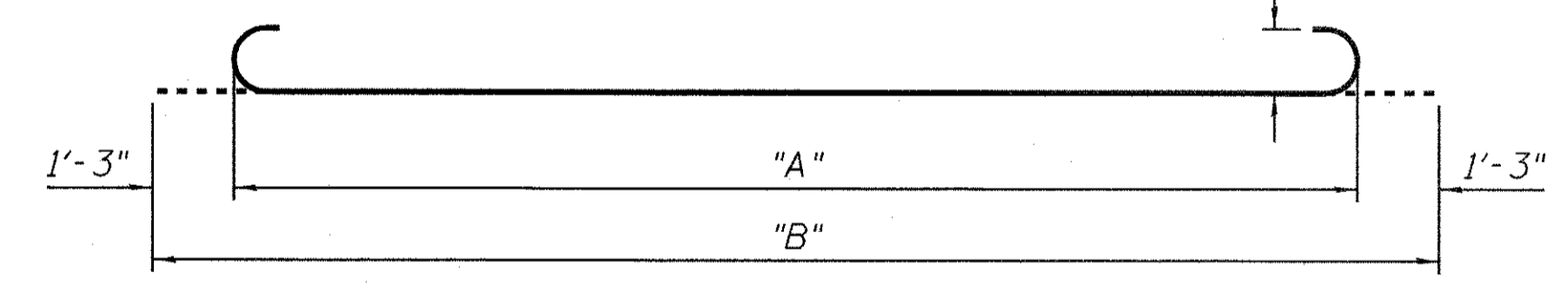


VIEW C-C

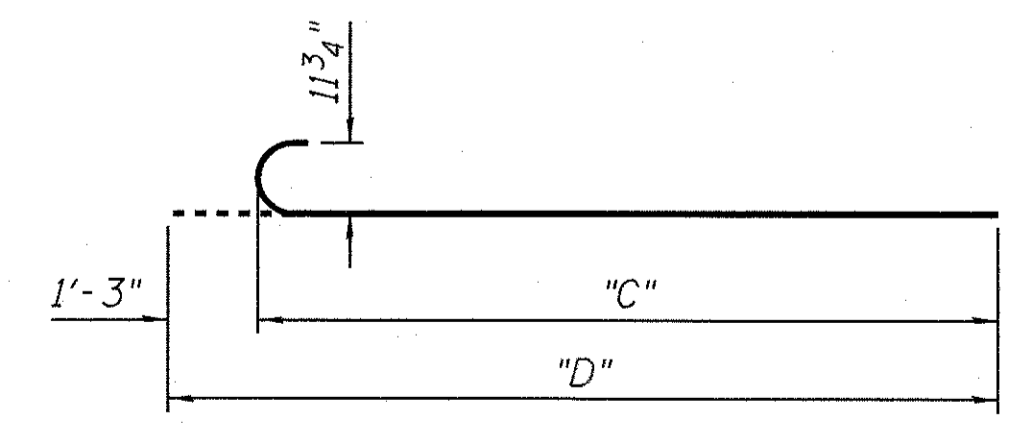
*** #4 d(E) bars shall be smooth steel rods.

Bar	"A"	"B"
b10(E)	17'-3"	19'-9"
b15(E)	9'-5 3/4"	11'-11 3/4"
b16(E)	7'-3 3/4"	9'-9 3/4"
b17(E)	5'-1 1/2"	7'-7 1/2"
b18(E)	2'-11 1/2"	5'-5 1/2"

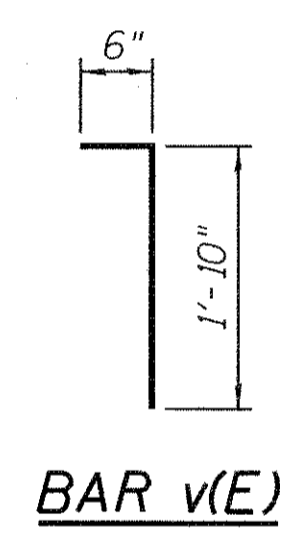
Bar	"C"	"D"
b11(E)	2'-11 1/4"	4'-2 1/4"
b12(E)	5'-8 1/2"	6'-11 1/2"
b13(E)	13'-3 3/4"	14'-3 3/4"
b14(E)	10'-3 1/2"	11'-6 1/2"



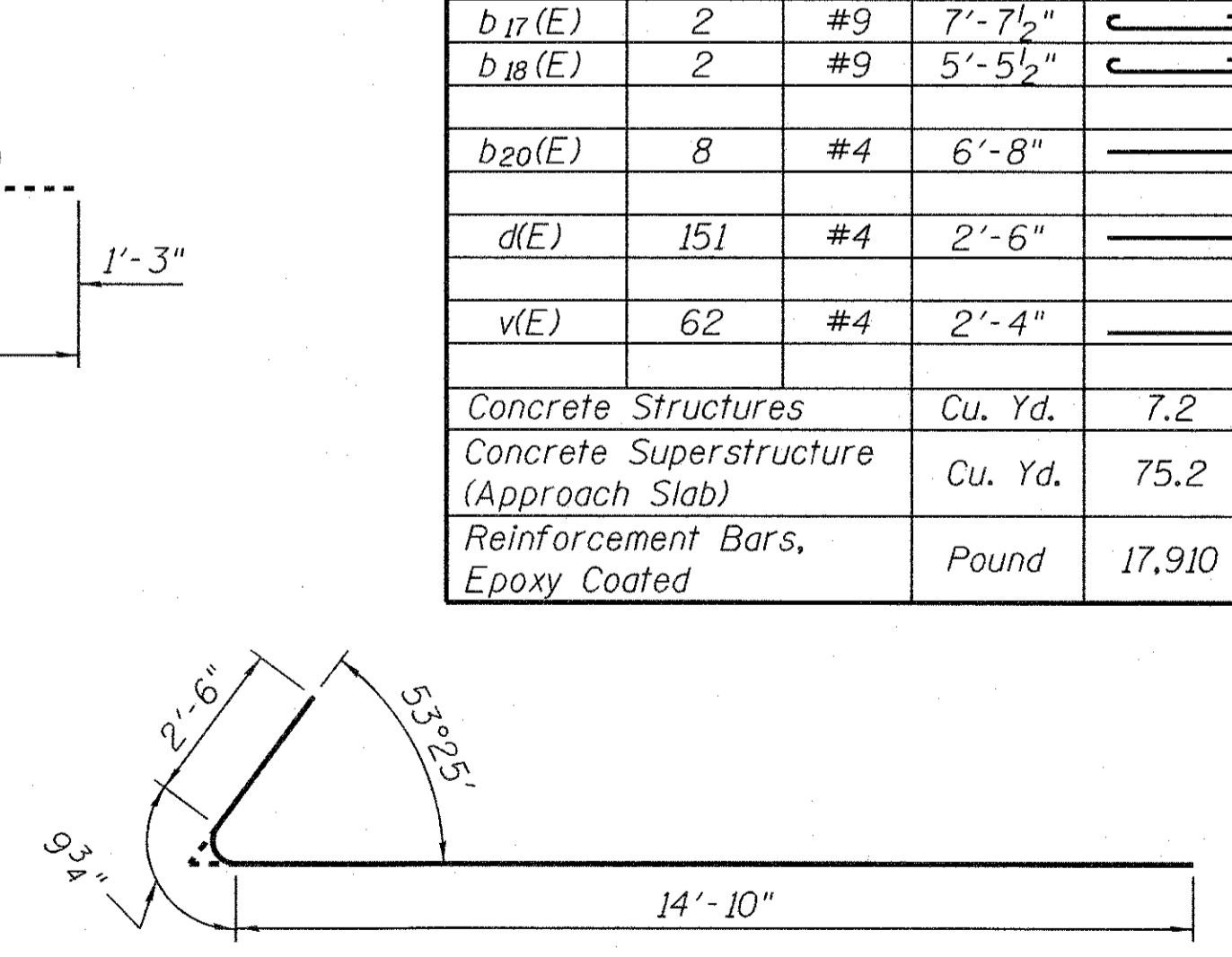
BARS b10, b15, b16, b17 and b18(E)



BARS b11, b12, b13 and b14(E)



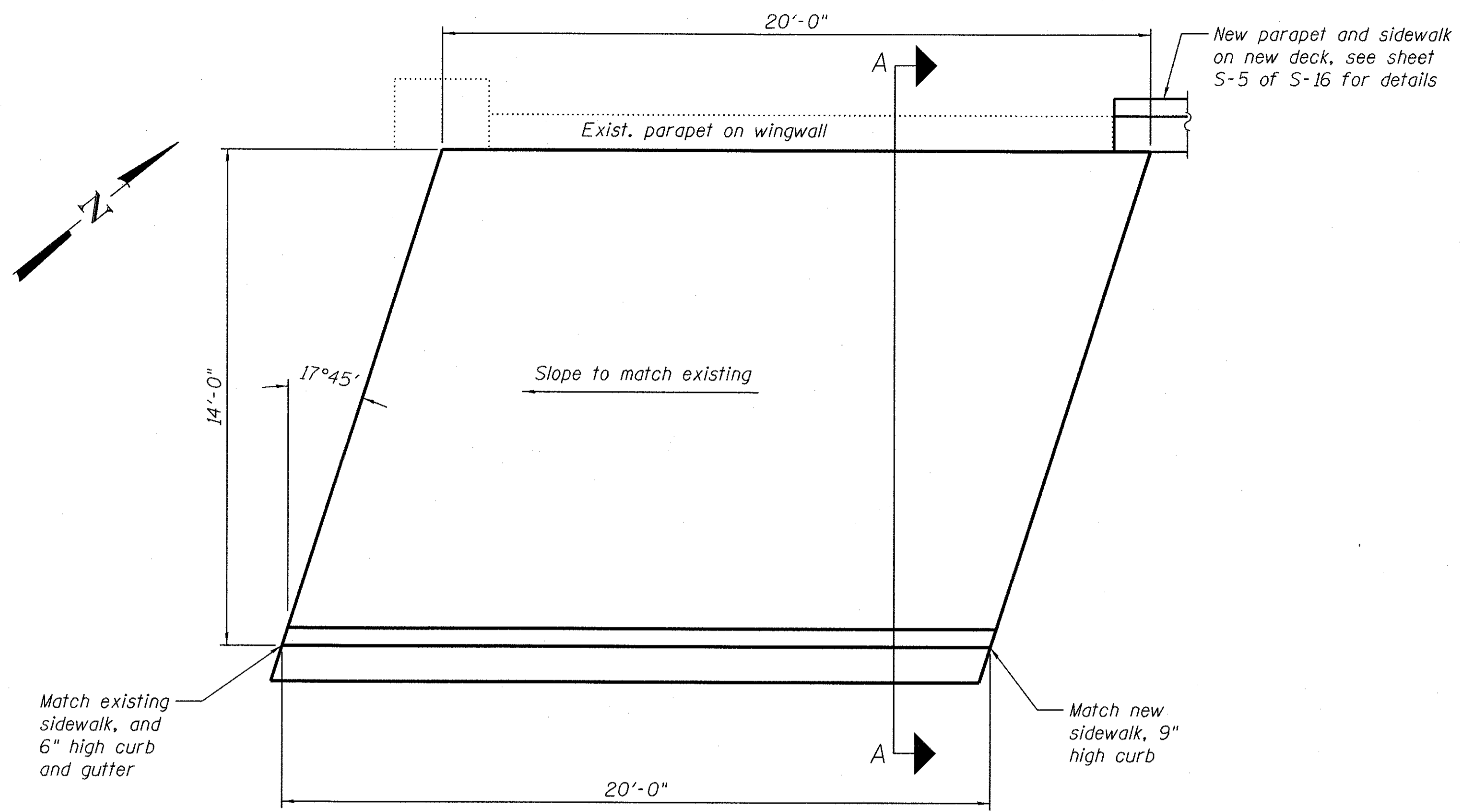
BAR v(E)



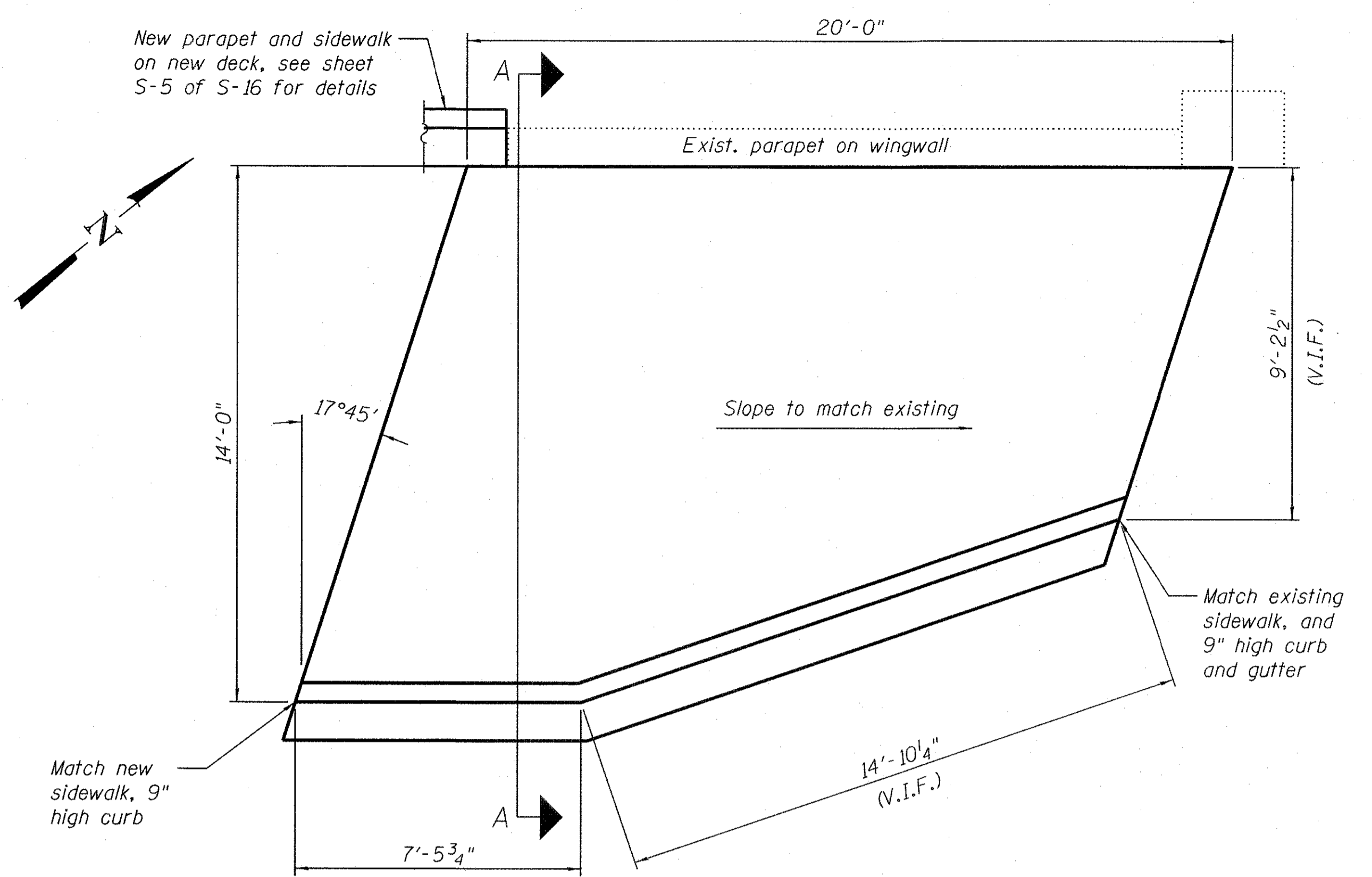
BAR a4 and a14(E)

TWO APPROACHES
 BILL OF MATERIAL

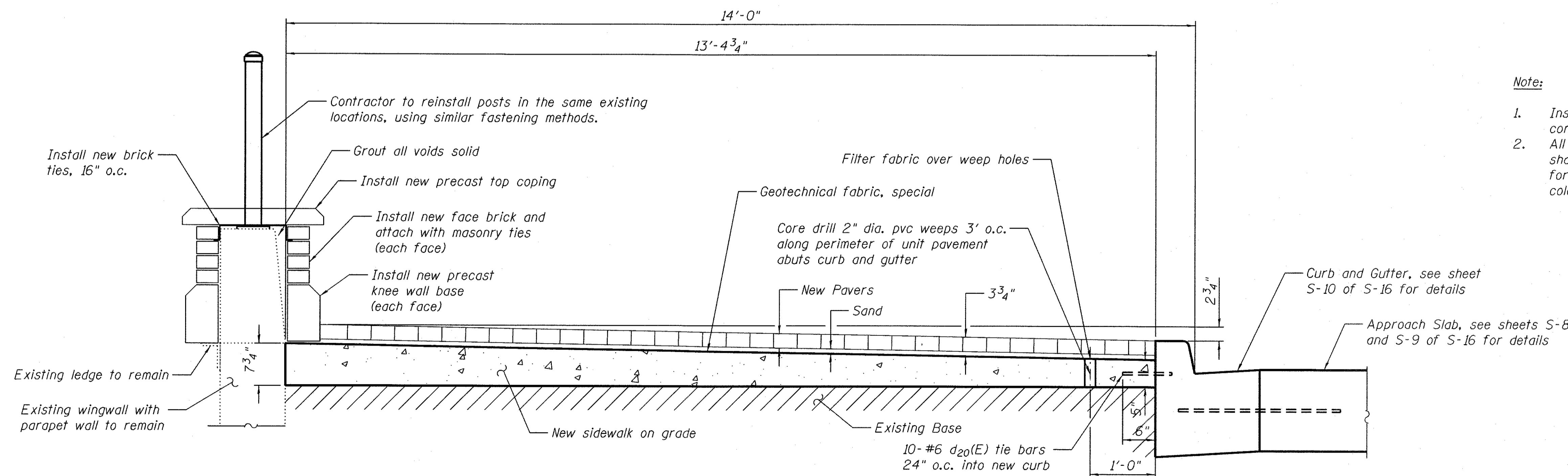
Bar	No.	Size	Length	Shape
a(E)	22	#4	30'-11 3/4"	—
a1(E)	2	#4	12'-2 1/2"	—
a2(E)	2	#4	17'-2 3/4"	—
a3(E)	20	#4	19'-5 1/2"	—
a4(E)	1	#4	18'-1 3/4"	└
a10(E)	40	#5	30'-11 3/4"	—
a11(E)	3	#5	12'-2 1/2"	—
a12(E)	3	#5	17'-2 3/4"	—
a13(E)	36	#5	19'-5 1/2"	—
a14(E)	1	#5	18'-1 3/4"	└
b(E)	48	#4	19'-8"	—
b1(E)	2	#4	5'-5"	—
b2(E)	2	#4	12'-4 1/2"	—
b3(E)	1	#4	8'-6 1/2"	—
b4(E)	1	#4	5'-3 1/4"	—
b10(E)	138	#9	19'-9"	┌
b11(E)	3	#9	4'-2 1/4"	┌
b12(E)	3	#9	6'-11 1/2"	┌
b13(E)	3	#9	14'-3 3/4"	┌
b14(E)	3	#9	11'-6 1/2"	┌
b15(E)	2	#9	11'-11 3/4"	┌
b16(E)	2	#9	9'-9 3/4"	┌
b17(E)	2	#9	7'-7 1/2"	┌
b18(E)	2	#9	5'-5 1/2"	┌
b20(E)	8	#4	6'-8"	—
d(E)	151	#4	2'-6"	—
v(E)	62	#4	2'-4"	└
Concrete Structures		Cu. Yd.	7.2	
Concrete Superstructure (Approach Slab)		Cu. Yd.	75.2	
Reinforcement Bars, Epoxy Coated		Pound	17,910	



SIDEWALK 1 - PLAN



SIDEWALK 2 - PLAN



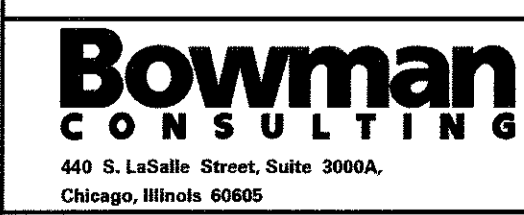
SECTION A-A - SIDEWALK ON GRADE

Note:

1. Installation of 2" dia. drain pipe is included in the cost of concrete structure.
2. All brick pavers shall be replaced in-kind. The contractor shall coordinate with the Engineer and brick pavers supplier for color and type of brick to be consistent with the existing color and types of brick pavers.

**FOUR SIDEWALKS ON GRADE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d20(E)	40	#6	9"	
Concrete Structures			Cu. Yd.	20.8
Reinforcement Bars, Epoxy Coated			Pound	50



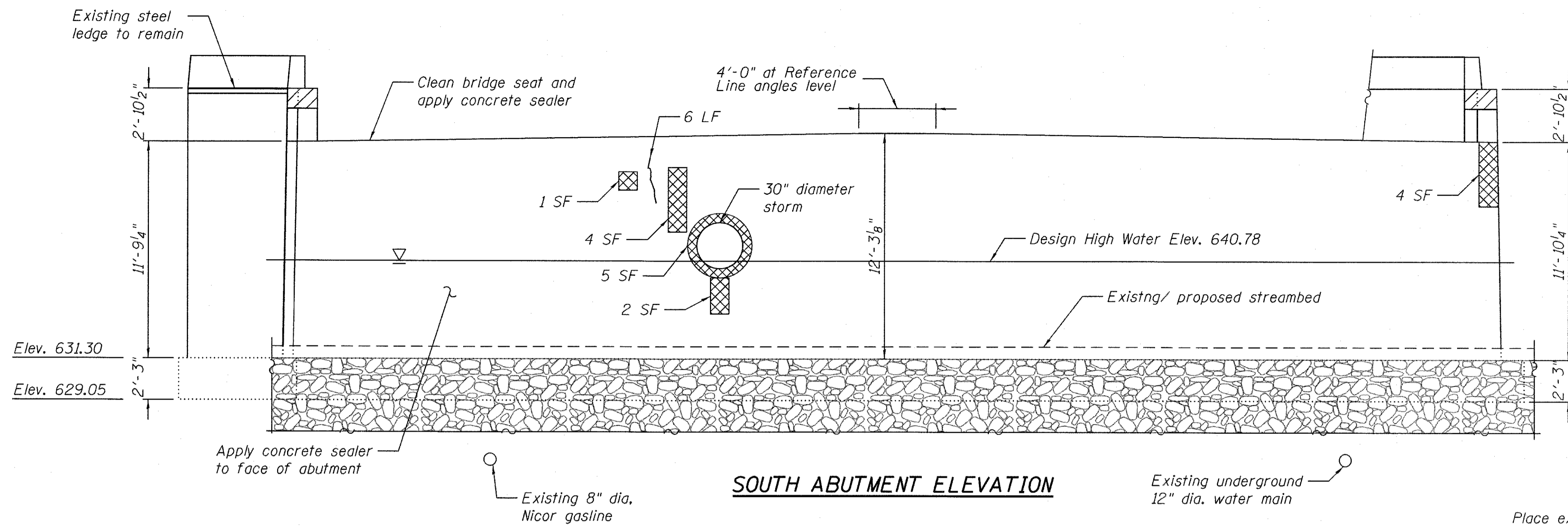
USER NAME =	DESIGNED - KJH	REVISED -
PLOT SCALE =	CHECKED - AJN	REVISED -
PLOT DATE = 5/24/17	DRAWN - JL	REVISED -
	CHECKED - AJN	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

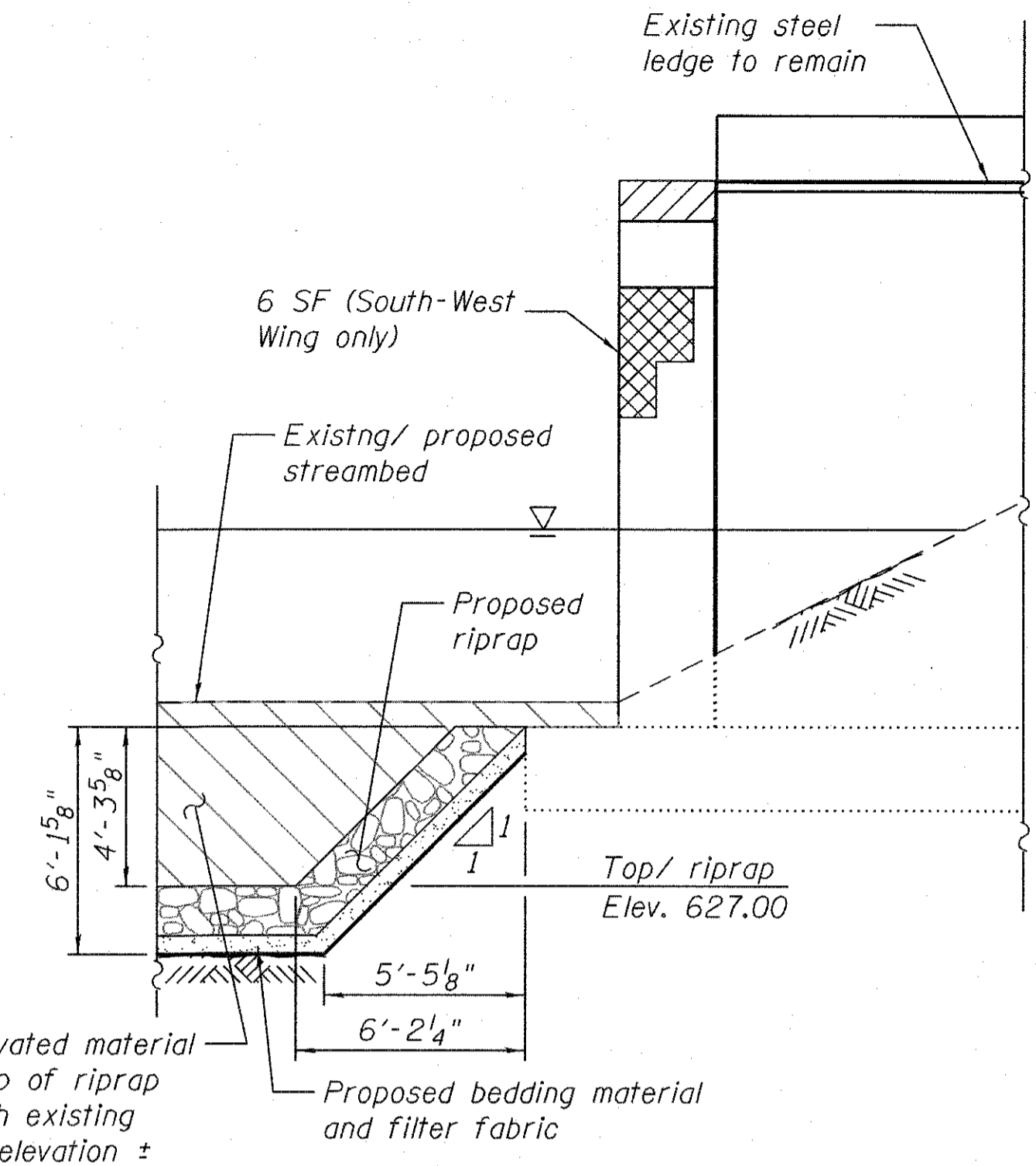
**SIDEWALK ON GRADE DETAILS
STRUCTURE NO. 016-0812**

SHEET NO. S-11 OF S-16 SHEETS

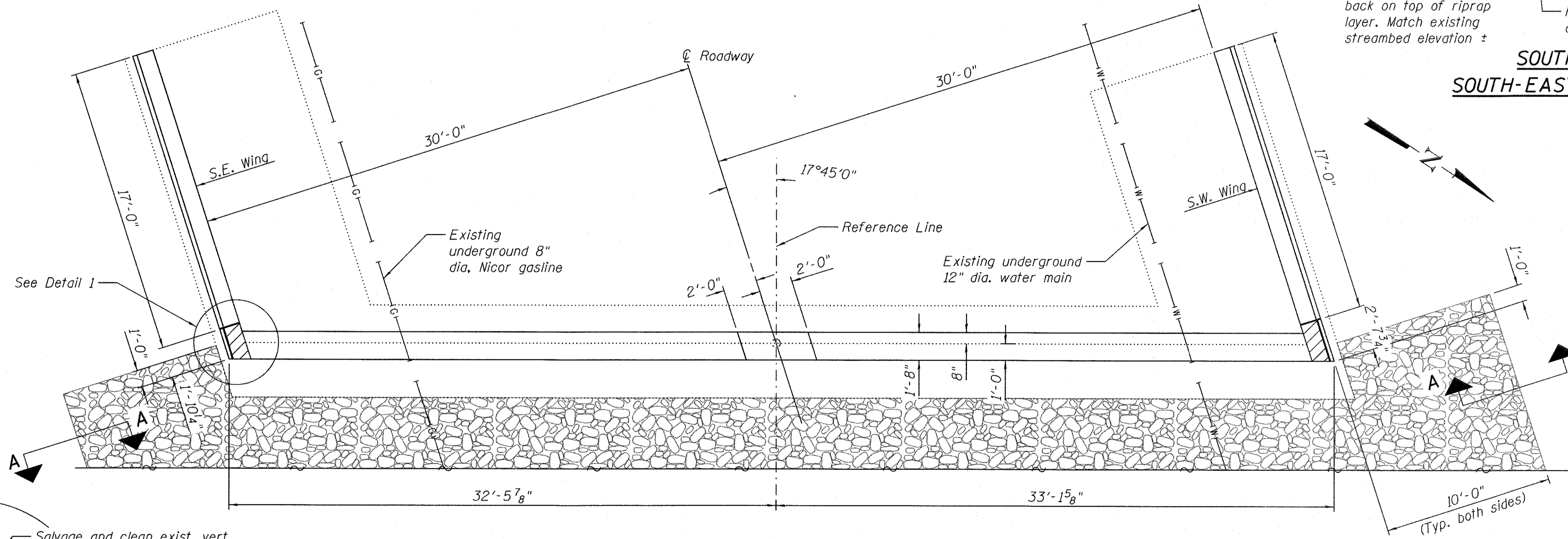
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	24
			CONTRACT NO. 61D98	
ILLINOIS FED. AID PROJECT				



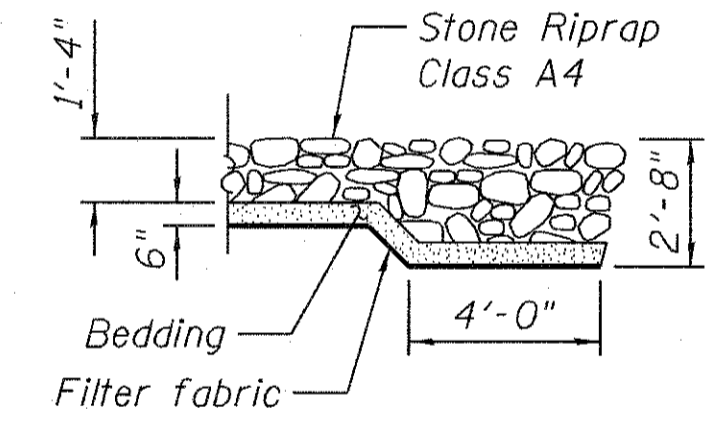
SOUTH ABUTMENT ELEVATION



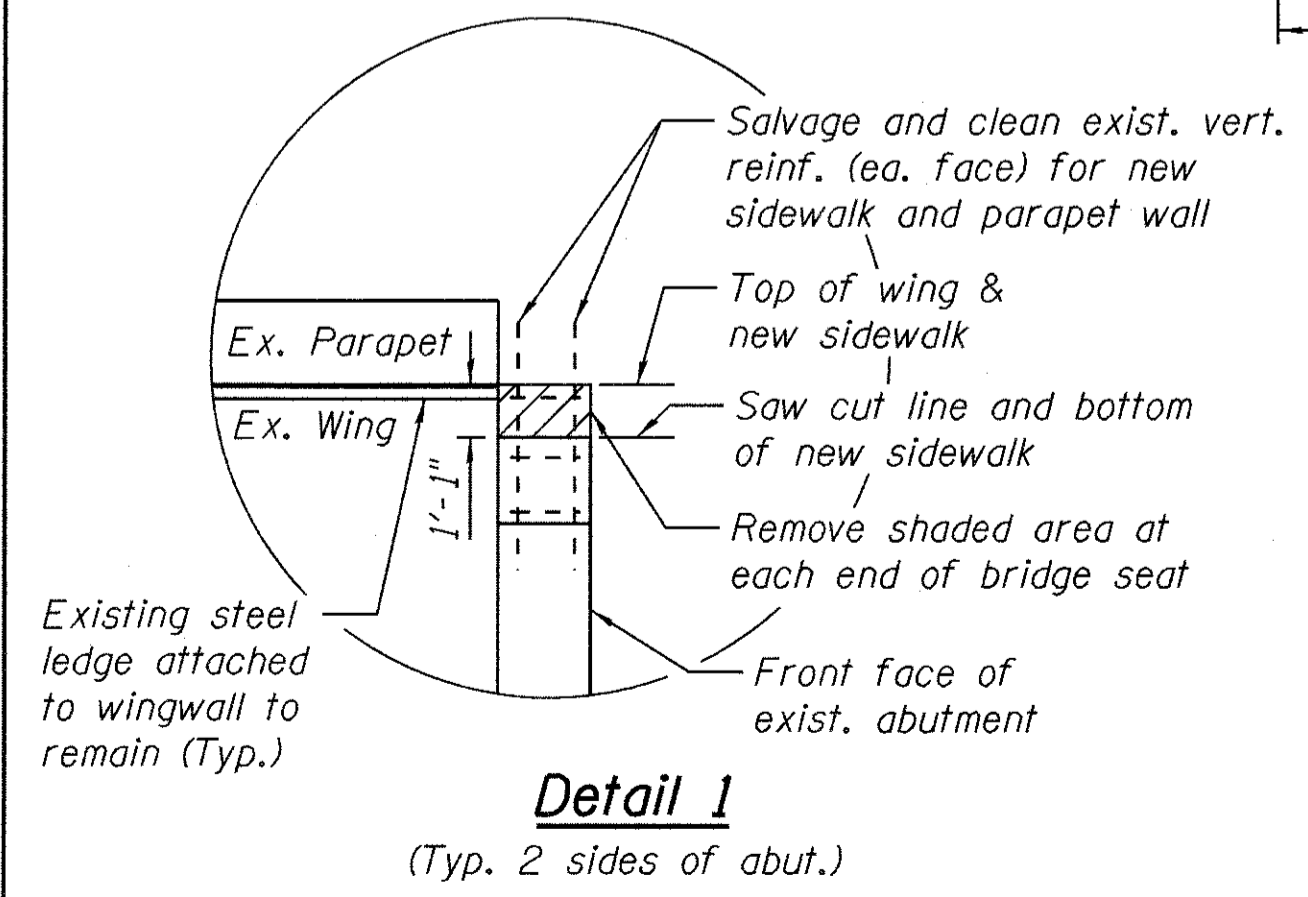
**SOUTH-WEST WING ELEVATION
SOUTH-EAST WING REFLECTED ELEVATION**



SOUTH ABUTMENT PLAN



SECTION A-A



Detail 1
(Typ. 2 sides of abut.)

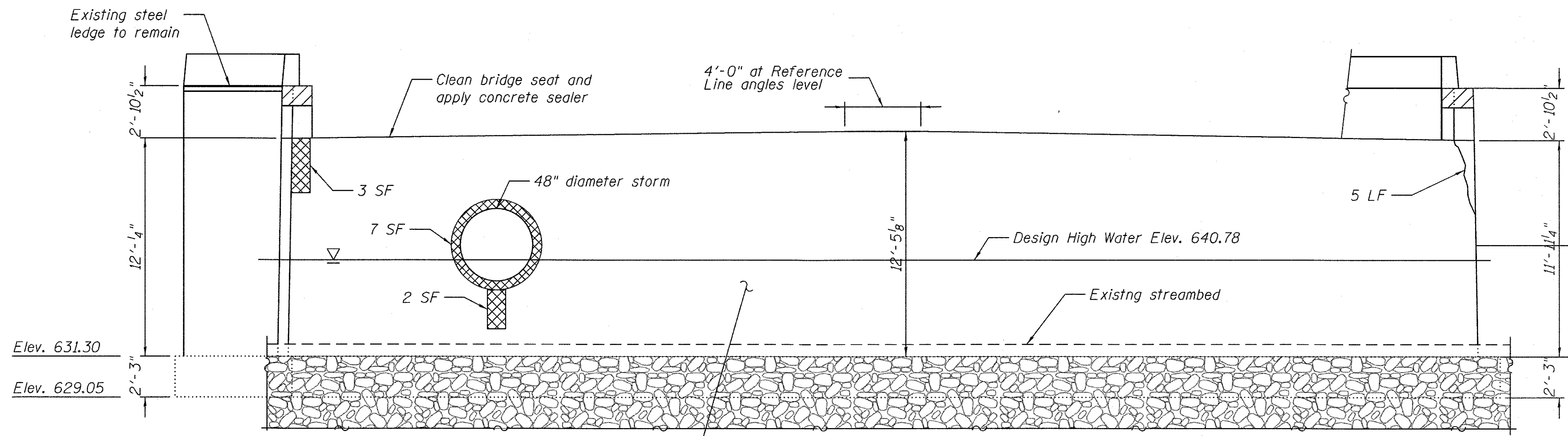
- Notes:**
- The existing streambed shall be excavated prior to the placement of riprap for scour protection such that the existing streambed elevation remains unchanged following construction.

BILL OF MATERIAL

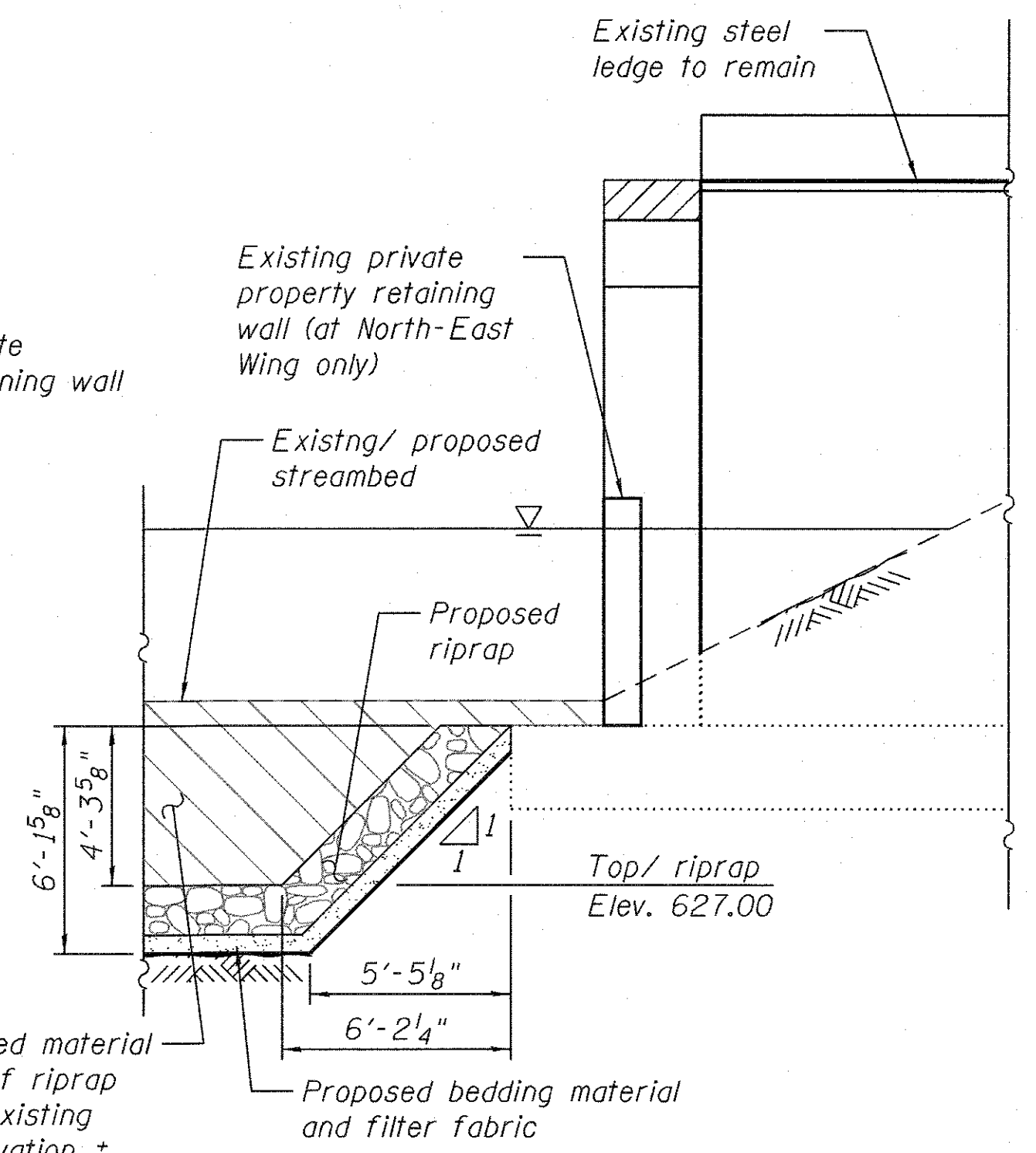
ITEM	UNIT	QUANTITY
Channel Excavation (Special)	Cu. Yd.	793
Concrete Removal	Cu. Yd.	2.2
Name Plates	Each	1
Concrete Sealer	Sq. Ft.	221
Epoxy Crack Injection	Foot	6
Cleaning Bridge Seats	Sq. Ft.	221
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	22

LEGEND

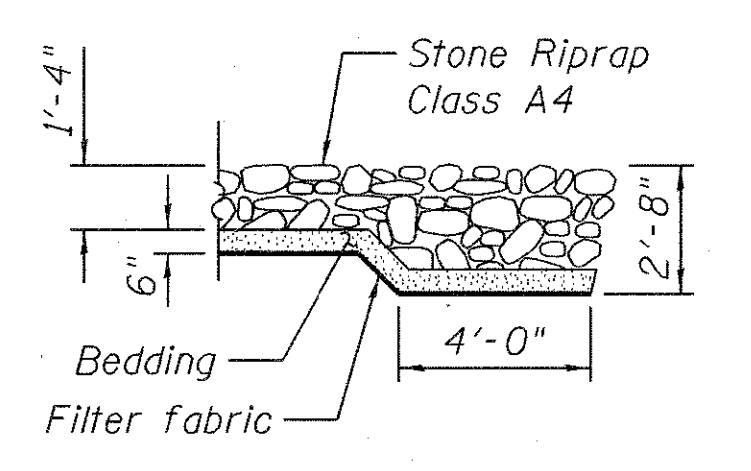
- Structural repair of concrete (depth equal to or less than 5 inches)
- Concrete removal, see detail 1 in this sheet
- Epoxy Crack Injection



NORTH ABUTMENT ELEVATION



NORTH-EAST WING ELEVATION
NORTH-WEST WING REFLECTED ELEVATION



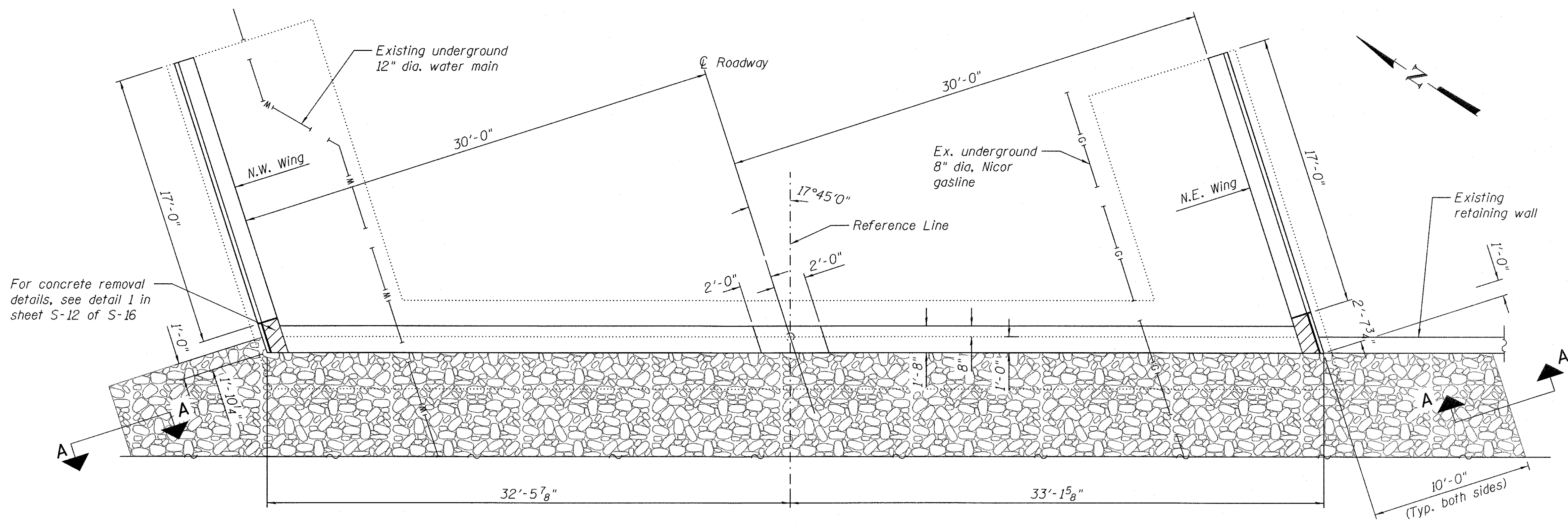
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	2.2
Concrete Sealer	Sq. Ft.	221
Epoxy Crack Injection	Foot	5
Cleaning Bridge Seats	Sq. Ft.	221
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	12

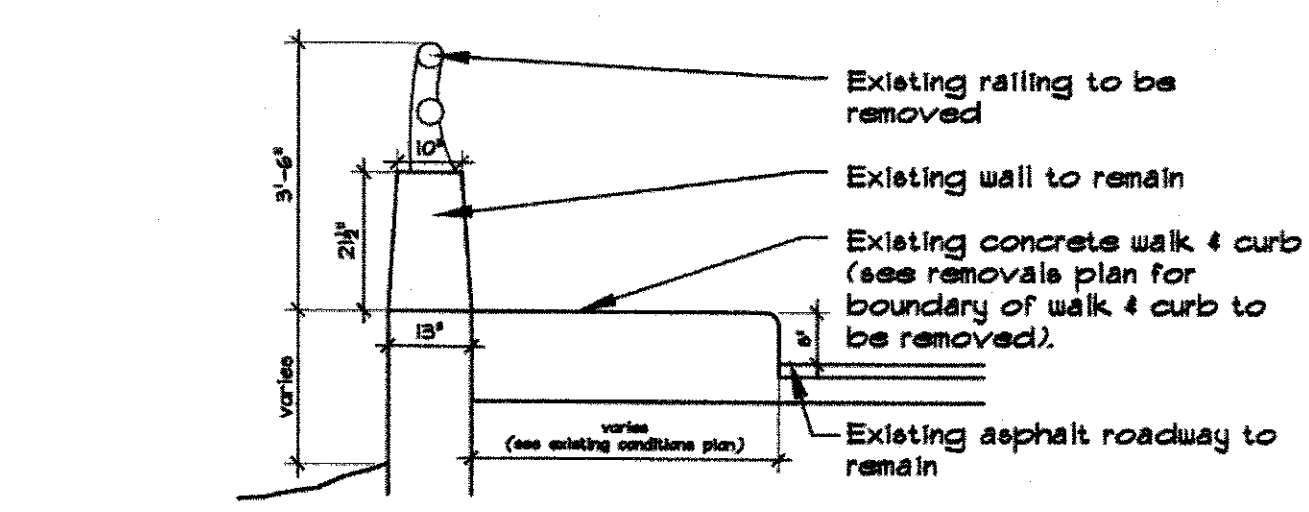
- Notes:
- The existing streambed shall be excavated prior to the placement of riprap for scour protection such that the existing streambed elevation remains unchanged following construction.

LEGEND

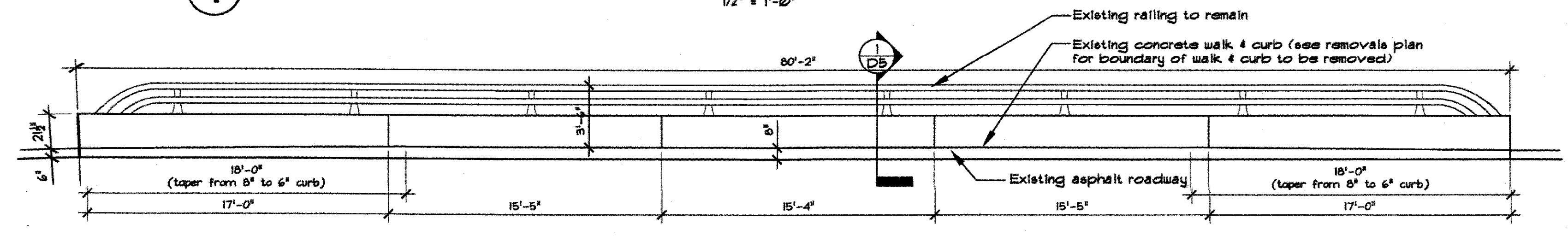
- Structural repair of concrete (depth equal to or less than 5 inches)
- Concrete removal, see detail 1 in sheet S-12 of S-16
- Epoxy Crack Injection



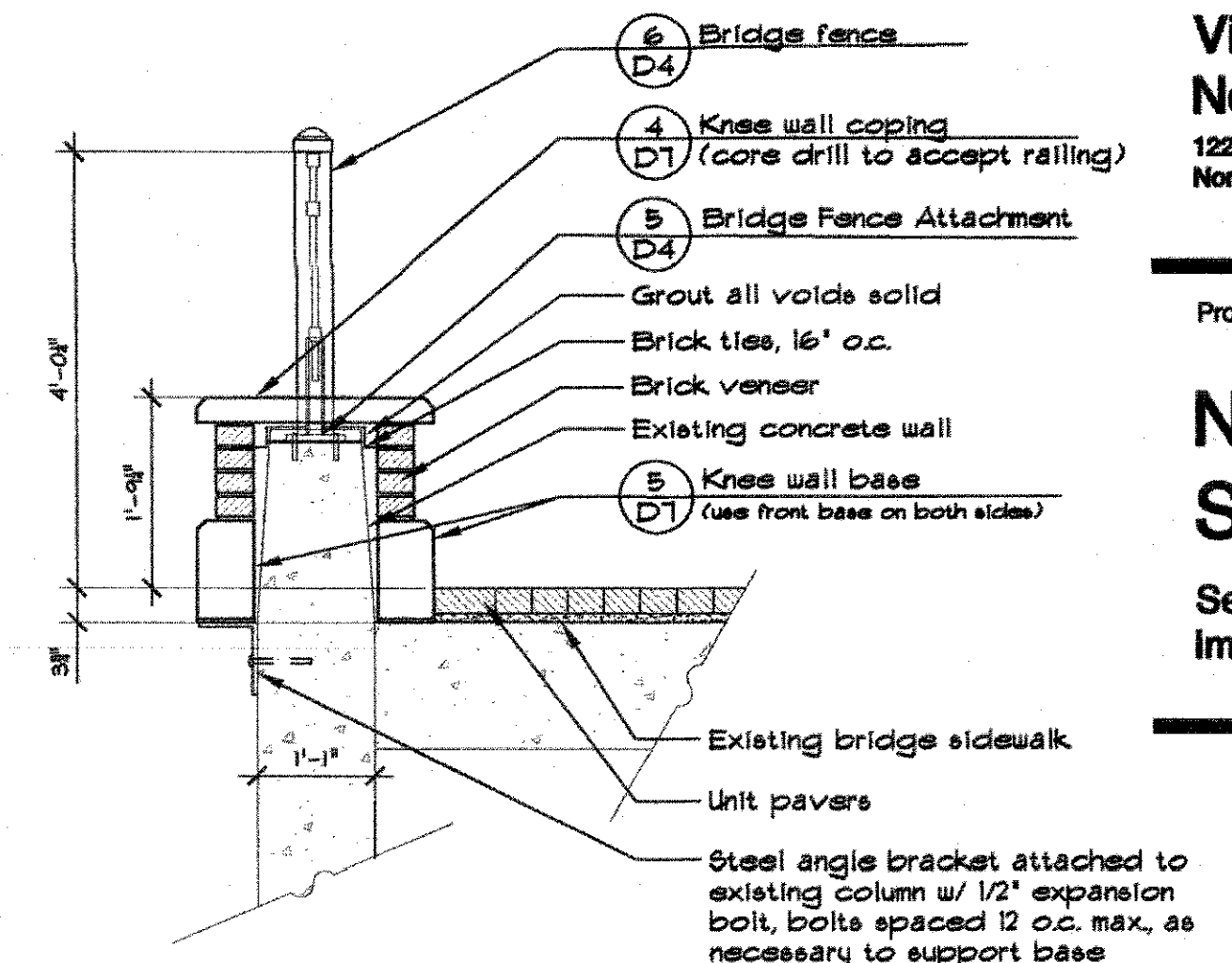
NORTH ABUTMENT PLAN



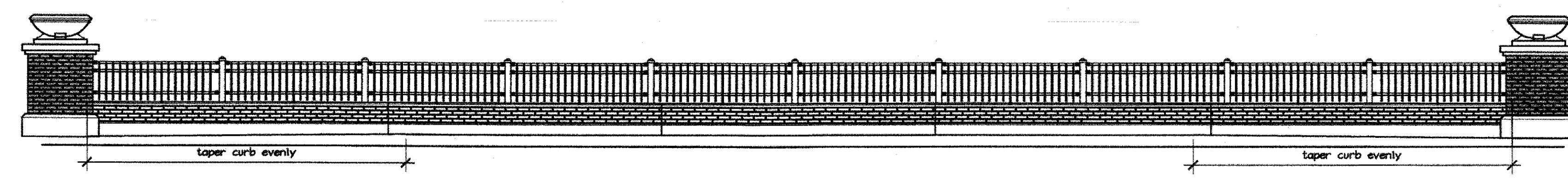
1 Existing Shermar River Bridge Section
 ex-shermar-bridge-sec
 1/2" = 1'-0"



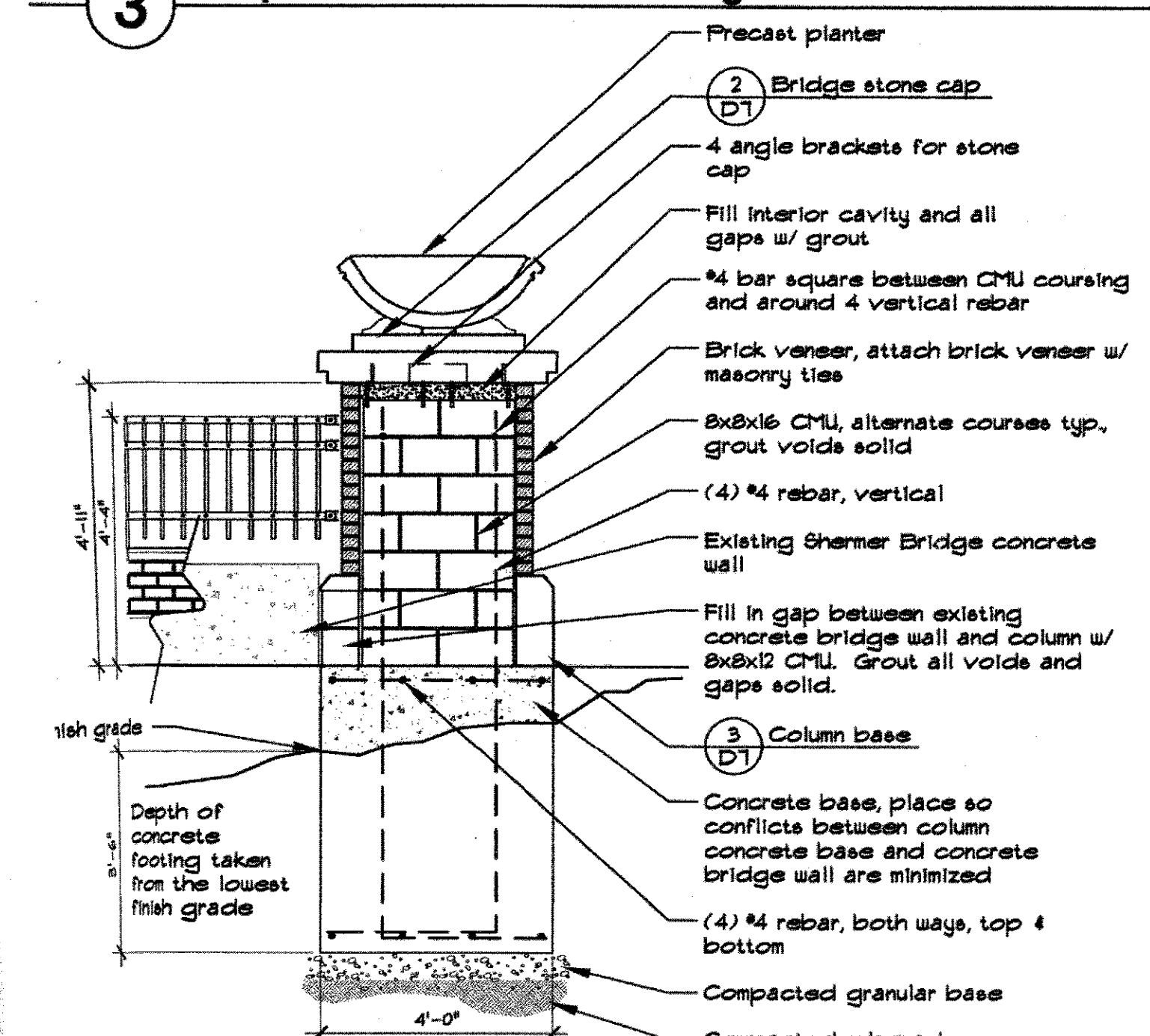
2 Existing Shermar River Bridge Elevation
 D-ex-shermar-bridge-elev
 1/4" = 1'-0"



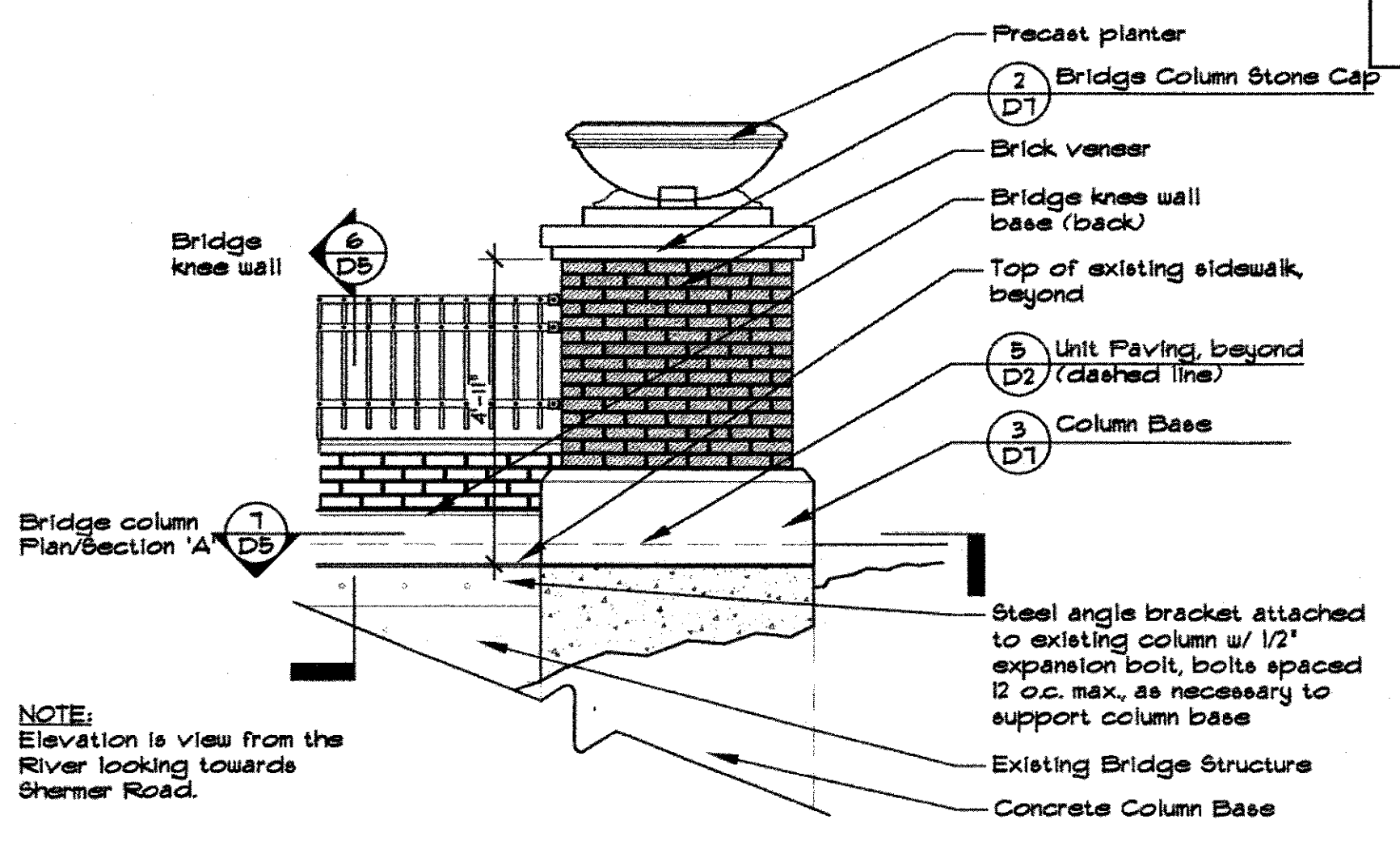
6 Shermar Bridge Knee Wall
 D-bridge-knee-wall-shermar-dwg
 3/4" = 1'-0"



3 Proposed Shermar River Bridge Elevation
 D-ex-shermar-bridge-elev
 1/4" = 1'-0"

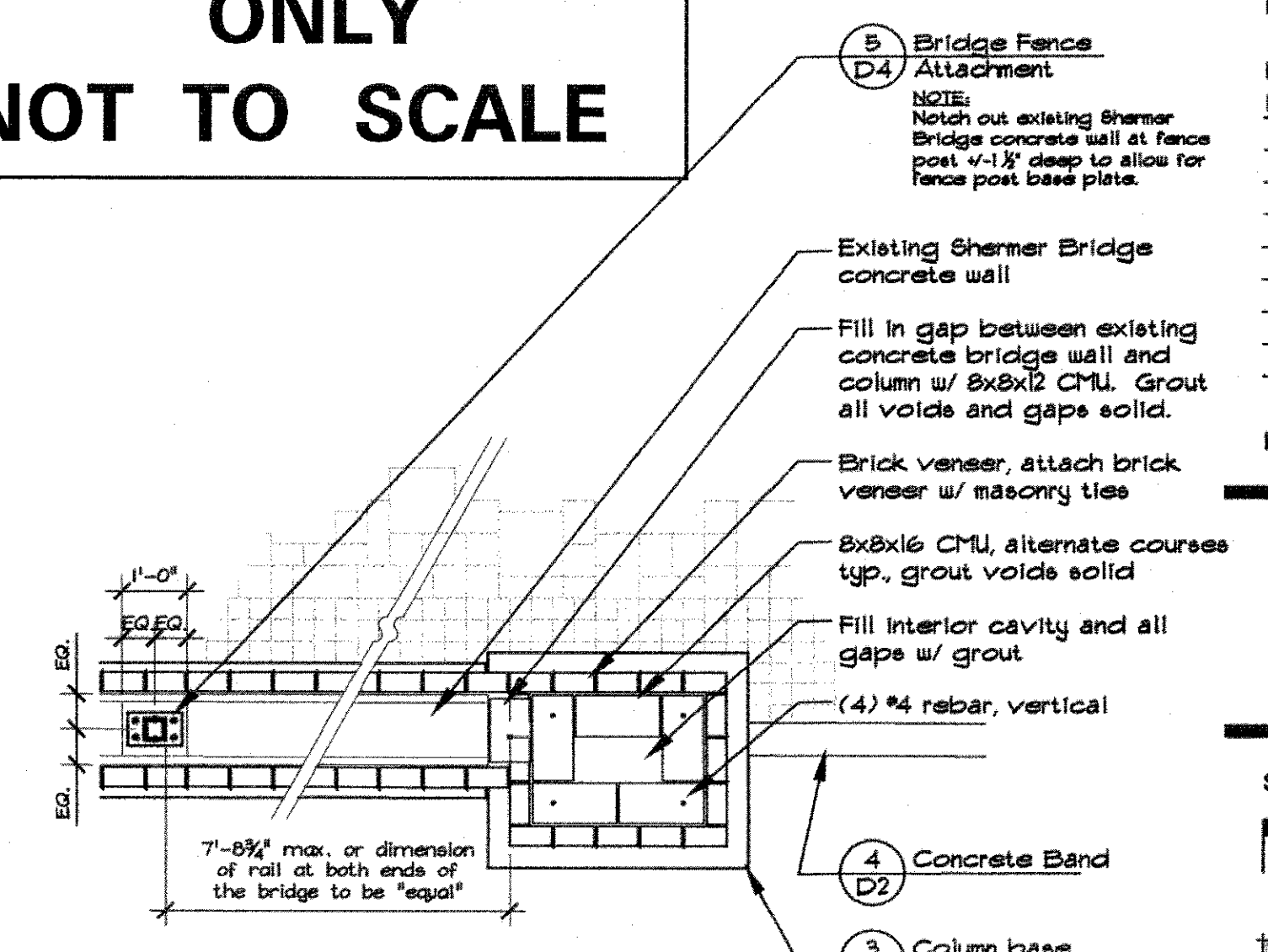


4 Shermar Bridge Column Section
 D-bridge-column-section-shermar-dwg
 1/2" = 1'-0"



5 Shermar Bridge Column Elevation
 D-bridge-column-elev
 1/2" = 1'-0"

**FOR REFERENCE ONLY
 NOT TO SCALE**



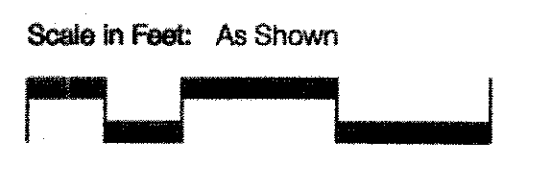
7 Shermar Bridge Column Plan/Section
 D-shermar-bridge-plan-dwg
 1/2" = 1'-0"

Issued: August 1, 2002
 ISSUED FOR BIDDING

Revisions No.	Date	Description

Drawn by: Staff Checked: TCK

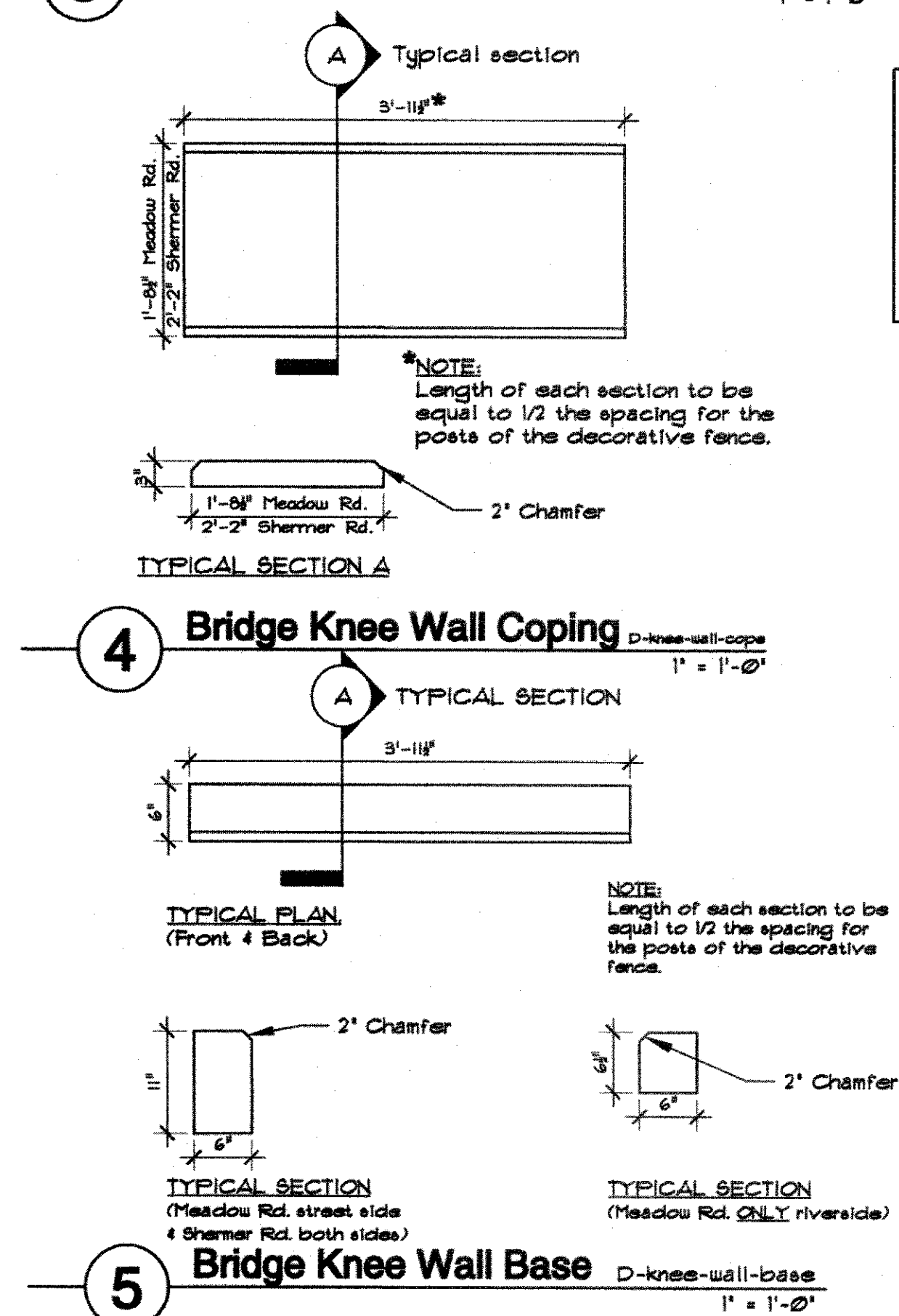
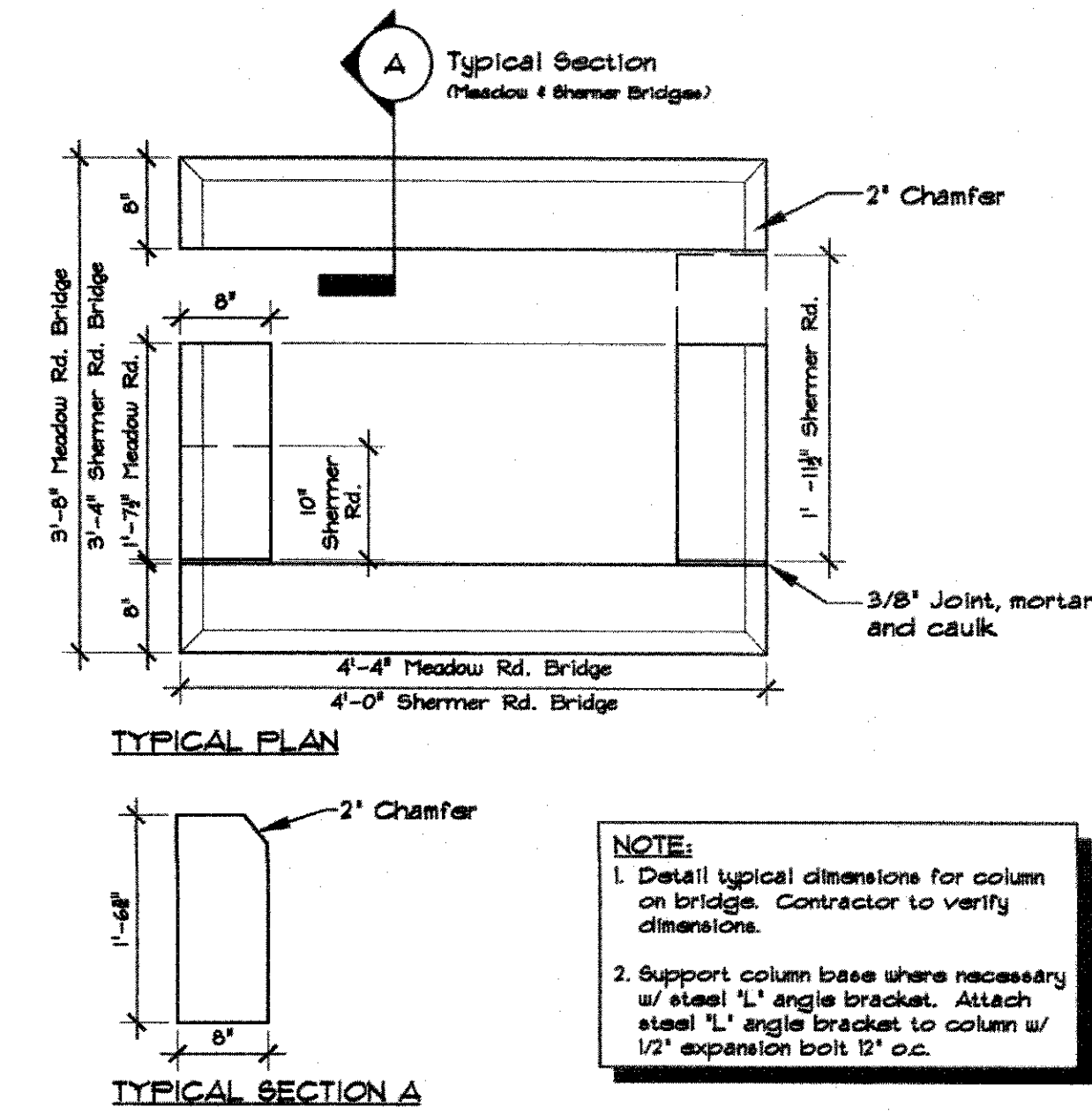
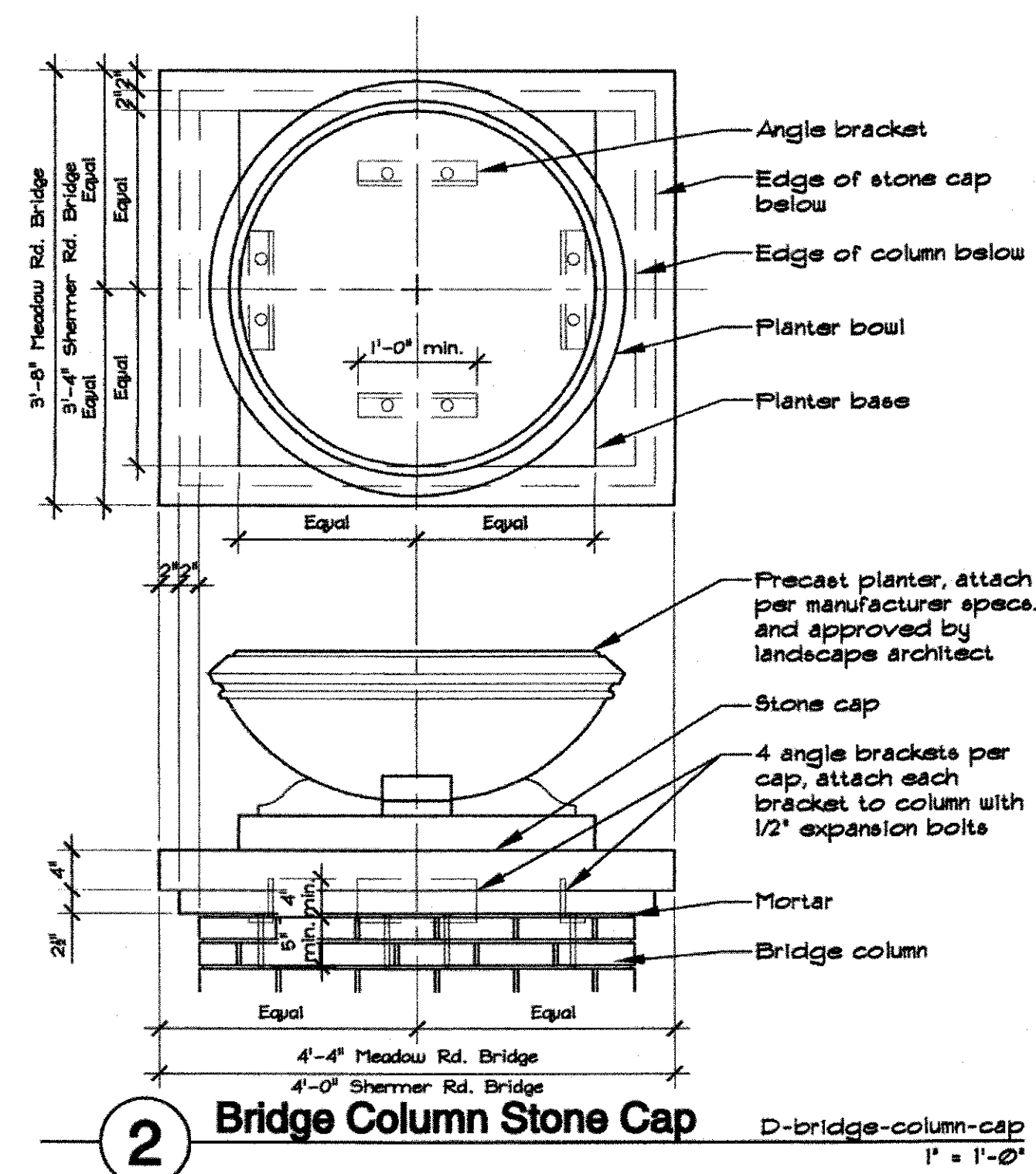
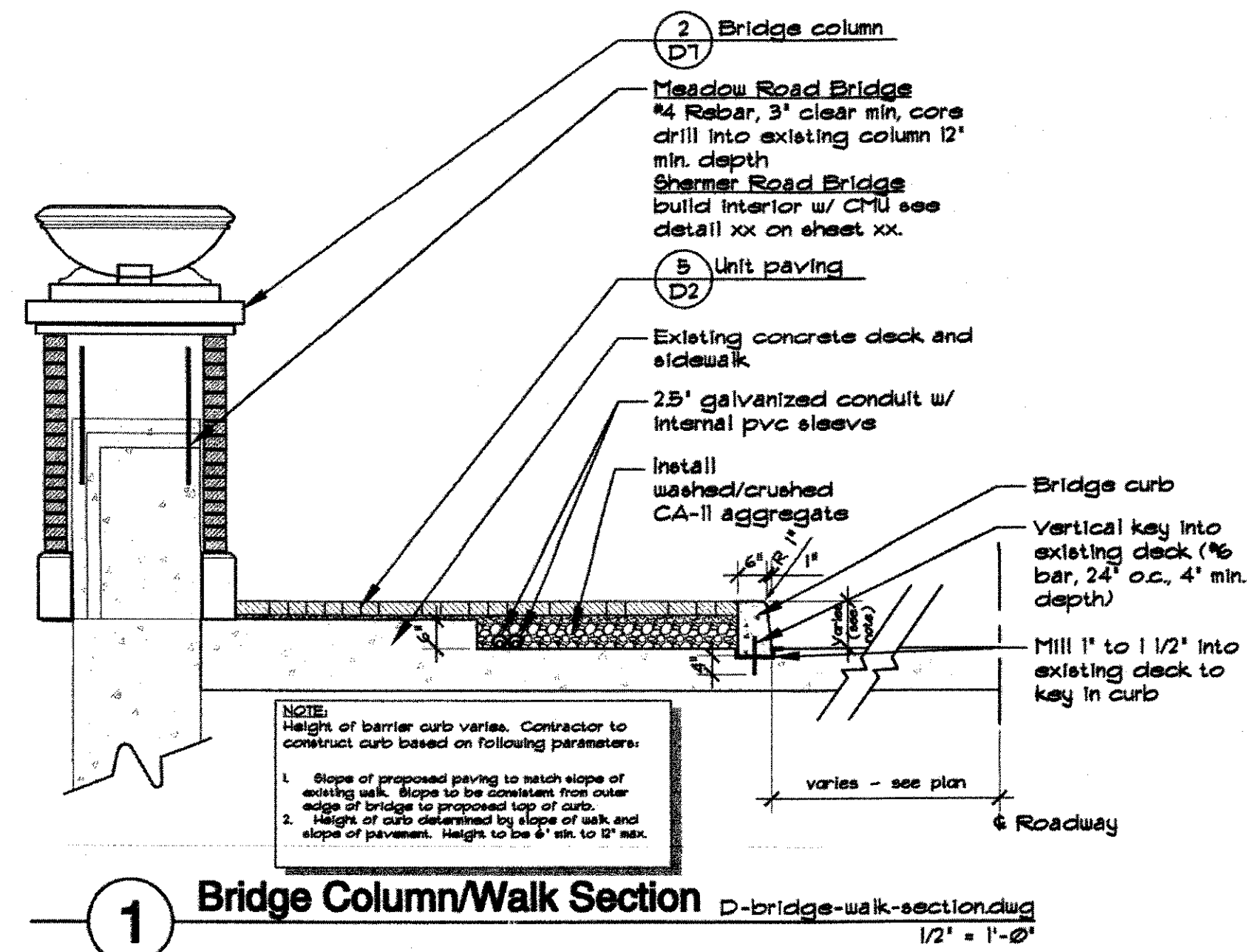
Construction Details



Sheet #: **D5**
 North
 Project #: 0503-001 21 of 59

USER NAME =	DESIGNED - KJH	REVISED -
PLOT SCALE =	CHECKED - AJN	REVISED -
PLOT DATE = 5/24/17	DRAWN - JL	REVISED -
	CHECKED - AJN	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	28
				CONTRACT NO. 61D98
ILLINOIS FED. AID PROJECT				



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Issued: August 1, 2002
ISSUED FOR BIDDING

Revisions No.	Date	Description

Drawn by: Staff Checked: TCK

Construction Details

Scale in Feet: As Shown



Sheet #: **D7**
Project #: 0503-001 **23 of 59**

USER NAME =	DESIGNED - KJH	REVISED -
PLOT SCALE =	CHECKED - AJN	REVISED -
PLOT DATE = 5/24/17	DRAWN - JL	REVISED -
	CHECKED - AJN	REVISED -

F.A.U. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 29
				CONTRACT NO. 61D98

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

3" (75) MIN.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- ** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
- ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

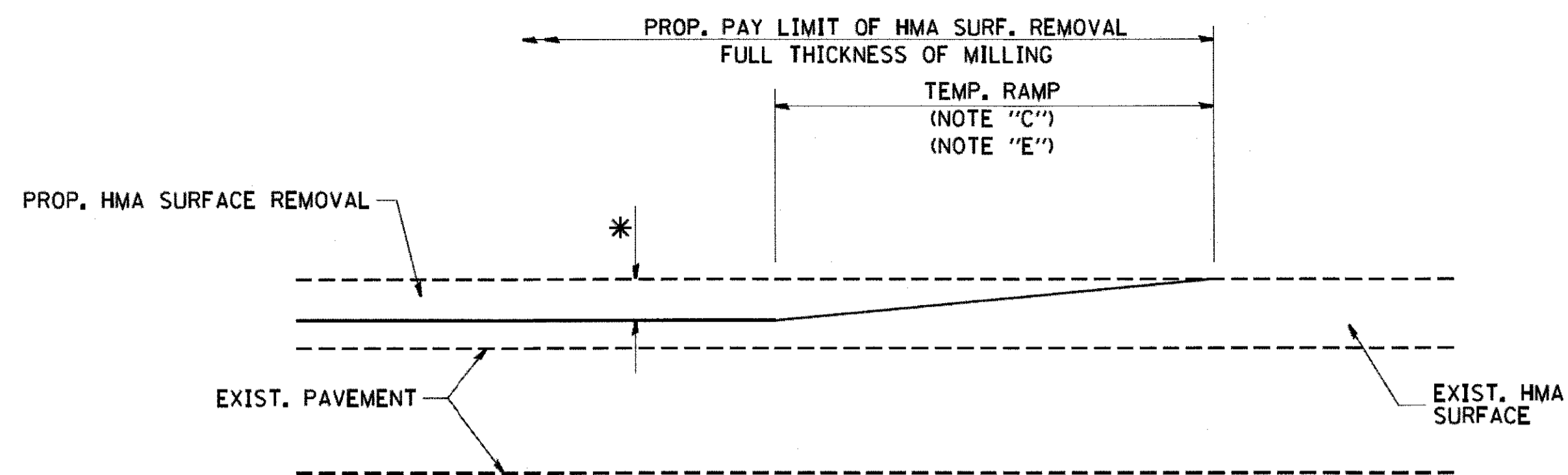
- ⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

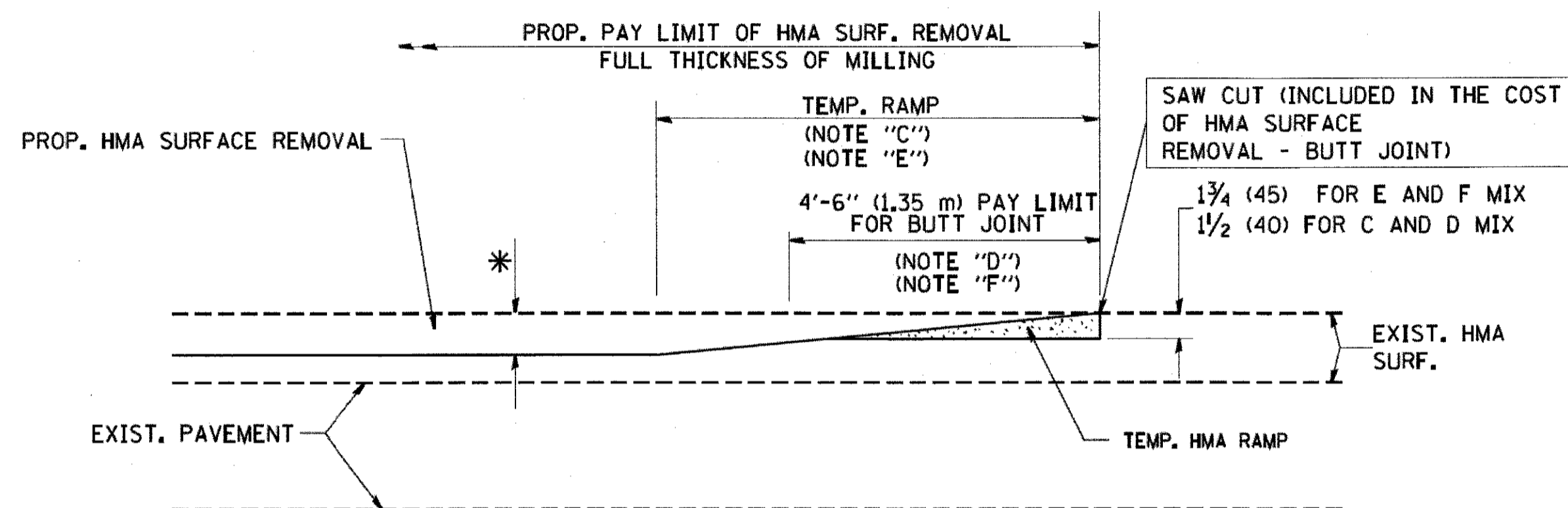
Bowman
CONSULTING
440 S. LaSalle Street, Suite 3000A,
Chicago, Illinois 60605

FILE NAME =	USER NAME = jdzienzo	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97		2760	14-00161-00-BR	COOK	34	30			
		PLOT SCALE = 20x0.000001" / 1in.	REVISED - M. GOMEZ 01-22-01		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.			BD600-06 (BD-24) CONTRACT NO. 61D98				
Default		DATE - 03-11-94	REVISED - R. BORO 12-15-09		ILLINOIS FED. AID PROJECT							



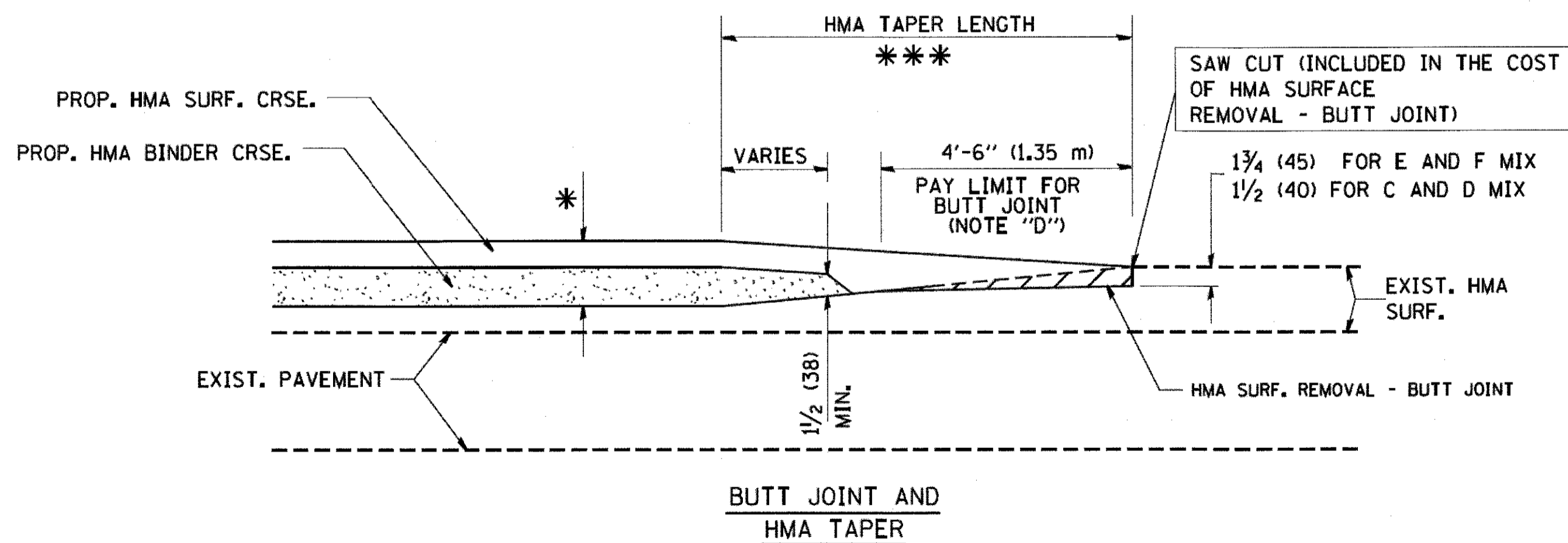
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

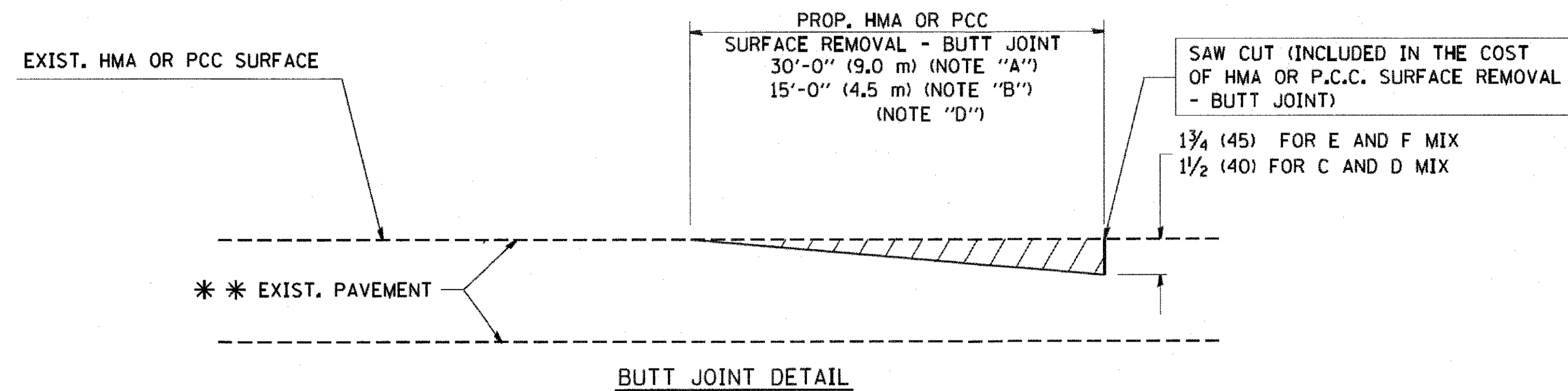


HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

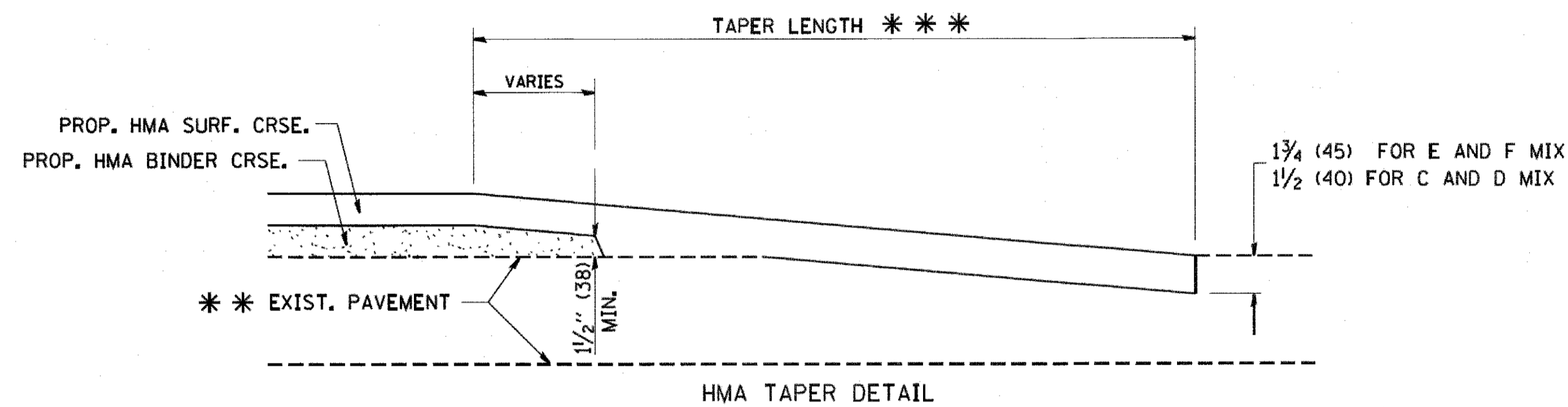
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER 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")

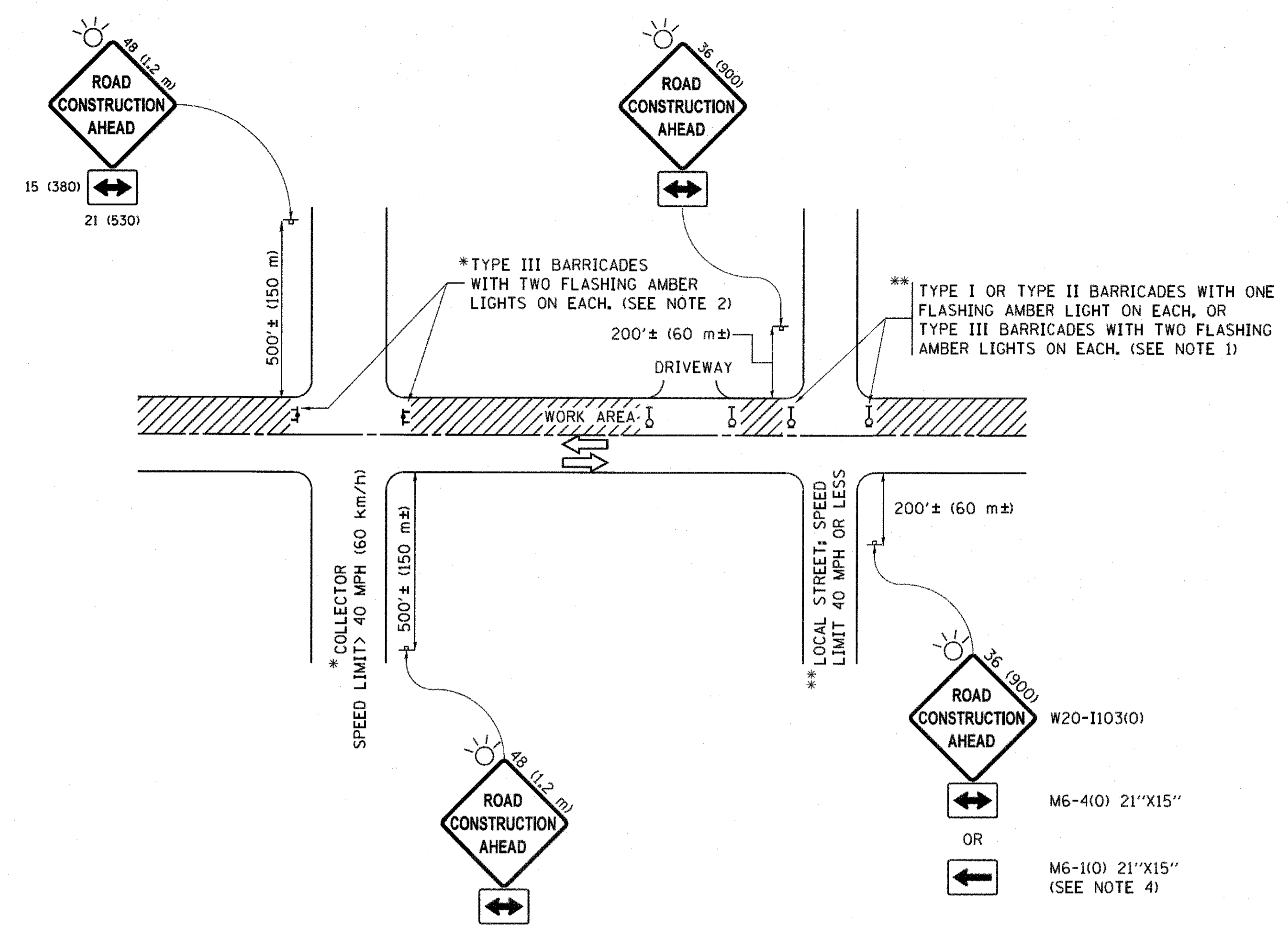
BASIS OF PAYMENT:

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.

FILE NAME =	USER NAME = jdizenzo	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 20:0.000001 1" = 10'	CHECKED -	REVISED - M. GOMEZ 04-06-01
Default	PLOT DATE = 5/24/17	DATE - 06-13-90	REVISED - R. BORO 01-01-07

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	31
BD400-05 (BD-32)		CONTRACT NO. 61D98		
ILLINOIS FED. AID PROJECT				



NOTES:

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:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

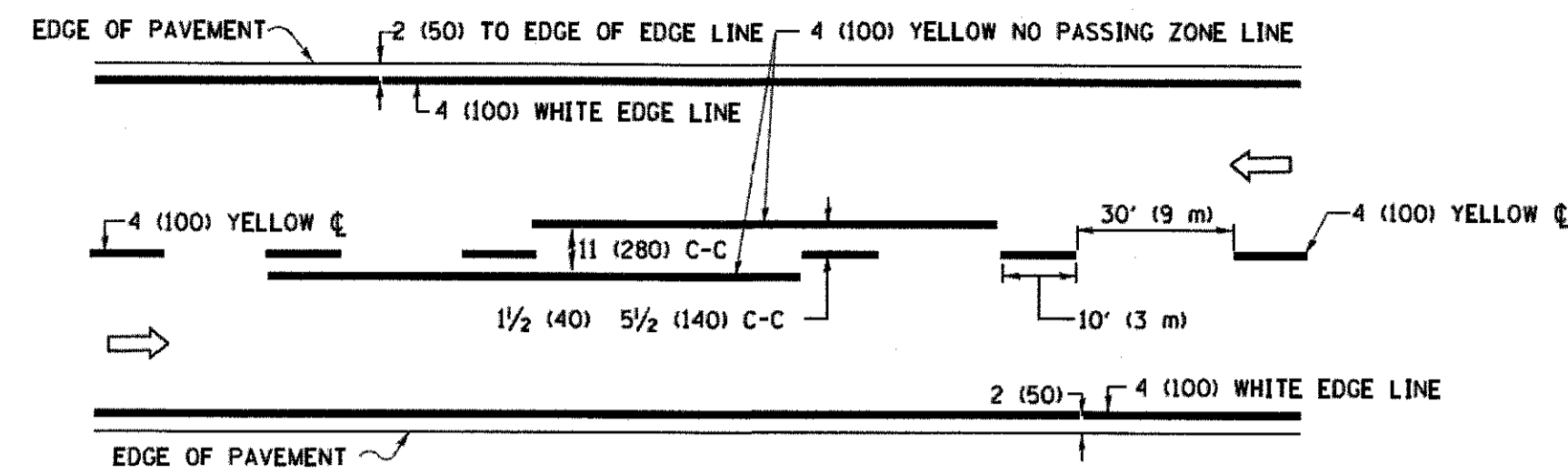
FILE NAME =	USER NAME = jdzzenzo	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
		DRAWN -	REVISED - T. RAMMACHER 01-06-00
	PLOT SCALE = 20x0.000001 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 5/24/17	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

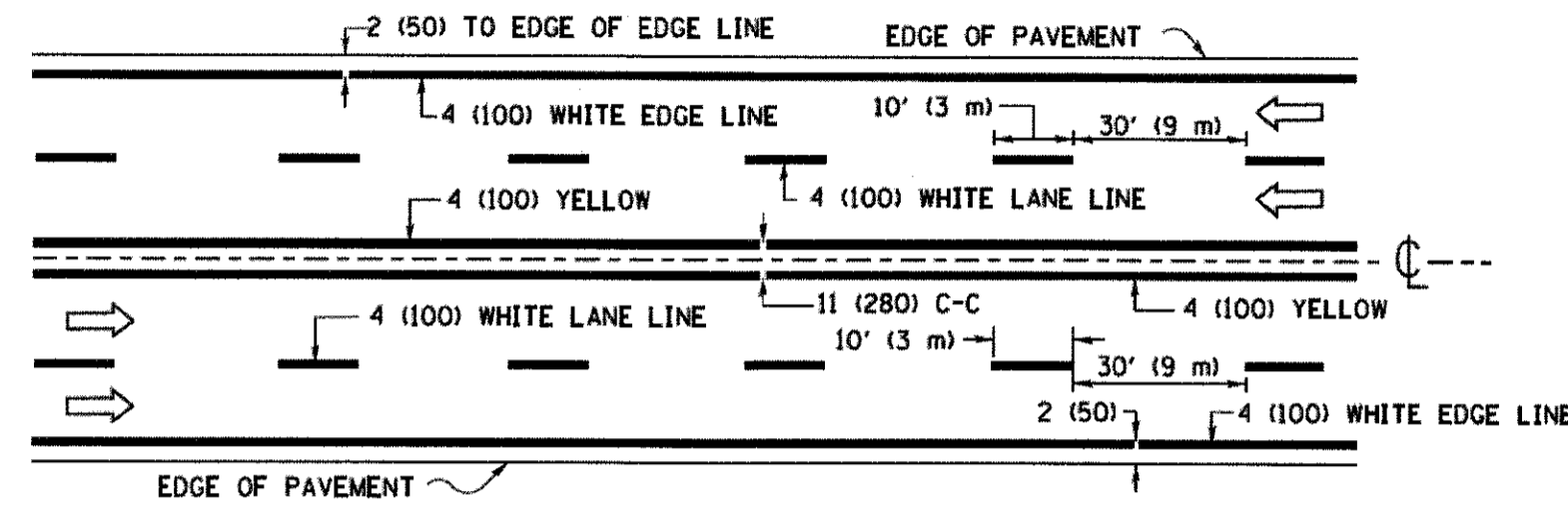
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

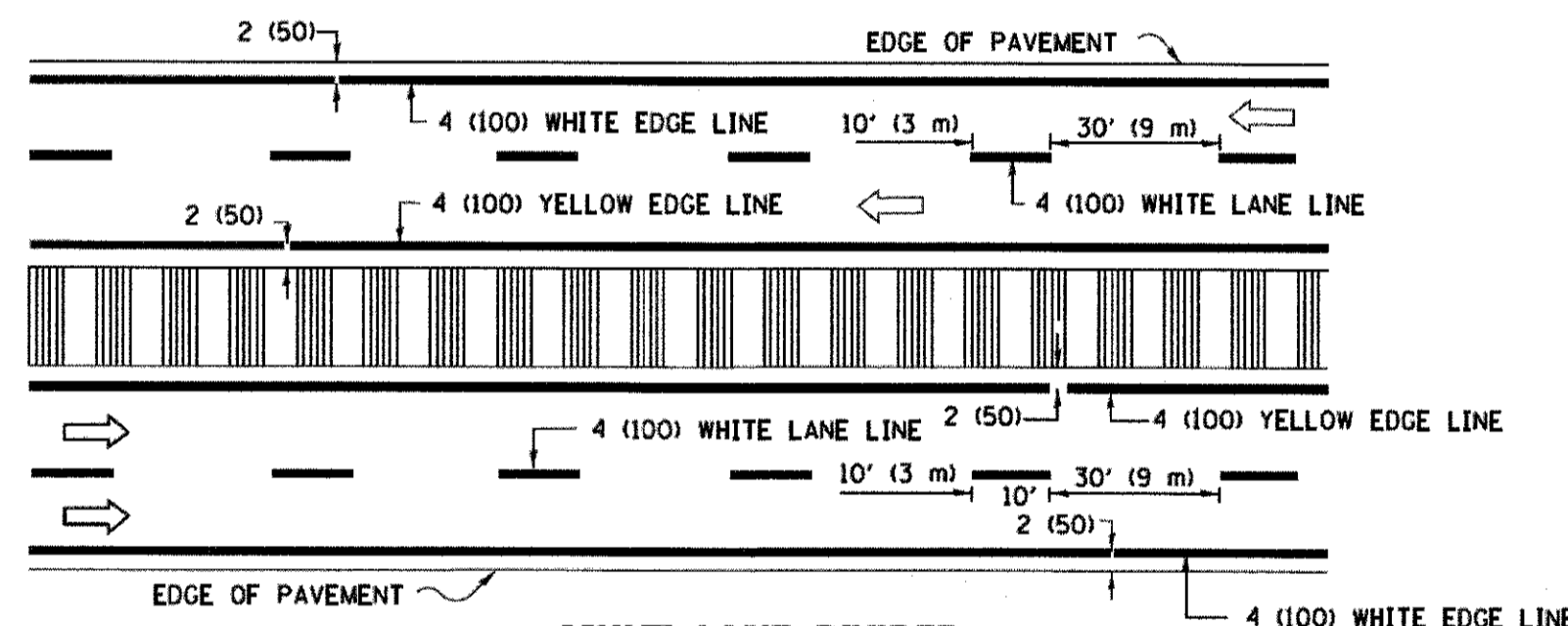
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2760	14-00161-00-BR	COOK	34	32
TC-10			CONTRACT NO. 61D98	
ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

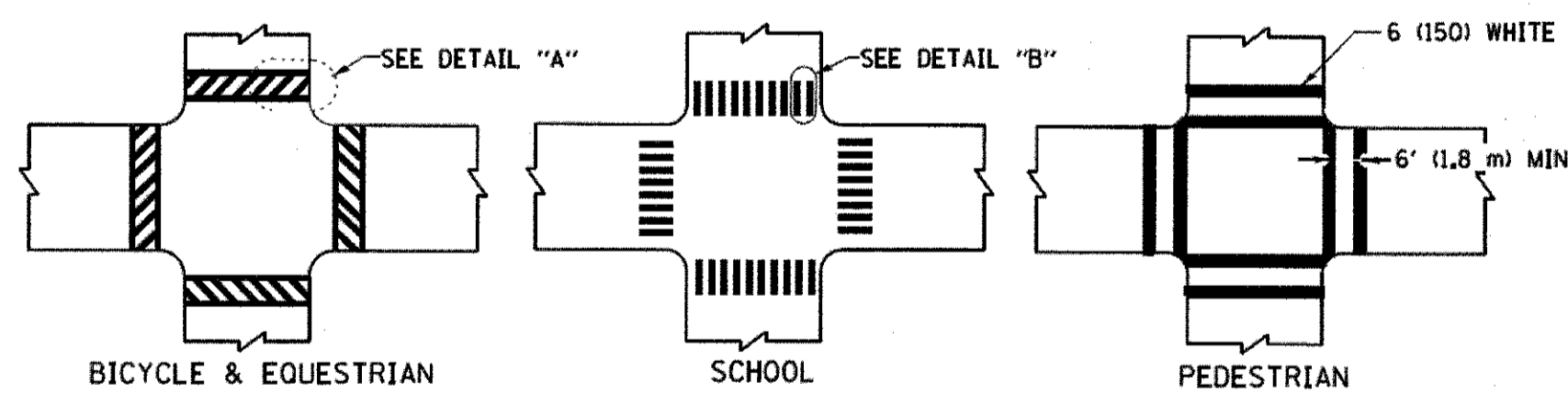


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

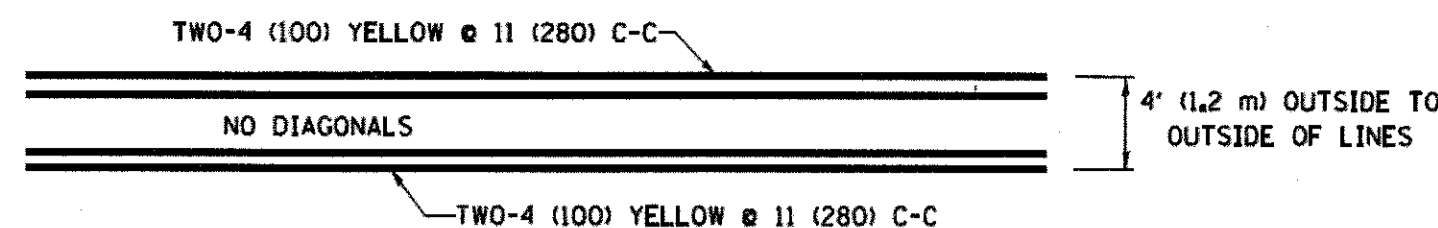


DETAIL "A"

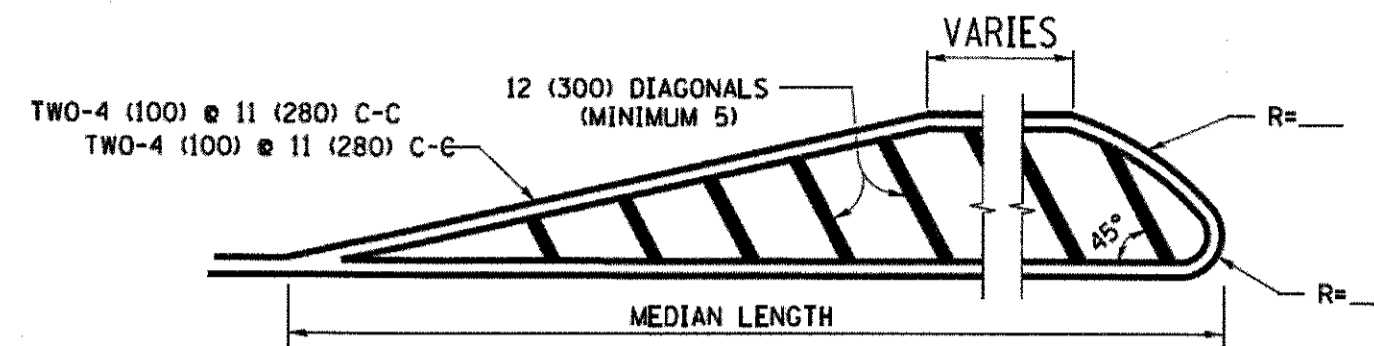
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



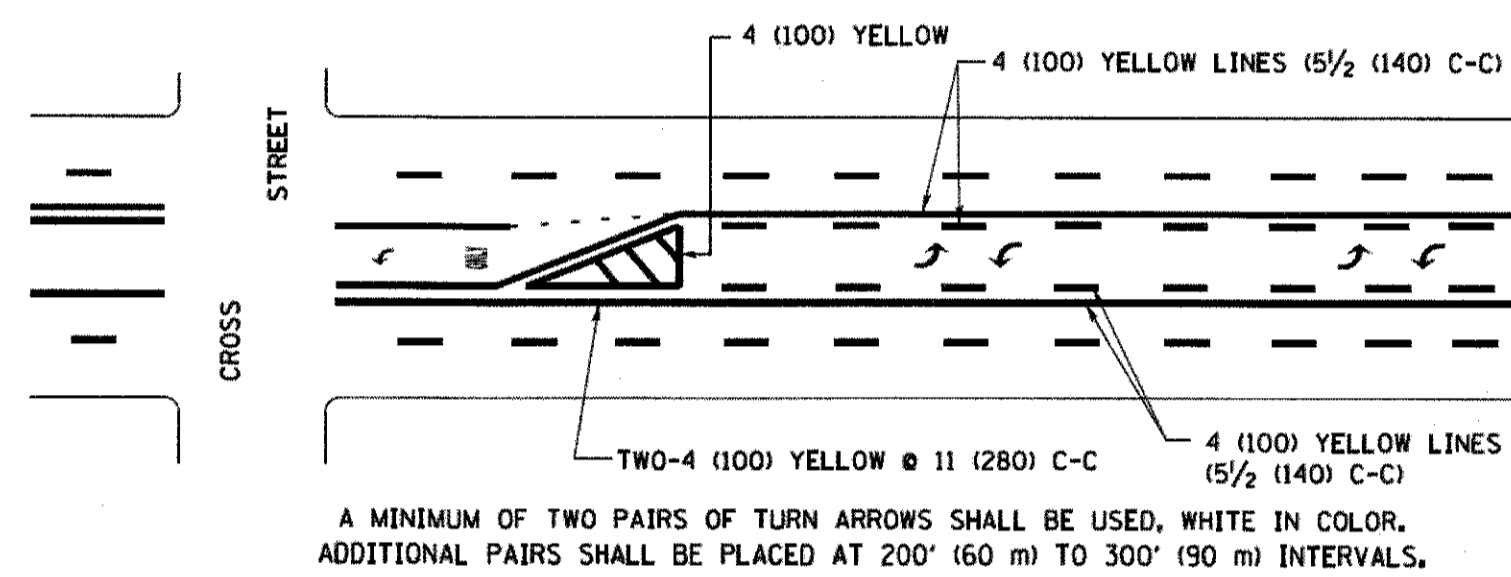
4' (1.2 m) WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

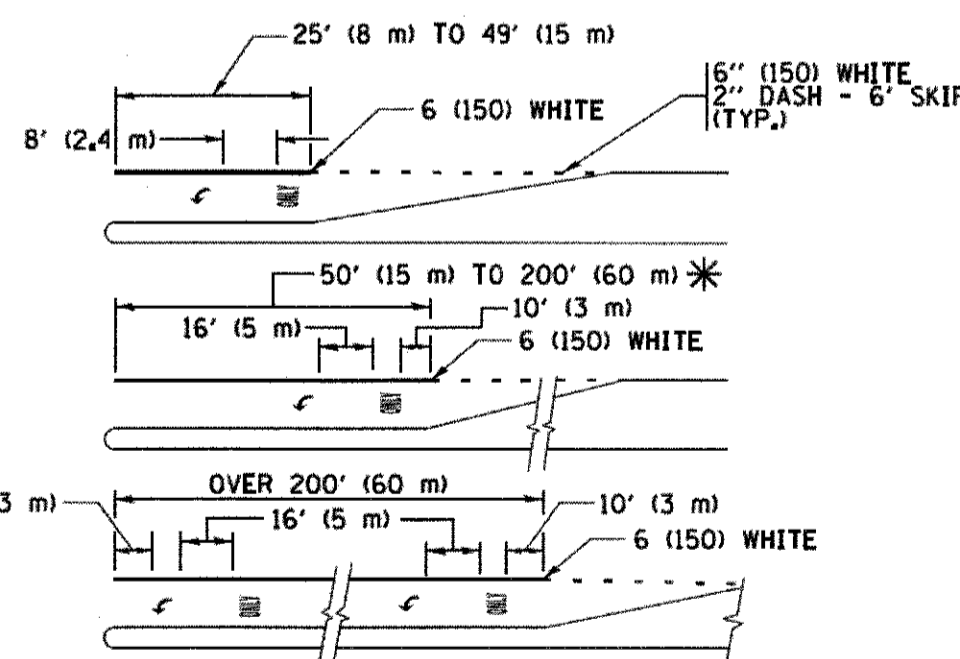
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

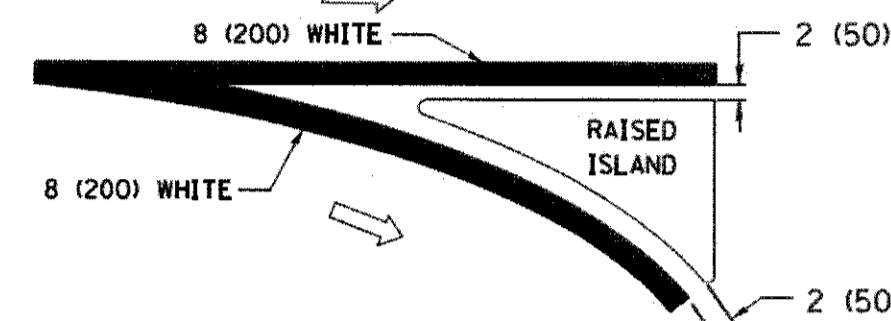
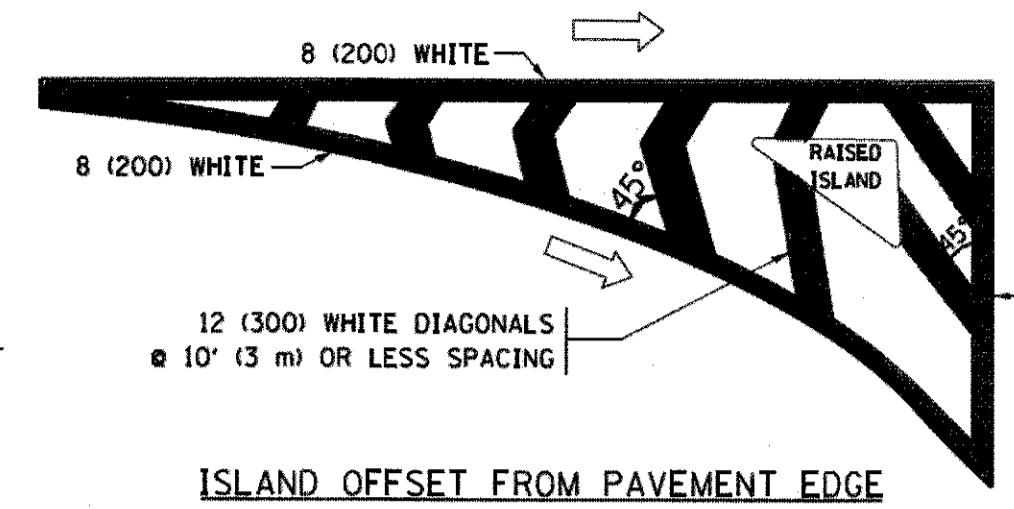


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

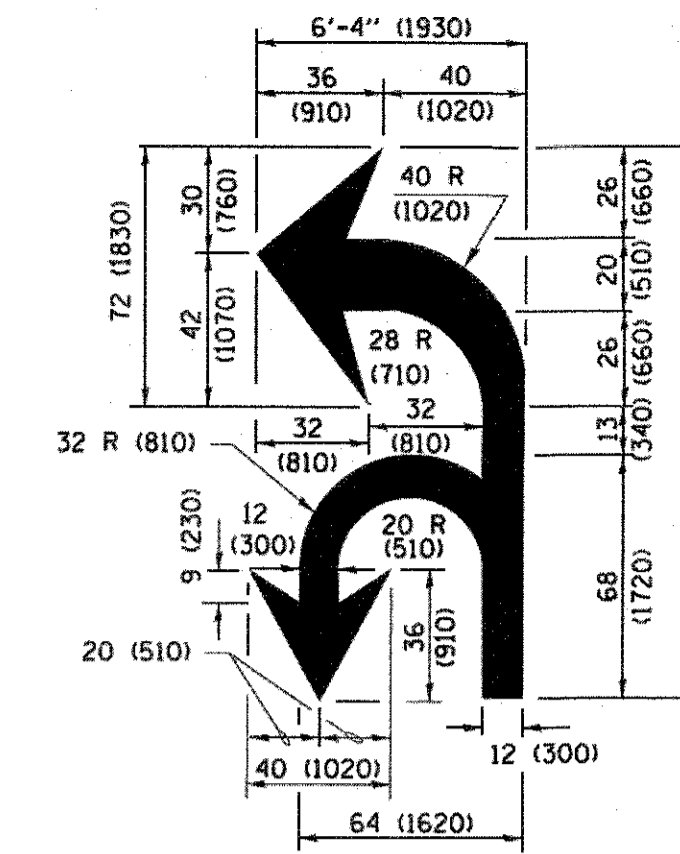
* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

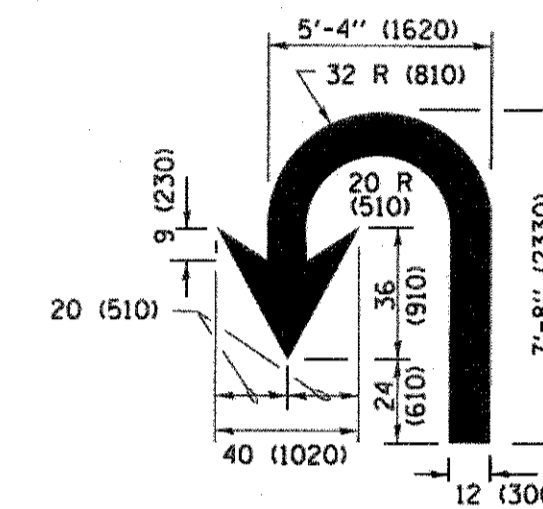
TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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	5/2 (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 MEDIANS IN YELLOW
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) 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE 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 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. OTHERWISE, 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.
CORE 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" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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 (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

FILE NAME =	USER NAME = jdszenzo	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
		DRAWN -	REVISED - C. JUCIUS 07-01-13
		CHECKED -	REVISED - C. JUCIUS 12-21-15
		DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

DISTRICT ONE				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS				2760	14-00161-00-BR	COOK	34	33
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.				TC-13		CONTRACT NO. 61D98		
				ILLINOIS FED. AID PROJECT				

ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

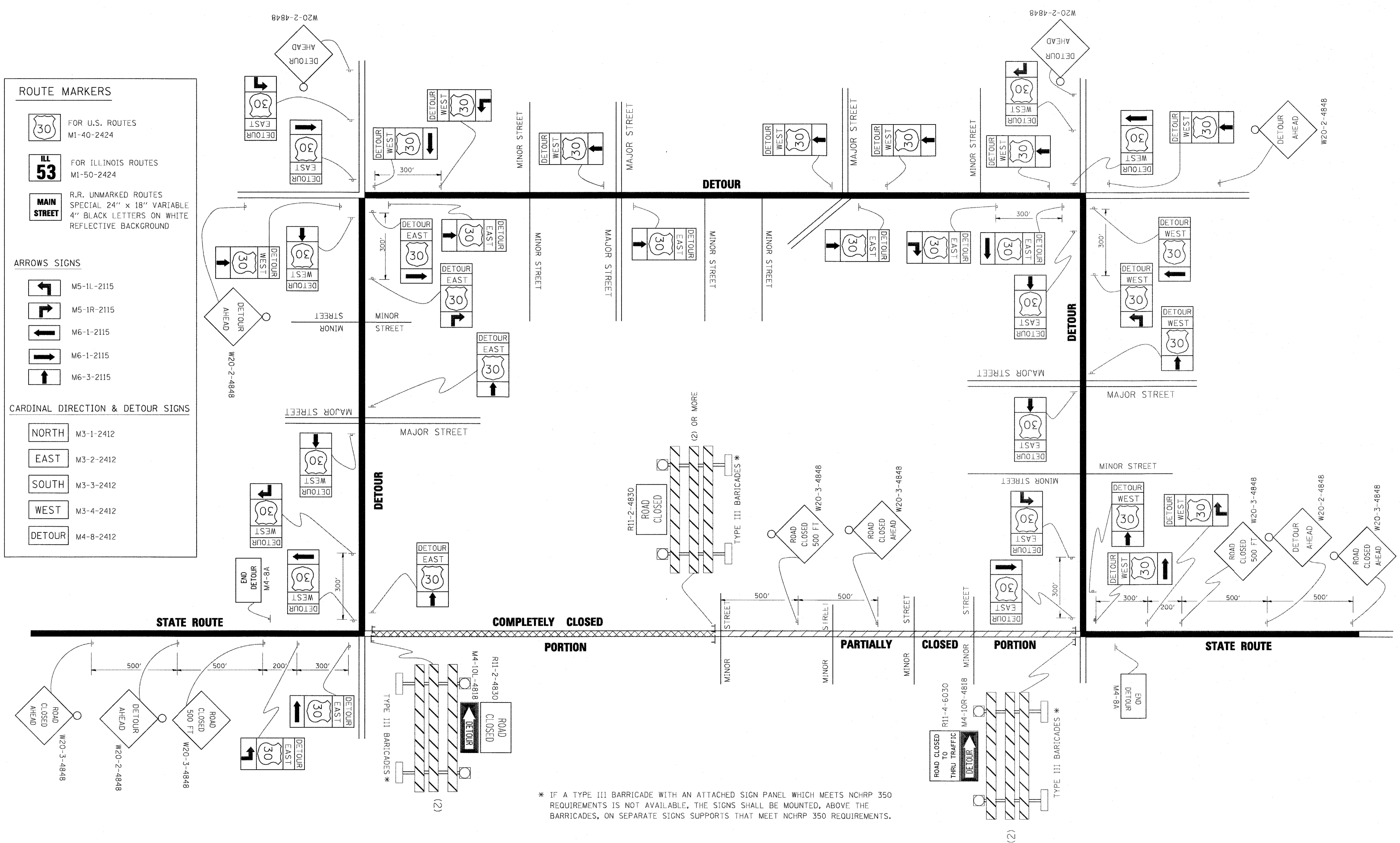
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

Bowman
CONSULTING
401 S. LaSalle Street, Suite 2000A,
Chicago, Illinois 60605

FILE NAME =	USER NAME = jdizenzo	DESIGNED -	REVISED - 10-18-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				DETOUR SIGNING FOR CLOSING STATE HIGHWAYS				F.A.I. RTE. 2760	SECTION 14-00161-00-BR	COUNTY COOK	TOTAL SHEETS 34	SHEET NO. 34
PLOT SCALE = 2000.000001' / 1 in.	CHECKED -	REVISOR - R, BORO 09-14-09	REVISED -					SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	TC-21	CONTRACT NO. 61D98	
PLOT DATE = 5/24/17	DATE -	REVISED -	REVISED -									ILLINOIS FED. AID PROJECT				