

V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com



FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN:  
VILLAGE OF VILLA PARK

DESIGN DESIGNATION

4 LANE URBAN COLLECTOR  
ADT ARDMORE AVE.: 10,200 (2005)  
ADT ARDMORE AVE.: 12,000 (2030)  
POSTED SPEED ARDMORE AVE.: 25 MPH  
DESIGN SPEED ARDMORE AVE.: 30 MPH

STRUCTURE NO. 022-6930 (EXISTING)  
STRUCTURE NO. 022-6930 (PROPOSED)

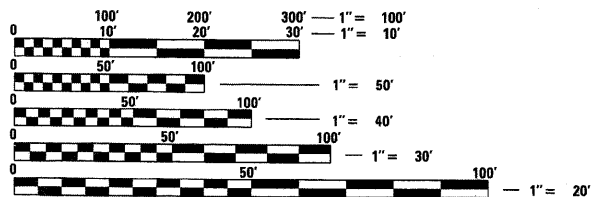
ADT HILL AVE.: 2800



*D.S. Sherman*  
Expires 11-30-11  
SHEETS 1-14, 44-50



*Bill Vegrzyn*  
Expires 11-30-12  
SHEETS 15-43



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

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

PROJECT ENGINEER: DANIEL SHERMAN, P.E.  
PROJECT MANAGER: PHIL MALONEY, P.E., S.E.

CONTRACT NO. 63601

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

FAU 2651 (ARDMORE AVENUE)  
OVER CHICAGO, CENTRAL, & PACIFIC RAILROAD

BRIDGE REHABILITATION

HILL AVENUE: ARDMORE AVENUE TO VILLA AVENUE

RESURFACING

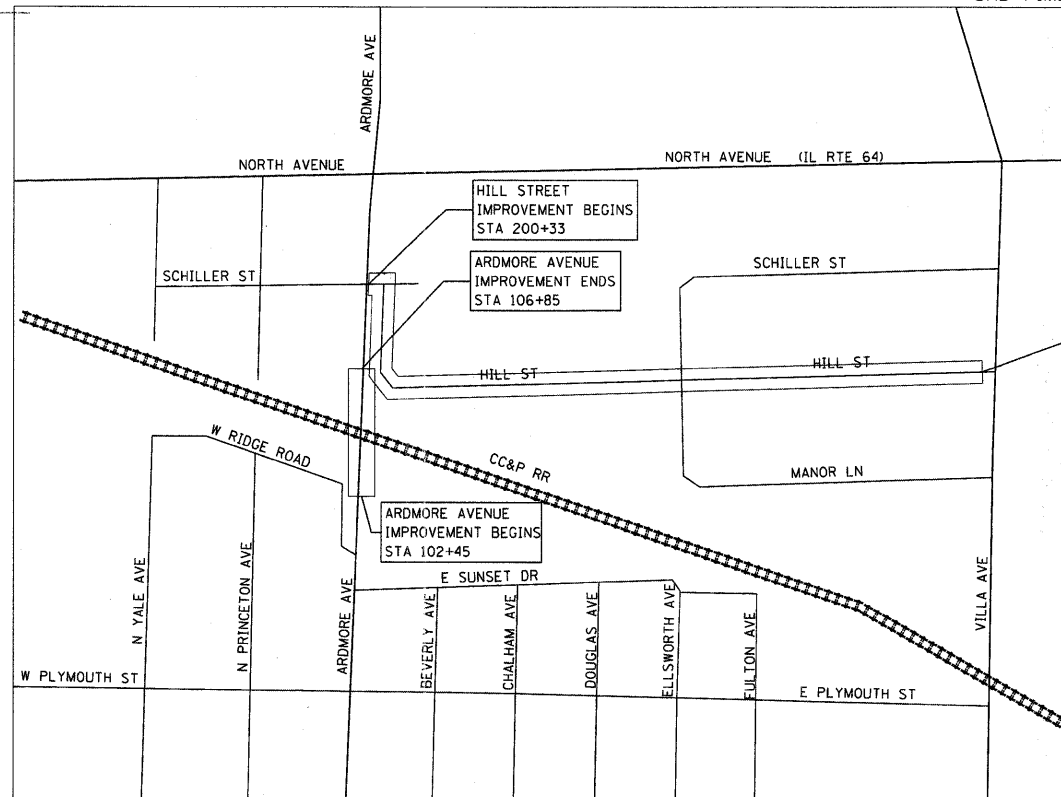
SECTION 07-00083-00-BR

PROJECT BRM8003(799)

VILLAGE OF VILLA PARK

DUPAGE COUNTY

C-91-191-07



LOCATION MAP  
1" = 652.15 FEET

YORK TOWNSHIP  
GROSS AND NET LENGTH = 440.20 FEET (0.08 MILES) ARDMORE AVENUE  
GROSS AND NET LENGTH = 2,938 FEET (0.56 MILES) HILL AVENUE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2651	07-00083-00-BR	DUPAGE	50	1
		ILLINOIS	CONTRACT NO. 63601	



LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED June 14, 20 11  
*Dydas Jankelis*  
VILLAGE OF VILLA PARK

PASSED JUNE 14 20 11  
*[Signature]*  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW JUNE 14 20 11  
*Diane M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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

# GENERAL NOTES

1. EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:  
  
V3 COMPANIES OF ILLINOIS LTD.  
7325 JANES AVENUE  
WOODRIDGE, IL 60517  
  
COPIES OF THE SURVEY ARE AVAILABLE FROM THE ENGINEER. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.
2. ALL EXISTING TOPOGRAPHY, UNDERGROUND UTILITIES, STRUCTURES AND ASSOCIATED FACILITIES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEREFORE, THEIR LOCATIONS AND ELEVATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER FACILITIES, THE EXISTENCE OF WHICH ARE NOT PRESENTLY KNOWN.
3. CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
4. ALL ELEVATIONS ARE BASED ON USGS DATUM. BENCHMARK LOCATIONS AND ELEVATIONS ARE SHOWN ON PLANS.
5. ALL APPLICABLE PROVISIONS OF THE CURRENT OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
6. ALL COORDINATES REFER TO EDGE OF PAVEMENT AND CENTERLINE OF MANHOLE STRUCTURE UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO COMMENCING ANY WORK AND FOR ANY NEW CONSTRUCTION REQUIRING INSPECTION.
8. WORK IS NOT PERMITTED OUTSIDE THE R.O.W. LIMITS WITHOUT AN EASEMENT. ANY AREAS IMPACTED OUTSIDE OF THE CONSTRUCTION LIMIT LINE SHALL BE RETURNED TO ITS PREVIOUS STATE.
9. STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND IF DAMAGED, SHALL BE REPLACED PROMPTLY IN CONFORMANCE WITH IDOT STANDARD SPECIFICATIONS IN MATERIALS AND WORKMANSHIP.
10. CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL UNDERGROUND UTILITY CONSTRUCTION AND SUBMIT "RECORD" INFORMATION TO ENGINEER FOR USE IN PREPARING RECORD DRAWINGS.
11. ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION BY THE ENGINEER AND SHALL BE PROTECTED PER IDOT ARTICLE 201.05. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES NOTED TO REMAIN SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
12. CONSTRUCTION ACCESS POINTS TO THE SITE SHALL BE PROTECTED IN SUCH A WAY AS TO PREVENT ACCUMULATION OF MUD OR SOIL ON PUBLIC THOROUGHFARES. AT THE END OF EACH DAY AND AS OFTEN AS NECESSARY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC STREETS OR AS REQUIRED BY THE ENGINEER.
13. FOR REGULATED UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT THE JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS, "J.U.L.I.E." AT 1-800-892-0123. LOCAL GOVERNMENT AGENCIES SHOULD BE CONTACTED BY THE CONTRACTOR FOR LOCATION OF ALL NONREGULATED UTILITY LOCATIONS. PLEASE CALL FOR LOCATES 48 HOURS IN ADVANCE OF CONSTRUCTION.
14. WHEN AN EXISTING DRAINAGE ROUTE, EITHER A STORM SEWER OR WATERWAY, IS INTERRUPTED DUE TO THE SEWER INSTALLATION, THE DRAINAGE ROUTE SHALL BE REESTABLISHED TO ORIGINAL CONDITIONS BY THE END OF THE SAME WORK DAY. DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
15. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.
16. BAND SEAL CONNECTORS OR EQUIVALENT SHALL BE USED TO JOIN PIPES OF DISSIMILAR MATERIAL.
17. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON THE STATE OR VILLAGE OF VILLA PARK RIGHT OF WAY WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
18. FOR STRUCTURAL GENERAL NOTES SEE STRUCTURAL PLANS.
19. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
20. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE CC&P RAILROAD WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE CC&P RAILROAD TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
21. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH OR LESS. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
22. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
23. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
24. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
25. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
26. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

# INDEX OF SHEETS

COVER SHEET	1
INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES	2
SUMMARY OF QUANTITIES	3-5
TYPICAL SECTIONS ARDMORE AVENUE	6
TYPICAL SECTIONS HILL STREET	7
ALIGNMENT, TIES AND BENCHMARKS	8
ROADWAY PLAN AND PROFILE ARDMORE AVENUE	9
ROADWAY PLAN HILL STREET	10
DETOUR PLAN	11
EROSION AND SEDIMENT CONTROL	12
DRAINAGE AND UTILITY PLAN ARDMORE AVENUE	13
PAVEMENT MARKING AND SIGNING ARDMORE AVENUE	14
STRUCTURAL PLANS	15-43
DISTRICT 1 STANDARD DETAILS	44-48
CROSS SECTIONS ARDMORE AVENUE	49-50

# STATE STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420101-04	24FT JOINTED PCC PAVEMENT
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATES FOR BRIDGES
602001-02	CATCH BASIN TYPE A
602401-03	MANHOLE TYPE A
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE 8
604051-03	FRAME AND GRATE TYPE 11
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-09	STEEL PLATE BEAM GUARDRAIL
631026-05	TRAFFIC BARRIER TERMINAL, TYPE 6
701501-06	URBAN LANE CLOSURE, LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-04	MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
814001-02	HANDHOLES
878001-08	CONCRETE FOUNDATION DETAILS

HMA MIXTURE REQUIREMENTS CHART	
MIXTURE TYPE	AIR VOIDS
STABILIZED SUBBASE HOT MIX ASPHALT BAM (IL-19.0 mm), 4 1/2"	2% @ 30 GYR.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), !! 4.75, N50	4% @ 50 GYR.
CLASS D PATCHES (HMA BINDER IL-19 mm) (8 INCHES)	4% @ 70 GYR.
STABILIZED SUBBASE HOT MIX ASPHALT BAM (IL 19.0 mm), 4 1/2"	

NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL HOT MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ YD./IN

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



V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3cc.com

USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE -	REVISED -

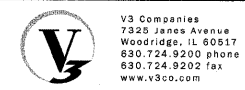
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ARDMORE AVENUE OVER CC&P RAILROAD  
INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES

SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
265I	07-00083-00-BR	DUPAGE	02	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	• SPECIALTY ITEM		80% FED	80% FED	80% FED	100%	80% FED
				20% VP	20% VP	20% VP	YORK TWP	20% VP		
				ROADWAY	RECONSTRUCTION	HILL AVENUE	HILL AVENUE	RESURFACING	RESURFACING	TRAINEES
				0004	SN 022-6930	0005	0005	0005	0005	0042
				0014	0014					
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	30	30						
20101000	TEMPORARY FENCE	FOOT	250	250						
20101100	TREE TRUNK PROTECTION	EACH	10	10						
20101400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45						
20101500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45						
20101600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45						
20200100	EARTH EXCAVATION	CU YD	743	728			12		3	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	545	545						
20400800	FURNISHED EXCAVATION	CU YD	1336	1336						
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2068	2068						
25000110	SEEDING, CLASS 1A	ACRE	0.50	0.50						
25100105	MULCH, METHOD 1	ACRE	0.50	0.50						
28000400	PERIMETER EROSION BARRIER	FOOT	890	890						
28000510	INLET FILTERS	EACH	12	12						
31200502	STABILIZED SUBBASE - HOT MIX ASPHALT, 4 1/2"	SQ YD	1390	1390						
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4050				3285		765	
40600300	AGGREGATE (PRIME COAT)	TON	16				13		3	
40600400	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	TON	10				8		2	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	385				365		20	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1020				930		90	
42000411	PORTLAND CEMENT CONCRETE PAVEMENT, 9 1/2" (JOINTED)	SQ YD	318	318						
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	967	967						
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	1962	1962						
44000100	PAVEMENT REMOVAL	SQ YD	62	62						
44000101	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	8100				6570		1530	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	649	649						
44000600	SIDEWALK REMOVAL	SQ FT	1962	1962						
44201737	CLASS D PATCHES, TYPE I 8 INCH	SQ YD	100				80		20	
44201741	CLASS D PATCHES, TYPE II 8 INCH	SQ YD	200				160		40	
44201745	CLASS D PATCHES, TYPE III 8 INCH	SQ YD	300				240		60	
44201747	CLASS D PATCHES, TYPE IV 8 INCH	SQ YD	500				400		100	
48101498	AGGREGATE SHOULDERS, TYPE B 4"	SQ YD	1200				960		240	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1				1			



USER NAME = #USER#  
 DESIGNED -  
 DRAWN -  
 PLOT SCALE = #SCALE#  
 PLOT DATE = 6/14/2011

REVISED -  
 REVISED -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**ARDMORE AVENUE OVER CC&P RAILROAD  
 SUMMARY OF QUANTITIES**

SCALE: NTS      SHEET NO. 1 OF 3 SHEETS      STA.      TO STA.

F.A.U. RTE. 2651      SECTION 07-0083-00-BR      COUNTY DUPAGE      SHEET NO. 03      TOTAL SHEETS 50  
 CONTRACT NO. 63601  
 ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% VP ROADWAY 0004	80% FED 20% VP ARDMORE BRIDGE RECONSTRUCTION SN 022-6930 0014	80% FED 20% VP HILL AVENUE RESURFACING 0005	100% YORK TWP HILL AVENUE RESURFACING 0005	80% FED 20% VP TRAINEES 0042
50102400	CONCRETE REMOVAL	CU YD	209.8		209.8			
50104650	SLOPE WALL REMOVAL	SQ YD	111		111			
50300225	CONCRETE STRUCTURES	CU YD	421.9		421.9			
50300255	CONCRETE SUPERSTRUCTURE	CU YD	214.7		214.7			
50300260	BRIDGE DECK GROOVING	SQ YD	932		932			
50300300	PROTECTIVE COAT	SQ YD	1193		1193			
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	7102		7102			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	75770		75770			
* 50901730	BRIDGE FENCE RAILING	FOOT	228		228			
51100100	SLOPE WALL, 4 INCH	SQ YD	111		111			
51202100	FURNISHING STEEL PILES HP 14X117	FOOT	1474		1474			
51202305	DRIVING PILES	FOOT	924		924			
51204100	TEST PILE STEEL HP 14X17	EACH	2		2			
51500100	NAME PLATES	EACH	1		1			
59000200	EPOXY CRACK INJECTION	FOOT	7		7			
60251730	CATCH BASINS TO BE ADJUST WITH NEW TYPE 23 FRAME AND GRATE	EACH	3	3				
60261300	INLETS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	1	1				
60255500	MANHOLE TO BE ADJUSTED	EACH	3	3				
<del>6030310</del>	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5			5		
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	649	649				
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	644	644				
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4				
63200310	GUARDRAIL REMOVAL	FOOT	644	644				
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	12	12				
67100100	MOBILIZATION	L SUM	1	1				
70102620	TRAFFIC CONTROL AND PROECTION, STANDARD 701501	LSUM	1			1		

\* SPECIALTY ITEM



USER NAME = \*USER\*  
PLOT SCALE = \*SCALE\*  
PLOT DATE = 6/14/2011

DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ARDMORE AVENUE OVER CC&P RAILROAD  
SUMMARY OF QUANTITIES

SCALE: NTS SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.U.  
RTE.  
2651

SECTION  
07-0083-00-BR

COUNTY  
DUPAGE

SHEET NO.  
04

TOTAL SHEETS  
50

CONTRACT NO. 63601

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% VP	80% FED 20% VP	80% FED 20% VP	100% YORK TWP	80% FED 20% VP
				ROADWAY 0004	BRIDGE RECONSTRUCTION SN 022-6930 0014	HILL AVENUE RESURFACING 0005	HILL AVENUE RESURFACING 0005	TRAINEES 0042
* 78008210	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4"	FOOT	880	880				
* 81200120	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	524	524				
* 81304100	JUNCTION BOX EMBEDDED IN STRUCTURE, 12"x12"x6"	EACH	4	4				
* 81603040	UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 8 GROUND (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1197	1197				
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	935	935				
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3591	3591				
* X0323651	REMOVE AND REINSTALL EXISTING LIGHTING UNIT	EACH	2	2				
X2020502	BRACED EXCAVATION	CU YD	111.4		111.4			
X4020816	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	570			456	114	
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	791		791			
XX006119	TRAFFIC CONTROL AND PROTECTION (DETOUR)	L SUM	1	1				
Z0001050	AGGREGATE SUBGRADE, 12"	SQ YD	1390	1390				
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	32		32			
Z0004552	APPROACH SLAB REMOVAL	SQ YD	1029	1029				
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	114		114			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1			
Z0076600	TRAINEES	HOUR	1000					1000

\* SPECIALTY ITEM



USER NAME = #USER#  
 PLOT SCALE = #SCALE#  
 PLOT DATE = 6/14/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

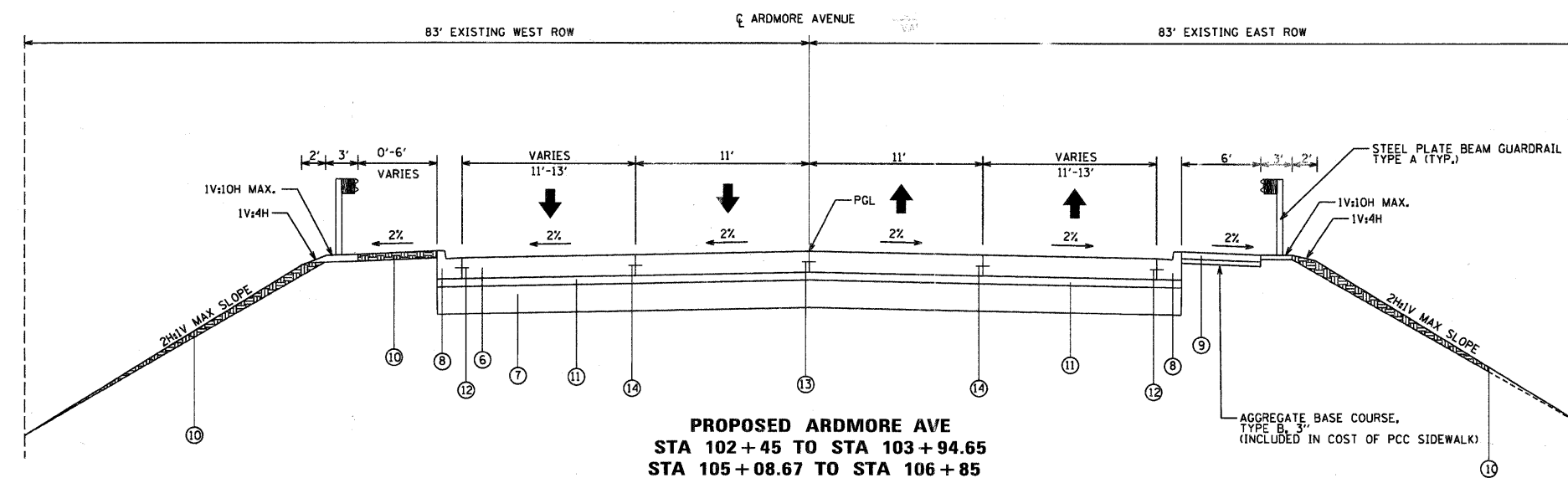
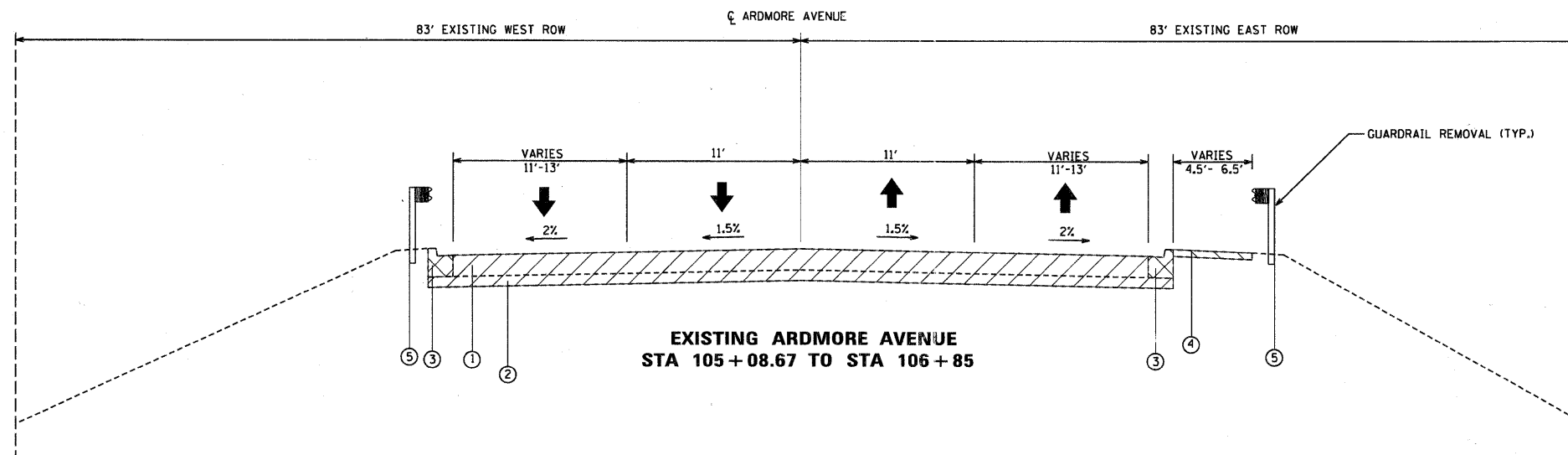
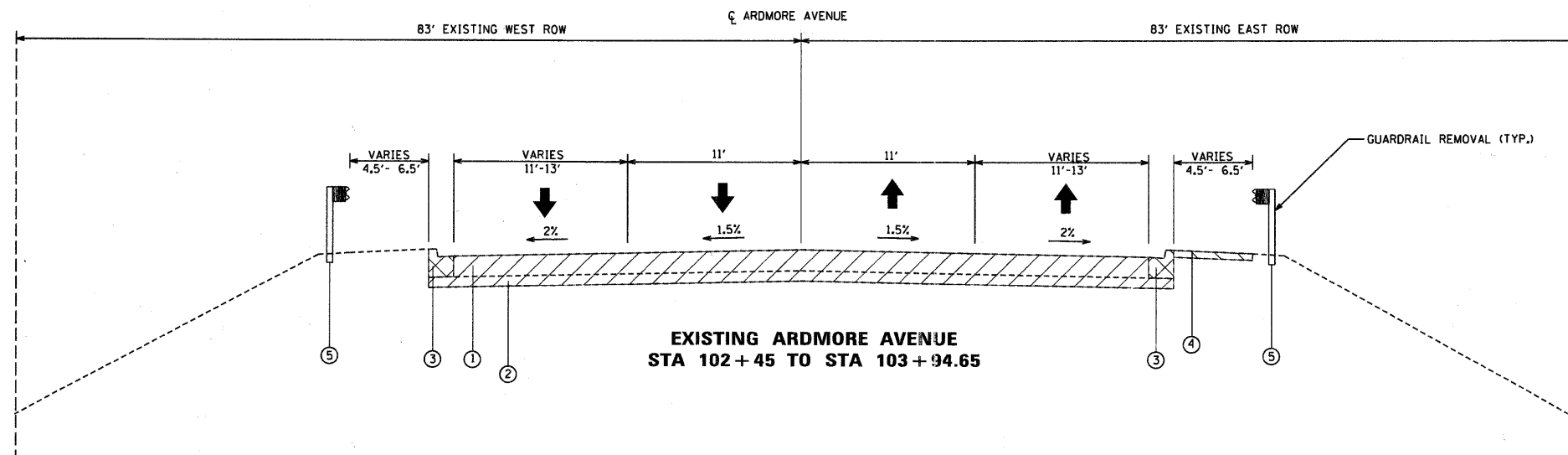
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

ARDMORE AVENUE OVER CC&P RAILROAD  
 SUMMARY OF QUANTITIES

SCALE: NTS SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE. 2651 SECTION 07-0083-00-BR COUNTY DUPAGE SHEET NO. 05 TOTAL SHEETS 50 CONTRACT NO. 63601 ILLINOIS FED. AID PROJECT

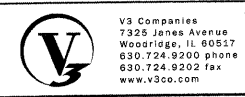


- ① EXIST. PORTLAND CEMENT CONCRETE PAVEMENT, 8" (JOINTED)
- ② EXIST. SUBBASE GRANULAR MATERIAL, TYPE B
- ③ EXIST. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ④ EXIST. PORTLAND CEMENT CONCRETE SIDEWALK
- ⑤ EXIST. STEEL PLATE BEAM GUARDRAIL
- ⑥ PROP. PORTLAND CEMENT CONCRETE PAVEMENT, 9.5" (JOINTED)
- ⑦ PROP. AGGREGATE SUBGRADE, 12" AND VARIES
- ⑧ PROP. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- ⑨ PROP. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- ⑩ PROP. TOPSOIL FURNISH AND PLACE, 4" AND SEEDING, CLASS 2A AND HEAVY DUTY EROSION CONTROL BLANKET
- ⑪ PROP. STABILIZED SUBBASE, HOT-MIX ASPHALT, 4 1/2"
- ⑫ NO. 6 X 24" DEFORMED BARS (EPOXY COATED) GROUTED IN PLACE AT 24" C-C (INCLUDED IN COST OF "COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12")
- ⑬ LONGITUDINAL KEYED JOINT - NO. 6 X 24" DEFORMED TIE BARS (EPOXY COATED) AT 24" C-C (INCLUDED IN THE COST OF "PCC PAVT 9.5" (JOINTED)")
- ⑭ LONGITUDINAL SAWS JOINT - NO. 6 X 30" DEFORMED TIE BARS (EPOXY COATED) AT 30" C-C (INCLUDED IN THE COST OF "PCC PAVT 9.5" (JOINTED)")

**LEGEND**

- PAVEMENT REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL

STRUCTURAL TRAFFIC:	YEAR 2018
ROAD/STREET CLASSIFICATION:	CLASS 1
	P = 32% S = 45% M = 45%
TRAFFIC FACTOR:	ACTUAL TF = 3.88
	MINIMUM TF = 5.02
EDGE SUPPORT CONDITION:	TIED CURB & GUTTER
SUBGRADE SUPPORT RATING:	SSR = POOR (PROJECT LIMITS)



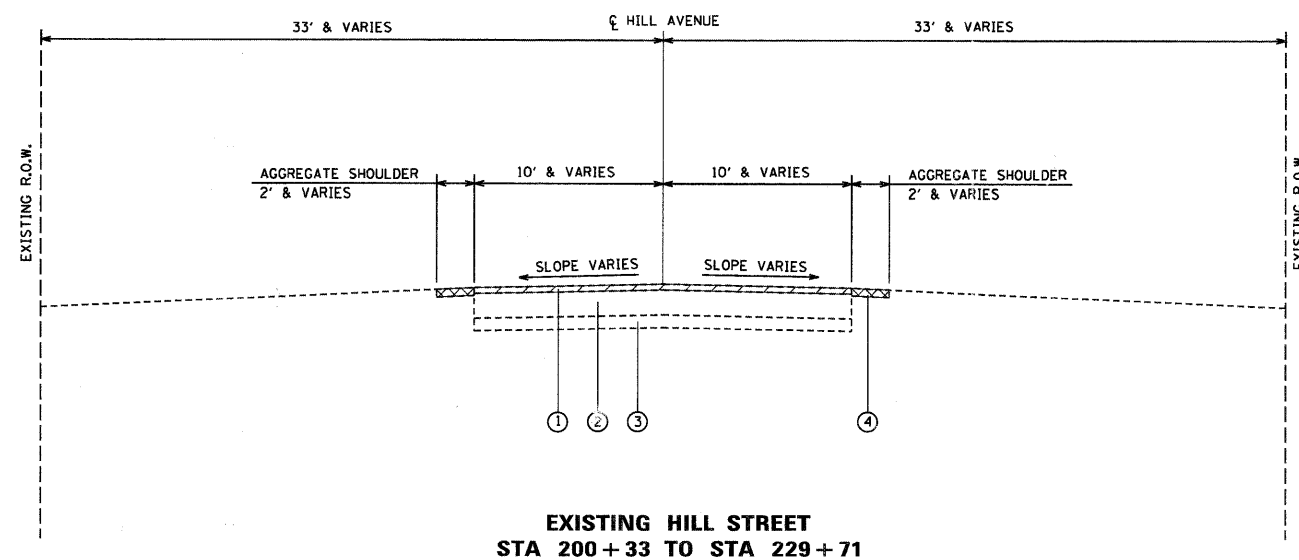
USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARDMORE AVENUE OVER CC&P RAILROAD  
TYPICAL SECTIONS**

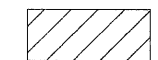
SCALE: NTS      SHEET NO. 1 OF 2 SHEETS      STA.      TO STA.

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	06	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				



- ① EXIST. HOT-MIX ASPHALT SURFACE REMOVAL, 3"
- ② EXIST. HOT-MIX ASPHALT PAVEMENT, VARIES
- ③ EXIST. AGGREGATE BASE COURSE
- ④ EXIST. AGGREGATE SHOULDER, 4" & VARIES
- ⑤ PROP. HOT-MIX SURFACE COURSE, MIX "D", N50 - 1 1/4"
- ⑥ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 1 1/4"
- ⑦ PROP. AGGREGATE SHOULDER, TY 8, 4"

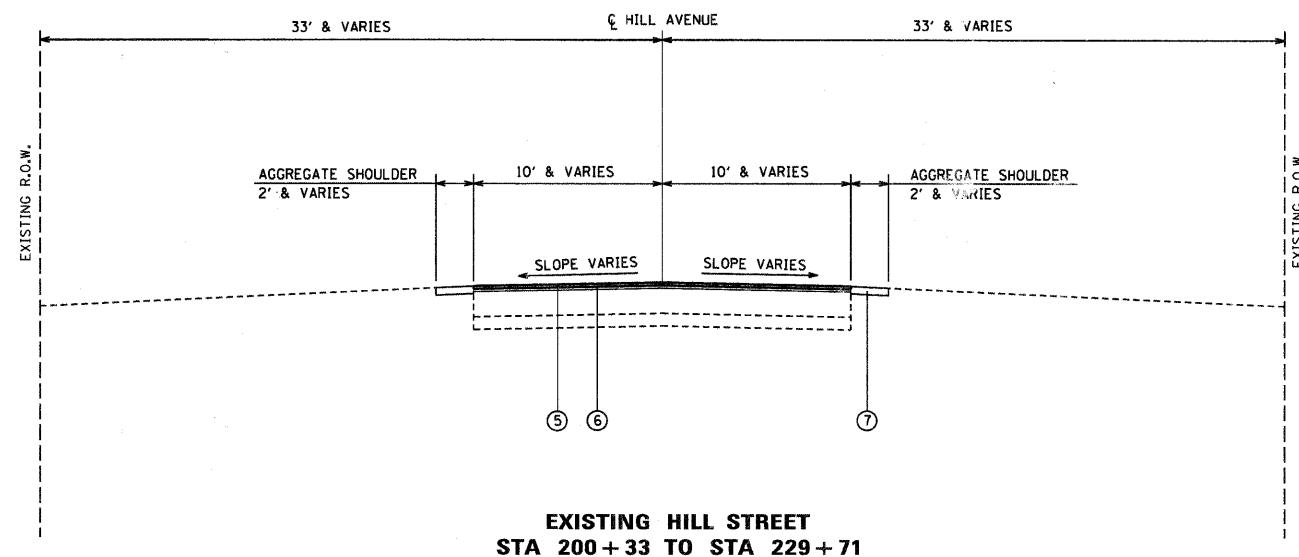
**LEGEND**



PAVEMENT REMOVAL



AGGREGATE SHOULDER REMOVAL



**NOTE:**

HMA SURFACE COURSE, MIX D, N50 THICKNESS WILL VARY FROM 2-1/2" AT CROWN OF ROADWAY TO 2" AT EDGE OF PAVEMENT AND POLYMERIZED LEVEL BINDER (MACHINE METHOD), IL-4.75, N50 THICKNESS WILL VARY FROM 1-1/2" AT CROWN OF ROADWAY TO 1" AT EDGE OF PAVEMENT IN ORDER TO RESTORE ROADWAY CROSS SLOPE TO 2%.



USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HILL STREET  
EXISTING AND PROPOSED TYPICAL SECTIONS**

SCALE: NTS    SHEET NO. 2 OF 2 SHEETS    STA. 200+33 TO STA. 229+71

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	07	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				

**BENCHMARKS**

**SOURCE:**

STATION DESIGNATION: VILLAGE OF VILLA PARK BENCHMARK #14  
 ESTABLISHED BY: VILLAGE OF VILLA PARK  
 DATE: 06/28/2002

ELEVATION: 671.83 (PUBLISHED AND HELD)  
 DATUM: NGVD29  
 DESCRIPTION: BRONZE DISK ON TOP OF THE WEST HEADWALL OF THE EAST POND AT NORTH PARK WHERE ARDMORE AVENUE DEAD ENDS NORTH OF NORTH AVENUE.

STATION DESIGNATION: VILLAGE OF VILLA PARK BENCHMARK #2  
 ESTABLISHED BY: VILLAGE OF VILLA PARK

ELEVATION: 679.86 (PUBLISHED)  
 DATUM: NGVD29  
 DESCRIPTION: BRONZE DISK IN CONCRETE BASE OF TRAFFIC SIGNAL AT SOUTHWEST CORNER OF VILLA AVENUE AND NORTH AVENUE.

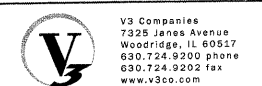
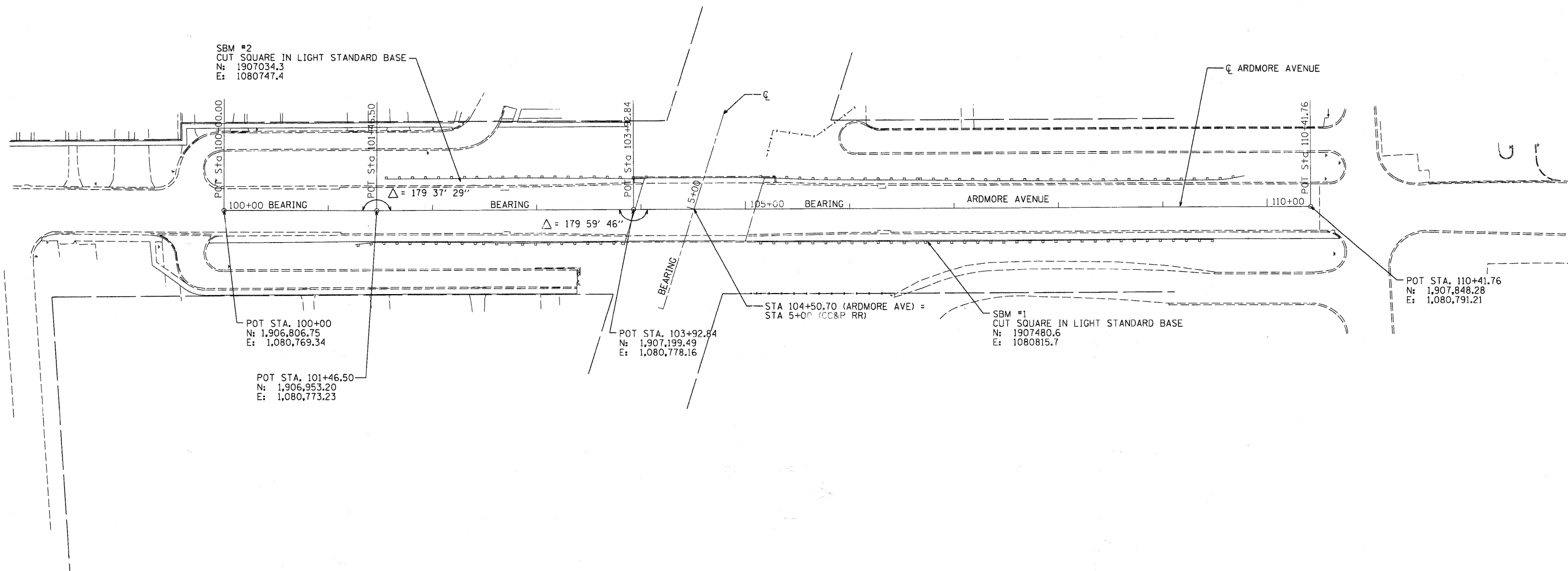
**SITE:**

STATION DESIGNATION: SBM #1  
 ESTABLISHED BY: V3 COMPANIES OF ILLINOIS, LTD.  
 DATE: 08/02/07

ELEVATION: 708.73 (MEASURED)  
 DATUM: NGVD29  
 DESCRIPTION: CUT SQUARE IN LIGHT STANDARD BASE (SOUTHWESTERLY), FIRST LIGHT STANDARD BASE NORTH OF ARDMORE BRIDGE ON EASE SIDE OF ARDMORE AVENUE.

STATION DESIGNATION: SBM #2  
 ESTABLISHED BY: V3 COMPANIES OF ILLINOIS, LTD.  
 DATE: 08/02/07

ELEVATION: 709.11 (MEASURED)  
 DATUM: NGVD29  
 DESCRIPTION: CUT SQUARE IN LIGHT STANDARD BASE (EAST), FIRST LIGHT STANDARD BASE SOUTH OF BRIDGE ON WEST SIDE OF ARDMORE AVENUE.



USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE	REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
 ALIGNMENT, TIES AND BENCHMARKS**

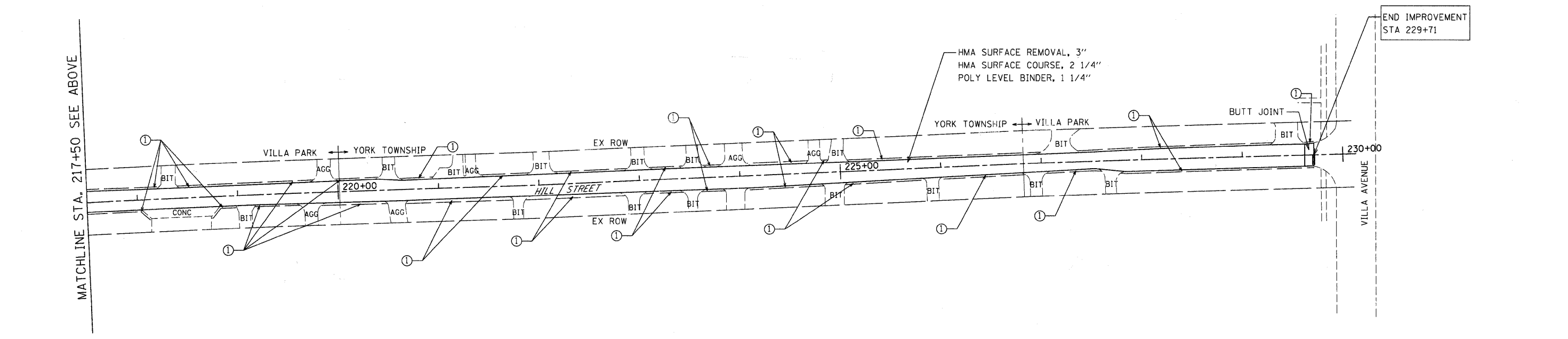
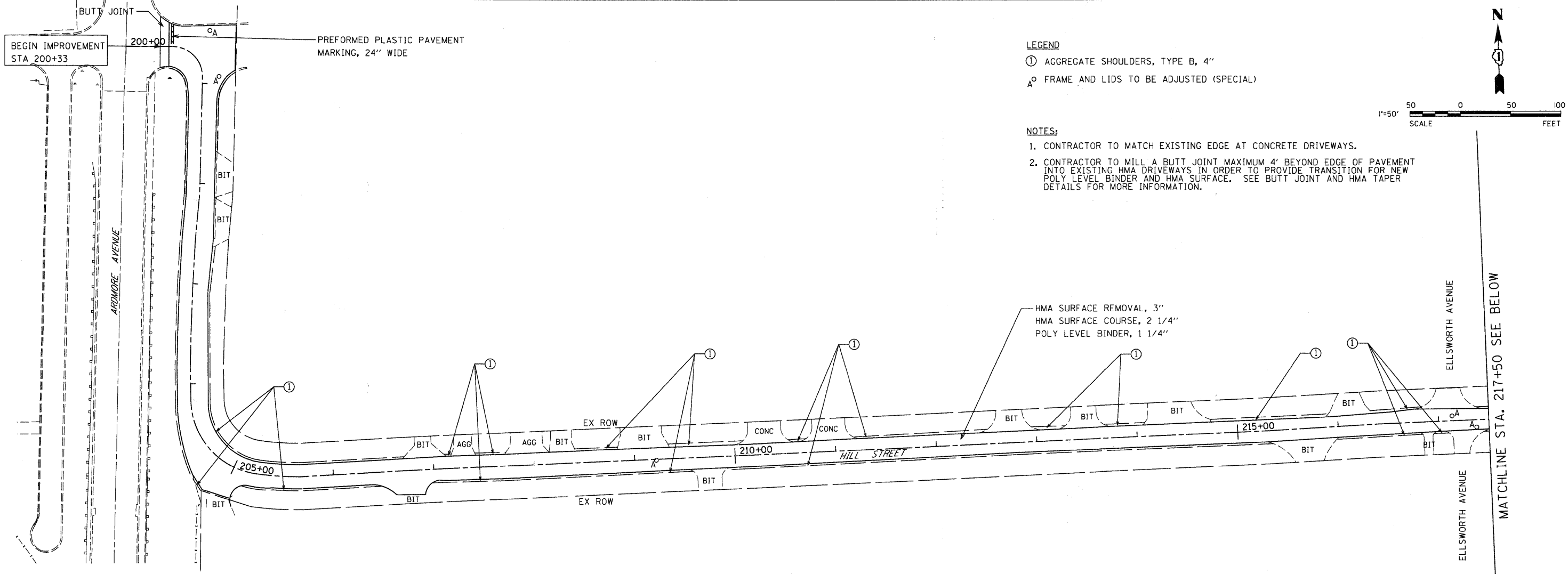
SCALE: 1"=50'    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	08	50
CONTRACT NO. 63601				

ILLINOIS FED. AID PROJECT

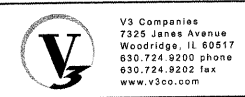
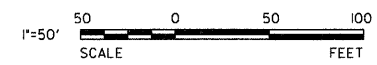






- LEGEND**
- ① AGGREGATE SHOULDERS, TYPE B, 4"
  - ⊙ FRAME AND LIDS TO BE ADJUSTED (SPECIAL)

- NOTES:**
1. CONTRACTOR TO MATCH EXISTING EDGE AT CONCRETE DRIVEWAYS.
  2. CONTRACTOR TO MILL A BUTT JOINT MAXIMUM 4' BEYOND EDGE OF PAVEMENT INTO EXISTING HMA DRIVEWAYS IN ORDER TO PROVIDE TRANSITION FOR NEW POLY LEVEL BINDER AND HMA SURFACE. SEE BUTT JOINT AND HMA TAPER DETAILS FOR MORE INFORMATION.



USER NAME = #USER#  
 DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

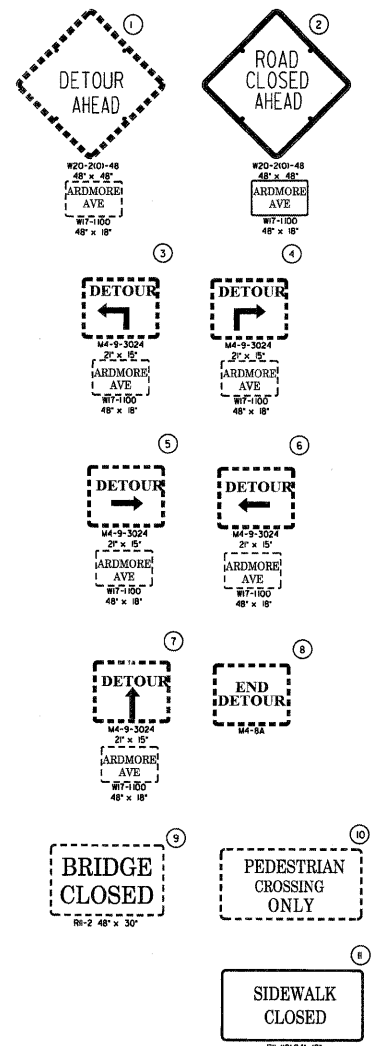
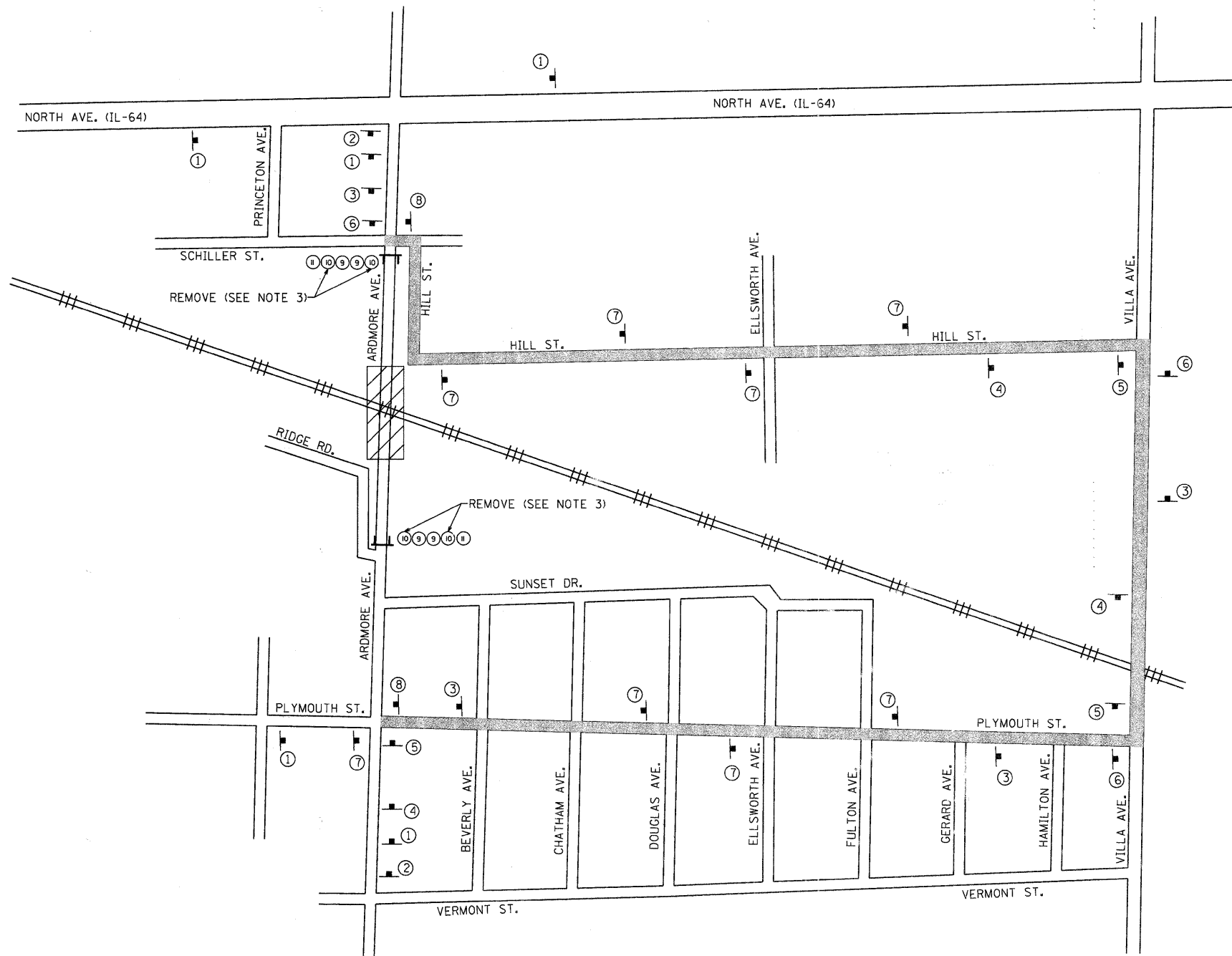
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**VILLAGE OF VILLA PARK**

**HILL STREET  
ROADWAY PLAN**

F.A.U. RTE. 2651	SECTION 07-00083-00-BR	COUNTY DUPAGE	SHEET NO. 10	TOTAL SHEETS 50
CONTRACT NO. 63601				ILLINOIS FED. AID PROJECT

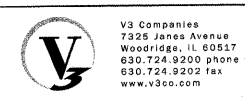
SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.



- TRAFFIC CONTROL LEGEND**
- DETOUR ROUTE
  - DETOUR SIGN
  - PROJECT AREA
  - TYPE III BARRICADE WITH TWO AMBER FLASHING LIGHTS
  - EXISTING SIGN (TO REMAIN IN PLACE)
  - PROPOSED SIGN
- DETOUR NOTES**

1. ALL BARRICADES, SIGN PLACEMENT, AND ERECTION SHALL FOLLOW HIGHWAY STANDARD 701901-01.
2. CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF EXISTING DETOUR SIGNS.
3. CONTRACTOR TO REMOVE "PEDESTRIAN CROSSING ONLY" SIGNS PRIOR TO BEGINNING STRUCTURE DEMOLITION. THIS WORK TO BE INCLUDED IN THE PRICE FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

**NOTE:**  
 THE RESURFACING OF HILL STREET SHALL NOT COMMENCE UNTIL THE BRIDGE IS OPEN AND THE DETOUR SIGNS ARE DOWN. TRAFFIC CONTROL AND PROTECTION ON HILL STREET TO CONFORM TO STANDARD 701501.



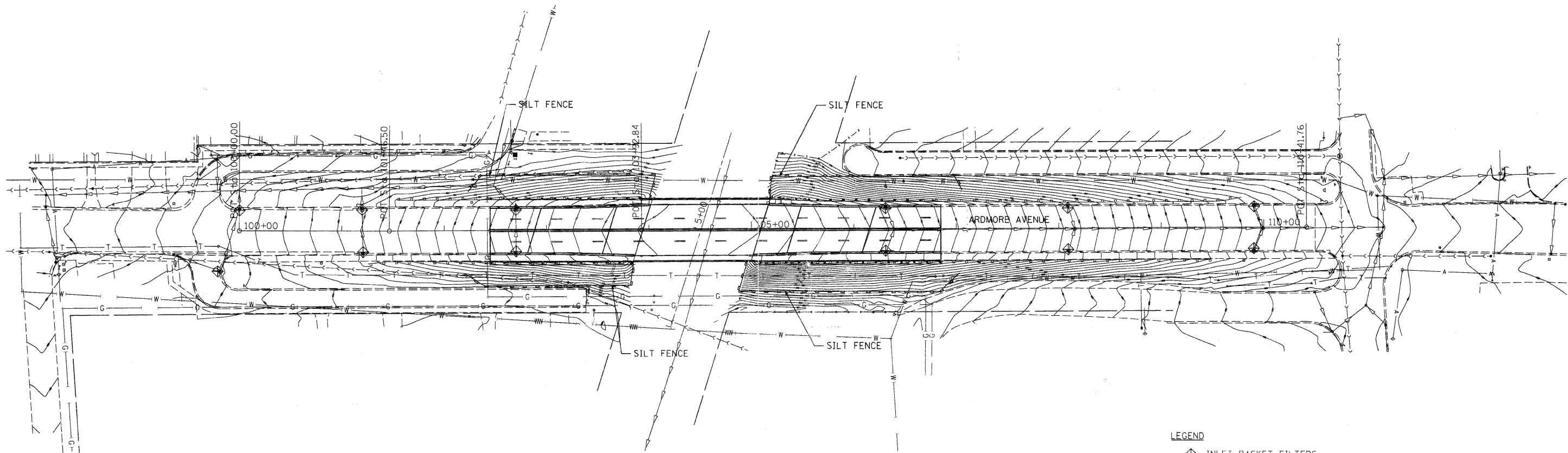
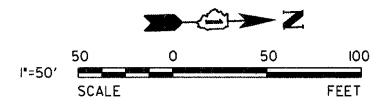
USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/14/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
 DETOUR PLAN**

SCALE: NTS SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	11	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				

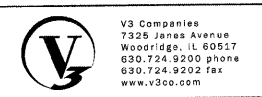


**LEGEND**

- ◊ INLET BASKET FILTERS
- SILT FENCE

**EROSION CONTROL NOTES**

1. CONTRACTOR TO INSTALL SILT FENCE PRIOR TO COMMENCEMENT OF ANY EARTHWORK. CONTRACTOR TO MAINTAIN SILT FENCE AS SHOWN AND INSTALL ADDITIONAL SILT FENCE WHEREVER NECESSARY THROUGHOUT CONSTRUCTION ACTIVITIES TO MINIMIZE SOIL EROSION.
2. CONTRACTOR TO INSTALL INLET SEDIMENT TRAPS ON ALL OPEN LID STRUCTURES IN GREEN SPACE.
3. CONTRACTOR TO INSTALL INLET BASKET FILTERS ON ALL OPEN LID STRUCTURES IN PAVED AREAS.
4. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL AREAS WITH SIDE SLOPES UP TO 3:1. HEAVY DUTY EROSION CONTROL BLANKET WILL BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.
5. ALL SEDIMENT AND EROSION CONTROL MEASURES IN AND AROUND THE PROPOSED IMPROVEMENTS ARE TO REMAIN IN PLACE AND TO BE MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES UNTIL THE PROPOSED IMPROVEMENTS ARE COMPLETED AND THE SITE ADEQUATELY STABILIZED TO THE SATISFACTION OF THE ENGINEER.



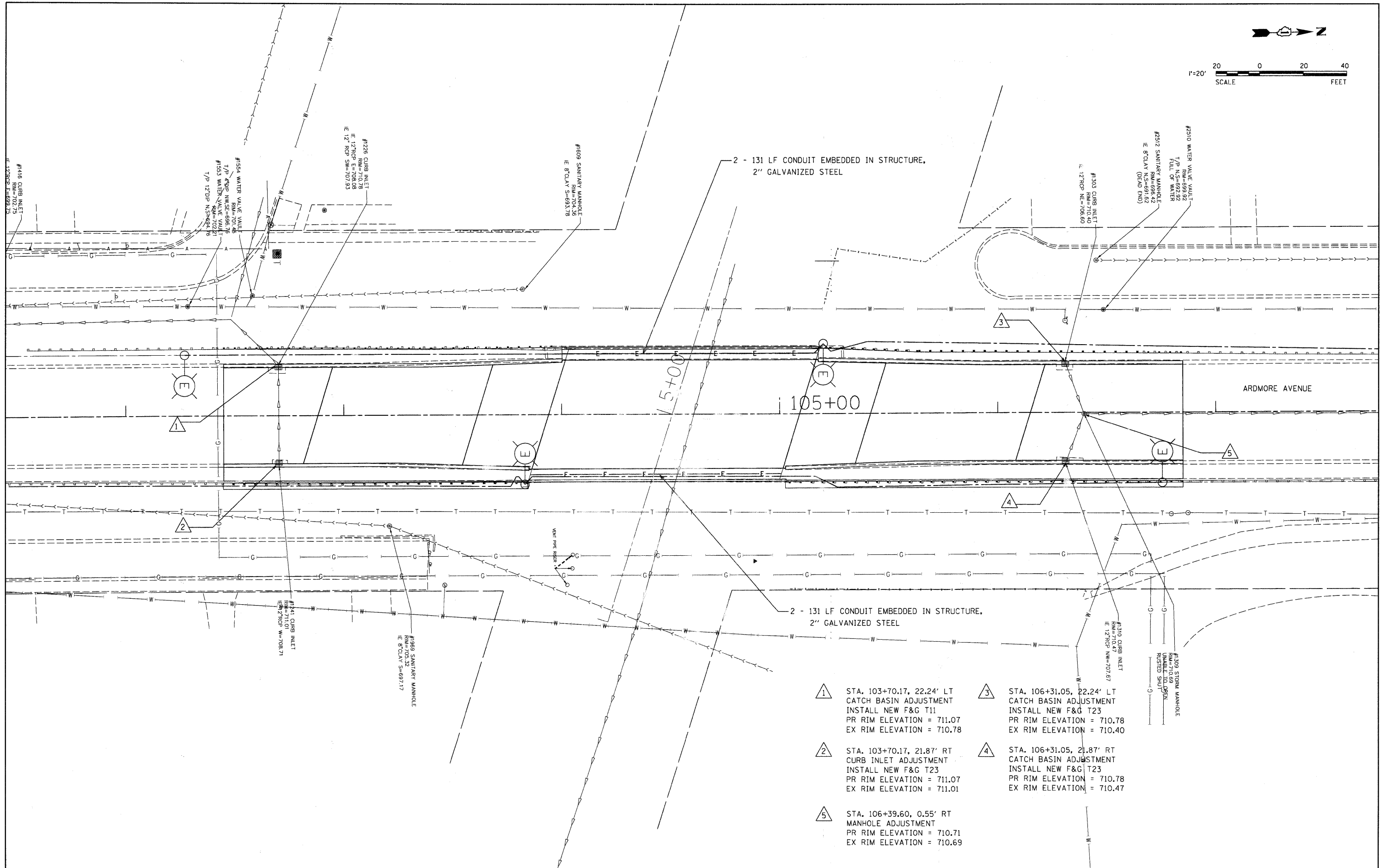
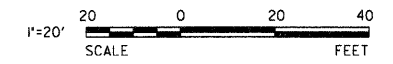
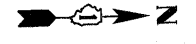
USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
EROSION AND SEDIMENT CONTROL PLAN**

SCALE: 1"=50'    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	12	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				



- 1 STA. 103+70.17, 22.24' LT  
CATCH BASIN ADJUSTMENT  
INSTALL NEW F&G T11  
PR RIM ELEVATION = 711.07  
EX RIM ELEVATION = 710.78
- 2 STA. 103+70.17, 21.87' RT  
CURB INLET ADJUSTMENT  
INSTALL NEW F&G T23  
PR RIM ELEVATION = 711.07  
EX RIM ELEVATION = 711.01
- 3 STA. 106+31.05, 22.24' LT  
CATCH BASIN ADJUSTMENT  
INSTALL NEW F&G T23  
PR RIM ELEVATION = 710.78  
EX RIM ELEVATION = 710.40
- 4 STA. 106+31.05, 21.87' RT  
CATCH BASIN ADJUSTMENT  
INSTALL NEW F&G T23  
PR RIM ELEVATION = 710.78  
EX RIM ELEVATION = 710.47
- 5 STA. 106+39.60, 0.55' RT  
MANHOLE ADJUSTMENT  
PR RIM ELEVATION = 710.71  
EX RIM ELEVATION = 710.69



vs Cd=USER#NAME = #USER#  
7325  
Woodlge, IL 60517  
830.24-9200  
830.24-9200  
www.villapark.org  
PLOT DATE = 6/13/2011

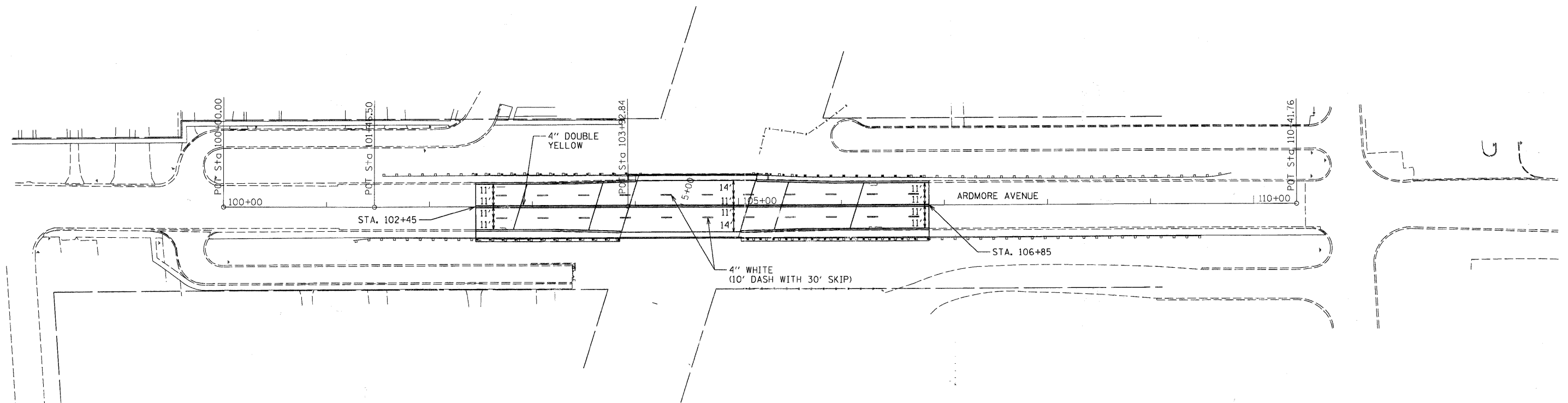
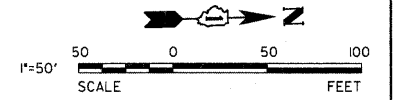
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
DRAINAGE AND UTILITY PLAN**

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 2651	SECTION 07-00083-00-BR	COUNTY DUPAGE	SHEET NO. 13	TOTAL SHEETS 50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				



NOTE: ALL PAVEMENT MARKINGS SHALL BE POLYUREA UNLESS OTHERWISE NOTED.



V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

USER NAME = #USER#	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN -	REVISED -
PLOT DATE = 6/13/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
PAVEMENT MARKING AND SIGNING**

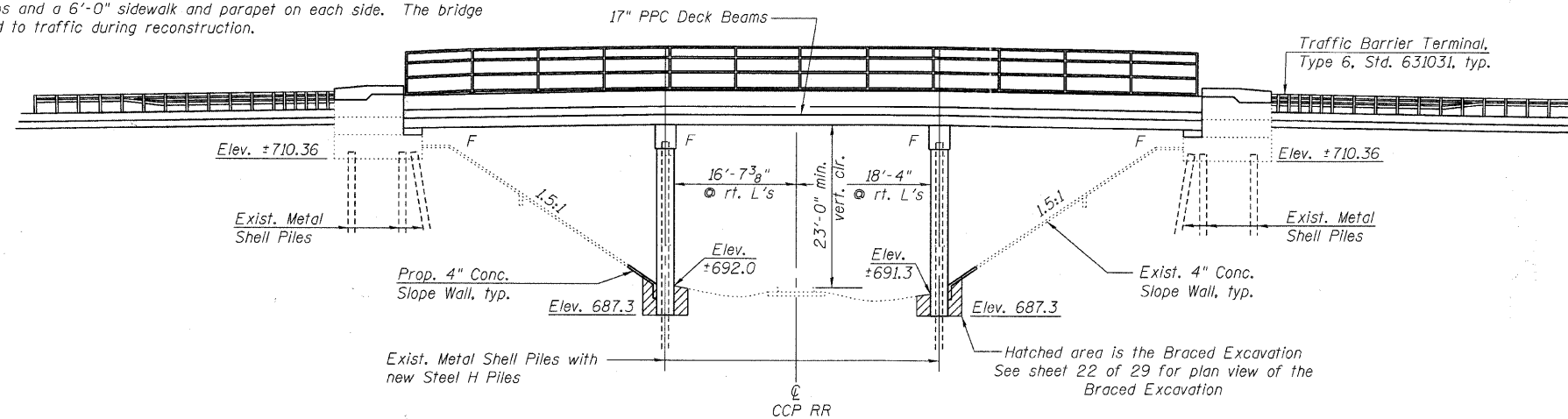
SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 2651	SECTION 07-00083-00-BR	COUNTY DUPAGE	SHEET NO. 14	TOTAL SHEETS 50
CONTRACT NO. 63601				ILLINOIS FED. AID PROJECT

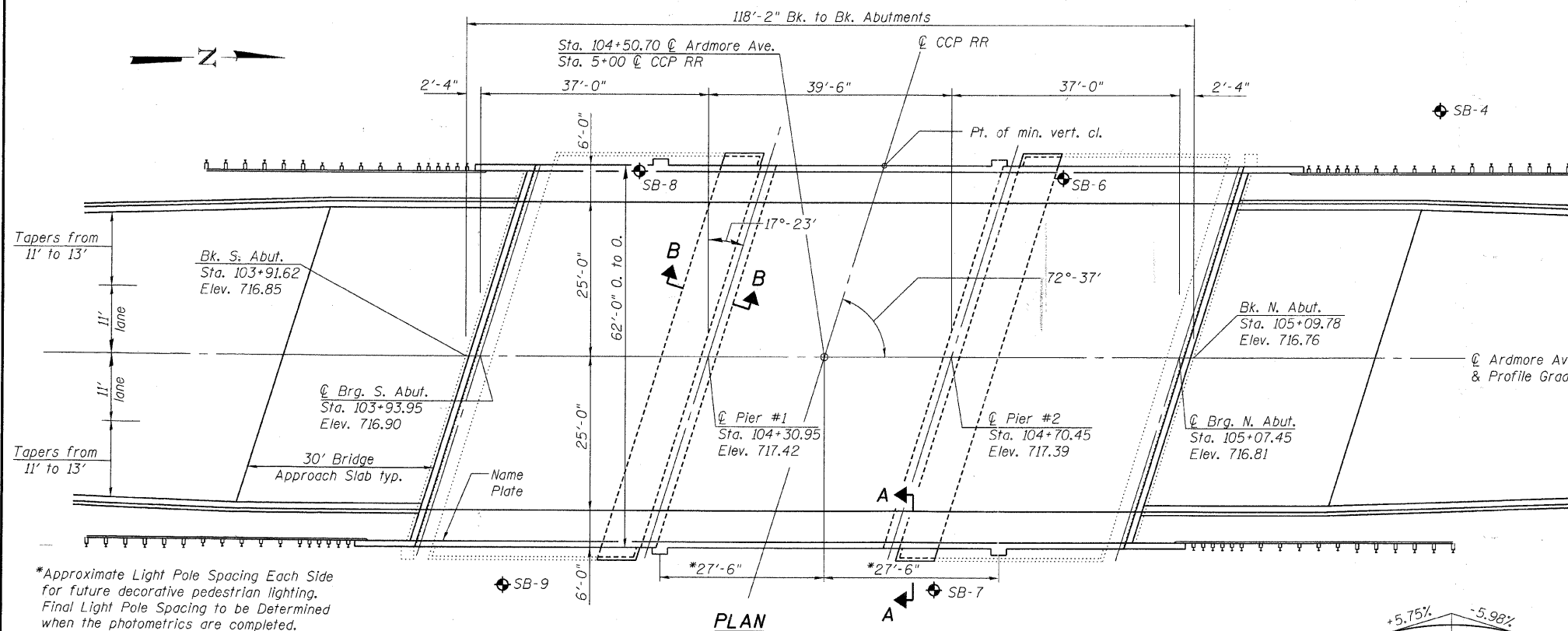
Bench Mark: SBM #1: Cut square in light standard base (southwesterly). First light standard base north of Ardmore Bridge on the east side of Ardmore Avenue. Elevation 708.73 (measured) NGVD29.

Existing Structure: SN 022-6930 was built in 1978 as F.A.U. Route 2651 replacing an existing structure. The structure is a three span simply supported (37'-0", 39'-6", 37'-0") 17" PPC Deck Beam bridge supported by stub abutments and concrete piers. The existing structure is 118'-2" back to back of abutments and the out to out width of deck is 62'-0" with a 50'-0" clear width between curbs and a 6'-0" sidewalk and parapet on each side. The bridge will be closed to traffic during reconstruction.

No Salvage



ELEVATION



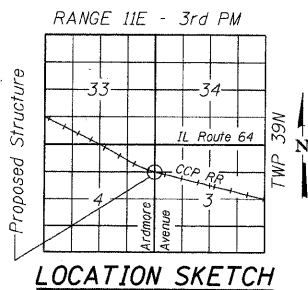
PLAN

\*Approximate Light Pole Spacing Each Side for future decorative pedestrian lighting. Final Light Pole Spacing to be Determined when the photometrics are completed.

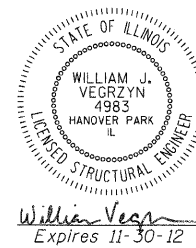
Note: See Sheet 2 of 29 for Sections A-A and B-B.



V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com



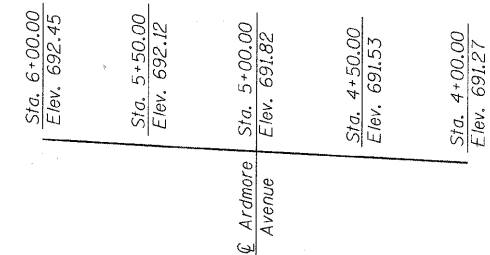
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current AASHTO Standard Specifications for Highway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



William Vegrzyn  
Expires 11-30-12



PROFILE GRADE  
(along centerline of Roadway)



PROFILE GRADE  
Top of rail along centerline of track  
(Looking North)

LOADING HS 20-44 (NEW CONST.)  
LOADING HS 20-44 (EXIST. CONST.)  
No allowance for future wearing surface.

DESIGN SPECIFICATIONS

NEW CONSTRUCTION  
2002 AASHTO - 17th edition

EXISTING CONSTRUCTION  
AASHTO Standard Specifications  
for Highway Bridges - 1971  
with 1976 Interims

DESIGN STRESSES

NEW CONSTRUCTION

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi  
f'ci = 5,000 psi  
fpu = 270,000 psi (1/2" low lax strands)  
fpbt = 201,960 psi (1/2" low lax strands)

EXISTING CONSTRUCTION

FIELD UNITS

f'c = 3,500 psi  
fy = 40,000 psi (Reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.037g  
Site Coefficient (S) = 1.0

CHICAGO, CENTRAL & PACIFIC RAILROAD  
BUILT 2011 BY  
VILLAGE OF VILLA PARK  
SEC. 07-00083-00-BR  
F.A.U. RT. 2651 STA. 104+50.70  
LOADING HS 20-44  
STRUCTURE NO. 022-6930

NAME PLATE  
See Std. 515001

Note:  
Existing Name plate shall remain  
where it is currently located.

GENERAL PLAN  
STRUCTURE NO. 022-6930

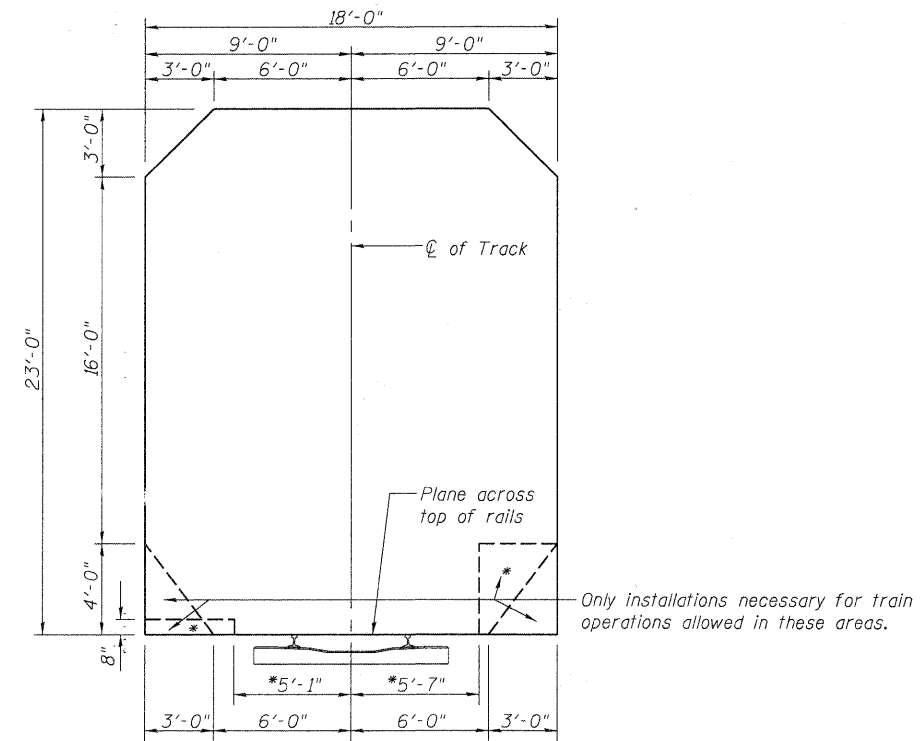
SHEET NO. 1 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	15
FED. ROAD DIST. NO. - ILLINOIS			FED. AID PROJECT		

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.	8.8	201.0	209.8
Slope Wall Removal	Sq. Yd.		111	111
Concrete Structures	Cu. Yd.		421.9	421.9
Concrete Superstructure	Cu. Yd.	214.7		214.7
Bridge Deck Grooving	Sq. Yd.	932		932
Protective Coat	Sq. Yd.	1193		1193
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	7102		7102
Reinforcement Bars, Epoxy Coated	Pound	54,710	21,060	75,770
Bridge Fence Railing	Foot	228		228
Slope Wall, 4"	Sq. Yd.		111	111
Furnishing Steel Piles HP 14x117	Foot		1474	1474
Driving Piles	Foot		924	924
Test Pile Steel HP 14x117	Each	2		2
Name Plates	Each	1		1
Epoxy Crack Injection	Foot	7		7
Braced Excavation	Cu. Yd.		111.4	111.4
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq. Ft.		114	114
Concrete Wearing Surface, 5"	Sq. Yd.	791		791
Asbestos Bearing Pad Removal	Each	32		32

**STRUCTURE INDEX OF SHEETS**

General Plan	Sheet No. 1 of 29
General Data	Sheet No. 2 of 29
Top of South Approach Slab Elevations	Sheet No. 3 of 29
Top of North Approach Slab Elevations	Sheet No. 4 of 29
Superstructure Plan	Sheet No. 5 of 29
Superstructure Cross Section and Details	Sheet No. 6 of 29
Superstructure Details	Sheet No. 7 of 29
17"x36" PPC Deck Beams Spans 1 & 3	Sheet No. 8 of 29
17"x36" PPC Deck Beam Details Spans 1 & 3	Sheet No. 9 of 29
17"x36" PPC Deck Beams Span 2	Sheet No. 10 of 29
17"x36" PPC Deck Beam Details Span 2	Sheet No. 11 of 29
17"x48" PPC Deck Beams Spans 1 & 3	Sheet No. 12 of 29
17"x48" PPC Deck Beam Details Spans 1 & 3	Sheet No. 13 of 29
17"x48" PPC Deck Beams Span 2	Sheet No. 14 of 29
17"x48" PPC Deck Beam Details Span 2	Sheet No. 15 of 29
Bridge Approach Slab Details-I	Sheet No. 16 of 29
Bridge Approach Slab Details-II	Sheet No. 17 of 29
Bridge Fence Railing Parapet Mounted	Sheet No. 18 of 29
Abutment Repairs	Sheet No. 19 of 29
Abutments	Sheet No. 20 of 29
Abutment Details	Sheet No. 21 of 29
Pier #1	Sheet No. 22 of 29
Pier #2	Sheet No. 23 of 29
HP Pile Details	Sheet No. 24 of 29
Soil Boring Log SB-4	Sheet No. 25 of 29
Soil Boring Log SB-6	Sheet No. 26 of 29
Soil Boring Log SB-5 & Soil Boring Log SB-7	Sheet No. 27 of 29
Soil Boring Log SB-8	Sheet No. 28 of 29
Soil Boring Log SB-9	Sheet No. 29 of 29



\*Passenger train operations only  
**RAILROAD'S CLEARANCE DIAGRAM**

**GENERAL NOTES**

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

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

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

If any Excavation is needed behind existing abutment walls it shall be performed before setting the new PPC deck beams. Cost included with Concrete Superstructure.

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

Any damage done to the abutments during beam removal shall be repaired by the Contractor. Cost included with Removal of Existing Superstructures.

If the Contractor's procedures for existing beam removal or placement of new beams involves placement of heavy equipment on the new or existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Precast Prestressed Concrete Deck Beams (17" Depth).

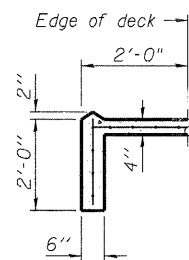
No drilling will be permitted into the new PPC deck beams.

The minimum thickness of the Concrete Wearing Surface shall be 5" and shall vary as required to adjust for the new profile grade and beam camber.

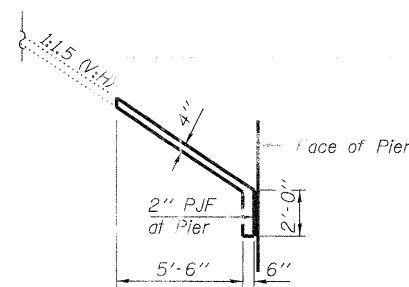
Out to out widths shown for deck and approach slabs are the minimum widths required. Variations in the new deck beams and erection tolerances may result in additional width. The Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

Slipforming of the parapet is not allowed.

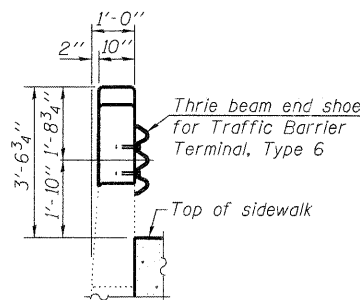
The existing bearing pads at the expansion ends of the deck beams (at the abutments) contain asbestos. See Special Provisions.



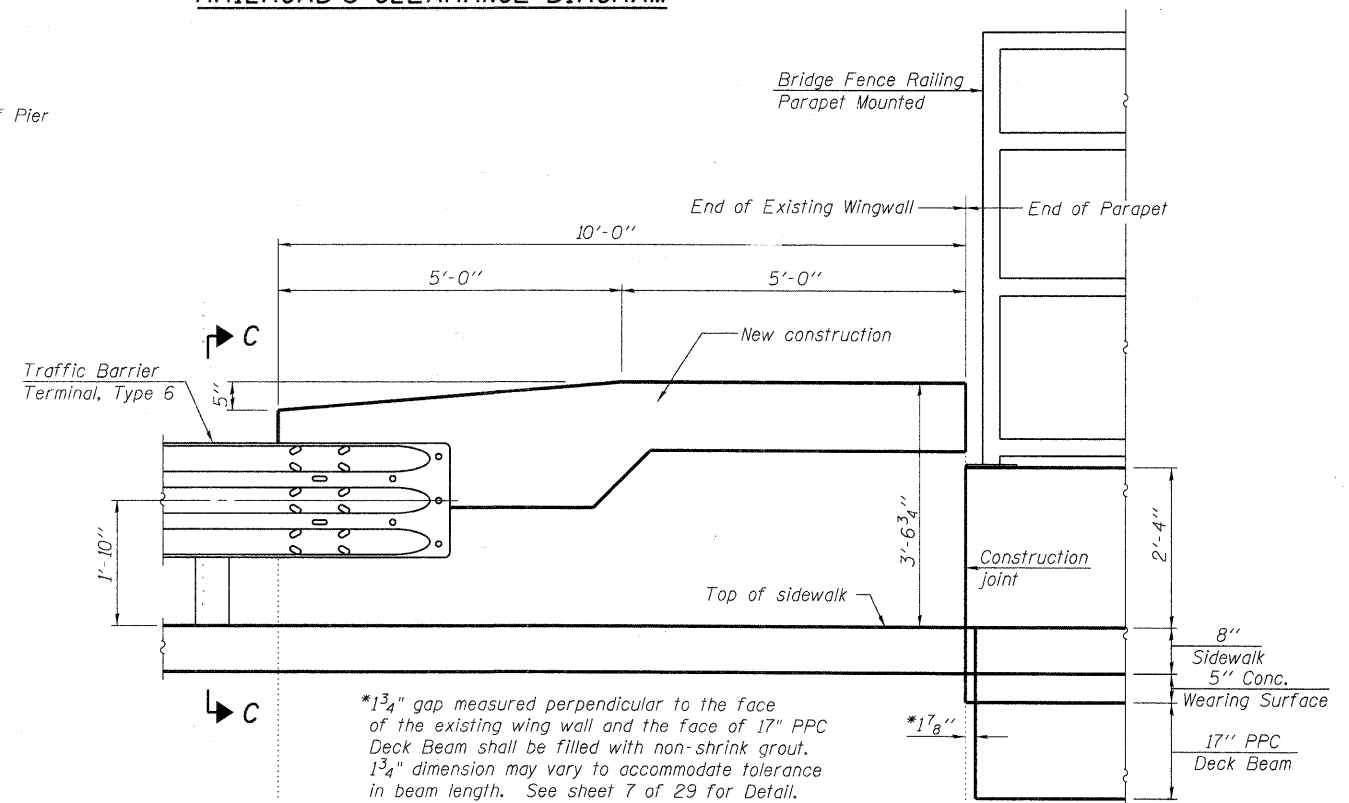
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

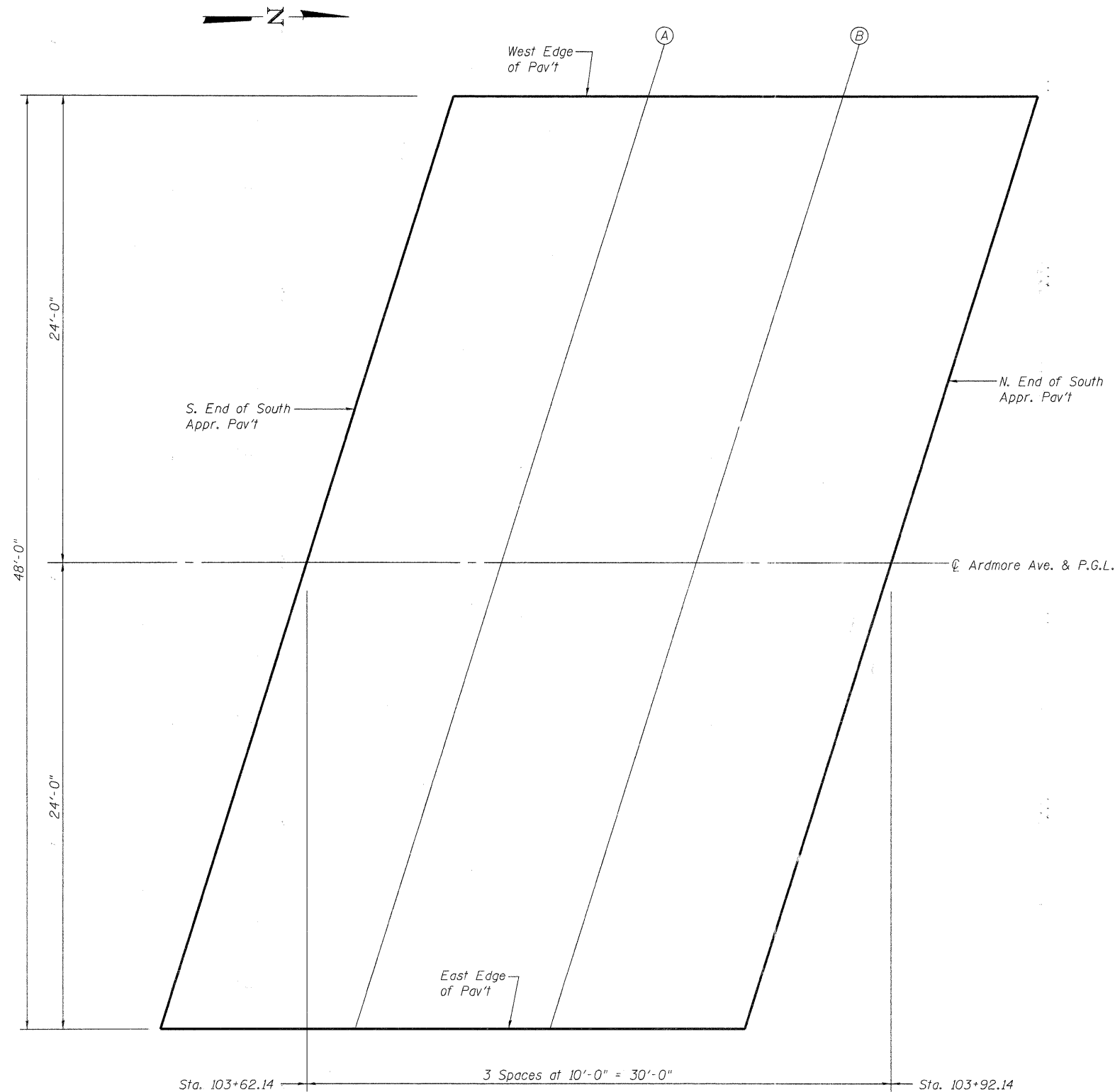


**TYPE 6 RAIL ATTACHMENT DETAIL**

**GENERAL DATA  
STRUCTURE NO. 022-6930**

SHEET NO. 2 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	16
FED. ROAD DIST. NO. _ ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 63601					





**PLAN**

**WEST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	103+69.66	-24.00	715.91
A	103+79.66	-24.00	716.19
B	103+89.66	-24.00	716.44
N. End South Appr. Pav't	103+99.66	-24.00	716.64

**C ARDMORE AVE. & P.G.L.**

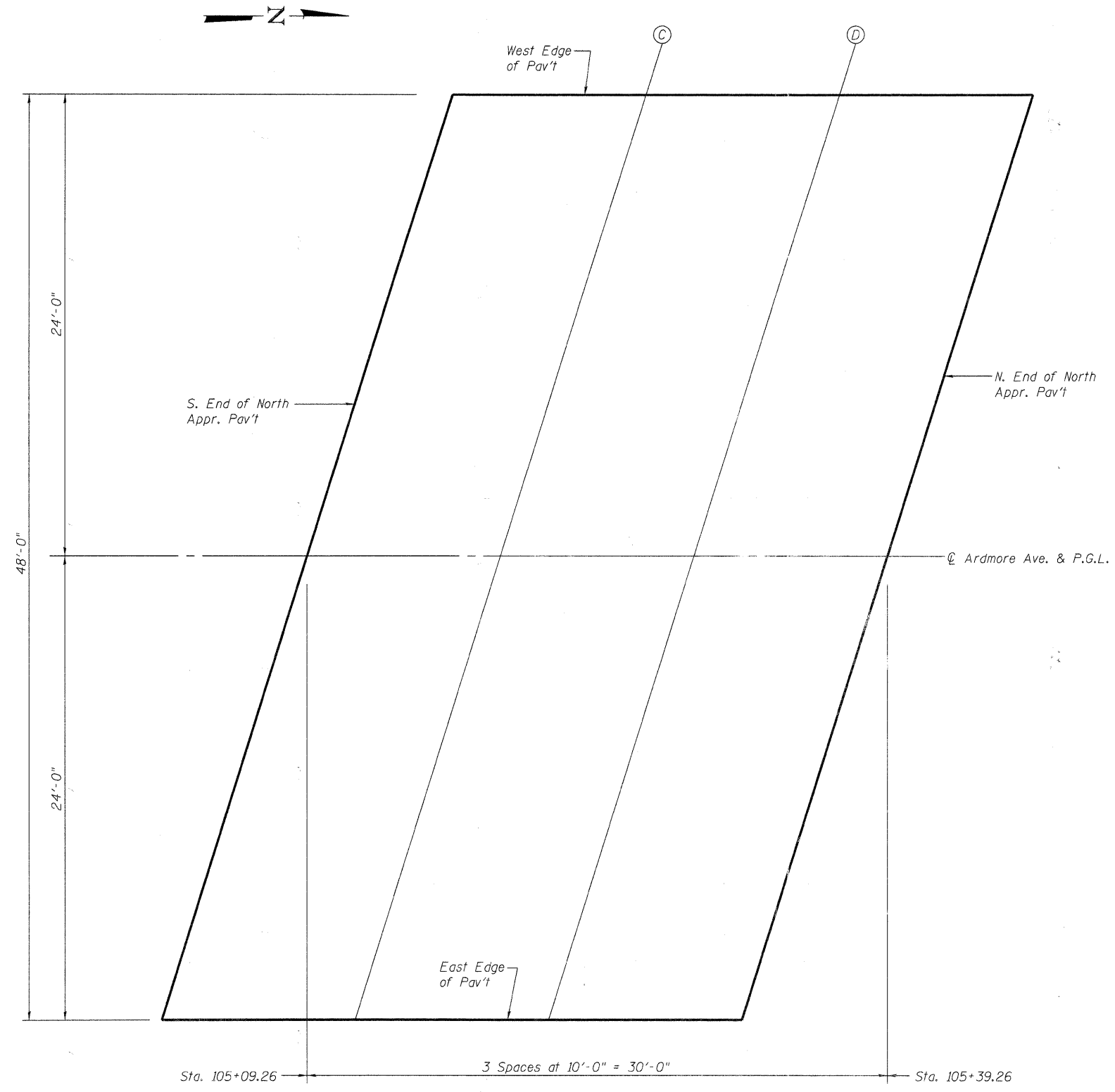
Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	103+62.14	0.00	716.04
A	103+72.14	0.00	716.36
B	103+82.14	0.00	716.63
N. End South Appr. Pav't	103+92.14	0.00	716.87

**EAST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	103+54.63	24.00	715.41
A	103+64.63	24.00	715.75
B	103+74.63	24.00	716.05
N. End South Appr. Pav't	103+84.63	24.00	716.32

**TOP OF SOUTH APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 022-6930**

SHEET NO. 3 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	17
CONTRACT NO. 63601					
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



**PLAN**

**WEST EDGE OF PAVEMENT**

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	105+16.77	-24.00	716.21
C	105+26.77	-24.00	715.93
D	105+36.77	-24.00	715.61
N. End North Appr. Pav't	105+46.77	-24.00	715.25

**☉ ARDMORE AVE. & P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	105+09.26	0.00	716.77
C	105+19.26	0.00	716.52
D	105+29.26	0.00	716.23
N. End North Appr. Pav't	105+39.26	0.00	715.90

**EAST EDGE OF PAVEMENT**

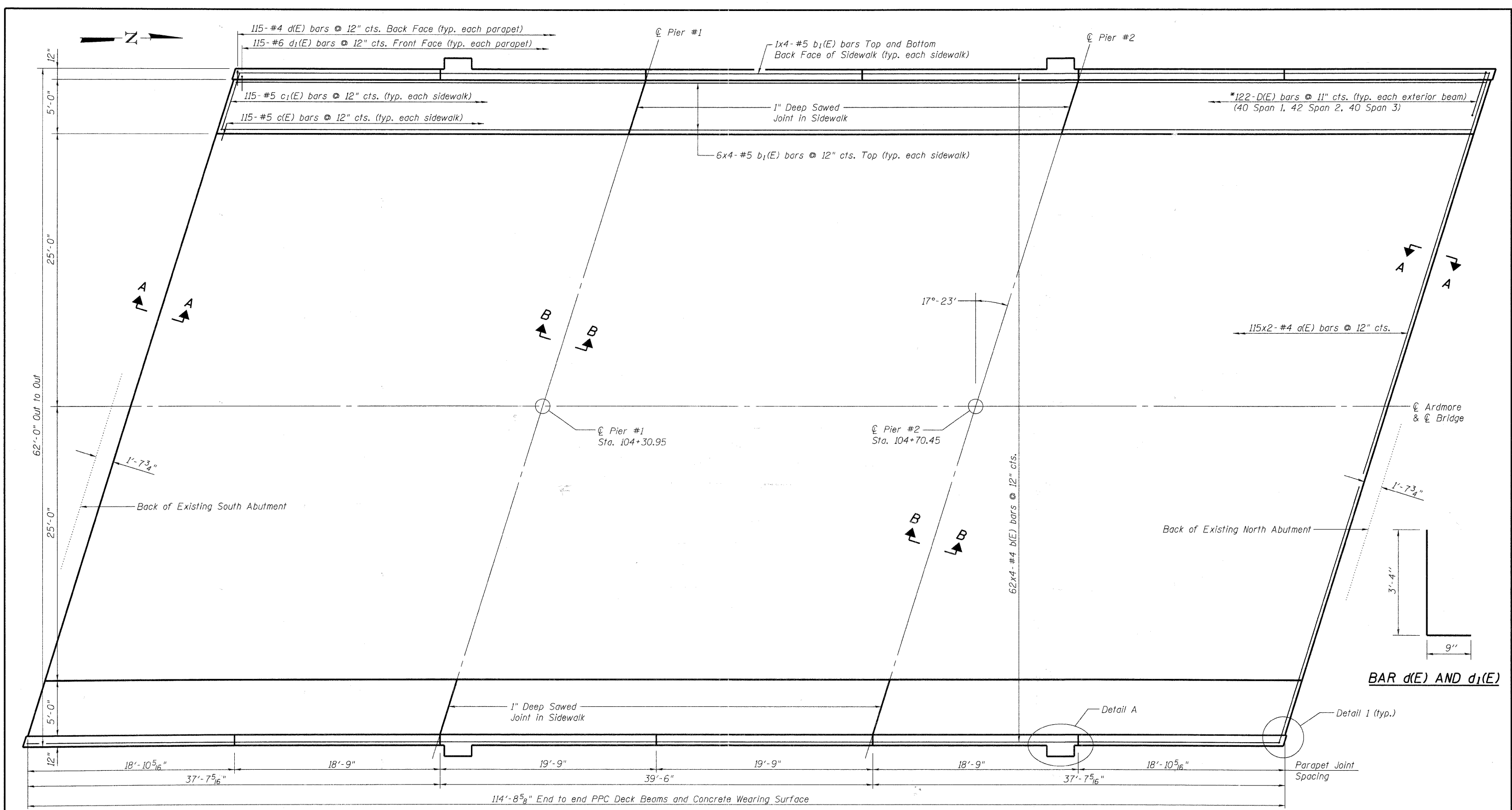
Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	105+01.74	24.00	716.56
C	105+11.74	24.00	716.34
D	105+21.74	24.00	716.08
N. End North Appr. Pav't	105+31.74	24.00	715.78

**TOP OF NORTH APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 022-6930**



V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 4 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	18
CONTRACT NO. 63601					
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

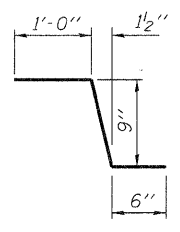


**PLAN - WEARING SURFACE**

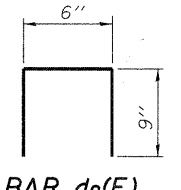
\*D(E) bars cast-in-place in each outside beam.  
See sheet 12 and 14 of 29 for details.

**NOTES**

See sheet 7 of 29 for Section A-A, Section B-B and Detail 1.  
See sheet 6 of 29 for Detail A and Bill of Material.



**BAR c(E)**

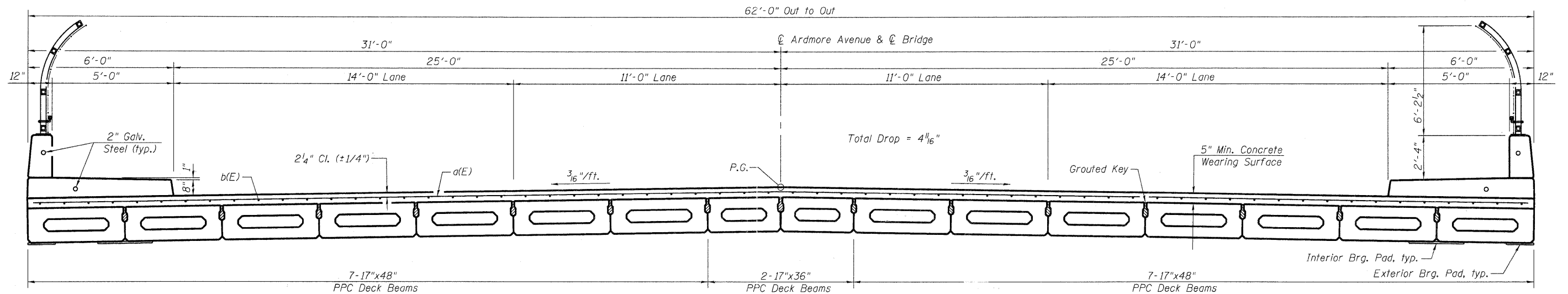


**BAR d2(E)**

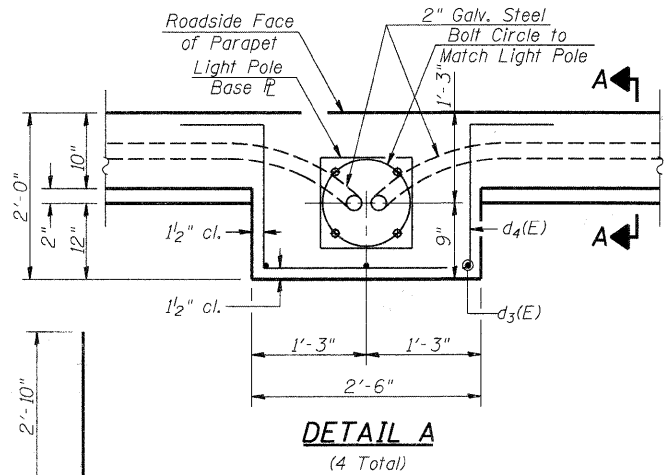
**SUPERSTRUCTURE PLAN  
STRUCTURE NO. 022-6930**

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 5 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	19
FED. ROAD DIST. NO. - ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 63601					



**CROSS SECTION**



**NOTES**

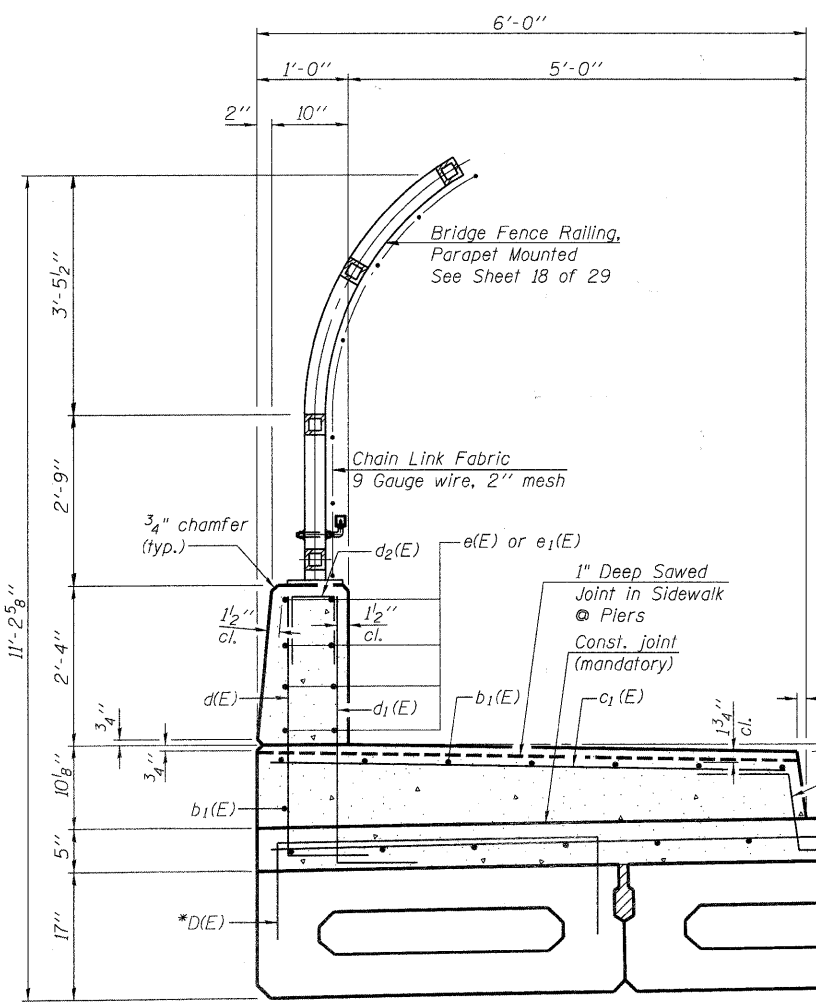
- Cost of anchor bolts is included with Concrete Superstructure.
- See Sheet 1 of 29 for locations of light poles.
- Move vertical bars and cut horizontal bars in parapet to clear Junction Boxes. Cost is included with Reinforcement Bars, Epoxy Coated.
- For quantity of Conduit Embedded in Structure See Drainage and Utility Plans.
- Coordinate location of conduit with Electrical Contractor.

**SUPERSTRUCTURE BILL OF MATERIAL**

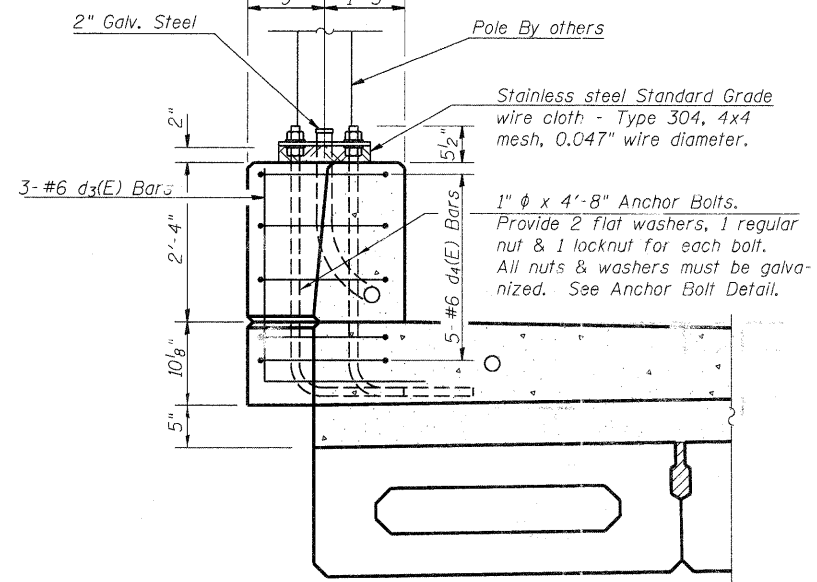
Bar	No.	Size	Length	Shape
a(E)	230	#4	33'-0"	—
b(E)	248	#4	29'-8"	—
b <sub>1</sub> (E)	64	#5	29'-11"	—
c(E)	230	#5	2'-3"	┌
c <sub>1</sub> (E)	230	#5	5'-8"	┌
d(E)	230	#4	4'-1"	┌
d <sub>1</sub> (E)	230	#6	4'-1"	┌
d <sub>2</sub> (E)	52	#5	2'-0"	┌
d <sub>3</sub> (E)	12	#6	4'-10"	┌
d <sub>4</sub> (E)	20	#6	9'-3"	┌
e(E)	64	#4	18'-6"	—
e <sub>1</sub> (E)	32	#4	19'-6"	—
Concrete Wearing Surface, 5"				Sq. Yd. 791
Protective Coat				Sq. Yd. 863
Bridge Deck Grooving				Sq. Yd. 612
Reinforcement Bars, Epoxy Coated				Pound 17,240
Concrete Superstructure				Cu. Yd. 56.4

Bars indicated thus 6x4-#4 etc. indicates 6 lines of bars with 4 lengths per line.

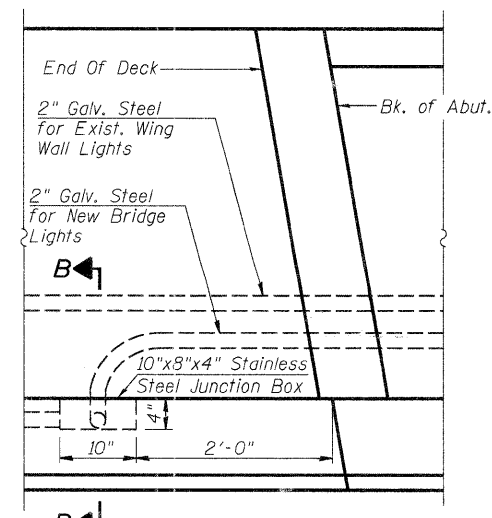
**SUPERSTRUCTURE CROSS SECTION AND DETAILS**  
**STRUCTURE NO. 022-6930**



\*D(E) bars cast-in-place in each outside beam. See sheet 12 and 14 of 29 for details.

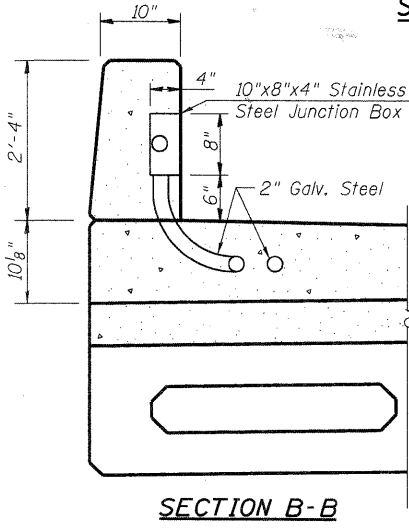
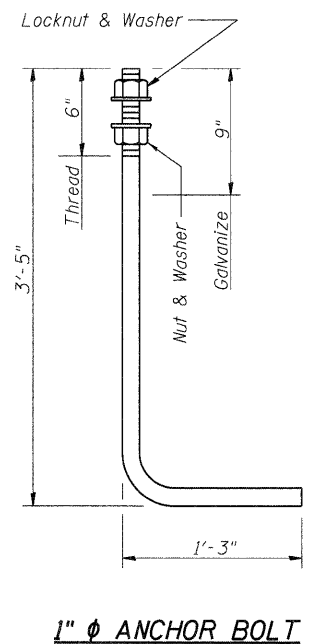


**SECTION A-A**



**PLAN AT JOINT SHOWING CONDUIT**  
(Typ. all 4 Corners)

**BAR d<sub>3</sub>(E)**

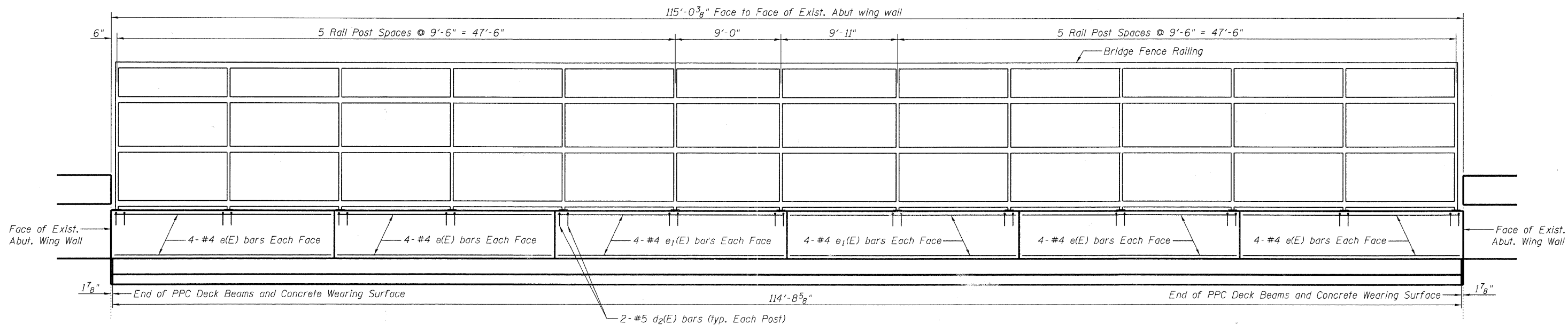


**BAR LAPS**

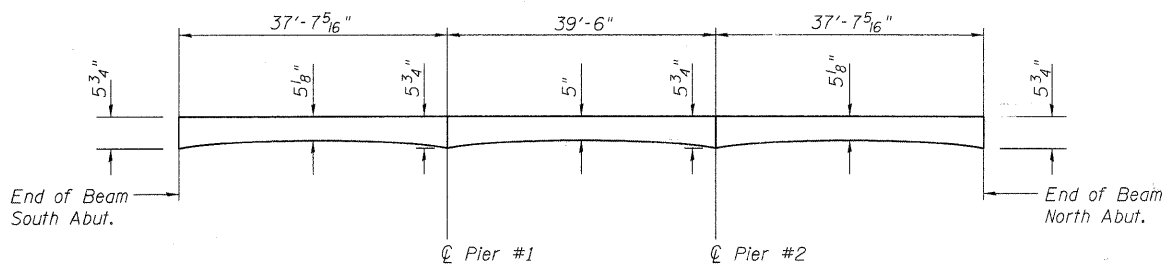
- #4 bars = 1'-4"
- #5 bars = 1'-8"

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

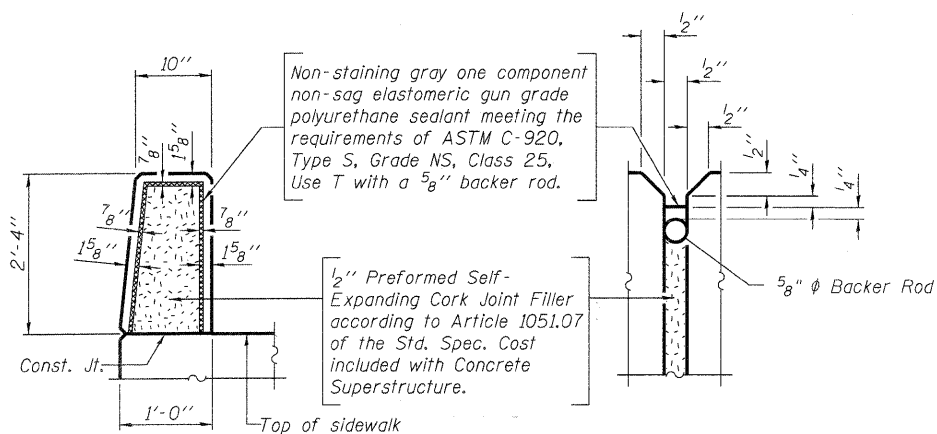
SHEET NO. 6 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	20
CONTRACT NO. 63601					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



**INSIDE ELEVATION OF PARAPET**

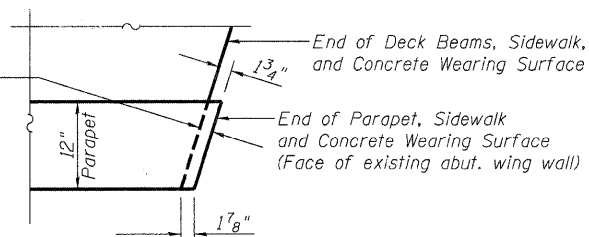


**CONCRETE WEARING SURFACE PROFILE**

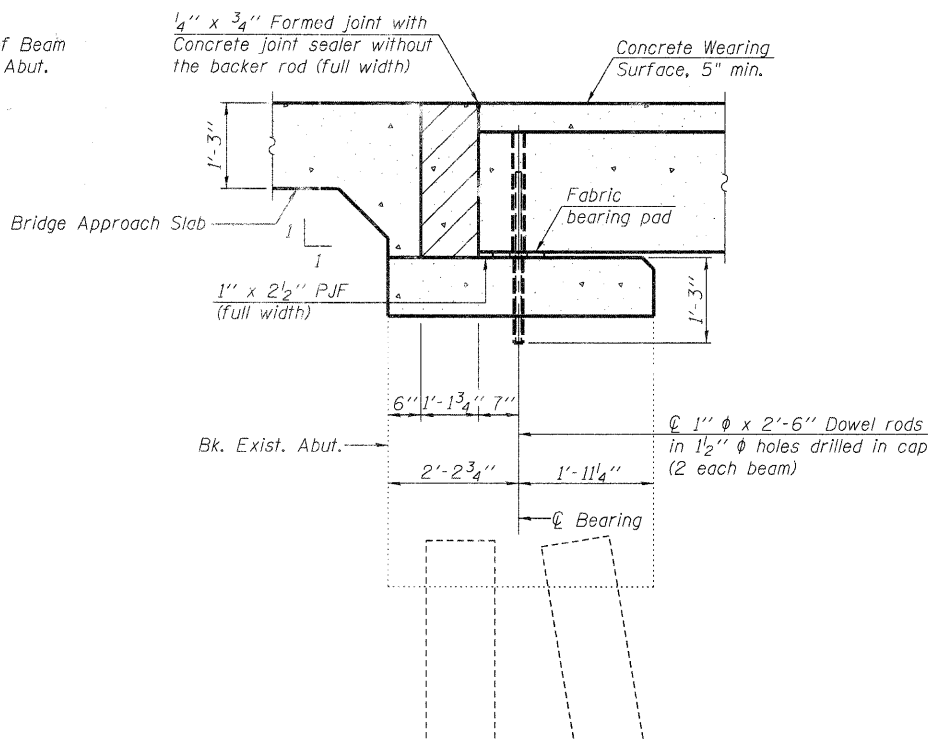


**PARAPET JOINT DETAILS**

1 3/4" opening between face of existing wing wall and face of 17" PPC Deck Beam shall be filled with non-shrink grout. 1 3/4" dimension may vary to accommodate tolerance in beam length.

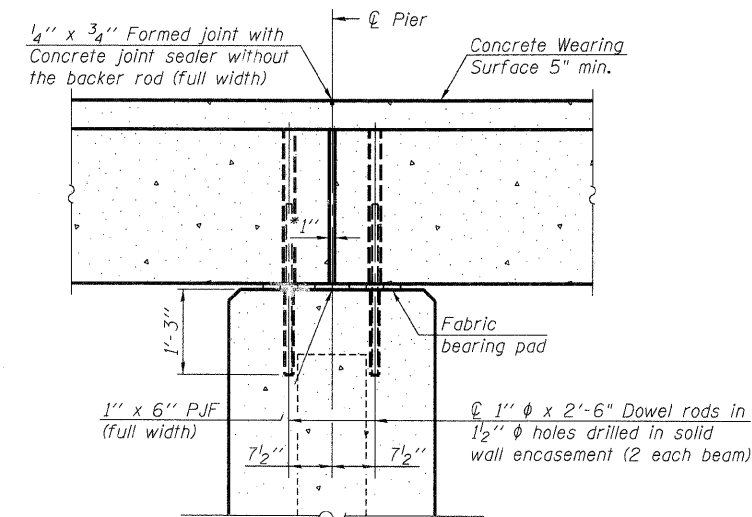


**DETAIL 1**  
(typ. all 4 corners)



**SECTION A-A**

(Dimensions are at Rt. L's)



**SECTION B-B**

(Dimensions are at Rt. L's)

\* 1" Joint shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam length.

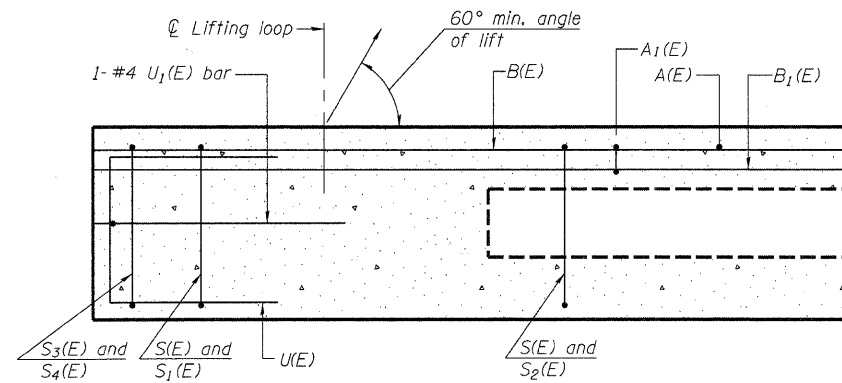
**NOTES**

See sheet 18 of 29 for Aluminum Railing details.  
See sheet 4 of 29 for bar details and Bill of Material.

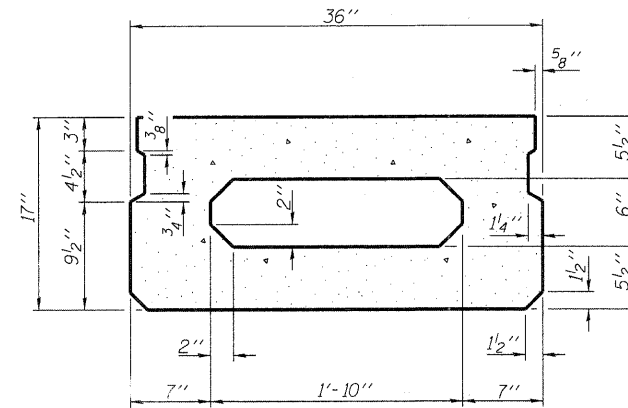
**SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 022-6930**

**V3** Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

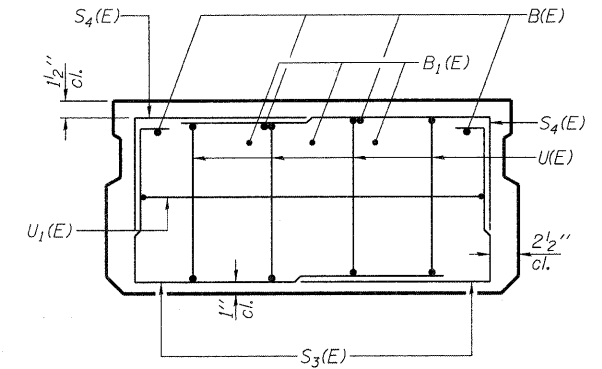
SHEET NO. 7 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	21
CONTRACT NO. 63601					
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



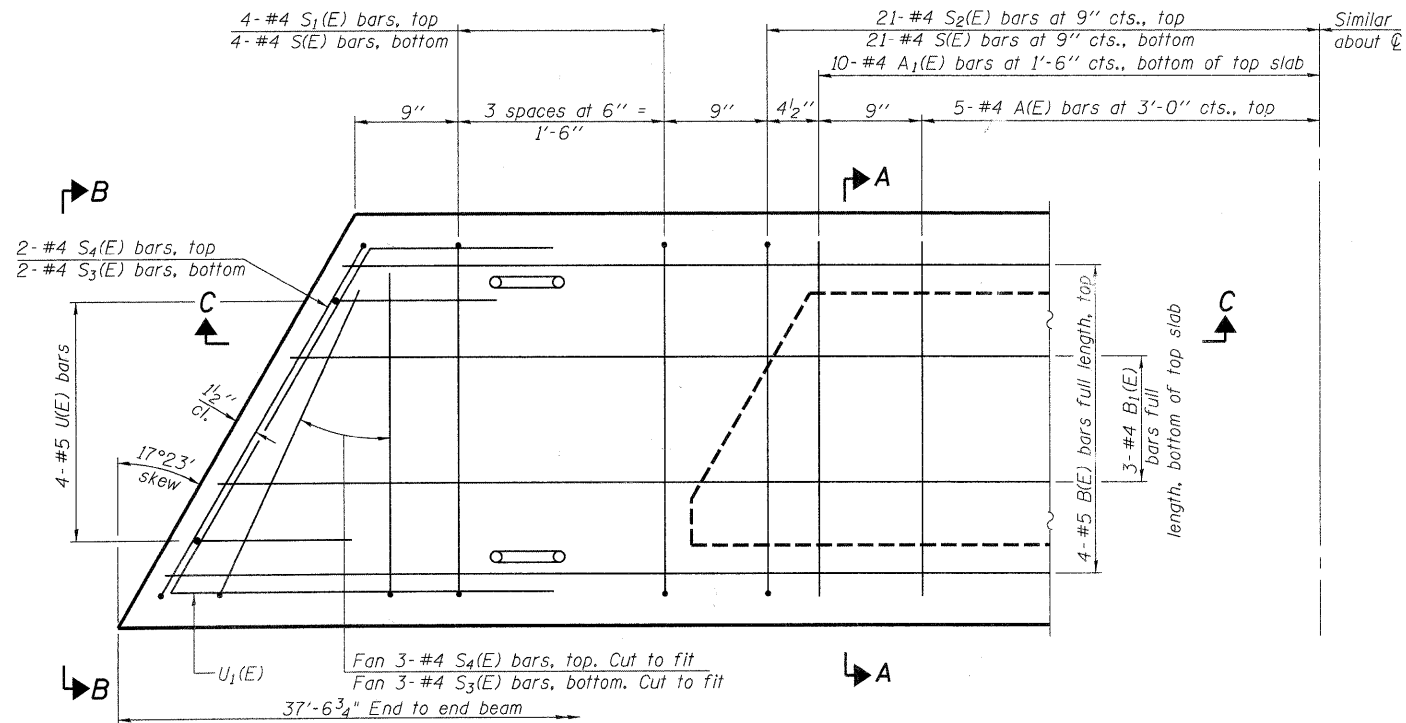
**SECTION C-C**



**SECTION A-A**  
(Showing dimensions)

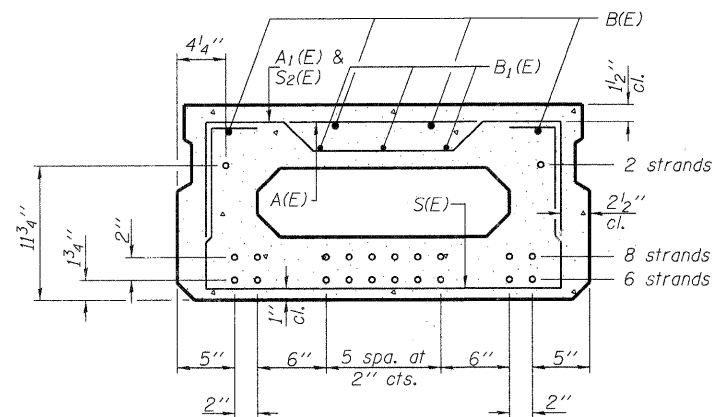


**VIEW B-B**



**PLAN VIEW**

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



**SECTION A-A**

(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.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	10	#4	2'-7"	—
A1(E)	20	#4	2'-10"	—
B(E)	4	#5	37'-3"	—
B1(E)	3	#4	37'-3"	—
S(E)	50	#4	5'-9"	□
S1(E)	8	#4	4'-3"	□
S2(E)	42	#4	4'-6"	□
S3(E)	10	#4	4'-1"	□
S4(E)	10	#4	3'-4"	□
U(E)	8	#5	3'-8"	□
U1(E)	2	#4	5'-11"	□

Note: See sheet 9 of 29 for additional details and Bill of Material.

**MINIMUM BAR LAP**

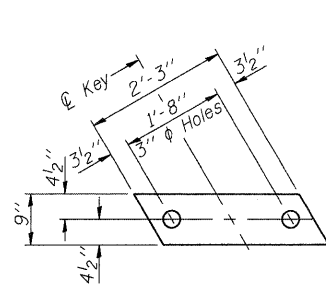
#4 bar = 2'-0"  
#5 bar = 2'-6"

**17" x 36" PPC DECK BEAMS SPANS 1 & 3**  
**STRUCTURE NO. 022-6930**

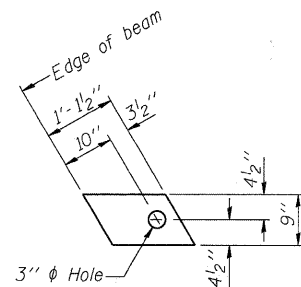


V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 8 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	22
CONTRACT NO. 63601					
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



**FABRIC BEARING PAD**  
(Interior)

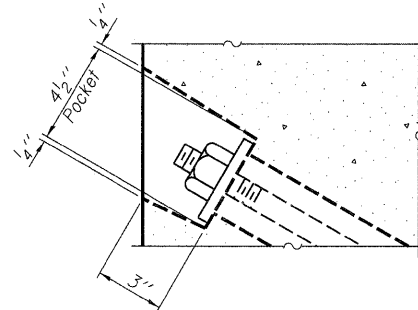


**FABRIC BEARING PAD**  
(Exterior)

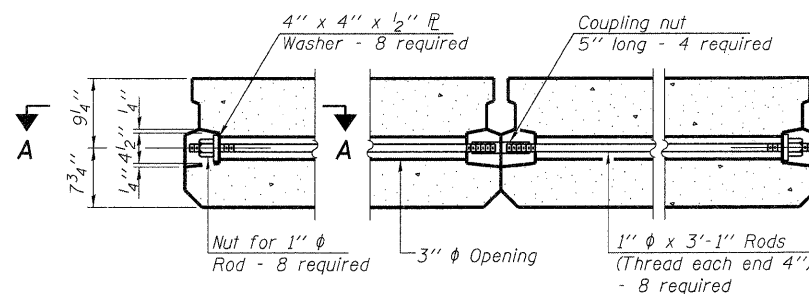
**FIXED**

Notes:

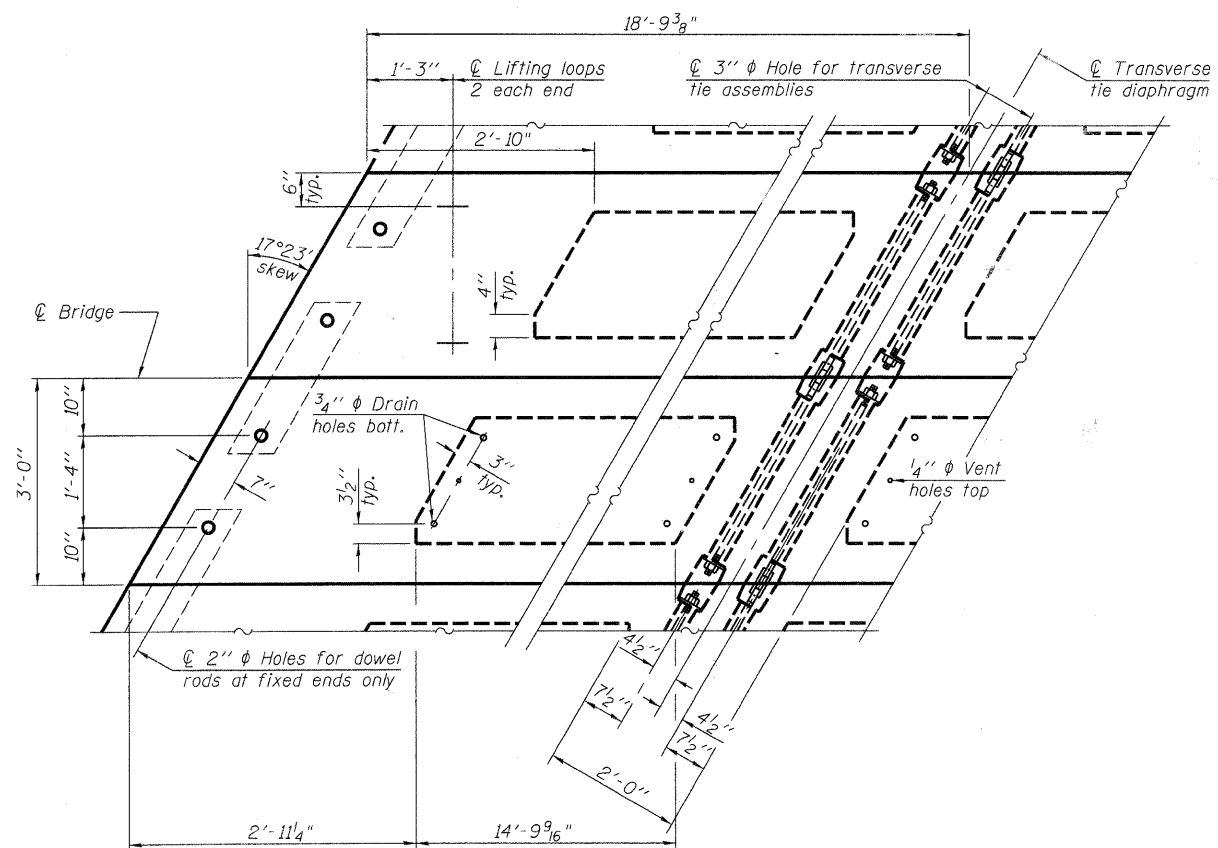
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.



**SECTION A-A**



**TYPICAL TRANSVERSE TIE ASSEMBLY**



**PLAN VIEW**

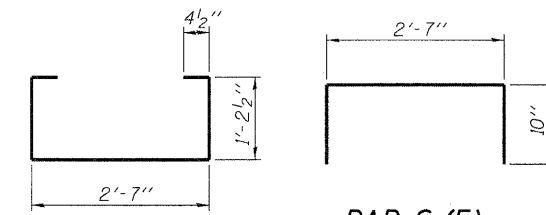
Note: Connect beams in pairs with the transverse tie configuration shown.

**NOTES**

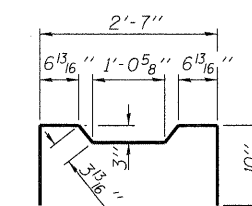
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

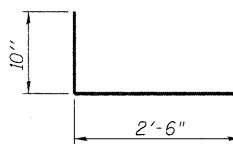
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



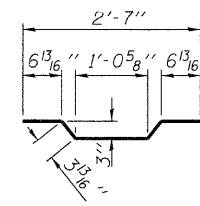
**BAR S(E)**



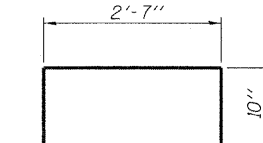
**BAR S2(E)**



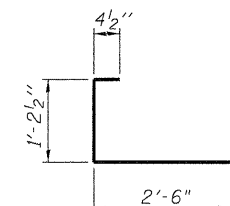
**BAR S4(E)**



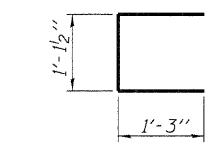
**BAR A1(E)**



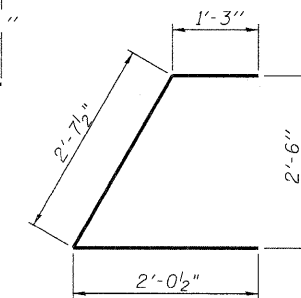
**BAR S1(E)**



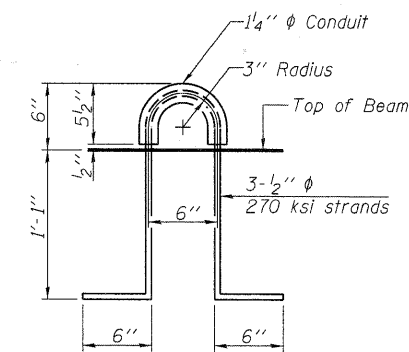
**BAR S3(E)**



**BAR U(E)**



**BAR U1(E)**



**LIFTING LOOP DETAIL**

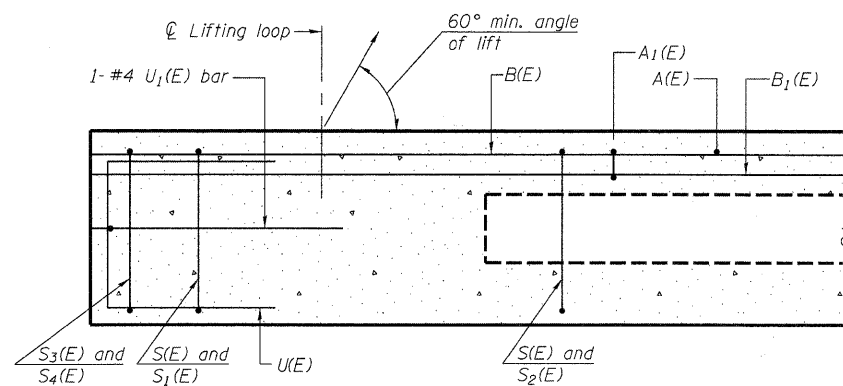
**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	451
---	---------	-----

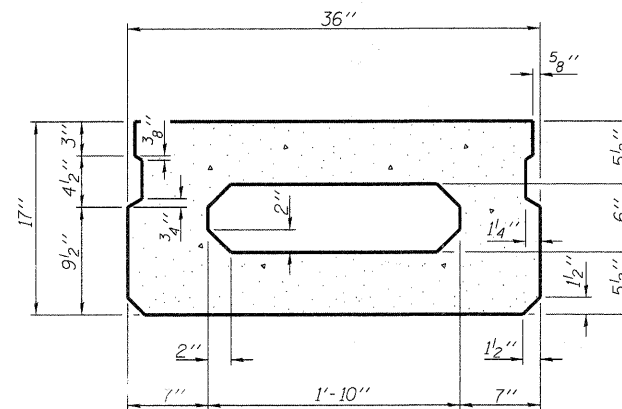
**17" x 36" PPC DECK BEAM DETAILS SPANS 1 & 3  
STRUCTURE NO. 022-6930**

SHEET NO. 9 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	23
FED. ROAD DIST. NO. _			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 63601					

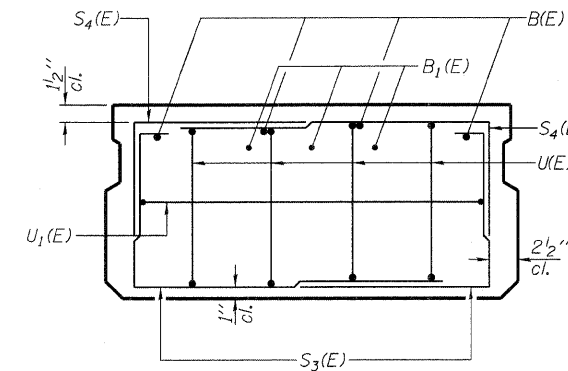
V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com



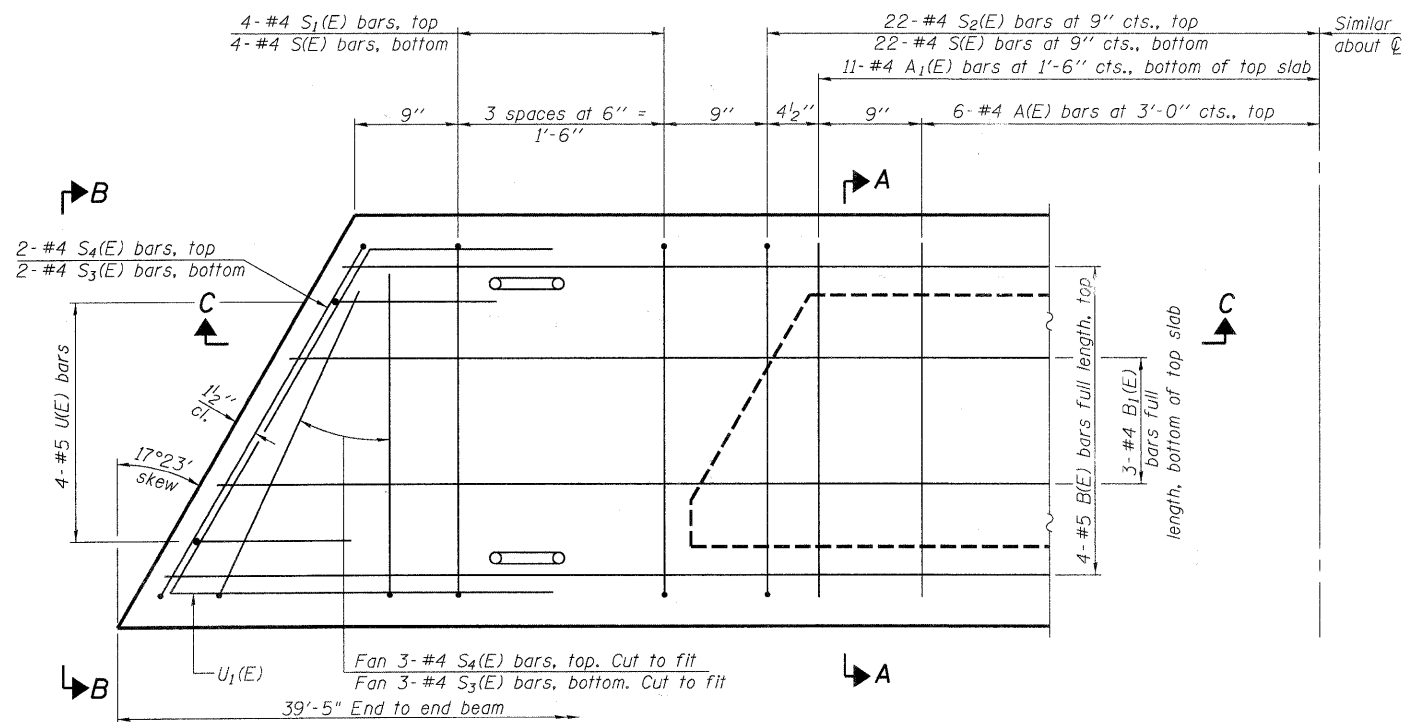
**SECTION C-C**



**SECTION A-A**  
(Showing dimensions)

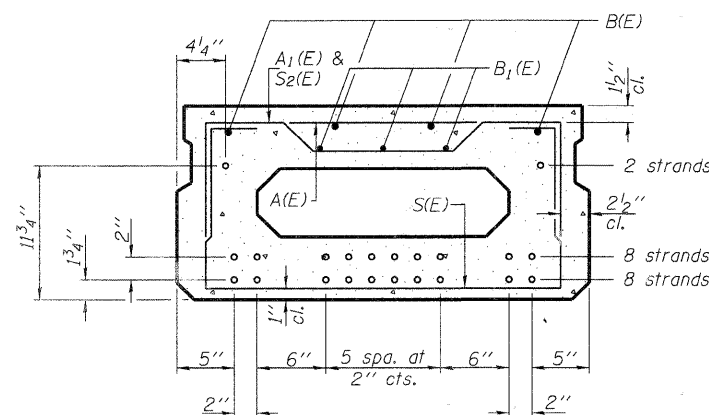


**VIEW B-B**



**PLAN VIEW**

Note: Spacing of S(E) and S<sub>2</sub>(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



**SECTION A-A**

(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.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	2'-7"	—
A <sub>1</sub> (E)	22	#4	2'-10"	~
B(E)	4	#5	39'-2"	—
B <sub>1</sub> (E)	3	#4	39'-2"	—
S(E)	52	#4	5'-9"	⌈
S <sub>1</sub> (E)	8	#4	4'-3"	⌈
S <sub>2</sub> (E)	44	#4	4'-6"	⌈
S <sub>3</sub> (E)	10	#4	4'-1"	⌈
S <sub>4</sub> (E)	10	#4	3'-4"	⌈
U(E)	8	#5	3'-6"	⌈
U <sub>1</sub> (E)	2	#4	5'-11"	⌈

Note: See sheet 11 of 29 for additional details and Bill of Material.

**MINIMUM BAR LAP**

#4 bar = 2'-0"  
#5 bar = 2'-6"

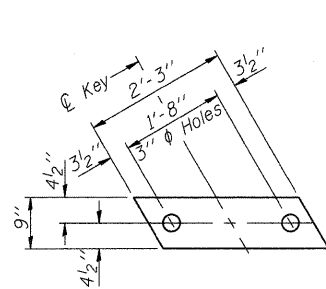
**17" x 36" PPC DECK BEAMS SPAN 2**  
**STRUCTURE NO. 022-6930**



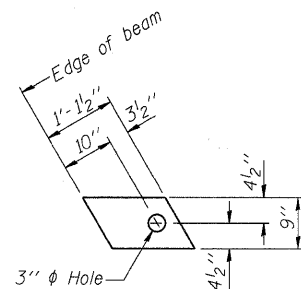
V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 10	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	24
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. _		ILLINOIS	FED. AID PROJECT		





**FABRIC BEARING PAD**  
(Interior)

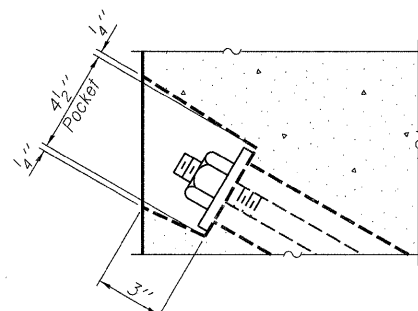


**FABRIC BEARING PAD**  
(Exterior)

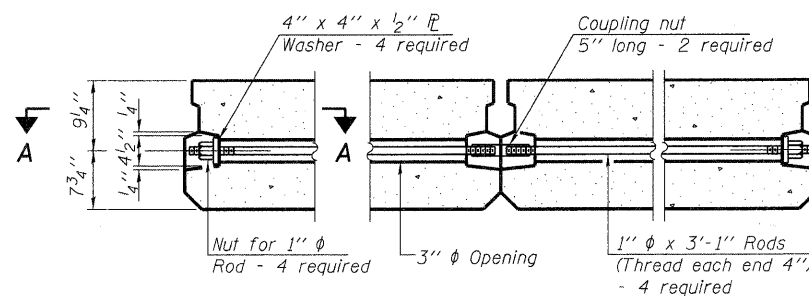
**FIXED**

Notes:

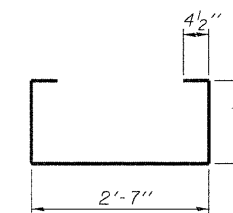
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.



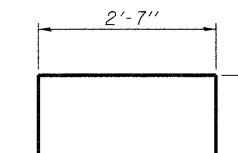
**SECTION A-A**



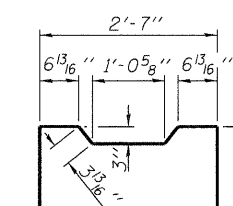
**TYPICAL TRANSVERSE TIE ASSEMBLY**



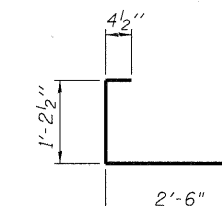
**BAR S(E)**



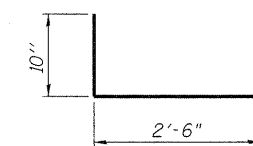
**BAR S1(E)**



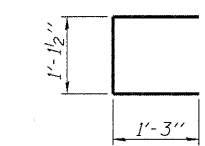
**BAR S2(E)**



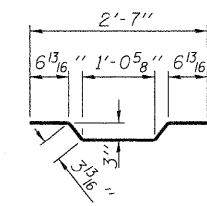
**BAR S3(E)**



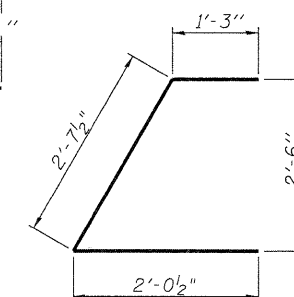
**BAR S4(E)**



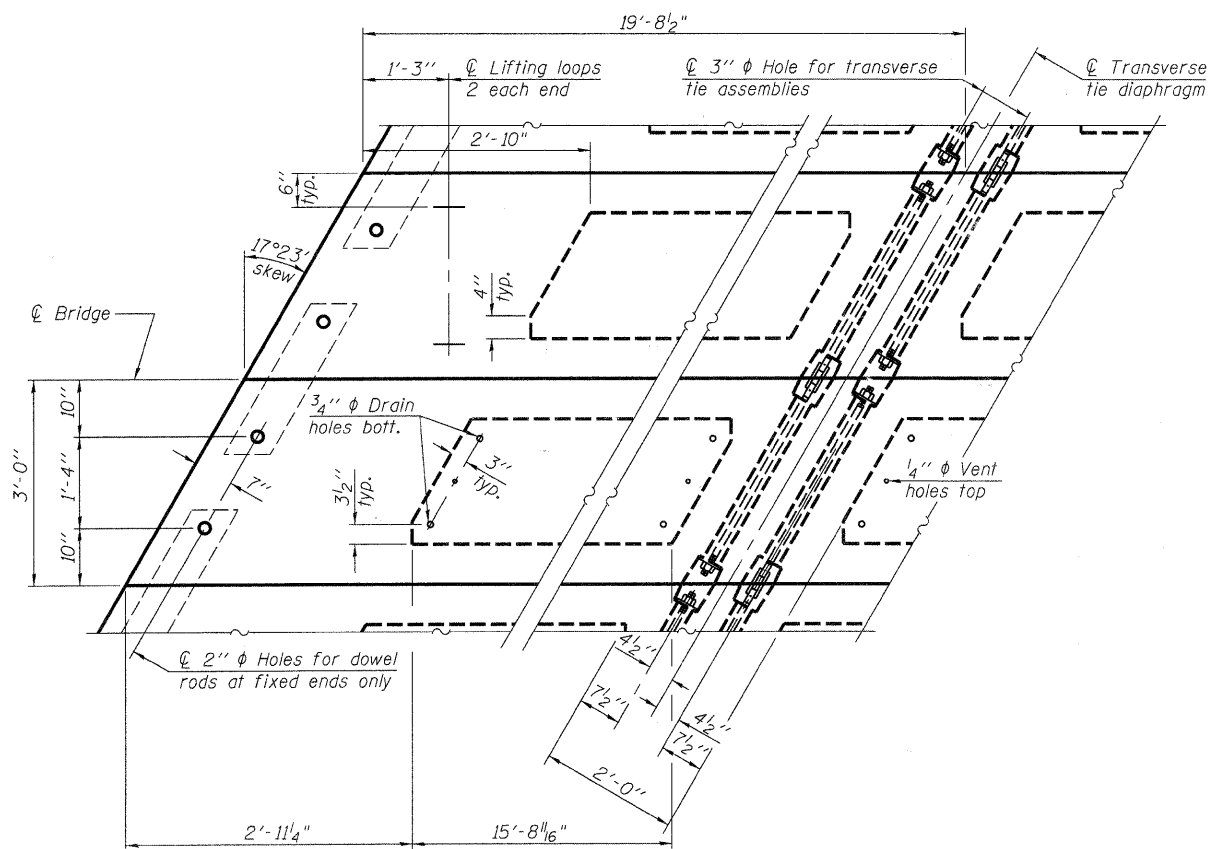
**BAR U(E)**



**BAR A1(E)**



**BAR U1(E)**



**PLAN VIEW**

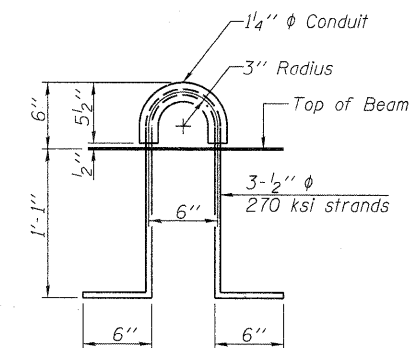
Note: Connect beams in pairs with the transverse tie configuration shown.

**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" diameter 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.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). 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" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



**LIFTING LOOP DETAIL**

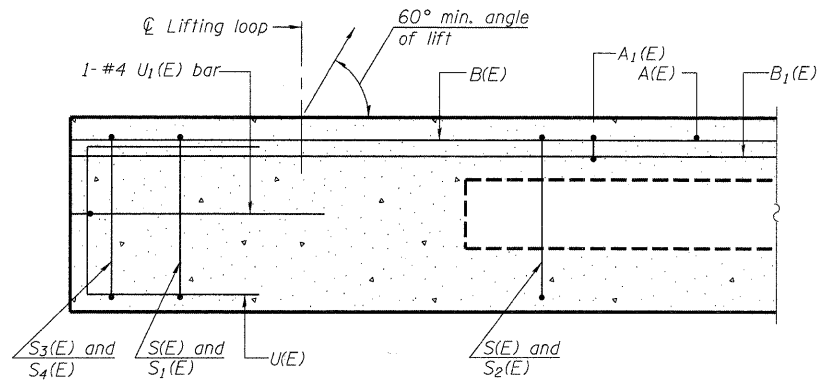
**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	237
---	---------	-----

**17" x 36" PPC DECK BEAM DETAILS SPAN 2  
STRUCTURE NO. 022-6930**

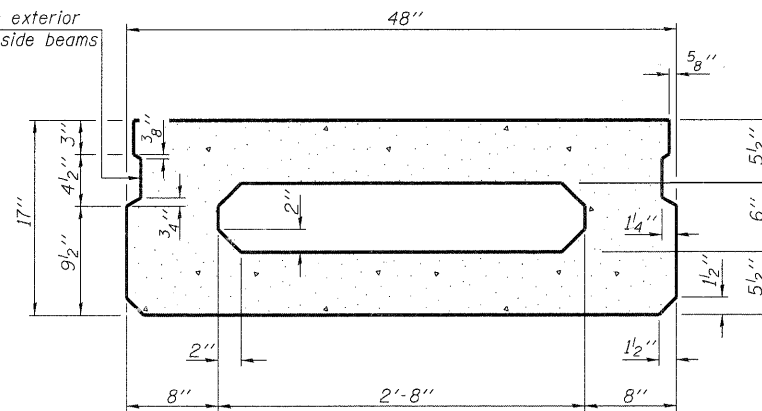
V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 11 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	25
FED. ROAD DIST. NO. _ ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 63601					

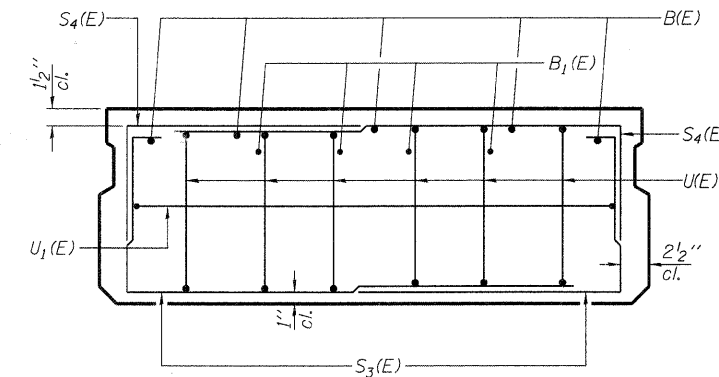


**SECTION C-C**

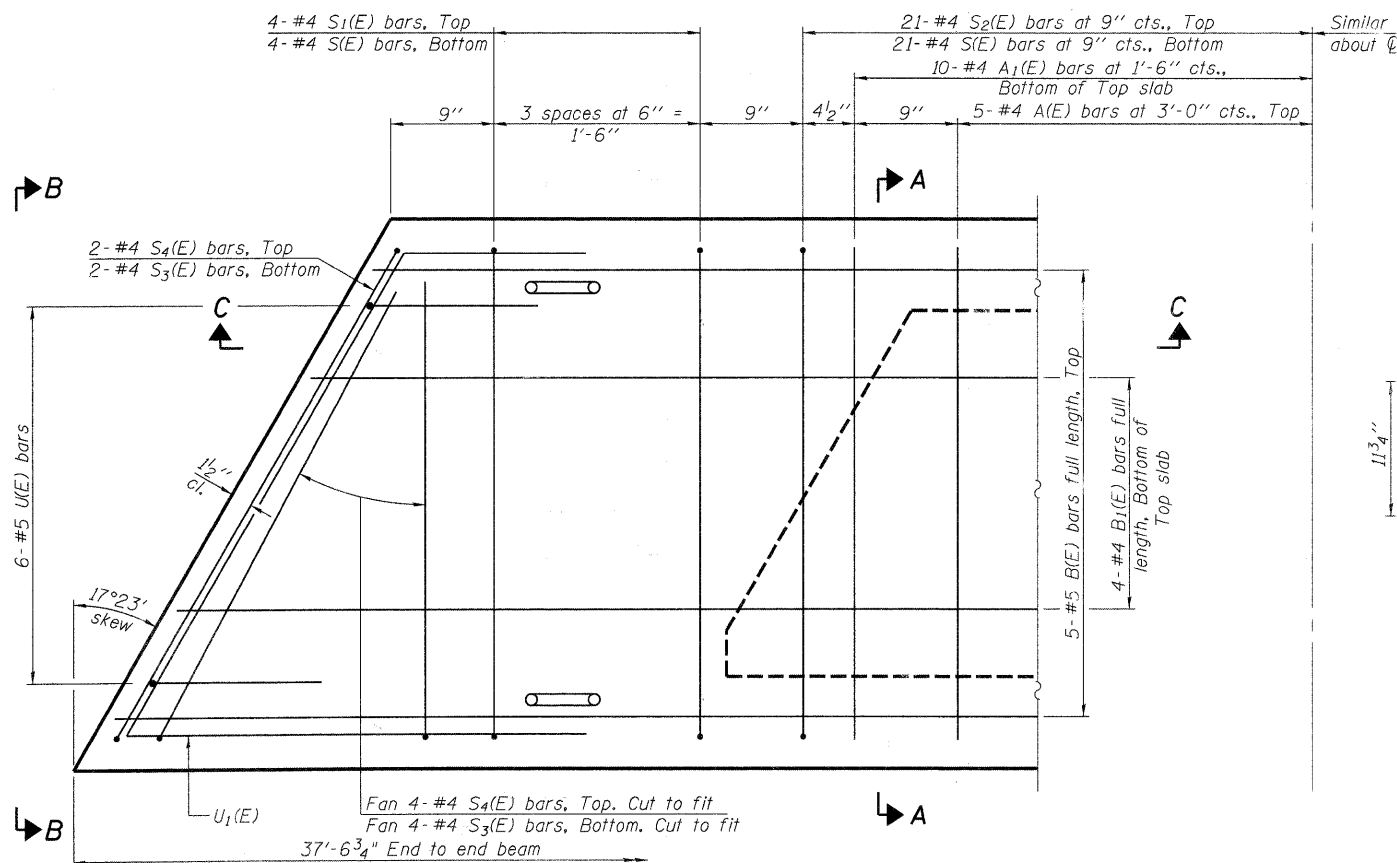
Omit key on exterior face of outside beams



**SECTION A-A**  
(Showing dimensions)

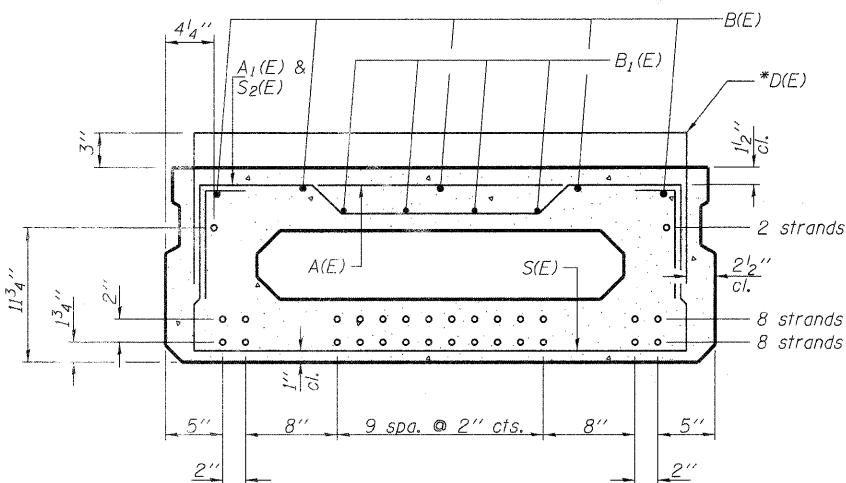


**VIEW B-B**



**PLAN VIEW**

Note: Spacing of S(E), S2(E) & \*D(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



**SECTION A-A**

(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.

**NOTES**

Contractor may use bar splicers instead of cast-in-place dowel D(E) at no extra cost to the project. If bar splicers are to be used, then they need to be incorporated into the shop drawings for approval.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	10	#4	3'-7"	—
A1(E)	20	#4	3'-10"	—
B(E)	5	#5	37'-3"	—
B1(E)	4	#4	37'-3"	—
*D(E)	40	#5	5'-7"	□
S(E)	50	#4	6'-9"	□
S1(E)	8	#4	5'-3"	□
S2(E)	42	#4	5'-6"	□
S3(E)	12	#4	4'-7"	□
S4(E)	12	#4	3'-10"	□
U(E)	12	#5	3'-8"	□
U1(E)	2	#4	7'-3"	□

Note: See sheet 13 of 29 for additional details and Bill of Material.

\*D(E) bars to be cast into outside beams only. See sheet 5, 6 and 13 of 29 for details.

**17" x 48" PPC DECK BEAMS SPANS 1 & 3**  
**STRUCTURE NO. 022-6930**

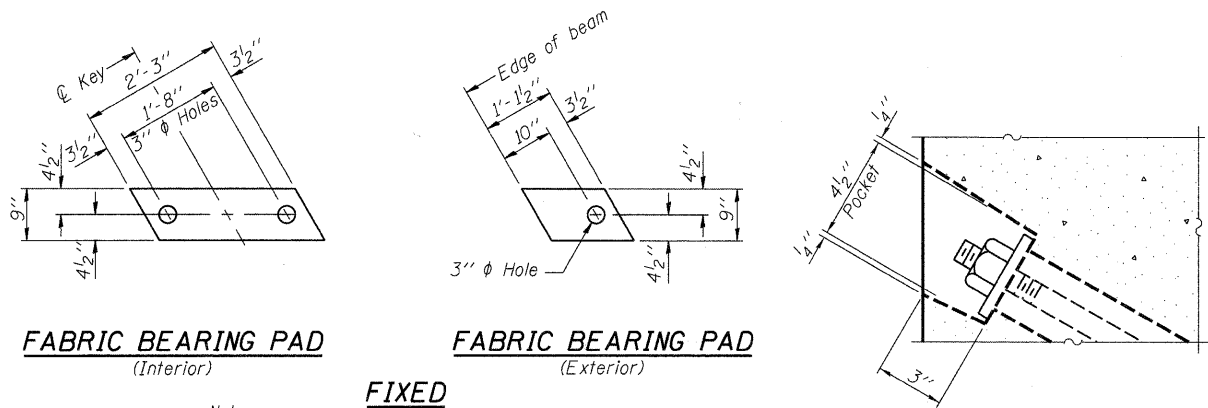
**MINIMUM BAR LAP**

#4 bar = 2'-0"  
#5 bar = 2'-6"



V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 12  29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	26
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					

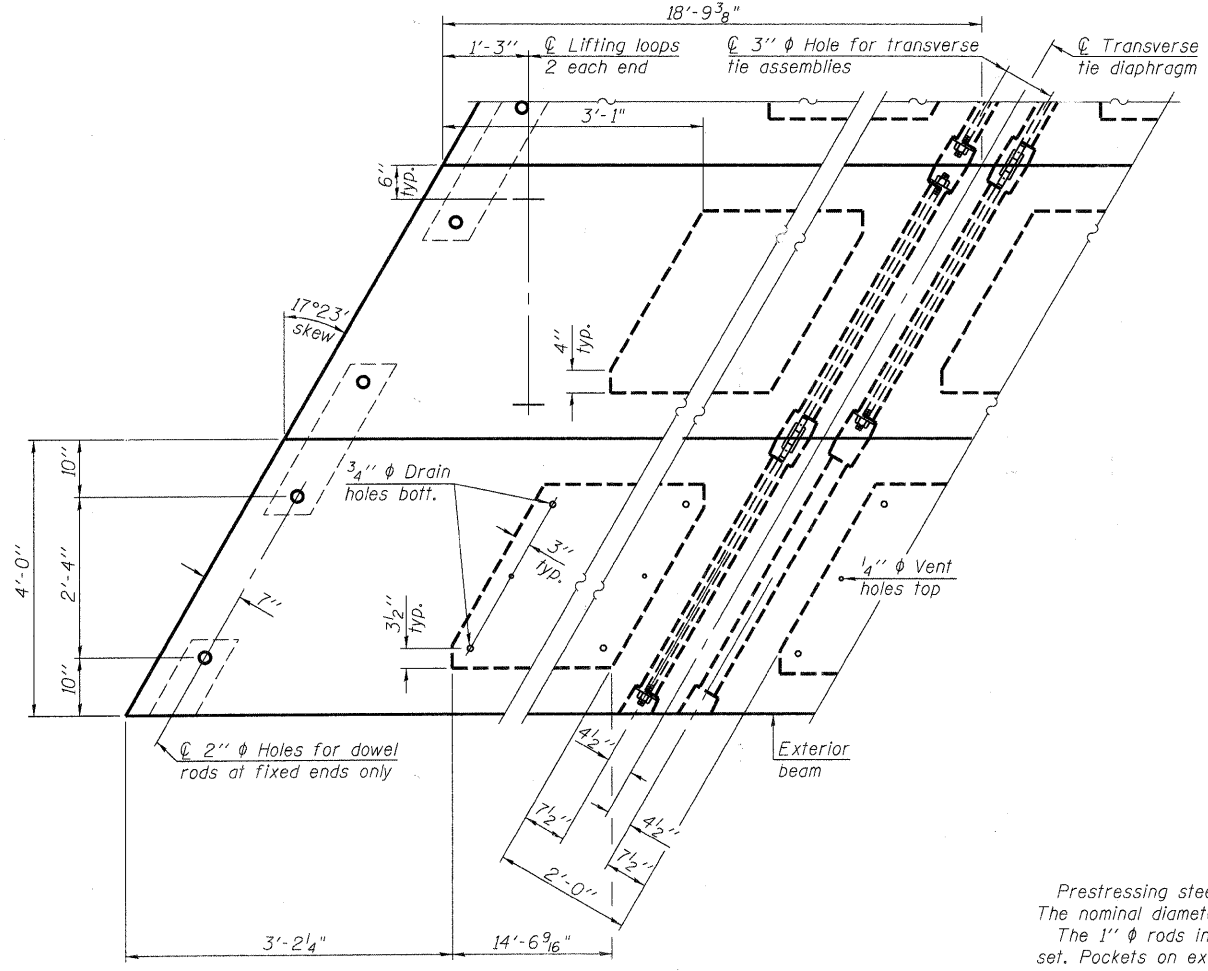


**FABRIC BEARING PAD**  
(Interior)

**FABRIC BEARING PAD**  
(Exterior)

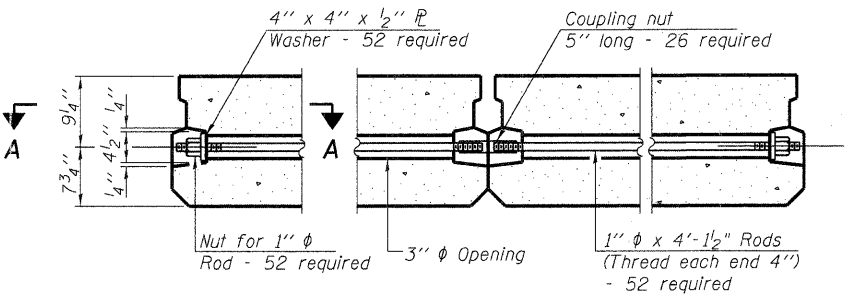
**SECTION A-A**

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

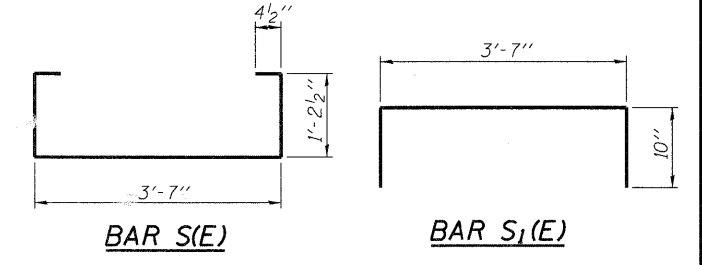


**PLAN VIEW**

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

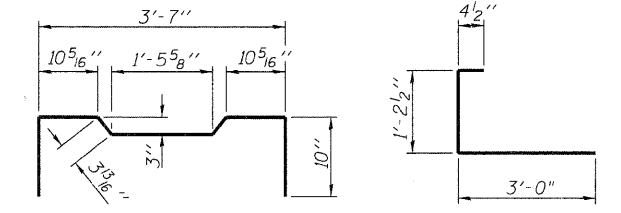


**TYPICAL TRANSVERSE TIE ASSEMBLY**



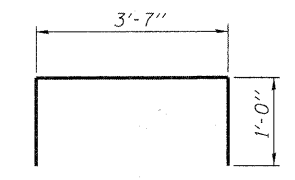
**BAR S(E)**

**BAR S<sub>1</sub>(E)**

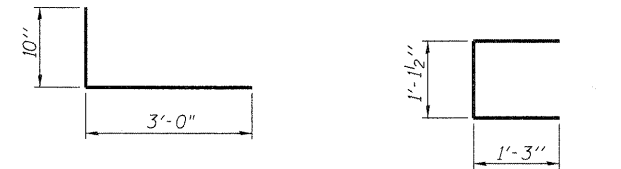


**BAR S<sub>2</sub>(E)**

**BAR S<sub>3</sub>(E)**

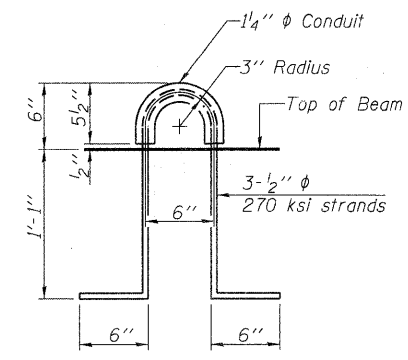


**BAR \*D(E)**

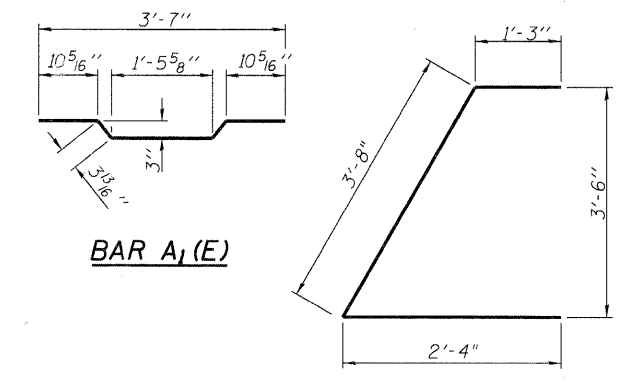


**BAR S<sub>4</sub>(E)**

**BAR U(E)**



**LIFTING LOOP DETAIL**



**BAR A<sub>1</sub>(E)**

**BAR U<sub>1</sub>(E)**

**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" 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.  
 Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).  
 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" diameter lifting pin shall be used to engage the lifting loops during handling.  
 Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
 Compressive strength of prestressed concrete, f'c, shall be 6000 psi.  
 Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

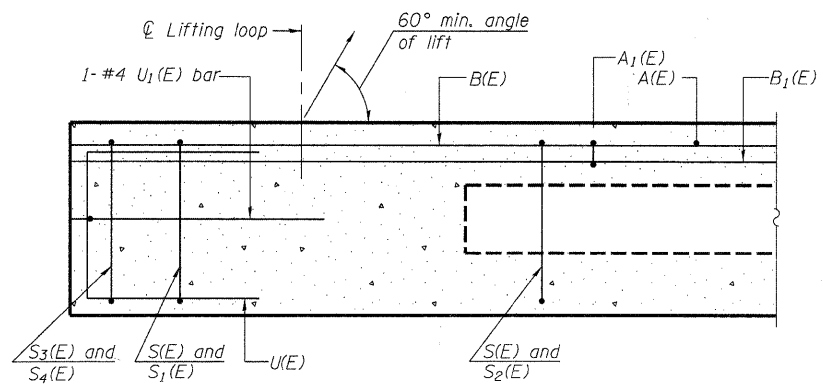
**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	4207
---	---------	------

**17" x 48" PPC DECK BEAM DETAILS SPANS 1 & 3  
STRUCTURE NO. 022-6930**

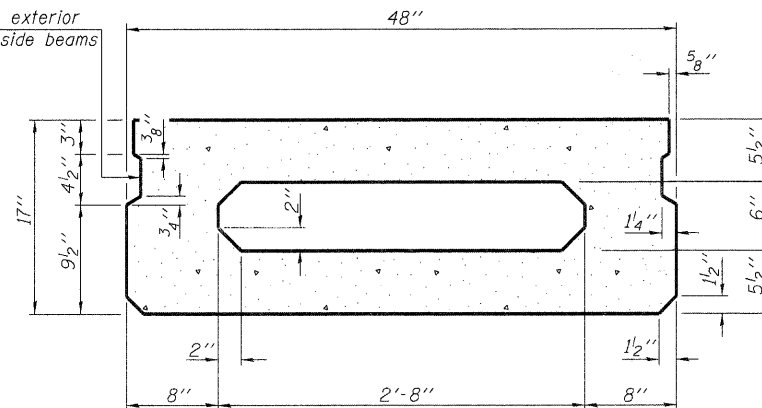
V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 830.724.9200 phone  
 830.724.9202 fax  
 www.v3co.com

SHEET NO. 13 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	27
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. -		ILLINOIS	FED. AID PROJECT		

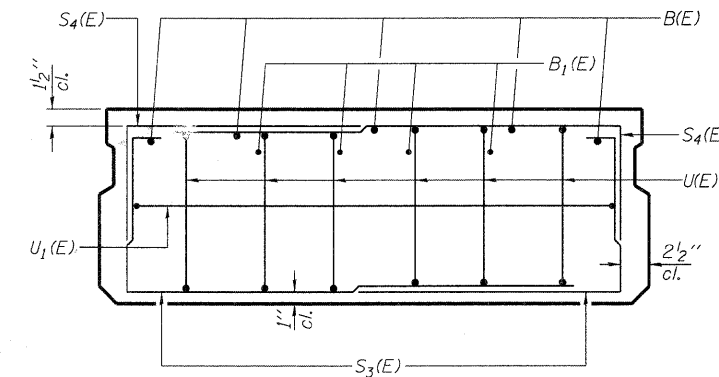


**SECTION C-C**

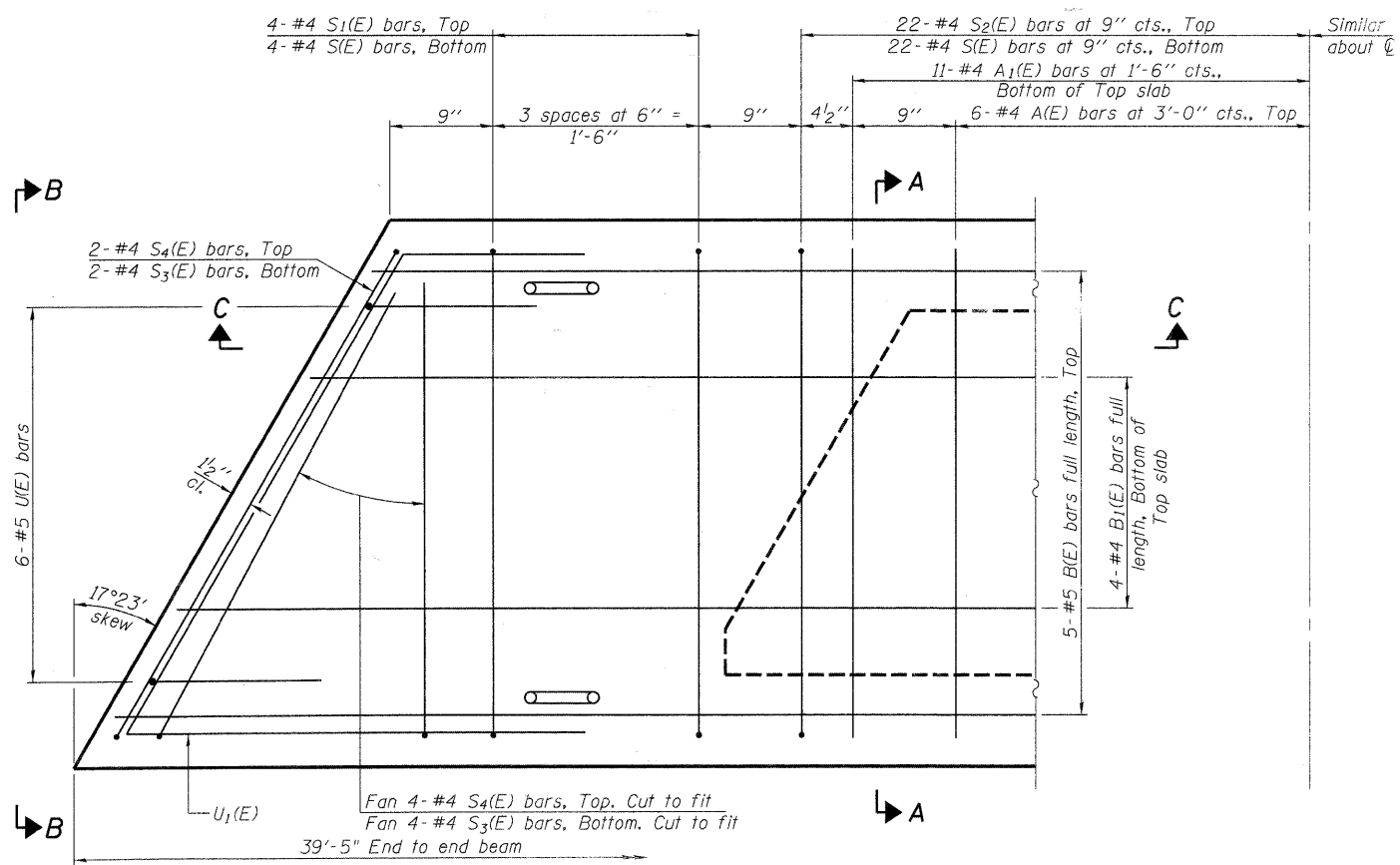
Omit key on exterior face of outside beams



**SECTION A-A**  
(Showing dimensions)

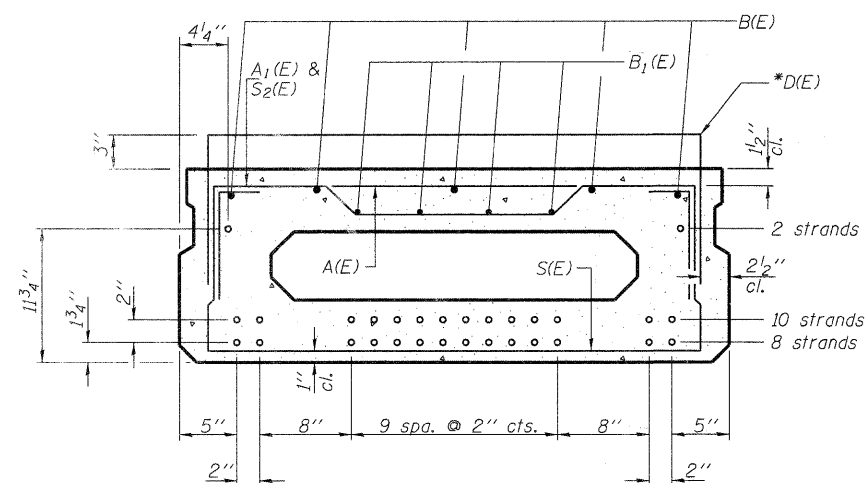


**VIEW B-B**



**PLAN VIEW**

Note: Spacing of S(E) and S<sub>2</sub>(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



**SECTION A-A**

(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.

**NOTES**

Contractor may use bar splicers instead of cast-in-place dowel D(E) at no extra cost to the project. If bar splicers are to be used, then they need to be incorporated into the shop drawings for approval.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	3'-7"	—
A <sub>1</sub> (E)	22	#4	3'-10"	—
B(E)	5	#5	39'-2"	—
B <sub>1</sub> (E)	4	#4	39'-2"	—
*D(E)	42	#5	5'-7"	□
S(E)	52	#4	6'-9"	□
S <sub>1</sub> (E)	8	#4	5'-3"	□
S <sub>2</sub> (E)	44	#4	5'-6"	□
S <sub>3</sub> (E)	12	#4	4'-7"	□
S <sub>4</sub> (E)	12	#4	3'-10"	□
U(E)	12	#5	3'-8"	□
U <sub>1</sub> (E)	2	#4	7'-3"	□

Note: See sheet 15 of 29 for additional details and Bill of Material.

\*D(E) bars to be cast into outside beams only. See sheet 5, 6 and 15 of 29 for details.

**MINIMUM BAR LAP**

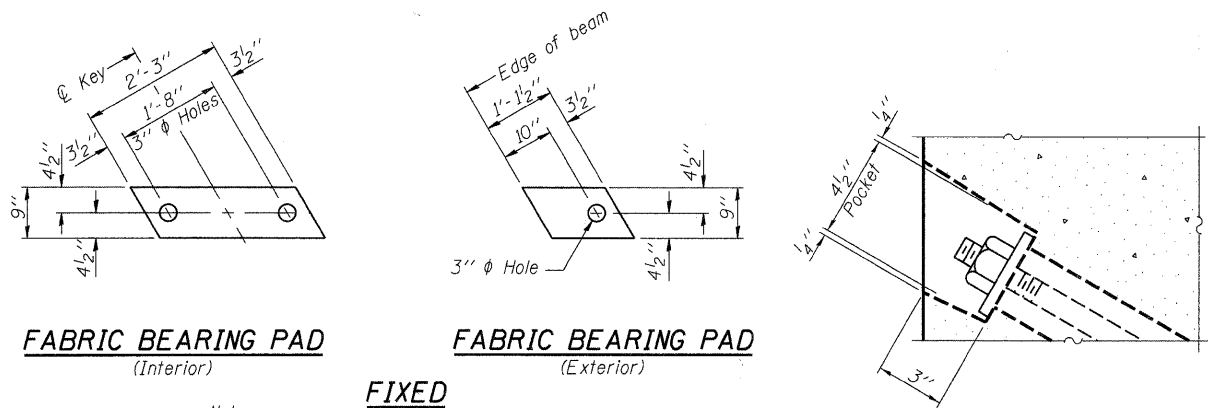
#4 bar = 2'-0"  
#5 bar = 2'-6"

**17" x 48" PPC DECK BEAMS SPAN 2**  
**STRUCTURE NO. 022-6930**



V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 14 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	28
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



**FABRIC BEARING PAD**  
(Interior)

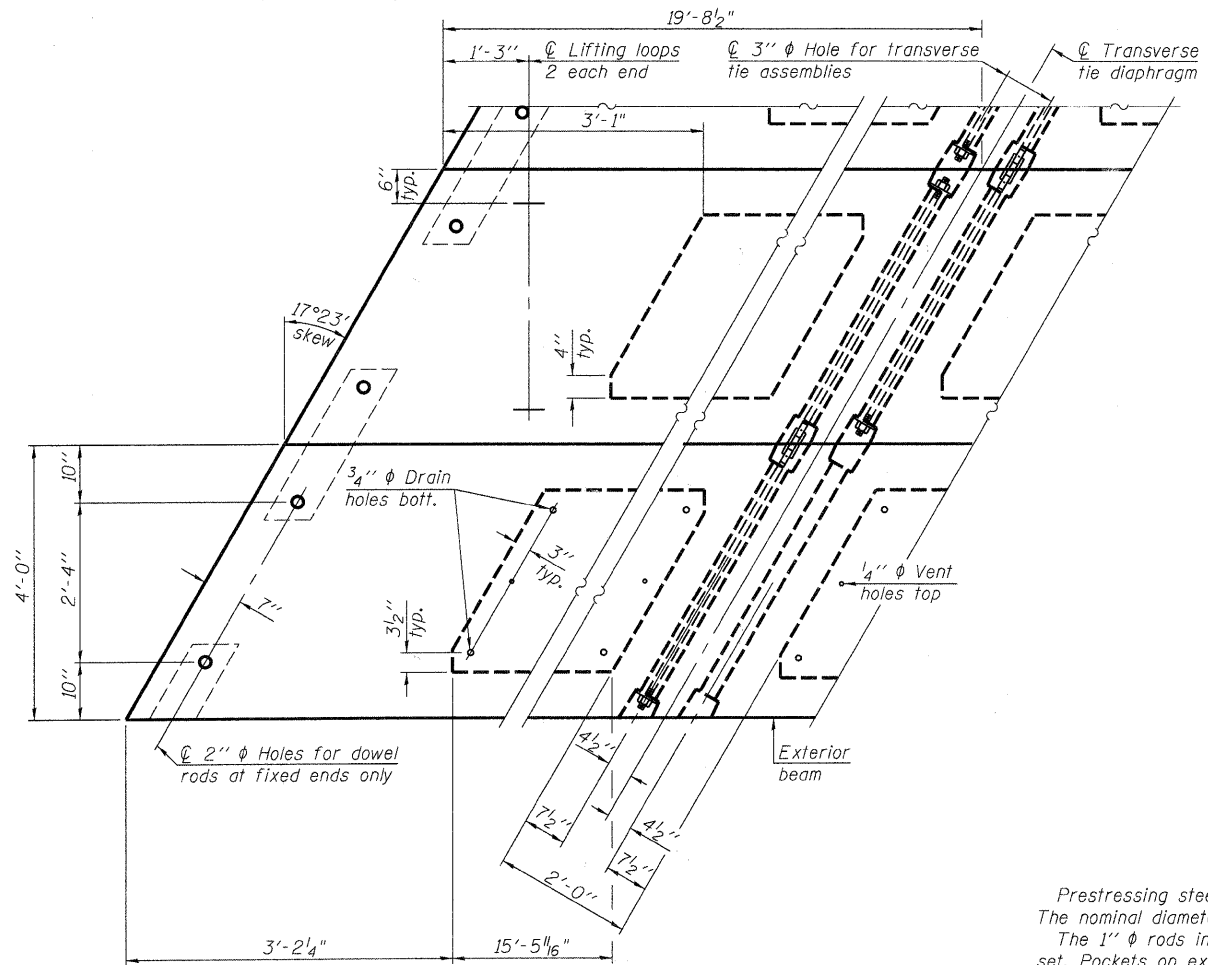
**FABRIC BEARING PAD**  
(Exterior)

**FIXED**

Notes:

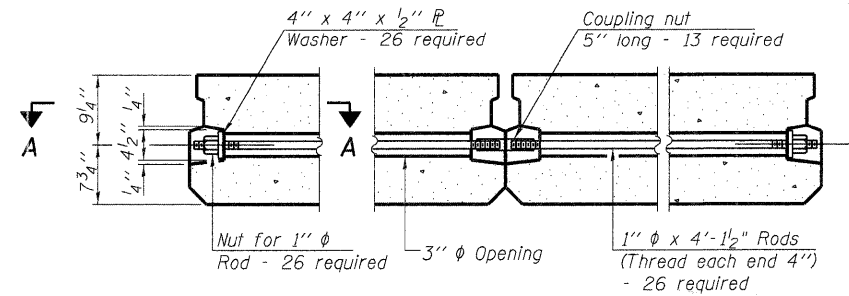
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.

**SECTION A-A**

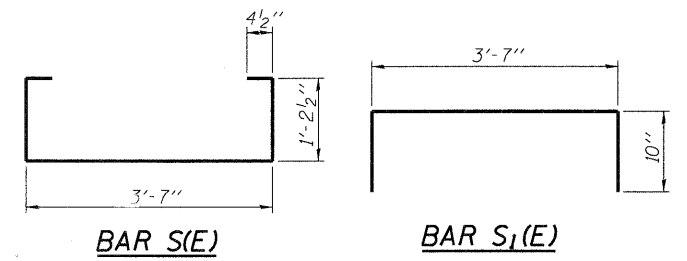


**PLAN VIEW**

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

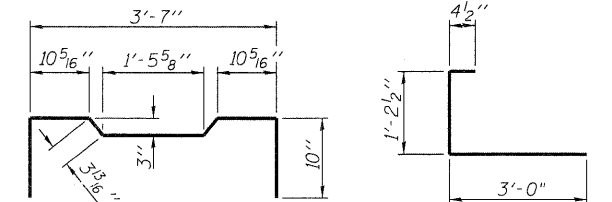


**TYPICAL TRANSVERSE TIE ASSEMBLY**



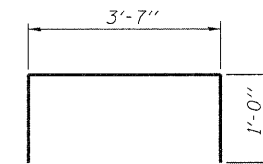
**BAR S1(E)**

**BAR S1(E)**

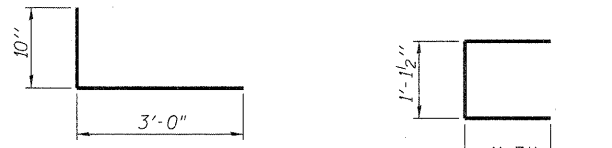


**BAR S2(E)**

**BAR S3(E)**

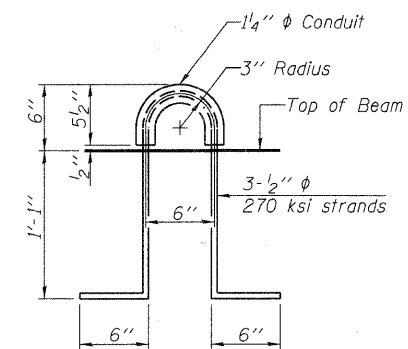


**BAR \*D(E)**

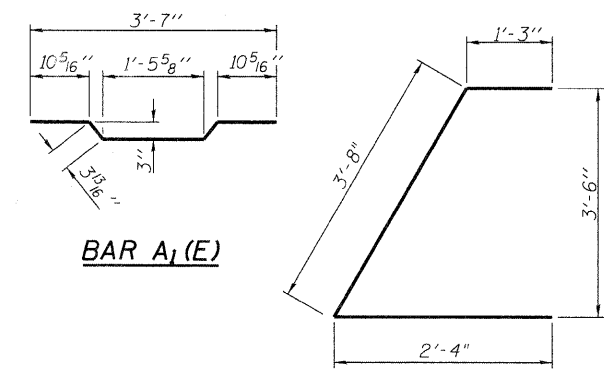


**BAR S4(E)**

**BAR U(E)**



**LIFTING LOOP DETAIL**



**BAR A1(E)**

**BAR U1(E)**

**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" diameter 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.  
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).  
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" diameter lifting pin shall be used to engage the lifting loops during handling.  
Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.  
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

**BILL OF MATERIAL**

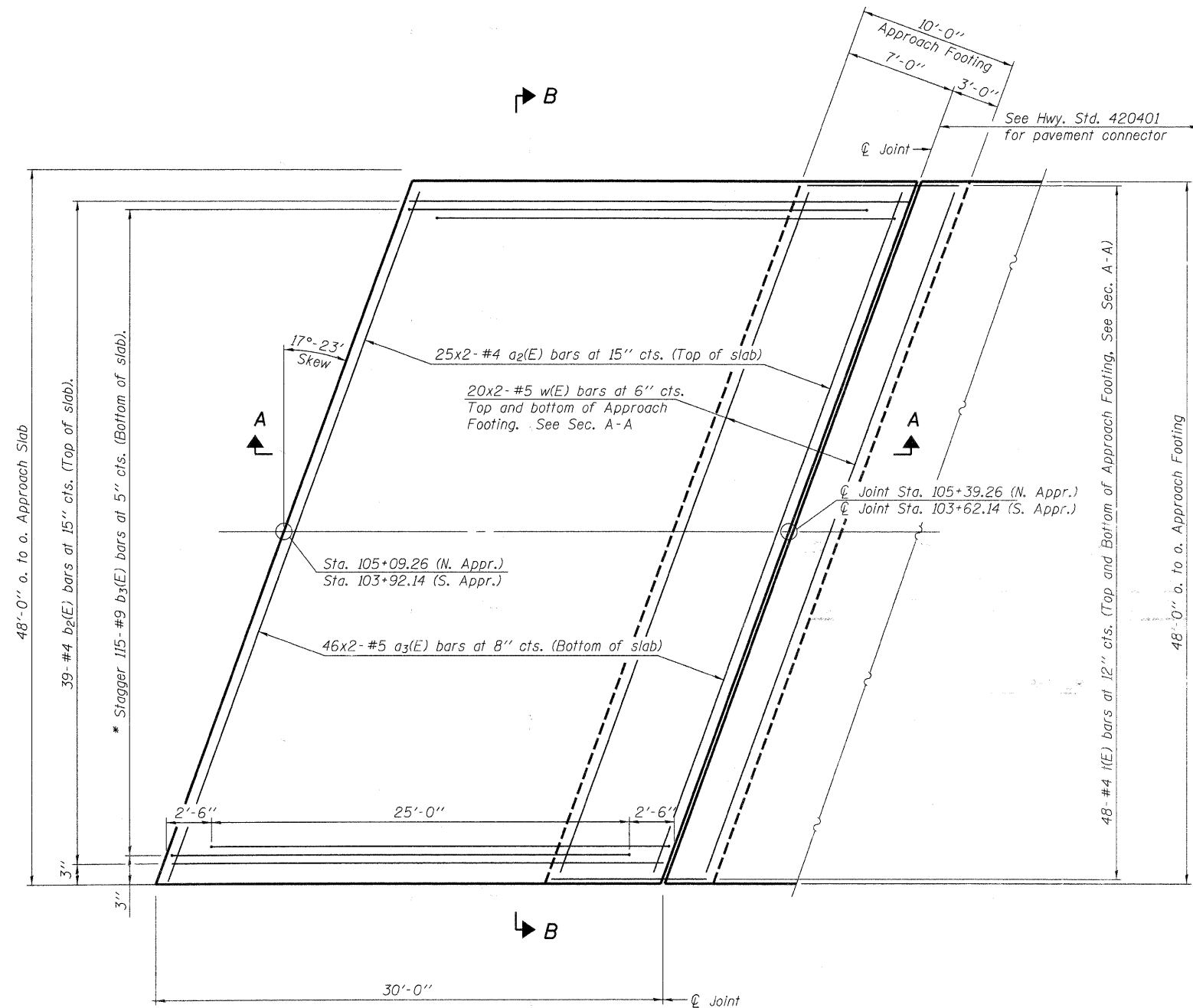
Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	2207
---	---------	------

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

**17" x 48" PPC DECK BEAM DETAILS SPAN 2  
STRUCTURE NO. 022-6930**

SHEET NO. 15 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	29
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. -		ILLINOIS	FED. AID PROJECT		

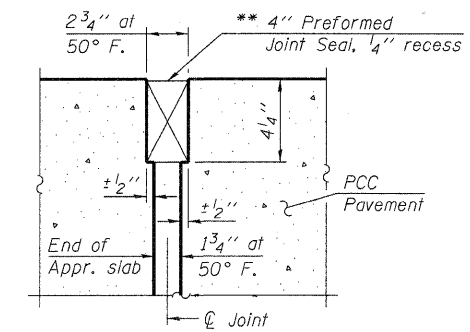
Notes:  
 See sheet 17 of 29 for Sections A-A & B-B.  
 $a_2(E)$  and  $a_3(E)$  bar spacings measured along  $\phi$  Rdwy.



**PLAN**

\* Tilt #9  $b_3(E)$  bars as required to maintain clearance.

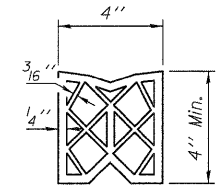
\*\* Cost included with Concrete Superstructure.



**DETAIL A**

**BAR LAPS**

#4 bars = 1'-4"  
 #5 bars = 1'-8"



**PREFORMED JOINT SEAL**

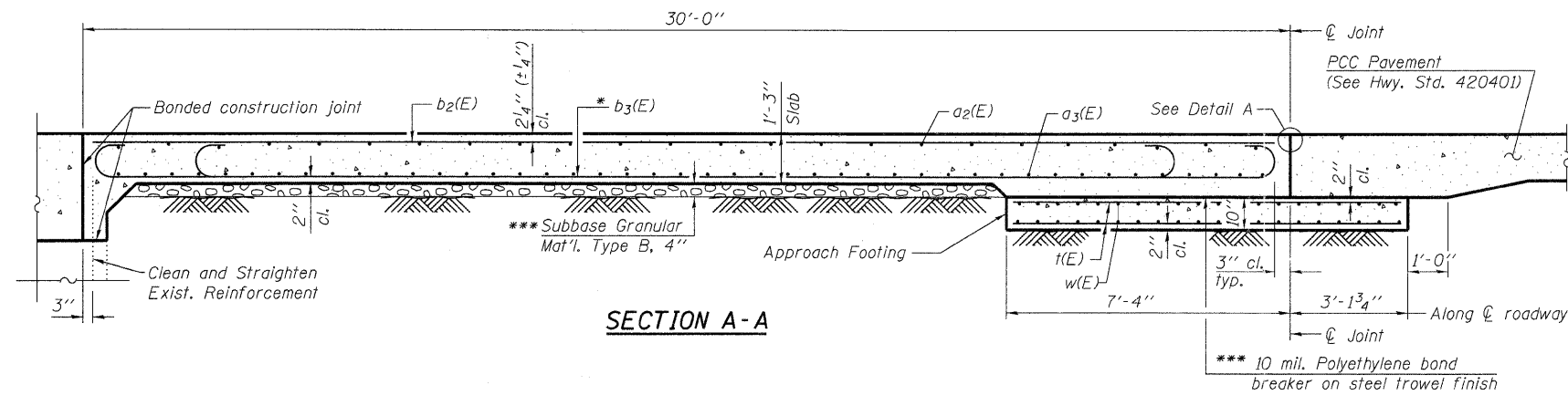
V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

(Sheet 1 of 2)  
**BRIDGE APPROACH SLAB DETAILS-I**  
**STRUCTURE NO. 022-6930**

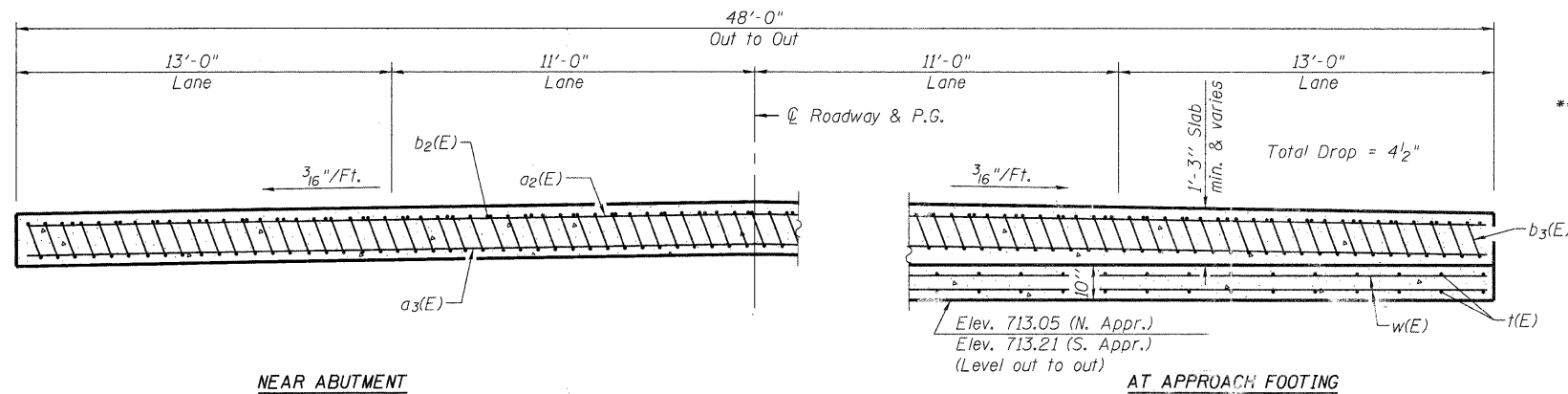
SHEET NO. 16	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
29 SHEETS	2651	07-00083-00-BR	DUPAGE	50	30
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. _		ILLINOIS FED. AID PROJECT			

**Notes:**

See sheet 16 of 29 for Detail A.  
 Approach slab concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.



**SECTION A-A**



**NEAR ABUTMENT**

**SECTION B-B**

(See Plan for dimensions not shown)

**AT APPROACH FOOTING**

\* Tilt #9 b<sub>3</sub>(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure.

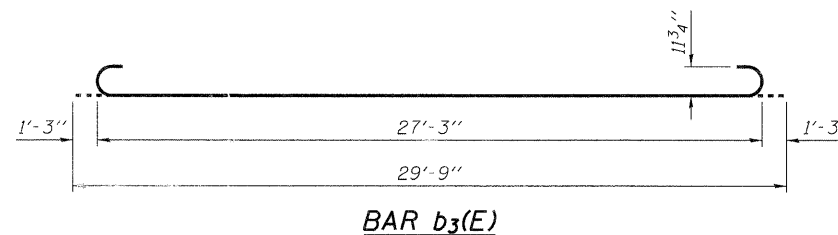
**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a <sub>2</sub> (E)	100	#4	25'-8"	—
a <sub>3</sub> (E)	184	#5	25'-10"	—
b <sub>2</sub> (E)	78	#4	29'-8"	—
b <sub>3</sub> (E)	230	#9	29'-9"	⌋
t(E)	192	#4	10'-3"	—
w(E)	160	#5	25'-10"	—
Concrete Superstructure			Cu. Yd.	147.1
Concrete Structures			Cu. Yd.	31.1
Reinforcement Bars, Epoxy Coated			Pound	37,110
Bridge Deck Grooving			Sq. Yd.	320
Protective Coat			Sq. Yd.	320

Bars indicated thus 25x2-#4 etc. indicates 25 lines of bars with 2 lengths per line.

(Sheet 2 of 2)

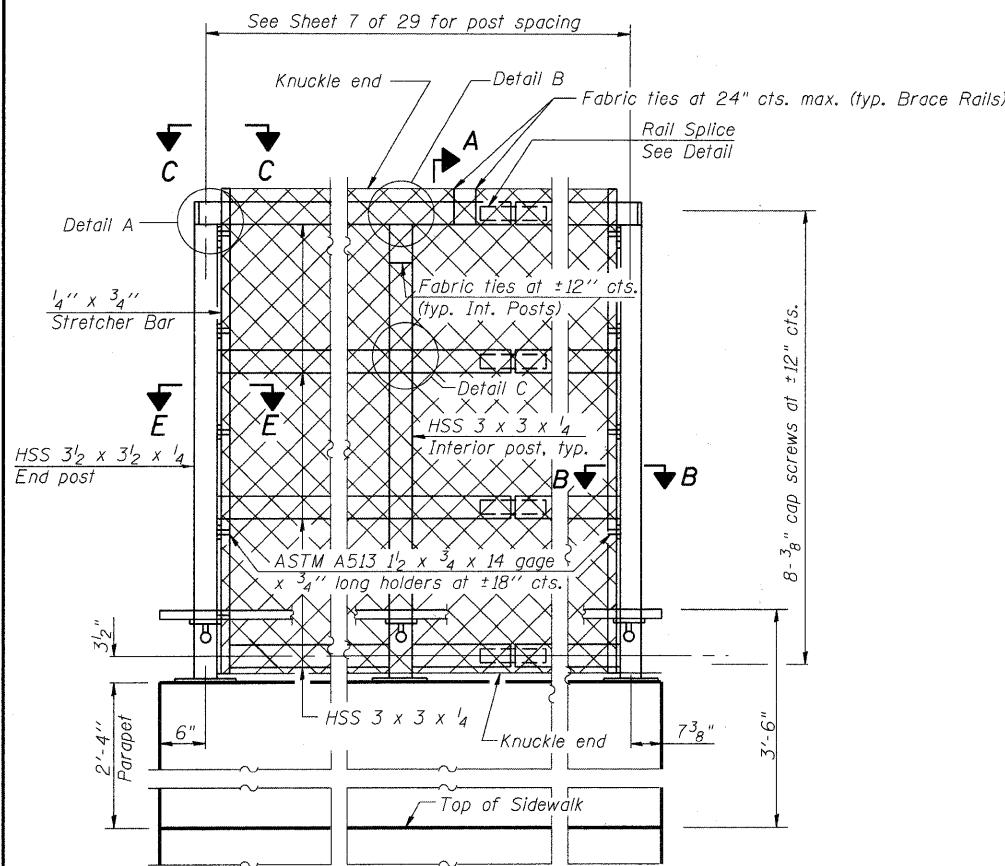
**BRIDGE APPROACH SLAB DETAILS-II  
 STRUCTURE NO. 022-6930**



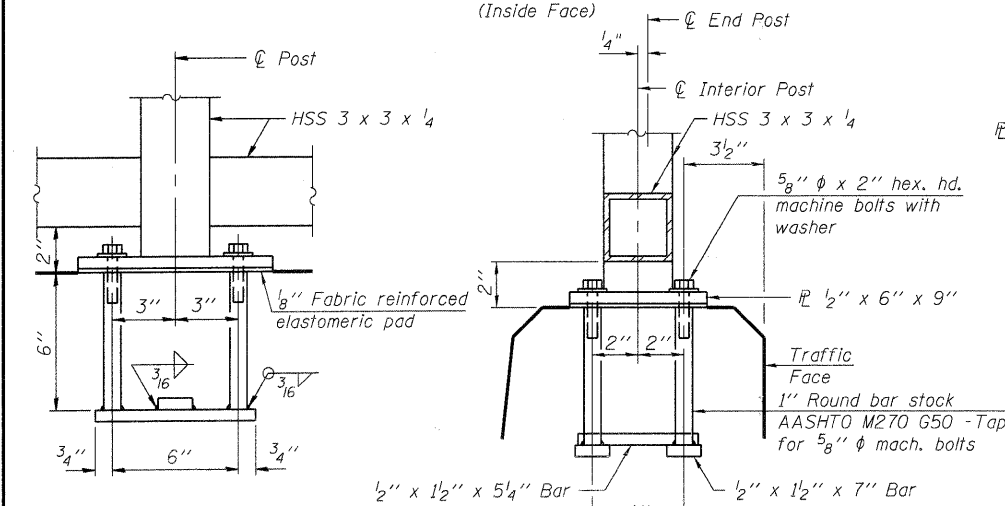
**BAR b<sub>3</sub>(E)**

V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

SHEET NO. 17 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	31
FED. ROAD DIST. NO. _			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 63601					

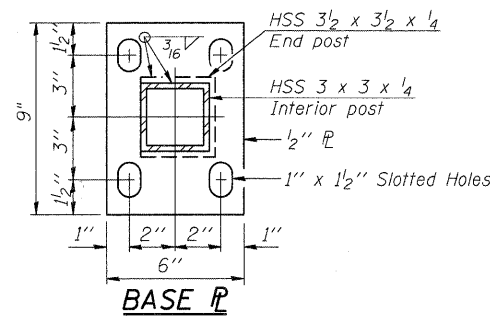


**ELEVATION**  
(Inside Face)

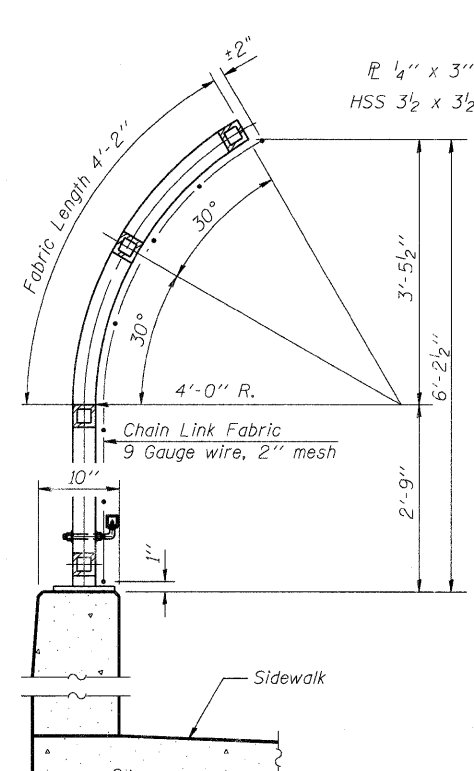


**ANCHOR BOLT DETAILS**

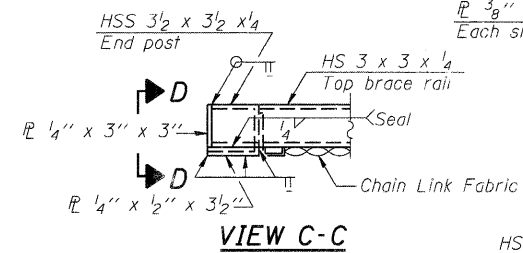
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" φ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



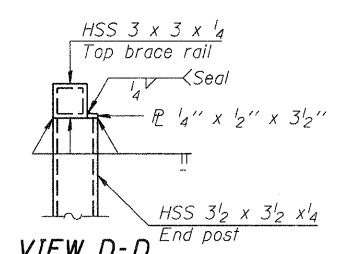
**BASE R**



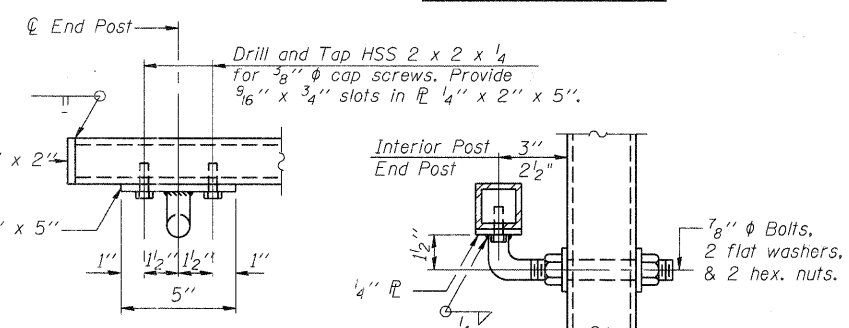
**SECTION A-A**



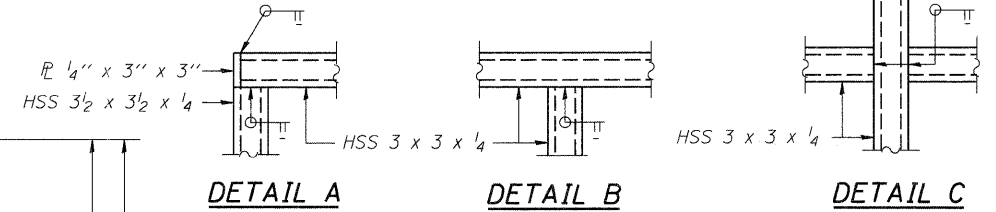
**VIEW C-C**



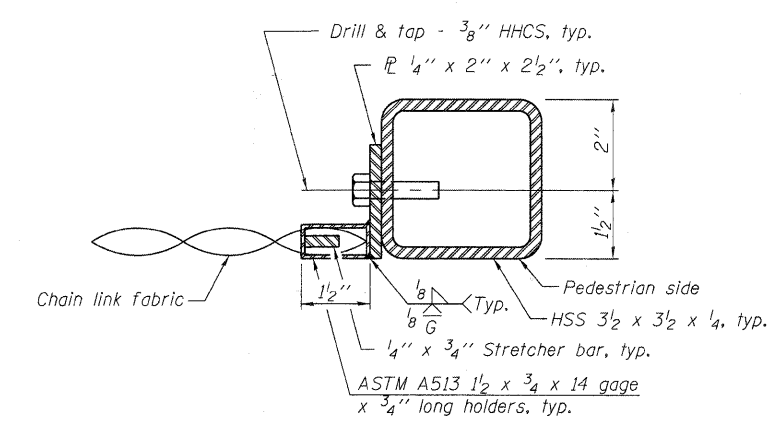
**VIEW D-D**



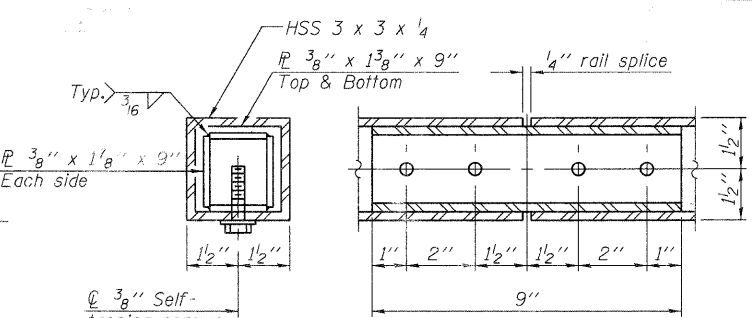
**HANDRAIL DETAIL**



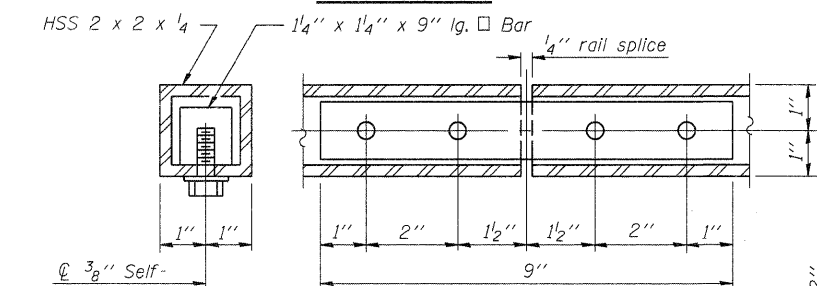
**DETAIL A      DETAIL B      DETAIL C**



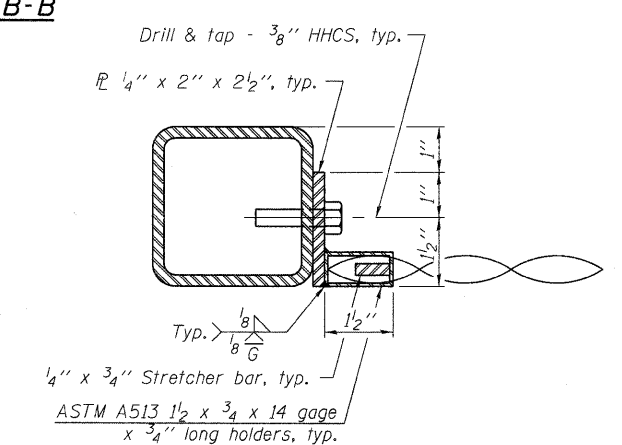
**SECTION B-B**



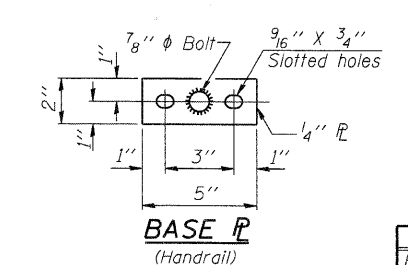
**RAIL SPLICE**



**HANDRAIL SPLICE**



**SECTION E-E**



**BASE R**  
(Handrail)

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Fence Railing	Foot	228

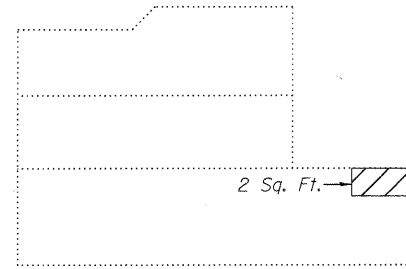
**BRIDGE FENCE RAILING  
PARAPET MOUNTED  
STRUCTURE NO. 022-6930**

**V3**  
V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

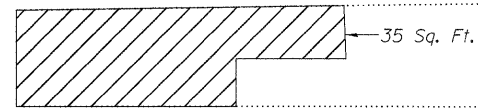
SHEET NO. 18 29 SHEETS	F.A.U. RTE. 2651	SECTION 07-00083-00-BR	COUNTY DUPAGE	TOTAL SHEETS 50	SHEET NO. 32
	CONTRACT NO. 63601			FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT	



**NORTHWEST WING WALL REPAIRS**  
(Inside Face)

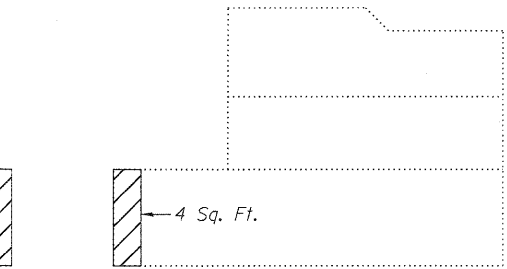


**NORTHWEST WING WALL REPAIRS**  
(Outside Face)

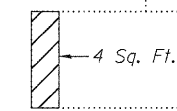


℄ Ardmore Ave. & ℄ of Bridge

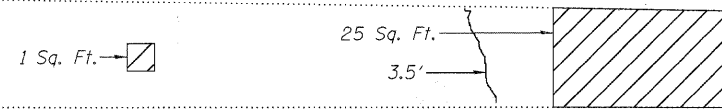
**NORTHEAST WING WALL REPAIRS**  
(Inside Face)



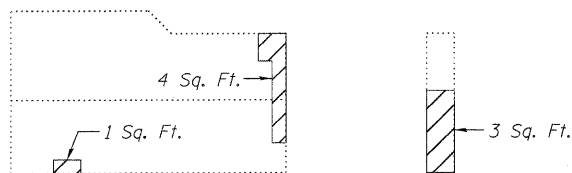
**NORTHEAST WING WALL REPAIRS**  
(Outside Face)



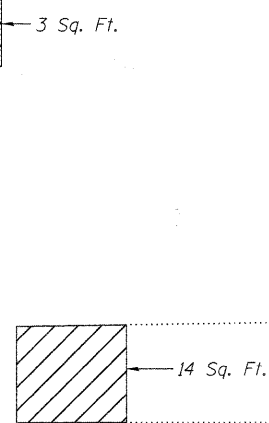
**NORTH ABUTMENT REPAIRS**  
(Looking North)



**SOUTHEAST WING WALL REPAIRS**  
(Inside Face)

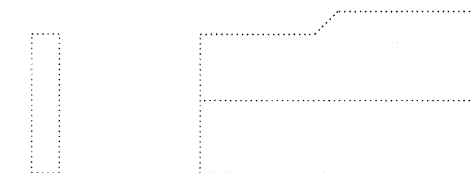


**SOUTHEAST WING WALL REPAIRS**  
(Outside Face)

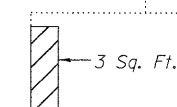


℄ Ardmore Ave. & ℄ of Bridge

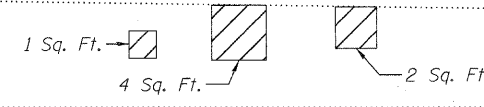
**SOUTHWEST WING WALL REPAIRS**  
(Inside Face)



**SOUTHWEST WING WALL REPAIRS**  
(Outside Face)



**SOUTH ABUTMENT REPAIRS**  
(Looking South)



Structural Repair of Concrete  
(Depth Equal to or Less than 5")

Epoxy Crack Injection

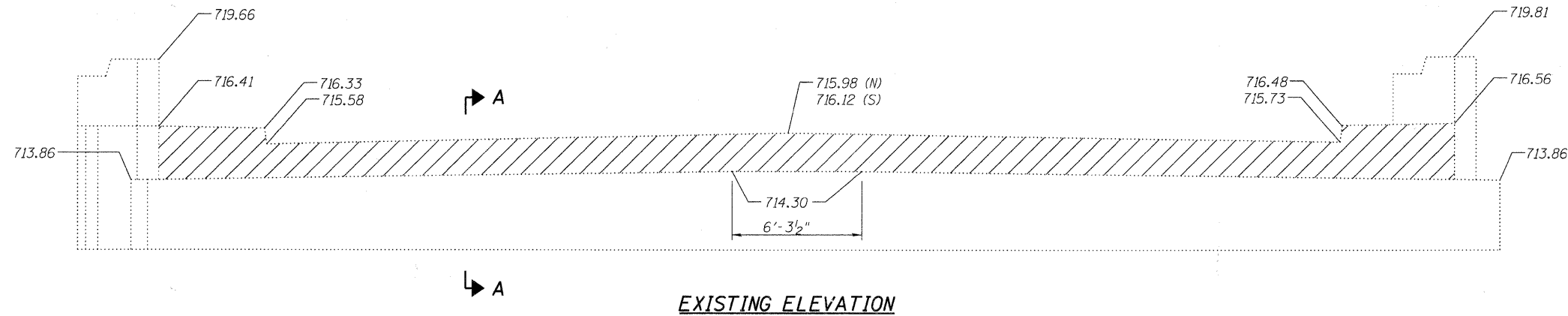
**BILL OF MATERIAL**

Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	114
Epoxy Crack Injection	Foot	7

**ABUTMENT REPAIRS**  
**STRUCTURE NO. 022-6930**

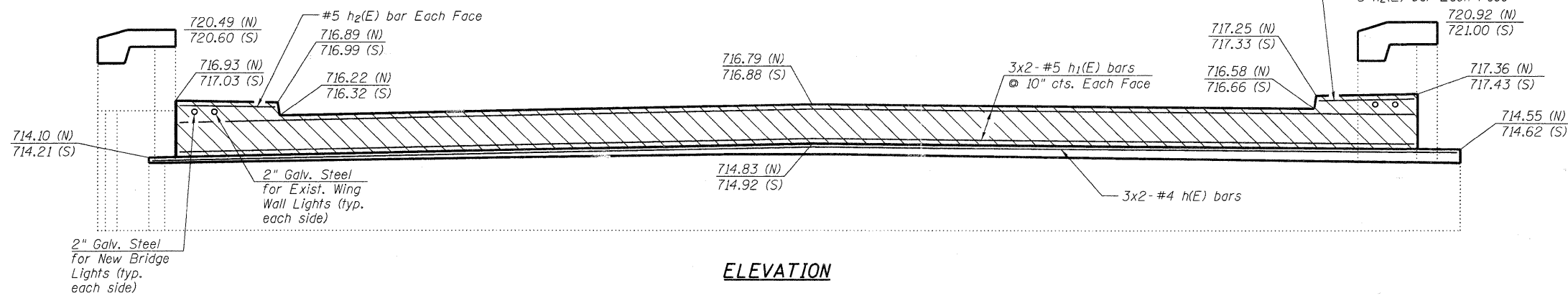
V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 19 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	33
FED. ROAD DIST. NO. _			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 63601					



To be poured after beams and concrete wearing surface are in place

Concrete Removal



**ABUTMENTS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	12	#4	33'-4"	—
h1(E)	24	#5	32'-2"	—
h2(E)	8	#5	5'-0"	—
h3(E)	16	#4	9'-8"	—
h4(E)	8	#4	4'-6"	—
u(E)	126	#4	6'-2"	—
u1(E)	106	#5	4'-4"	—
u2(E)	24	#5	5'-8"	—
v(E)	40	#4	2'-2"	—
v1(E)	40	#4	1'-4"	—
v2(E)	40	#4	2'-5"	—
v3(E)	40	#4	1'-8"	—
Concrete Removal		Cu. Yd.	8.8	
Concrete Structures		Cu. Yd.	11.6	
Concrete Superstructure		Cu. Yd.	9.9	
Reinforcement Bars, Epoxy Coated		Pound	2,590	
Protective Coat		Sq. Yd.	10	

**NOTES**

Existing reinforcement shall be cleaned, straightened (if required) and incorporated into the new construction. Cost included with Concrete Removal.

Existing reinforcement bars which have lost 25% or more of their original diameter shall be supplemented by new epoxy coated bars of the same diameter. New bars shall be drilled and epoxy grouted in place adjacent to the original bars, as directed by the Engineer.

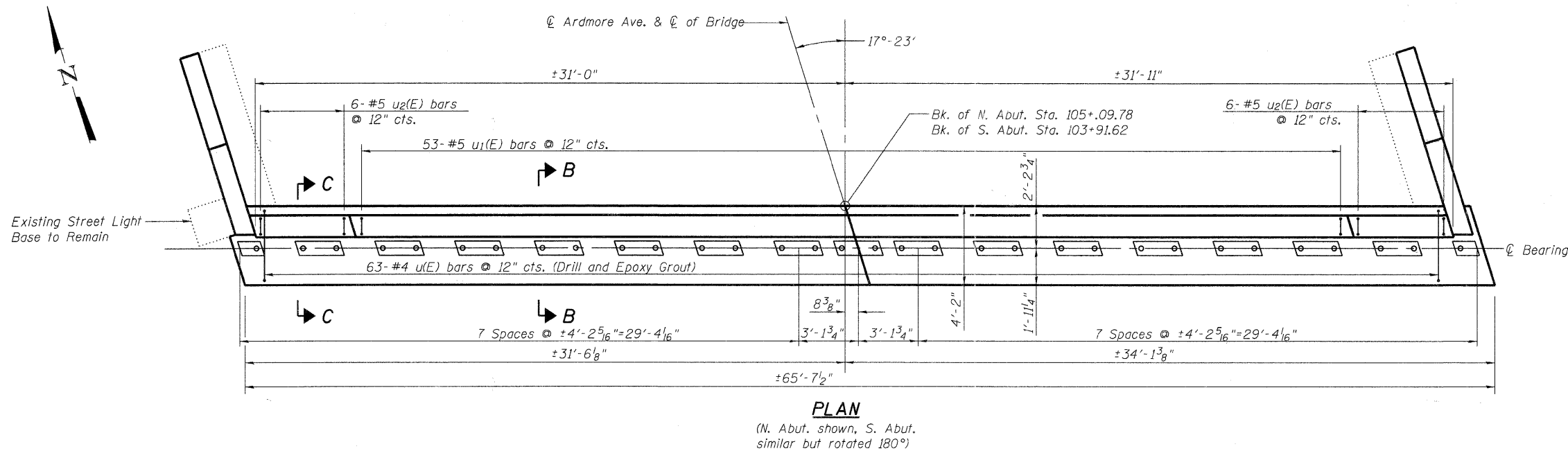
Drilling and epoxy grouting of reinforcement bars shall be in accordance with Article 584 of the Standard Specifications.

Removal of the existing joint system is included with concrete removal.

Hatched area to be poured after Concrete Wearing Surface false work has been removed. Quantity of concrete included with Concrete Superstructure.

Space reinforcement in cap to miss Dowel Rods.

See Sheet 21 of 29 for Sections A-A thru C-C and Wing Wall Details.

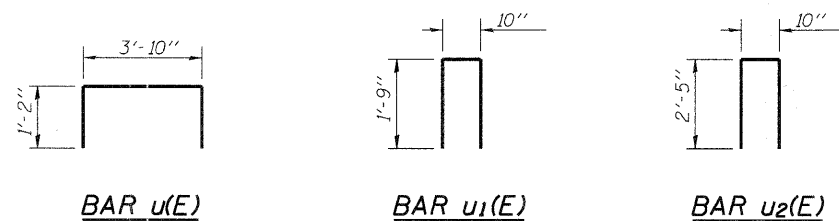


**PLAN**

(N. Abut. shown, S. Abut. similar but rotated 180°)

**BAR LAPS**

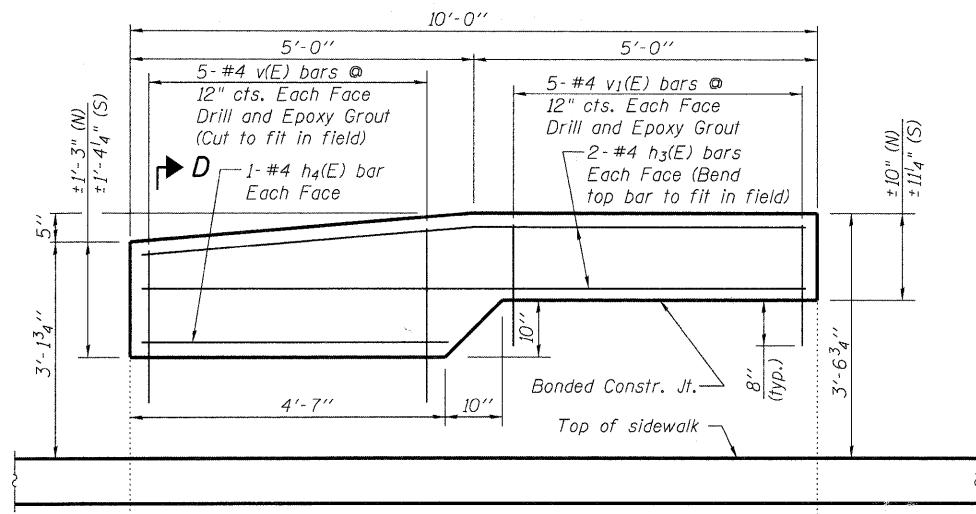
#4 bars = 1'-4"  
#5 bars = 1'-8"



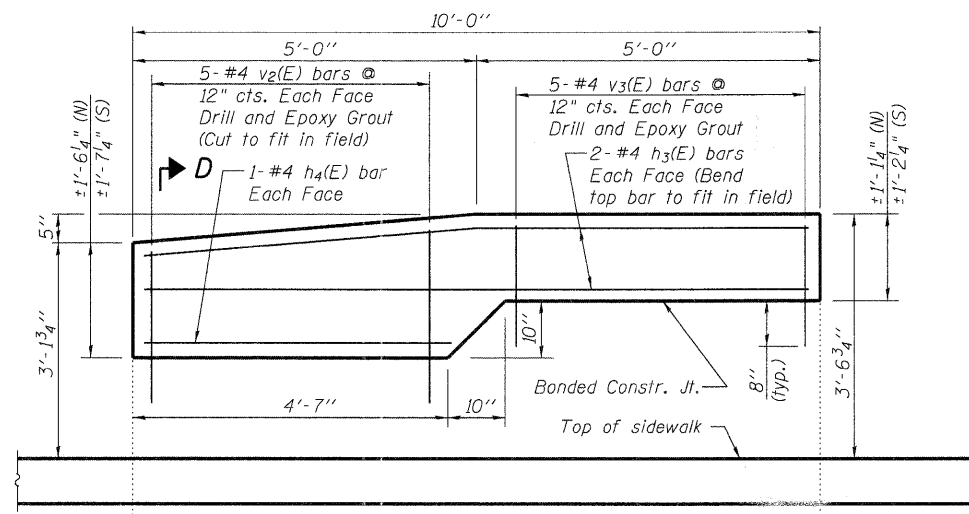
**ABUTMENTS  
STRUCTURE NO. 022-6930**

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

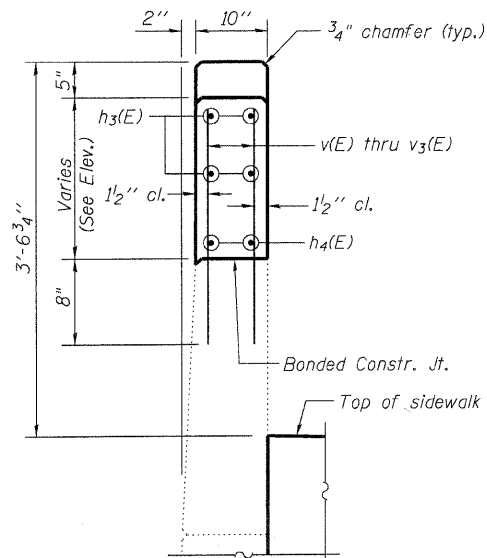
SHEET NO. 20 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	34
CONTRACT NO. 63601					
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					



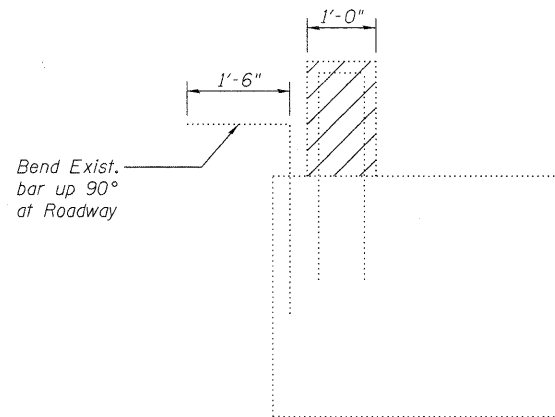
ELEVATION OF NW & SE WING WALL



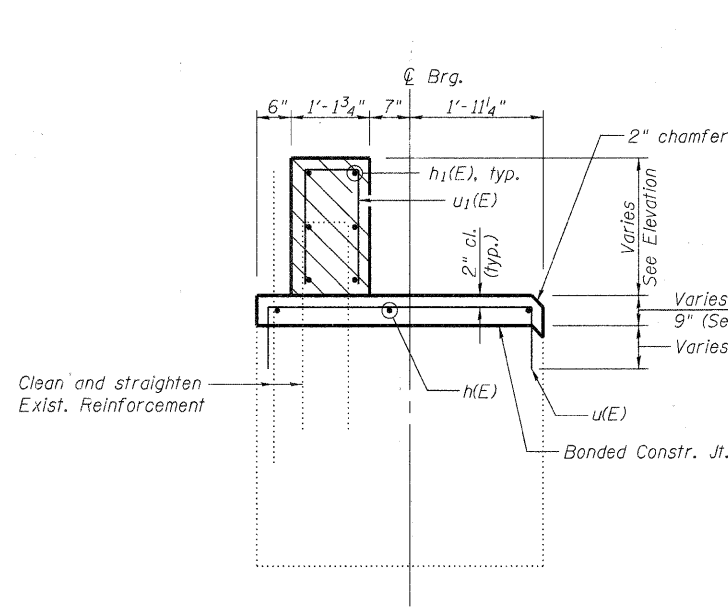
ELEVATION OF NE & SW WING WALL



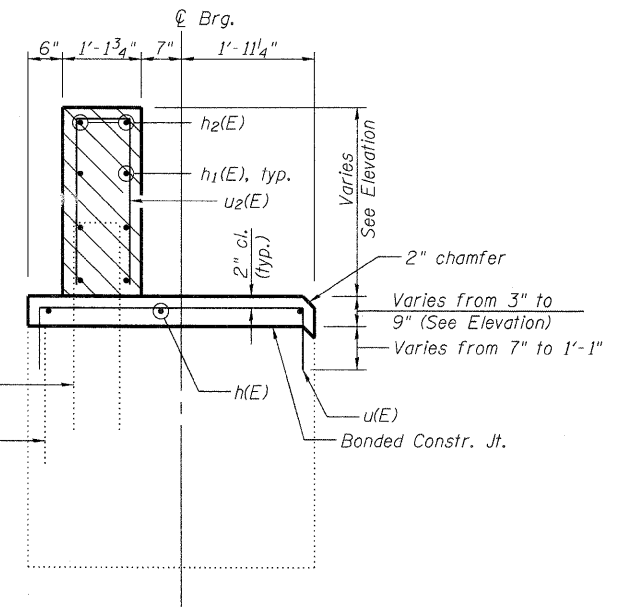
SECTION D-D



SECTION A-A



SECTION B-B



SECTION C-C

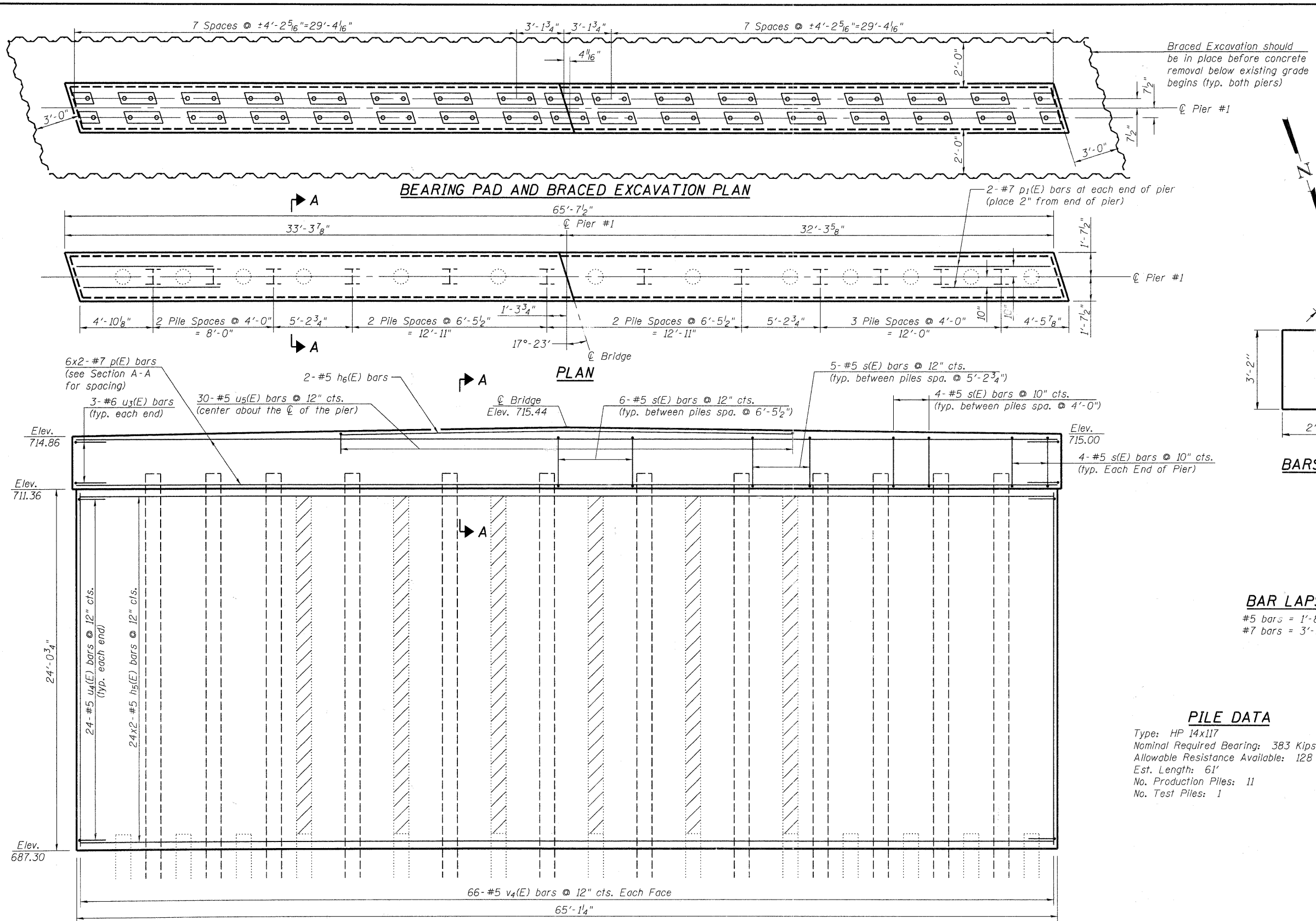
To be poured after beams and concrete wearing surface are in place

Concrete Removal

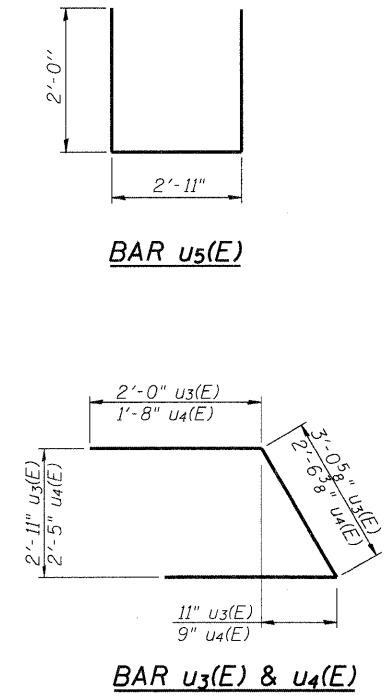
**ABUTMENT DETAILS**  
**STRUCTURE NO. 022-6930**

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

SHEET NO. 21	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	35
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



Braced Excavation should be in place before concrete removal below existing grade begins (typ. both piers)



**BAR LAPS**  
 #5 bars = 1'-8"  
 #7 bars = 3'-5"

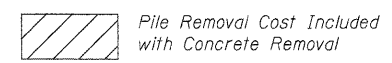
**PILE DATA**  
 Type: HP 14x117  
 Nominal Required Bearing: 383 Kips  
 Allowable Resistance Available: 128 Kips  
 Est. Length: 61'  
 No. Production Piles: 11  
 No. Test Piles: 1

**PIERS  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h5(E)	192	#5	33'-4"	—
h6(E)	4	#5	30'-0"	—
p(E)	24	#7	34'-4"	—
p1(E)	4	#7	10'-0"	—
u3(E)	12	#6	7'-1"	U
u4(E)	96	#5	5'-10"	U
u5(E)	60	#5	6'-11"	U
s(E)	117	#5	13'-1"	□
v4(E)	264	#5	26'-0"	—
Concrete Removal		Cu. Yd.	201.0	
Concrete Structures		Cu. Yd.	379.2	
Reinforcement Bars, Epoxy Coated		Pound	18,470	
Furnishing Steel Piles HP 14x117		Foot	1474	
Driving Piles Test Pile Steel HP 14x117		Each	2	
Braced Excavation		Cu. Yd.	111.4	

Bars indicated thus 6x2-#4 etc. indicates 6 lines of bars with 2 lengths per line.

**PIER #1  
STRUCTURE NO. 022-6930**



**NOTES**  
 Space reinforcement in cap to miss anchor bolts.  
 For details of piles, see sheet 24 of 29.  
 See Sheet 23 of 29 for Section A-A and End Elevation.  
 The existing pier will be removed and paid for as Concrete Removal.

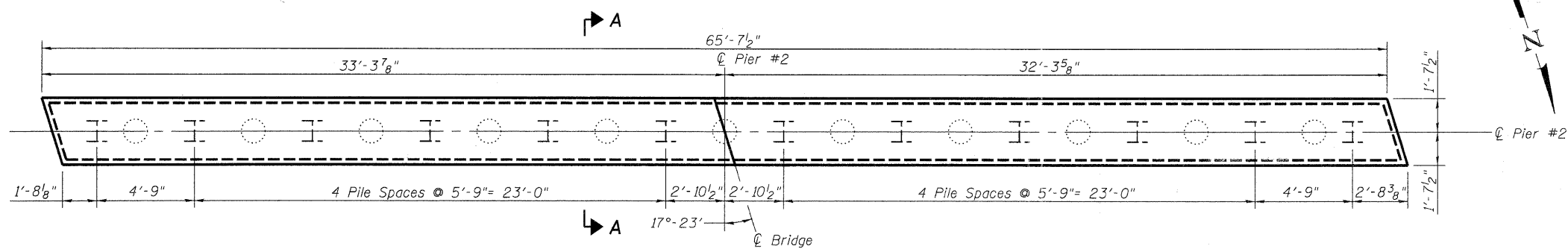
SHEET NO. 22	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	36
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

**V3**  
 V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

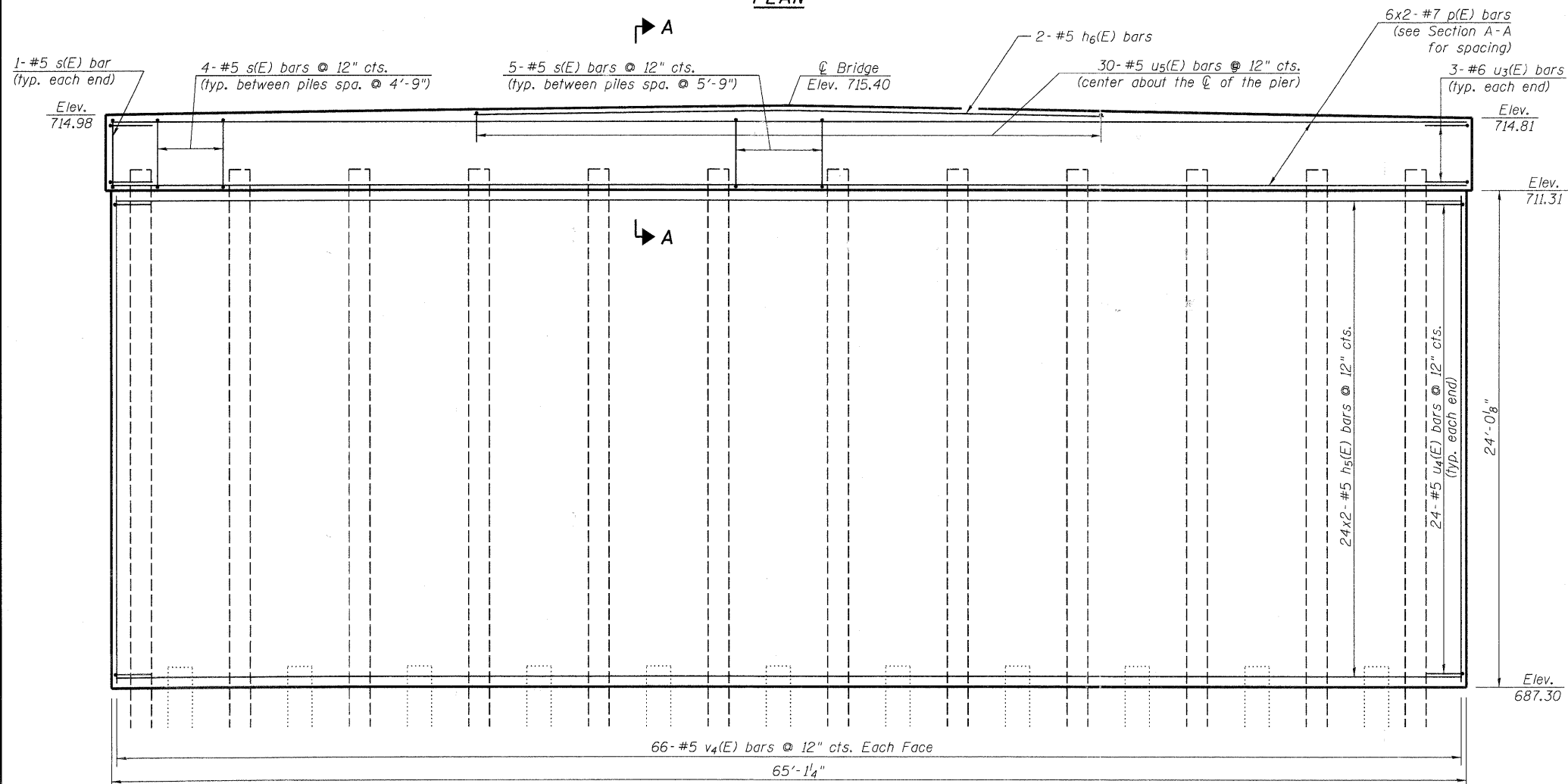
**ELEVATION**  
(Looking South)

**BEARING PAD AND BRACED EXCAVATION PLAN**

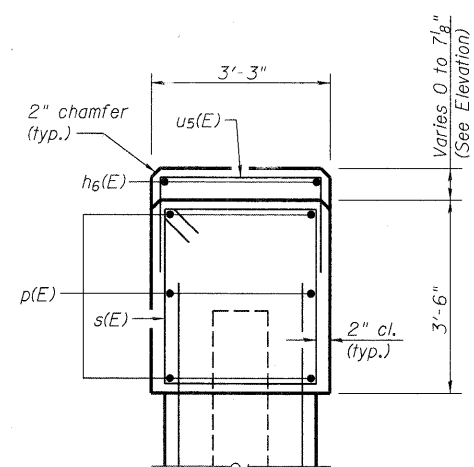
**PLAN**



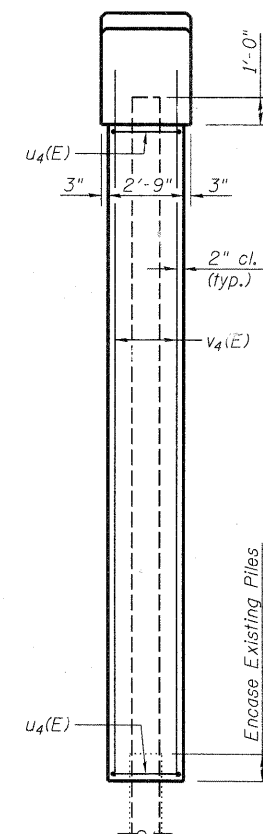
**PLAN**



**ELEVATION**  
(Looking South)



**SECTION A-A**



**END VIEW**

**PILE DATA**

Type: HP 14x117  
 Nominal Required Bearing: 393 Kips  
 Allowable Resistance Available: 131 Kips  
 Est. Length: 73'  
 No. Production Piles: 11  
 No. Test Piles: 1

**PIER #2**  
**STRUCTURE NO. 022-6930**

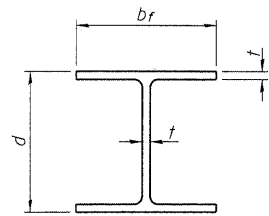
**NOTES**

Space reinforcement in cap to miss anchor bolts.  
 For details of piles, see sheet 24 of 29.  
 See Sheet 22 of 29 for bar details, Bearing Pad and Braced Excavation Plan and Bill of Material.  
 The existing pier will be removed and paid for as Concrete Removal.



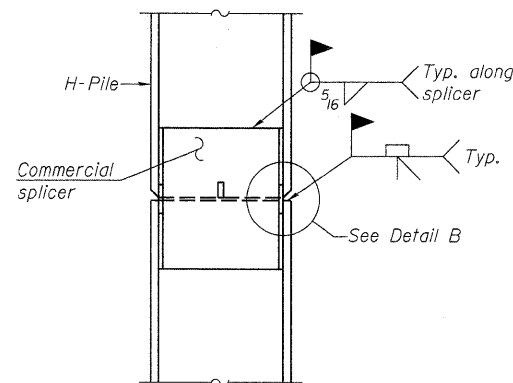
V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

SHEET NO. 23	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	37
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

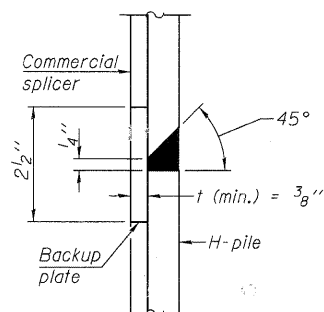


**STEEL PILE TABLE**

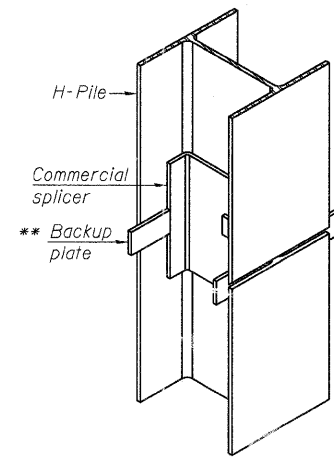
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

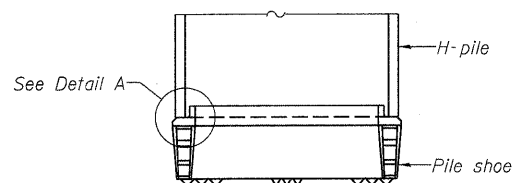


**DETAIL "B"**

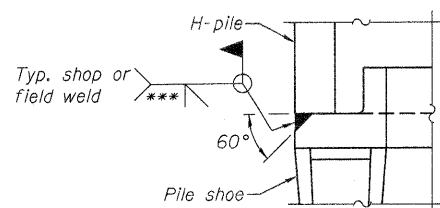


**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**

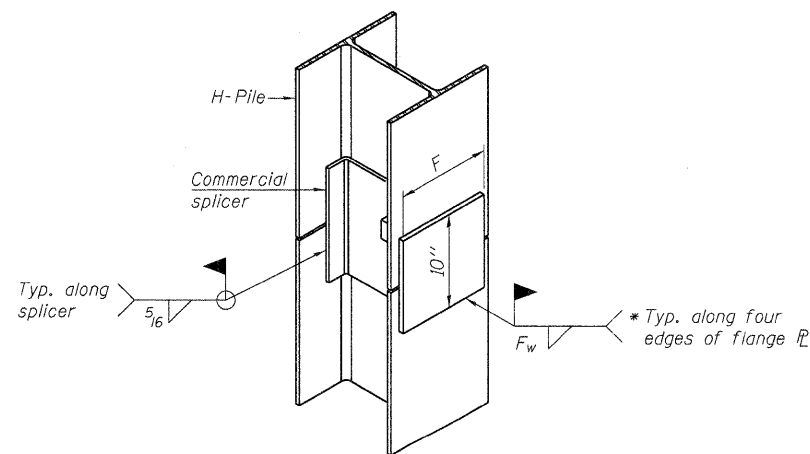


**ELEVATION**



**DETAIL A**

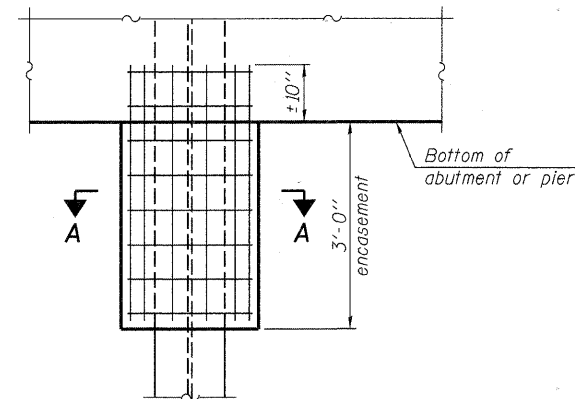
**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

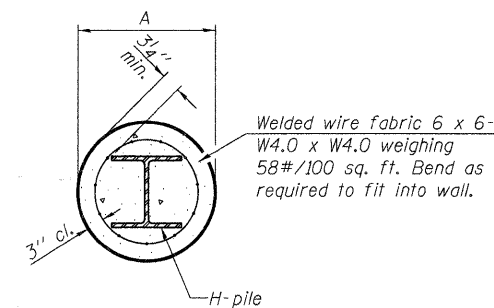
**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).



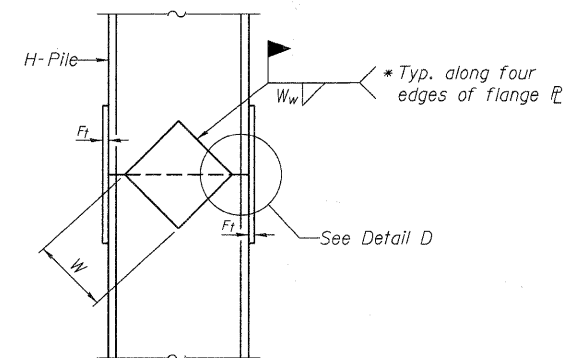
**ELEVATION**

**PILE ENCASEMENT**



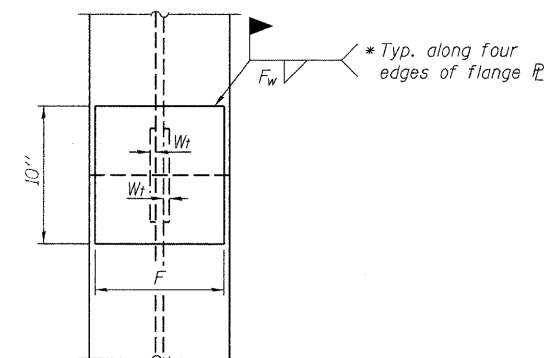
Note:  
Forms for encasement may be omitted when soil conditions permit.

**SECTION A-A**

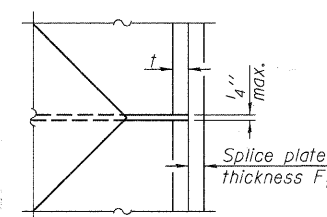


**ELEVATION**

**WELDED PLATE FIELD SPLICE**



**END VIEW**



**DETAIL D**

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5 1/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5 1/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5 1/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

**WELDED PLATE FIELD SPLICE**

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

V3 Companies of Illinois Ltd.  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
630.724.9202 fax  
www.v3co.com

**HP PILE DETAILS  
STRUCTURE NO. 022-6930**

SHEET NO. 24 29 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	38
CONTRACT NO. 63601					
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



CLAUDE H. HURLEY COMPANY  
**BORING LOG**  
 PROJECT NO. 1-644 BORING NO. SB-6  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 6+61 29'R ARDMORE AVENUE VILLA PARK, ILLINOIS  
 STRUCTURE STATION OFFSET STREET CITY STATE  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-6-76 COMPLETED 10-6-76 SURFACE ELEVATION 690.0  
 DRILLED BY R. SMITH LOGGED BY K. SHANNON

Elev	CLASSIFICATION	Depth	N lpt	Cu lbf	W %	Td pcf	GROUNDWATER DATA			DRILLING METHOD
							DATE	DEPTH	HOUR	
	BR CLAY, A-7-6 (FILL)		AU	-	18	-	DD 10-6 6.5 -	10-6 6.5 0	10-7 7.0 18	CMR 55
		18	-	14	-	-				
696.0	GR CLAY, A-6 (GLACIAL TILL)	5	13	2.9	18	-				
683.5	GR SAND, A-2-4 (GLACIAL OUTWASH)		16	-	20	-				
		10	13	-	25	-				
673.0	CLAY SEAM									
		10	10	1.3	14	-				
		15	18	2.3	17	-				
	GR CLAY, A-6 (GLACIAL TILL)		15	-	23	-				
		20	16	1.2	19	-				
		26	5.2	17	-	-				

CLAUDE H. HURLEY COMPANY  
**BORING LOG**  
 PROJECT NO. 1-644 BORING NO. SB-6 (CONT)  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 6+61 29'R ARDMORE AVENUE VILLA PARK, ILLINOIS  
 STRUCTURE STATION OFFSET STREET CITY STATE  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-6-76 COMPLETED 10-6-76 SURFACE ELEVATION 690.0  
 DRILLED BY R. SMITH LOGGED BY K. SHANNON

Elev	CLASSIFICATION	Depth	N lpt	Cu lbf	W %	Td pcf	GROUNDWATER DATA			DRILLING METHOD
							DATE	DEPTH	HOUR	
							DD 10-6 6.5 -	10-6 6.5 0	10-7 7.0 18	CMR 55
		45	29	-	12	-				
	GR SANDY LOAM, A-4 (GLACIAL TILL)									
		50	20	2.0	13	-				
699.0	END OF BORING	51.0								
		55								



V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

**SOIL BORING LOG SB-6**  
**STRUCTURE NO. 022-6930**

SHEET NO. 26	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
29 SHEETS	2651	07-00083-00-BR	DUPAGE	50	40
			CONTRACT NO. 63601		
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					



CLAUDE H. HURLEY COMPANY 479 SPRING ROAD ELMHURST, ILLINOIS 60120  
**BORING LOG**  
 PROJECT NO. 1-644 BORING NO. SB-5  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 6+48 47°L ARDMORE AVENUE VILLA PARK, ILLINOIS  
 STRUCTURE STATION OFFSET STREET CITY STATE  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-12-76 COMPLETED 10-12-76 SURFACE ELEVATION 695.4  
 DRILLED BY D. JEDLIKA LOGGED BY K. SWANSON

Elev	CLASSIFICATION	Depth	N bpf	Cu pcf	W %	Td pcf	GROUNDWATER DATA			DRILLING METHOD	
							DATE	DEPTH	HOUR	RIG TYPE	TYPE
							DD	10-12	13.5	-	AUGER TYPE-DEPTH 6" HSA
							WC	10-12	14.5	0	CASING TYPE-DEPTH
								10-13	12.5	1d	SAMPLER TYPE-SS
		17	-	16	-						
	BR CLAY, A-7-6 (FILL)	5	12	-	21	-					
688.4											
	BLK & BR CLAY, A-7-6 (FILL)		13	-	19	-					
685.9											
	BR CLAY, A-6 (GLACIAL TILL)	10	13	5.0	20	-					
681.9											
	GR SAND, A-2-4 (GLACIAL OUTWASH)	15	22	-	19	-					
677.9											
	GR CLAY, A-6 (GLACIAL TILL)	20	15	4.1	15	-					
		15	2.8	16	-						

SOIL BORING LOG SB-5  
 STRUCTURE NO. 022-6930

CLAUDE H. HURLEY COMPANY 479 SPRING ROAD ELMHURST, ILLINOIS 60120  
**BORING LOG**  
 PROJECT NO. 1-644 BORING NO. SB-7  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 6+82 35°L ARDMORE AVENUE VILLA PARK, ILLINOIS  
 STRUCTURE STATION OFFSET STREET CITY STATE  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-6-76 COMPLETED 10-6-76 SURFACE ELEVATION 691.6  
 DRILLED BY D. JEDLIKA LOGGED BY K. SWANSON

Elev	CLASSIFICATION	Depth	N bpf	Cu pcf	W %	Td pcf	GROUNDWATER DATA			DRILLING METHOD	
							DATE	DEPTH	HOUR	RIG TYPE	TYPE
							DD	10-6	9.5	-	AUGER TYPE-DEPTH 6" HSA
							WC	10-6	9.5	0	CASING TYPE-DEPTH
								10-7	8.7	1d	SAMPLER TYPE-AU-SS
		16	3.0	13	-						
	BR CLAY, A-7-6 (FILL)										
687.1											
	GR CLAY, A-6 (GLACIAL TILL)	5	17	3.0	15	-					
	GR CLAY, A-6 (GLACIAL TILL)										
		18	3.2	20	-						
682.1											
	GR SAND, A-2-4 (GLACIAL OUTWASH)	10	23	-	19	-					
679.6											
		13	4.2	13	-						
		13	4.3	10	-						
	GR CLAY, A-6 (GLACIAL TILL)										
		17	2.8	16	-						
		20	16	2.5	17	-					
		22	3.1	18	-						

SOIL BORING LOG SB-7  
 STRUCTURE NO. 022-6930



V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 830.724.9200 phone  
 830.724.9202 fax  
 www.v3co.com

SHEET NO. 27	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	41
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



CLAUDE H. HURLEY COMPANY 473 SPRING ROAD ELMHURST, ILLINOIS 60120  
**BORING LOG** BORING NO. SB-9  
 PROJECT NO. 1-644  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 7+52 37°L ARDMORE AVENUE VILLA PARK, ILLINOIS  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-13-76 COMPLETED 10-13-76 SURFACE ELEVATION 699.8  
 DRILLED BY D. JEDLIČKA LOGGED BY K. SWANSON

Elev	CLASSIFICATION	Depth	N bpf	Q <sub>u</sub> tsf	f %	T <sub>d</sub> pcf	GROUNDWATER DATA			DRILLING METHOD
							DATE	DEPTH	HOUR	
	BLK CLAY, A-7-6 (FILL)		AU	-	22	-				RIG TYPE CME 55 AUGER TYPE DEPTH 6" HSA CASING TYPE DEPTH - SAMPLER TYPE AU-33
696.8		10	-	25	-					
		5	20	5.0	10	-	25	16	2.9	15
										SILT CLAY
		13	5.0	18	-		12	2.0	19	GR CLAY, A-6 (GLACIAL TILL)
	BR CLAY, A-6 (GLACIAL TILL)	10	16	6.8	14	-	30	16	1.5	17
		19	4.5	22	-		23	3.8	19	C GRAVEL
685.8										
	GR CLAY, A-6 (GLACIAL TILL)		10	4.6	18	-	35	23	3.9	15
683.3										
	FR SAND, A-2-4 (GLACIAL OUTWASH)		18	-	22	-		15	1.6	12
682.7										
	GR SAND, A-2-4 (GLACIAL OUTWASH)	20	14	-	19	-	40	23	4.5	15
			14	3.0	15	-				
679.3										
	GR CLAY, A-6 (GLACIAL TILL)		14	3.1	15	-				

CLAUDE H. HURLEY COMPANY 473 SPRING ROAD ELMHURST, ILLINOIS 60120  
**BORING LOG** BORING NO. SB-9 (CONT)  
 PROJECT NO. 1-644  
 PROJECT ARDMORE AVENUE OVERHEAD HIGHWAY BRIDGE  
 LOCATION BRIDGE 7+52 37°L ARDMORE AVENUE VILLA PARK, ILLINOIS  
 DRILLING CONTRACTOR TEST-COR, INC.  
 DATE OF DRILLING: STARTED 10-13-76 COMPLETED 10-13-76 SURFACE ELEVATION 699.8  
 DRILLED BY D. JEDLIČKA LOGGED BY K. SWANSON

Elev	CLASSIFICATION	Depth	N bpf	Q <sub>u</sub> tsf	f %	T <sub>d</sub> pcf	GROUNDWATER DATA			DRILLING METHOD
							DATE	DEPTH	HOUR	
	GR LOAM, A-4 (GLACIAL TILL)									RIG TYPE CME 55 AUGER TYPE DEPTH 6" HSA CASING TYPE DEPTH - SAMPLER TYPE AU-33
656.3		45	30	-	14	-				
	GR SAND AND GRAVEL, A-1-b (GLACIAL OUTWASH)									
651.3										
	GR LOAM, A-4 (GLACIAL TILL)	50	40	4.7	11	-				
647.8										
	GR SANDY LOAM, A-4 (GLACIAL TILL)									
		55	18	-	22	-				
643.8	END OF BORING	56.0								

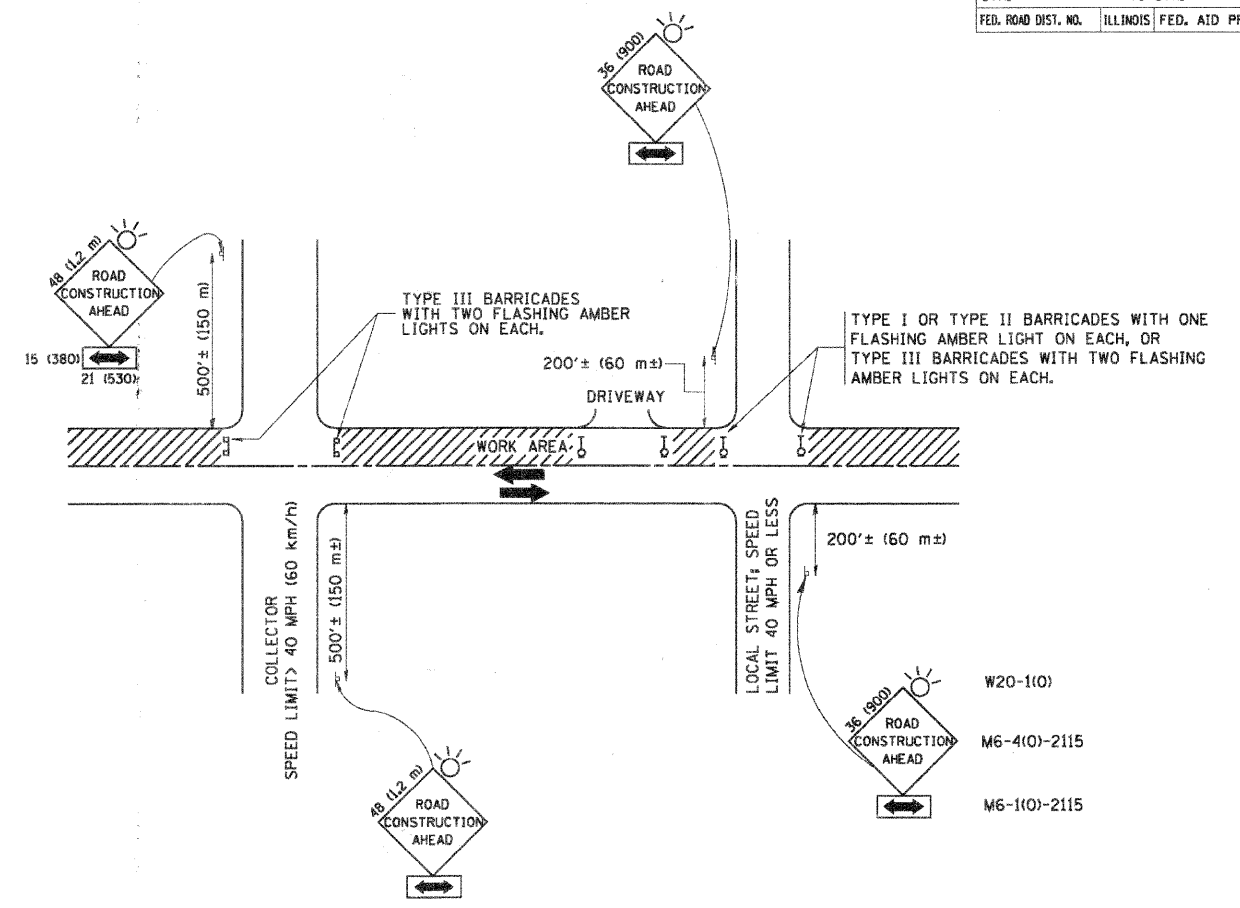
 V3 Companies of Illinois Ltd.  
 7325 Janes Avenue  
 Woodridge, IL 60517  
 630.724.9200 phone  
 630.724.9202 fax  
 www.v3co.com

SOIL BORING LOG SB-9  
 STRUCTURE NO. 022-6930

SHEET NO. 29	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2651	07-00083-00-BR	DUPAGE	50	43
29 SHEETS	CONTRACT NO. 63601				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



F.A. LI. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2651	07-00083-00-BR	DUPAGE	50	45
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- 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:
    - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - 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.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - 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.
    - 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.
  - 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).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

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

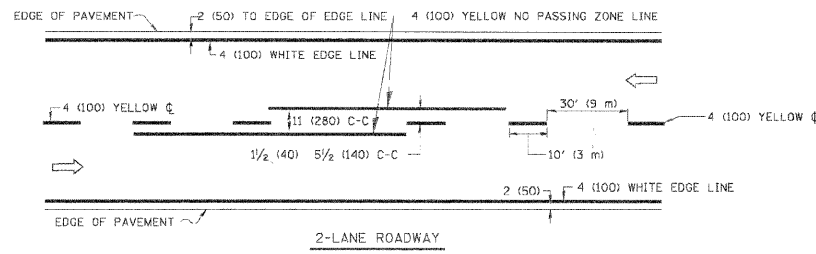
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL AND PROTECTION  
 FOR  
 SIDE ROADS, INTERSECTIONS, AND  
 DRIVEWAYS

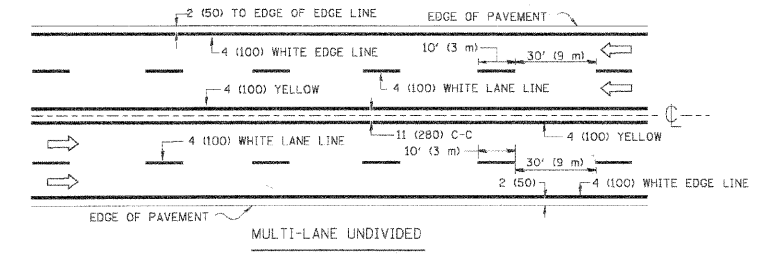
SCALE: NONE  
 DRAWN BY  
 CHECKED BY  
 TC-10

PLOT DATE = 3/16/2007  
 FILE NAME = K:\data\atc\atc10.dgn  
 PLOT SCALE = 0.84889 / IN.  
 USER NAME = bauerd

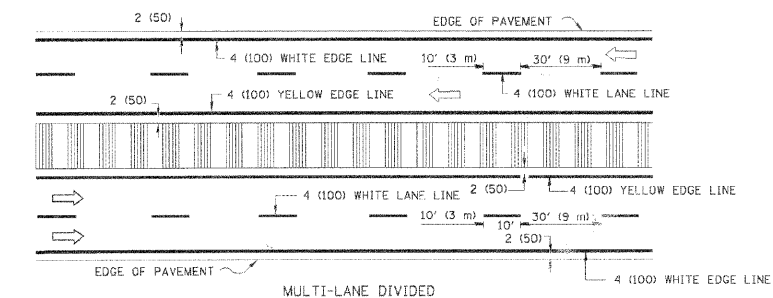
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2651	07-00083-00-BR	DUPAGE	50	46
ST.A.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



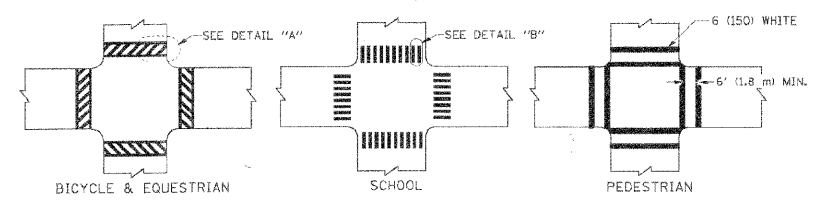
MULTI-LANE UNDIVIDED



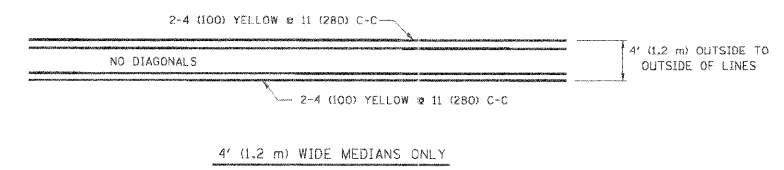
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

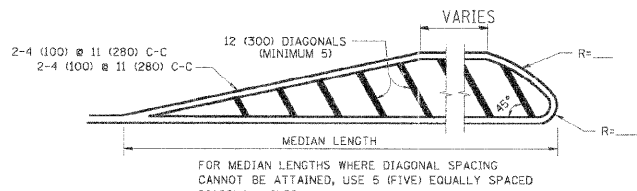
TYPICAL LANE AND EDGE LINE MARKING



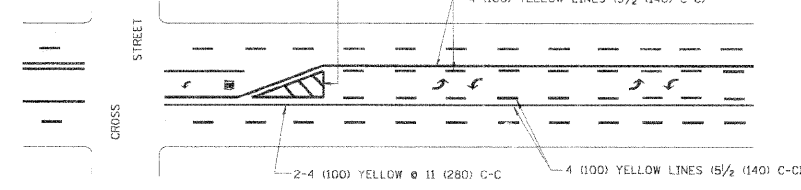
TYPICAL CROSSWALK MARKING



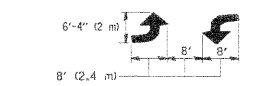
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE

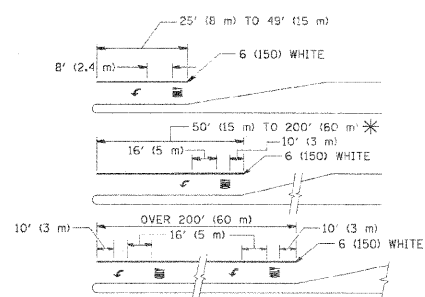


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

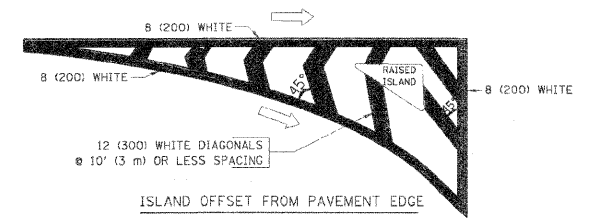
TYPICAL PAINTED MEDIAN MARKING



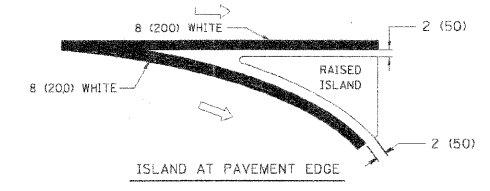
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.6 SQ. FT. (1.9 m<sup>2</sup>)  
 \* 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".



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8" (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO-WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 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.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 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 <sup>2</sup> ) EACH "X": 54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
C. JUCIUS	09-09-09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS

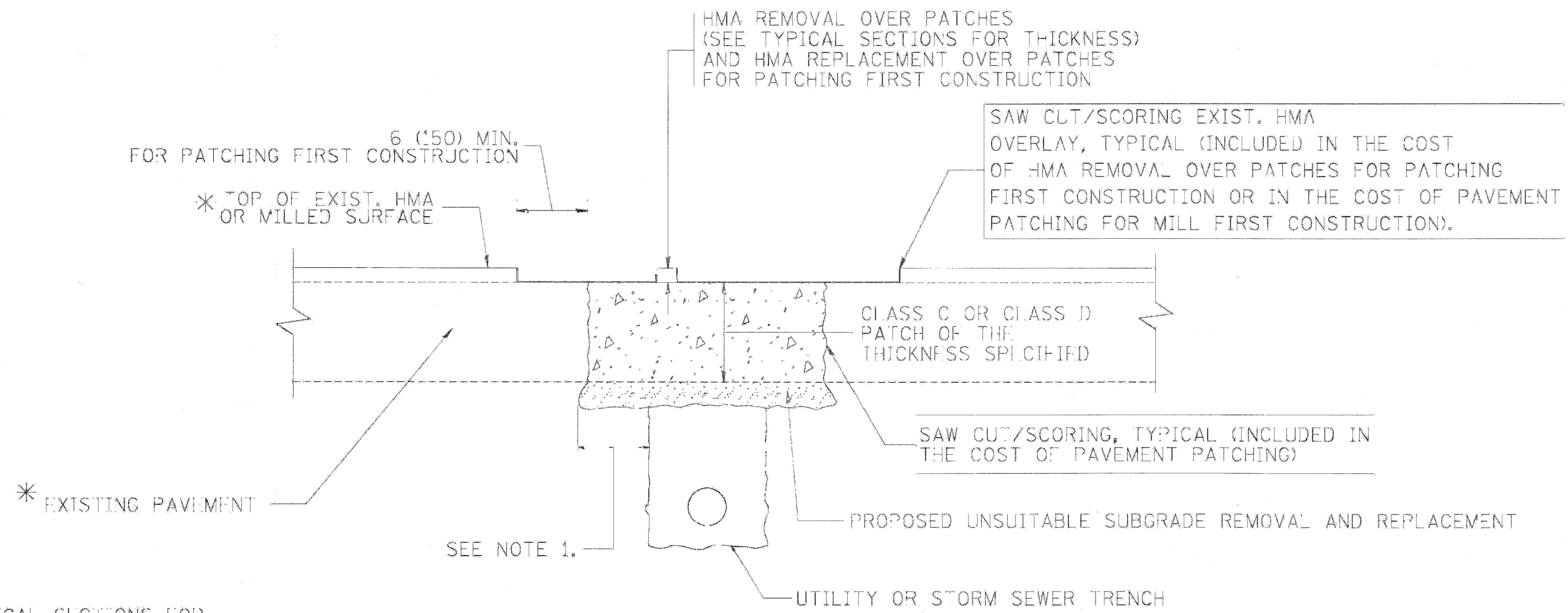
SCALE: NONE

DRAWN BY CADD  
CHECKED BY

TC-13

PLOT DATE = 9/9/2009  
 FILE NAME = c:\pawork\pawork\1013354\1013354.dgn  
 PLOT SCALE = 1/8" = 1'-0"  
 USER NAME = drvakosgn

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2651	07-00083-00-BR	DUPAGE	50	47
		ILLINOIS	CONTRACT NO. 63601	



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

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

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

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

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =  
c:\pwa\pccs\distat082x34\bd22.dgn

USER NAME = beaudj	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
	DRAWN -	REVISED - R. BORO 01-01-07
PLDT SCALE = 1/8" = 1' IN.	CHECKED -	REVISED - R. BORO 09-04-07
PLDT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

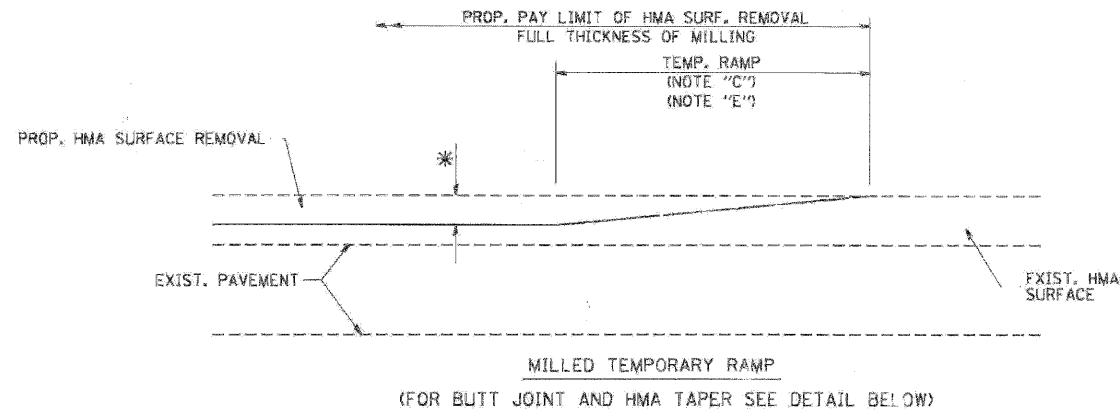
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT

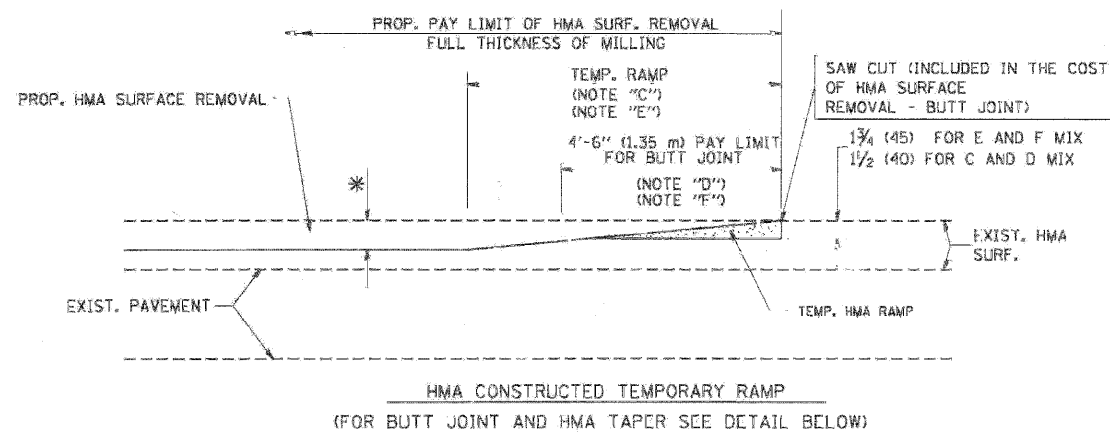
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2651	07-0083-00-BR	DUPAGE	50	47
		ILLINOIS	CONTRACT NO. 63601	

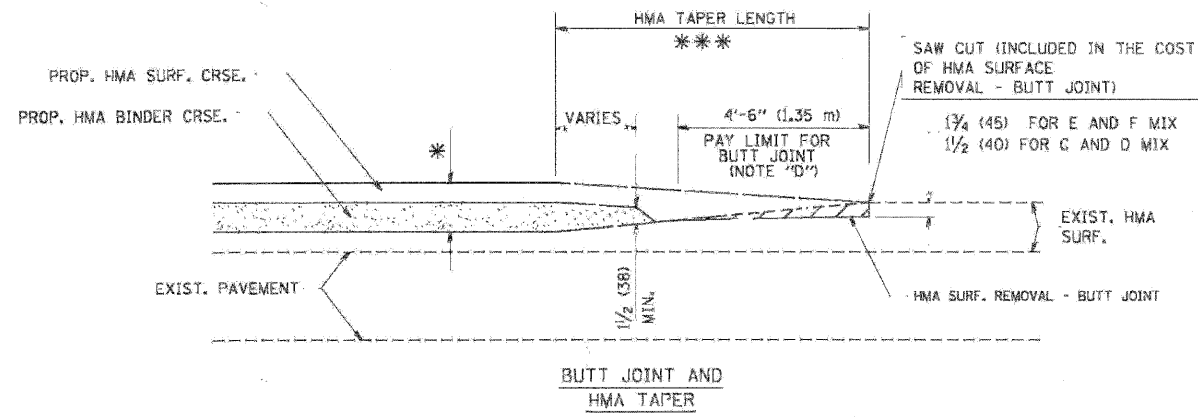
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



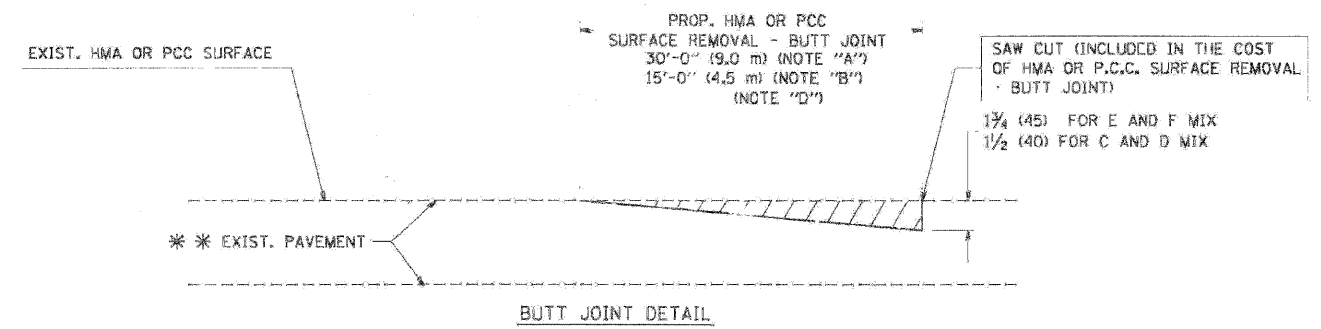
OPTION 1



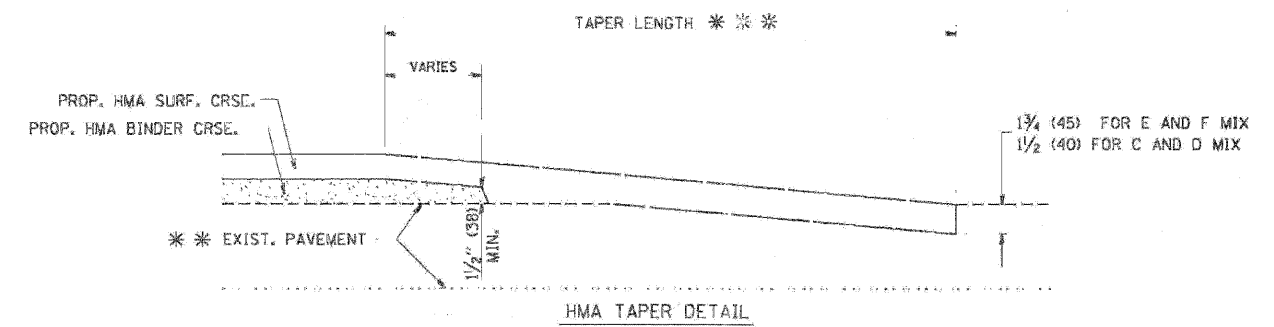
OPTION 2  
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

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

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

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".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE  
HORIZ. NONE

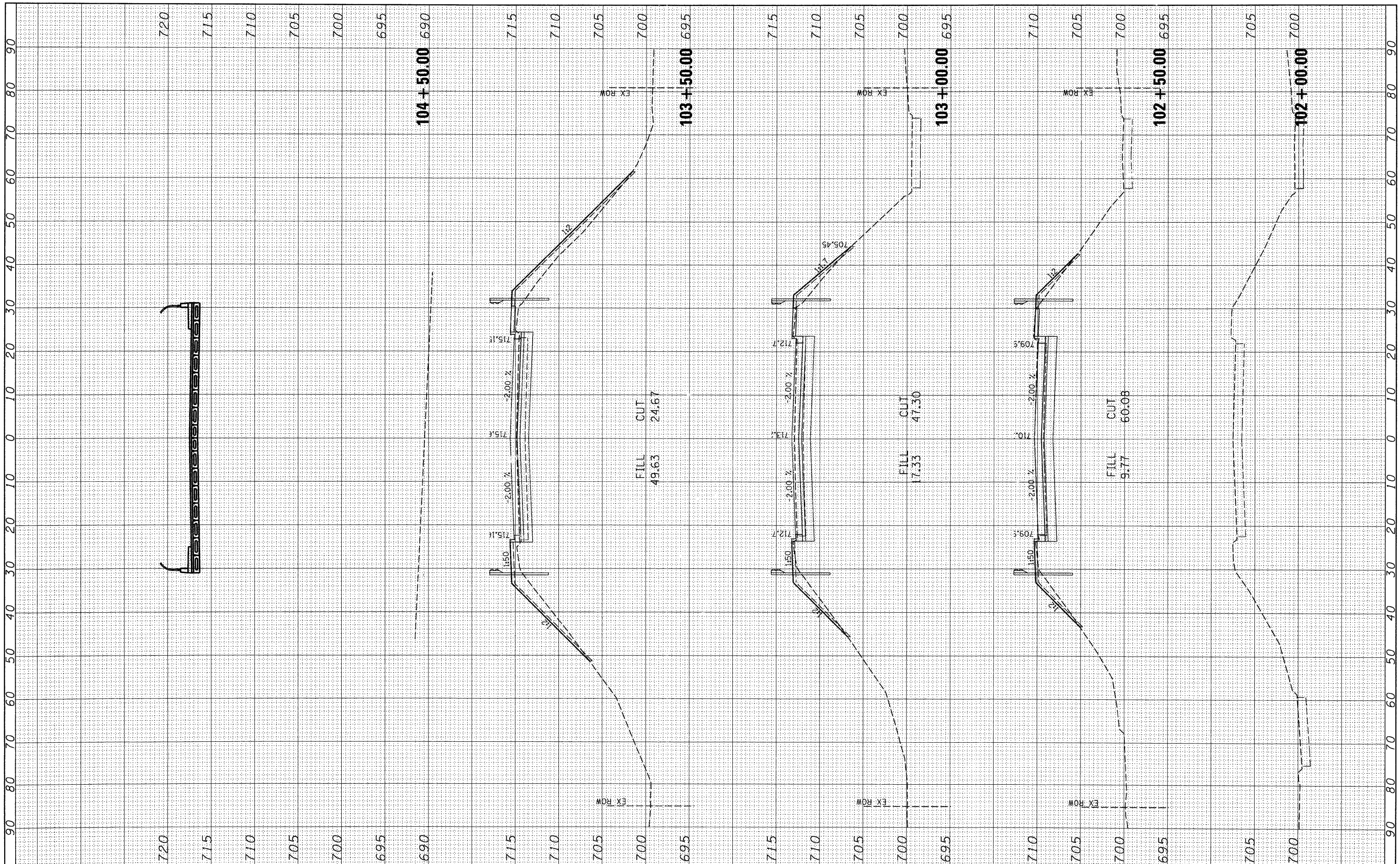
DRAWN BY  
CHECKED BY

PLOT DATE: 2/24/2007  
 FILE NAME: K:\GIS\1010102.dgn  
 PLOT SCALE: 0.100000  
 USER NAME: bboris



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

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



FILE NAME =  
#FILE#

USER NAME = #USER\*  
DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

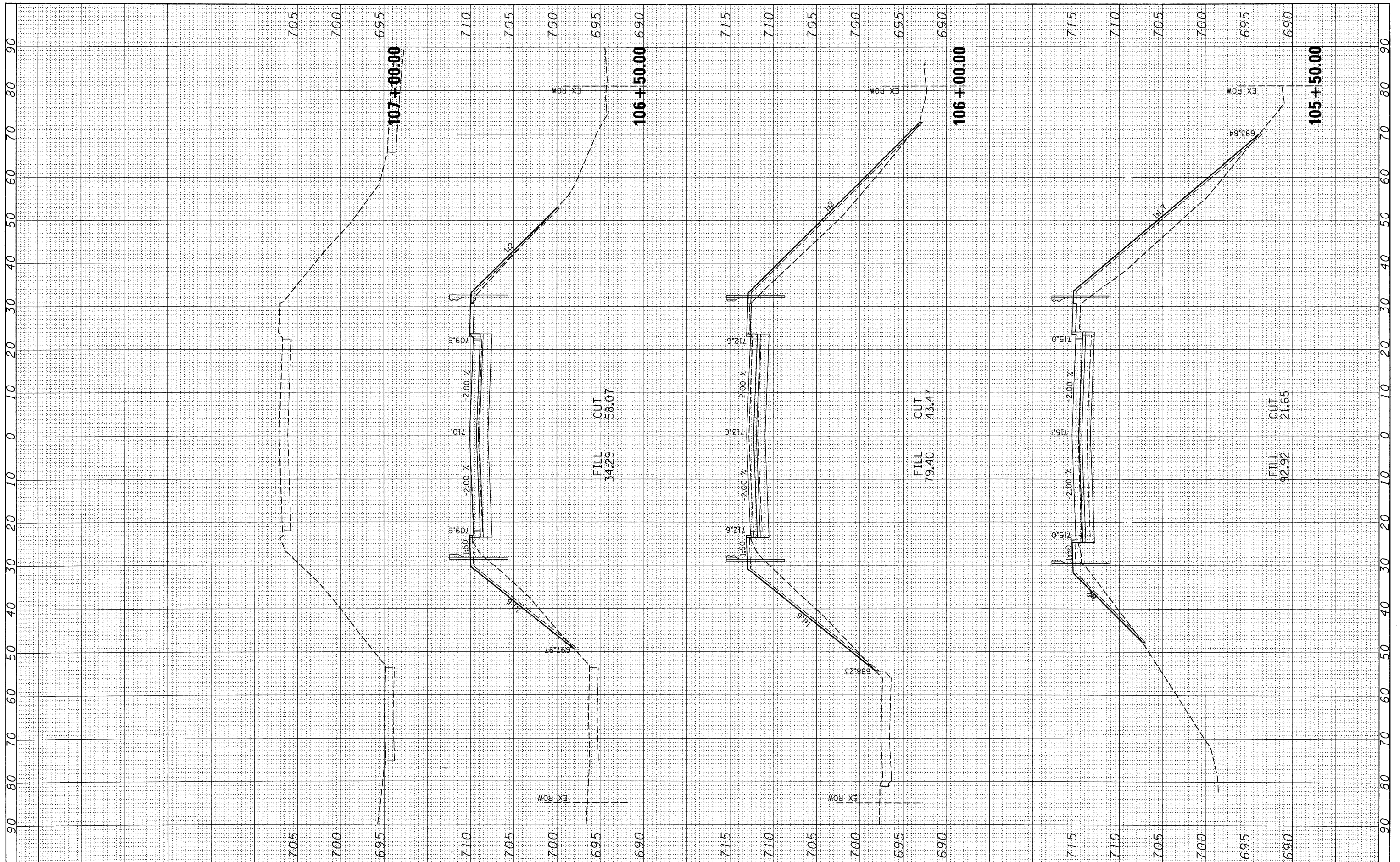
**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
CROSS SECTIONS**  
SCALE: SHEET NO. OF SHEETS STA. 102+00.00 TO STA. 104+50.00

F.A.U. RTE.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
2651	07-00083-00-BR	DUPAGE	49	50
CONTRACT NO. 63601				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 TEMPLATE AREAS CHECKED: \_\_\_\_\_

ORIGINAL SURVEY  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE BOOK NO.: \_\_\_\_\_  
 TEMPLATE AREAS CHECKED: \_\_\_\_\_



FILE NAME =  
 #FILEL\*

USER NAME = \*USER\*  
 DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**VILLAGE OF VILLA PARK**

**ARDMORE AVENUE OVER CC&P RAILROAD  
 CROSS SECTIONS**  
 SCALE: SHEET NO. OF SHEETS STA. 105+50.00 TO STA. 107+00.00

F.A.U. RTE. 2651	SECTION 07-00083-00-BR	COUNTY DUPAGE	SHEET NO. 50	TOTAL SHEETS 50
CONTRACT NO. 63601				ILLINOIS FED. AID PROJECT