

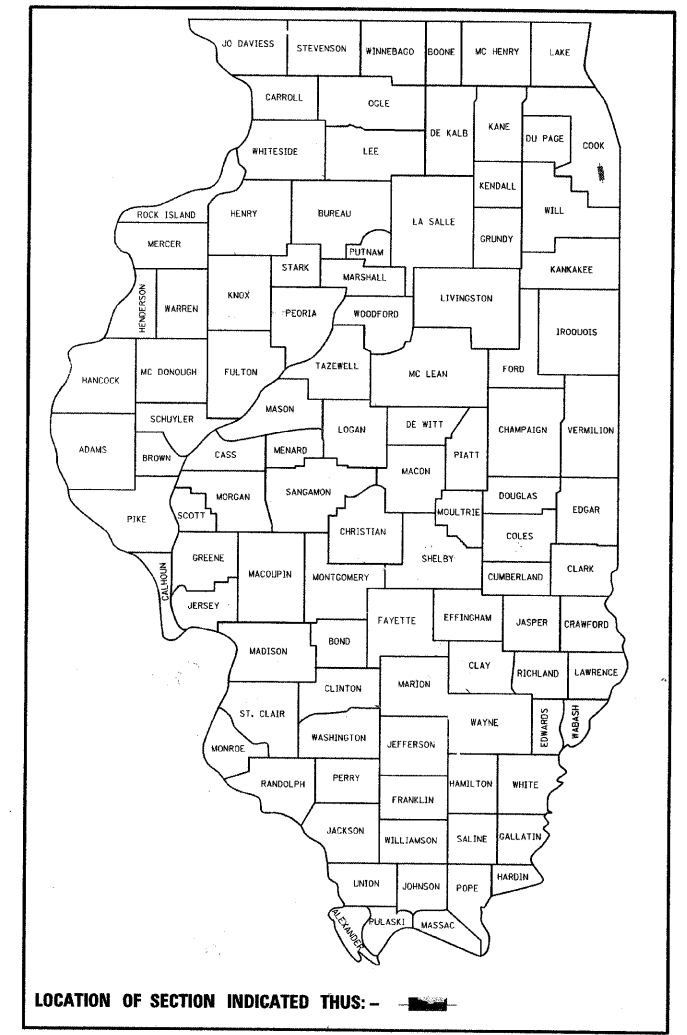
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	1

CONTRACT NO. 62539
D-91-358-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.U. 2843 - DIXIE HIGHWAY
OVER BUTTERFIELD CREEK
BRIDGE REPLACEMENT
SECTION 3249B-R
COOK COUNTY
C-91-358-02
PROJECT NO. BRM-2843(007)



LOCATION OF SECTION INDICATED THUS: -

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Ave, Suite 1500 Chicago IL 60604-2482
T: 312 870 6600 F: 312 663 1473

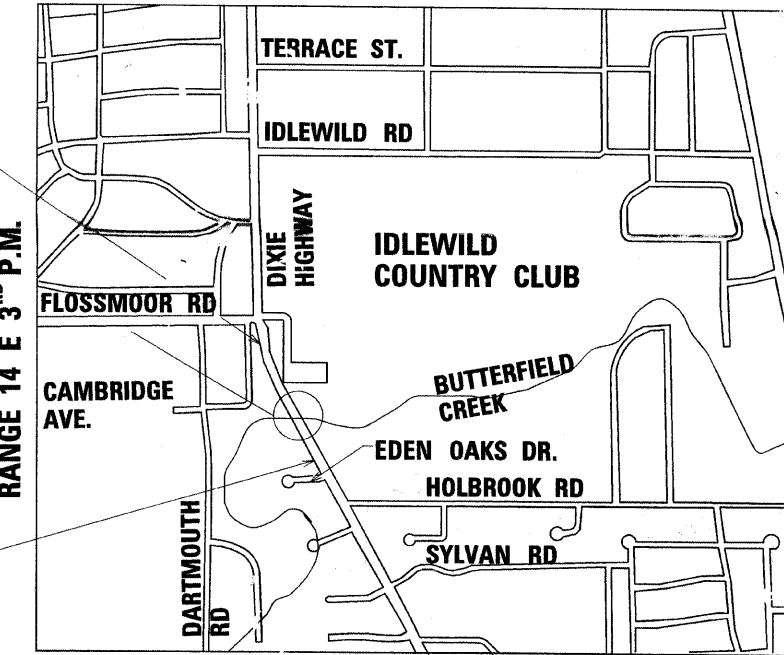
FOR NUMBER OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN:
VILLAGE OF FLOSSMOOR

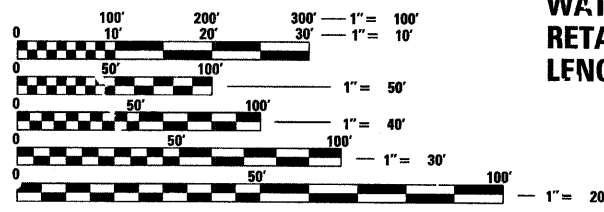
DESIGN DESIGNATION:
2160(15) URBAN ARTERIAL 1.59 (FD-20)
TRAFFIC DATA
DIXIE HIGHWAY
DESIGN SPEED = 45 MPH
POSTED SPEED = 40 MPH
DHV 14,000 (2000)
ADT 21,572 (2020)

END PROJECT STA. 84 + 25
DIXIE HIGHWAY OVER BUTTERFIELD CREEK
STA. 78 + 55
STRUCTURE #016-6,75 (EXISTING)
STRUCTURE #016-7946 (PROPOSED)
LENGTH = 165'-8"
BRIDGE REPLACEMENT
NEW APPROACH ROADWAY
WATERMAIN AND SANITARY SEWER WORK
RETAINING WALL NO. 06-W962 (PROPOSED)
LENGTH = 97'-0"

BEGIN PROJECT STA. 73 + 50



BLOOM TOWNSHIP T. 35 N
LOCATION MAP
SCALE: 1" = 750'
GROSS & NET LENGTH OF PROJECT = 1075 FEET (0.20 MILE)



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

CONTRACT NO. 62539

STATE OF ILLINOIS
MOHSEN FARAHANY
62-43875
LICENSED PROFESSIONAL ENGINEER
State of Illinois
Lic. No. 62-43875
Expires: 11-30-2009
Pages: 1-13, 21, 49, 60-64

STATE OF ILLINOIS
MOHSEN FARAHANY
81-5131
LICENSED PROFESSIONAL ENGINEER
State of Illinois
Lic. No. 81-5131
Expires: 11-30-2010
Pages: 27-48

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED June 24 20 09
Devin O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
August 14, 20 09
Charles G. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT
August 14, 20 09
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CONSULTANT SERVICES PROJECT MANAGER - BRIAN KUTTAB (847)705-4431

INDEX OF SHEETS

SHEET NO.	DESCRIPTION		HIGHWAY STANDARDS
1.	COVER SHEET	000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2.	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS	001001-02	AREAS OF REINFORCEMENT REBARS
3.	SUMMARY OF QUANTITIES (1 OF 2)	001006	DECIMAL OF AN INCH AND OF A FOOT
4.	SUMMARY OF QUANTITIES (2 OF 2)	280001-04	TEMPORARY EROSION CONTROL SYSTEMS
5.	TYPICAL SECTIONS (ROADWAY)	353001-04	PCC BASE COURSE WITH HMA CONCRETE UNDER AND SURFACE COURSES
6.	SCHEDULE OF QUANTITIES EARTHWORK	420001-07	PAVEMENT JOINTS
7.	ALIGNMENT, TIES AND BENCHMARKS	442201-03	CLASS C AND D PATCHES
8.	PLAN AND PROFILE	482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
9.	MAINTENANCE OF TRAFFIC SECTIONS	515001-03	NAME PLATE FOR BRIDGES
10.	MAINTENANCE OF TRAFFIC STAGE I	542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
11.	MAINTENANCE OF TRAFFIC STAGE II	606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
12.	EROSION & SEDIMENT CONTROL	609001-04	BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN
13.	DRAINAGE AND UTILITIES	609006-04	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
14.-16.	SANITARY SEWER AND WATERMAIN RELOCATION PLANS AND DETAIL	630001-08	STEEL PLATE BEAM GUARDRAIL
17.-20.	PLAT OF HIGHWAY SHEET (2 TO 5)	630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
21.	PAVEMENT MARKING AND LANDSCAPING	631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
22.-46.	STRUCTURAL DRAWINGS	635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
47.	BRIDGE APPROACH SLAB (1 OF 2)	635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
48.	BRIDGE APPROACH SLAB (2 OF 2)	701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5m (15') AWAY
49.	BUTTERFIELD CREEK GRADING	701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 4.5m (15') TO 600 mm (24") FROM PAVEMENT EDGE
50.	RUSTICATION FINISH AND GEOCOMPOSITE DRAIN FOR RETAINING WALLS (BD-28)	701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
51.	DRIVEWAY DETAILS DISTANCE BETWEEN R.O.W. AND FACE OF CURB/EDGE OF SHOULDER >= 15' (BD-01)	701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
52.	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	702001 701901-01	TRAFFIC CONTROL DEVICES
53.	FIRE HYDRANT TO BE MOVED (BD-36)	704001-05	TEMPORARY CONCRETE BARRIER
54.	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)	720001-01	SIGN PANEL MOUNTING DETAILS
55.	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)	720006-02	SIGN PANEL ERECTION DETAILS
56.	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)		
57.	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)		
58.	TEMPORARY INFORMATION SIGNING (TC-22)		
59.	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)		
60-63	CROSS-SECTIONS - ROADWAY		
64.	CROSS-SECTIONS - BUTTERFIELD CREEK		
65	HIGHWAY STANDARDS		

GENERAL NOTES

- ALL SAWCUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE REMOVAL ITEMS INVOLVED.
- BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF ALL BURIED FACILITIES INCLUDING ELECTRICAL, TELEPHONE, AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED)
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS IN THE CREEK. COST OF THIS WORK SHALL BE INCLUDED AS PART OF REMOVAL OF EXISTING STRUCTURE.
- CONTRACTOR IS FULLY RESPONSIBLE FOR PROVIDING ANY DIVERSION OF CREEK AND PROTECTION OF CREEK AS NEEDED TO FACILITATE REMOVAL OF EXISTING STRUCTURES. SUCH TEMPORARY MEASURES ARE SUBJECT TO THE APPROVAL OF ENGINEER, DEPARTMENT OF NATURAL RESOURCES AND ARMY CORP OF ENGINEERS. THE COST OF SUCH TEMPORARY MEASURES SHALL BE CONSIDERED INCLUDED IN THE UNIT COST OF THE REMOVAL OF EXISTING STRUCTURES.
- THE ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD TECHNICIAN, MS. PATRICE HARRIS, AT 708-597-9800 TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 mm (1-1/2") WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH) OR LESS THAN 25 mm (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80 KM/H (45 MPH). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75 mm (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H)
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ALL UTILITY COMPANIES AND LOCAL AGENCIES IN THE VILLAGE OF FLOSSMOOR.
- ~~THE HMA MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.44 GAL/SQ YD.~~
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE OWNED PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED-ONE(1) WEIGHTED SANDBAG ACROSS EACH BOTTOM RAIL.
- WHERE ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.
- PROTECT EXISTING VEGETATION TO REMAIN BY PLACING TEMPORARY FENCING TO PREVENT ACCESS TO THE VEGETATED AREA. TEMPORARY FENCE SHOULD BE ERECTED ALONG THE DRIPLINE OF THE TREES DESIGNATED TO REMAIN WITHIN THE CONSTRUCTION AREA OR ALONG THE LIMIT OF CONSTRUCTION IN ORDER TO PROTECT AGAINST THE MANEUVERING OF MACHINERY OR STOCKPILING OF MATERIAL WITHIN THE ROOT ZONE OF THE TREES TO REMAIN.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ENTRANCES SERVICING ADJACENT PROPERTIES AT ALL TIMES DURING CONSTRUCTION

16. IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS FOR PROTECTION AND RESTORATION OF PROPERTY, THE CONTRACTOR SHALL DOCUMENT THE EXISTING PRE-CONSTRUCTION CONDITIONS OF ALL ADJACENT PROPERTIES NEAR THE BRIDGE AS WELL AS THE CREEK CHANNEL USING VIDEOTAPE AND/OR PICTURES. THIS WORK REFERS TO BUT NOT LIMITED TO THE ADJACENT GOLF COURSE PARKING LOT, THE EXISTING TREES ALONG THE SLOPES, THE PEDESTRIAN GOLF BRIDGE AND ANY OTHER APPURTENANCES/PROPERTIES WHICH MAY HAVE POTENTIAL FOR DAMAGES AS A RESULT OF THE BRIDGE/ROADWAY RECONSTRUCTION PROJECT. THE POST-CONSTRUCTION CONDITIONS FOR THE PROPERTIES INVOLVED ALSO NEED TO BE DOCUMENTED UPON COMPLETION OF THE PROJECT. TWO COPIES OF THE DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER UPON THE PROJECT COMPLETION.

THE COST FOR THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE BRIDGE REMOVAL PAY ITEM AND WILL NOT BE PAID FOR SEPARATELY.

- CONTRACTOR TO COORDINATE REMOVAL AND REPLACEMENT WITH THE VILLAGE OF FLOSSMOOR. PLEASE CONTACT _____ AT (708)672-4994.
- SLIP FORMING OF THE PARAPRTS IS NOT ALLOWED.
-

COMMITMENTS: NONE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62539

RME Rubinos & Mesia Engineers, Inc.
 200 S. Michigan Ave, Suite 1500 Chicago IL 60604-2482
 T> 312 870 6800 F> 312 683 1473

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 INDEX OF SHEETS, HIGHWAY STANDARDS,
 GENERAL NOTES AND COMMITMENTS

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 6-26-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF

LOCATION OF WORK: DIXIE HIGHWAY OVER BUTTERFIELD CREEK
COOK COUNTY

SUMMARY OF QUANTITIES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	3
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 62539				

CODE NO.	ITEM	UNIT	URBAN TOTAL QTY	CONSTRUCTION TYPE FUND CODE			
				80% FED./20% STATE			
				ROADWAY 1000-2A	BRIDGE X071-2A	RET-WALL Y007	FLOSSMOOR VILLAGE-100% Y060
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	461	301			160
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	577	477			100
20101000	TEMPORARY FENCE	FOOT	250	250			
20101100	TREE TRUNK PROTECTION	EACH	50	50			
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	25	25			
20200100	EARTH EXCAVATION	CU YD	666	666			
20300100	CHANNEL EXCAVATION	CU YD	4000	4000			
20400800	FURNISHED EXCAVATION	CU YD	4135	4135			
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	450		270	180	
20800150	TRENCH BACKFILL	CU YD	442	217			225
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	7100	6700			400
25000210	SEEDING, CLASS 2A	ACRE	0.75	0.50			0.25
25000310	SEEDING, CLASS 4	ACRE	1.00	1.00			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	50	50			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	50	50			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	50	50			
25100630	EROSION CONTROL BLANKET	SQ YD	6460	5250			1210
25200110	SODDING, SALT TOLERANT	SQ YD	1141	1141			
28000200	TEMPORARY EROSION CONTROL SEEDING	POUND	125	125			
28000300	TEMPORARY DITCH CHECKS	EACH	12	12			
28000400	PERIMETER EROSION BARRIER	FOOT	2175	1975			200
28000510	INLET FILTERS	EACH	2	2			
28100107	STONE RIPRAP, CLASS A4	SQ YD	1900		900		
28200200	FILTER FABRIC	SQ YD	2150		2150		
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	105	105			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	30	30			
40600300	AGGREGATE (PRIME COAT)	TON	10	10			
40600895	CONSTRUCTING TEST STRIP	EACH	2	2			
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	222	222			
40700941	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13"	SQ YD	4725	4725			
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	350	350			
42001420	BRIDGE PAVEMENT CONNECTOR APPROACH (PCC)	SQ YD	70	70			
44000100	PAVEMENT REMOVAL	SQ YD	4685	4685			

CODE NO.	ITEM	UNIT	URBAN TOTAL QTY	CONSTRUCTION TYPE FUND CODE			
				80% FED./20% STATE			
				ROADWAY 1000-2A	BRIDGE X071-2A	RET-WALL Y007	FLOSSMOOR VILLAGE-100% Y060
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	150	150			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	26	26			
44000700	APPROACH SLAB REMOVAL	SQ YD	303	303			
44004250	PAVED SHOULDER REMOVAL	SQ YD	340	340			
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	20	10			10
44201713	CLASS D PATCHES, TYPE I, 6 INCH HOT-MIX ASPHALT	SQ YD	15	15			
48203029	SHOULDERS, 8"	SQ YD	201	201			
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1		
50200100	STRUCTURE EXCAVATION	CU YD	360		80	280	
50300100	FLOOR DRAINS	EACH	10		10		
50300225	CONCRETE STRUCTURES	CU YD	508		362	146	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	300		300		
50300260	BRIDGE DECK GRADING	SQ YD	900		900		
50300280	CONCRETE ENCASMENT	CU YD	20		20		
50300300	PROTECTIVE COAT	SQ YD	1300	180	1070	50	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
50500505	STUD SHEAR CONNECTORS	EACH	6072		6072		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	118,340		102,540	15,800	
50800515	BAR SPLICERS	EACH	792		792		
51201610	FURNISHING STEEL PILES HP12x63	FOOT	1560			1560	
51201700	FURNISHING STEEL PILES HP12x74	FOOT	2550		2550		
51202305	DRIVING PILES	FOOT	4110		2550	1560	
51203610	TEST PILE STEEL HP12x63	EACH	1			1	
51203700	TEST PILE STEEL HP12x74	EACH	4		4		
51204650	PILE SHOES	EACH	95		56	39	
51205200	TEMPORARY SHEET PILING	SQ FT	6600		6600		
51500100	NAME PLATES	EACH	1		1		
52100520	ANCHOR BOLT, 1"	EACH	64		64		
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1			
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1			
55023800	STORM SEWERS, TYPE 3, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 15"	FOOT	45	45			

Rev. 9-1-09



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK
SUMMARY OF QUANTITIES
(1 OF 2)

SCALE: VERT. NONE
HORIZ. NONE
DATE 6-25-09
DRAWN BY AW
DESIGNED BY AW
CHECKED BY MF

801.FED./201.STATE SUMMARY OF QUANTITIES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	4

STA.	TO STA.
FED. ROAD DIST. NO. - ILLINOIS	FED. AID PROJECT

CONTRACT NO. 62539

CODE NO.	ITEM	UNIT	TOTAL QTY	CONSTRUCTION TYPE FUND CODE			
				ROADWAY	BRIDGE	RET-WALL	FLOSSMOOR
				1000-2A	X071-2A	Y007	Y060 VILLAGE-100%
55019900	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 24"	FOOT	285	285			
*** 55039700	STORM SEWERS TO BE CLEANED	FOOT	330	330			
56104000	DUCTILE IRON WATER MAIN, MECHANICAL JOINT 10"	FOOT	410				410
56109000	TAPPING VALVES AND SLEEVES 10"	EACH	2				2
56400820	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	2				2
56400500	FIRE HYDRANTS TO BE REMOVED	EACH	2				2
58700300	CONCRETE SEALER	SQ FT	3480		3480		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	335		180	155	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	330		220	110	
60107700	PIPE UNDERDRAINS 6"	FOOT	110	110			
60228110	MANHOLES, SANITARY, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4				4
60248900	VALVE VAULTS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2				2
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	8	8			
60603000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	5	5			
60614600	PAVED DITCH (SPECIAL)	FOOT	400	400			
* 63000003	STEEL PLATE BEAM GUARD RAIL, TYPE A, 9' POSTS	FOOT	312	312			
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4			
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4			
63200310	GUARD RAIL REMOVAL	FOOT	412	412			
66400305	CHAIN LINK FENCE, 6'	FOOT	180	180			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12			
67100100	MOBILIZATION	L SUM	1	0.5	0.5		
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.5	0.4	0.1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	50	50			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2100	2100			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3816	3816			
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1022	1022			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	88	88			
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	24	24			
* 78200200	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	50	50			
* 78200405	GUARDRAIL MARKERS	EACH	43	43			

CODE NO.	ITEM	UNIT	TOTAL QTY	CONSTRUCTION TYPE FUND CODE			
				ROADWAY	BRIDGE	RET-WALL	FLOSSMOOR
				1000-2A	X071-2A	Y007	Y060 VILLAGE-100%
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4			
78300105	PAVEMENT MARKING REMOVAL	FOOT	1344	1344			
* 81200120	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	692		692		
* 81301110	JUNCTION BOX EMBEDDED IN STRUCTURE, STAINLESS STEEL, 12"x8"x6"	EACH	4		4		
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	500	500			
X0322671	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	600	600			
X0324243	SEDIMENT CONTROL, SILT CURTAIN	L SUM	1	1			
X0323988	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	3400		3400		
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	14258	14258			
X0325837	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 6 INCH	FOOT	321	321			
X0325841	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 24 INCH	FOOT	144	144			
X0325842	WET REFLECTIVE TEMPORARY TAPE, TYPE III, LETTERS AND SYMBOLS	SQ FT	731	731			
X0426200	DEWATERING	L SUM	1				1
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1			
X4023000	TEMPORARY ACCESS (ROAD)	EACH	1	1			
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1		1		
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1		1		
XX004782	TEMPORARY BITUMINOUS PAVEMENT	SQ YD	779	779			
XX005656	INLET FILTER CLEANING	EACH	2	2			
XX007864	SANITARY SEWER, DUCTILE IRON 8"	FOOT	221				221
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	5200	5200			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
*** Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	4	4			
Z0022800	FENCE REMOVAL	FOOT	120	120			
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2			
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2			
X0326673	CASING PIPE TO BE JACKED AND BORED IN PLACE - 16"	FOOT	110				110
0 Z0076600	TRAINEES	HOUR	1000	1000			
X0326674	CASING PIPE TO BE JACKED AND BORED IN PLACE - 20"	FOOT	55				55

* SPECIALTY ITEM
 0 Y060
 *** NON PARTICIPATING ITEM

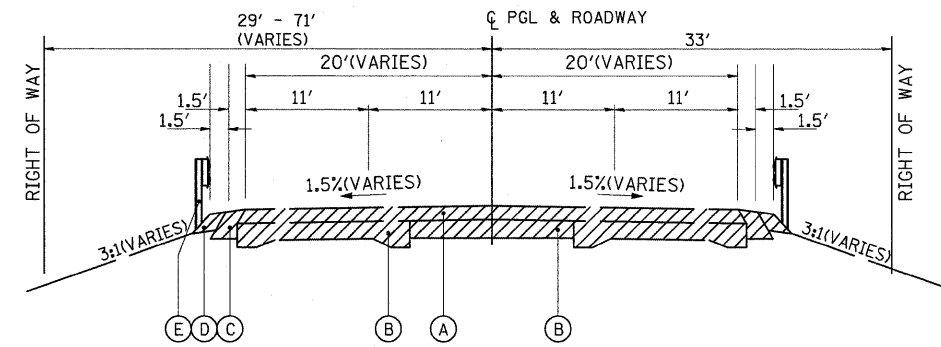
RME Rubinos & Mesia Engineers, Inc.
 200 S. Michigan Ave, Suite 1500 Chicago, IL 60604-2482
 T: 312 870 6800 F: 312 663 1473

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 SUMMARY OF QUANTITIES
 (2 OF 2)

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 6-25-09

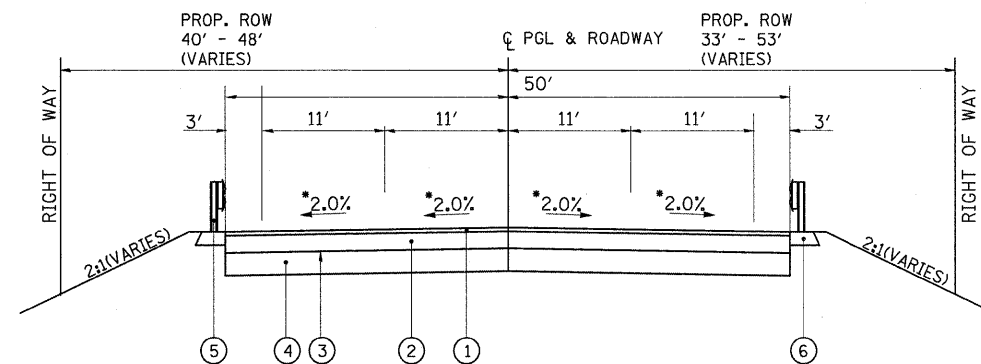
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 DESIGNED BY AW
 CHECKED BY MF



REMOVAL ITEM

EXISTING ROADWAY - DIXIE HIGHWAY

Sta. 73+50 to Sta. 77+97
Sta. 79+15 to Sta. 84+25
BRIDGE LIMITS
(78+28 to 78+84)



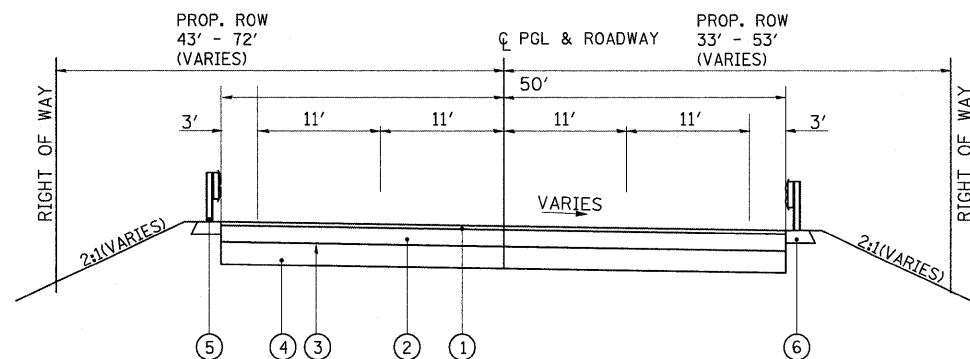
• TRANSITIONS TO SUPERELEVATION

PROPOSED ROADWAY - DIXIE HIGHWAY

Sta. 73+50 to Sta. 77+42

SUPERELEVATION CHART

SUPERELEVATION RATE: e=3.29%
SUPERELEVATION RUNOFF: L=196.80'
TANGENT RUNOUT: TR=80.08'
BEGIN SUPERELEVATION TRANSITION: STA. 75+30.23
TANGENT RUNOUT: STA. 76+10.31
FULL SUPERELEVATION: STA. 80+32.77



PROPOSED ROADWAY - DIXIE HIGHWAY

Sta. 79+68 to Sta. 84+25

EXISTING LEGEND

- (A) EXISTING HMA PAVEMENT, 2 1/4" (+)
- (B) EXISTING P.C.C. BASE COURSE, 9" (+)
- (C) EXISTING HMA SHOULDER, 8" (+)
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING STEEL PLATE BEAM GUARDRAIL

PROPOSED LEGEND

- (1) HOT-MIX ASPHALT SURFACE COURSE, MIX D, N 70, (IL-9.5mm), 2"
- (2) HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N 70, 11"
- (3) AGGREGATE MATERIALS (PRIME COAT)
- (4) PROPOSED AGGREGATE SUBGRADE, 12"
- (5) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A
- (6) HMA SHOULDERS, 8"

HMA MIXTURE REQUIREMENTS		
PAY ITEM	AC TYPE	VOIDS
FULL DEPTH PAVEMENT, 13"		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N 70, (IL-9.5mm), 2"	PG 64 -22	4% @ 70 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N 70, 11"	PG 64 -22	4% @ 70 GYR
TEMPORARY HMA PAVEMENT, 10"		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N 70, (IL-9.5mm), 1.5"	PG 64 -22	4% @ 70 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N 70, 8.5"	PG 64 -22	4% @ 70 GYR
DRIVEWAYS		
HMA BASE COURSE (HMA BINDER IL-19 mm), 6"	PG 58-22	2% @ 50 GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N 70, (IL-9.5mm), 2"*	PG 64-22	4% @ 70 GYR
CLASS D PATCHES		
CLASS D PATCH (HMA BINDER IL-19 mm), 6"	PG 64-22	4% @ 70 GYR
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	PG 64-22	4% @ 70 GYR
SHOULDERS		
HMA SHOULDER, 8"	PG 58-22	2% @ 30 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIX QUANTITIES IS 112 lbs / sq yd / In.
*DUE TO THE MINIMAL AMOUNT OF DRIVEWAY SURFACE NEEDED, PAVEMENT SURFACE COURSE TO BE USED.

STRUCTURAL DESIGN TRAFFIC:	Year 2015		
PV = 19,052	SU = 595	MU = 198	
ROAD / STREET CLASSIFICATION:	Class 1		
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:			
P = 32%	S = 45%	M = 45%	
TRAFFIC FACTOR:	Actual TF = 1.59	AC Type = 10	
	Minimum TF = 0.59		
AC GRADE:	Binder = IL - 19, N70 Surface = Mix " D ", N70		
SUBGRADE SUPPORT RATING:			
SSR =	(Sta. to)		
SSR =	(Sta. to)		

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK
TYPICAL SECTIONS
(ROADWAY)

SCALE: VERT. NONE
HORIZ. 7-2-09
DATE

DRAWN BY AW
DESIGNED BY AW
CHECKED BY MF

LOCATION	STATION TO STATION	EARTH EXCAVATION		TOTAL SUITABLE EXCAVATION		EXCAVATION TO BE USED IN EMBANKMENT (ADJ. FOR SHRINKAGE) 15%		EMBANKMENT		EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
		(CU FT)		(CU FT)		(CU FT)		(CU FT)		(CU FT)	
		STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II	STAGE I	STAGE II
73+50	74+00	2013.75	2013.75	2013.75	2013.75	1711.69	1711.69	10.15	10.15	1701.54	1701.54
74+00	75+00	2684.25	2684.25	2684.25	2684.25	2281.61	2281.61	144	144	2137.61	2137.61
75+00	75+27	181.65	181.65	181.65	181.65	154.40	154.40	503	503	348.60	348.60
75+27	76+00	0	0	0	0	0	0	3876.30	3876.30	3876.30	3876.30
76+00	76+66	0	0	0	0	0	0	7101.25	7101.25	7101.25	7101.25
76+66	77+00	0	0	0	0	0	0	5809.40	5809.40	5809.40	5809.40
77+00	77+35	0	0	0	0	0	0	7740.35	7740.35	7740.35	7740.35
77+35	77+65	0	0	0	0	0	0	5781.40	5781.40	5781.40	5781.40
BRIDGE OMISSION (STA. 77+72 to STA. 79+38)											
79+45	79+75	38.50	38.50	38.50	38.50	32.73	32.73	4432.75	4432.75	4400.02	4400.02
79+75	80+00	69.75	69.75	69.75	69.75	59.29	59.29	4437.00	4437.00	4377.71	4377.71
80+00	81+00	195.75	195.75	195.75	195.75	166.39	166.39	12676.50	12676.50	12510.11	12510.11
81+00	82+00	0	0	0	0	0	0	7029.00	7029.00	7029.00	7029.00
82+00	83+00	778.50	778.50	778.50	778.50	661.73	661.73	2463.75	2463.75	1802.02	1802.02
83+00	84+00	2261.25	2261.25	2261.25	2261.25	1922.06	1922.06	258.75	258.75	1663.31	1663.31
84+00	84+25	758.25	758.25	758.25	758.25	644.51	644.51	18.00	18.00	626.51	626.51
TOTALS		8981.65	8981.65	8981.65	8981.65	7634.41	7634.41	62281.60	62281.60	-54647.19	-54647.19

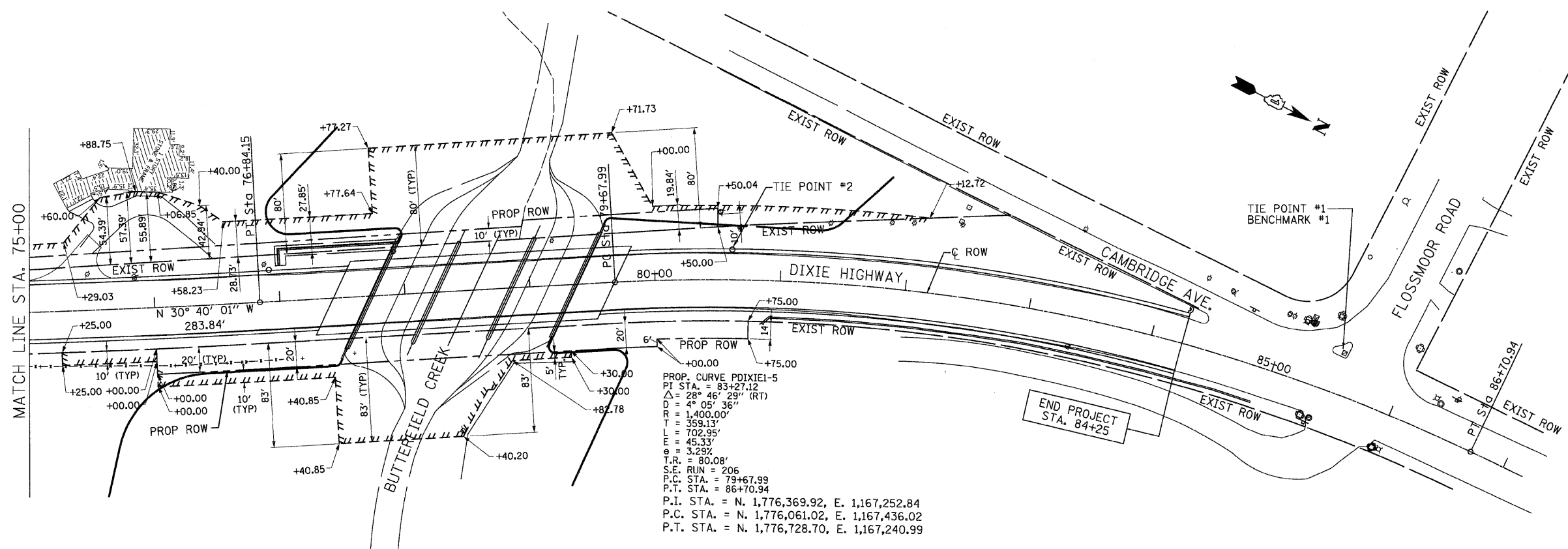
	STAGE I	STAGE II	TOTAL
EARTH EXCAVATION	8981.65	8981.65	17963.30 Cu Ft
FURNISHED EXCAVATION	55819.84	55819.84	111639.68 Cu Ft

REVISIONS	
NAME	DATE

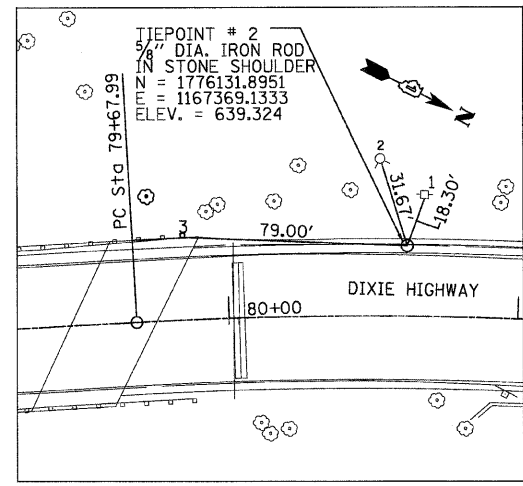
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK
SCHEDULE OF QUANTITIES
EARTHWORK

R M E Rubinos & Mesia Engineers, Inc.
200 S. Michigan Ave. Suite 1500 Chicago IL 60604-2482
T: 312 870 8600 F: 312 863 1473

SCALE: VERT. NONE
HORIZ. NONE
DATE 6-25-09
DRAWN BY AW
DESIGNED BY AW
CHECKED BY MF

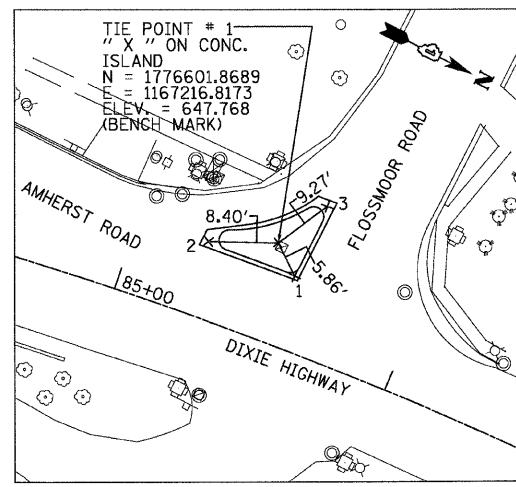


PROP. CURVE PDIXIE1-5
 PT STA. = 83+27.12
 $\Delta = 28^\circ 46' 29''$ (RT)
 $D = 4^\circ 05' 36''$
 $R = 1,400.00'$
 $T = 359.13'$
 $L = 702.95'$
 $e = 45.33'$
 $\theta = 3.29^\circ$
 $T.R. = 80.08'$
 $S.E. RUN = 206$
 $P.C. STA. = 79+67.99$
 $P.T. STA. = 86+70.94$
 $P.I. STA. = N. 1,776,369.92, E. 1,167,252.84$
 $P.C. STA. = N. 1,776,061.02, E. 1,167,436.02$
 $P.T. STA. = N. 1,776,728.70, E. 1,167,240.99$



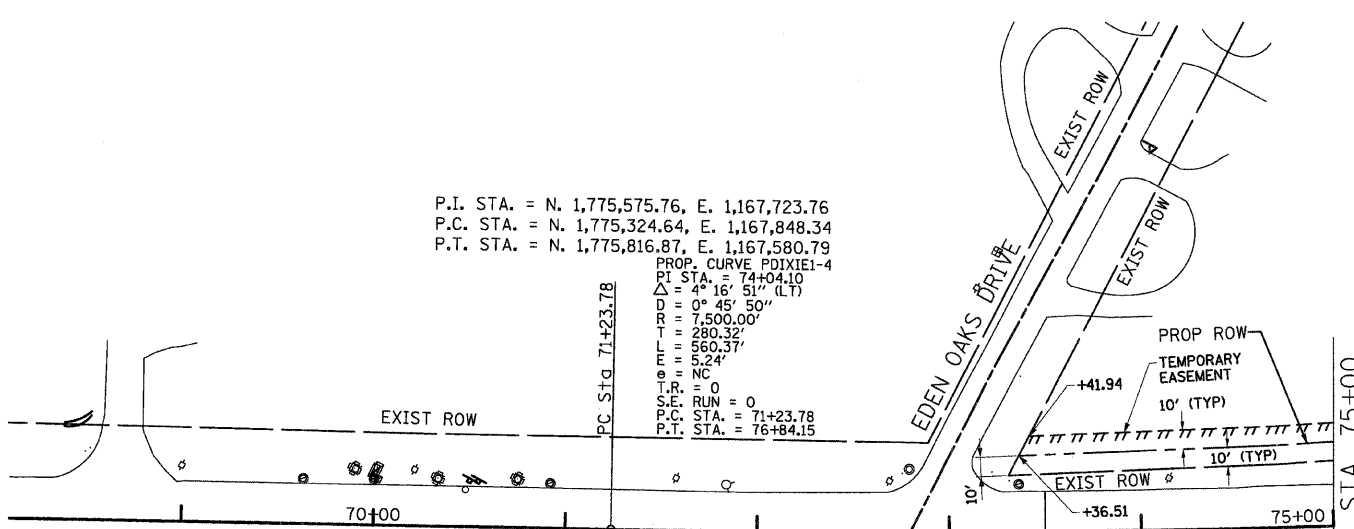
- TIES:
1. MAG (MAGNETIC NAIL) ON EAST FACE OF POWER POLE.
 2. " X " ON EAST FLANGE BOLT OF FIRE HYDRANT.
 3. MAG (MAGNETIC NAIL) ON TOP OF NORTH MOST WOOD GUARDRAIL POST.

TIE POINT #2 (TP2)

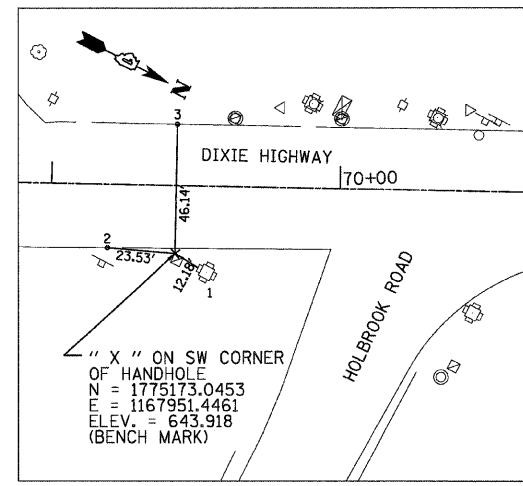


- TIES:
1. " X " ON NORTHEAST CORNER OF CONCRETE ISLAND.
 2. " X " ON SOUTHEAST CORNER OF CONCRETE ISLAND.
 3. " X " ON NORTHWEST CORNER OF CONCRETE ISLAND.

TIE POINT #1 (TP1)



$P.I. STA. = N. 1,775,575.76, E. 1,167,723.76$
 $P.C. STA. = N. 1,775,324.64, E. 1,167,848.34$
 $P.T. STA. = N. 1,775,816.87, E. 1,167,580.79$
 PROP. CURVE PDIXIE1-4
 PT STA. = 74+04.10
 $\Delta = 4^\circ 16' 51''$ (LT)
 $D = 0^\circ 45' 50''$
 $R = 7,500.00'$
 $T = 280.32'$
 $L = 560.37'$
 $e = 5.24'$
 $\theta = NC$
 $T.R. = 0$
 $S.E. RUN = 0$
 $P.C. STA. = 71+23.78$
 $P.T. STA. = 76+84.15$



- TIES:
1. " X " ON SOUTHWEST CORNER OF CONCRETE TRAFFIC SIGNAL BASE.
 2. MAG (MAGNETIC NAIL) ON EDGE OF PAVEMENT.
 3. MAG (MAGNETIC NAIL) ON EDGE OF PAVEMENT.

TIE POINT #3 (TP3)

NOTE:
 ADDITIONAL PROPOSED ROW AND TEMPORARY EASEMENTS SHOWN ON THIS PLAN ARE BASED ON THE ROW PLAT / INFORMATION DATED NOVEMBER 3RD, 2005, PROVIDED BY IDOT'S RIGHT OF WAY CONSULTANT, RUETTIGER, TONELLI AND ASSOCIATES. SINCE THE ROADWAY CENTERLINES AND THE CONTROL POINTS FROM THE ROW INFORMATION AND THE PHASE I SURVEY DID NOT COINCIDE, IN COORDINATION AND CONCURRENCE WITH RUETTIGER, TONELLI AND ASSOCIATES, RME SHIFTED THE SURVEY SO THAT THE CONTROL POINTS AND CENTERLINES WOULD COINCIDE.

NOTE:
 1. THE PROPOSED ALIGNMENT IS THE SAME AS THE EXISTING ALIGNMENT.
BENCH MARKS #1
 ELEVATION = 647.768
 " X " ON CONCRETE ISLAND AT SOUTHWEST QUADRANT OF DIXIE HIGHWAY AND FLOSSMOOR ROAD.
BENCH MARKS #2
 ELEVATION = 643.918
 " X " ON SOUTHWEST CORNER OF TRAFFIC HANDHOLE AT SOUTHEAST QUADRANT OF DIXIE HIGHWAY AND HOLBROOK ROAD.

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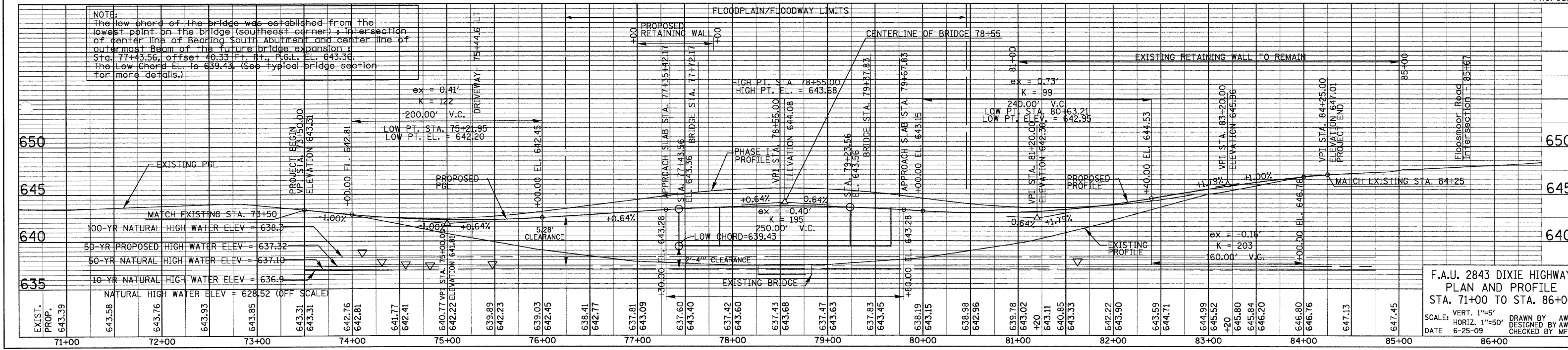
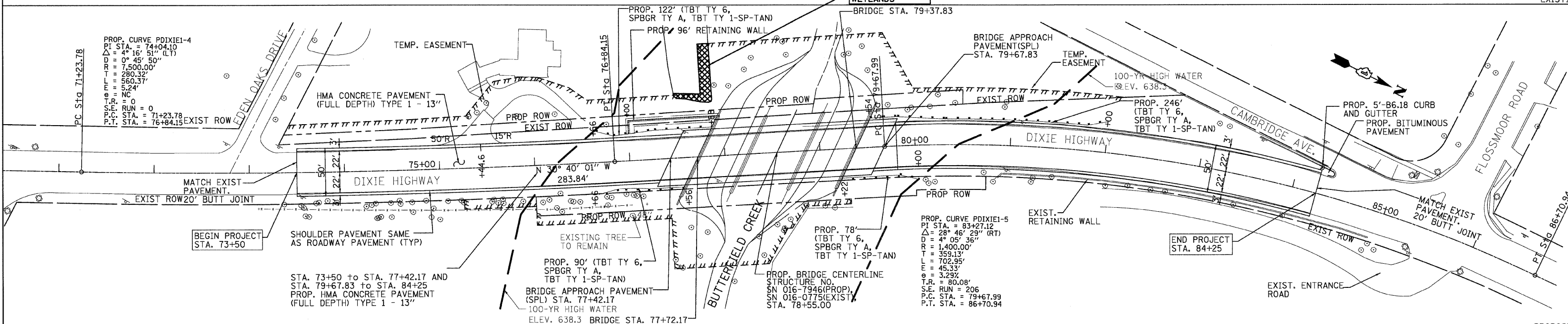
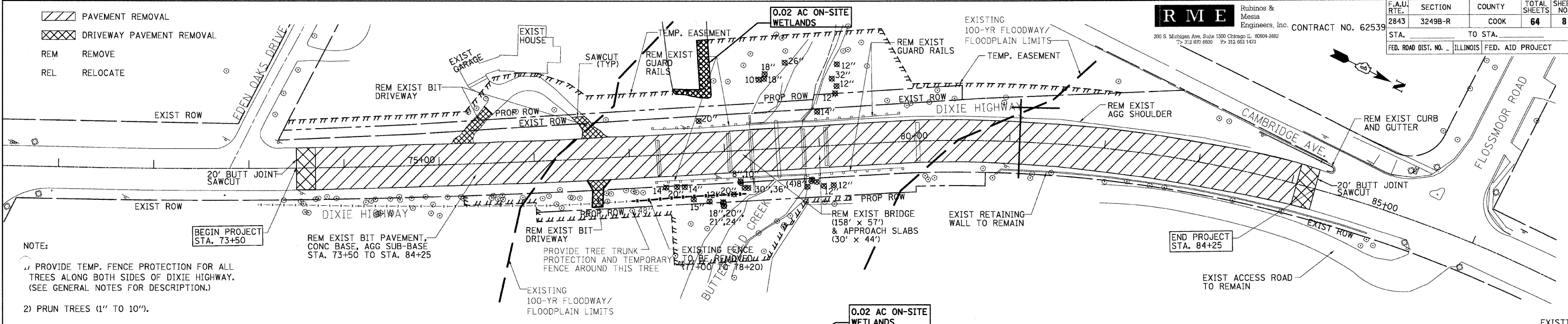
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 ALIGNMENT, TIES AND BENCHMARKS

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF

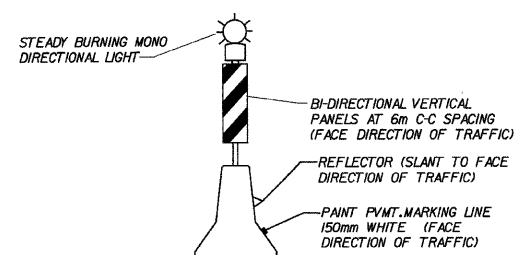
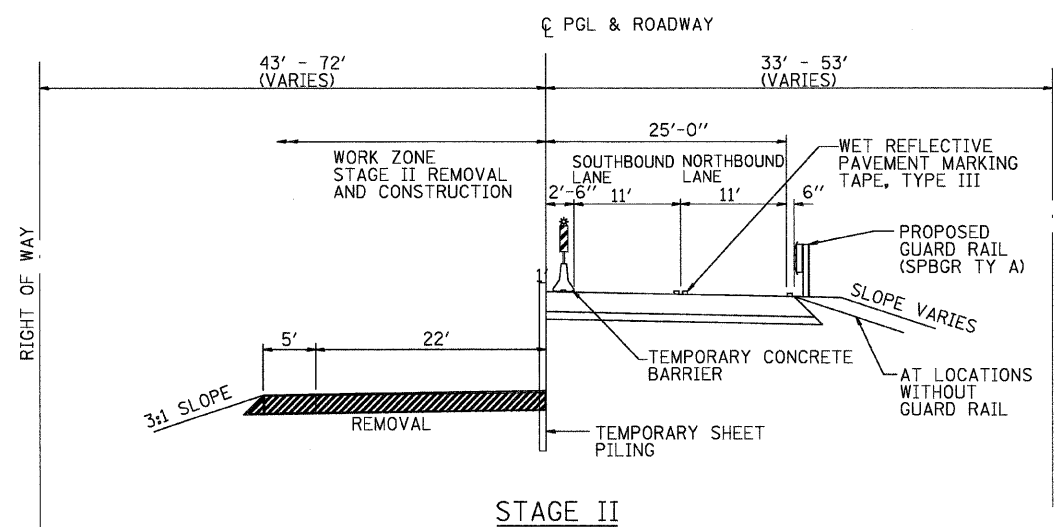
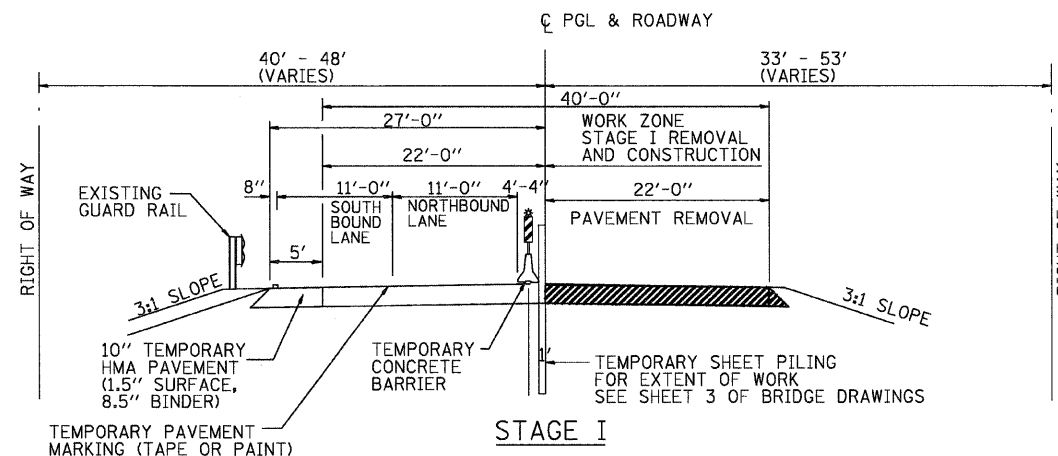
- PAVEMENT REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- REM REMOVE
- REL RELOCATE

NOTE:
 1) PROVIDE TEMP. FENCE PROTECTION FOR ALL TREES ALONG BOTH SIDES OF DIXIE HIGHWAY. (SEE GENERAL NOTES FOR DESCRIPTION.)
 2) PRUN TREES (1" TO 10").



NOTE:
 The low chord of the bridge was established from the lowest point on the bridge (southeast corner); intersection of center line of Bearing South Abutment and center line of outermost beam of the future bridge expansion; Sta. 77+43.56, offset 40.33 Ft. Rt., P.G.L. EL. 643.36. The Low Chord EL. is 639.43. (See typical bridge section for more details.)

F.A.U. 2843 DIXIE HIGHWAY
 PLAN AND PROFILE
 STA. 71+00 TO STA. 86+00
 SCALE: VERT. 1"=5'
 HORIZ. 1"=50'
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF



42" TEMPORARY CONCRETE BARRIER WALL
NO SCALE

TRAFFIC MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL MAINTAIN ONE LANE OF TRAFFIC FLOW IN EACH DIRECTION THROUGHOUT THE DURATION OF THE CONTRACT.
2. THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN ACCORDANCE WITH THE SPECIAL PROVISION AND AS DIRECTED BY THE ENGINEER.
3. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE IN CONSTRUCTION STAGING.
4. BARRICADES OR DRUMS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL STEADY BURN LIGHTS AND SHALL BE PLACED AT A MAXIMUM OF 30.0 FT INTERVALS ALONG THE PROPOSED WORK ZONE AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN. THIS WORK SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL.
6. THE CONTRACTOR SHALL MAKE A SOLID EDGE LINE AT EACH SIDE OF ROADWAY DURING STAGE I, II, AND III TRAFFIC OPERATIONS. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PAVEMENT MARKING TAPE, TYPE III.
7. SIGN LOCATIONS PLACEMENT ARE APPROXIMATE & SUBJECT TO LOCATION ADJUSTMENT DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.
8. ALL SIGNS/BARRICADES SHALL BE ACCORDING TO LATEST ILL. MUTCD.
9. THE FURNISHING, INSTALLING AND RELOCATION OF ALL TRAFFIC SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR TRAFFIC CONTROL AND PROTECTION.
10. ALL CONFLICTING TRAFFIC SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER. THIS SHALL BE INCLUDED TO THE COST OF TRAFFIC CONTROL AND PROTECTION.
11. TEMPORARY CONCRETE BARRIER SHALL HAVE THE BASE OF THE WALL PAINTED WITH REFLECTIVE YELLOW OR WHITE PAINT AS NOTED. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR INSTALL AND REMOVE TEMPORARY CONCRETE BARRIER.
12. THE TEMPORARY PAVEMENT MARKINGS SHALL BE WET REFLECTIVE PAVEMENT MARKINGS, TYPE III TAPE. THE APPLICABLE LOCATIONS FOR THE USE OF TAPE SHALL BE GOVERNED BY THE STANDARD SPECIFICATIONS.

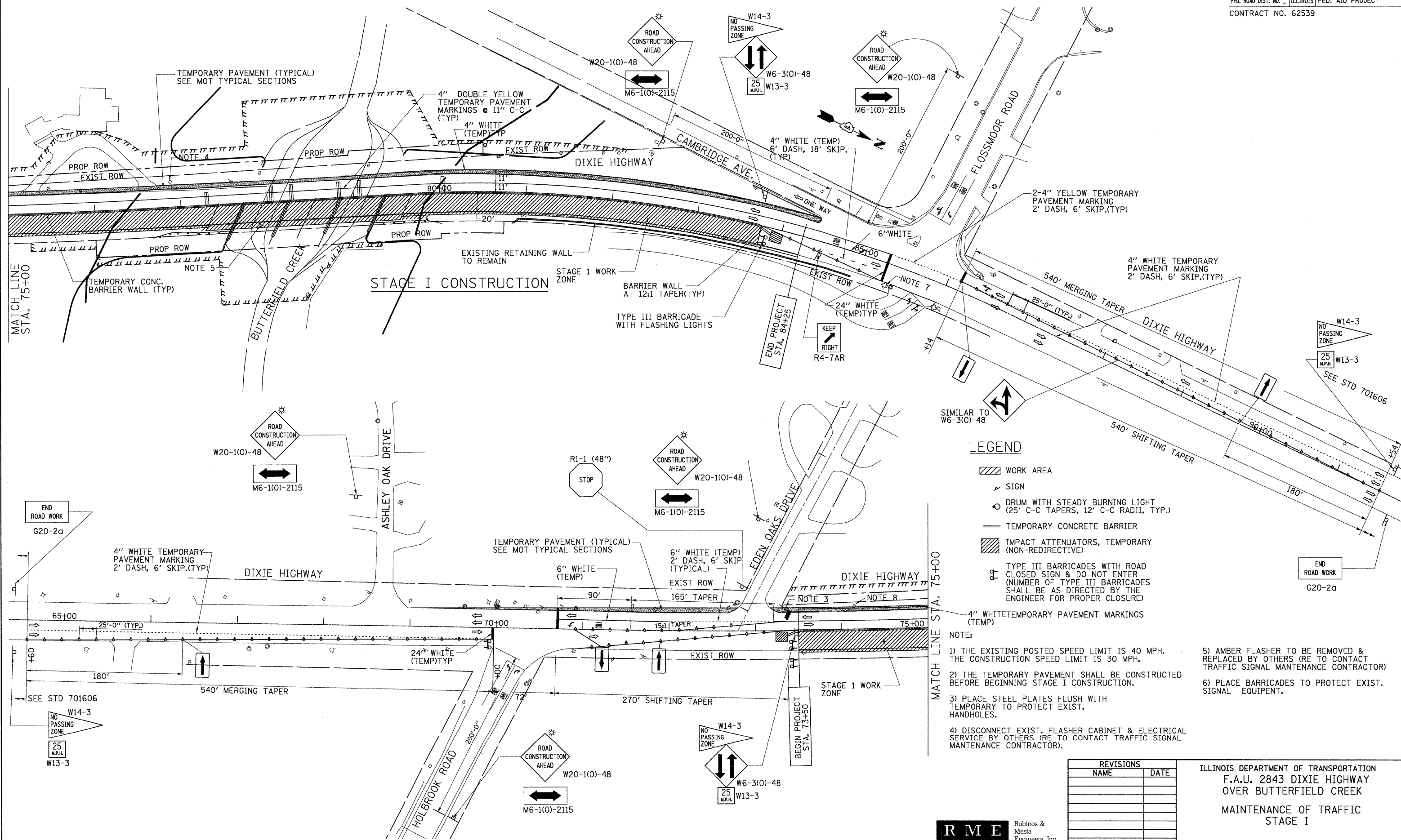
RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Ave, Suite 1500 Chicago IL 60604-2482
T: 312 870 6600 F: 312 863 1473

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK

MAINTENANCE OF TRAFFIC SECTIONS

SCALE: VERT. NONE
HORIZ. NONE
DATE: 6-25-09
DRAWN BY: AW
DESIGNED BY: AW
CHECKED BY: MF



LEGEND

- WORK AREA
- SIGN
- DRUM WITH STEADY BURNING LIGHT (25' C-C TAPERS, 12' C-C RADII, TYP.)
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE)
- TYPE III BARRICADES WITH ROAD CLOSED SIGN & DO NOT ENTER (NUMBER OF TYPE III BARRICADES SHALL BE AS DIRECTED BY THE ENGINEER FOR PROPER CLOSURE)
- 4\"/>

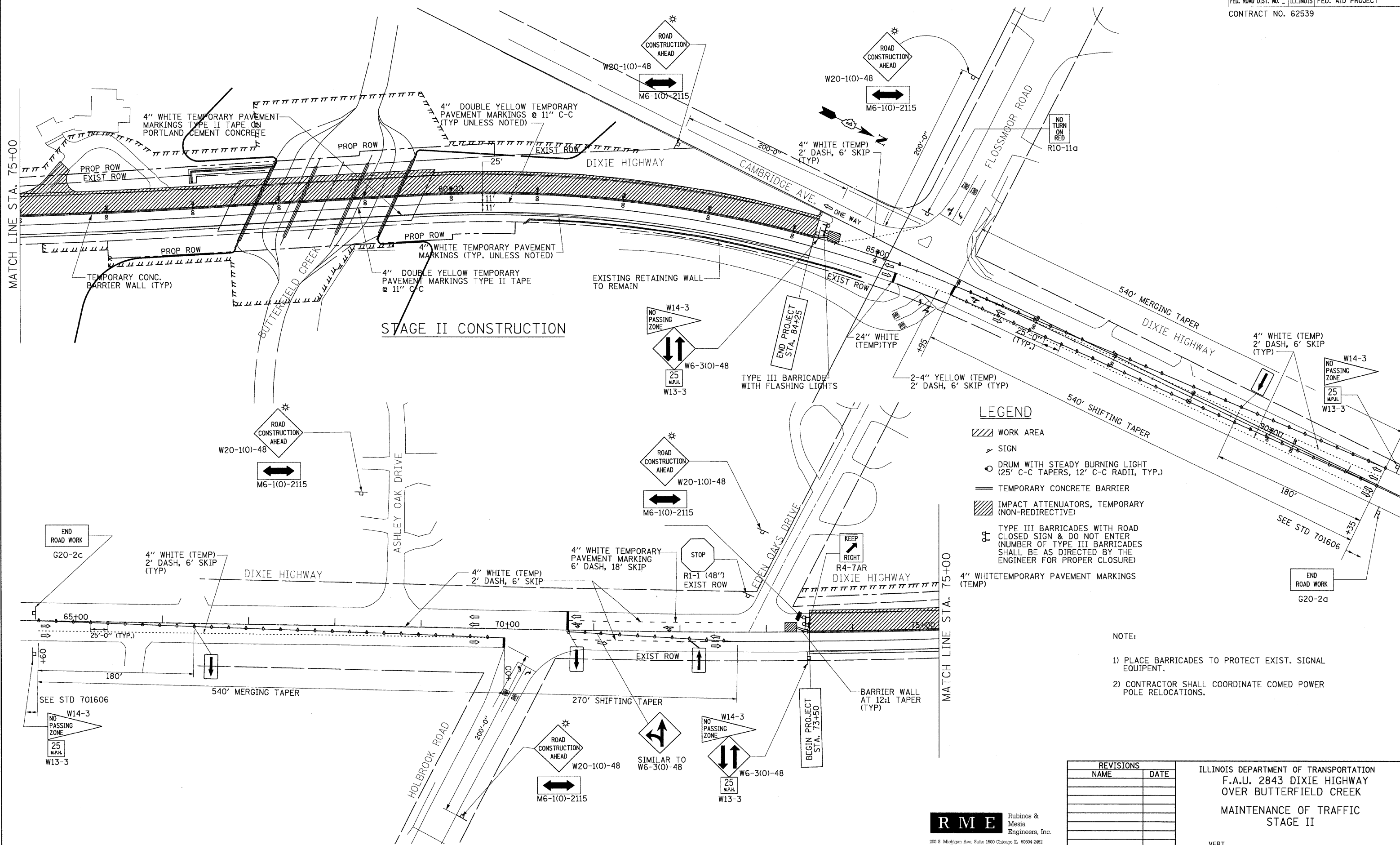
- NOTE:
- 1) THE EXISTING POSTED SPEED LIMIT IS 40 MPH. THE CONSTRUCTION SPEED LIMIT IS 30 MPH.
 - 2) THE TEMPORARY PAVEMENT SHALL BE CONSTRUCTED BEFORE BEGINNING STAGE I CONSTRUCTION.
 - 3) PLACE STEEL PLATES FLUSH WITH TEMPORARY TO PROTECT EXIST. HANDHOLES.
 - 4) DISCONNECT EXIST. FLASHER CABINET & ELECTRICAL SERVICE BY OTHERS (RE TO CONTACT TRAFFIC SIGNAL MAINTENANCE CONTRACTOR).
 - 5) AMBER FLASHER TO BE REMOVED & REPLACED BY OTHERS (RE TO CONTACT TRAFFIC SIGNAL MAINTENANCE CONTRACTOR)
 - 6) PLACE BARRICADES TO PROTECT EXIST. SIGNAL EQUIPMENT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 MAINTENANCE OF TRAFFIC
 STAGE I

RME Rubinos & Mastia Engineers, Inc.
 200 S. Michigan Ave., Suite 1500 Chicago, IL 60604-2682
 T 312 870 8900 F 312 863 1473

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF



LEGEND

- WORK AREA
- SIGN
- DRUM WITH STEADY BURNING LIGHT (25' C-C TAPERS, 12' C-C RADII, TYP.)
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE)
- TYPE III BARRICADES WITH ROAD CLOSED SIGN & DO NOT ENTER (NUMBER OF TYPE III BARRICADES SHALL BE AS DIRECTED BY THE ENGINEER FOR PROPER CLOSURE)
- 4" WHITE TEMPORARY PAVEMENT MARKINGS (TEMP)

NOTE:

- 1) PLACE BARRICADES TO PROTECT EXIST. SIGNAL EQUIPMENT.
- 2) CONTRACTOR SHALL COORDINATE COMED POWER POLE RELOCATIONS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 MAINTENANCE OF TRAFFIC
 STAGE II

RME Rubinos & Mosia Engineers, Inc.
 200 S. Michigan Ave., Suite 1500 Chicago, IL 60604-2482
 T: 312.870.6800 F: 312.663.1473

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF


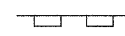
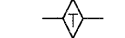


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62539				

TEMPORARY EROSION CONTROL NOTES

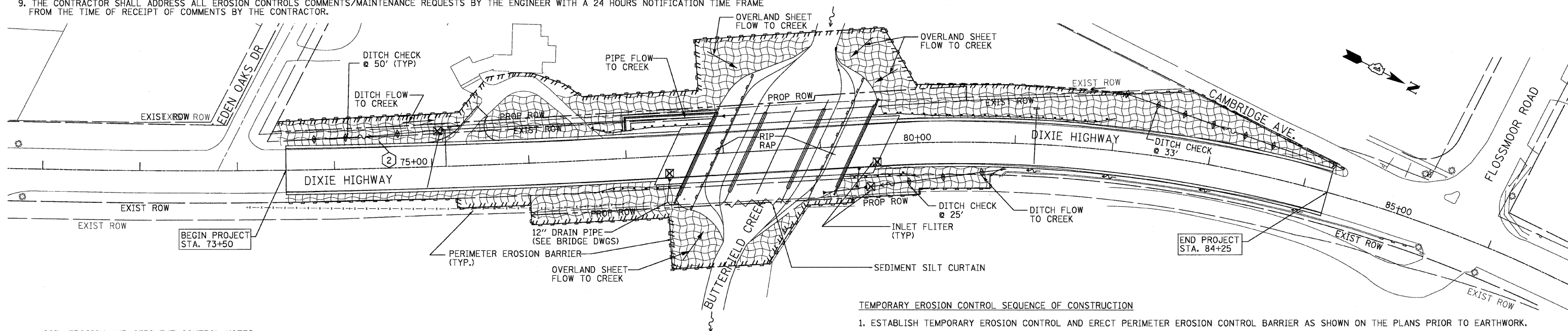
1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMIT.
2. THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING VEGETATION.
3. TEMPORARY DITCH CHECKS SHALL BE INSTALLED IMMEDIATELY AFTER DITCH GRADING IS COMPLETED. DITCH CHECKS ARE BASED ON ONE (1) INSTALLATION AND THREE (3) REPLACEMENTS OVER THE DURATION OF THE CONTRACT. THESE ITEMS WILL BE PAID FOR AS EACH, REGARDLESS OF THE TYPE OF CONFIGURATION USED.
4. RUNOFF FROM EXCAVATION AREAS SHALL LEAVE THE SITE THROUGH SEDIMENT CONTROL DEVICES. THE CONTRACTOR SHALL ADJUST HIS OPERATION AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.
5. THE CONTRACTOR SHALL SURROUND ALL EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES AT ALL TIMES. EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS OR WITHIN 24 HOUR AFTER A 13 MM (0.5 INCH) RAINFALL OR SNOWFALL.
7. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAS BEEN CONCLUDED. AREAS THAT HAVE STEEP SLOPES OR WILL NOT RECEIVE PERMANENT LANDSCAPING SHALL BE TEMPORARILY SEEDED. ALL FLATTER AREAS OR AREAS WHERE NO FURTHER WORK IS TO OCCUR FOR ONE MONTH OR MORE SHALL BE SEEDED AND EXCELSIOR BLANKET WITHIN SEVEN (7) CALENDAR DAYS.
8. NO SEDIMENT SHALL BE ALLOWED TO FLOW DOWNSTREAM AT ANY TIME. ALL WATER FROM DEWATERING OPERATIONS SHALL BE FILTERED TO REMOVE SEDIMENT BEFORE IT IS DISCHARGED INTO THE CREEK.
9. THE CONTRACTOR SHALL ADDRESS ALL EROSION CONTROLS COMMENTS/MAINTENANCE REQUESTS BY THE ENGINEER WITH A 24 HOURS NOTIFICATION TIME FRAME FROM THE TIME OF RECEIPT OF COMMENTS BY THE CONTRACTOR.

LEGEND

TEMPORARY EROSION CONTROL SYSTEMS PER STANDARD

-  TEMPORARY EROSION CONTROL SEEDING
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK (ROLLED EXCELSIOR)
-  INLET FLITER
-  SEDIMENT CONTROL, SILT CURTAIN (STREAM VELOCITY=2.84 FPS)

NOTE: STABILIZED CONSTRUCTION ENTRANCES SHALL BE USED. LOCATIONS WILL VARY.

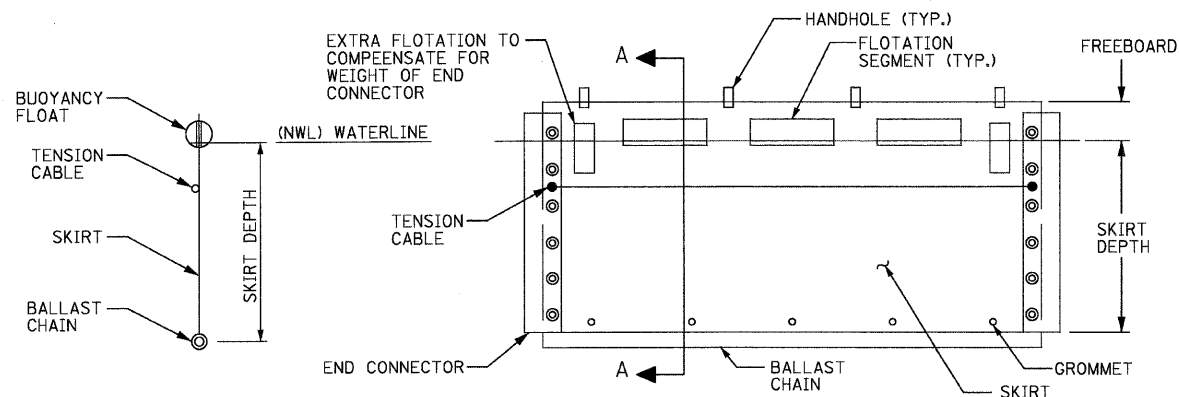


SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.
2. EROSION CONTROL BLANKET SHALL BE INSTALLED TO ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 5H:1V AND IN CRITICAL AREAS (I.E. DETENTION BASIN PERIMETERS, STREAMBANKS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.
3. SILT FENCE SHALL BE INSTALLED FOLLOWING THE COMPLETION AND STABILIZATION OF THE STORMWATER FACILITIES WILL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
4. STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
5. ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY AND CLEANED WHEN NECESSARY.
6. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.

TEMPORARY EROSION CONTROL SEQUENCE OF CONSTRUCTION

1. ESTABLISH TEMPORARY EROSION CONTROL AND ERECT PERIMETER EROSION CONTROL BARRIER AS SHOWN ON THE PLANS PRIOR TO EARTHWORK.
2. IMPLEMENT SEDIMENT AND EROSION CONTROL DEVICES FOR STOCKPILE AREAS REQUIRED.
3. CONSTRUCT CONSTRUCTION STAGING OF PROPOSED DRAINAGE FACILITIES AND INSTALL TEMPORARY DITCH CHECKS IMMEDIATELY AFTER DITCH GRADING IS COMPLETED. MAINTAIN EROSION CONTROL DEVICES AND ELEMENTS FOR THE ENTIRE DURATION OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
4. INSTALL PERMANENT LANDSCAPING IN CONJUNCTION WITH CONSTRUCTION STAGING.
5. CLEAN DRAINAGE FACILITIES AND REMOVE TEMPORARY EROSION CONTROL DEVICES WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED.



SEDIMENT CONTROL, SILT CURTAIN DETAIL

SILT CURTAIN TO BE USED TO CONTROL SILT AND DEBRIS WHEN WORKING IN WATERWAY-SEE SPECIAL PROVISION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 EROSION AND SEDIMENT CONTROL PLAN

RME Rubinos & Messia Engineers, Inc.
 200 S. Michigan Ave, Suite 1500 Chicago IL 60604-2482
 T- 312 870 6900 F- 312 865 1473

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	13

STA.	TO STA.
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

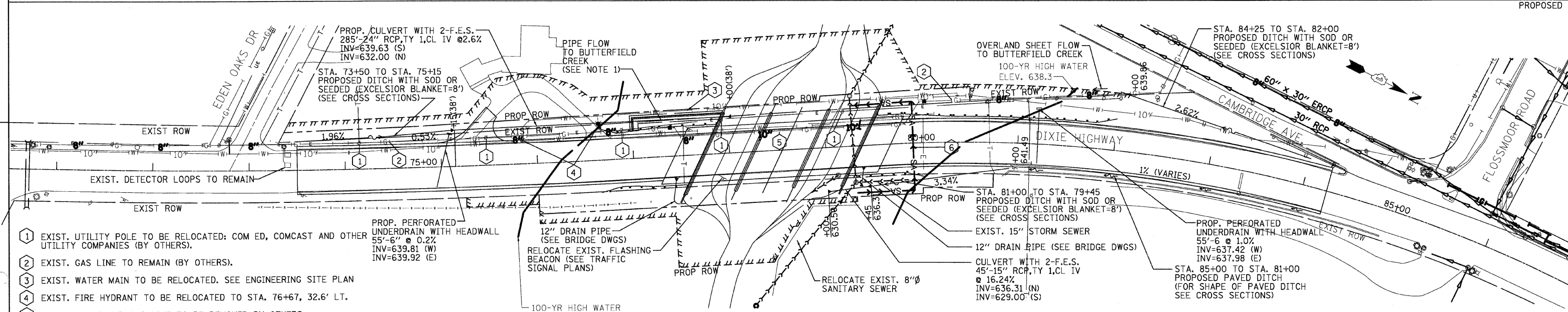
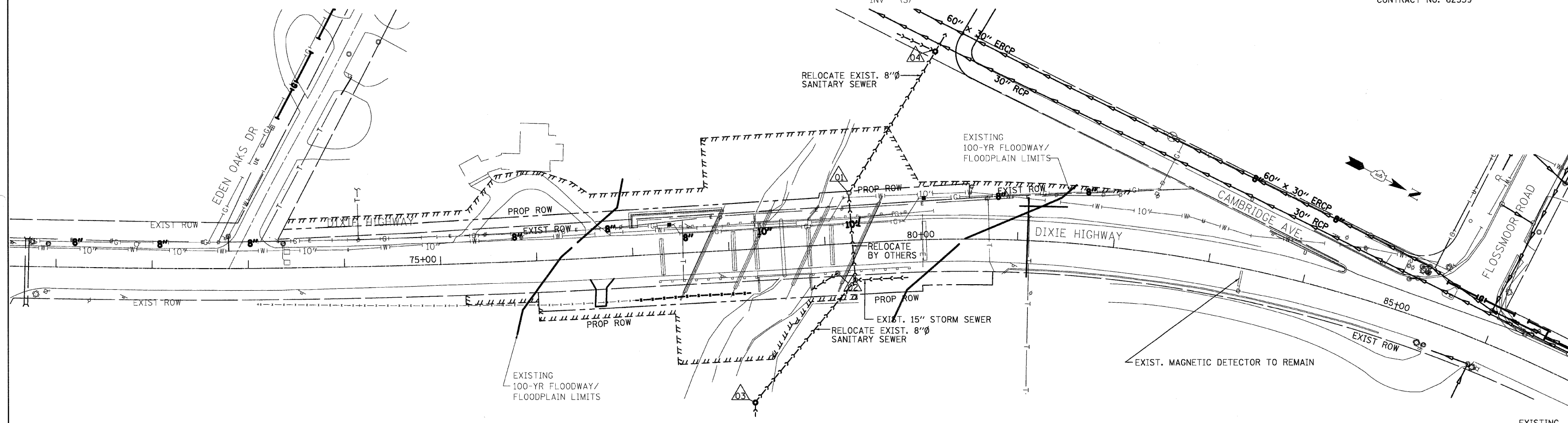
CONTRACT NO. 62539

EXIST. SANITARY MH-1
(TO BE REMOVED BY OTHERS)
RIM 634.89
INV 628.98(E) 10", INV 626.69(W) 10"
(8" ABS SEWER WITH 18" STEEL CASING PIPE
BETWEEN MH-1 & MH-2 PER VILLAGE ATLAS)

EXIST. SANITARY MH-2
(TO BE REMOVED BY OTHERS)
RIM 636.36
INV 631.74(E) 15"
INV 631.79(W) 15"

(LOCATED BY ATLAS, NOT SURVEY)
EXIST. SANITARY MH-3
(TO REMAIN)
RIM 634.9+
INV - (E), INV - (W)

(LOCATED BY ATLAS, NOT SURVEY)
EXIST. SANITARY MH-4
(TO REMAIN)
RIM -
INV - (E)
INV - (W)
INV - (S)



- 1 EXIST. UTILITY POLE TO BE RELOCATED: COM ED, COMCAST AND OTHER UTILITY COMPANIES (BY OTHERS).
- 2 EXIST. GAS LINE TO REMAIN (BY OTHERS).
- 3 EXIST. WATER MAIN TO BE RELOCATED. SEE ENGINEERING SITE PLAN
- 4 EXIST. FIRE HYDRANT TO BE RELOCATED TO STA. 76+67, 32.6' LT.
- 5 EXIST. ABANDONED GAS LINE TO BE REMOVED BY OTHERS.
- 6 EXIST. SANITARY SEWER TO BE RELOCATED. SEE ENGINEERING SITE PLAN

NOTE 1. THE 24" RCP PIPE WILL REQUIRE AN 18" CLEAR DISTANCE TO THE PILES UNDER ABUTMENT. CONTRACTOR TO COORDINATE THIS EFFORT. (SEE BRIDGE DRAWINGS)

2. ALL TREE REMOVAL SHALL BE DONE BEFORE UTILITY POLE RELOCATION.

○ POLE LOCATIONS SHOWN PER COMED PERMIT DRAWING.

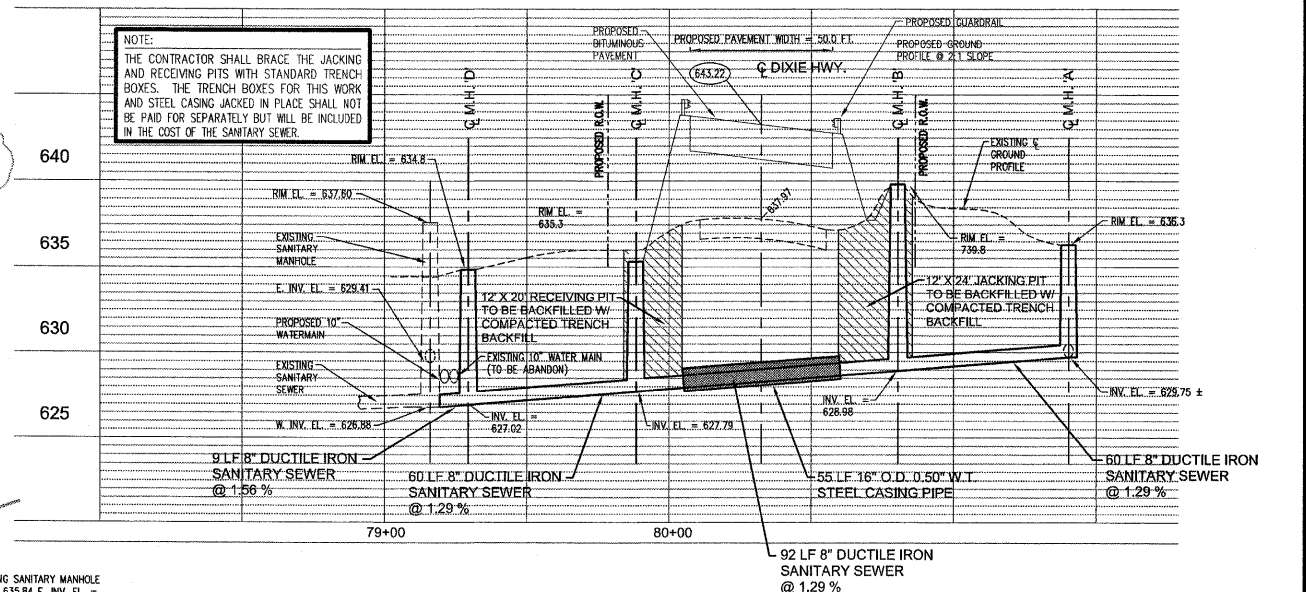
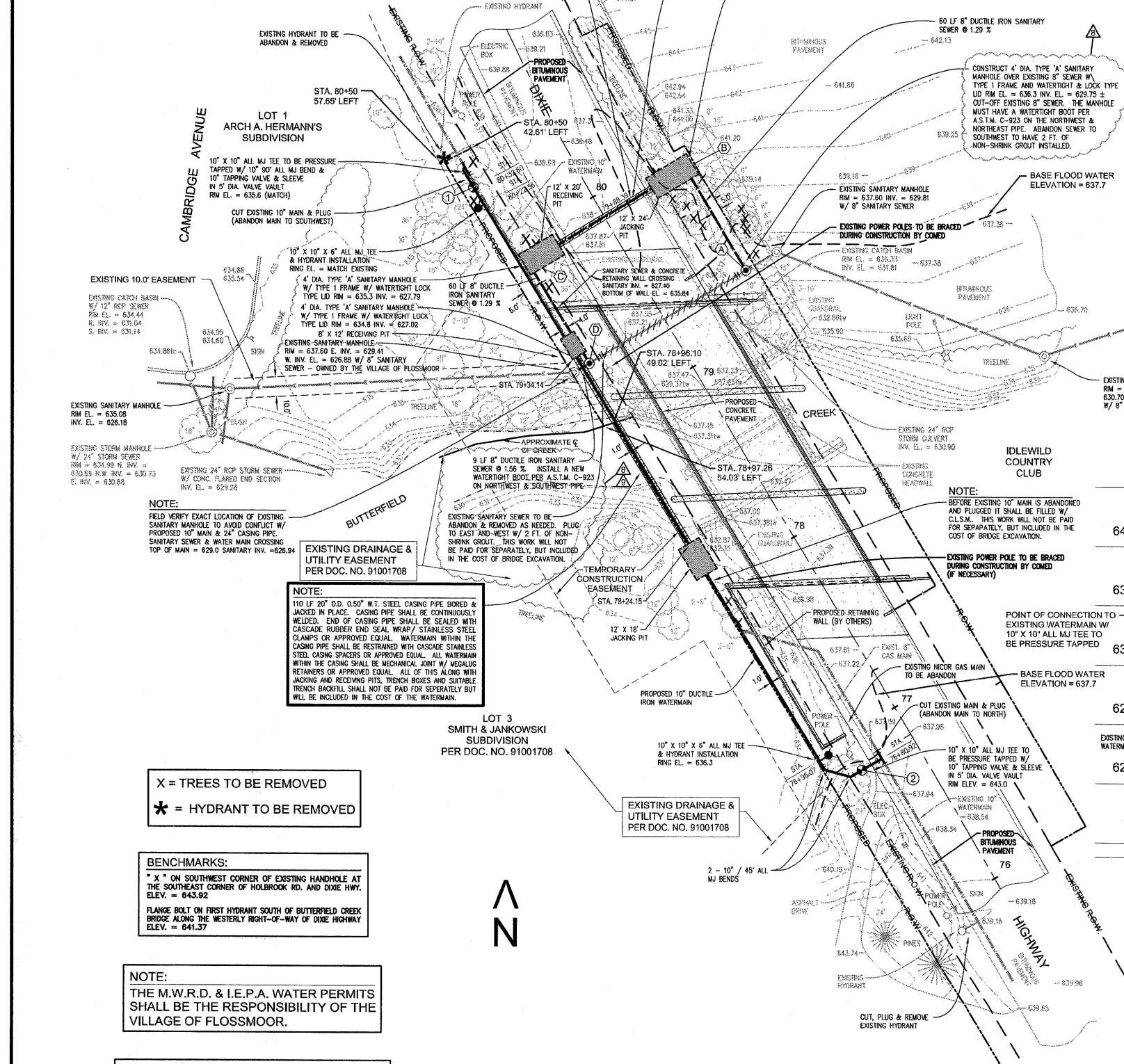
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK
DRAINAGE AND UTILITIES

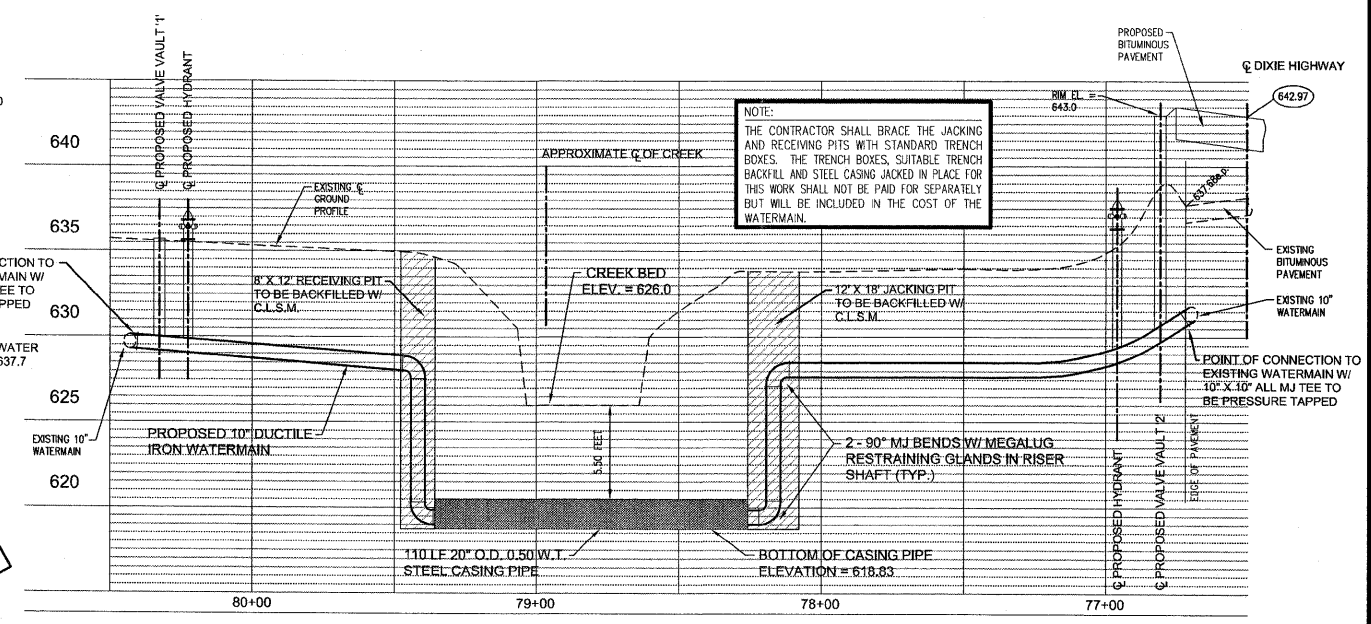
RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Ave. Suite 1500 Chicago IL 60604-2482
T-312 870 8600 F-312 663 1473

SCALE: VERT. 1"=50'
HORIZ. 1"=50'
DATE 6-25-09
DRAWN BY AW
DESIGNED BY AW
CHECKED BY MF

NOTE:
 55 LF 16" O.D. 0.50" W.T. STEEL CASING PIPE BORED & JACKED IN PLACE. CASING PIPE SHALL BE CONTINUOUSLY WELDED. END OF CASING PIPE SHALL BE SEALED WITH CASCADE RUBBER END SEAL WRAP/ STAINLESS STEEL CLAMPS OR APPROVED EQUAL. SAN SEWER WITHIN THE CASING PIPE SHALL BE RESTRAINED WITH CASCADE STAINLESS STEEL CASING SPACERS OR APPROVED EQUAL. ALL SAN SEWER WITHIN THE CASING SHALL BE MECHANICAL JOINT W/ MEGALUG RETAINERS OR APPROVED EQUAL. ALL OF THIS ALONG W/ JACKING AND RECEIVING PITS. TRENCH BOXES AND SUITABLE TRENCH BACKFILL SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE SANITARY SEWER.



PROPOSED SANITARY SEWER PROFILE



PROPOSED WATERMAIN PROFILE

NOTE:
 FIELD VERIFY EXACT LOCATION OF EXISTING SANITARY MANHOLE TO AVOID CONFLICT W/ PROPOSED 10" MAIN & 24" CASING PIPE. SANITARY SEWER & WATER MAIN CROSSING TOP OF MAIN = 629.0 SANITARY INV. = 626.94

NOTE:
 110 LF 20" O.D. 0.50" W.T. STEEL CASING PIPE BORED & JACKED IN PLACE. CASING PIPE SHALL BE CONTINUOUSLY WELDED. END OF CASING PIPE SHALL BE SEALED WITH CASCADE RUBBER END SEAL WRAP/ STAINLESS STEEL CLAMPS OR APPROVED EQUAL. WATERMAIN WITHIN THE CASING PIPE SHALL BE RESTRAINED WITH CASCADE STAINLESS STEEL CASING SPACERS OR APPROVED EQUAL. ALL WATERMAIN WITHIN THE CASING SHALL BE MECHANICAL JOINT W/ MEGALUG RETAINERS OR APPROVED EQUAL. ALL OF THIS ALONG WITH JACKING AND RECEIVING PITS. TRENCH BOXES AND SUITABLE TRENCH BACKFILL SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE WATERMAIN.

NOTE:
 BEFORE EXISTING 10" MAIN IS ABANDONED AND PLUGGED IT SHALL BE FILLED W/ C.L.S.M. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF BRIDGE EXCAVATION.

NOTE:
 THE CONTRACTOR SHALL BRACE THE JACKING AND RECEIVING PITS WITH STANDARD TRENCH BOXES. THE TRENCH BOXES, SUITABLE TRENCH BACKFILL AND STEEL CASING JACKED IN PLACE FOR THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE WATERMAIN.

X = TREES TO BE REMOVED
 * = HYDRANT TO BE REMOVED

BENCHMARKS:
 * X * ON SOUTHWEST CORNER OF EXISTING HANDHOLE AT THE SOUTHWEST CORNER OF HOLBROOK RD. AND DIXIE HWY. ELEV. = 643.92
 FLANGE BOLT ON FIRST HYDRANT SOUTH OF BUTTERFIELD CREEK BRIDGE ALONG THE WESTERLY RIGHT-OF-WAY OF DIXIE HIGHWAY ELEV. = 641.37

NOTE:
 THE M.W.R.D. & I.E.P.A. WATER PERMITS SHALL BE THE RESPONSIBILITY OF THE VILLAGE OF FLOSSMOOR.

PROPOSED UTILITIES LEGEND
 (A) = PROPOSED SANITARY MANHOLE IDENTIFICATION LETTER
 (1) = PROPOSED VALVE VAULT IDENTIFICATION NUMBER

NO.	DATE	BY	DESCRIPTION
7	11/12/08	EGH	PER M.W.R.D. REVIEW
8	11/24/08	EGH	PER M.W.R.D. REVIEW
9	11/24/08	JJF	PER M.W.R.D. REVIEW
10	12/01/08	EGH	PER M.W.R.D. REVIEW
11	2/05/09	EGH	FOR CONSTRUCTION ISSUE
12	7/08/09	EGH	FOR CONSTRUCTION ISSUE

DESIGNED BY: RWM
 DRAWN BY: EGH
 CHECKED BY: RWM

Rev. 9/25/2009

TECH 3 CONSULTING GROUP, INC. ASSUMES NO LIABILITY FOR THE CORRECTNESS OR ACCURACY OF THESE PLANS UNLESS AN ORIGINAL SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY THE CORPORATION ARE AFFIXED TO THESE PLANS.
 DATED THIS 5th DAY OF FEBRUARY, 2009
 LICENSE EXPIRES 12/31/2009

ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-002235

TECH 3 Consulting Group, Inc.
 ENGINEERS SURVEYORS
 737 West Exchange St. Crete, IL 60417
 ph 708.672.4994 fax 708.672.3739

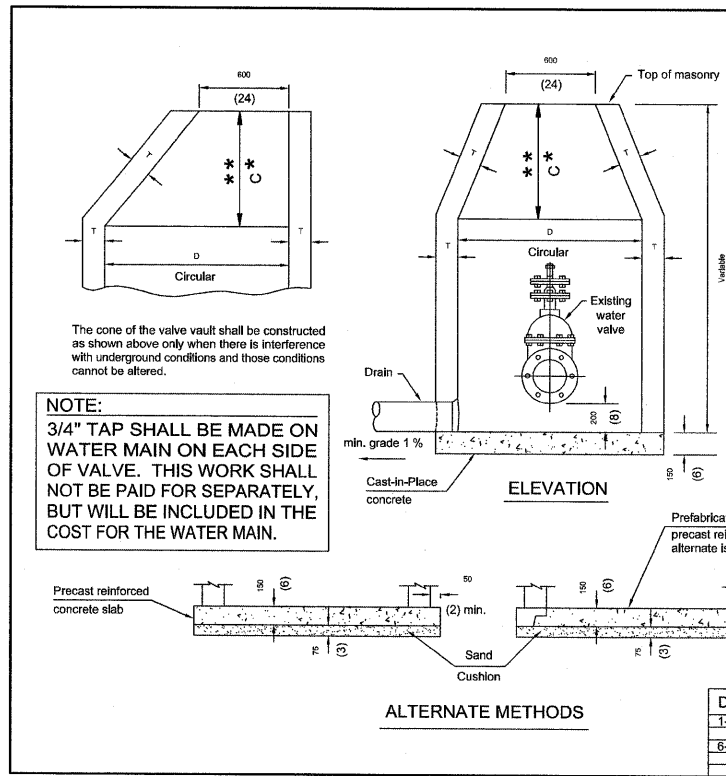


Village of Flossmoor
 Flossmoor, Illinois

**IDOT DIXIE BRIDGE RECONSTRUCTION
 UTILITY LOCATION
 ENGINEERING SITE PLAN**

DATE: JANUARY 16, 2008 SCALE: 1" = 30' JOB NO. 06702

C-1



ALTERNATE MATERIALS FOR WALLS	D	C	T
Concrete Masonry Unit	1.2 m (4'-0")	750 (30)	125 (5)
	1.5 m (5'-0")	1,15 m (3'-9")	125 (5)
Brick Masonry	1.2 m (4'-0")	750 (30)	200 (8)
	1.5 m (5'-0")	1,15 m (3'-9")	200 (8)
Precast Reinforced Concrete Section	1.2 m (4'-0")	750 (30)	100 (4)
	1.5 m (5'-0")	1,15 m (3'-9")	100 (4)
Cast-in-Place Concrete	1.2 m (4'-0")	750 (30)	150 (6)
	1.5 m (5'-0")	1,15 m (3'-9")	150 (6)

DIAMETER OF WATER MAIN	D
200 (8) and under	1.2 m (4'-0")
250 (10) and over	1.5 m (5'-0")

NOTE:
THE VALVE VAULT TO BE CONSTRUCTED SURROUNDING THE TWELVE INCH (12") VALVE SHALL HAVE FIVE FOOT (5') ID AND SHALL HAVE A ONE (1) PIECE FLAT SLAB ON TOP INSTEAD OF A CONE WITH OPENING CENTERED ON TURNING NUT OF THE VALVE. THAT VALVE FRAME AND LIDS ARE TO BE NEEHAH R-1712 OR APPROVED EQUAL W/ THE WORD "WATER" CAST INTO THE SELF-SEALED LIDS.

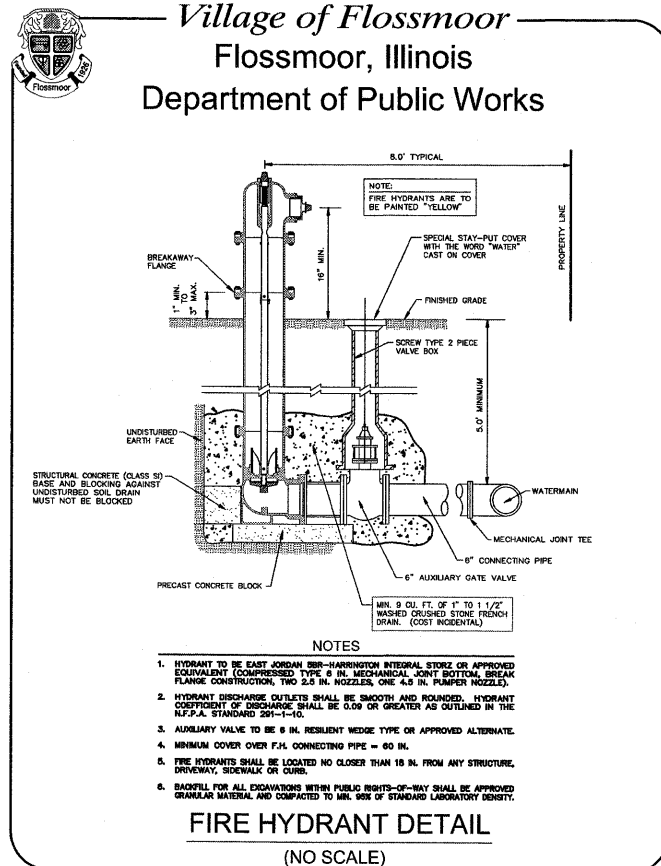
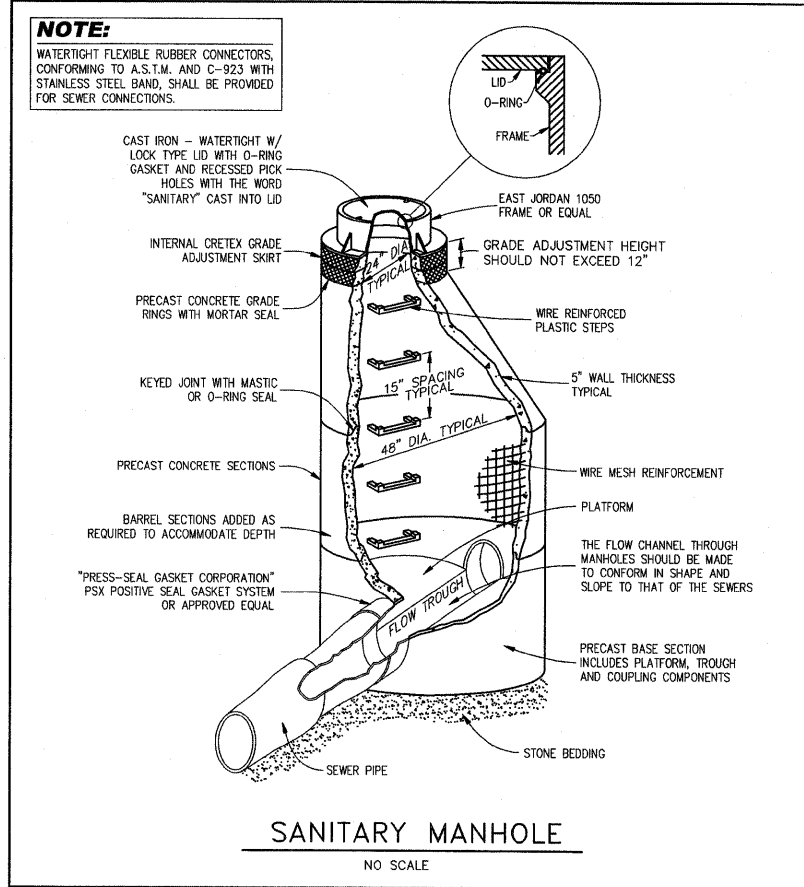
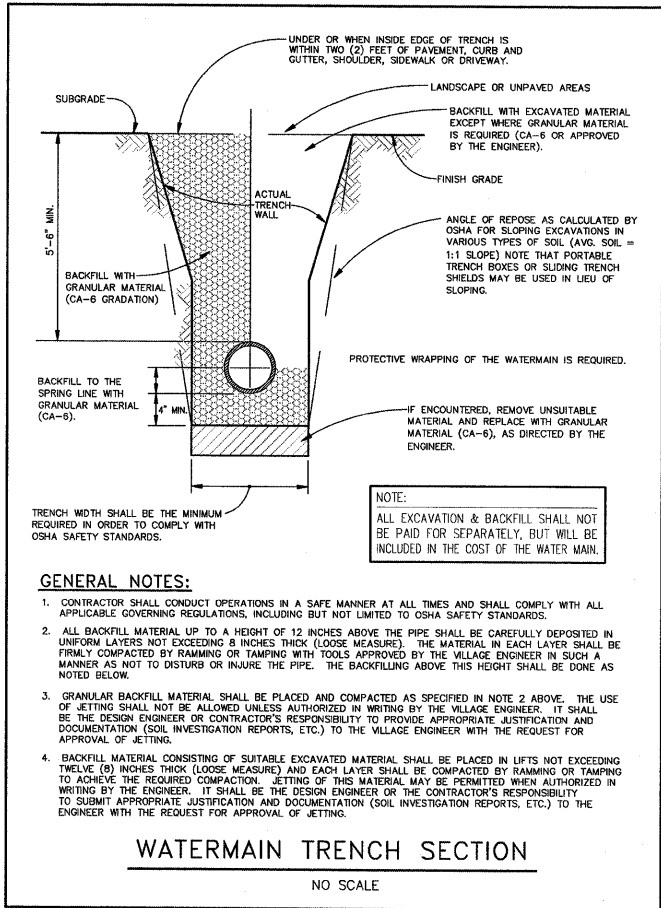
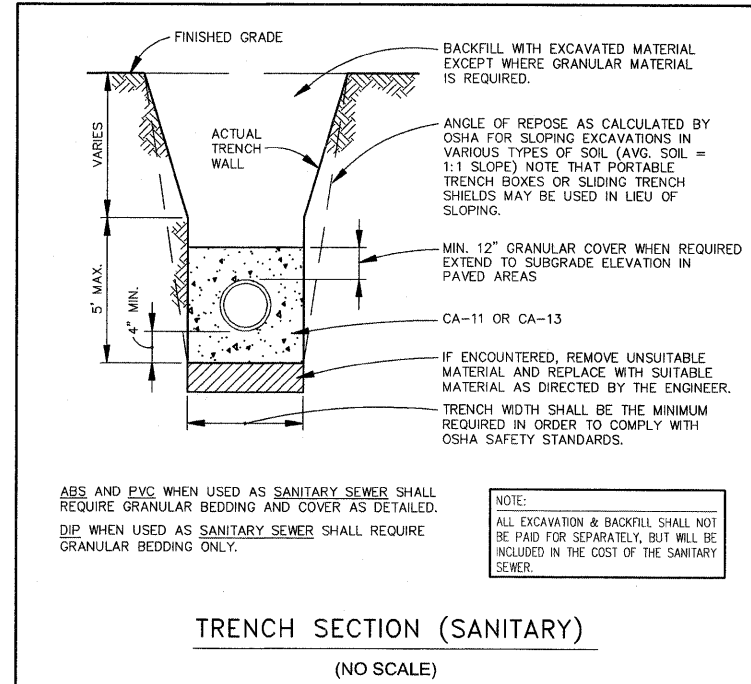
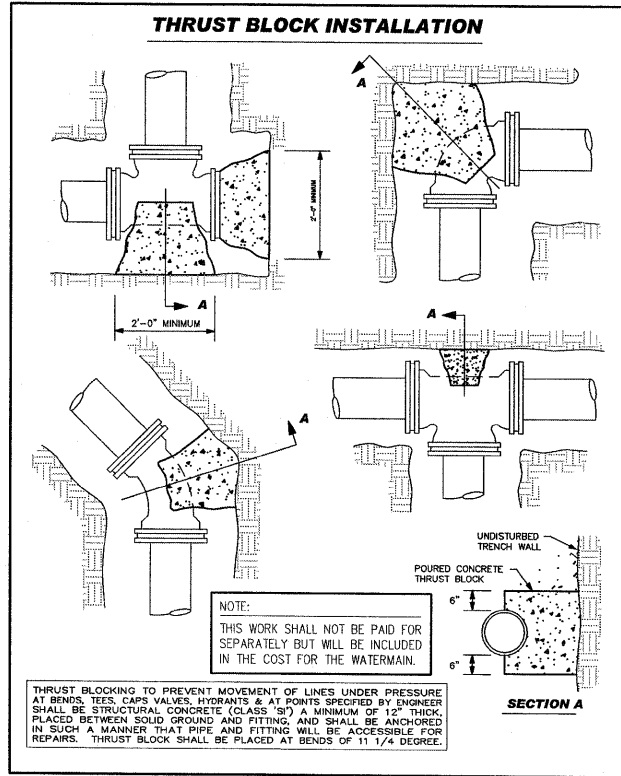
GENERAL NOTES

- * Dimension "C" for Precast Reinforced Concrete Section may vary from the dimension given to plus 150 mm (6").
- ** See Standard I.D.O.T. 602601 for optional Precast Reinforced Concrete Flat Top Slab.

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

DATE	REVISIONS
1-1-97	Renum. Standard 1526-8
6-15-94	Moved G.N. to Specs. Added Metric.

VALVE VAULT TYPE A



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DATED THIS 5th DAY OF JANUARY, 2009

LICENSE EXP. 12/31/2009

Rev 9/25/2009

NO.	DATE	BY	DESCRIPTION
11	2/05/09	EGH	FOR CONSTRUCTION ISSUE

NO.	DATE	BY	DESCRIPTION
3	1/16/08	EGH	PER I.D.O.T. REVIEW
4	3/21/08	EGH	PER I.D.O.T. REVIEW
5	4/29/08	EGH	PER I.D.O.T. REVIEW
6	9/01/08	EGH	PER I.D.O.T. REVIEW
7	11/12/08	EGH	PER M.W.R.D. REVIEW

DESIGNED BY: RWM
DRAWN BY: EGH
CHECKED BY: RWM

ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-002235

TECH 3 Consulting Group, Inc.
ENGINEERS SURVEYORS
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ph 708.672.4994 fax 708.672.3739

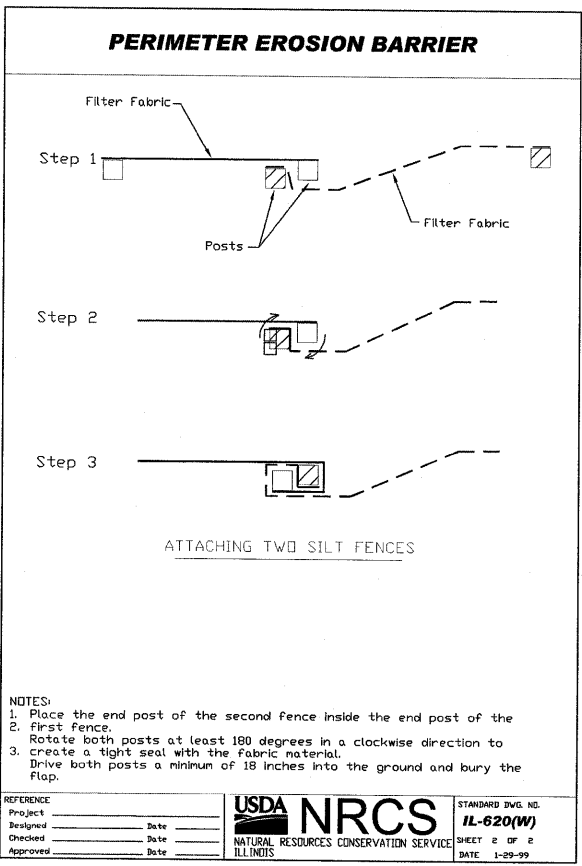
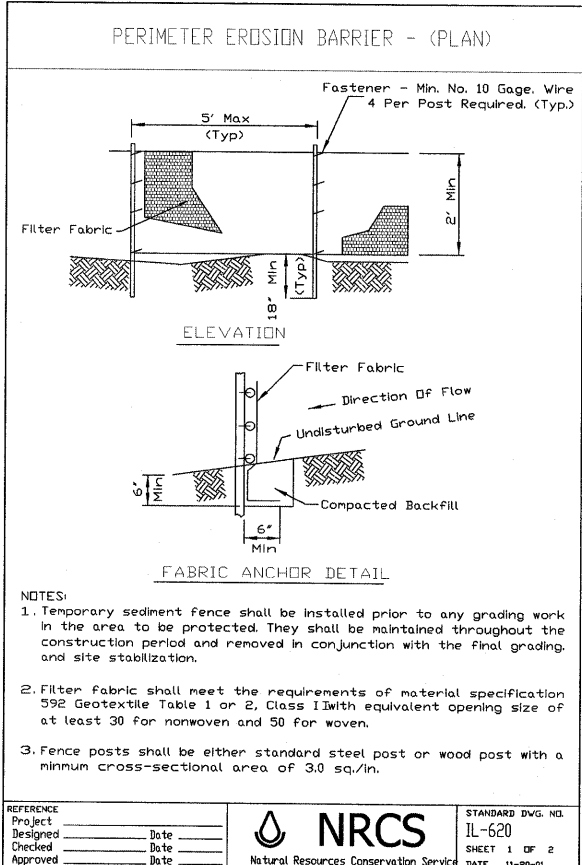


Village of Flossmoor
Flossmoor, Illinois

IDOT DIXIE BRIDGE RECONSTRUCTION
UTILITY LOCATION
CONSTRUCTION DETAILS

DATE: JANUARY 16, 2009 SCALE: AS NOTED JOB NO. 06702

C-2



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
LOCAL SEWER SYSTEMS SECTION
MINIMUM TYPICAL GENERAL NOTES

TYPICAL GENERAL NOTES	COMMENTS
1. The MWRD Local Sewer Systems Section Field Office must be notified at least two (2) working days prior to the commencement of any work (call 708-588-4055).	Required in all cases.
2. Elevation datum is <u>U.S.G.S.</u> Conversion equation _____	State if OGD or USGS; or provide conversion equation if other datum is used.
3. All floor drains shall discharge to the sanitary sewer system.	If none, state "no floor drains". (THERE ARE NO FLOOR DRAINS.)
4. All downspouts and footing drains shall discharge to the storm sewer system.	If none, state "no footing drains and downspouts". (THERE ARE NO FOOTING DRAINS.)
5. All sanitary sewer pipe materials and joints (and storm sewer pipe materials and joints in a combined sewer area) shall conform to:	Required in all cases. Specify pipe material and joint specifications. If project is in a combined sewer area, include storm sewer.
Pipe Material Spec.	Joint Spec.
Wireless Clay Pipe VCP C-700 VCP (No-Bell) C-700 Collar	C-425 C-425 D-1784
Concrete Pipe C-14 RCP C-715 ACP C-428	C-443 C-443 D-1869
ABS Sewer Pipe Solid Wall 6" dia. SDR 23.5 ABS D-2751	D-2751 D-2751
ABS Composite/Truss Pipe 6"-15" dia. ABS D-2680	D-2680 D-2680
PVC Gravity Sewer Pipe 6"-15" dia. SDR 26 D-3034	D-3212 or D-2855 D-3212 or D-2855
18"-27" dia. P/d=46 F-679	D-3212 or D-2855 D-2855
CISP A-74 DIP A-21.51	C-564 A-21.11

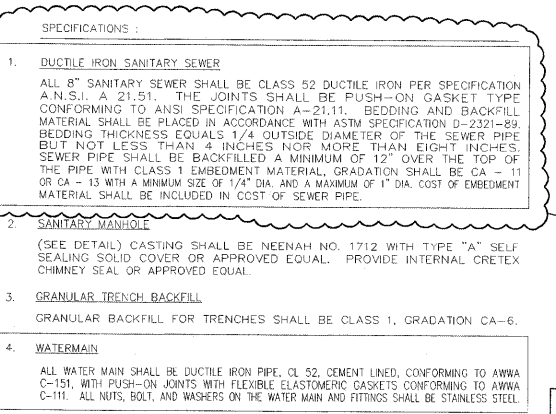
Note: The District has approved less common pipe materials on a qualified basis in addition to those above. Please contact the District if considering pipe not listed above.

1 of 2
LBS/Rev. Jan. 2003

6. All sanitary sewer construction (and storm sewer construction in combined sewer areas), requires stone bedding with stone 1/4" to 1/2" in size, with minimum bedding thickness equal to 1/4 the outside diameter of the sewer pipe, but not less than four (4) inches nor more than eight (8) inches. Material shall be CA-11 or CA-13 and shall be extended at least 12" above the top of the pipe when using PVC.	- Can be omitted if IDOT equiv. CA 11 or 13 bedding detail is provided. - Alternately, if a detail is submitted, the general note should make a reference to that detail. - Not required for ductile iron pipe. - Can also be concrete embedment.
7. "Band Seal" or similar flexible-type couplings shall be used in the connection of sewer pipes of dissimilar materials.	- Required in all cases. - Alternately, if a detail is provided, the general note should make a reference to that detail.
8. When connecting to an existing sewer main by means other than an existing wye, tee, or an existing manhole, one of the following methods shall be used: 1. Circular saw-cut of sewer main by proper tools (Shearer-Tap machine or similar) and proper installation of hub-wye saddle or hub-tee saddle. 2. Remove an entire section of pipe (breaking only the top of one bell) and replace with a wye or tee branch section. 3. With pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting, using "Band Seal" or similar couplings to hold it firmly in place.	- Required in all cases. - Alternately, if a detail is provided, the general note should make a reference to that detail.
9. Whenever a sanitary/combined sewer crosses under a watermain, the minimum vertical distance from the top of the sewer to the bottom of the watermain shall be 18 inches. Furthermore, a minimum horizontal distance of 10 feet between sanitary/combined sewers and watermains shall be maintained unless the sewer is laid in a separate trench, keeping a minimum 18" vertical separation; or the sewer is laid in the same trench with the watermain located at the opposite side on a bench of undisturbed earth, keeping a minimum 18" vertical separation. <u>If either the vertical or horizontal distances described above can not be maintained, or the sewer crosses above the watermain, the sewer shall be constructed to watermain standards.</u>	- Required in all cases. - Alternately, if a detail is provided, the general note should make a reference to that detail.
10. All existing septic systems shall be abandoned. Abandoned tanks shall be filled with granular material or cemented.	- Use when existing septic system is to be abandoned.
11. All sanitary manholes, (and storm manholes in combined sewer areas), shall have a minimum inside diameter of 48 inches, and shall be cast in place or pre-cast reinforced concrete.	- Required in all cases. - Alternately, if a detail is provided, the general note should make a reference to that detail.

2 of 2

- GENERAL NOTES:**
- ALL CONSTRUCTION SHALL CONFORM TO THE ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" IN ITS LATEST EDITION AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" IN ITS LATEST EDITION.
 - THE VILLAGE OF FLOSSMOOR DIRECTOR OF PUBLIC WORKS 708/957-4100, AND TECH 3 CONSULTING GROUP, INC. 708/672-4994 AND MWRD FIELD OFFICE 708/588-4055 SHALL BE NOTIFIED 2 WORKING DAYS PRIOR TO COMMENCING OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THESE FACILITIES. CALL J.U.L.I.E. 800/892-0123.
 - ALL SEWER, INCLUDING BUILDING STUBS, SHALL HAVE 5" MINIMUM CRUSHED STONE BEDDING. THE GRADATION SHALL BE CA-11.
 - ALL PROPOSED SANITARY MANHOLES ARE TO HAVE PRECAST SECTIONS AND BOTTOM ADJUSTMENT RINGS TO BE PRECAST AND LIMITED TO 1'-0".
 - HORIZONTAL SEPARATION - WATERMANS AND SEWERS**
 - WATERMANS SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
 - WATERMANS MAY BE LOCATED CLOSER THAN 10' TO A SEWER LINE WHEN:
 - LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10' AND
 - THE WATERMAIN INVERT IS AT LEAST 18" ABOVE THE CROWN OF THE SEWER; AND
 - THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
 - WHEN IT IS IMPOSSIBLE TO MEET (1) OR (2) ABOVE, BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING. (INCIDENTAL TO SANITARY SEWER UNIT PRICE).
 - VERTICAL SEPARATION - WATERMAIN AND SEWERS**
 - A WATERMAIN SHALL BE SEPARATED FROM A SEWER SO THAT THE INVERT IS A MINIMUM OF 18" ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMANS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN 10' HORIZONTALLY OF ANY SEWER OR DRAIN CROSS. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
 - BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN:
 - IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (1) ABOVE; OR
 - THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
 - A VERTICAL SEPARATION OF 18" BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER AND DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN, AS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER.
 - CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST 10'.
 - ALL MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS SHALL INCLUDE A CAST IRON FRAME AND LID AS SPECIFIED ON PLANS.
 - ALL SEWER CONNECTIONS ARE TO BE MADE BY ONE OF THE FOLLOWING METHODS: (A.) CONNECT EXISTING STUB. (B.) USE SHEARER TAP MACHINE AND USE WYE SADDLE.
 - BAND SEAL OR SIMILAR FLEXIBLE TYPE COUPLINGS SHALL BE USED IN CONNECTION OF SEWER PIPE OR DISSIMILAR MATERIALS.
 - ALL WATERMANS SHALL HAVE AT LEAST 5'-6" OF COVER.
 - ALL WATERMANS SHALL BE HYDROSTATICALLY TESTED AS PER VILLAGE OF FLOSSMOOR SPECIFICATIONS. THE VILLAGE ENGINEER SHALL BE GIVEN 2 WORKING DAYS PRIOR TO STARTING OF THE 150 PSI PRESSURE TEST. ENGINEER SHALL BE PRESENT FOR ALL TESTING. TWO COPIES OF APPROVED CHLORINATION REPORT SHALL BE GIVEN TO THE DIRECTOR OF PUBLIC WORKS.
 - ALL WATERMAIN FITTINGS SHALL BE MECHANICAL JOINTS WITH RETAINER GLANDS. ALL FITTINGS SHALL BE MANUFACTURED IN THE U.S.A. * THE RETAINER GLAND IS TO BE MANUFACTURED BY E.B.A.A. IRON SALES, INC. OF EASTLAND, TEXAS AND KNOWN AS THEIR 1112 SERIES OR APPROVED EQUAL.
 - ALL ELEVATIONS ARE U.S.G.S. DATUM. SUBTRACT 579.48 TO OBTAIN CHICAGO CITY DATUM.
 - TWO (2) THREE-FOURTHS INCH (3/4") SAMPLING TAPS SHALL BE INSTALLED ON THE WATERMAIN IN EACH VALVE VAULT; ON TAP ON EACH SIDE OF THE VALVE HEREOF.
 - SANITARY SEWERS SHALL BE CLEANED IMMEDIATELY PRIOR TO INSPECTION BY CLOSED CIRCUIT TELEVISION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED FOR THE COST OF THE SANITARY SEWER.
 - SANITARY SEWERS SHALL BE INSPECTED BY CLOSED CIRCUIT TELEVISION. TWO COPIES OF THE COLORED VIDEO TAPES WITH AUDIO DESCRIPTION ALONG WITH TWO COPIES OF THE TYPED REPORT SHALL BE GIVEN TO THE VILLAGE ENGINEER FOR REVIEW PRIOR TO THE APPROVAL OF THE INSTALLED SEWER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE SANITARY SEWER.
 - THE USE OF RETAINER GLANDS ON THE BELLS OF ALL FITTINGS DOES NOT NEGATE THE REQUIREMENTS OF THE INSTALLATION OF CONCRETE THRUST BLOCKS AT ALL FITTINGS.
 - ALL FIRE HYDRANTS SHALL BE BAGGED IMMEDIATELY AFTER INSTALLATION. THE BAG WILL BE REMOVED AFTER THE WATERMAIN HAS BEEN PRESSURE TESTED AND CHLORINATED.
 - ALL DUCTILE IRON SANITARY SEWERS SHALL BE REQUIRED TO CONFORM TO THE TESTING AND ACCEPTANCE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS SECTION 31-1.11b OPTION 3 AND 4. "EXTRUDED OR AIR UNDER PRESSURE" AND ALL PVC SEWER SHALL BE REQUIRED TO CONFORM TO THE TESTING AND ACCEPTANCE FOR "DEFLECTION FOR FLEXIBLE THERMOPLASTIC PIPE". THE COST OF THE TESTING SHALL BE CONSIDERED INCIDENTAL TO THE SEWER.



STANDARD SYMBOL LEGEND

EXISTING		PROPOSED
— W —	WATERMAIN	— W —
— W —	WATERMAIN AND VALVE BOX	— W —
— W —	HYDRANT INSTALLATION	— W —
— W —	WATERMAIN AND VALVE PIT	— W —
— W —	WATER SERVICE W/ "B" BOX	— W —
— W —	SANITARY SEWER AND MANHOLE	— W —
— W —	SANITARY SEWER AND DROP MANHOLE	— W —
— W —	INLET AND STORM SEWER	— W —
— W —	CATCH BASIN AND STORM SEWER	— W —
— W —	DRAINAGE SWALE	— W —
— W —	SPOT ELEVATION	— W —
— W —	DIRECTION OF OVERLAND DRAINAGE	— W —
— W —	FENCE	— W —
— W —	PROPERTY LINE	— W —
— W —	RIGHT-OF-WAY LINE	— W —
— W —	SLOPE	— W —
— W —	STREET LIGHT	— W —
— W —	PARKING LIGHT	— W —
— W —	I.B.T. BURIED CABLE	— W —
— W —	GAS LINE	— W —
— W —	POWER LINE POLE	— W —
— W —	ELECTRICAL TRANSFORMER	— W —
— W —	ELECTRICAL PEDESTAL	— W —

REVISIONS

NO.	DATE	BY	DESCRIPTION
10	12/01/08	EGH	PER M.W.R.D. REVIEW FOR CONSTRUCTION ISSUE
11	2/05/09	EGH	
3	1/16/08	BY	
4	3/21/08	EGH	PER I.D.O.T. REVIEW
5	4/29/08	EGH	PER I.D.O.T. REVIEW
6	9/01/08	EGH	PER I.D.O.T. REVIEW
7	11/12/08	EGH	PER M.W.R.D. REVIEW
8	11/24/08	EGH	PER M.W.R.D. REVIEW



C-3

TECH 3 CONSULTING GROUP, INC. ASSUMES NO LIABILITY FOR THE CORRECTNESS OR ACCURACY OF THESE PLANS UNLESS AN ORIGINAL SIGNATURE AND SEAL OF A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY THE CORPORATION ARE AFFIXED TO THESE PLANS.

DATED THIS 5th DAY OF FEBRUARY, 2009

LICENSE EXPIRES NOVEMBER 30, 2009

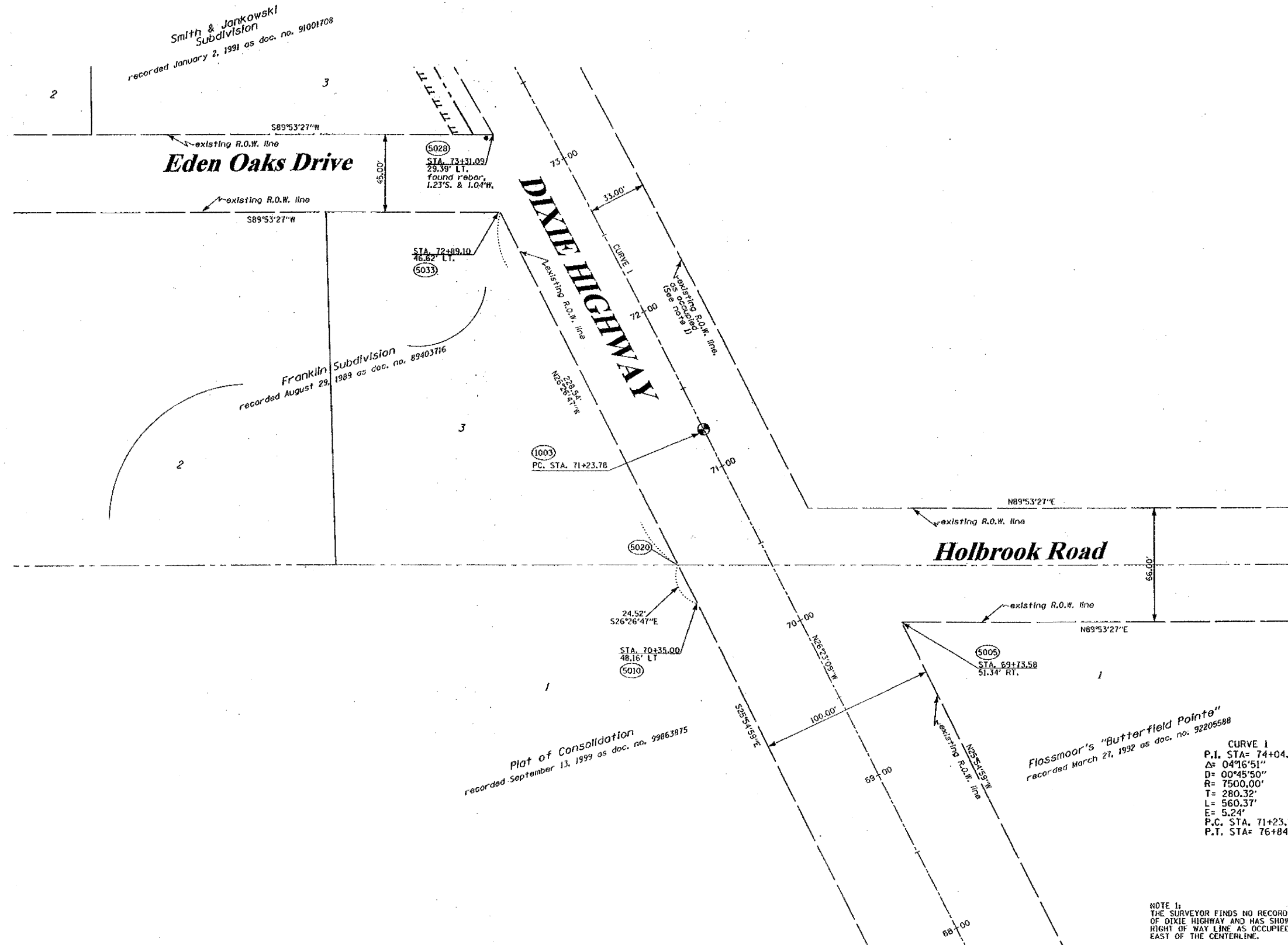
Rev. 9/25/2009

PART OF THE NE 1/4 OF SECTION 7, T35N, R14E OF THE 3rd PM, BLOOM TOWNSHIP, COOK COUNTY, ILLINOIS.

SEE SHEET 3 FOR CONTINUATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DIXIE HIGHWAY	BUTTERFIELD CREEK	COOK	67	17
STATION 68+00		TO STATION 73+00		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83.



LEGEND

---	EXISTING CENTERLINE
---	PROPOSED CENTERLINE
---	EXISTING RIGHT OF WAY LINE
---	PROPOSED RIGHT OF WAY LINE
---	PROPOSED EASEMENT LINE
---	SECTION LINE
---	QUARTER SECTION LINE
---	QUARTER QUARTER SECTION LINE
---	PROPERTY (DEED) LINE
---	APL
---	APPARENT PROPERTY LINE
---	MEASURED DIMENSION
---	COMPUTED DIMENSION
---	RECORDED DIMENSION
---	FOUND IRON PIPE OR IRON ROD
---	SET 1/4 INCH IRON ROD
---	PERMANENT SURVEY MONUMENT
---	I.O.T. STD. 2135
---	(TO BE SET BY OTHERS)
---	CUT CROSS FOUND OR SET
---	SAME OWNERSHIP
---	EXISTING TELEPHONE SPLICE BOX
---	EXISTING STREET LIGHT
---	EXISTING MAIL BOX
---	EXISTING WELL HEAD
---	STAKING OF PROPOSED RIGHT OF WAY, SET 3/4 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
---	STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, SET 3/4 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
---	SECTION CORNER
---	QUARTER SECTION CORNER

STATE OF ILLINOIS)
 COUNTY OF WILL) SS

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 7, TOWNSHIP 35 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY. THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AND SIGNED AT ILLINOIS THIS 23RD DAY OF OCTOBER, 2006

Ronald F. Hodgen
 RONALD F. HODGEN P.L.S. NO. 2630
 MY LICENSE EXPIRES 11-30-2006



CURVE 1
 P.I. STA= 74+04.10
 Δ= 04°16'51"
 D= 00°45'50"
 R= 7500.00'
 T= 280.32'
 L= 560.37'
 E= 5.24'
 P.C. STA= 71+23.78
 P.T. STA= 76+84.15

NOTE 1:
 THE SURVEYOR FINDS NO RECORDED DEDICATION OF DIXIE HIGHWAY AND HAS SHOWN THE EAST RIGHT OF WAY LINE AS OCCUPIED TO BE 33 FEET EAST OF THE CENTERLINE.

RECEIVED
 OCT 31 2006
 PLATS & LEGALS

RUETTIGER, TONELLI & ASSOCIATES, INC.
 Land Surveyors/Engineers/Planners/Landscape Architects/C.I.S. Consultants
 2124 OWEDA STREET SUITE 100 | 2603 SOUTH WASHINGTON STREET SUITE 170
 JOLIET, ILLINOIS 60435 | SUPERVILLE, ILLINOIS 60555
 PH. (815) 744-6600 FAX (815) 744-0101 | PH. (630) 420-1740 FAX (630) 420-1741

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PLAT OF HIGHWAYS
 DIXIE HIGHWAY
 COOK COUNTY
 JOB NO. R-90-014-03
 STATION 68+00 TO STATION 73+00

SCALE: 1"=30' SHEET 2 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS/DISTRICT 1
 201 WEST CENTER COURT
 SCHAMBURG, ILLINOIS 60196

PART OF THE NE 1/4 OF SECTION 7, T35N, R14E OF THE 3rd PM, BLOOM TOWNSHIP, COOK COUNTY, ILLINOIS.

CONTRACT NUMBER:				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DIXIE HWY	BUTTERFIELD CREEK	COOK	69	18
STATION 73+00 TO STATION 79+00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

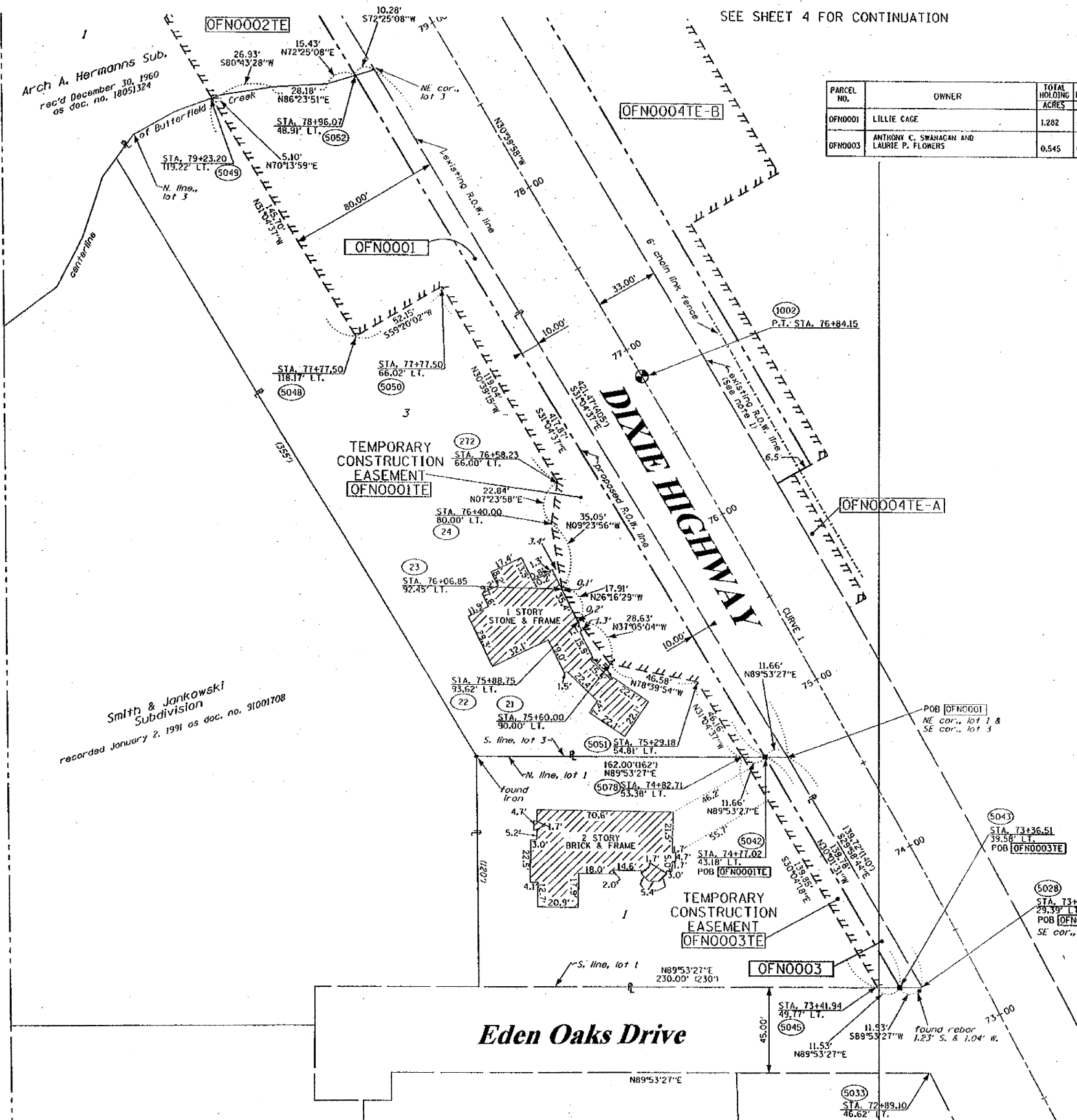
SEE SHEET 4 FOR CONTINUATION

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	R.O.W. REQUIRED ACRES	PREVIOUSLY DEDICATED ACRES	REMAINDER ACRES	EASEMENTS TEMP. ACRES	EASEMENTS PERM. ACRES	EASEMENT PURPOSE	PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
OFN0001	LILLIE CAGE	1.282	0.096	N/A	1.186	0.382	N/A	CONSTR.	32-07-200-067	
OFN0003	ANTHONY C. SWANAGAN AND LAURIE P. FLOWERS	0.545	0.032	N/A	0.513	0.032	N/A	CONSTR.	32-07-200-065	

BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, MAD 83.

LEGEND

- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PROPERTY IDEED LINE
- APPROXIMATE PROPERTY LINE
- 121.45 MEASURED DIMENSION
- 123.45 (COMP) COMPUTED DIMENSION
- (123.45) RECORDED DIMENSION
- FOUND IRON PIPE OR IRON ROD
- SET 3/8 INCH IRON ROD
- PERMANENT SURVEY MONUMENT
- I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- EXISTING TELEPHONE SPLICE BOX
- EXISTING STREET LIGHT
- EXISTING MAIL BOX
- EXISTING WELL HEAD
- STAKING OF PROPOSED RIGHT OF WAY. SET 3/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. SET 3/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.



Arch A. Hermanns Sub.
rec'd December 30, 1960
as doc. no. 18051324

Smith & Jankowski
Subdivision
recorded January 2, 1991 as doc. no. 91001708

SEE SHEET 2 FOR CONTINUATION

NOTE 1:
THE SURVEYOR FINDS NO RECORDED DEDICATION OF DIXIE HIGHWAY AND HAS SHOWN THE EAST RIGHT OF WAY LINE AS OCCUPIED TO BE 33 FEET EAST OF THE CENTERLINE.

REVISED 10-31-06 REVISED TO LINETYPE
REVISED 8-15-06 / REVISED OWNER, 0001
REVISED 8-11-06 / ADDED OWNER TO PARCEL 0003
REVISED 6-08-2006

STATE OF ILLINOIS)
COUNTY OF WILL)

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 7, TOWNSHIP 35 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED 19th DAY OF OCTOBER, 2006

Ronald F. Hodgen
RONALD F. HODGEN P.L.S. NO. 2630
MY LICENSE EXPIRES 11-30-2006

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/C.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101 PH. (815) 420-1760 FAX (815) 420-7741

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
DIXIE HIGHWAY
COOK COUNTY
JOB NO. R-90-014-03
STATION 73+00 TO STATION 79+00

RECEIVED
OCT 31 2006
PLATS & LEGALS

SCALE: 1"=30' SHEET 3 OF 6

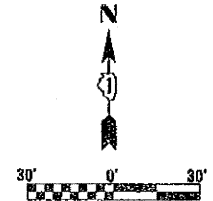
ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT
SCHMIDGALL, ILLINOIS 60196

SHEET 1 OF 6 IS A COVER SHEET AND IS NOT RECORDED
RT&A 2005221DIXIE HWY

PART OF THE NE 1/4 OF SECTION 7, T35N, R14E OF THE 3rd PM, BLOOM TOWNSHIP, COOK COUNTY, ILLINOIS.

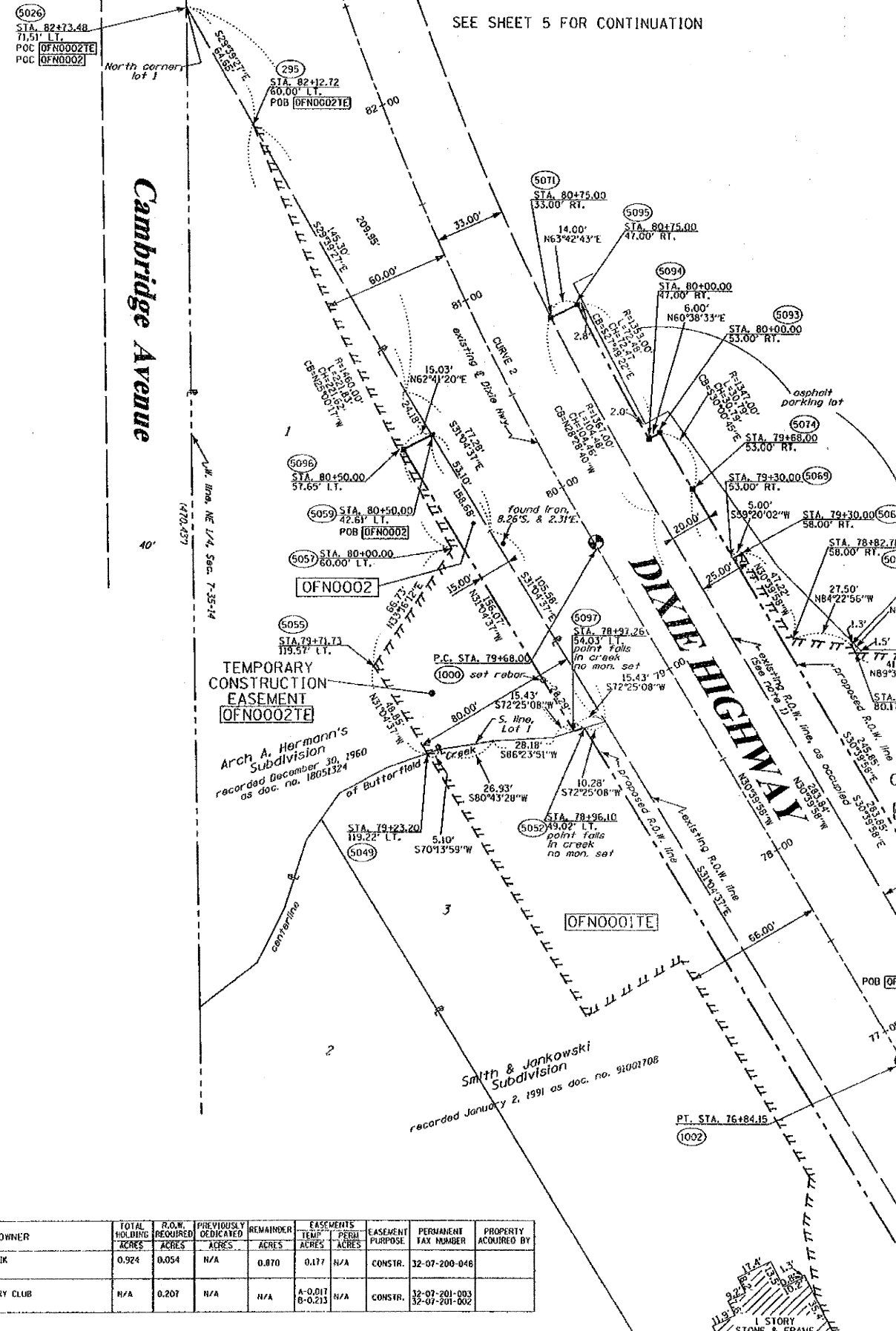
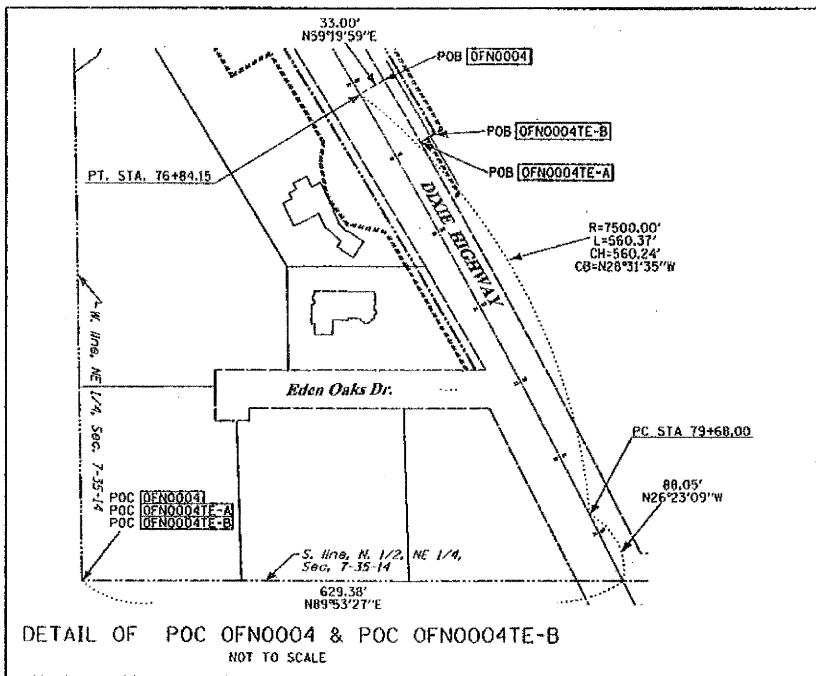
CONTRACT NUMBER:				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DIXIE HIGHWAY	BUTTERFIELD CREEK	COOK	67	17
STATION 76+00 TO STATION 83+00		ILLINOIS FED. AID PROJECT		
FED. ROAD DIST. NO. 1		ILLINOIS		

BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83.



LEGEND

- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- FOUND IRON PIPE OR IRON ROD
- SET 1/2 INCH IRON ROD
- PERMANENT SURVEY MONUMENT
- I.D.O.T. STD. 2135
- TO BE SET BY OTHERS
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- EXISTING TELEPHONE SPLICE BOX
- EXISTING STREET LIGHT
- EXISTING MAIL BOX
- EXISTING WELL HEAD
- STAKING OF PROPOSED RIGHT OF WAY. SET 1/2 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. SET 1/2 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.



SEE SHEET 5 FOR CONTINUATION

NOTE 1:
THE SURVEYOR FINDS NO RECORDED DEDICATION TO THE EAST OF DIXIE HIGHWAY AND HAS SHOWN THE EAST RIGHT OF WAY LINE AS OCCUPIED TO BE 33 FEET EAST OF THE CENTERLINE.

CURVE 2
P.I. STA: 83+27.05
Δ = 28°46'06"
D = 04°05'33"
R = 1400.00'
T = 359.05'
L = 702.94'
E = 5.24'
P.C. STA: 79+68.00
P.T. STA: 86+70.94

STATE OF ILLINOIS)
COUNTY OF WILL) SS

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 7, TOWNSHIP 35 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT JOLIET, ILLINOIS THIS 11 DAY OF July, 2007.

Ronald F. Hodgen
RONALD F. HODGEN P.L.S. NO. 2630
MY LICENSE EXPIRES 11-30-2008

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2124 O'NEILL STREET JOLIET, ILLINOIS 60435
2603 SOUTH WASHINGTON STREET SUITE 110 NAPERVILLE, ILLINOIS 60565
PH (815) 744-6600 FAX (815) 744-0101 PL (630) 420-1740 FAX (630) 420-1741

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
DIXIE HIGHWAY
COOK COUNTY
JOB NO. R-90-014-03
STATION 76+00 TO STATION 83+00

REVISIONS:
REVISED 7-24-07 ADDED NEW TIE INFO
REVISED 7-18-07 REVISED DIM LEADER
REVISED 7-10-07 CHANGED TAKE 0002
REVISED 10-31-06 UPDATED TIE LINE TYPE
REVISED 8-15-06 ADDED OWNER, OFN0002
REVISED 8-11-06 ADDED OWNER, OFN0004
REVISED 8-4-06 CHANGED OFN0004
REVISED 7-19-06 CHANGED OFN0004TE-B
REVISED 6-8-2006

SCALE: 1"=30'
SHEET 4 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT
SCHMUNZBURG, ILLINOIS 60196

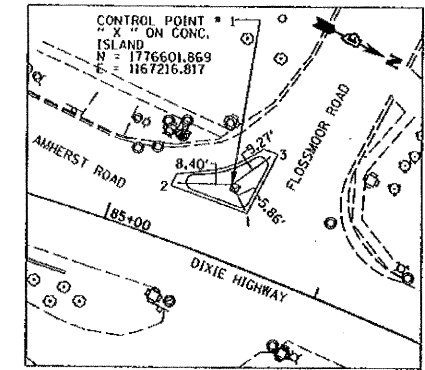
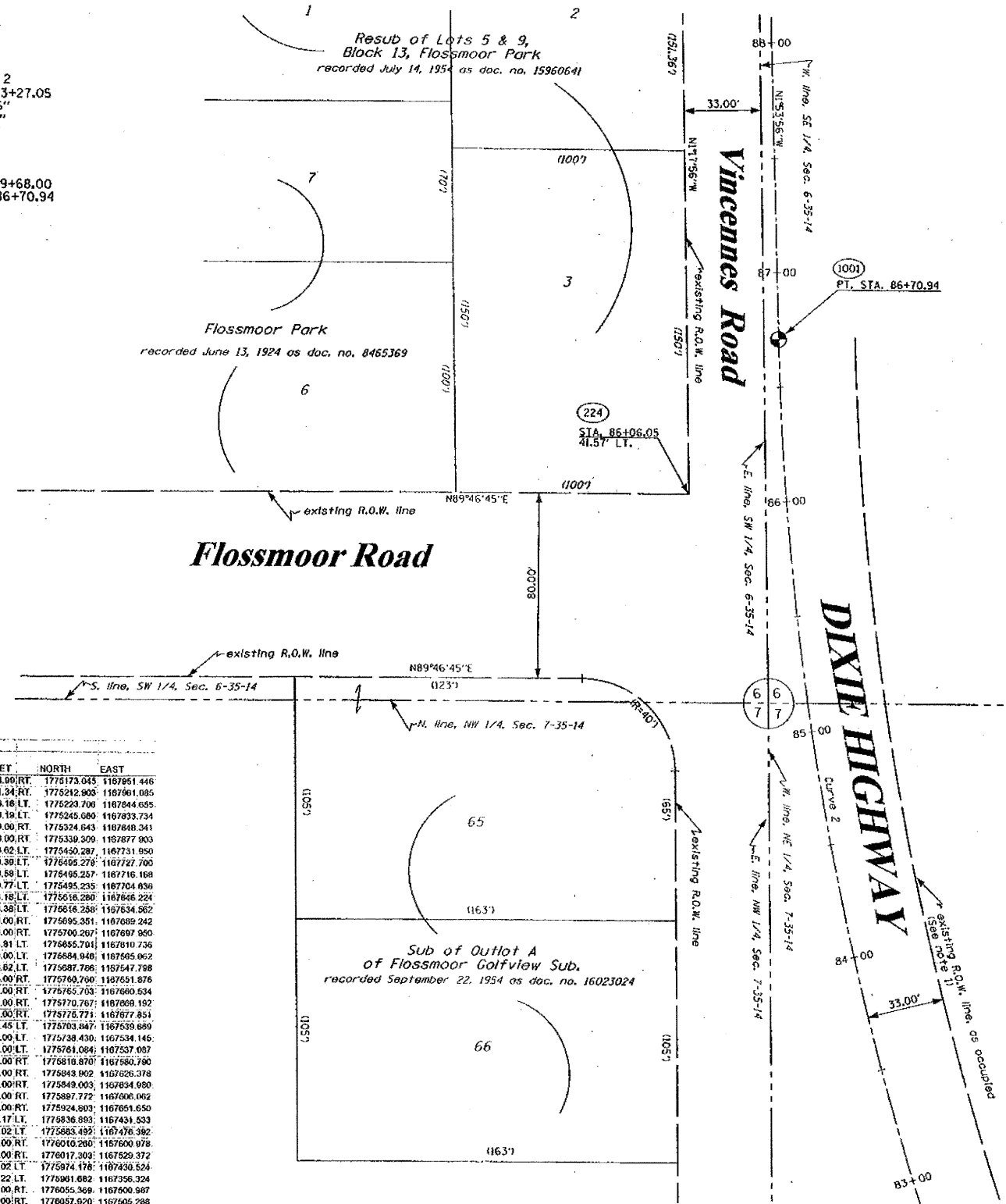
SHEET 1 OF 6 IS A COVER SHEET AND IS NOT RECORDED
RT&A 20052213DIXIE HWY

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	R.O.W. REQUIRED ACRES	PREVIOUSLY DEDICATED ACRES	REMAINDER ACRES	EASEMENTS		EASEMENT PURPOSE	PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
						TEMP	PERM			
OFN0002	ANDRES SCHOLNIK	0.924	0.054	N/A	0.870	0.177	N/A	CONSTR.	32-07-200-046	
OFN0004	IDLEWILD COUNTRY CLUB	N/A	0.207	N/A	N/A	A-0.017 B-0.213	N/A	CONSTR.	32-07-201-003 32-07-201-002	

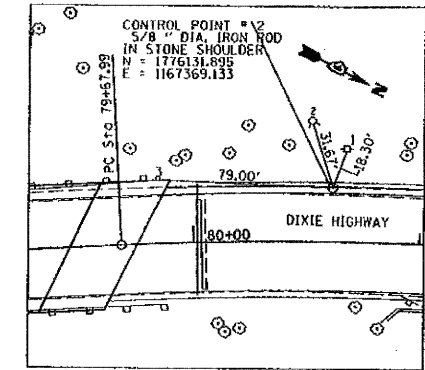
PART OF THE NW 1/4 OF SECTION 7 AND PART OF THE SW 1/4 OF SECTION 6, T35N, R14E OF THE 3rd PM, BLOOM TOWNSHIP, COOK COUNTY, ILLINOIS.

CONTRACT NUMBER:				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DIXIE HIGHWAY	BUTTERFIELD CREEK	COOK	64	20
STATION 83+00 TO STATION 88+00				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
BEARINGS SHOWN HEREON ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83.				

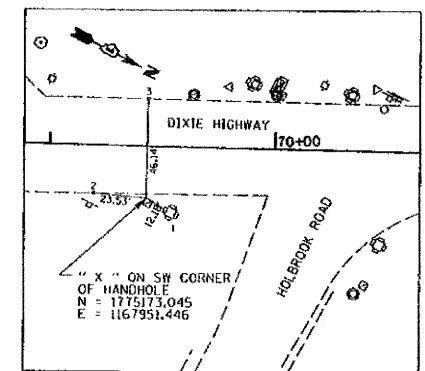
CURVE 2
 P.I. STA= 83+27.05
 Δ= 28°46'06"
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 R= 1400.00'
 T= 359.05'
 L= 702.94'
 E= 5.24'
 P.C. STA. 79+68.00
 P.T. STA= 86+70.94



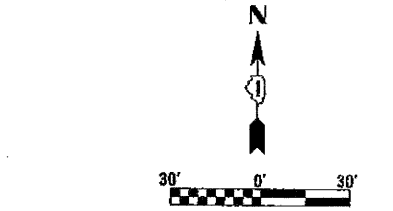
TIES:
 1. "X" ON NORTHEAST CORNER OF CONCRETE ISLAND.
 2. "X" ON SOUTHWEST CORNER OF CONCRETE ISLAND.
 3. "X" ON NORTHWEST CORNER OF CONCRETE ISLAND.



TIES:
 1. MAG (MAGNETIC NAIL) ON EAST FACE OF POWER POLE.
 2. "X" ON EAST FLANGE BOLT OF FIRE HYDRANT.
 3. MAG (MAGNETIC NAIL) ON TOP OF NORTH MOST WOOD GUARDRAIL POST.



TIES:
 1. "X" ON SOUTHWEST CORNER OF CONCRETE TRAFFIC SIGNAL BASE.
 2. MAG (MAGNETIC NAIL) ON EDGE OF PAVEMENT.
 3. MAG (MAGNETIC NAIL) ON EDGE OF PAVEMENT.



LEGEND

- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT LINE
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER QUARTER SECTION LINE
- PROPERTY IDEED LINE
- APPL
- APPARENT PROPERTY LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- FOUND IRON PIPE OR IRON ROD
- SET 5/8 INCH IRON ROD
- PERMANENT SURVEY MONUMENT
- I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- CUT CROSS FOUND OR SET
- SAME OWNERSHIP
- TEL
- EXISTING TELEPHONE SPLICE BOX
- LGT
- EXISTING STREET LIGHT
- MAIL BOX
- EXISTING MAIL BOX
- WELL
- EXISTING WELL HEAD
- STAKING OF PROPOSED RIGHT OF WAY, SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSURPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN UNLIVATED AREAS, SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY MARKER 20 INCHES BELOW GROUND SURFACE TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSURPTION DATA AND SURVEYORS REGISTRATION NUMBER.

COORDINATE TABLE

POINT NO.	STATION/OFFSET	NORTH	EAST
CONTROL PT. 3	89+42.15	24.00 RT.	1775173.045
5005	69+75.68	51.34 RT.	1775242.905
5010	70+35.00	48.18 LT.	1775223.706
5020	70+50.52	48.18 LT.	1775245.060
1003	71+23.76	0.00 RT.	1775324.643
269	71+23.76	33.00 RT.	1775330.309
5033	72+09.10	48.62 LT.	1775450.287
5028	73+31.09	28.39 LT.	1775495.278
5043	73+36.51	39.88 LT.	1775495.257
5045	73+41.94	49.77 LT.	1775495.235
5042	74+77.02	43.18 LT.	1775518.280
5078	74+82.71	63.38 LT.	1775516.258
5080	75+25.00	33.00 RT.	1775595.351
5089	75+25.00	45.00 RT.	1775700.267
5051	75+29.16	54.81 LT.	1775685.701
21	75+80.00	90.00 LT.	1775684.940
22	75+88.75	93.62 LT.	1775687.786
5061	76+00.00	33.00 RT.	1775760.760
5067	76+00.00	43.00 RT.	1775765.703
5062	76+00.00	63.00 RT.	1775770.767
5063	76+00.00	63.00 RT.	1775772.771
23	76+06.85	97.45 LT.	1775793.847
24	76+40.00	60.00 LT.	1775738.430
272	76+58.23	68.00 LT.	1775761.084
1002	76+84.15	0.00 RT.	1775810.870
5072	76+84.15	63.00 RT.	1775843.902
5073	76+84.15	63.00 RT.	1775849.003
5064	77+40.85	63.00 RT.	1775887.772
5065	77+40.85	116.00 RT.	1775924.803
5048	77+77.50	118.17 LT.	1775836.893
9050	77+77.50	96.02 LT.	1775883.493
5068	78+40.20	118.00 RT.	1776010.260
5067	78+82.78	58.00 RT.	1776017.303
5052	78+96.10	49.02 LT.	1775974.176
5049	79+23.20	119.22 LT.	1776061.682
5069	79+30.00	53.00 RT.	1776055.369
5068	79+30.00	68.00 RT.	1776057.620
1000	79+68.00	0.00 RT.	1776061.020
5074	79+68.00	53.00 RT.	1776060.053
5055	79+71.73	118.67 LT.	1776093.621
5097	80+00.00	60.00 LT.	1776059.317
5060	80+50.00	52.63 LT.	1776106.689
5059	80+50.00	42.61 LT.	1776113.186
CONTROL PT. 2	80+81.50	24.58 LT.	1776131.995
5071	80+75.00	33.00 RT.	1776168.669
5070	80+75.00	63.00 RT.	1776178.527
295	82+12.72	60.00 LT.	1776260.163
5026	82+73.46	71.51 LT.	1776318.344
CONTROL PT. 1	85+47.60	33.91 LT.	1776601.899
224	86+08.65	41.57 LT.	1776660.624
1001	86+70.94	0.00 RT.	1776728.700

SEE SHEET 4 FOR CONTINUATION

STATE OF ILLINOIS)
) SS
 COUNTY OF WILL)

THIS IS TO CERTIFY THAT RUETTIGER, TONELLI & ASSOCIATES, INC., AN ILLINOIS DESIGN FIRM, HAS SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTIONS 6 AND 7, TOWNSHIP 35 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RE-TRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATE: JULIET, ILLINOIS THIS 23RD DAY OF OCTOBER, 2006
 RONALD F. HOODEN P.L.S. NO. 2630
 MY LICENSE EXPIRES 11-30-2006

RUETTIGER, TONELLI & ASSOCIATES, INC.
 Lead Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
 2174 OMEGA STREET 2603 SOUTH WASHINGTON STREET SUITE 110
 JULIET, ILLINOIS 60435 NAPERVILLE, ILLINOIS 60565
 PH. (815) 744-6600 FAX (815) 744-0101 PH. (630) 420-7740 FAX (630) 420-7741

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PLAT OF HIGHWAYS
 DIXIE HIGHWAY
 COOK COUNTY
 JOB NO. R-90-014-03
 STATION 83+00 TO STATION 88+00

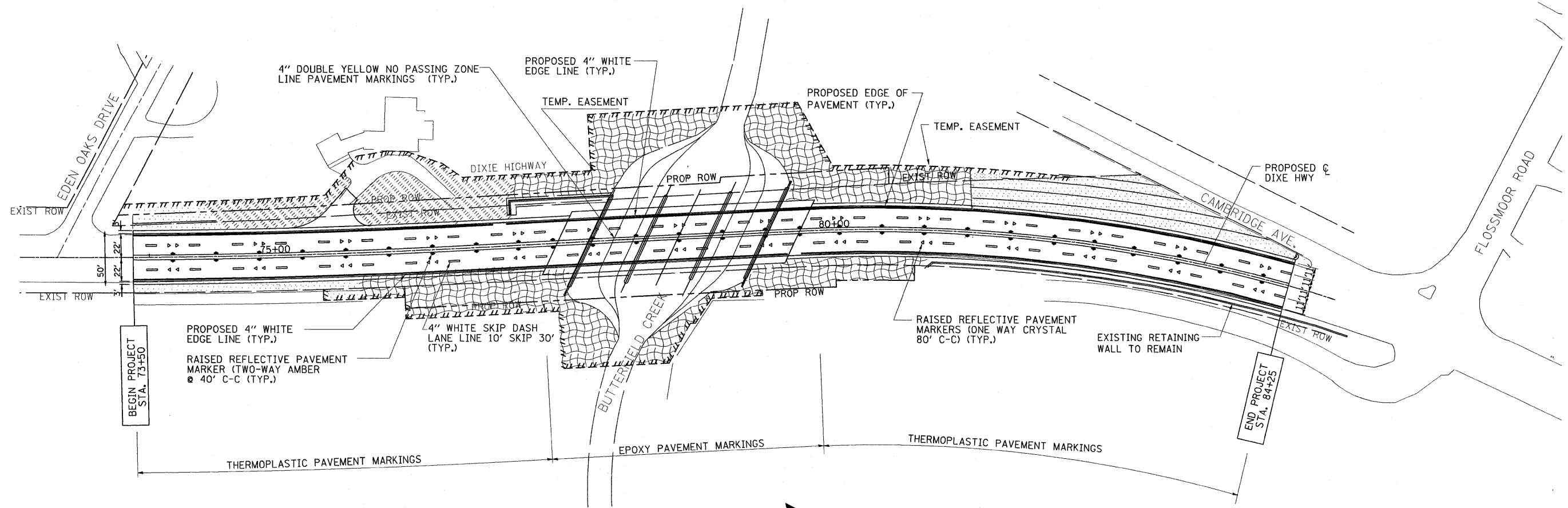
RECEIVED
 OCT. 31 2006
 PLATS & LEGAL

SCALE: 1"=30' SHEET 5 OF 6

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS/DISTRICT 1
 201 WEST CENTER COURT
 SCHAMBERG, ILLINOIS 60196

SHEET 1 OF 6 IS A COVER SHEET AND IS NOT RECORDED
 RT&A 200522130/DIXIE HWY!

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	21
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 62539				



NOTES

1. ALL PROPOSED PAVEMENT MARKINGS ON HMA ROADWAY SURFACE SHALL BE THERMOPLASTIC.
2. ALL PAVEMENT MARKINGS ON PORTLAND CEMENT CONCRETE SURFACES SHALL BE EPOXY.
3. ALL EXISTING PAVEMENT MARKING IMPACTED BY THIS PROJECT OR STAGING OPERATION SHALL BE REMOVED & REPLACED IN KIND. PAYMENTS SHALL BE ACCORDING TO APPLICABLE PAY ITEMS SHOWN IN THE SUMMARY OF QUANTITIES.
4. THE SEEDING DATES FOR BARE EARTH SEEDING OF MIXTURE CLASSES 4 & 4B SHALL BE FROM MAY 15 TO JUNE 30 AND OCTOBER 30 TO DECEMBER 1.

LEGEND

- TOPSOIL FURNISH & PLACE, 4" NITROGEN FERTILIZER NUTRIENT PHOSPHORUS FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT SEEDING, CLASS 2A EROSION CONTROL BLANKET
- TOPSOIL FURNISH & PLACE, 4" SEEDING, CLASS 4 EROSION CONTROL BLANKET
- TOPSOIL FURNISH & PLACE, 4" NITROGEN FERTILIZER NUTRIENT PHOSPHORUS FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT SODDING, SALT TOLERANT

Rev. 9/25/2009

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HIGHWAY
OVER BUTTERFIELD CREEK

PAVEMENT MARKING AND
LANDSCAPING

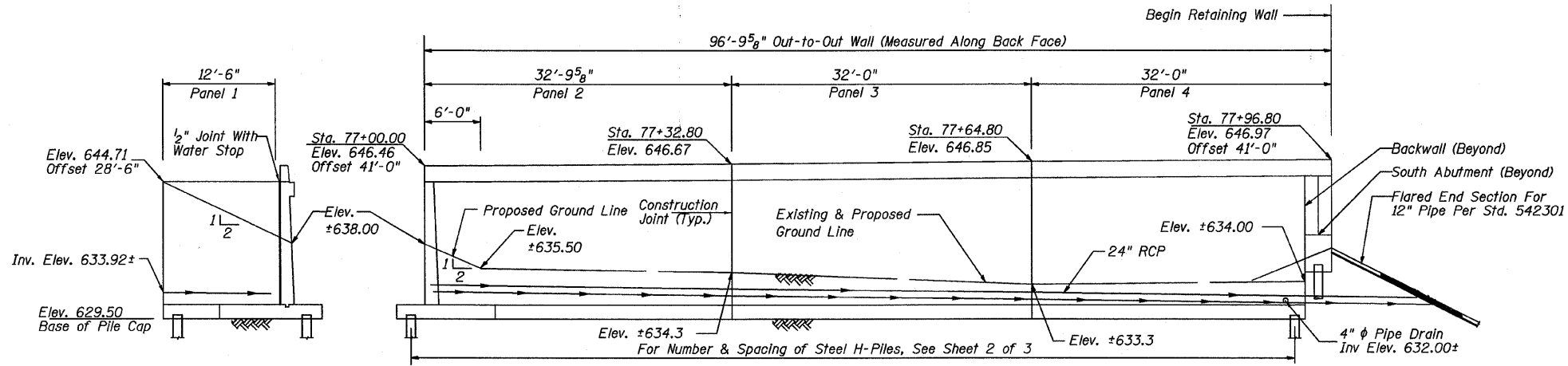
RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Ave. Suite 1500 Chicago IL 60604-2482
T: 312 670 8800 F: 312 663 1478

SCALE: VERT. 1"=50'
HORIZ. DATE 6-25-09

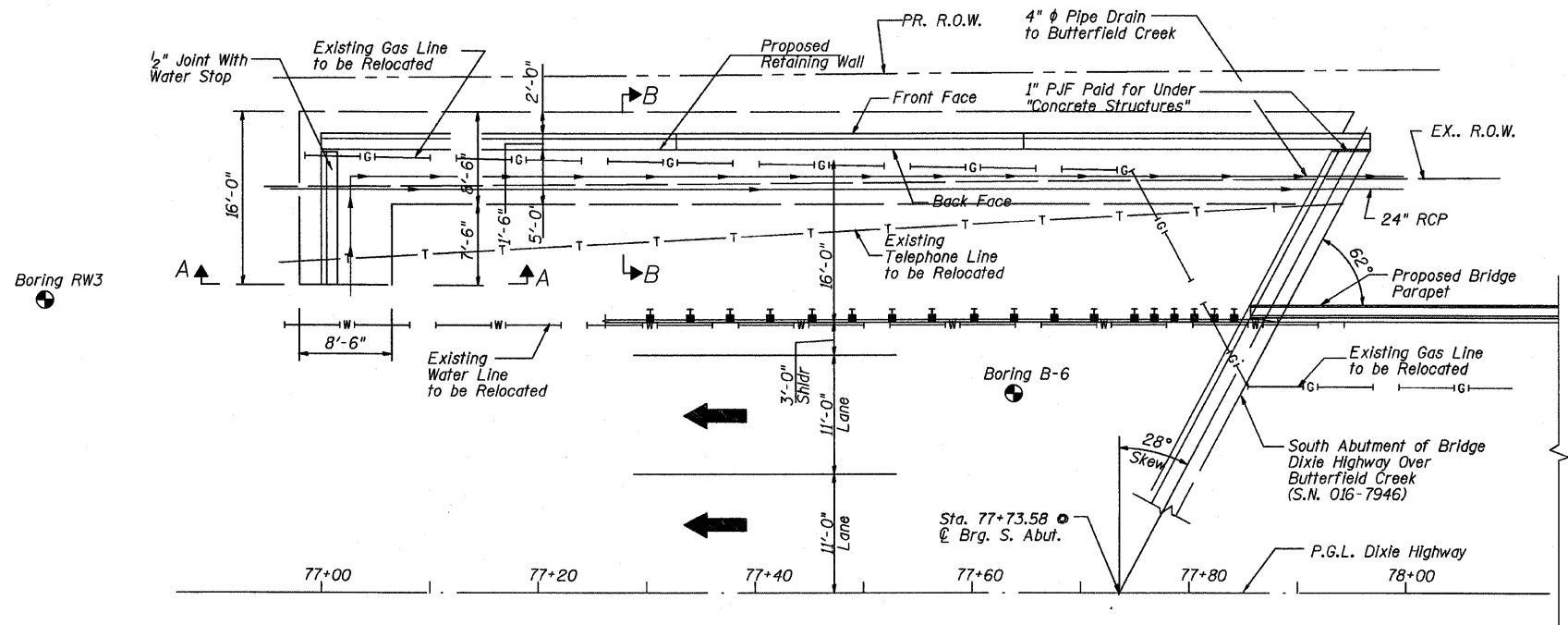
DRAWN BY AW
DESIGNED BY AW
CHECKED BY MF

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	22
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
			Sheet 1 of 3	
			Contract No. 62539	

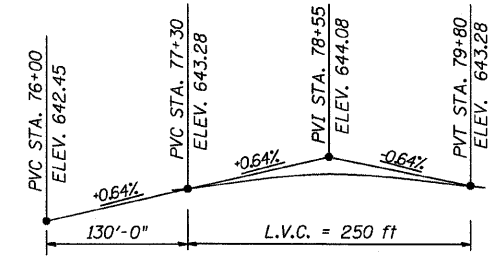


ELEVATION



PLAN

For Section A & B, See Sht 3



PROFILE GRADE OF ROADWAY

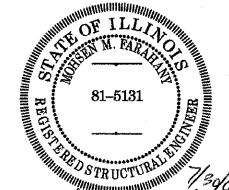
DESIGN SPECIFICATIONS
2002, AASHTO Specifications, 17th Edition

LOADING
Allow 2'-0" Soil Surcharge

DESIGN STRESSES

FIELD UNITS
f'c = 3500 psi
fy = 60,000 psi (Reinf.)

Utility Note:
Prior to Excavation in This Area, The Existing Utilities Will Be Field Located. The Utilities Interfering With The Construction Will Be Relocated as Shown on Contract Plans.



Mohsen Farahany
Licensed Structural Engineer
State of Illinois
Lic. No. 81-5131
Expires: 11-30-2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (P.E.)
ENGINEER OF BRIDGES AND STRUCTURES

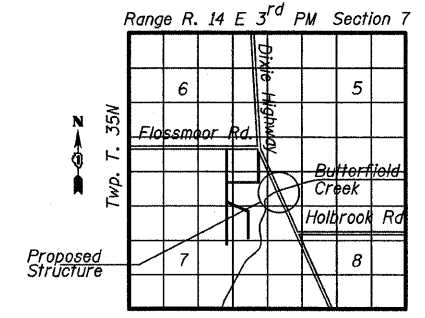
TOTAL BILL OF MATERIAL

ITEMS	UNITS	TOTAL
*Porous Granular Embankment (Special)	Cu. Yd.	180
Structure Excavation	Cu. Yd.	280
Concrete Structures	Cu. Yd.	146
Protective Coat	Sq. Yd.	50
*Reinforcement Bars, Epoxy Coated	POUND	15800
Furnishing Steel Piles HP 12 x 63	FOOT	1560
Driving Piles	FOOT	1560
Test Pile Steel, HP 12 x 63	EACH	1
Pile Shoes	EACH	39
Geocomposite Wall Drain	Sq. Yd.	155
*Pipe Underdrain for Structures 4"	FOOT	110

*See Special Provisions

GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A-706 Grade 60. See Special Provisions.
- The contractor shall drive test pile to 110% of the nominal required bearing specified in production locations at substructure specified or approved by the Engineer before ordering the remainder of piles.
- For benchmark information and other relevant notes, see drawings for S.N. #016-7946.
- Existing utilities in conflict with the retaining wall shall be abandoned or relocated according to directions given in plans.
- All wall dimensions are from the front face of the wall.
- All slopes shall be 1:2(max) unless otherwise specified.
- All construction joints shall be bonded.
- Temporary sheet piling is shown on Sheet 1 and 3 of the structural plans for S. N. 016-7946.



LOCATION SKETCH

REVISIONS	
NAME	DATE

GENERAL PLAN, ELEVATION & BILL OF MATERIAL

DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-W962

SCALE: NOT-TO-SCALE
DATE 6-30-09

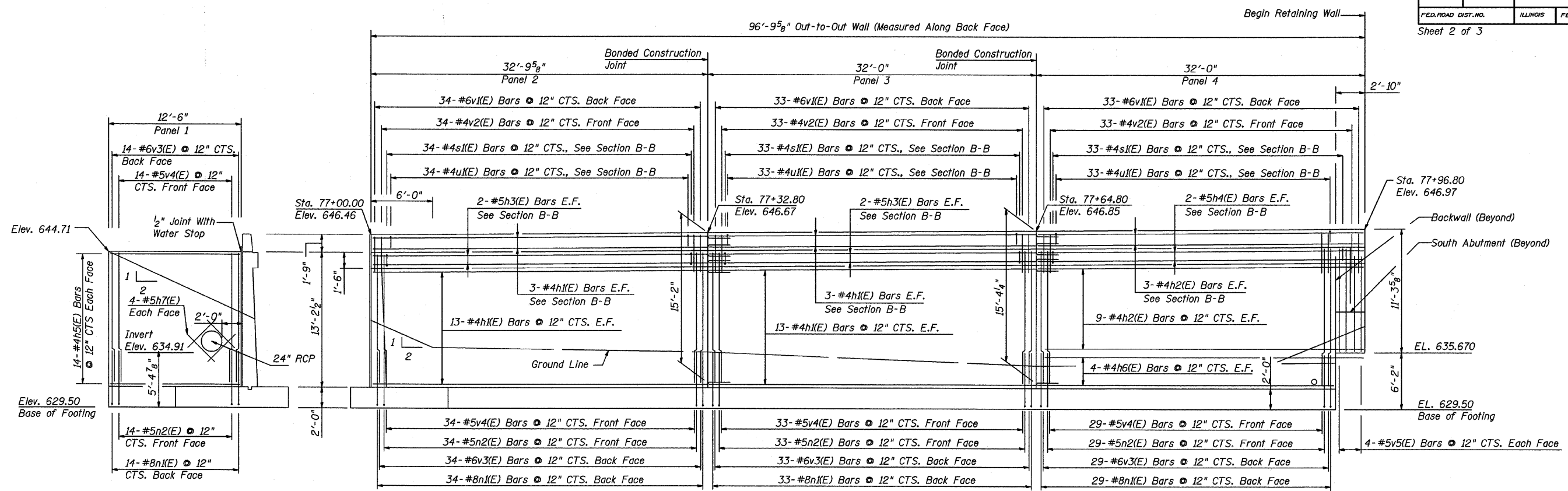
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DESIGNED BY BS
CHECKED BY PK



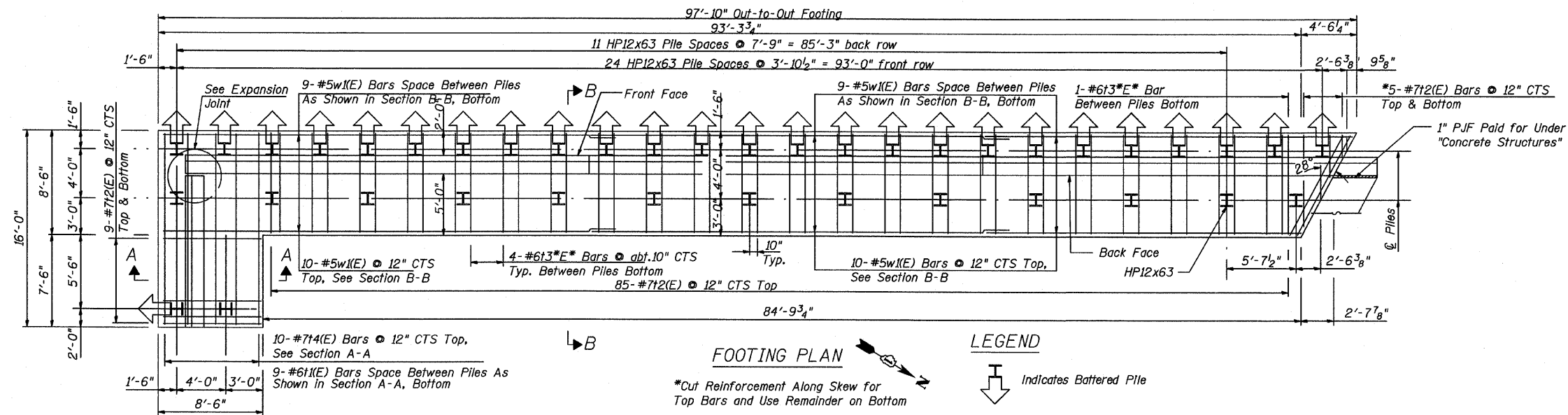
FILES
DATE
TIME

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	23
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
Sheet 2 of 3			Contract No. 62539	



ELEVATION
(Looking West)



FOOTING PLAN

LEGEND

- *Cut Reinforcement Along Skew for Top Bars and Use Remainder on Bottom
- Minimum Bar Lap For #5 Bar - 2'-2"
- Minimum Bar Lap For #6 Bar - 2'-7"
- Indicates Battered Pile
- B.F. Indicates Back Face
- F.F. Indicates Front Face
- E.F. Indicates Each Face

REVISIONS

NAME	DATE

PLAN & ELEVATION

DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-W962

SCALE: NOT-TO-SCALE
DATE 6-30-09

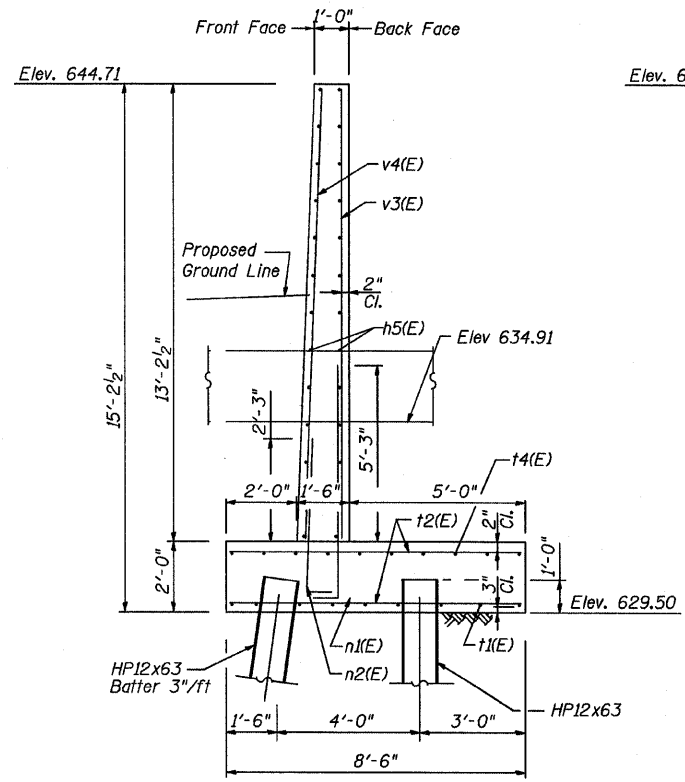
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DESIGNED BY BS
CHECKED BY PK



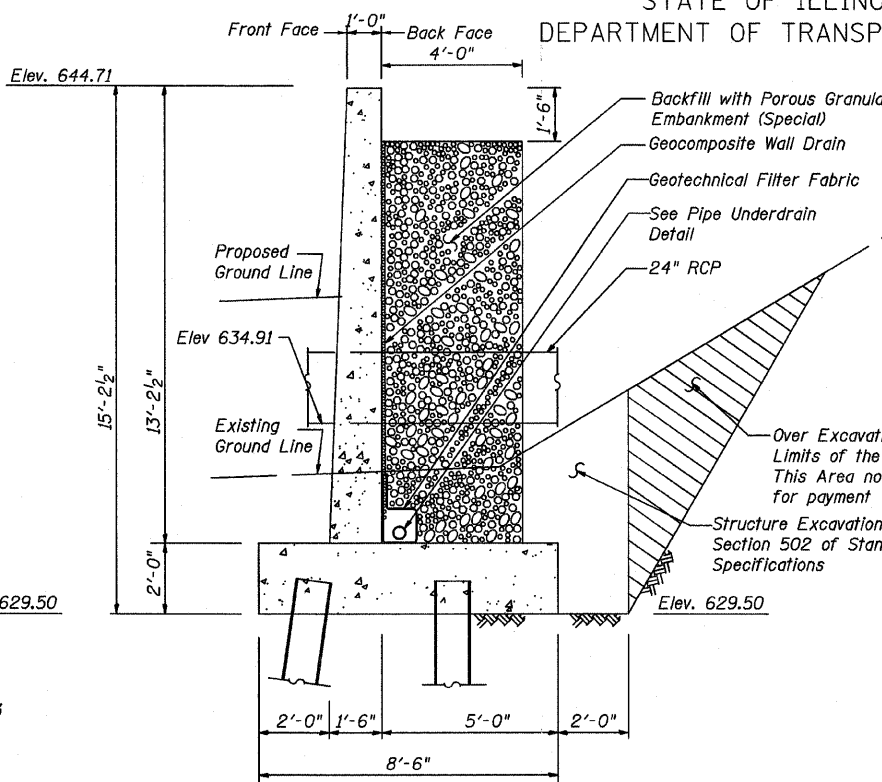
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	24
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
			Sheet 3 of 3 Contract No. 62539	

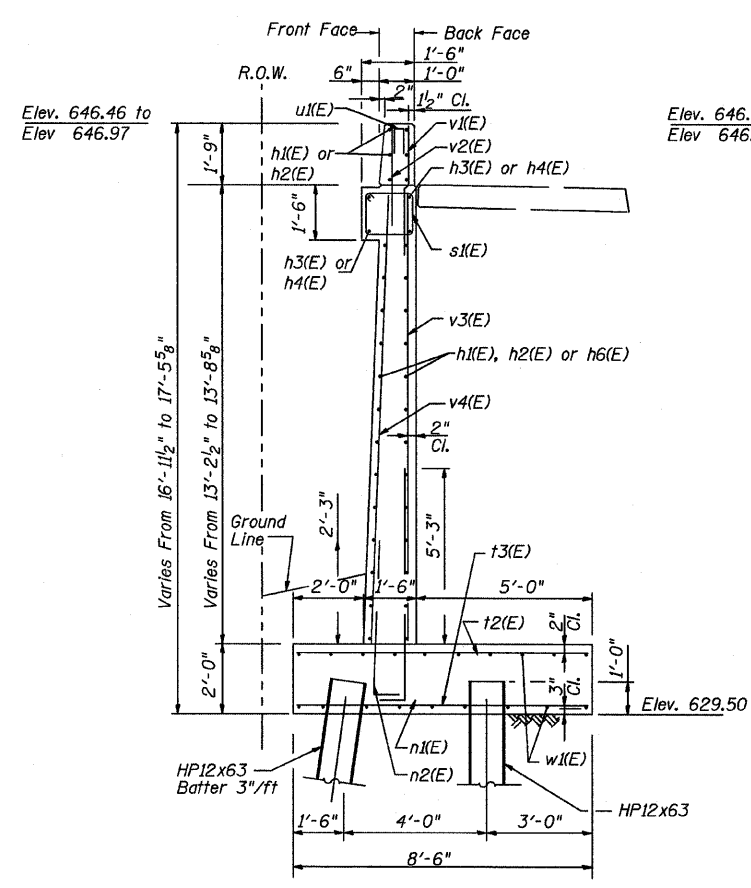


SECTION SHOWING REINFORCEMENT

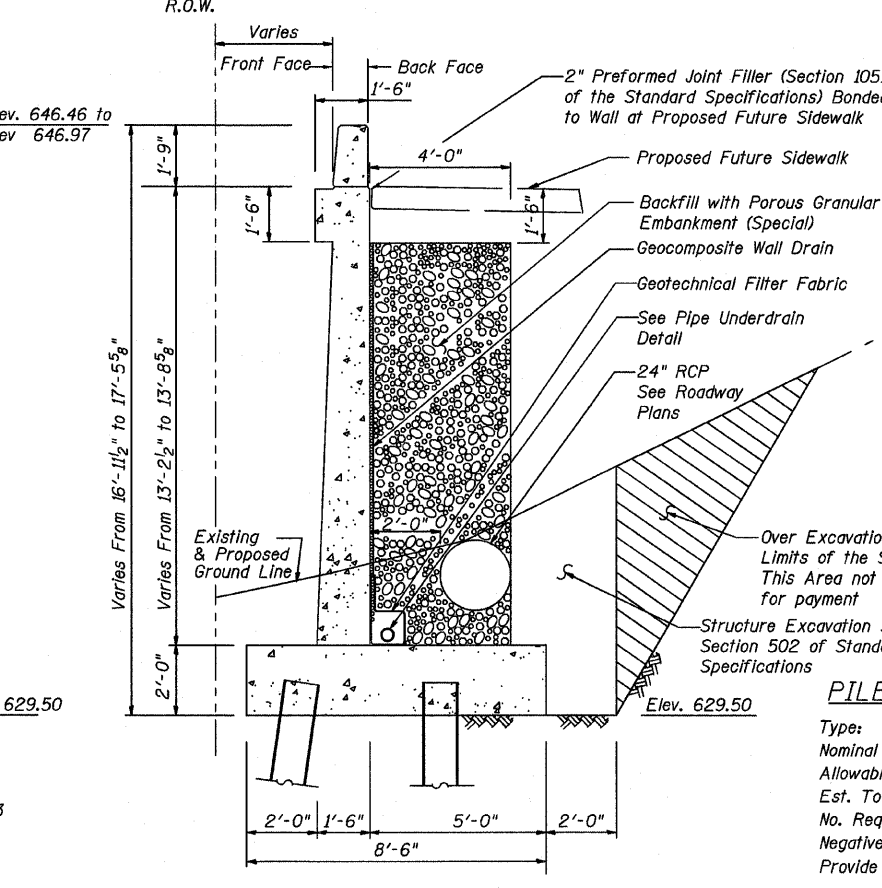


SECTION SHOWING DRAINAGE

SECTION A-A

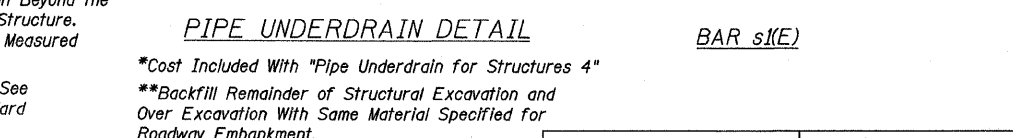
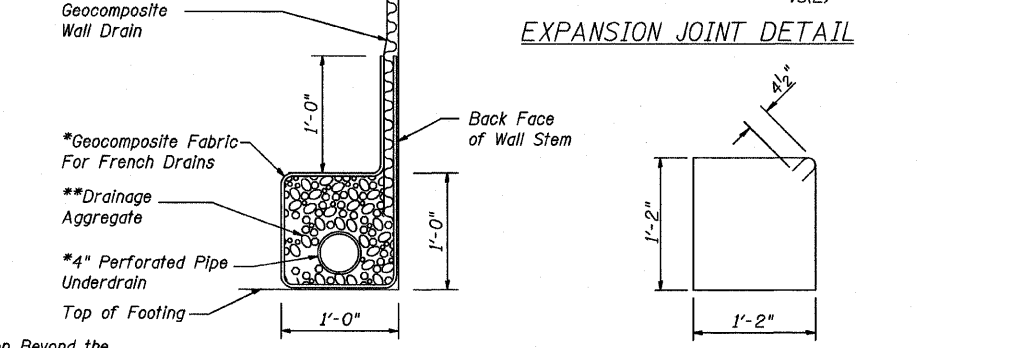
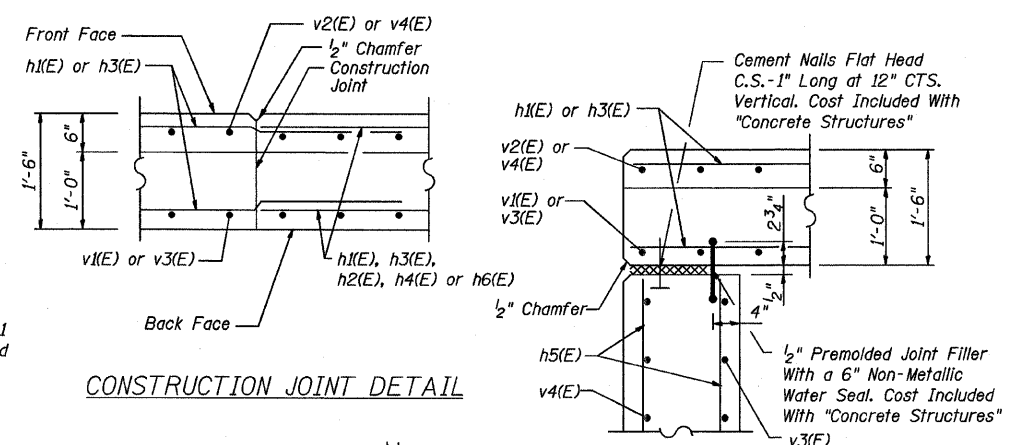
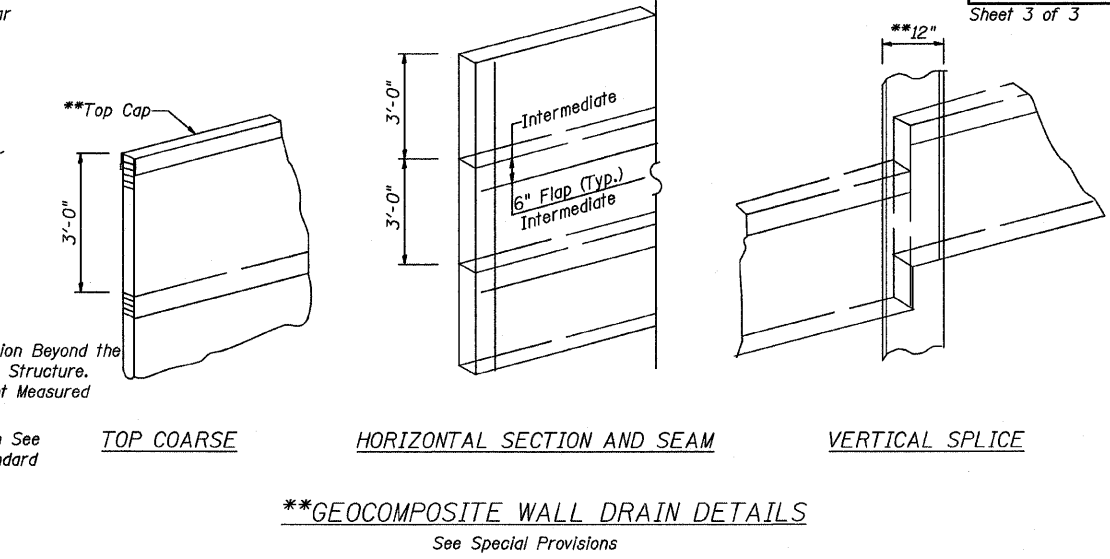


SECTION SHOWING REINFORCEMENT



SECTION SHOWING DRAINAGE

SECTION B-B



PILE DATA

Type: HP12x63
Nominal Required Bearing: 497 Kips
Allowable Resistance Available: 166 Kips
Est. Total Length: 40'-0"
No. Required: 39 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes for all Piles

RETAINING WALL
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	64	#4	34'-3"	—
h2(E)	24	#4	31'-9"	—
h3(E)	8	#5	34'-9"	—
h4(E)	4	#5	31'-9"	—
h5(E)	28	#4	12'-1"	—
h6(E)	8	#4	28'-11"	—
h7(E)	8	#5	4'-0"	—
n1(E)	110	#8	8'-4"	—
n2(E)	110	#5	4'-8"	—
s1(E)	100	#4	5'-5"	□
t1(E)	9	#6	15'-9"	—
t2(E)	108	#7	8'-3"	—
t3(E)	85	#6	8'-3"	—
t4(E)	10	#7	15'-9"	—
u1(E)	100	#4	2'-0"	□
v1(E)	100	#6	4'-4"	—
v2(E)	100	#4	3'-5"	—
v3(E)	110	#6	13'-0"	—
v4(E)	110	#4	13'-0"	—
v5(E)	8	#5	9'-4"	—
w1(E)	57	#5	34'-1"	—
Reinforcement Bars, Epoxy Coated	Pound			15800
Concrete Structures	Cu. Yds.			146
Furnishing Steel Piles HP12x63	Foot			1560
Driving Piles	Foot			1560
Test Pile Steel, HP12x63	Each			1
Pile Shoes	Each			39

REVISIONS	
NAME	DATE

SECTIONS, DETAILS & BILL OF MATERIAL

DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-W962

SCALE: NOT-TO-SCALE
DATE 6-30-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK



#PENTBLSP
#PLTDVRS#

#FILES
#DATE
#TIMES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	25
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

Sheet 1 of 22 Contract No. 62539

CURVE PDIXIE1-5
 @ F.A.U. RTE 2843
 PI STA. = 83+27.12
 $\Delta = 28^\circ 46' 29''$ (RT)
 $D = 4^\circ 05' 36''$
 $T = 359.13'$
 $R = 1,400.00'$
 $L = 702.95'$
 $E = 45.33'$
 $SE = 2.4\%$
 P.C. STA. = 79+67.99
 P.T. STA. = 86+70.94
 Normal Crown
 Sta. 74+00.00
 Full Superelevation
 Sta. 77+19.00 to Sta. 79+91.00
 Normal Crown
 Sta. 84+25.00

TOTAL BILL OF MATERIAL

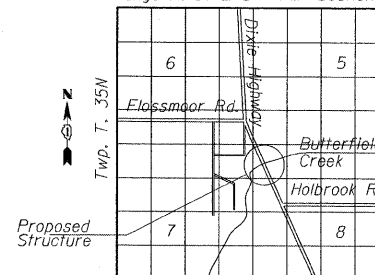
ITEMS	UNITS	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)*	Cu. Yd.		270	270
Stone Riprap, Class A4	Sq. Yd.	1,900		1,900
Filter Fabric	Sq. Yd.	2,150		2,150
Removal of Existing Structures	EACH	1		1
Structure Excavation	Cu. Yd.		80	80
Floor Drains	EACH	10		10
Concrete Structures	Cu. Yd.		362	362
Concrete Superstructure	Cu. Yd.	300		300
Bridge Deck Grooving	Sq. Yd.	900		900
Protective Coat	Sq. Yd.	1,070		1,070
Furnishing and Erecting Structural Steel	L. SUM	1		1
Stud Shear Connectors	EACH	6,072		6,072
*Reinforcement Bars, Epoxy Coated	POUND	70,800	31,740	102,540
Furnishing Steel Piles HP 12 x 74	FOOT		2,550	2,550
Driving Piles	FOOT		2,550	2,550
Test Pile Steel, HP 12 x 74	EACH		4	4
Pile Shoes	EACH		56	56
Geocomposite Wall Drain	Sq. Yd.	180		180
*Pipe Underdrain for Structures 4"	FOOT		220	220
Chain Link Fence, 6'	FOOT	180		180
Temporary Soil Retention System*	Sq. Ft.		3,400	3,400
Name Plates	EACH	1		1
Bar Splicers	EACH	690	102	792
Underwater Structure Excavation Protection, Location 1	EACH		1	1
Underwater Structure Excavation Protection, Location 2	EACH		1	1
Concrete Encasement	Cu. Yd.		20	20
Anchor Bolts, 1" Dia.	EACH	64		64
Concrete Sealer	Sq. Ft.		3,480	3,480
Conduit Embedded in Structure 2" Dia. Galvanized Steel	FOOT	692		692
Junction Box Embedded in Structure Stainless Steel, 12"x8"x6"	EACH	4		4

*See Special Provisions

STATION 78+55.00
 BUILT 20... BY
 STATE OF ILLINOIS
 F.A.U. ROUTE 2843 SEC. 3249B-R
 LOADING HS20
 STRUCTURE NO. 016-7946

NAME PLATE
 See Std. 515001.

Range R. 14 E 3rd PM Section 7



LOCATION SKETCH

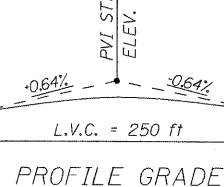
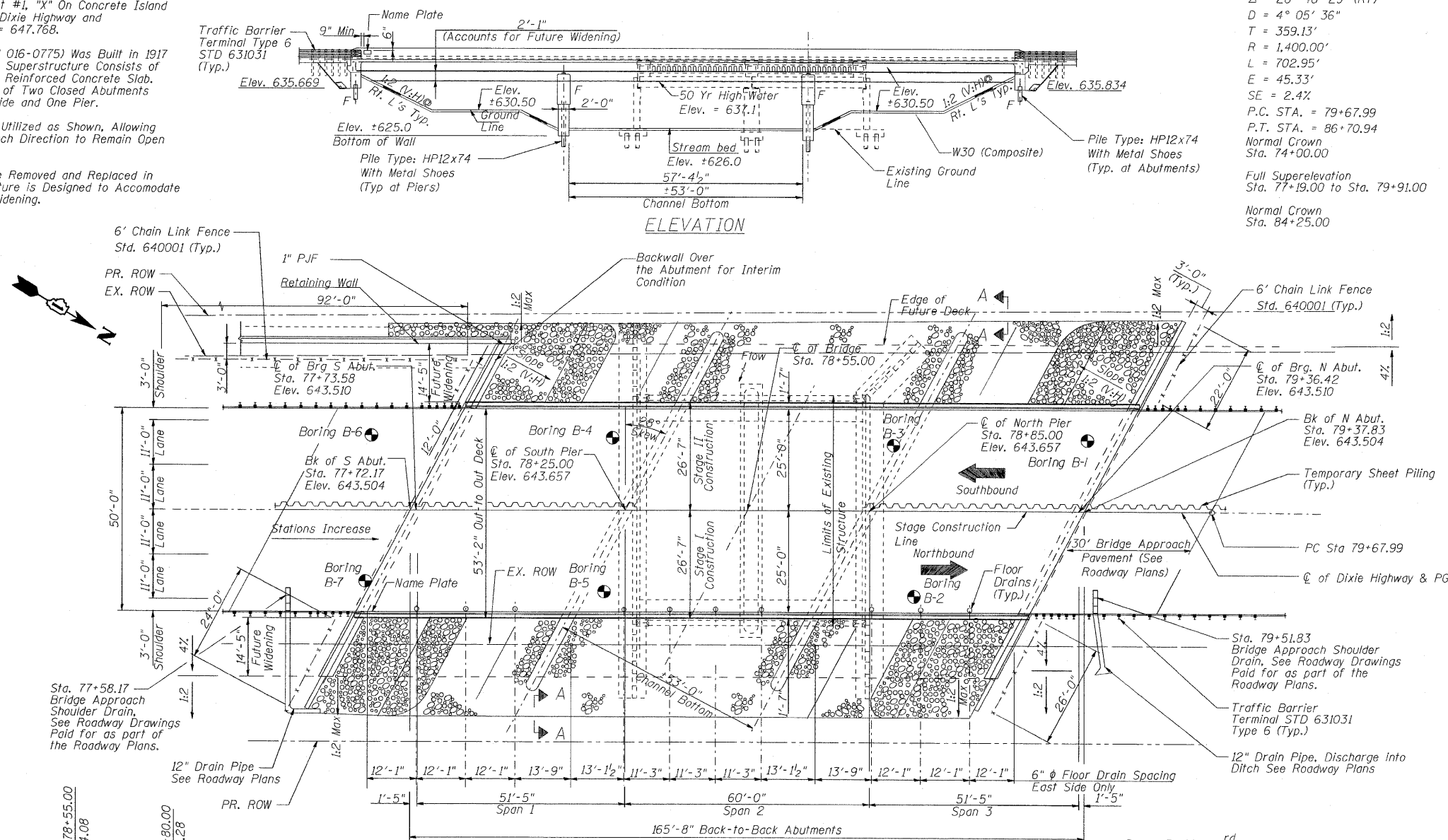
BENCH MARK: Control Point #1, "X" On Concrete Island at Southwest Quadrant of Dixie Highway and Flossmoor Road Elevation = 647.768.

The Existing Structure (SN 016-0775) Was Built in 1917 and Widened in 1930. The Superstructure Consists of a Two Span Cast-in-Place Reinforced Concrete Slab. The Substructure Consists of Two Closed Abutments With Wing-Walls on Each Side and One Pier.

Stage Construction will be Utilized as Shown, Allowing One Lane of Traffic in Each Direction to Remain Open at All Times.

The Existing Bridge will be Removed and Replaced in Two Stages. The Substructure is Designed to Accommodate a Future Superstructure Widening.

No Salvage



WATERWAY INFORMATION

Drainage Area = 22.7 Sq. Mi. Prop. Low Grade Elev. = 644.6 ft. @ Sta 75+50

Flood	Freq. yr.	Q cfs	Opening ft ²		Not. H.W.E.	Head (ft)		Headwater EL.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
10	1650	337	946	636.4	0.7	0.2	637.1	636.6	
Design	50	2305	337	1038	637.1	1.1	0.2	638.2	637.3
Base	100	2775	337	1091	637.5	1.2	0.2	638.7	637.7
Max Calc	500	3920	337	1226	638.5	1.0	0.2	639.5	638.7

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, (17th Edition)

LOADING HS20-44
 Allow 50 psf for Future Wearing Surface

DESIGN STRESSES

FIELD UNITS
 $f'c = 3500$ psi
 $f_v = 50,000$ psi
 $f_y = 60,000$ psi (Reinf.)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) 0.04 g
 Site Coefficient (S) = 1.0

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES



Mohsen Farahany
 Mohsen Farahany
 Licensed Structural Engineer
 State of Illinois
 Lic. No. 81-5131
 Expires: 11-30-2010



REVISIONS	
NAME	DATE
Rev-BK	9/25/09

GENERAL PLAN, ELEVATION & BILL OF MATERIAL

DIXIE HIGHWAY OVER
 BUTTERFIELD CREEK
 F.A.U. ROUTE 2843 SECTION 3249B-R
 STA. 78+55.00
 COOK COUNTY
 STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
 DATE 4-27-09

DRAWN BY BV
 DESIGNED BY BS
 CHECKED BY PK

SPL PLANS

SPL PLANS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	26
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
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GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts $\frac{7}{8}$ " ϕ , open holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- Calculated weight of structural steel = 141000 lbs. Grade 50*
25000 lbs. M 270 Grade 36.
- All structural steel shall be Grade 50*. Steel H-Piles shall be according to AASHTO M270 Grade 50.
- Field welding of construction accessories will not be permitted to beams.
- Anchor bolts shall be set before bolting diaphragms over supports.
- The main load carrying member components subject to tensile stress shall conform to the Charpy V-notch (CVN) requirements given in the Special Provision for Wide-Flange Rolled Sections for Bridges. These components are the wide flange beams and all splice plate material except fill plates.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$ in. adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
- The contractor shall drive HP12x74 test piles in a permanent location at piers and HP12x74 test piles in a permanent location at abutments as directed by the Engineer before ordering the remainder of piles.
- Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I removal.
- The inorganic zinc rich primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5b 7/1. See special provisions for "Cleaning and Painting New Metal Structures".
- All construction joints shall be bonded.
- The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- Concrete sealer shall be applied to the designated areas of the piers and abutments.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See special provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Slipforming of parapets is not allowed.
- Existing substructure to be removed following a line of removal for superstructure and will be done in accordance with SSRBC section 501. See notes on drawing 3 of 22.
- Contractor shall submit Structural Assessment Report (SAR) as required for contractor's means and methods of construction. See special provisions.
- *Current Ratings on File for Existing Structure
Inventory: HS 10.2
Operating: HS 17.0
Live Load Restrictions: No
Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment."
- SSPC OPI Contractor certification will be required for this contract.

*See the Special Provision for Wide-Flange Rolled Sections for Bridges.

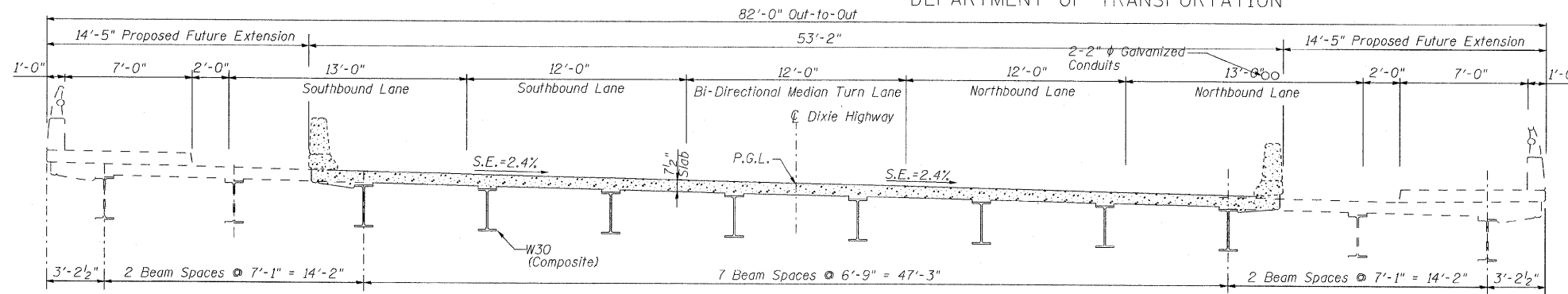
REVISIONS	
NAME	DATE
Rev-BK	9/25/09

CONSTRUCTION STAGING & GENERAL NOTES

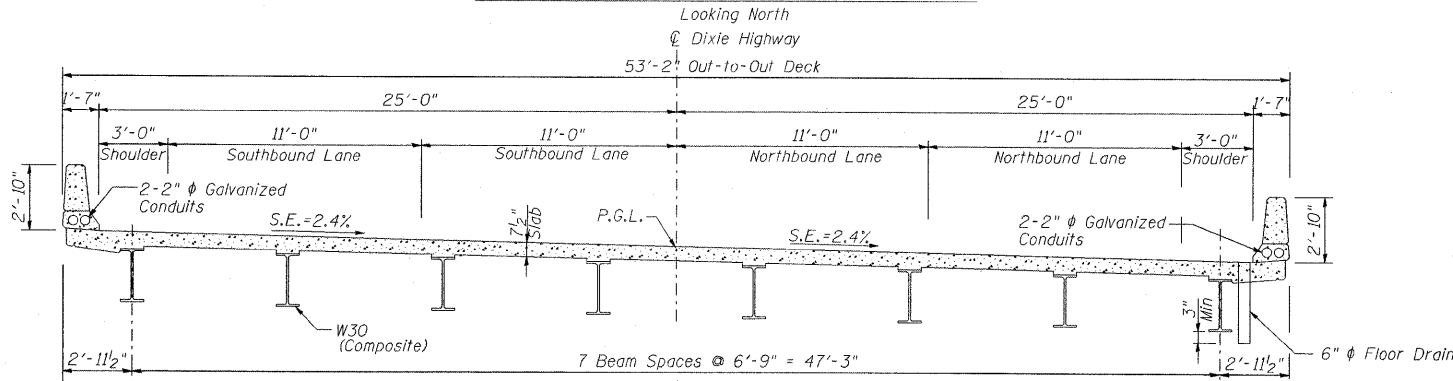
DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 4-27-09

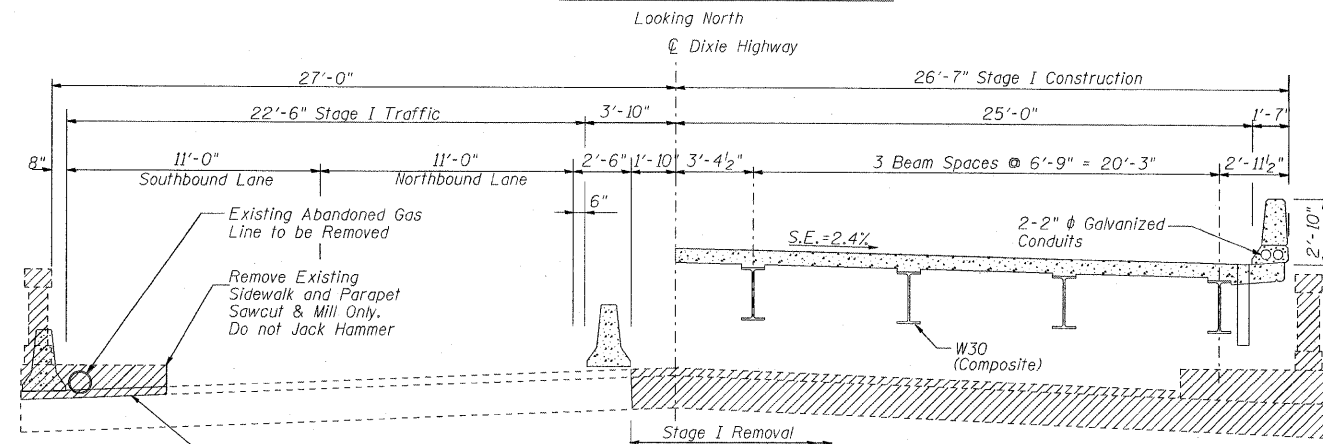
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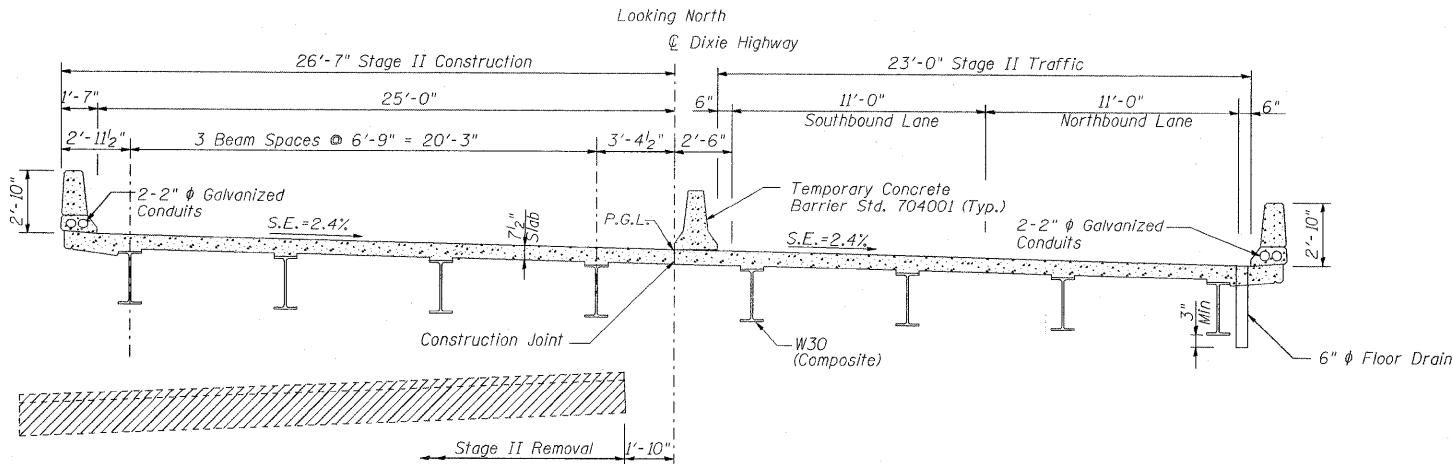
PROPOSED FUTURE BRIDGE SECTION



TYPICAL BRIDGE SECTION



STAGE I CONSTRUCTION



STAGE II CONSTRUCTION

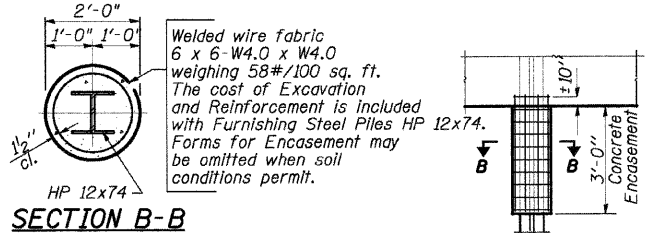
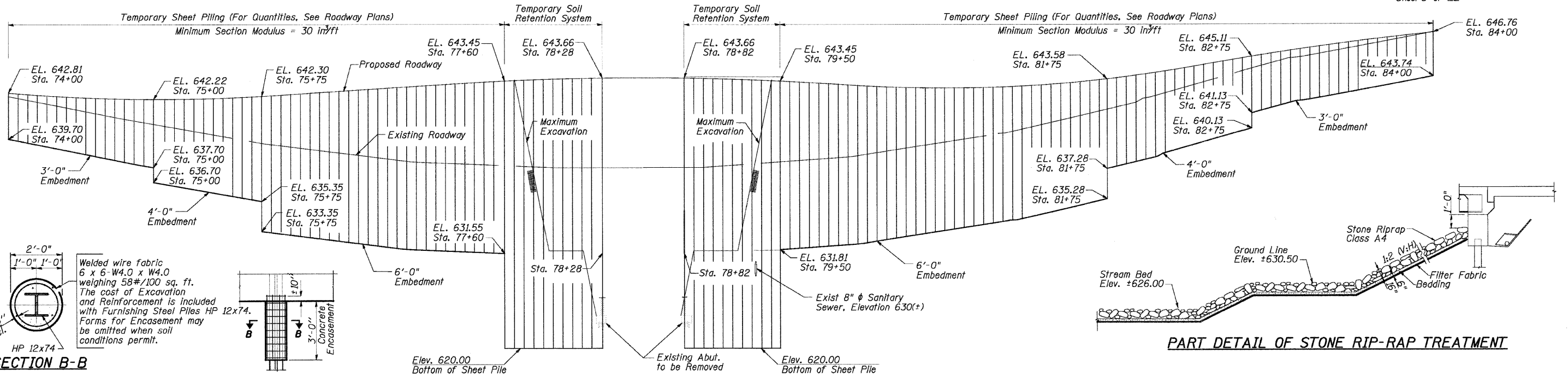
INDEX OF SHEETS

- General Plan, Elevation & Bill of Material
- Construction Staging & General Notes
- Footing Layout, Sheet Pile Elevation & Rip-Rap Detail
- Top of Deck Elevations
- Top of Deck Elevations
- Top of Deck Elevations
- Deck Plan And Cross Section
- Diaphragm Elevation, Sections & Drain Detail
- Parapet Elevation
- Deck Details & Bill of Material
- Framing Plan And Beam Elevation
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- Bearing Details
- South Abutment
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- South Pier
- North Pier
- Bar Splicer Assembly Details
- Anchor Bolt Details For Bearings
- Temporary Concrete Barrier For Stage Construction
- Soil Borings
- Soil Borings



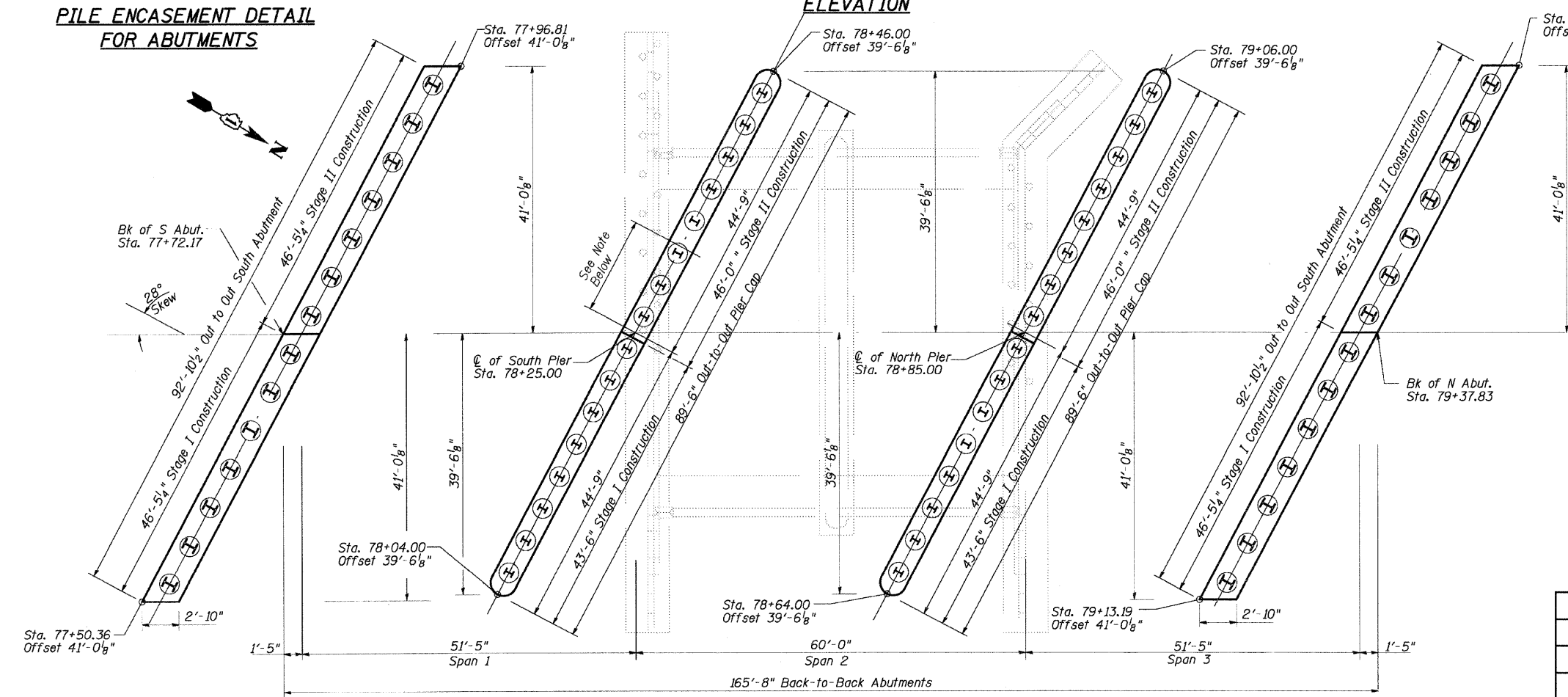
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DEPARTMENT OF TRANSPORTATION

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PART DETAIL OF STONE RIP-RAP TREATMENT

PILE ENCASEMENT DETAIL FOR ABUTMENTS



Notes:

A cantilevered sheet piling design is not feasible in the region designated as "Temporary Soil Retention System". A wale restraining system or other system will be required. The contractor shall submit a temporary soil retention system design including plan details and computations to the Engineer for review and approval. The design requires a seal from a Licensed Structural Engineer.

If the contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

The contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

Hard driving may be encountered during the sheet piling installation. The Contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring logs.

There are existing utilities in the areas where proposed sheet piling will be installed. Contractor to locate all existing utilities per requirements of the special provisions. For overhead utilities and all other known utilities. See Roadway Plans, Sheet 13.

Note:
Interference With Existing Piles in Existing Abutment is Possible. In Such Case, Proposed Piles Shall be Relocated as Directed by the Engineer of Record. Maintain Minimum Pile Spacing of 3'-0" New Piles Must Remain Along C of Pier.

REVISIONS	
NAME	DATE

FOOTING LAYOUT
SHEET PILE ELEVATION
& RIP-RAP DETAIL
DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

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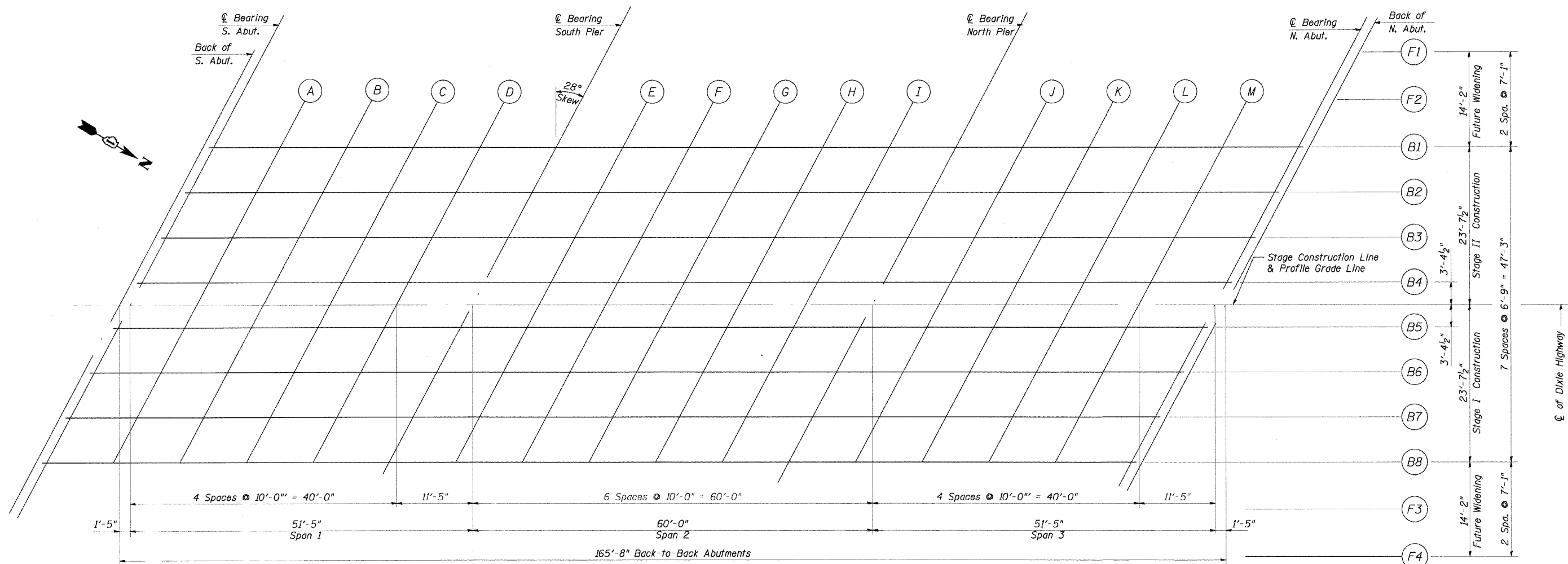


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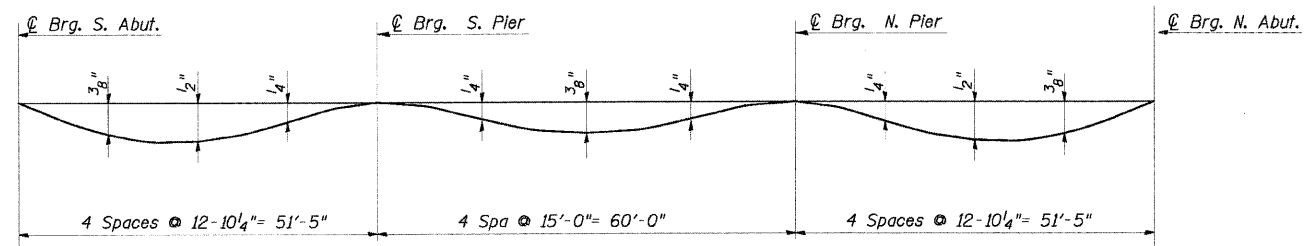
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F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	28

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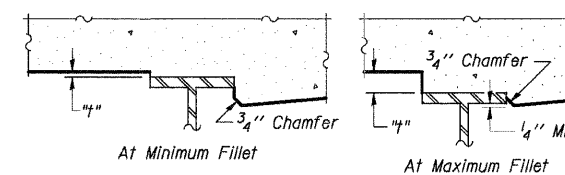
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on deck elevation tables.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on tables, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

REVISIONS	
NAME	DATE

TOP OF DECK ELEVATIONS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
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RME Rubinos & Mesta Engineers, Inc.

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F.A.RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	29

FED.ROAD DIST.NO. ILLINOIS FED.AID PROJECT-
Sheet 5 of 22 Contract No. 62539

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+84.728	-23.625	644.121	644.121
CL Brg. S. Abut.	77+86.145	-23.625	644.126	644.126
A	77+96.145	-23.625	644.158	644.184
B	78+06.145	-23.625	644.186	644.225
C	78+16.145	-23.625	644.208	644.243
D	78+26.145	-23.625	644.226	644.242
CL S. Pier	78+37.562	-23.625	644.239	644.239
E	78+47.562	-23.625	644.246	644.255
F	78+57.562	-23.625	644.247	644.271
G	78+67.562	-23.625	644.243	644.274
H	78+77.562	-23.625	644.234	644.258
I	78+87.562	-23.625	644.220	644.229
CL N. Pier	78+97.562	-23.625	644.201	644.201
J	79+07.562	-23.625	644.176	644.190
K	79+17.562	-23.625	644.147	644.179
L	79+27.562	-23.625	644.112	644.151
M	79+37.562	-23.625	644.072	644.101
CL Brg. N. Abut.	79+48.978	-23.625	644.021	644.021
BK N. Abut.	79+50.395	-23.625	644.014	644.014

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+81.139	-16.875	643.945	643.945
CL Brg. S. Abut.	77+82.556	-16.875	643.951	643.951
A	77+92.556	-16.875	643.985	644.011
B	78+02.556	-16.875	644.015	644.053
C	78+12.556	-16.875	644.039	644.073
D	78+22.556	-16.875	644.058	644.074
CL S. Pier	78+33.973	-16.875	644.074	644.074
E	78+43.973	-16.875	644.082	644.091
F	78+53.973	-16.875	644.085	644.109
G	78+63.973	-16.875	644.083	644.114
H	78+73.973	-16.875	644.076	644.100
I	78+83.973	-16.875	644.064	644.072
CL N. Pier	78+93.973	-16.875	644.046	644.046
J	79+03.973	-16.875	644.024	644.037
K	79+13.973	-16.875	643.996	644.028
L	79+23.973	-16.875	643.963	644.002
M	79+33.973	-16.875	643.925	643.954
CL Brg. N. Abut.	79+45.389	-16.875	643.876	643.876
BK N. Abut.	79+46.806	-16.875	643.869	643.869

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+77.550	-10.125	643.769	643.769
CL Brg. S. Abut.	77+78.967	-10.125	643.775	643.775
A	77+88.967	-10.125	643.811	643.837
B	77+98.967	-10.125	643.843	643.881
C	78+08.967	-10.125	643.869	643.903
D	78+18.967	-10.125	643.890	643.906
CL S. Pier	78+30.384	-10.125	643.907	643.907
E	78+40.384	-10.125	643.918	643.926
F	78+50.384	-10.125	643.922	643.946
G	78+60.384	-10.125	643.922	643.953
H	78+70.384	-10.125	643.917	643.941
I	78+80.384	-10.125	643.907	643.915
CL N. Pier	78+90.384	-10.125	643.891	643.891
J	79+00.384	-10.125	643.870	643.884
K	79+10.384	-10.125	643.844	643.877
L	79+20.384	-10.125	643.814	643.853
M	79+30.384	-10.125	643.778	643.806
CL Brg. N. Abut.	79+41.800	-10.125	643.730	643.730
BK N. Abut.	79+43.217	-10.125	643.724	643.724

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+73.961	-3.375	643.593	643.593
CL Brg. S. Abut.	77+75.378	-3.375	643.599	643.599
A	77+85.378	-3.375	643.637	643.662
B	77+95.378	-3.375	643.670	643.709
C	78+05.378	-3.375	643.698	643.732
D	78+15.378	-3.375	643.721	643.737
CL S. Pier	78+26.795	-3.375	643.741	643.741
E	78+36.795	-3.375	643.753	643.761
F	78+46.795	-3.375	643.759	643.783
G	78+56.795	-3.375	643.761	643.792
H	78+66.795	-3.375	643.757	643.781
I	78+76.795	-3.375	643.749	643.758
CL N. Pier	78+86.795	-3.375	643.735	643.735
J	78+96.795	-3.375	643.716	643.730
K	79+06.795	-3.375	643.692	643.725
L	79+16.795	-3.375	643.663	643.702
M	79+26.795	-3.375	643.629	643.657
CL Brg. N. Abut.	79+38.211	-3.375	643.584	643.584
BK N. Abut.	79+39.628	-3.375	643.578	643.578

STAGE LINE & BONDED CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+72.167	0.0	643.504	643.504
CL Brg. S. Abut.	77+73.583	0.0	643.510	643.510
A	77+83.583	0.0	643.549	643.575
B	77+93.583	0.0	643.583	643.622
C	78+03.583	0.0	643.612	643.646
D	78+13.583	0.0	643.636	643.653
CL S. Pier	78+25.000	0.0	643.657	643.657
E	78+35.000	0.0	643.670	643.679
F	78+45.000	0.0	643.677	643.701
G	78+55.000	0.0	643.680	643.711
H	78+65.000	0.0	643.677	643.701
I	78+75.000	0.0	643.670	643.679
CL N. Pier	78+85.000	0.0	643.657	643.657
J	78+95.000	0.0	643.639	643.653
K	79+05.000	0.0	643.616	643.648
L	79+15.000	0.0	643.588	643.627
M	79+25.000	0.0	643.555	643.583
CL Brg. N. Abut.	79+36.417	0.0	643.510	643.510
BK N. Abut.	79+37.833	0.0	643.504	643.504

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+70.372	3.375	643.416	643.416
CL Brg. S. Abut.	77+71.789	3.375	643.422	643.422
A	77+81.789	3.375	643.462	643.487
B	77+91.789	3.375	643.497	643.535
C	78+01.789	3.375	643.527	643.561
D	78+11.789	3.375	643.551	643.568
CL S. Pier	78+23.205	3.375	643.573	643.573
E	78+33.205	3.375	643.587	643.596
F	78+43.205	3.375	643.595	643.619
G	78+53.205	3.375	643.599	643.630
H	78+63.205	3.375	643.597	643.621
I	78+73.205	3.375	643.591	643.599
CL N. Pier	78+83.205	3.375	643.579	643.579
J	78+93.205	3.375	643.562	643.575
K	79+03.205	3.375	643.540	643.572
L	79+13.205	3.375	643.512	643.551
M	79+23.205	3.375	643.480	643.508
CL Brg. N. Abut.	79+34.622	3.375	643.437	643.437
BK N. Abut.	79+36.039	3.375	643.431	643.431

REVISIONS	
NAME	DATE

TOP OF DECK ELEVATIONS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	30
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Sheet 6 of 22			Contract No. 62539	

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BEAM 6				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+66.783	10.125	643.238	643.238
CL Brg. S. Abut.	77+68.200	10.125	643.244	643.244
A	77+78.2.00	10.125	643.286	643.311
B	77+88.2.00	10.125	643.323	643.361
C	77+98.2.00	10.125	643.354	643.389
D	78+08.2.00	10.125	643.381	643.397
CL S. Pier	78+19.616	10.125	643.405	643.405
E	78+29.616	10.125	643.421	643.429
F	78+39.616	10.125	643.431	643.455
G	78+49.616	10.125	643.436	643.467
H	78+59.616	10.125	643.436	643.460
I	78+69.616	10.125	643.432	643.440
CL N. Pier	78+79.616	10.125	643.421	643.421
J	78+89.616	10.125	643.406	643.420
K	78+99.616	10.125	643.386	643.418
L	79+09.616	10.125	643.361	643.400
M	79+19.616	10.125	643.330	643.358
CL Brg. N. Abut.	79+31.033	10.125	643.289	643.289
BK N. Abut.	79+32.450	10.125	643.283	643.283

BEAM 7				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+63.194	16.875	643.059	643.059
CL Brg. S. Abut.	77+64.611	16.875	643.066	643.066
A	77+74.611	16.875	643.110	643.135
B	77+84.611	16.875	643.148	643.187
C	77+94.611	16.875	643.182	643.216
D	78+04.611	16.875	643.210	643.226
CL S. Pier	78+16.027	16.875	643.236	643.236
E	78+26.027	16.875	643.254	643.262
F	78+36.027	16.875	643.266	643.290
G	78+46.027	16.875	643.273	643.304
H	78+56.027	16.875	643.275	643.299
I	78+66.027	16.875	643.272	643.281
CL N. Pier	78+76.027	16.875	643.264	643.264
J	78+86.027	16.875	643.250	643.264
K	78+96.027	16.875	643.232	643.264
L	79+06.027	16.875	643.208	643.247
M	79+16.027	16.875	643.180	643.208
CL Brg. N. Abut.	79+27.444	16.875	643.141	643.141
BK N. Abut.	79+28.861	16.875	643.135	643.135

BEAM 8				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK S. Abut.	77+59.605	23.625	642.880	642.880
CL Brg. S. Abut.	77+61.022	23.625	642.887	642.887
A	77+71.022	23.625	642.932	642.958
B	77+81.022	23.625	642.973	643.012
C	77+91.022	23.625	643.008	643.042
D	78+01.022	23.625	643.038	643.055
CL S. Pier	78+12.438	23.625	643.067	643.067
E	78+22.438	23.625	643.086	643.095
F	78+32.438	23.625	643.100	643.124
G	78+42.438	23.625	643.109	643.140
H	78+52.438	23.625	643.113	643.137
I	78+62.438	23.625	643.112	643.121
CL N. Pier	78+72.438	23.625	643.105	643.105
J	78+82.438	23.625	643.094	643.107
K	78+92.438	23.625	643.077	643.109
L	79+02.438	23.625	643.055	643.095
M	79+12.438	23.625	643.029	643.057
CL Brg. N. Abut.	79+23.855	23.625	642.992	642.992
BK N. Abut.	79+25.272	23.625	642.987	642.987

REVISIONS	
NAME	DATE

TOP OF DECK ELEVATIONS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
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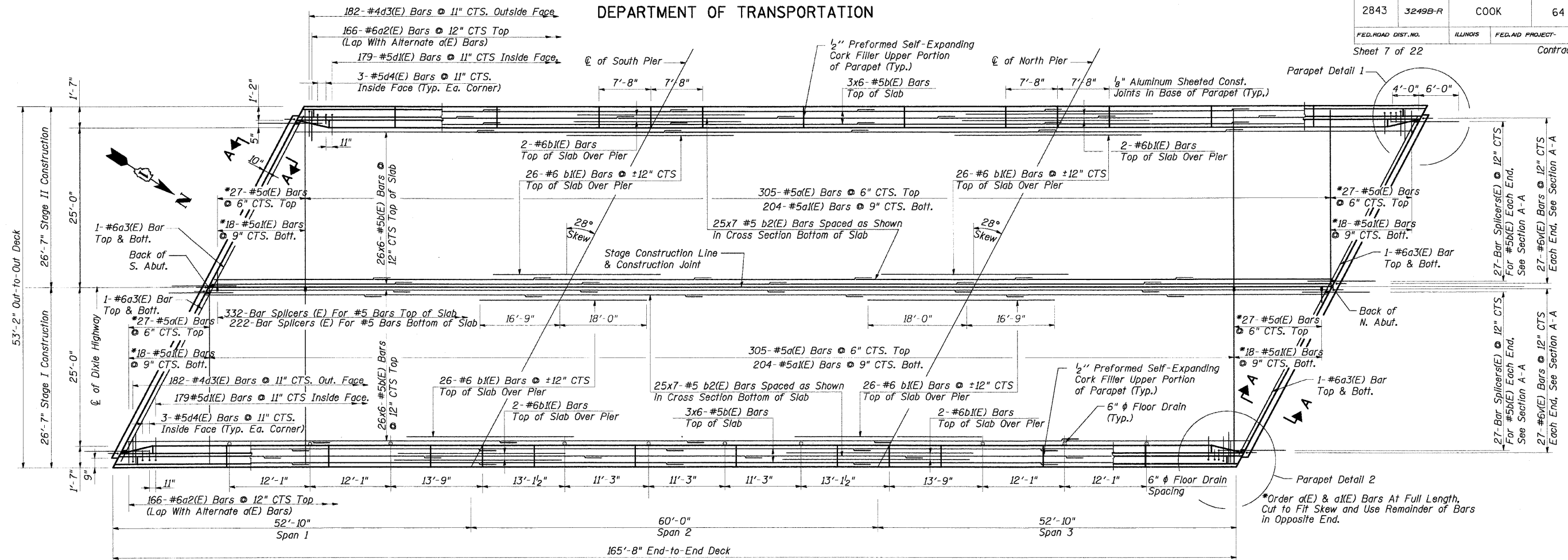
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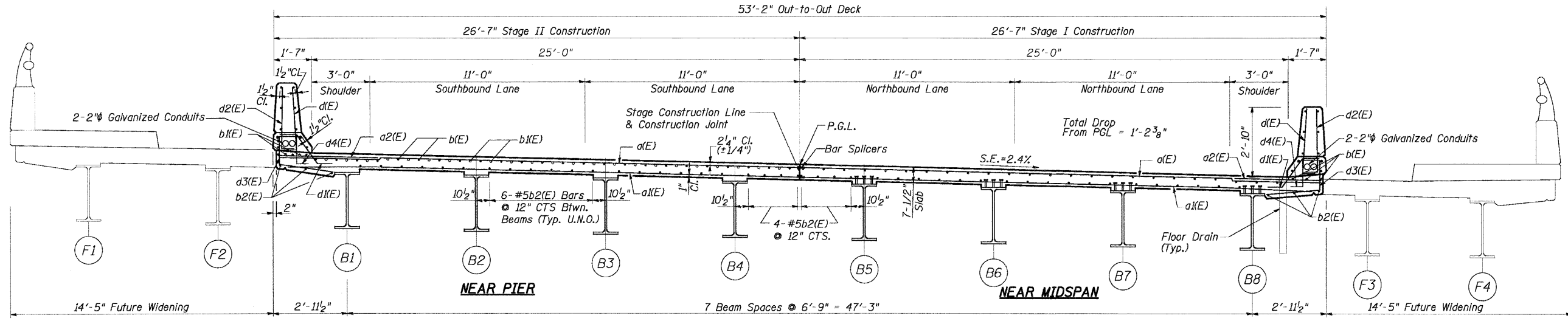


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	31
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
			Sheet 7 of 22	Contract No. 62539



DECK PLAN



CROSS SECTION
Looking North

Notes: See Sheet #10 of 22 for Superstructure Details and Bill of Material.
Reinforcement Bars Designated (E) Shall be Epoxy Coated.
Bars Indicated Thus 25 x 7-#5 etc. Indicates 25 Lines of Bars With 7 Lengths per Line.
See Sheet # 9 of 22 for Parapet Reinforcement.
Space Reinforcement to Avoid Floor Drains.
Minimum Bar Lap For #5 Bar - 2'-2".
Minimum Bar Lap For #6 Bar - 2'-7".
For Floor Drain Details, See Sht. #10 of 22.
For Section A-A & Deck Diaphragm, See Sht #8 of 22.
See Sheet #9 of 22 For Parapet Details 1 & 2.

REVISIONS	
NAME	DATE

DECK PLAN AND
CROSS SECTION
DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BY
DESIGNED BY BS
CHECKED BY PK

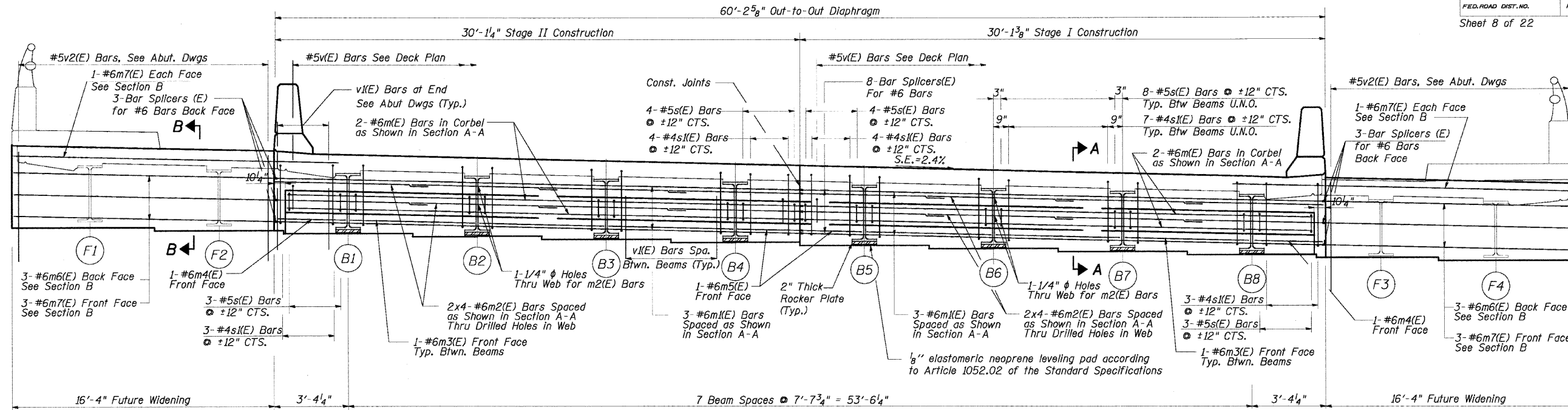
RME Rubinos & Mesia Engineers, Inc.

\$PRINT \$P \$DRVS \$
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

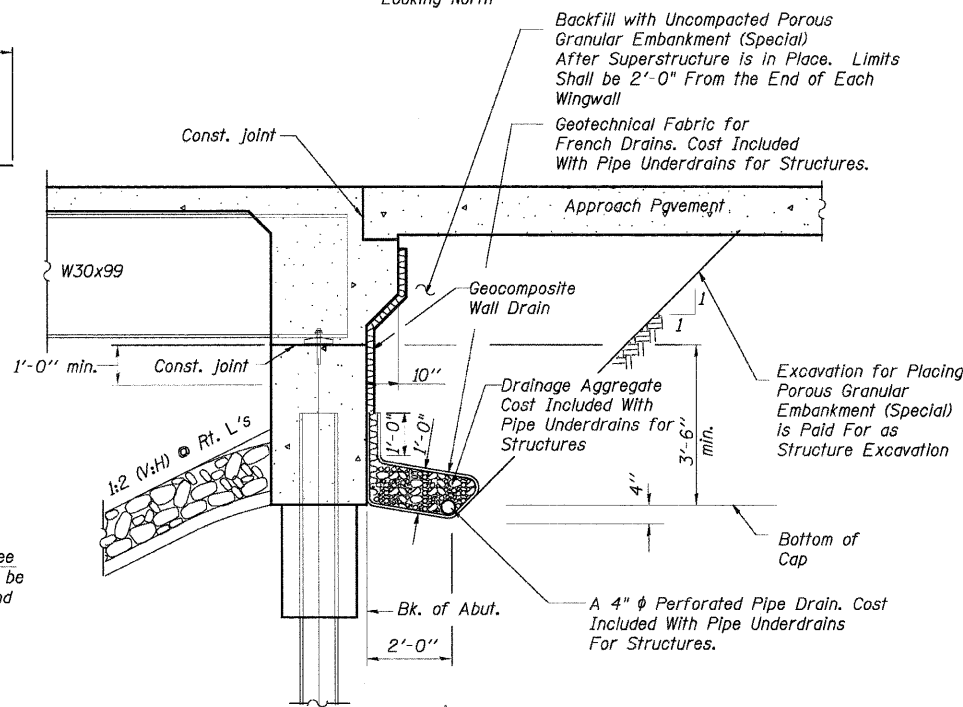
F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	32

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-
Sheet 8 of 22 Contract No. 62539



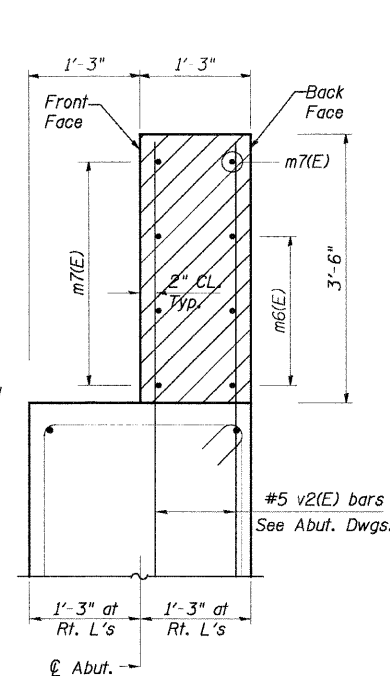
DIAPHRAGM ELEVATION AT ABUTMENT

Looking North



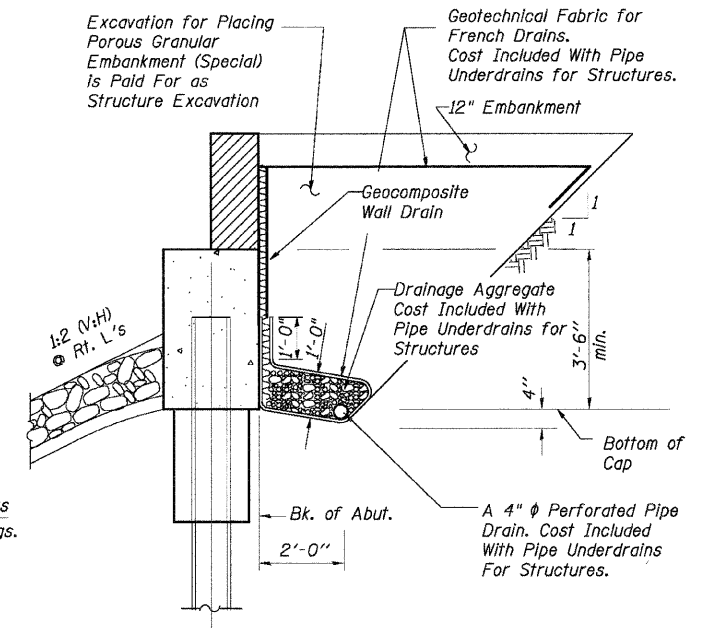
SECTION THRU ABUTMENT DRAIN

(Horiz. dim. @ Rt. L's)



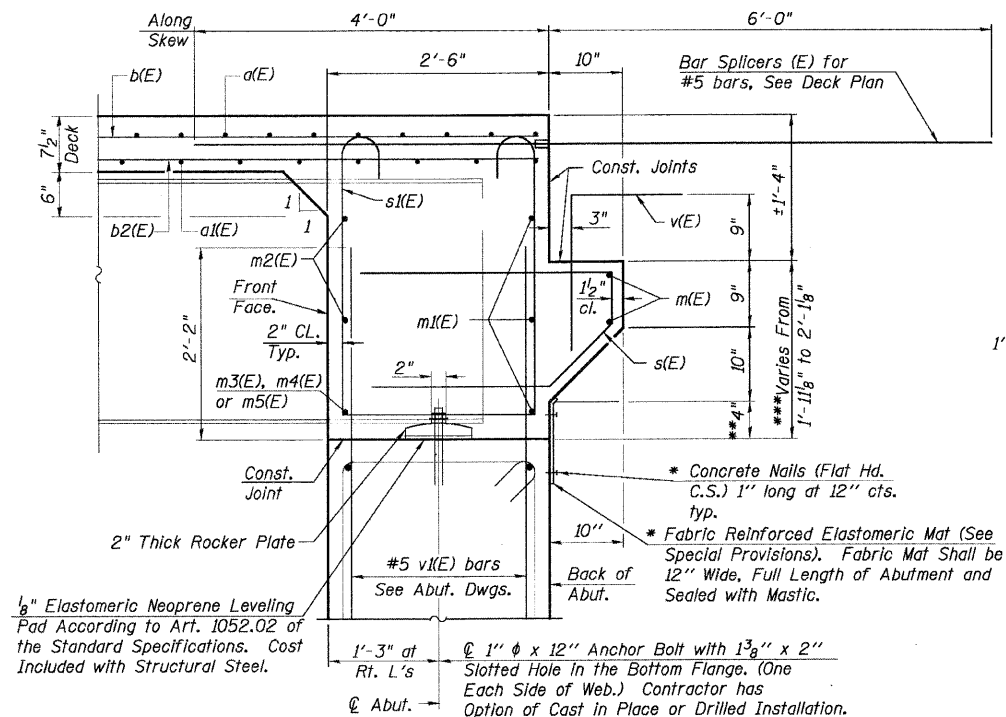
SECTION B-B

Hatching Indicates Backwall Over Abutment for Interim Conditions



SECTION THRU ABUTMENT DRAIN

(Horiz. dim. @ Rt. L's)
At Southwest Quadrant, Adjacent to Retaining Wall



SECTION A-A

Dimensions at right angles to abutment, except as shown.

* Cost included with Concrete Superstructure.

**4 1/2" at Centerline of Beam

***2'-0 1/8" at Centerline of Beam

Notes:

Reinforcement bars in Diaphragm are Billed With Superstructure on Sheet 10 of 22 .
Concrete in Diaphragm is Included with Concrete Superstructure on Sheet 7 of 22 .
For Details of Bars s(E) & s(E) See Sheet 10 of 22 .
The s(E) and s(E) Bars Shall Be Placed Parallel to the Beams. Spacing For These Bars Shall be at Right Angles to the Beams.
For Anchor Bolt Details, See Sheet 19 of 22.

MIN. BAR LAP

#6 bar = 2'-9"

Notes:

All drainage components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with side slopes. (See Article 601.05 of the Standard Specifications and Highway Standard 6011.01)

REVISIONS	
NAME	DATE

DIAPHRAGM ELEVATION.
SECTIONS & DRAIN DETAIL

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

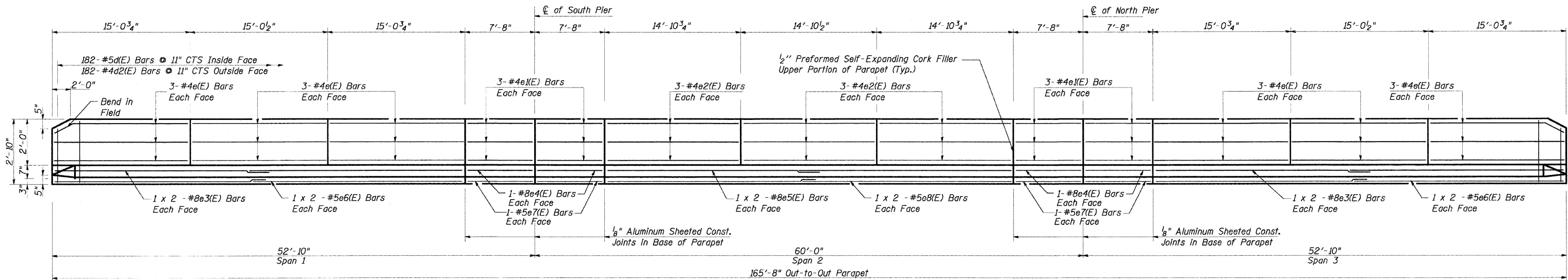
RME Rubinos & Mesia Engineers, Inc.

SPINB.SS
SP1.DRW

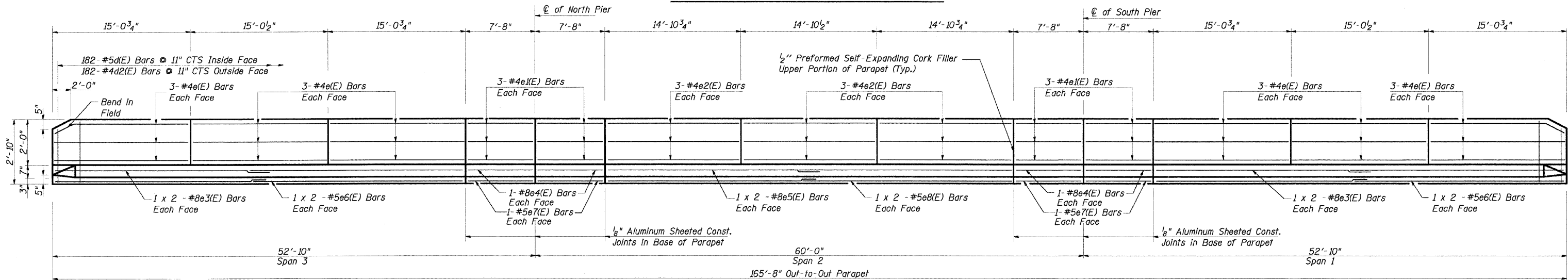
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DATES
TIME#

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

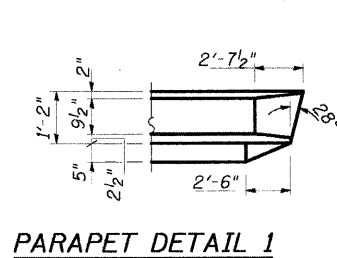
F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	33
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Sheet 9 of 22		Contract No. 62539		



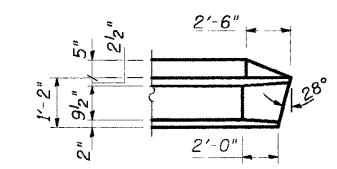
INSIDE ELEVATION OF WEST PARAPET



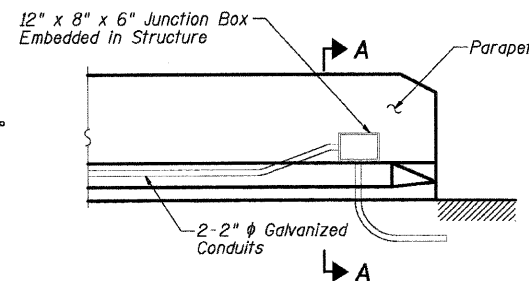
INSIDE ELEVATION OF EAST PARAPET



PARAPET DETAIL 1



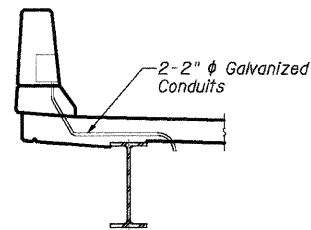
PARAPET DETAIL 2



JUNCTION BOX EMBEDDED IN PARAPET

Notes:

1. The Junction Box Shall Only be Installed when Indicated on the Plans or as Directed by the Engineer to Facilitate the Installation of Unit Duct into the Conduit Embedded in the Parapet.
2. The Junction Box Shall be Paid for at the Unit Price for Junction Box, Embedded in Structure, 12" x 8" x 6"
3. The Exact Location of the Junction Box Shall be Determined by the Engineer.



SECTION A-A

Notes: See Sheet #10 of 22 for Superstructure Details and Bill of Material.

Reinforcement bars designated (E) shall be epoxy coated.

Bars Indicated thus 1 x 2-#8 etc. Indicates 1 Line of Bars With 2 Lengths per Line.

Minimum Bar Lap For #4 Bar - 1'-8".

Minimum Bar Lap For #5 Bar - 2'-2".

Minimum Bar Lap For #8 Bar - 4'-6".

For Deck Diaphragm, See Sht #8 of 22.

REVISIONS	
NAME	DATE

PARAPET ELEVATION

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BV
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CHECKED BY PK

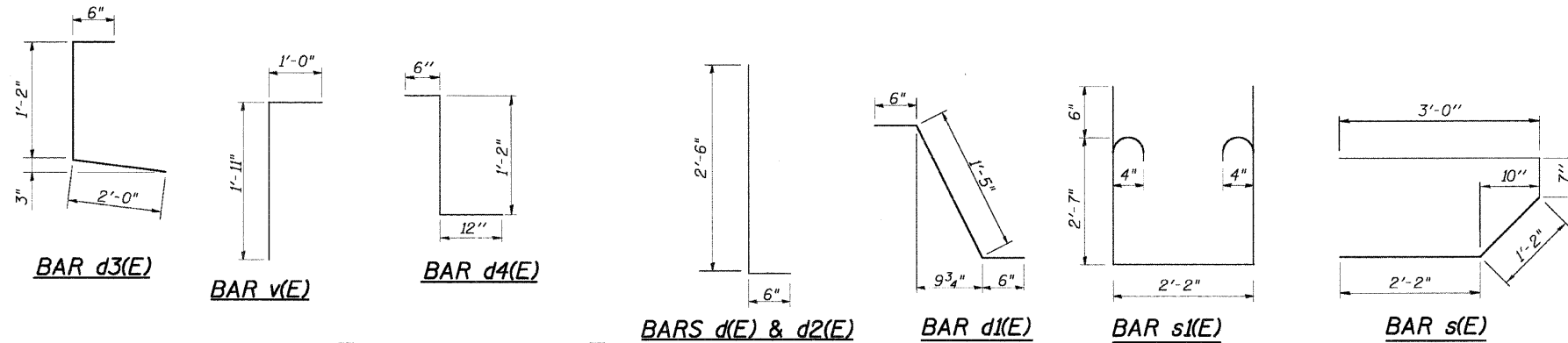
RME Rubinos & Mesia Engineers, Inc.

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TIME \$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	34
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
Sheet 10 of 22			Contract No. 62539	



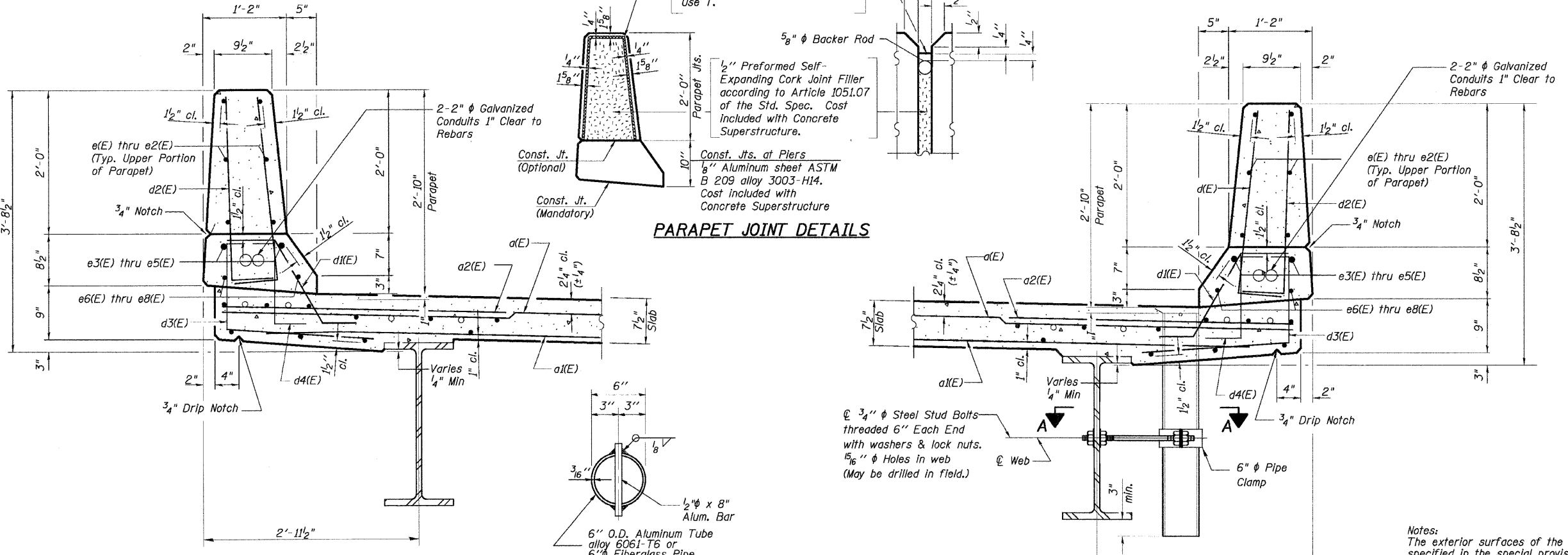
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	664	#5	26'-2"	—
a1(E)	444	#5	25'-10"	—
a2(E)	332	#6	4'-6"	—
a3(E)	8	#6	29'-4"	—
b(E)	348	#5	29'-5"	—
b1(E)	112	#6	34'-9"	—
b2(E)	350	#5	25'-6"	—
d(E)	364	#5	3'-0"	—
d1(E)	358	#5	2'-5"	—
d2(E)	364	#4	3'-0"	—
d3(E)	364	#4	3'-8"	—
d4(E)	12	#5	2'-8"	—
e(E)	72	#4	14'-9"	—
e1(E)	48	#4	7'-5"	—
e2(E)	36	#4	14'-7"	—
e3(E)	16	#8	24'-10"	—
e4(E)	16	#8	7'-4"	—
e5(E)	8	#8	24'-7"	—
e6(E)	16	#5	23'-8"	—
e7(E)	16	#5	7'-4"	—
e8(E)	8	#5	23'-5"	—
m(E)	8	#6	29'-0"	—
m1(E)	12	#6	29'-10"	—
m2(E)	32	#6	9'-8"	—
m3(E)	12	#6	7'-4"	—
m4(E)	4	#6	3'-1"	—
m5(E)	4	#6	3'-7"	—
m6(E)	12	#6	16'-7"	—
m7(E)	20	#6	18'-10"	—
s(E)	124	#5	6'-11"	—
s1(E)	112	#4	8'-4"	—
v(E)	108	#6	2'-11"	—
Reinforcement Bars, Epoxy Coated		Pound	70800	
Concrete Superstructure		Cu Yd	300	
Bar Splacers		Each	690	

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, Use T.

5/8" ϕ Backer Rod
1/2" Preformed Self-Expanding Cork Joint Filler according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.
Const. Jts. at Piers
1/8" Aluminum sheet ASTM B 209 alloy 3003-H14. Cost included with Concrete Superstructure

PARAPET JOINT DETAILS

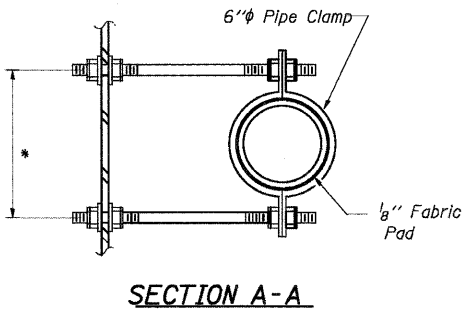
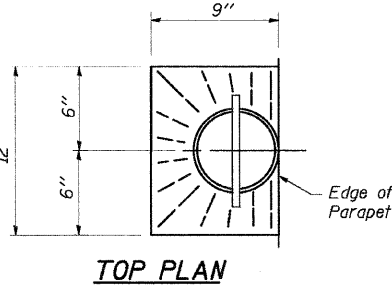
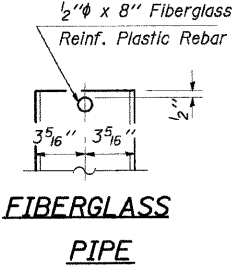
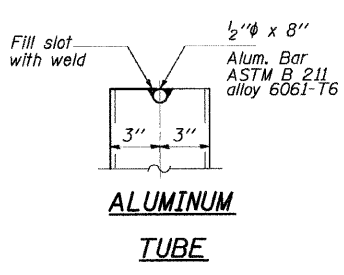


SECTION THRU WEST PARAPET

TOP PLAN
(Showing Aluminum Tube)

SECTION THRU EAST PARAPET

Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



REVISIONS	
NAME	DATE

**DECK DETAILS &
BILL OF MATERIAL**

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

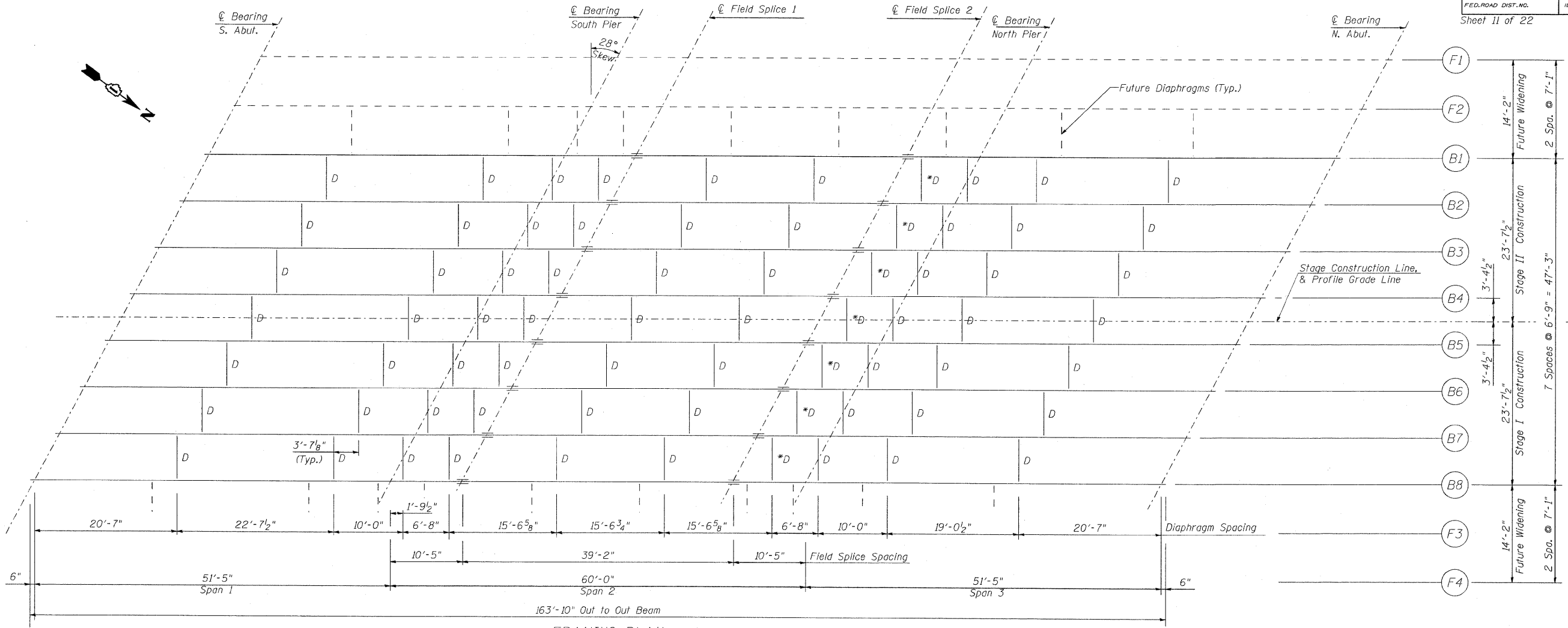
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RME Rubinos & Mesia Engineers, Inc.

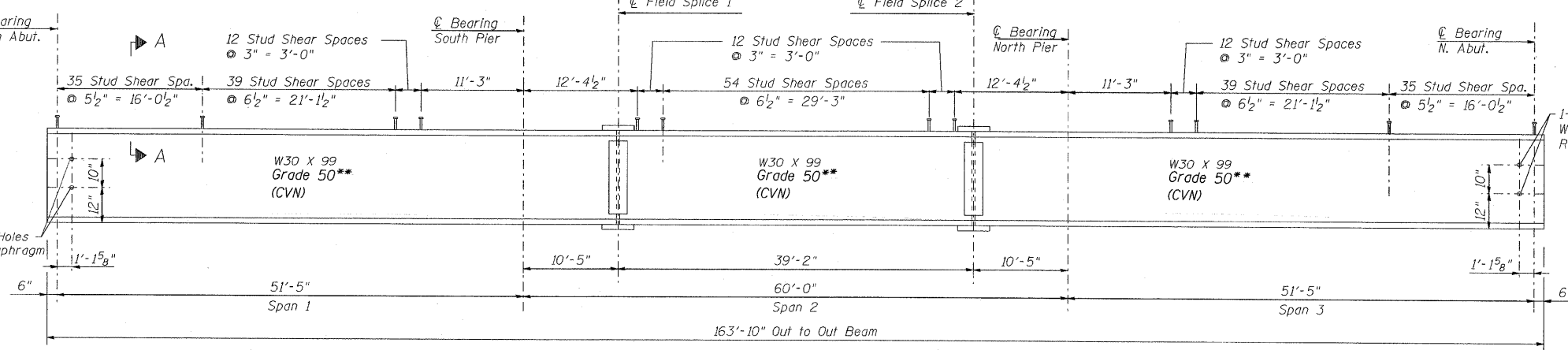
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

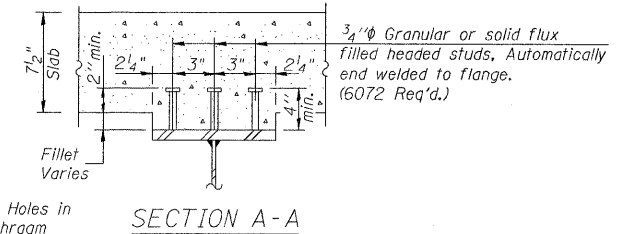
F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	35
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	
Sheet 11 of 22		Contract No. 62539		



FRAMING PLAN
*D - Place Diaphragms at Center of Higher Beam



ELEVATION



- Notes:**
- All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
 - Components designated (CVN) shall conform to the toughness requirements given in the Special Provision for Wide-Flange Rolled Sections for Bridges. ****See the Special Provision for Wide-Flange Rolled Sections for Bridges.**
 - All Steel Beams Shall be M270 Grade 50.
 - D1 - Denotes Location of Future Diaphragms.

REVISIONS	
NAME	DATE
Rev-BK	9/25/09

FRAMING PLAN AND BEAM ELEVATION

DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 4-27-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK



\$PENPLS\$ \$PLT\$ \$JES\$
 \$FILES\$ \$DATES\$ \$TIMES\$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	36
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
Sheet 12 of 22		Contract No. 62539		

	0.4 Sp. 1	S. Pier	0.5 Sp. 2	N. Pier	0.6 Sp. 3
I_s (in ⁴)	3990	3990	3990	3990	3990
I_c (n) (in ⁴)	11961		11961		11961
I_c (3n) (in ⁴)	8864		8864		8864
S_s (in ³)	269	269	269	269	269
S_c (n) (in ³)	419		419		419
S_c (3n) (in ³)	378		378		378
Z (in ³)		312		312	
\bar{D} (k/ft.)	0.87	1.44	0.87	1.44	0.87
$M\bar{D}$ (k)	169	404	124	404	169
$s\bar{D}$ (k/ft.)	0.57		0.57		0.57
$Ms\bar{D}$ (k)	127		121		127
$M\bar{L}$ (k)	363	191	362	191	363
M (Imp) (k)	101	53	98	53	101
$S_3(M\bar{L} + M(Imp))$ (k)	773.3	406.7	766.7	406.7	773.3
M_a (k)	1390.1	1053.9	1315.2	1053.9	1390.1
M_u (k)	2062	1300	2073	1300	2062
$fs\bar{D}$ non-comp (k.s.i.)	7.5	18.0	5.5	18.0	7.5
$fs\bar{D}$ (comp) (k.s.i.)	4.0		3.8		4.0
$fs\bar{D}_3(L + Imp)$ (k.s.i.)	22.1	18.1	22.0	18.1	22.1
fs (Overload) (k.s.i.)	33.6	36.1	31.3	36.1	33.6
fs (Total) (k.s.i.)					
VR (k)	50.4		40.2		50.4

*Compact Braced Sections
**Non-Compact Section

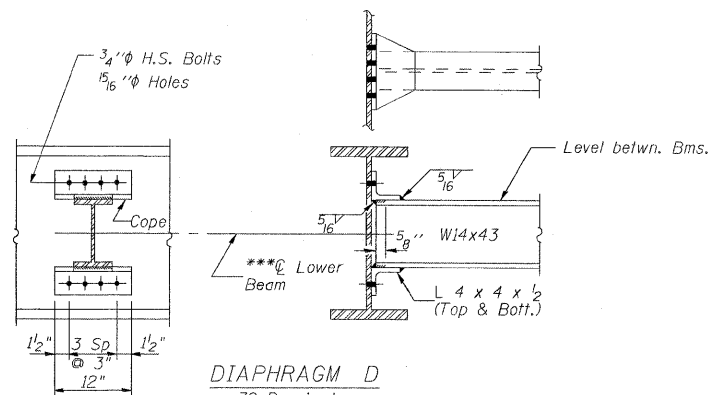
	S. Abut.	S. Pier	N. Pier	N. Abut.
$R\bar{D}$ (k)	29.2	88.1	88.1	29.2
$R\bar{L}$ (k)	36.7	42.8	42.8	36.7
$Imp.$ (k)	10.3	12.0	12.0	10.3
R (Total) (k)	76.2	142.9	142.9	76.2

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 I_c (n) and S_c (n) are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 I_c (3n) and S_c (3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.
 VR is the maximum Live Load + Impact shear within the composite portion of the span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 M_a (Applied Moment) = $1.3EM\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M(Imp))$.
 The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 fs (Overload) is the sum of the stresses due to $M\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M(Imp))$.
 fs (Total) (Non-compact section) is the sum of the stresses due to $1.3EM\bar{D} + Ms\bar{D} + S_3(M\bar{L} + M(Imp))$.

TOP OF BEAM ELEVATIONS

For Fabrication Only

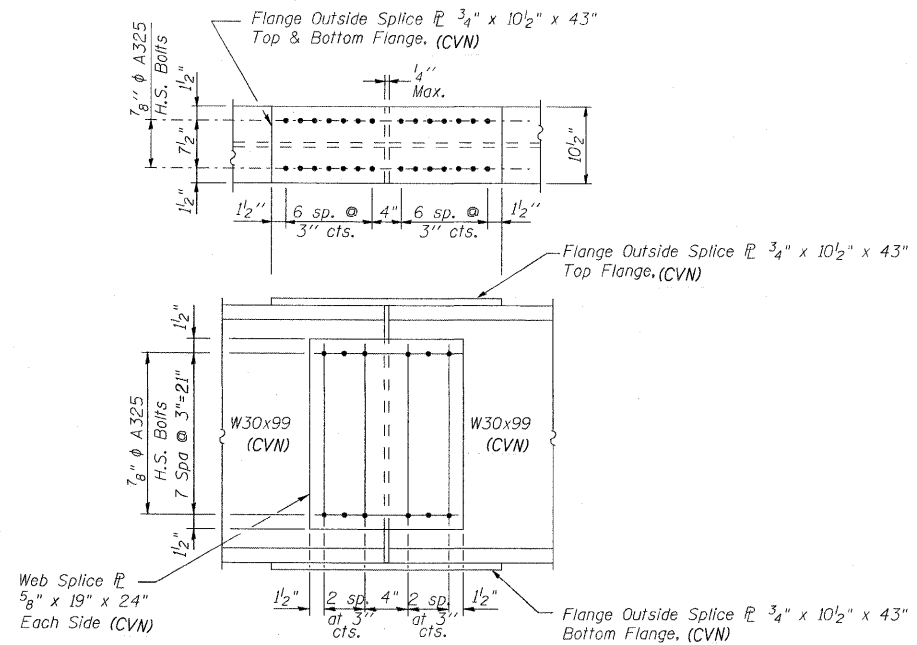
Location	Beam B1	Beam B2	Beam B3	Beam B4	Beam B5	Beam B6	Beam B7	Beam B8
Center Bearing South Abutment	643.438	643.263	643.088	642.911	642.734	642.557	642.378	642.199
Center South Pier	643.495	643.329	643.163	642.996	642.828	642.660	642.491	642.322
Center Field Splice 1	643.506	643.342	643.178	643.013	642.847	642.681	642.514	642.347
Center Field Splice 2	643.481	643.324	643.167	643.009	642.851	642.692	642.532	642.372
Center North Pier	643.456	643.301	643.146	642.990	642.834	642.677	642.519	642.361
Center Bearing North Abutment	643.333	643.188	643.043	642.896	642.749	642.602	642.453	642.304



DIAPHRAGM D
70 Required

***For Diaphragm Adjacent to Field Splice 2, Use Higher Beam

Notes: Two hardened washers shall be required over all oversize holes
For future diaphragm DI, apply 1 5/16 inch holes at location specified on Framing Plan.



FIELD SPLICE

16 Field Splices Required

Components designated (CVN) shall conform to the toughness requirements given in the Special Provision for Wide-Flange Rolled Sections for Bridges.

All Splice Plates except Filler Plates shall be Grade 50 (CVN). See the Special Provision for Wide-Flange Rolled Sections for Bridges.

REVISIONS	
NAME	DATE
Rev. -BK	9/25/09

STEEL DETAILS &
TOP OF BEAM ELEVATIONS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 4-27-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

RME Rubinos &
Mesia
Engineers, Inc.

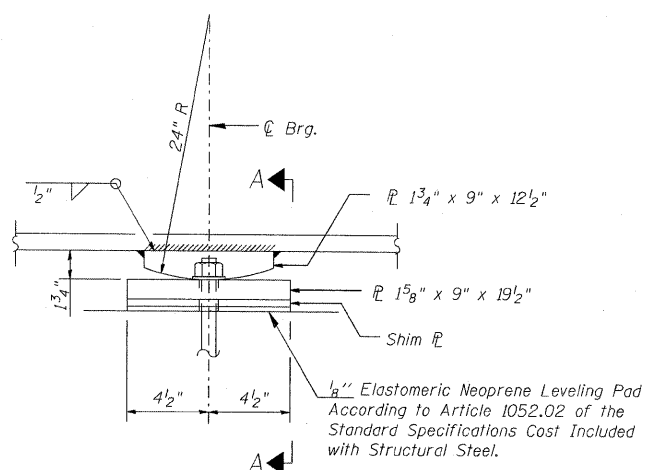
SPL X56

SPL X56

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	37
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

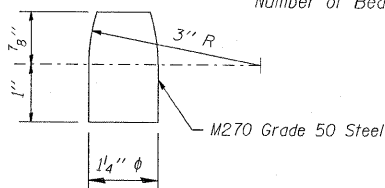
Sheet 13 of 22 Contract No. 62539



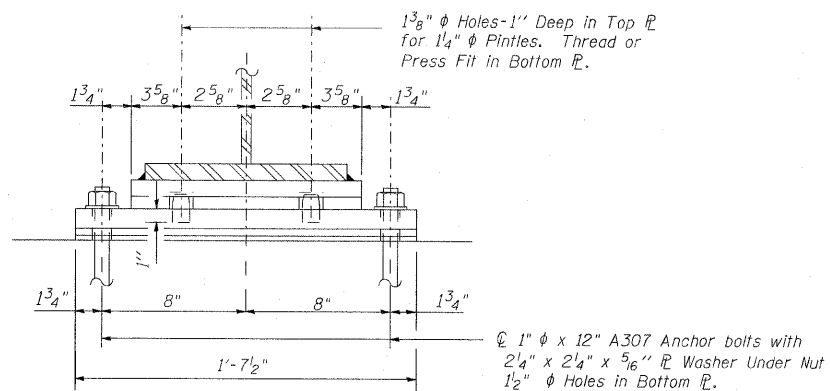
ELEVATION AT SOUTH PIER

FIXED BEARING

Number of Bearing Assemblies Required - 8



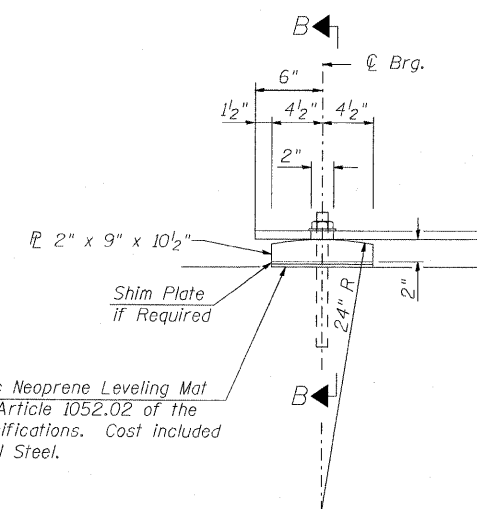
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SECTION A-A

BEARINGS BILL OF MATERIALS

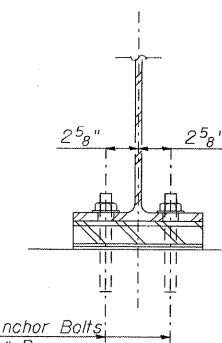
Item	Unit	Total
Anchor Bolts, 1"	Each	64



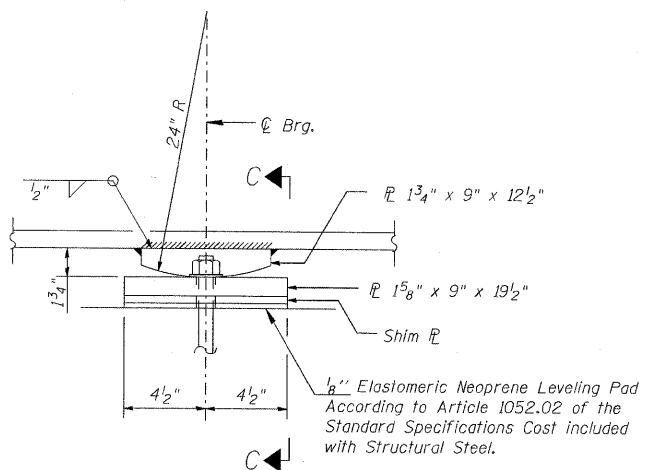
ELEVATION AT SOUTH ABUTMENT

FIXED BEARING

Number of Bearing Assemblies Required - 8



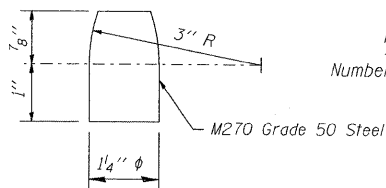
SECTION B-B



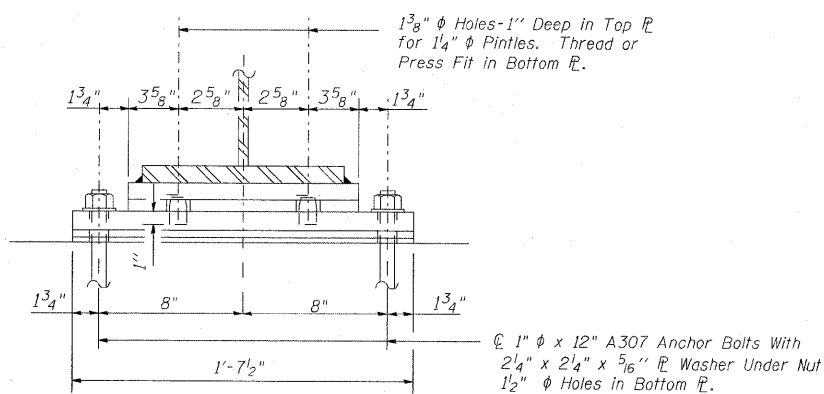
ELEVATION AT NORTH PIER

FIXED BEARING

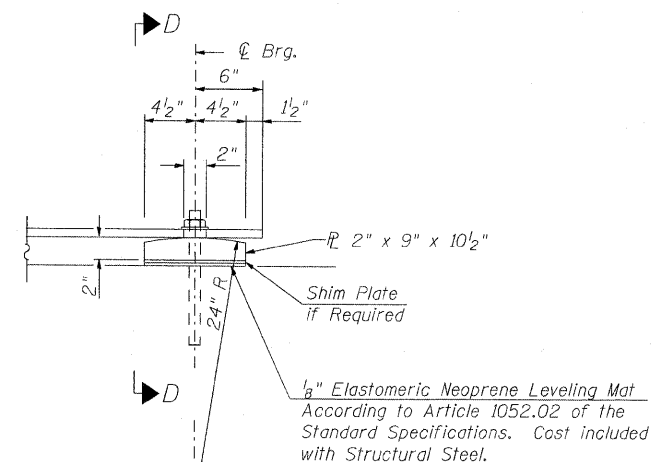
Number of Bearing Assemblies Required - 8



PINTLE



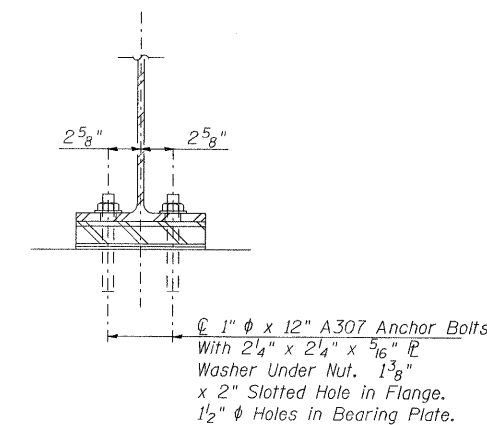
SECTION C-C



ELEVATION AT NORTH ABUTMENT

FIXED BEARING

Number of Bearing Assemblies Required - 8



SECTION D-D

Notes:
Anchor bolts at fixed bearings may be built into the Concrete Abutment.
See sheet 19 of 20 for Anchor Bolt installation.

REVISIONS	
NAME	DATE
REV-BK	9/25/09

BEARING DETAILS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 4-27-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

RME Rubinos & Mesia Engineers, Inc.

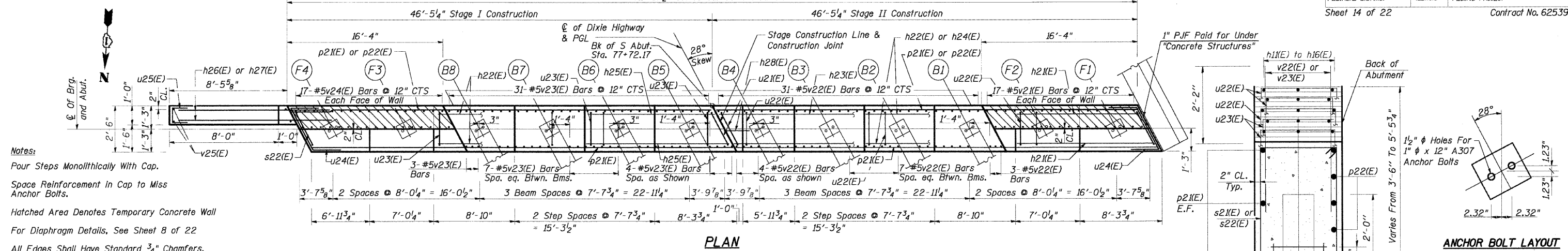
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SPF
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8/DATES
8/TIMES

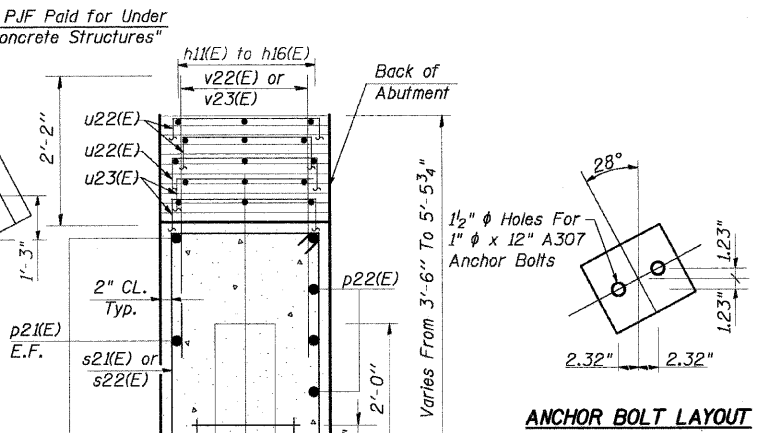
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	38
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Sheet 14 of 22			Contract No. 62539	

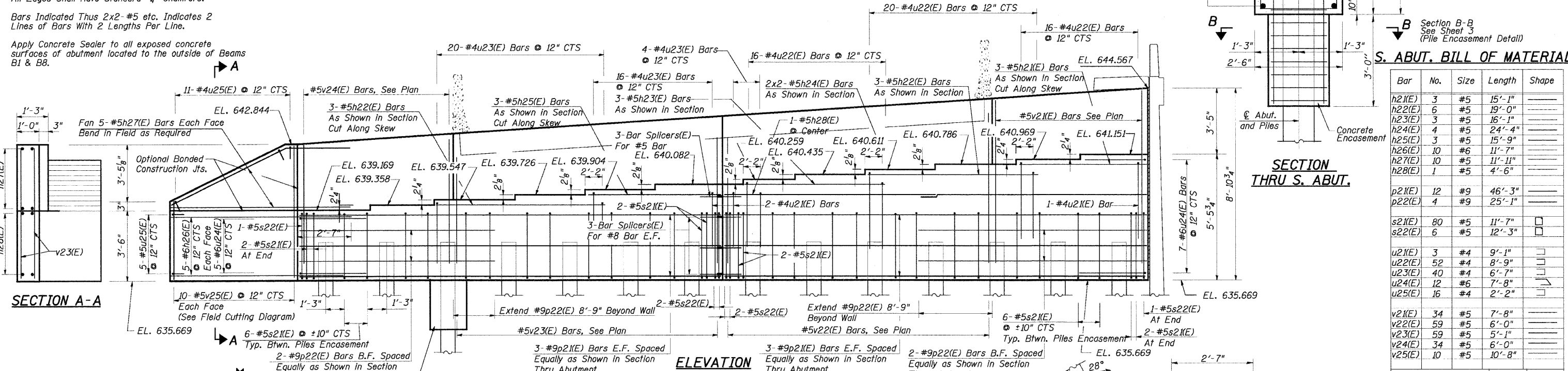
92'-10 1/2" Out to Out South Abutment



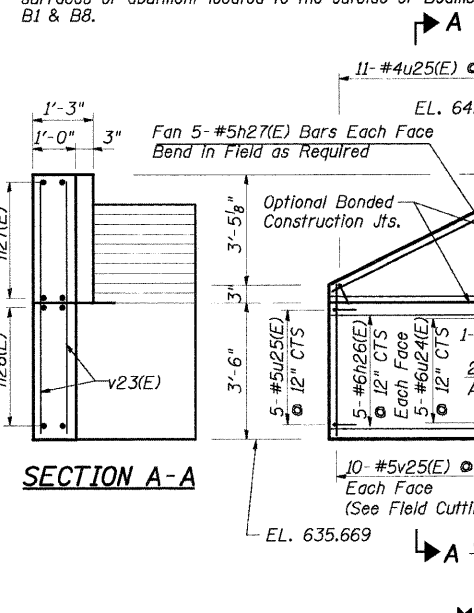
Notes:
 Pour Steps Monolithically With Cap.
 Space Reinforcement in Cap to Miss Anchor Bolts.
 Hatched Area Denotes Temporary Concrete Wall
 For Diaphragm Details, See Sheet 8 of 22
 All Edges Shall Have Standard 3/4" Chamfers.
 Bars Indicated Thus 2x2-#5 etc. Indicates 2 Lines of Bars With 2 Lengths Per Line.
 Apply Concrete Sealer to all exposed concrete surfaces of abutment located to the outside of Beams B1 & B8.



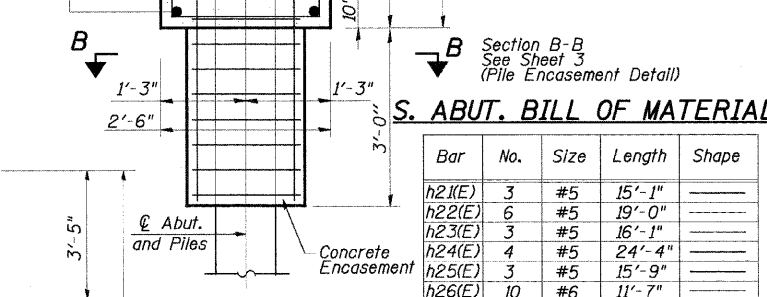
PLAN



ELEVATION (Looking South)



SECTION A-A

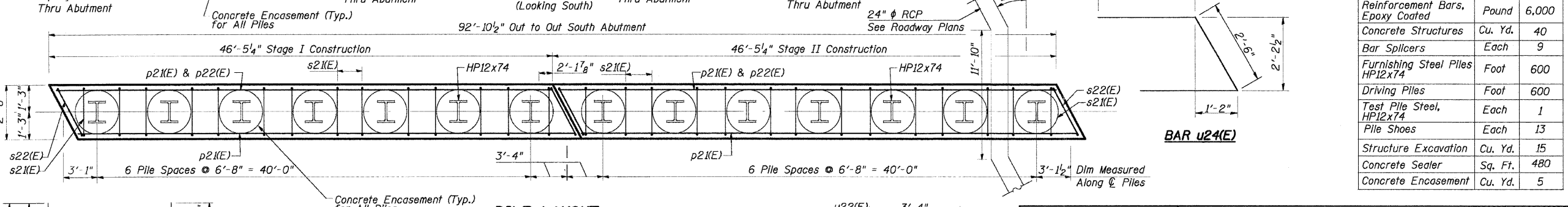


SECTION THRU S. ABUT.

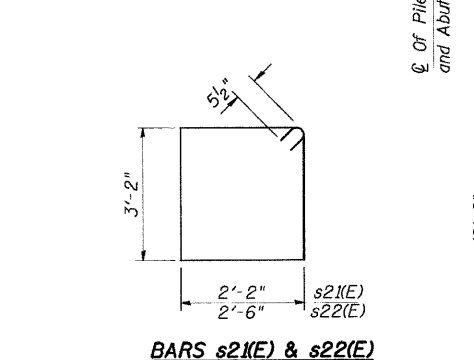
S. ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h21(E)	3	#5	15'-1"	—
h22(E)	6	#5	19'-0"	—
h23(E)	3	#5	16'-1"	—
h24(E)	4	#5	24'-4"	—
h25(E)	3	#5	15'-9"	—
h26(E)	10	#6	11'-7"	—
h27(E)	10	#5	11'-11"	—
h28(E)	1	#5	4'-6"	—
p21(E)	12	#9	46'-3"	—
p22(E)	4	#9	25'-1"	—
s21(E)	80	#5	11'-7"	□
s22(E)	6	#5	12'-3"	□
u21(E)	3	#4	9'-1"	—
u22(E)	52	#4	8'-9"	—
u23(E)	40	#4	6'-7"	—
u24(E)	12	#6	7'-8"	—
u25(E)	16	#4	2'-2"	—
v21(E)	34	#5	7'-8"	—
v22(E)	59	#5	6'-0"	—
v23(E)	59	#5	5'-1"	—
v24(E)	34	#5	6'-0"	—
v25(E)	10	#5	10'-8"	—
Reinforcement Bars, Epoxy Coated	Pound	6,000		
Concrete Structures	Cu. Yd.	40		
Bar Splicers	Each	9		
Furnishing Steel Piles HP12x74	Foot	600		
Driving Piles	Foot	600		
Test Pile Steel, HP12x74	Each	1		
Pile Shoes	Each	13		
Structure Excavation	Cu. Yd.	15		
Concrete Sealer	Sq. Ft.	480		
Concrete Encasement	Cu. Yd.	5		

PILE DATA
 Type: HP12x74
 Nominal Required Bearing: 589 Kips
 Allowable Resistance Available: 196 Kips
 Est. Total Length: 45'-0"
 No. Required: 13 + 1 Test Pile
 Negative Skin Friction: 30 Kips/Pile
 Provide Pile Shoes for all Piles



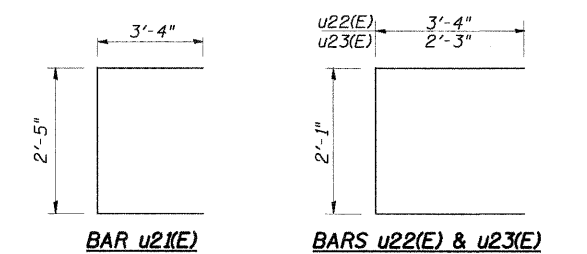
PILE LAYOUT



FIELD CUTTING DIAGRAM

LEGEND

- Indicates Temporary Wall
- B.F. Indicates Back Face of Abutment
- E.F. Indicates Each Face of Abutment



REVISIONS	
NAME	DATE

SOUTH ABUTMENT

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BY
DESIGNED BY BS
CHECKED BY PK



SPIN B.S.
SPL. DRYS

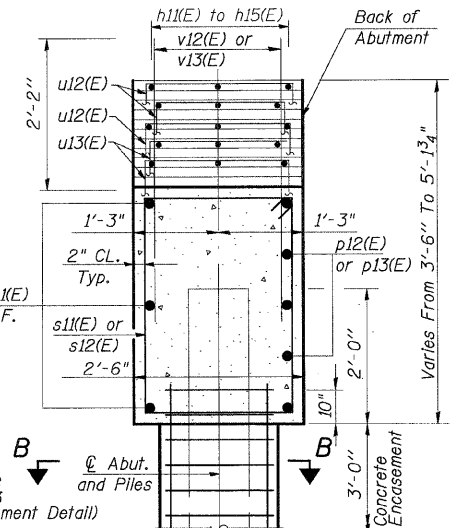
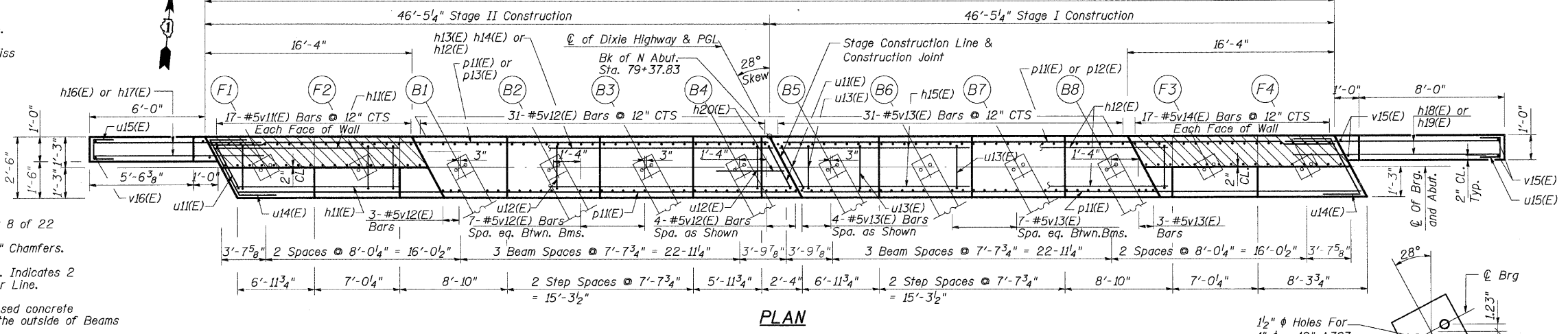
FILES
DATES
TIME

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

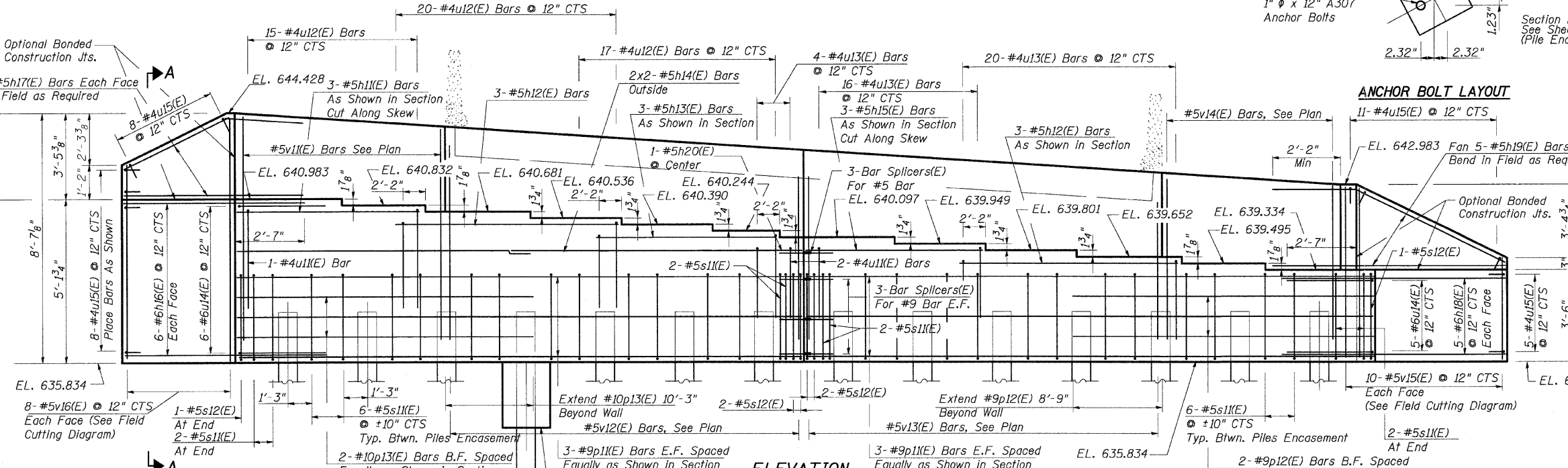
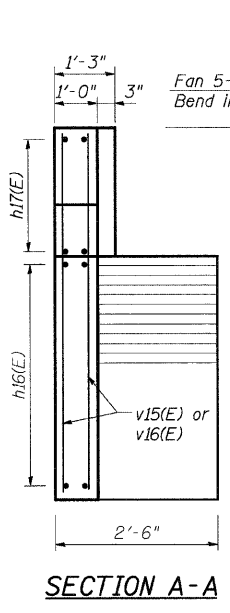
F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	39

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-
Sheet 15 of 22 Contract No. 62539

Notes:
Four Steps Monolithically With Cap.
Space Reinforcement in Cap to Miss Anchor Bolts.
Hatched Area Denotes Temporary Concrete Wall



For Diaphragm Details, See Sheet 8 of 22
All Edges Shall Have Standard 3/4\"/>

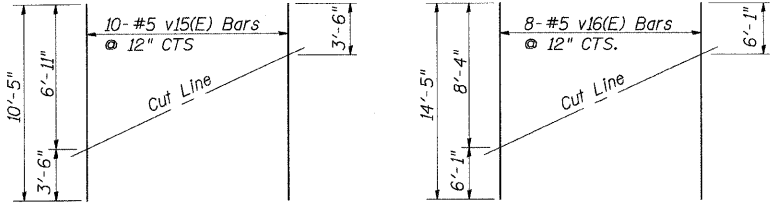
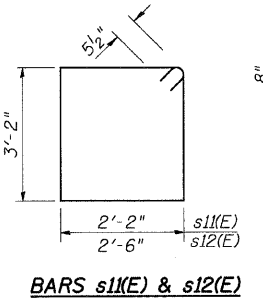
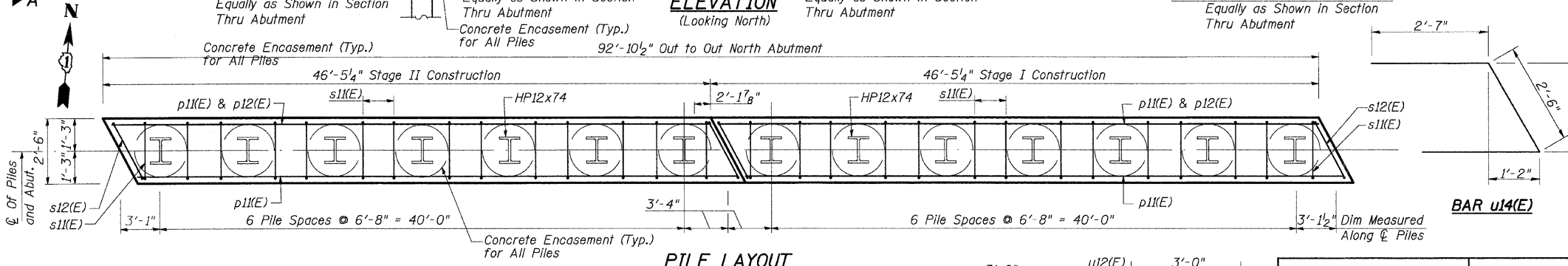


ANCHOR BOLT LAYOUT

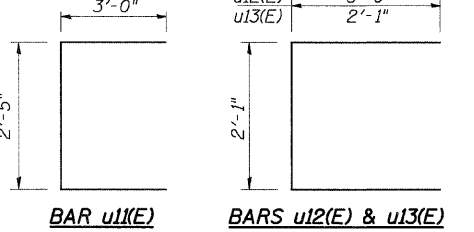
SECTION THRU N. ABUT. N. ABUT. BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h11(E)	3	#5	15'-1"	
h12(E)	6	#5	18'-8"	
h13(E)	3	#5	15'-10"	
h14(E)	4	#5	24'-4"	
h15(E)	3	#5	15'-9"	
h16(E)	12	#6	9'-1"	
h17(E)	10	#5	9'-1"	
h18(E)	10	#6	11'-7"	
h19(E)	10	#5	11'-10"	
h20(E)	1	#5	4'-6"	
p11(E)	12	#9	46'-3"	
p12(E)	2	#9	25'-1"	
p13(E)	2	#10	26'-7"	
s11(E)	80	#5	11'-7"	
s12(E)	6	#5	12'-3"	
u11(E)	3	#4	8'-5"	
u12(E)	52	#4	8'-1"	
u13(E)	40	#4	6'-3"	
u14(E)	11	#6	7'-8"	
u15(E)	32	#4	2'-2"	
v11(E)	34	#5	7'-4"	
v12(E)	59	#5	6'-0"	
v13(E)	59	#5	5'-1"	
v14(E)	34	#5	6'-0"	
v15(E)	10	#5	10'-5"	
v16(E)	8	#5	14'-5"	
Reinforcement Bars, Epoxy Coated	Pound		6,300	
Concrete Structures	Cu. Yds.		42	
Bar Splicers	Each		9	
Furnishing Steel Piles HP12x74	Foot		590	
Driving Piles	Foot		590	
Test Pile Steel, HP12x74	Each		1	
Pile Shoes	Each		13	
Structure Excavation	Cu. Yd.		15	
Concrete Sealer	Sq. Ft.		520	
Concrete Encasement	Cu. Yds.		5	

PILE DATA
Type: HP12x74
Nominal Required Bearing: 589 Kips
Allowable Resistance Available: 196 Kips
Est. Total Length: 45'-0"
No. Required: 13 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes for all Piles



LEGEND
Indicates Temporary Wall
B.F. Indicates Back Face of Abutment
E.F. Indicates Each Face of Abutment



REVISIONS

NAME	DATE

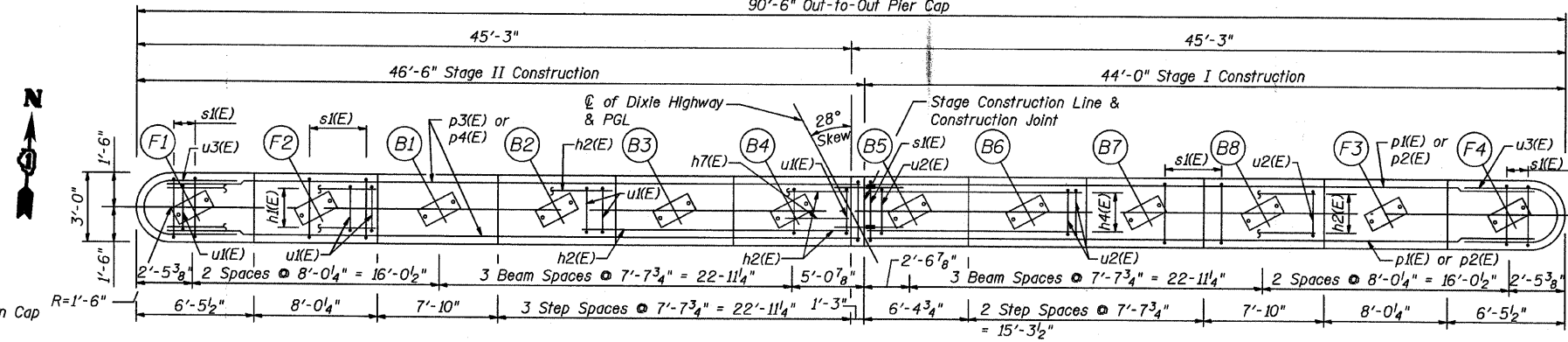
NORTH ABUTMENT
DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09
DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK



\$FILES\$ \$DATES\$ \$TIMES\$
 \$PLOT\$ \$PRINT\$ \$DRIVE\$

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	40
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
Sheet 16 of 22			Contract No. 62539	

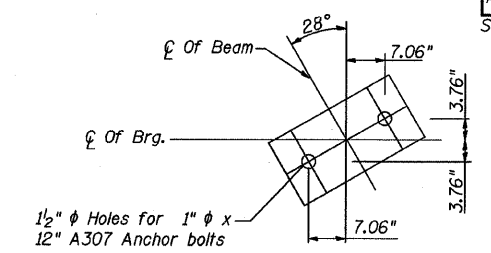


PLAN

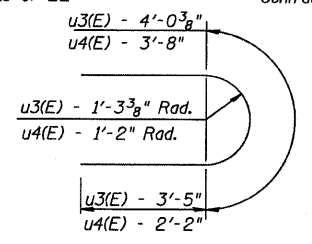
Notes:
Space Reinforcement in Cap to Miss Anchor Bolts.
Four steps Monolithically With Cap.

Bars Indicated Thus 4 x 2-#5 etc. Indicates 4 Lines of Bars With 2 Lengths Per Line

All Edges Shall Have Standard 3/4" Chamfers.
Apply Concrete Sealer to all exposed concrete surfaces of Pier located to the outside of Beams B1 & B8.



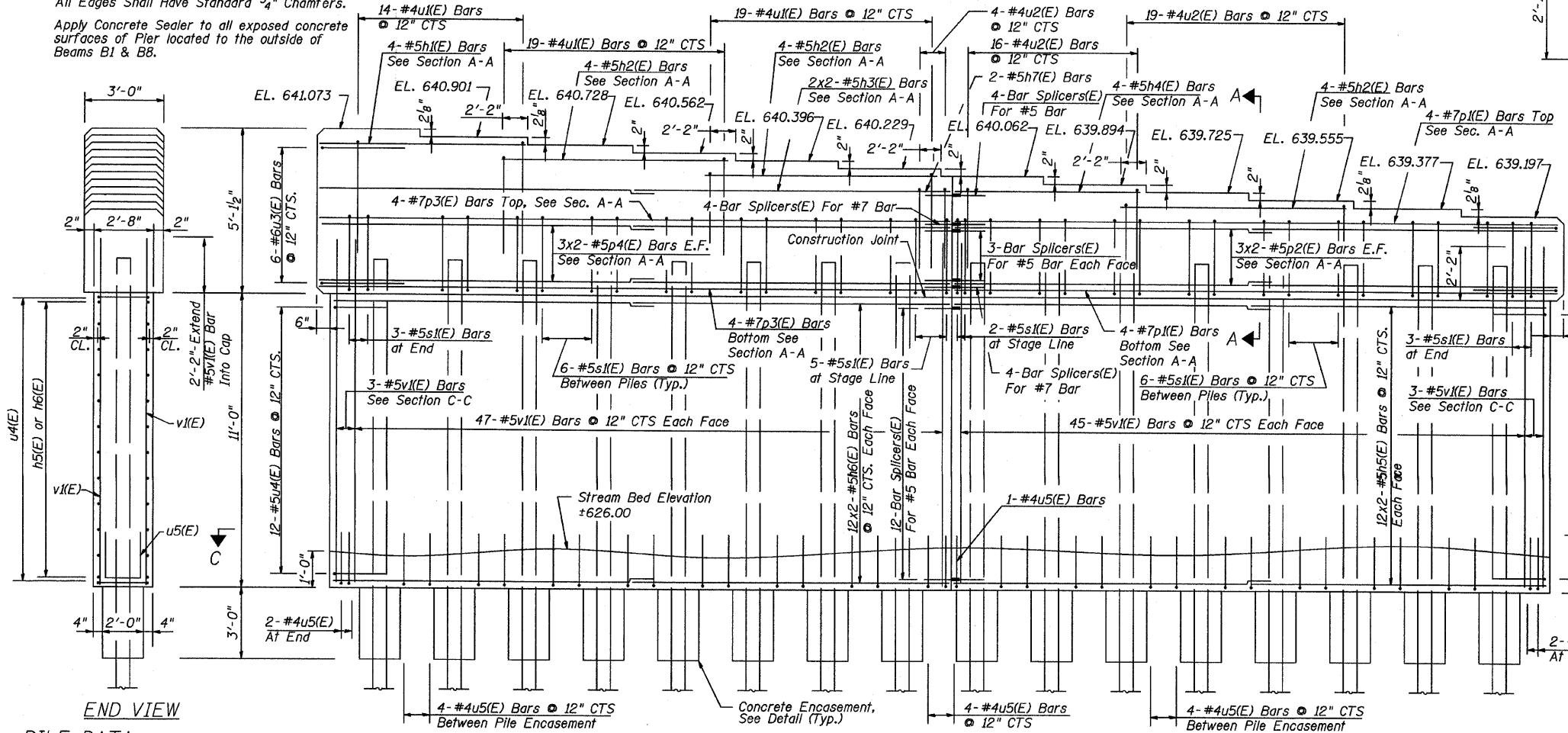
ANCHOR BOLT LAYOUT



BARS u3(E) & u4(E)
SOUTH PIER

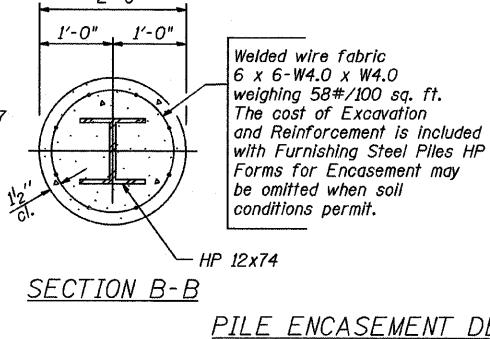
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	12'-10"	
h2(E)	12	#5	17'-9"	
h3(E)	4	#5	23'-7"	
h4(E)	4	#5	13'-10"	
h5(E)	48	#5	22'-9"	
h6(E)	48	#5	24'-0"	
h7(E)	2	#5	4'-0"	
p1(E)	8	#7	42'-5"	
p2(E)	12	#5	22'-4"	
p3(E)	8	#7	44'-11"	
p4(E)	12	#5	23'-7"	
s1(E)	97	#5	12'-1"	
u1(E)	52	#4	8'-11"	
u2(E)	39	#4	6'-11"	
u3(E)	10	#6	10'-10"	
u4(E)	24	#5	8'-0"	
u5(E)	65	#4	5'-7"	
v1(E)	190	#5	13'-2"	
Reinforcement Bars, Epoxy Coated	Pound		9,720	
Concrete Structures	Cu. Yd.		140	
Bar Splicers	Each		42	
Furnishing Steel Piles HP12x74	Foot		680	
Driving Piles	Foot		680	
Test Pile Steel, HP12x74	Each		1	
Pile Shoes	Each		15	
Structure Excavation	Cu. Yd.		25	
Concrete Encasement	Cu. Yd.		5	
Concrete Sealer	Sq. Ft.		1,240	



ELEVATION

END VIEW

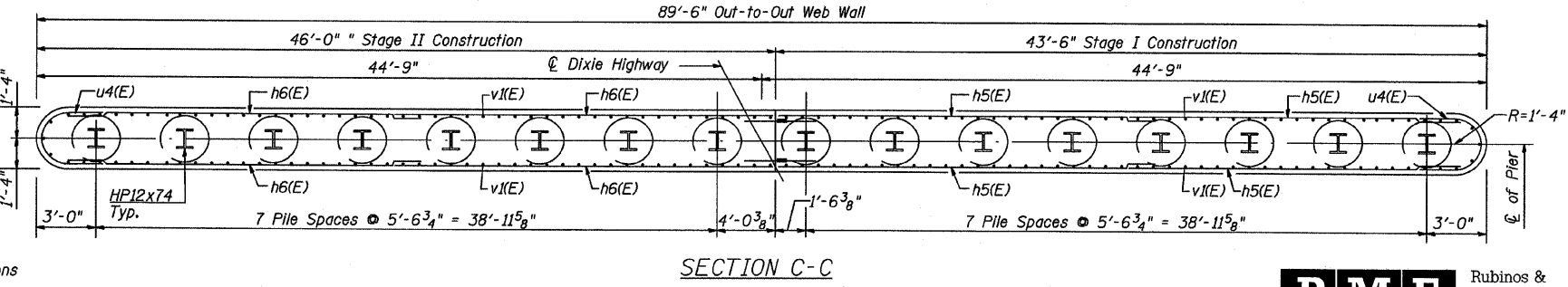


SECTION B-B

PILE ENCASEMENT DETAIL

PILE DATA
Type: HP12x74
Nominal Required Bearing: 589 Kips
Allowable Resistance Available: 196 Kips
Est. Total Length: 45'-0"
No. Required: 15 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes for all Piles

Note:
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



SECTION C-C

RME Rubinos & Mesia Engineers, Inc.

REVISIONS	
NAME	DATE

SOUTH PIER

DIXIE HIGHWAY OVER BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-30-09

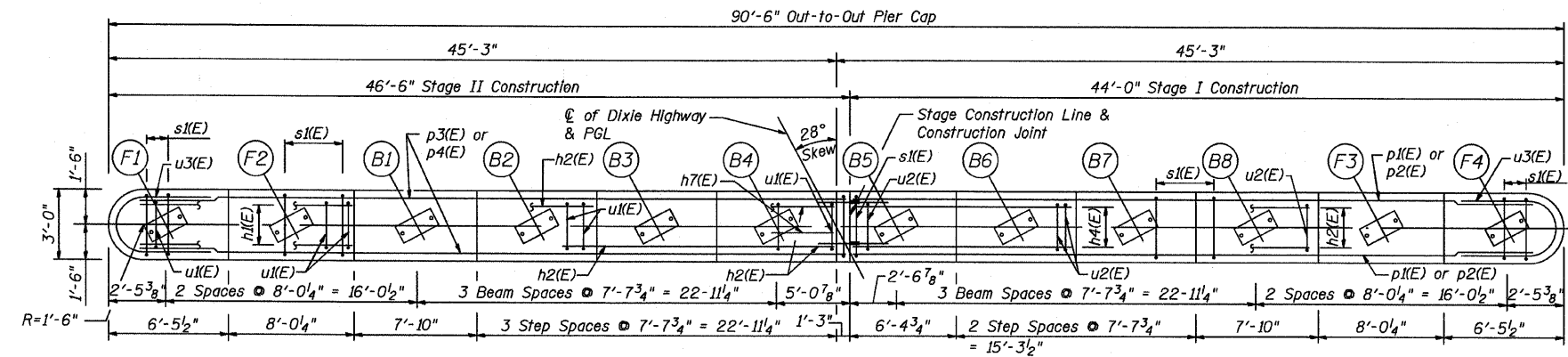
DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

FILES: 4-DATES: 4-TIMES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

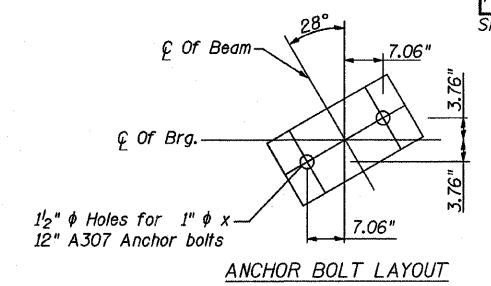
F.A.R.T.E	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	41

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-
Sheet 17 of 22 Contract No. 625.39

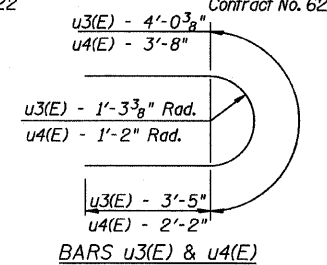


PLAN

Notes:
Space Reinforcement in Cap to Miss Anchor Bolts.
Four steps Monolithically With Cap.
Bars Indicated Thus 4 x 2-#5 etc. Indicates 4 Lines of Bars With 2 Lengths Per Line
All Edges Shall Have Standard 3/4" Chamfers.
Apply Concrete Sealer to all exposed concrete surfaces of Pier located to the outside of Beams B1 & B8.



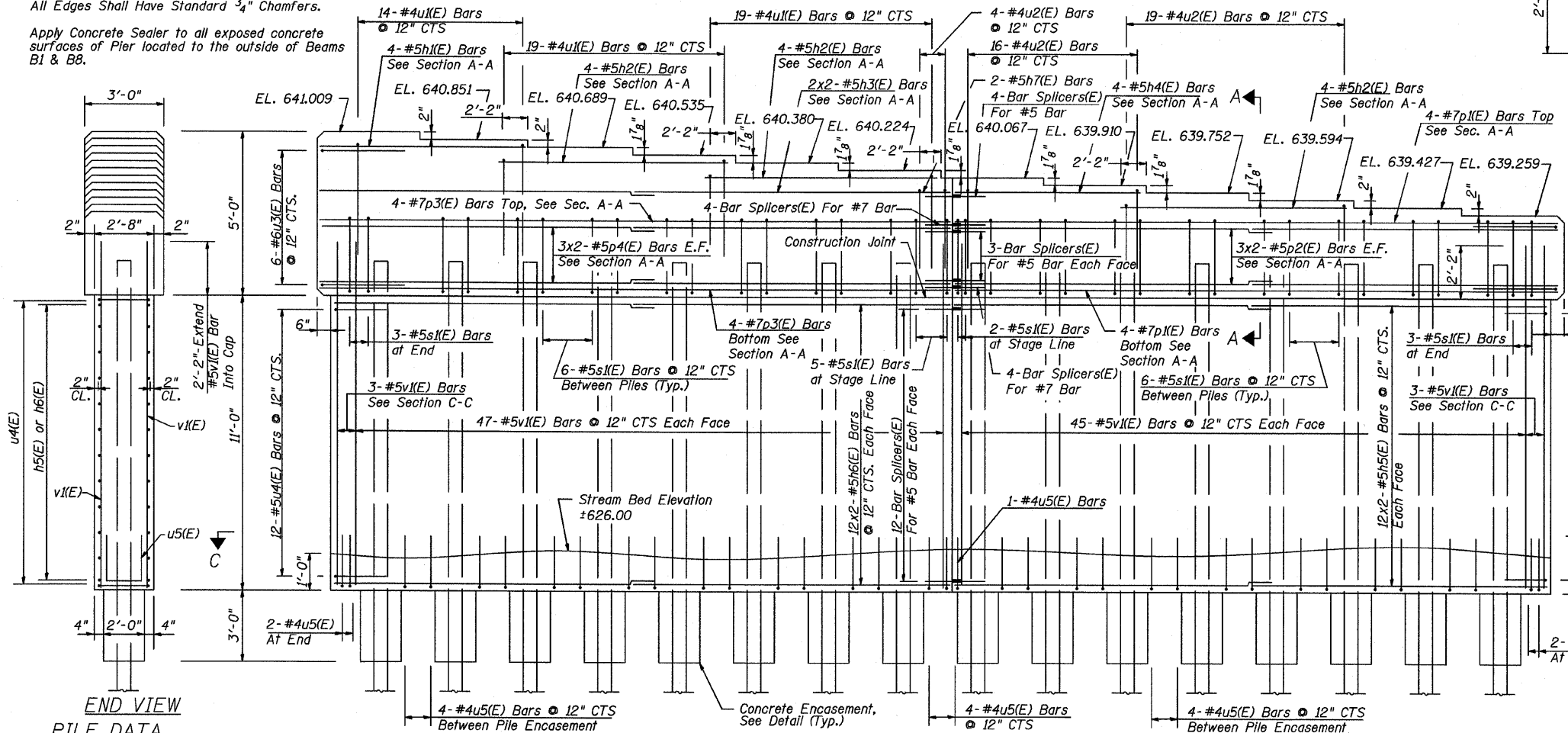
ANCHOR BOLT LAYOUT



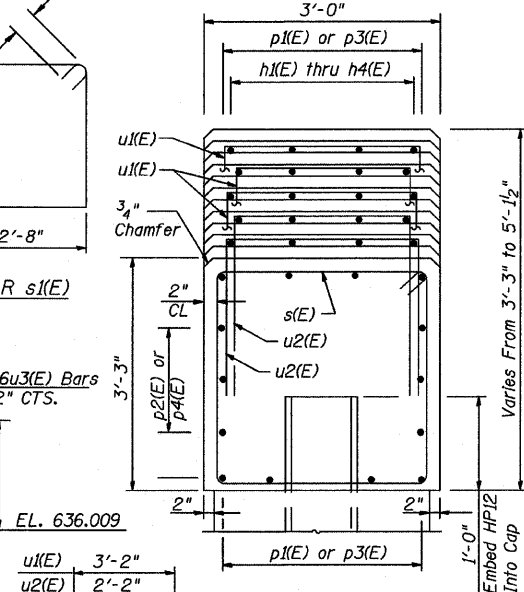
BARS u3(E) & u4(E)
NORTH PIER
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	#5	12'-10"	
h2(E)	12	#5	17'-9"	
h3(E)	4	#5	23'-7"	
h4(E)	4	#5	13'-10"	
h5(E)	48	#5	22'-9"	
h6(E)	48	#5	24'-0"	
h7(E)	2	#5	4'-0"	
p1(E)	8	#7	42'-5"	
p2(E)	12	#5	22'-4"	
p3(E)	8	#7	44'-11"	
p4(E)	12	#5	23'-7"	
s1(E)	97	#5	12'-1"	
u1(E)	52	#4	8'-11"	
u2(E)	39	#4	6'-11"	
u3(E)	10	#6	10'-10"	
u4(E)	24	#5	8'-0"	
u5(E)	65	#4	5'-7"	
v1(E)	190	#5	13'-2"	

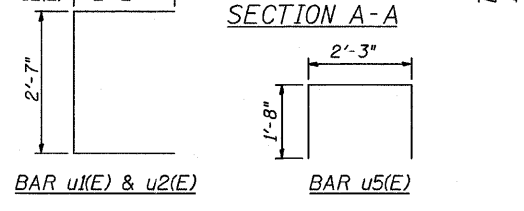
Reinforcement Bars, Epoxy Coated	Pound	9,720
Concrete Structures	Cu. Yd.	140
Bar Splicers	Each	42
Furnishing Steel Piles HP12x74	Foot	680
Driving Piles	Foot	680
Test Pile Steel, HP12x74	Each	1
Pile Shoes	Each	15
Structure Excavation	Cu. Yd.	25
Concrete Encasement	Cu. Yd.	5
Concrete Sealer	Sq. Ft.	1,240



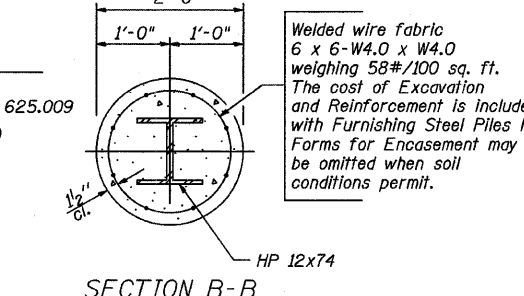
ELEVATION



SECTION A-A



SECTION B-B

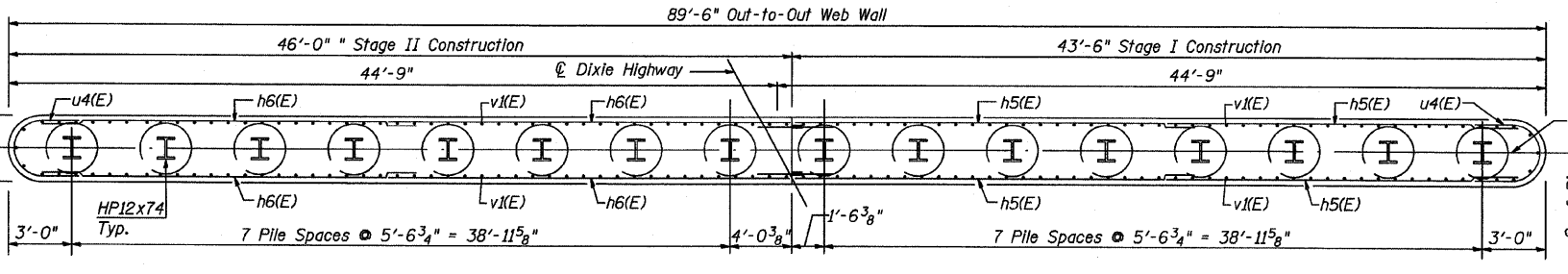


PILE ENCASEMENT DETAIL

END VIEW
PILE DATA

Type: HP12x74
Nominal Required Bearing: 589 Kips
Allowable Resistance Available: 196 Kips
Est. Total Length: 45'-0"
No. Required: 15 + 1 Test Pile
Negative Skin Friction: 30 Kips/Pile
Provide Pile Shoes For all Piles

Note:
If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



SECTION C-C

REVISIONS

NAME	DATE

NORTH PIER

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-30-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	42
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Sheet 18 of 22			Contract No. 62539	

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

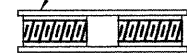
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

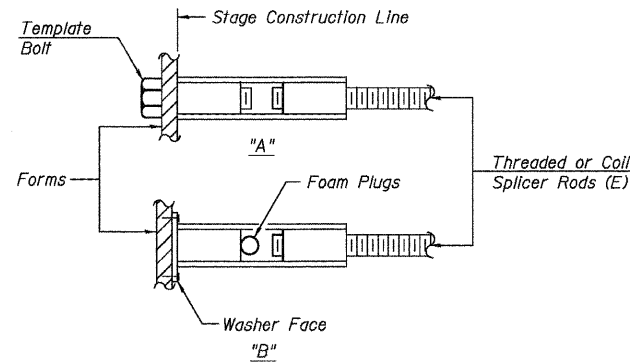
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

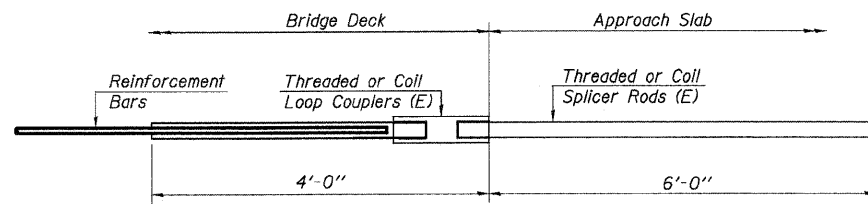
** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

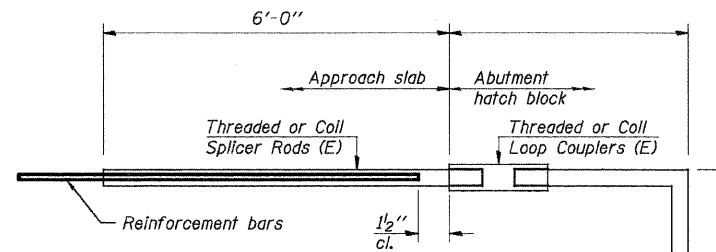
"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



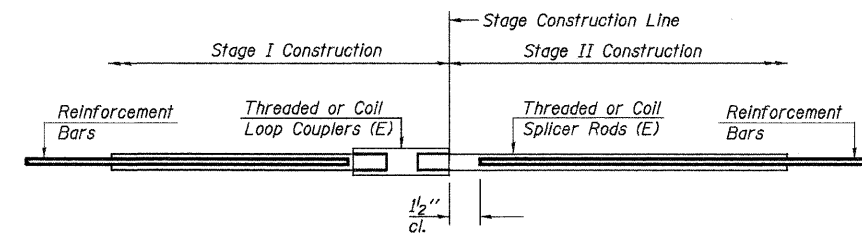
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 108



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



STANDARD

Bar Size	No. Assemblies Required	Location
#5	554	Deck
#6	28	Diaphragm
#5	68	Piers
#7	16	Piers
#9	12	Abutments
#5	6	Abutments

REVISIONS	
NAME	DATE

BAR SPLICER ASSEMBLY DETAILS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BY
DESIGNED BY BS
CHECKED BY PK

RME Rubinos & Mesia Engineers, Inc.

SPIN BLS#
SPL DRIVE#

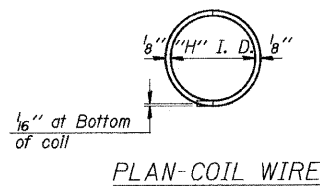
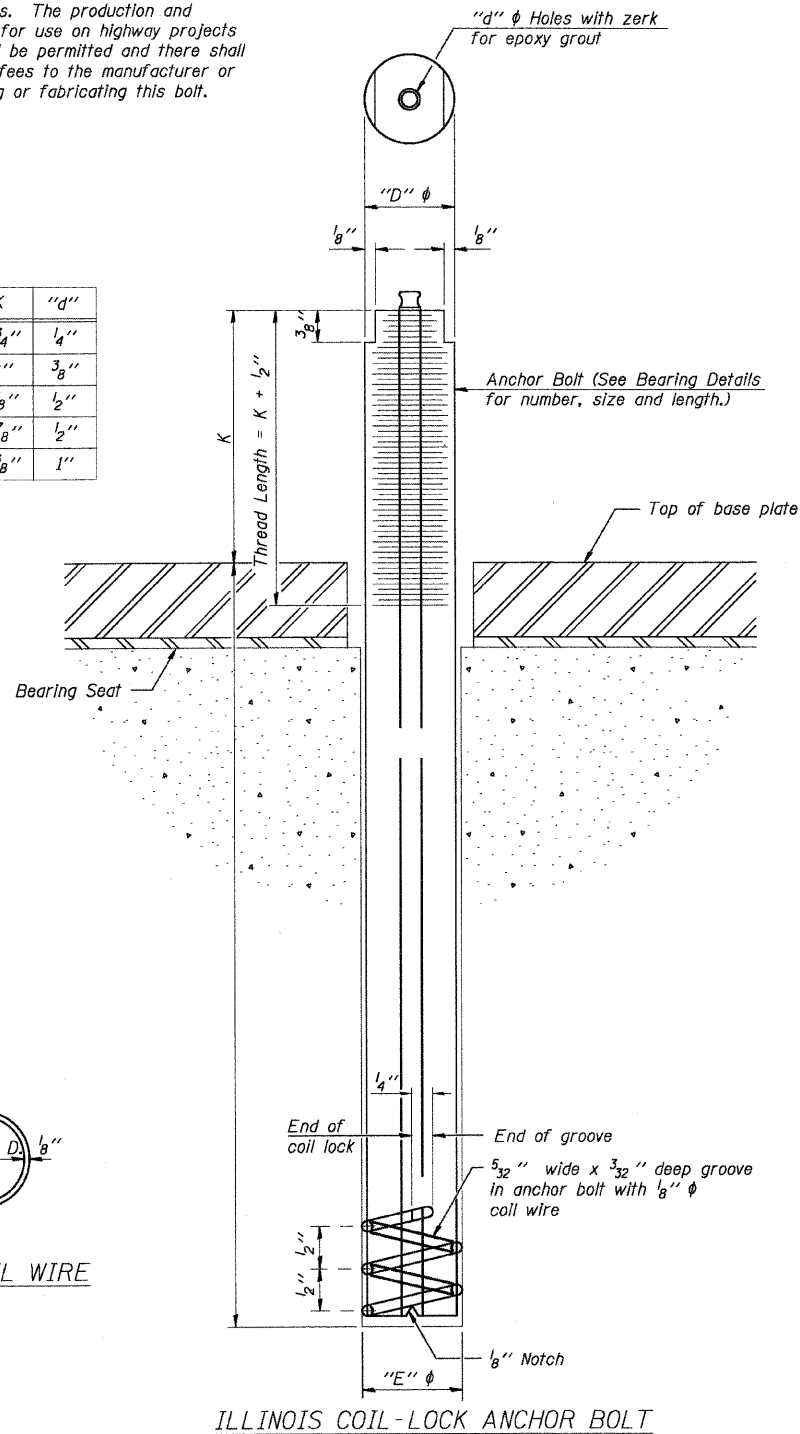
FILES#
DATES#
TIME#

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	43
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
Sheet 19 of 22			Contract No. 62539	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



MATERIALS FOR ILLINOIS COIL-LOCK
ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS
COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
S. Abut.	A307
S. Pier	A307
N. Pier	A307
N. Abut.	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

REVISIONS	
NAME	DATE

ANCHOR BOLT DETAILS
FOR BEARINGS

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

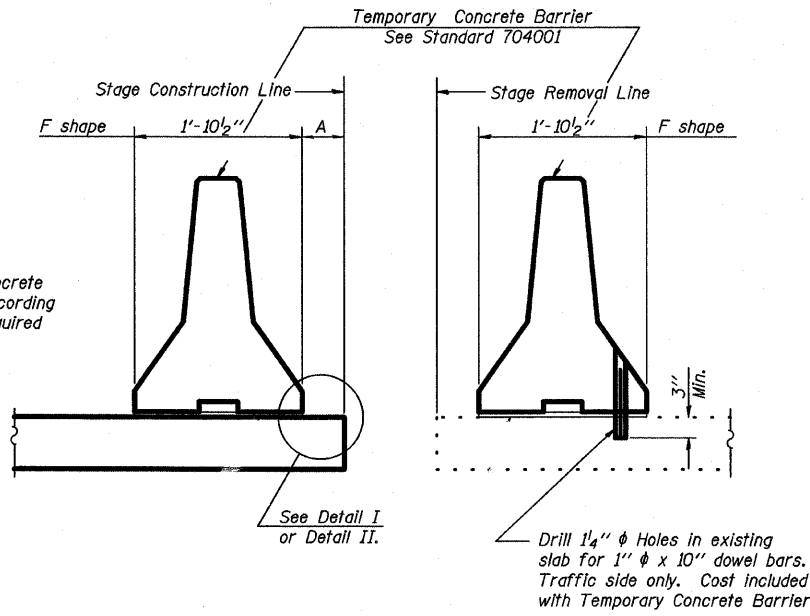
SCALE: NOT-TO-SCALE
DATE 6-25-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

RME Rubinos & Mesia Engineers, Inc.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	44
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Sheet 20 of 22			Contract No. 62539	



When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

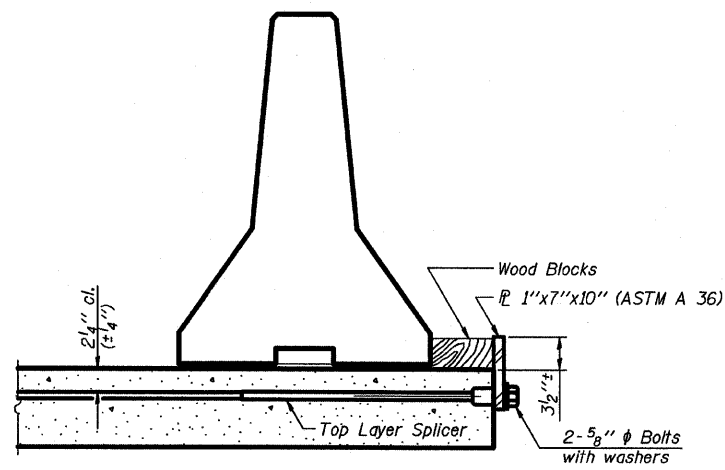
NEW SLAB

EXISTING SLAB

SECTIONS THRU SLAB

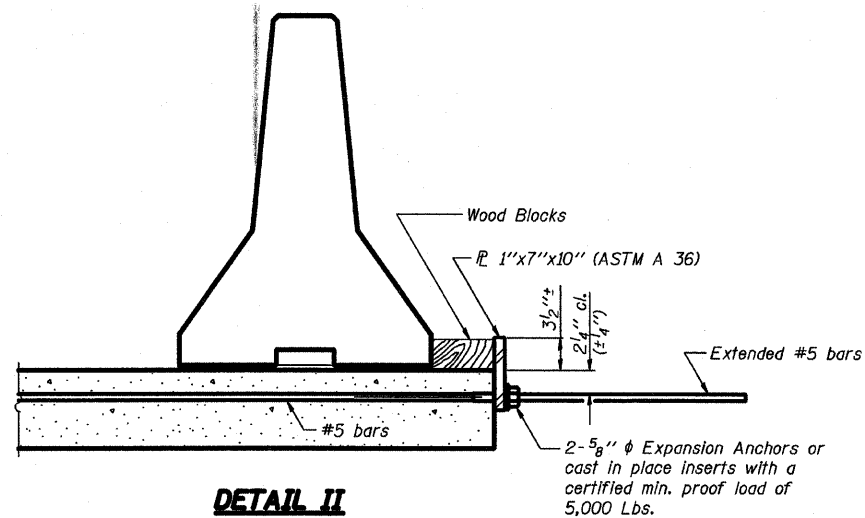
NOTES

- Detail I - With Bar Splicer or Couplers:**
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:**
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place Inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.



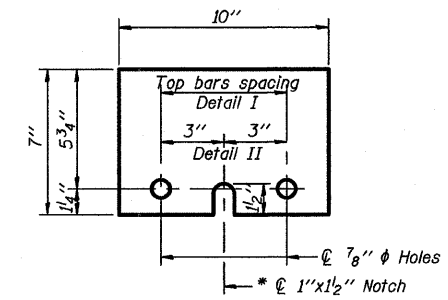
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1"x7"x10"

* Required only with Detail II

REVISIONS	
NAME	DATE

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION

DIXIE HIGHWAY OVER
BUTTERFIELD CREEK
F.A.U. ROUTE 2843 SECTION 3249B-R
STA. 78+55.00
COOK COUNTY
STRUCTURE NUMBER 016-7946

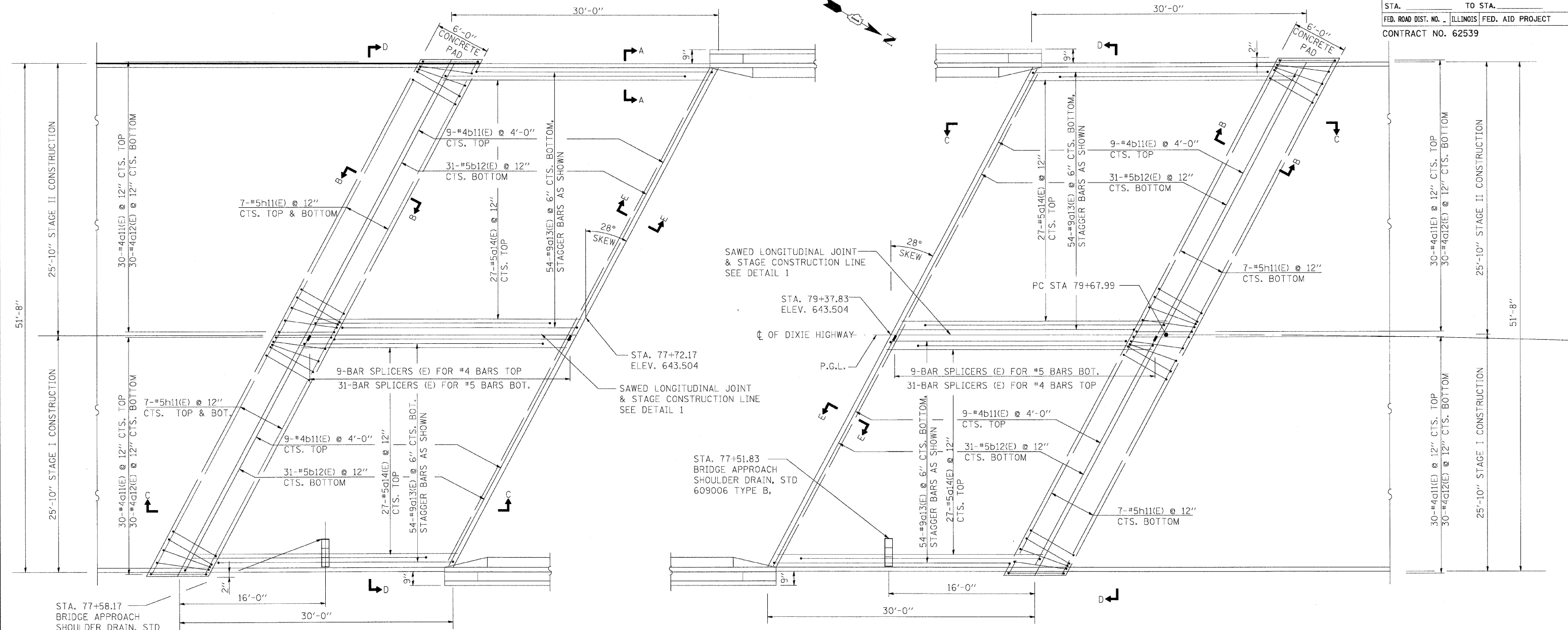
SCALE: NOT-TO-SCALE
DATE 6-30-09

DRAWN BY BV
DESIGNED BY BS
CHECKED BY PK

RME Rubinos & Mesia Engineers, Inc.

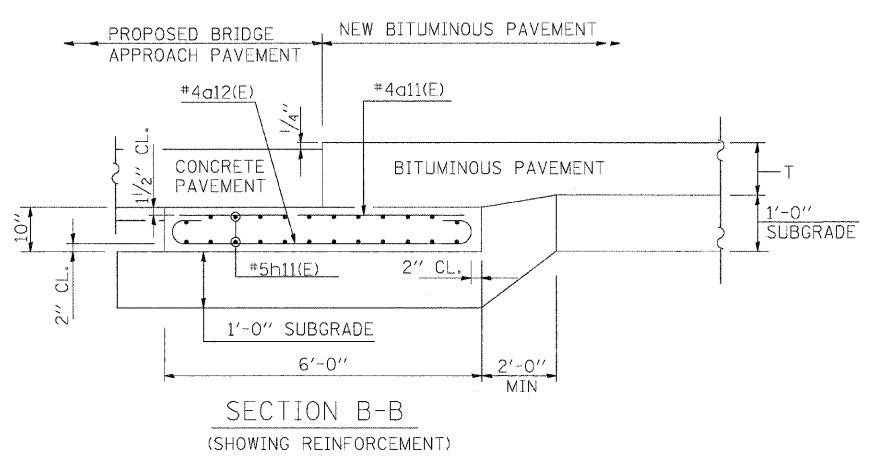
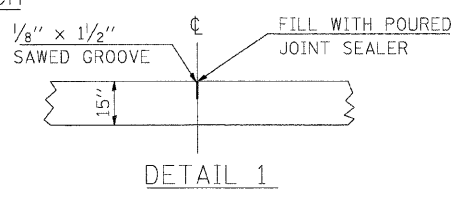
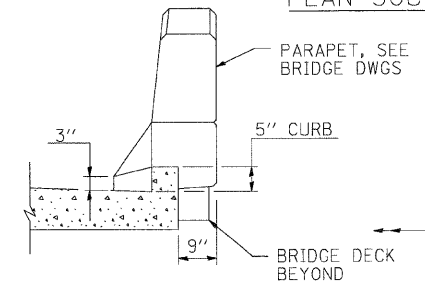
FILES
DATE
TIMES

FILES
DATE
TIMES



PLAN SOUTH APPROACH

PLAN NORTH APPROACH



GENERAL NOTES

THICKNESS-"T"=THICKNESS OF PAVEMENT
 SEE STANDARD 420001 FOR DETAILS OF JOINTS NOT SHOWN.
 SAW ϕ OR LANE EDGE IF Poured TWO OR MORE LANE WIDTHS AT A TIME. OMIT REINFORCEMENT, TIE BARS AND SAWED LONG. JT. FOR FLEXIBLE PAVEMENT.
 ALL WORK SHOWN HERE AND RELATED TO BRIDGE APPROACH PAVEMENT, SHALL BE PAID FOR AS PART OF BRIDGE APPROACH PAVEMENT (SPECIAL).

PARAPET TO CURB TRANSITION INTEGRAL ABUTMENT

SECTION B-B (SHOWING REINFORCEMENT)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 BRIDGE APPROACH SLAB
 (1 OF 2)

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 6-25-09

DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF

RME Rubinos & Mesia Engineers, Inc.
 200 S. Michigan Ave. Suite 1500 Chicago IL 60604-2482
 T> 312 870 8600 F> 312 663 1473

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	48

STA. _____ TO STA. _____
 FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT
 CONTRACT NO. 62539

APPROACH SLAB
 BILL OF MATERIAL

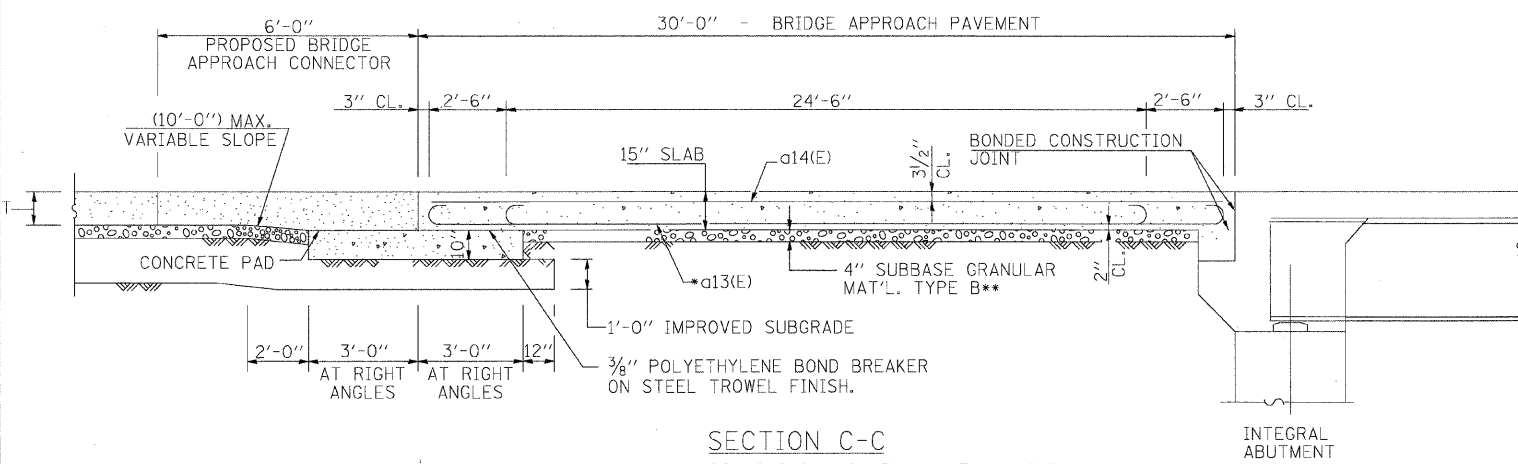
BAR	NO.	SIZE	LENGTH	SHAPE
a11(E)	120	#4	5'-9"	—
a12(E)	120	#4	6'-9"	⊂
a13(E)	216	#5	29'-9"	⊂
a14(E)	108	#9	30'-0"	—
b11(E)	36	#4	29'-0"	—
b12(E)	124	#5	29'-0"	—
h11(E)	56	#5	29'-2"	—

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED

NOTE:
 ALL WORK AND MATERIAL RELATED TO APPROACH PAVEMENT WILL BE PAID FOR UNDER "BRIDGE APPROACH PAVEMENT (SPECIAL).

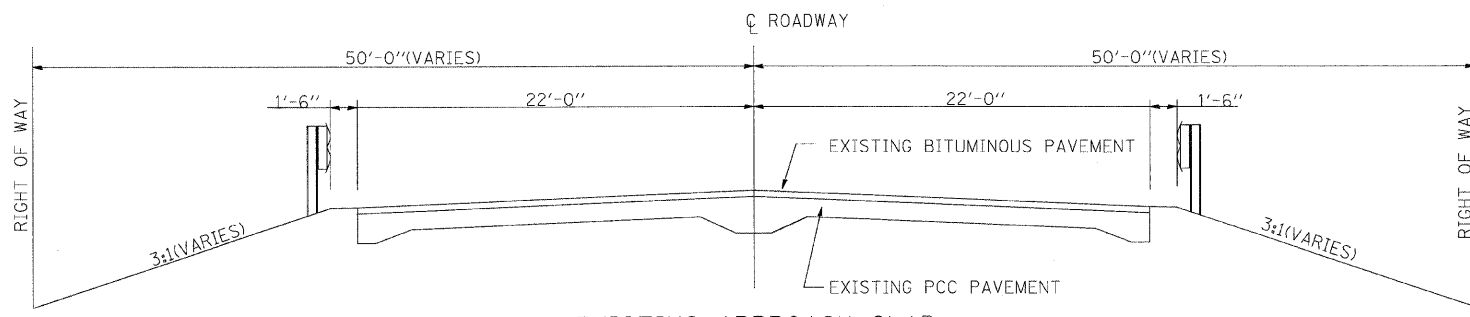
f_y = (60,000 P.S.I.)
 f'c = (3,500 P.S.I.)
 n = 8.5

#4 = 1'-8"
 #5 = 2'-2"
 #9 = 5'-9"

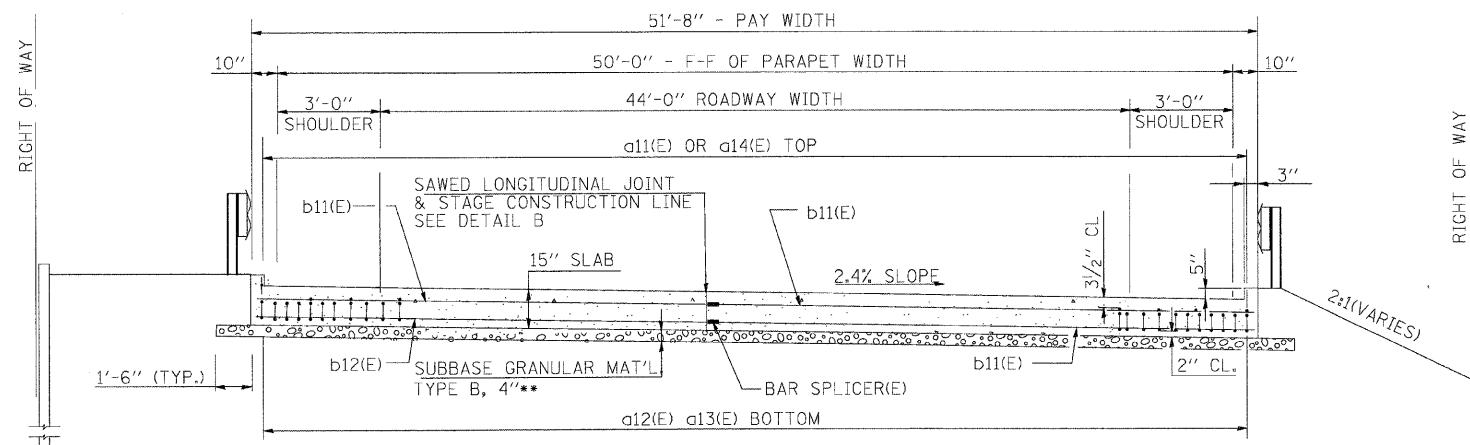


SECTION C-C

*STAGGER #9 A BARS AS SHOWN ON PLAN - FULL WIDTH
 **INCLUDED IN BRIDGE APPROACH SLAB SPECIAL

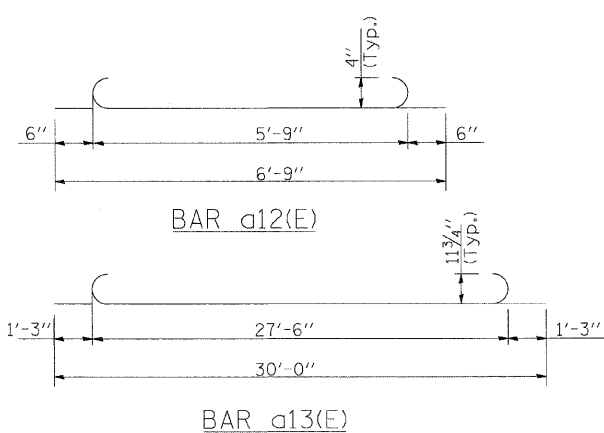


EXISTING APPROACH SLAB

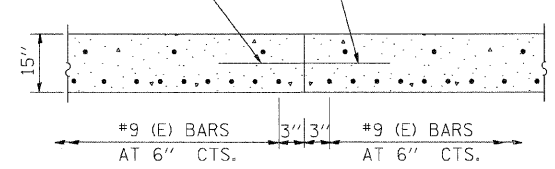


SECTION D-D

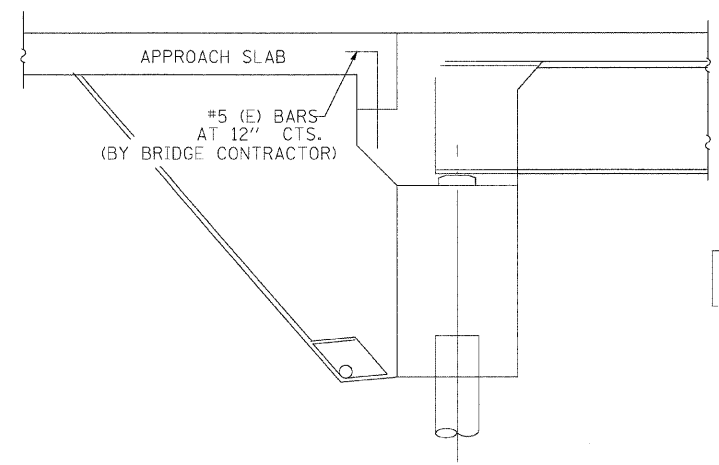
(SEE PLAN FOR DIMENSIONS NOT SHOWN)
 ALL REINFORCEMENT BARS SHALL BE EPOXY COATED.
 **INCLUDED IN BRIDGE APPROACH SLAB SPECIAL



LONGITUDINAL CONSTRUCTION JOINT IN ACCORDANCE WITH DETAILS SHOWN ON STANDARD 420001.



AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.



(INTEGRAL ABUTMENTS)

BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	350
------------------------------------	-------	-----



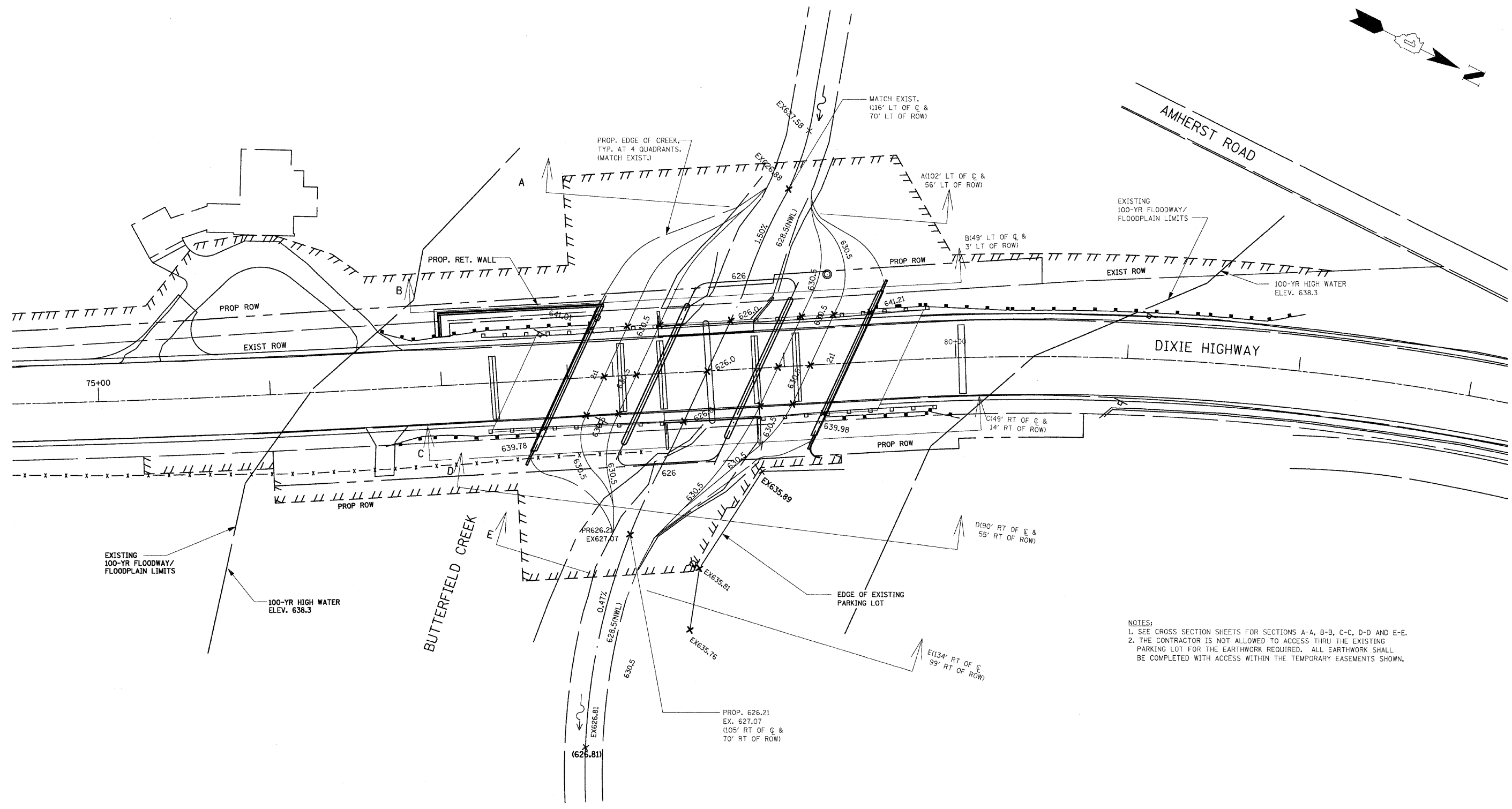
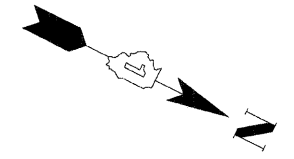
200 S. Michigan Ave, Suite 1500 Chicago IL 60604-2482
 T> 312 870 8800 F> 312 863 1473

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK

BRIDGE APPROACH SLAB
 (2 OF 2)

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 6-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF



NOTES:
 1. SEE CROSS SECTION SHEETS FOR SECTIONS A-A, B-B, C-C, D-D AND E-E.
 2. THE CONTRACTOR IS NOT ALLOWED TO ACCESS THRU THE EXISTING PARKING LOT FOR THE EARTHWORK REQUIRED. ALL EARTHWORK SHALL BE COMPLETED WITH ACCESS WITHIN THE TEMPORARY EASEMENTS SHOWN.

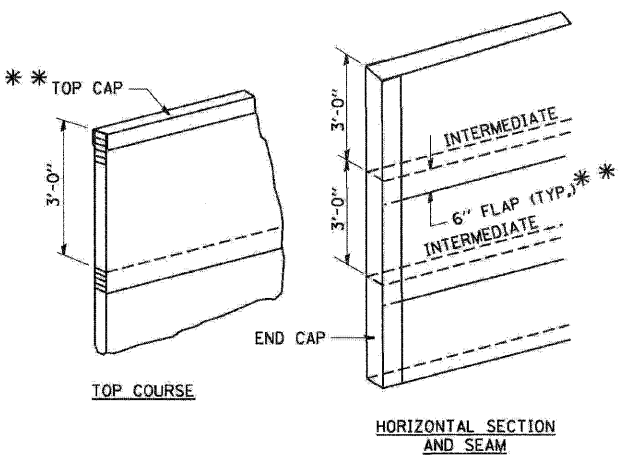
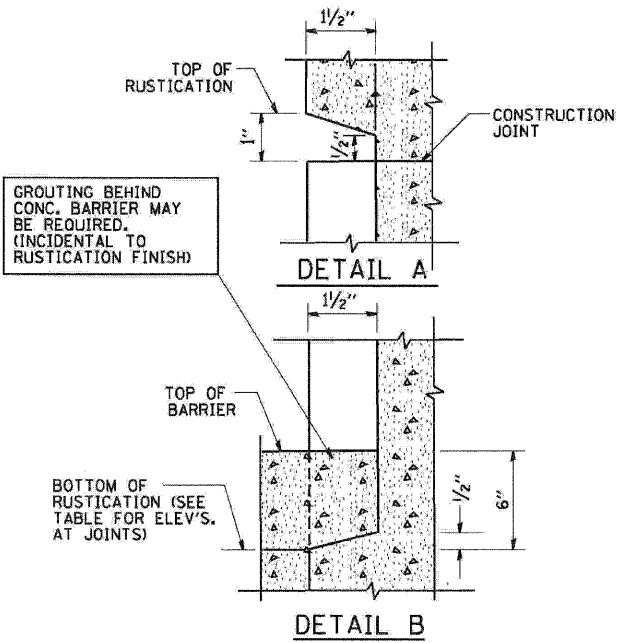
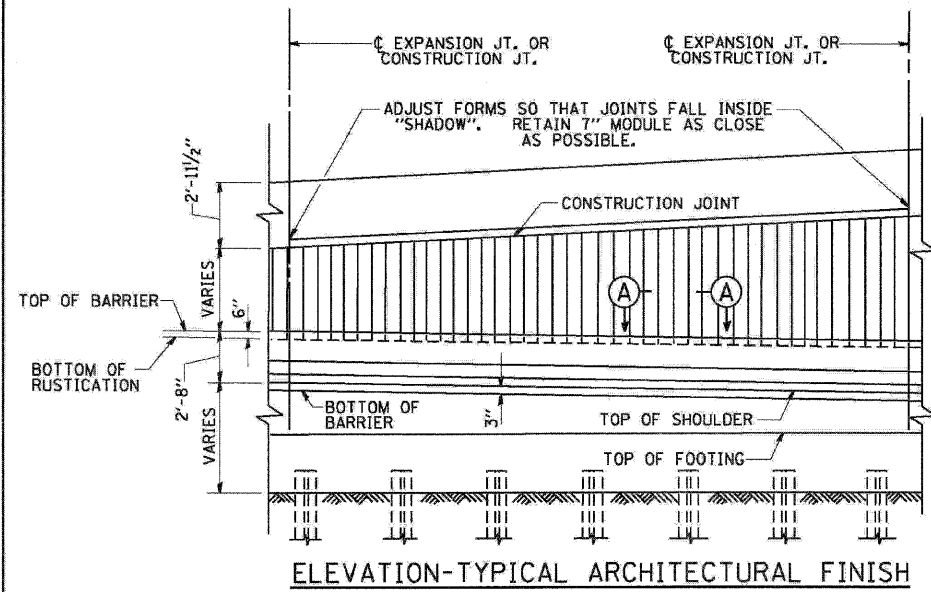
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HIGHWAY
 OVER BUTTERFIELD CREEK
 BUTTERFIELD CREEK GRADING

RME Rubinos & Mesia Engineers, Inc.
 200 S. Michigan Ave. Suite 1500 Chicago IL 60604-2482
 T> 312 870 6600 F> 312 663 1476

SCALE: VERT. 1"=30'
 HORIZ. 1"=30'
 DATE 06-25-09
 DRAWN BY AW
 DESIGNED BY AW
 CHECKED BY MF

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	50
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



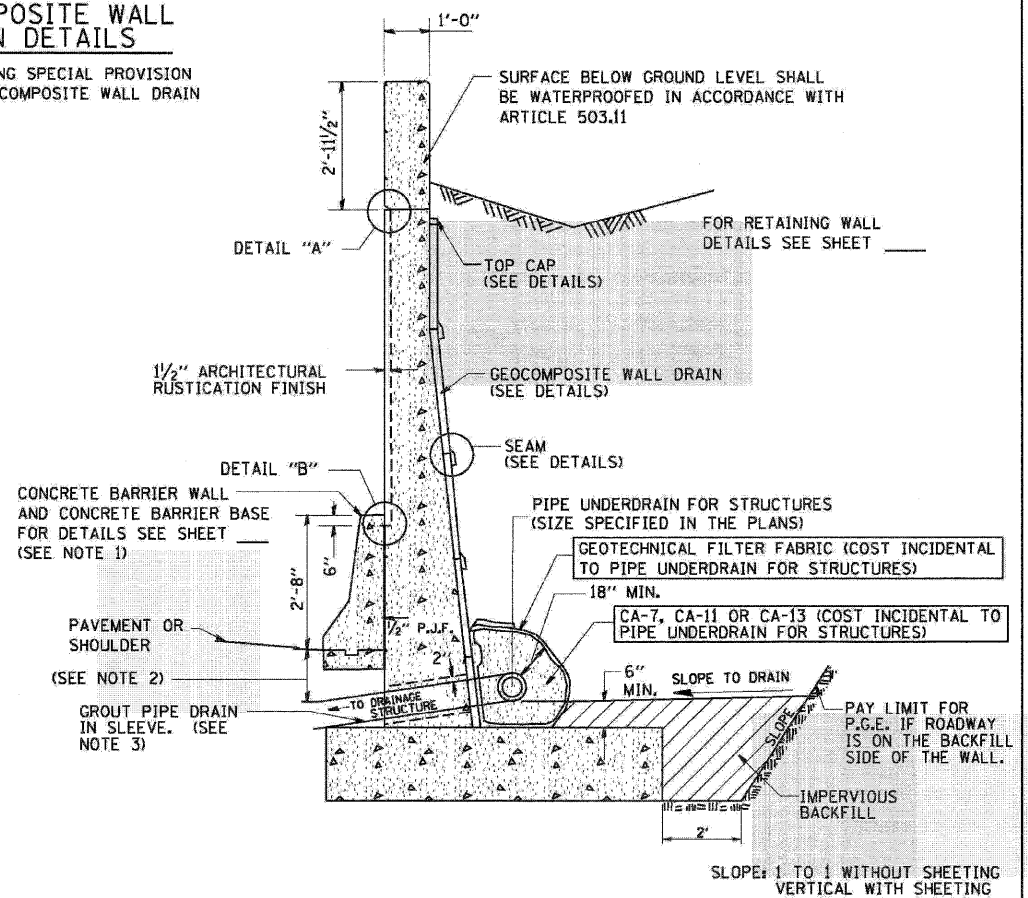
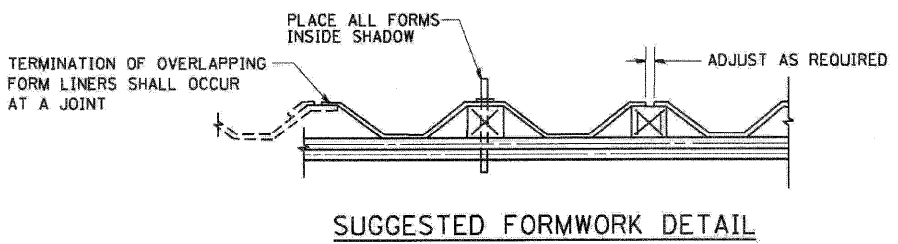
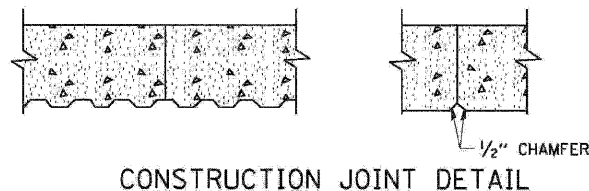
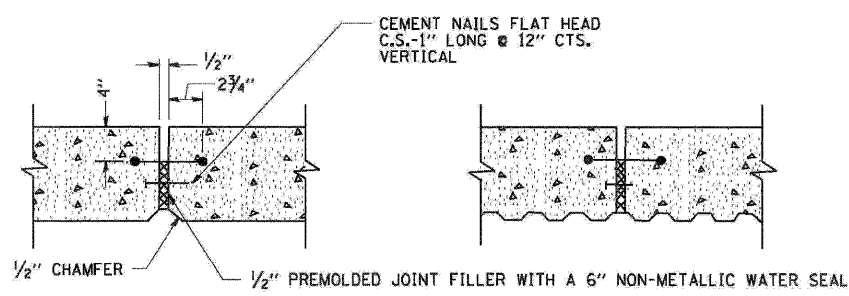
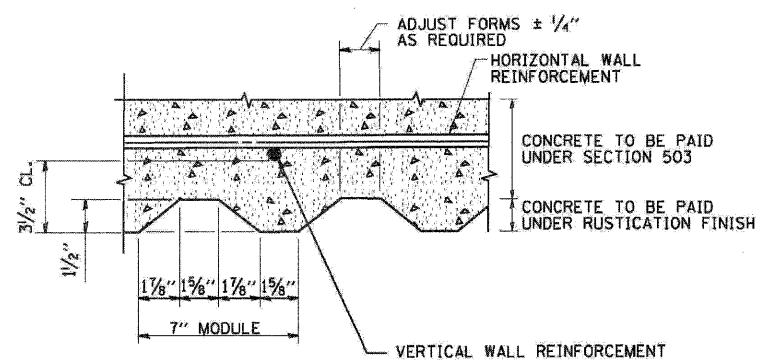
GEOCOMPOSITE WALL DRAIN DETAILS

** SEE RECURRING SPECIAL PROVISION #43 FOR GEOCOMPOSITE WALL DRAIN

PREFERRED PAY ITEMS

50400850	CLASS X CONCRETE (RETAINING WALL)	(C.Y.)
50400510	RUSTICATION FINISH	(S.F.)
60709582	PIPE UNDERDRAINS FOR STRUCTURES 6"	(L.F.)
20027750	GEOCOMPOSITE WALL DRAIN	(S.Y.)
60700200	PIPE DRAINS 6"	(L.F.)

*SEE SPECIAL PROVISIONS



WALL #		WALL #		WALL #		WALL #		WALL #		WALL #		WALL #	
STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION

- NOTE 1. CONCRETE BARRIER CONSTRUCTION: WHEN THE CONCRETE BARRIER WALL IS TO BE CONSTRUCTED MONOLITHIC WITH THE RETAINING WALL THE DETAILS SHOWN IN THE RETAINING WALL SECTION SHALL GOVERN.
- NOTE 2. PIPE DRAIN SLOPE: PRIOR TO THE PLACEMENT OF THE PIPE UNDERDRAIN SLEEVE THE ENGINEER SHALL DETERMINE THE SLOPE REQUIRED FOR THE PIPE UNDERDRAIN TO ENTER BELOW THE DRAINAGE STRUCTURE LID AT OR BELOW THE MINIMUM DISTANCE SHOWN ON THE DETAILS FOR THE STRUCTURE.
- NOTE 3. PIPE DRAIN: THE PIPE DRAIN SHALL TERMINATE AT A DRAINAGE STRUCTURE. THE COST OF THE SLEEVE AND GROUT SHALL BE INCIDENTAL TO PIPE DRAINS.

REVISIONS

NAME	DATE
FORD	11/30/88
FORD	05/15/89
DE YONG	09/07/89
DE YONG	07/11/90
DE YONG	08/18/90
DE YONG	07/09/91
R. WEIDEMAN	02/20/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HWY OVER BUTTERFIELD CREEK

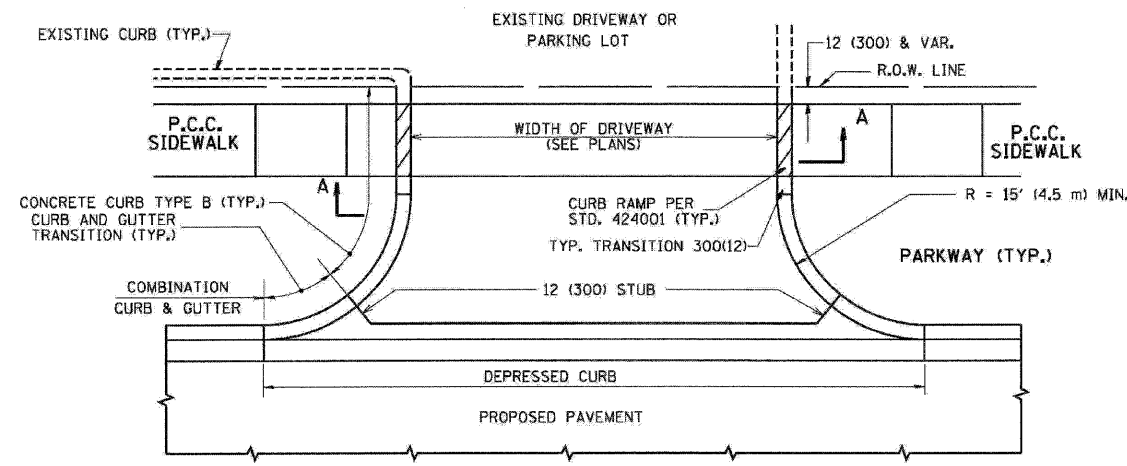
RUSTICATION FINISH AND GEOCOMPOSITE DRAIN FOR RETAINING WALLS

SCALE: VERT. NONE
HORIZ. _____

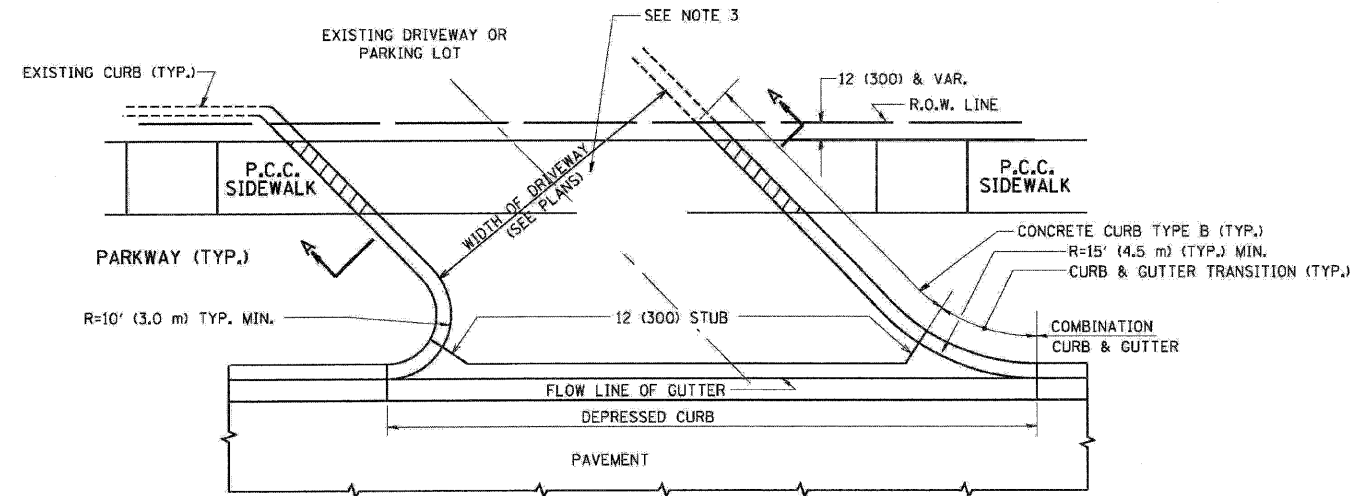
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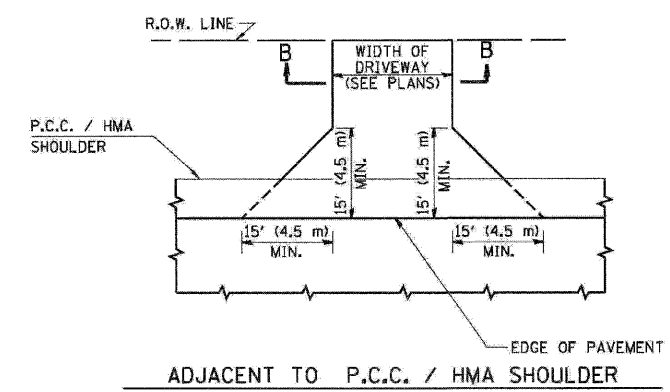
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	51
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		



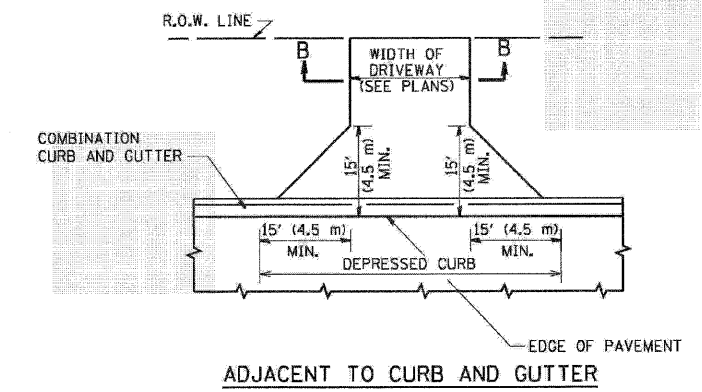
WITH CONCRETE CURB, TYPE B



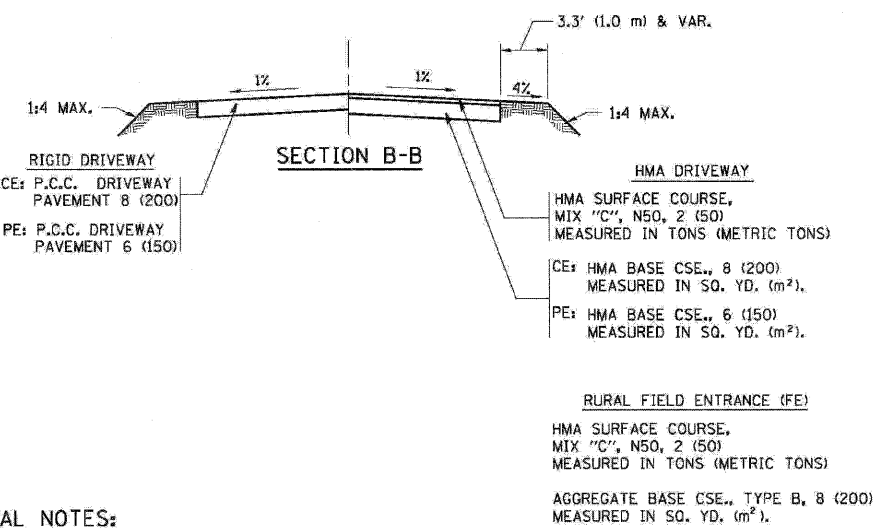
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

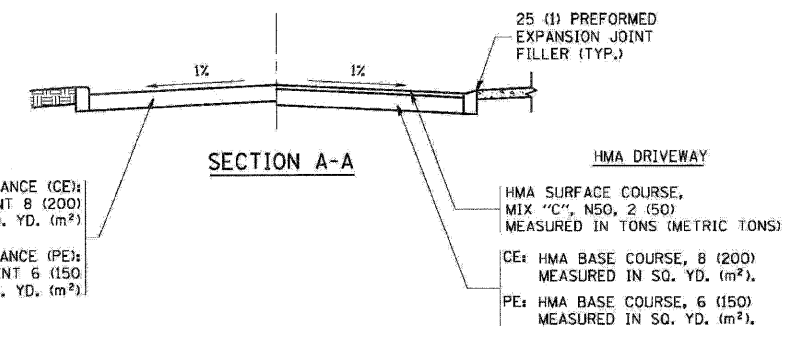
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.



RIGID DRIVEWAY
 COMMERCIAL ENTRANCE (CE):
 P.C.C. DRIVEWAY PAVEMENT 8 (200)
 MEASURED IN SQ. YD. (m²)
 NON-COMMERCIAL ENTRANCE (PE):
 P.C.C. DRIVEWAY PAVEMENT 6 (150)
 MEASURED IN SQ. YD. (m²)

HMA DRIVEWAY
 HMA SURFACE COURSE,
 MIX "C", N50, 2 (50)
 MEASURED IN TONS (METRIC TONS)
 CE: HMA BASE COURSE, 8 (200)
 MEASURED IN SQ. YD. (m²)
 PE: HMA BASE COURSE, 6 (150)
 MEASURED IN SQ. YD. (m²)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

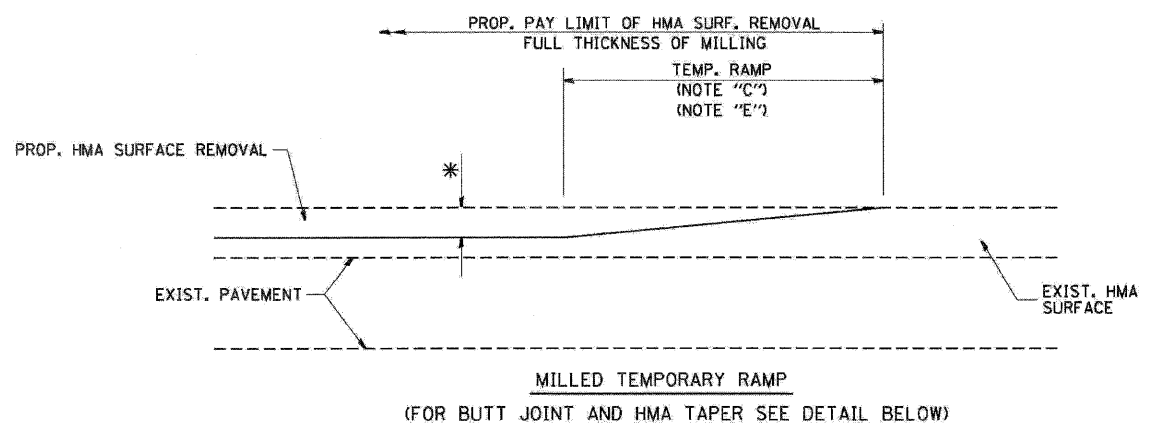
REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. LAFLEUR	04-15-03
R. BORO	01-01-07
R. BORO	06-11-08

ILLINOIS DEPARTMENT OF TRANSPORTATION
 P.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
DRIVEWAY DETAILS
 DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

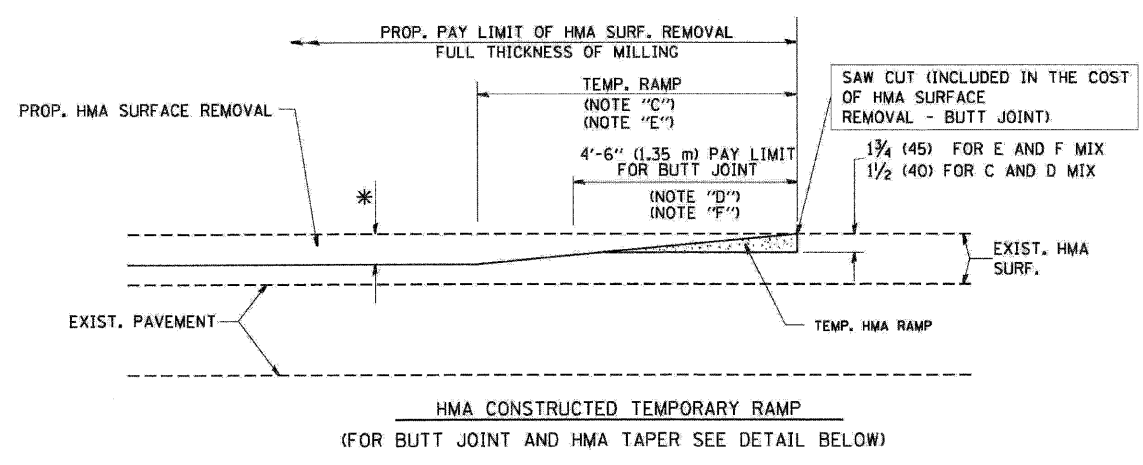
SCALE: VERT. NONE
 HORIZ. NONE
 DRAWN BY
 CHECKED BY

PLOT DATE = 6/12/2008
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 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = bward

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	52
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

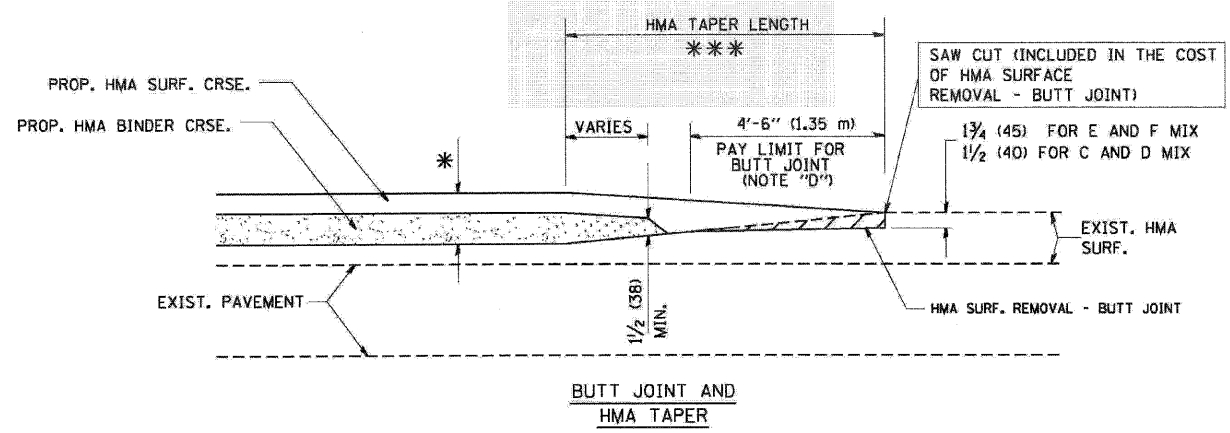


OPTION 1

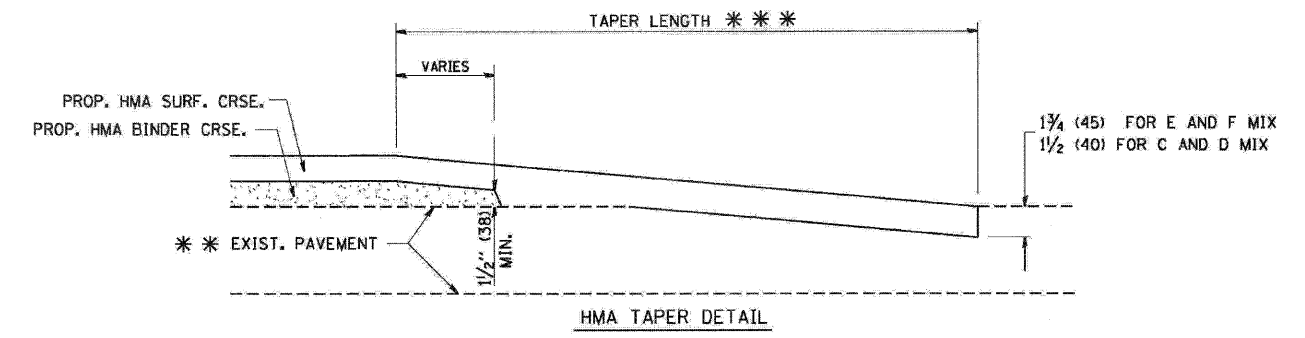
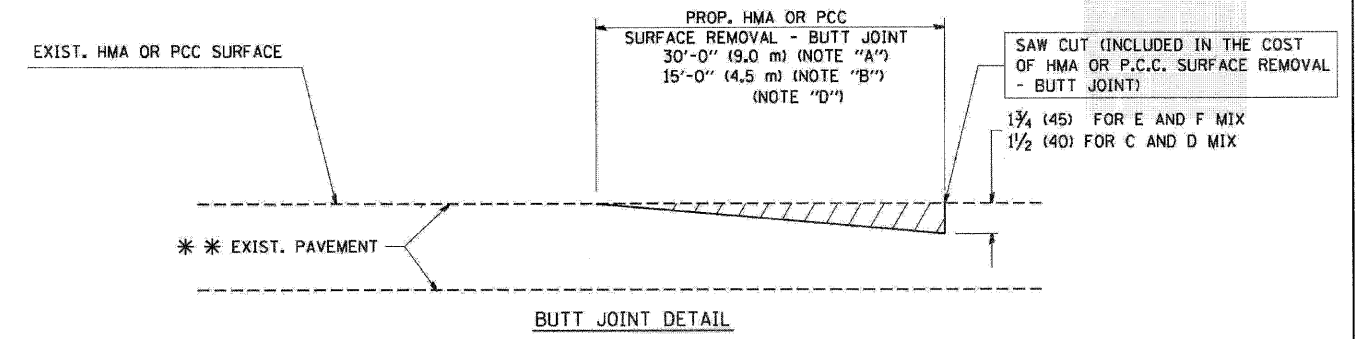


OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



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
F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
BUTT JOINT AND HMA TAPER DETAILS

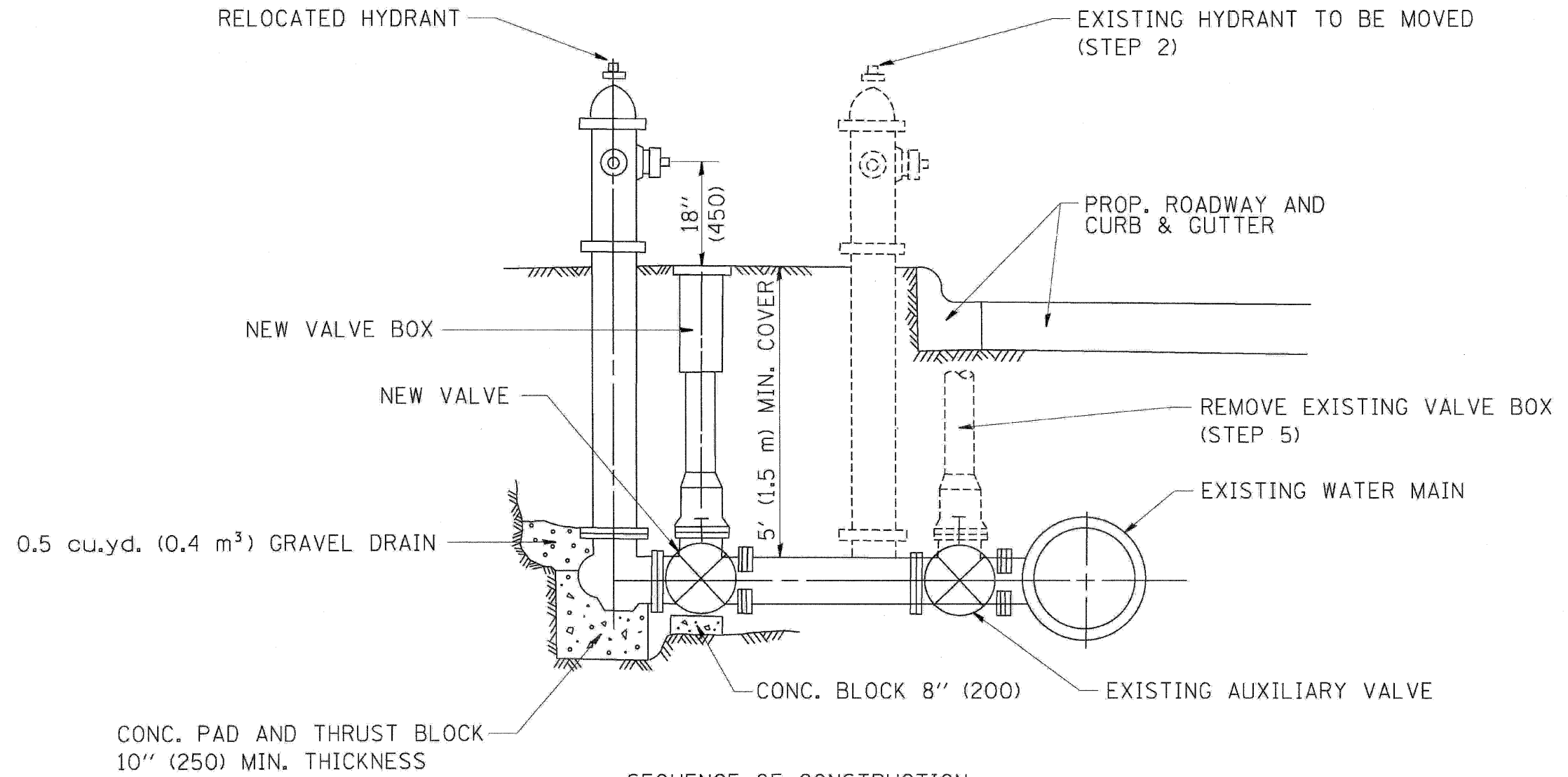
SCALE: VERT. NONE
HORIZ. NONE

DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)

PLOT DATE = 3/15/2007
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USER NAME = bbor404

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	53
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK

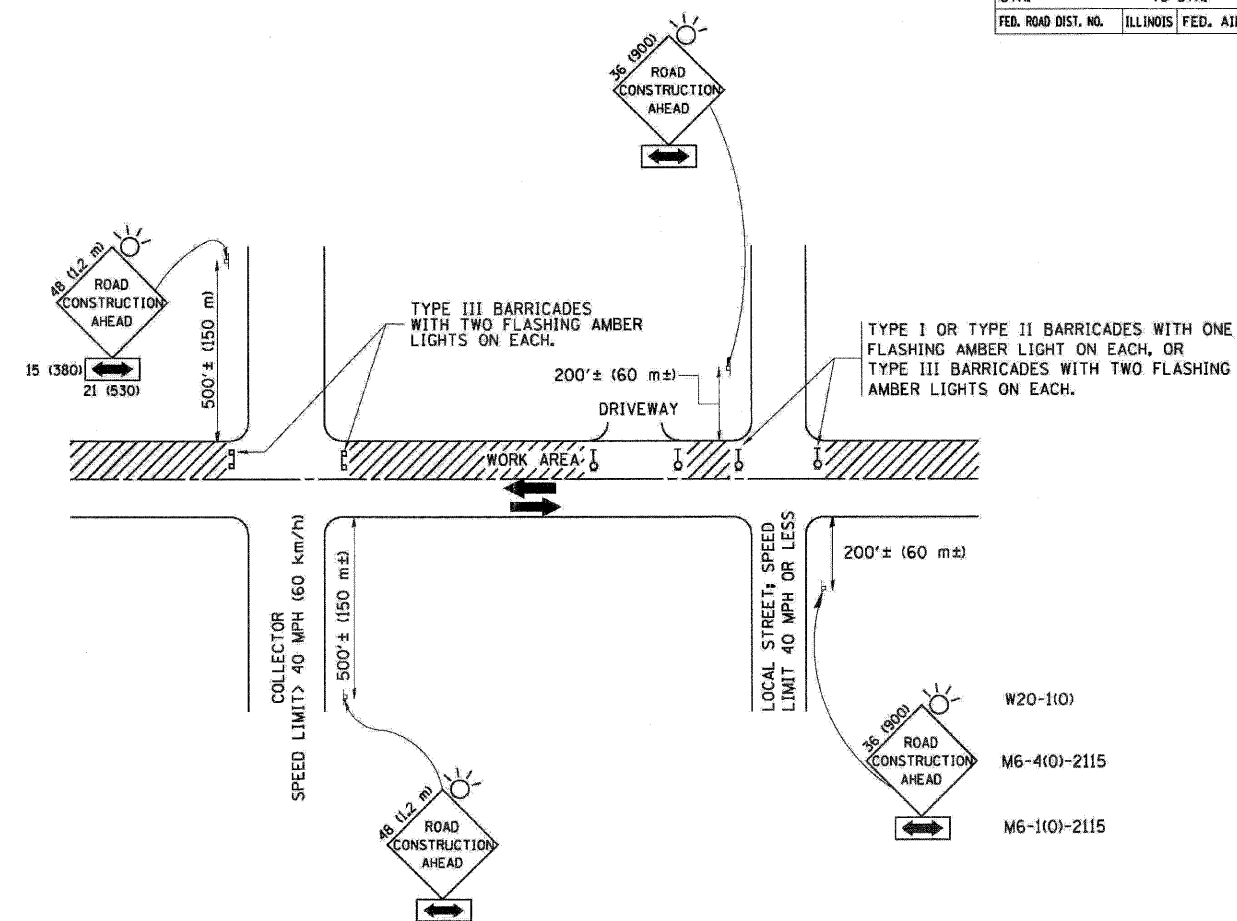
FIRE HYDRANT TO BE MOVED

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY

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PLOT SCALE = 80/8000 / 1 IN
USER NAME = bshah-dl

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	54
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 DRIVEWAYS:

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
 P.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

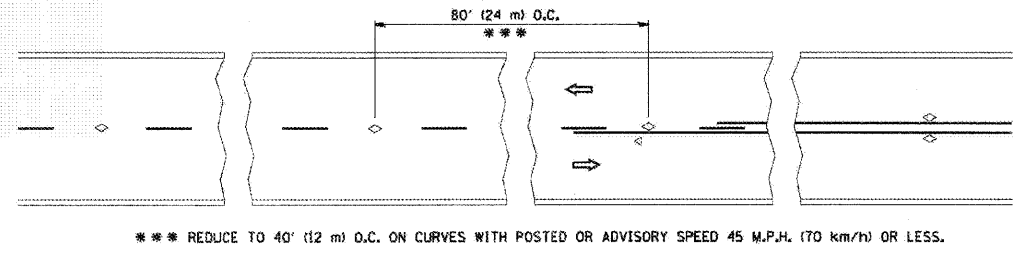
SCALE: NONE

DRAWN BY

CHECKED BY

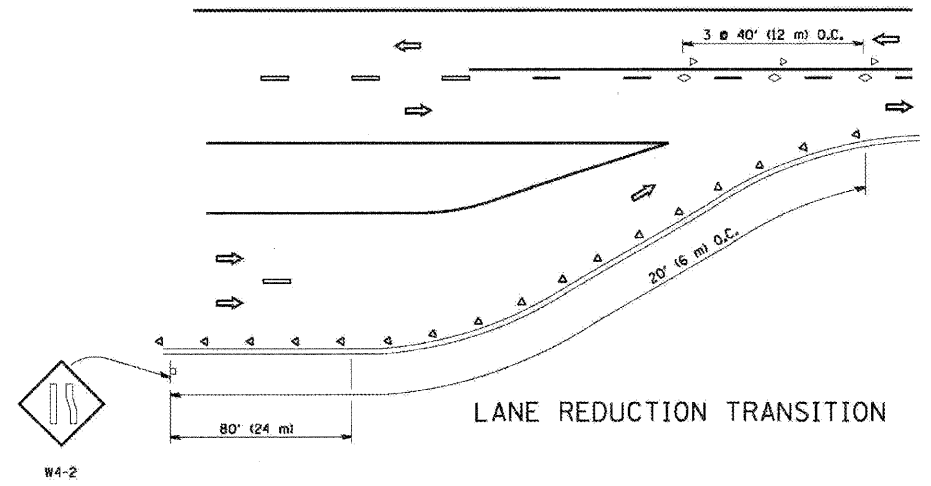
TC-10

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-B	COOK	64	55
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

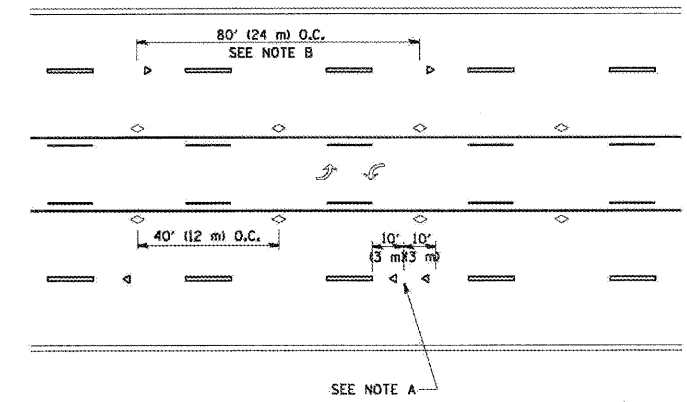


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

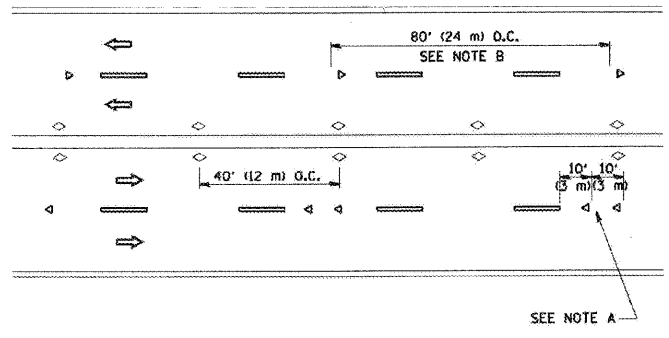
TWO-LANE/TWO-WAY



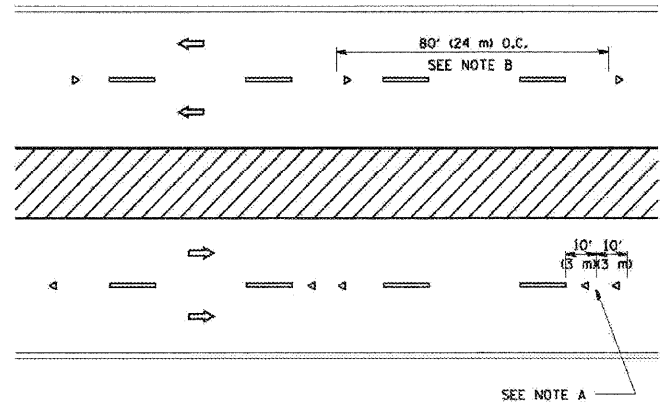
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

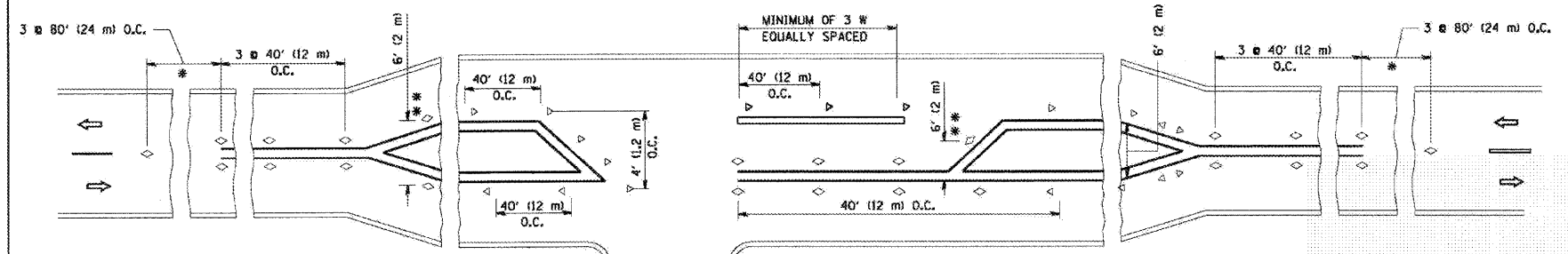
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

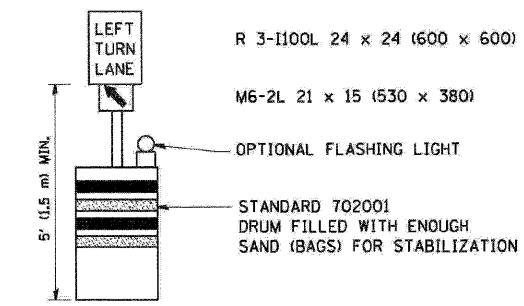
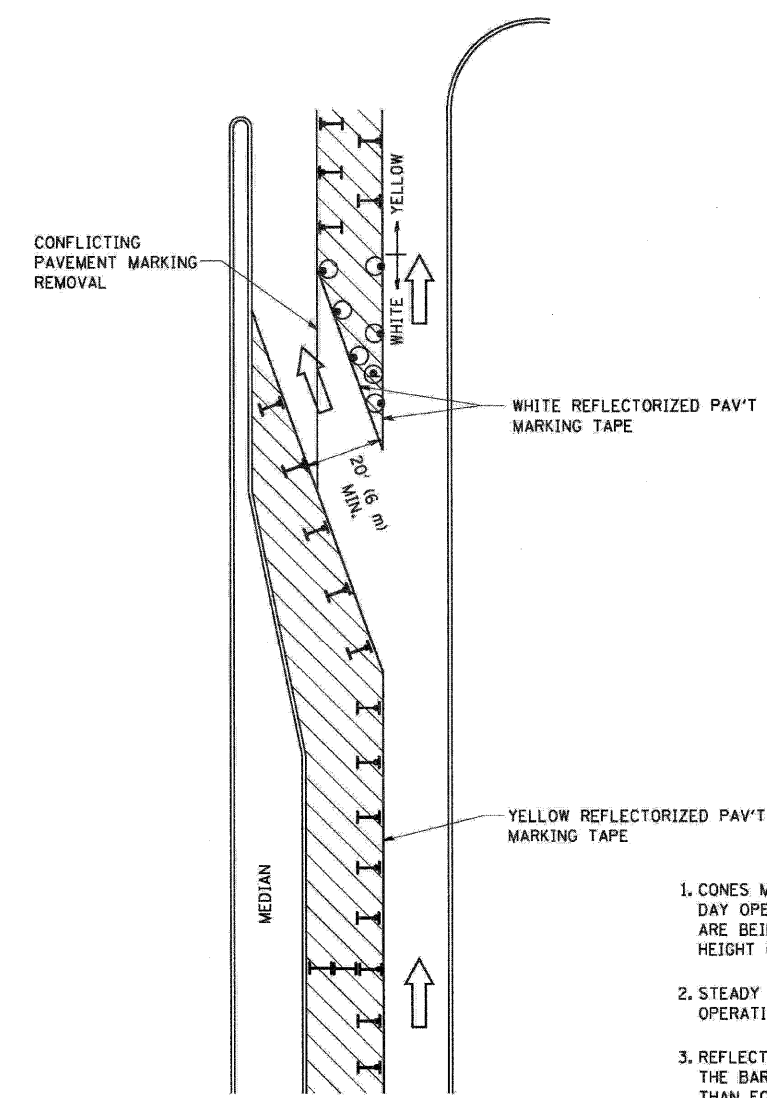
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT
MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE
 DRAWN BY CADD
 CHECKED BY
 TC-11

PLOT DATE = 3/8/2007
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = bawnd







F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	56
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

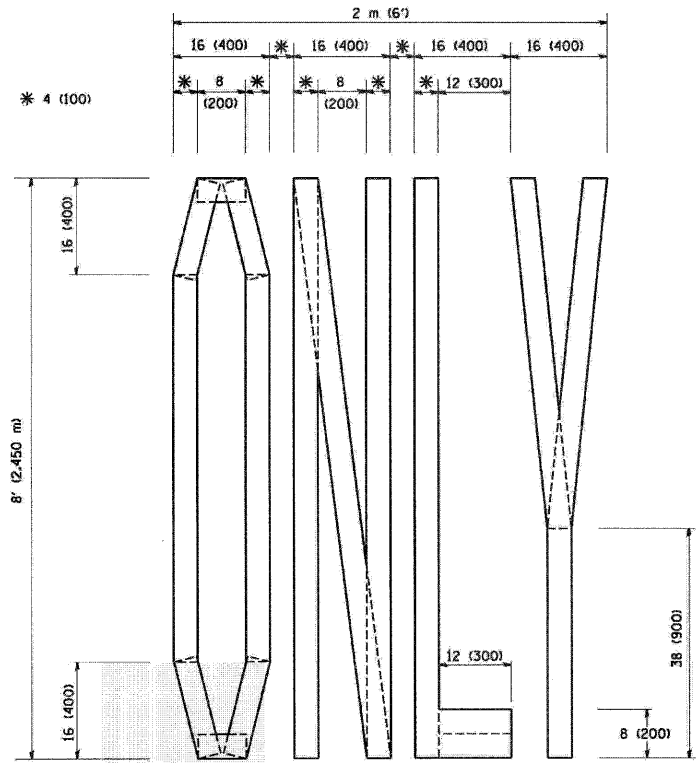
REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
**TRAFFIC CONTROL AND PROTECTION
 AT TURN BAYS
 (TO REMAIN OPEN TO TRAFFIC)**

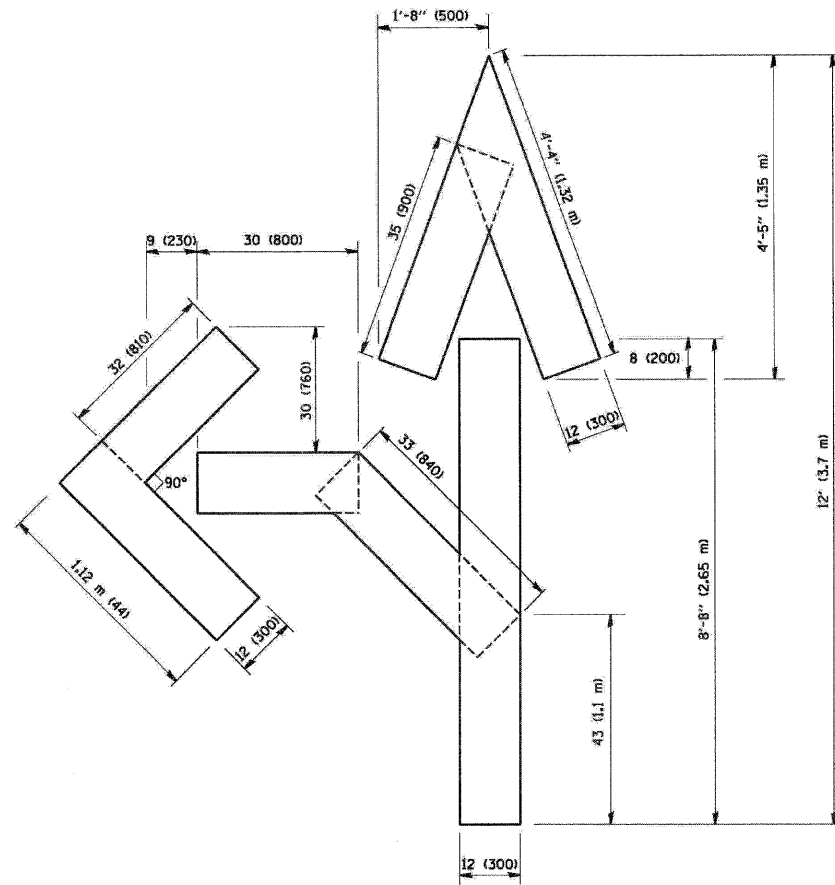
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 CHECKED BY LHA

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 USER NAME = bauer-d

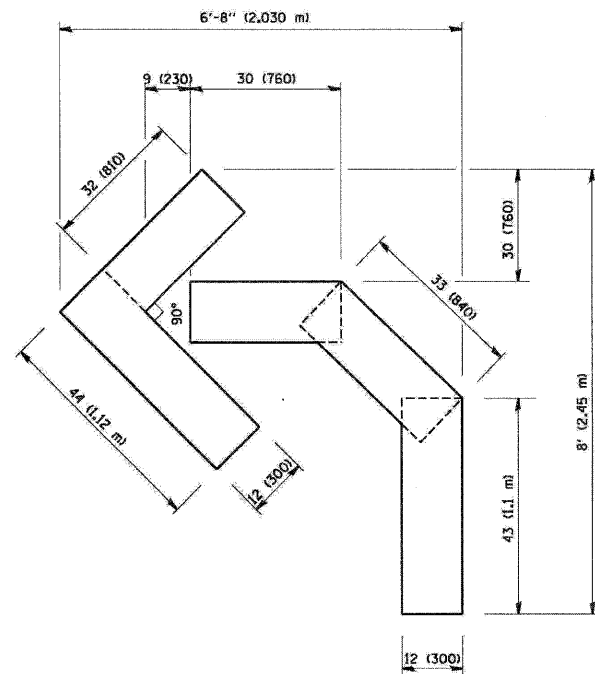
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	57
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK

**PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING**

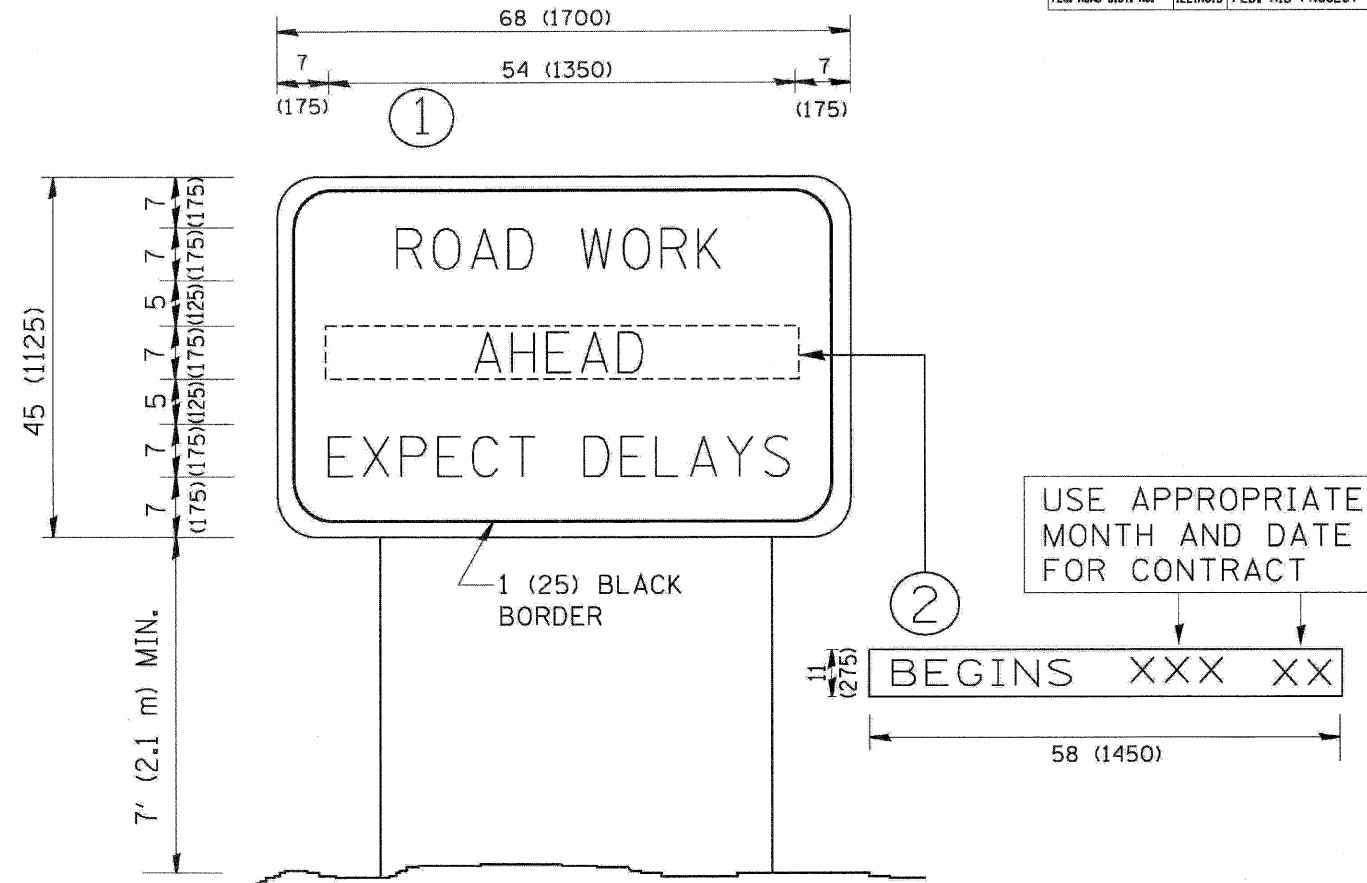
SCALE: NONE

DRAWN BY CADD

CHECKED BY

TC-16

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2843	3249B-R	COOK	64	58
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

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

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

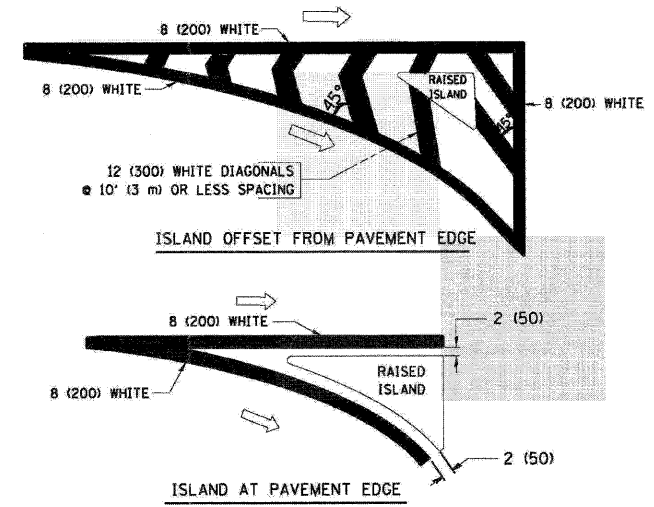
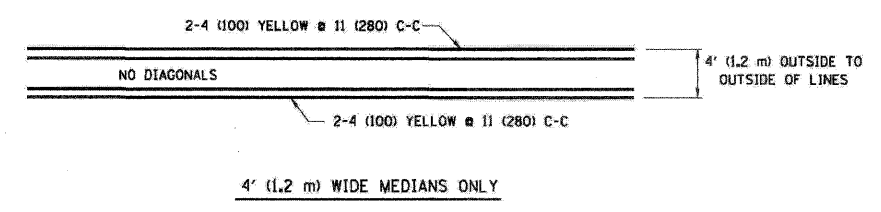
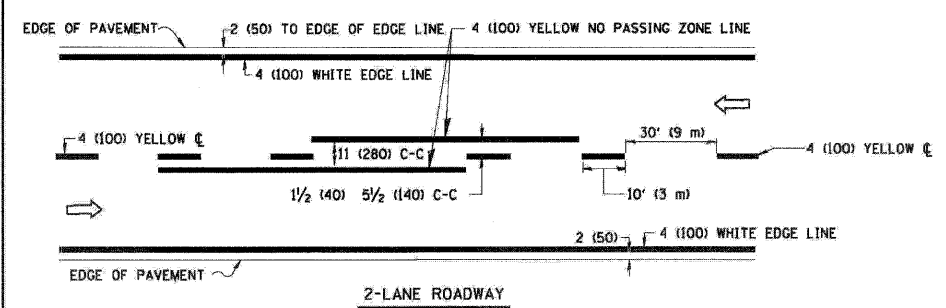
REVISIONS	
NAME	DATE
R. MIRS	9-15-91
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 2843 DIXIE HWY over BUTTERFIELD CREEK
**ARTERIAL ROAD
 INFORMATION SIGN**

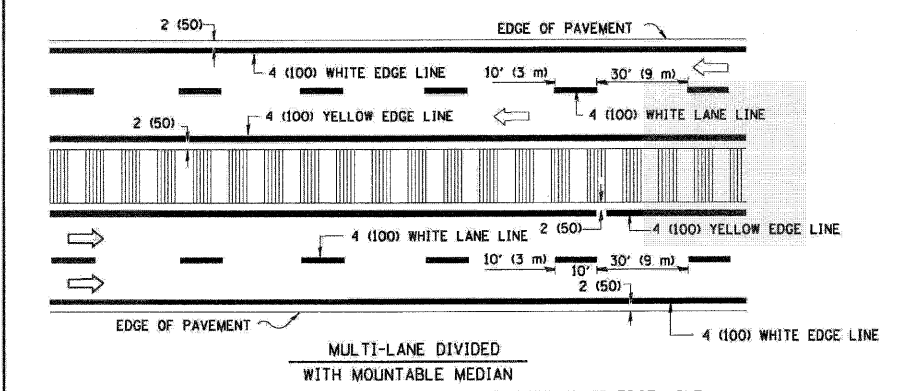
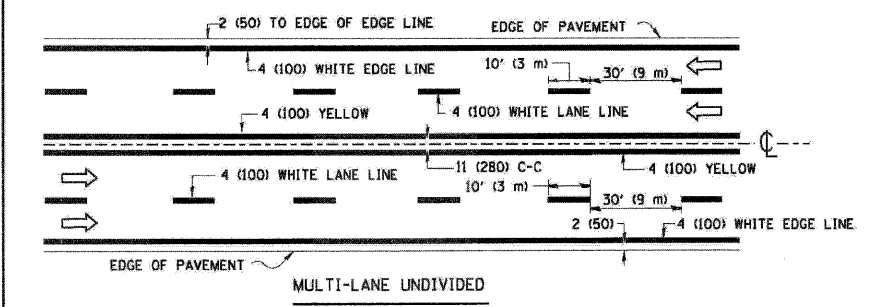
SCALE: NONE

DRAWN BY DESIGN
 CHECKED BY
 TC22

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

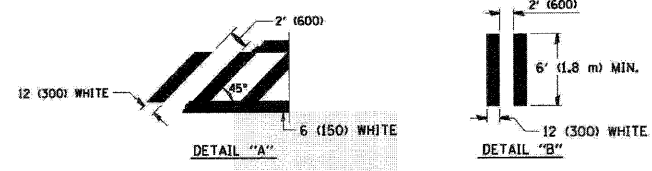
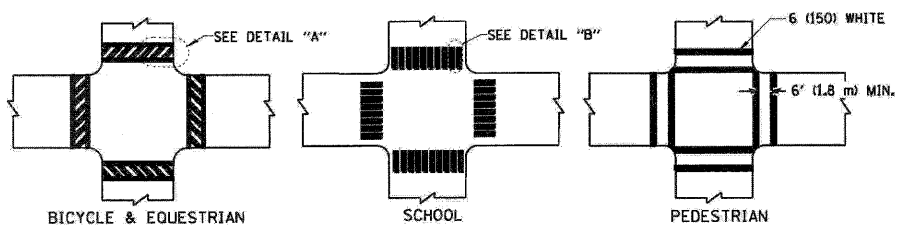


TYPICAL ISLAND MARKING

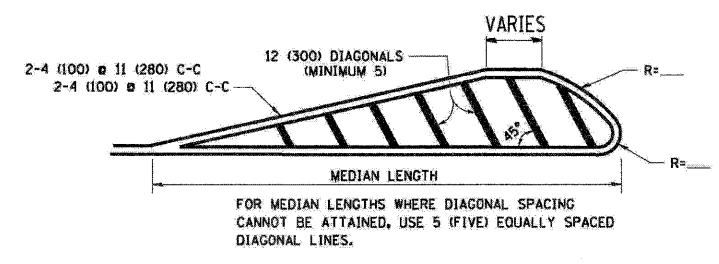


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

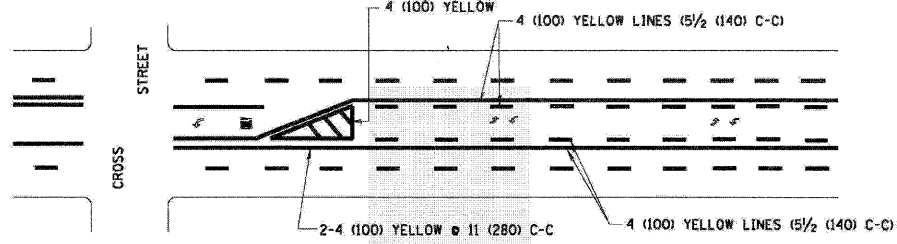
TYPICAL LANE AND EDGE LINE MARKING



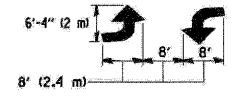
TYPICAL CROSSWALK MARKING



MEDIANS OVER 4' (1.2 m) WIDE

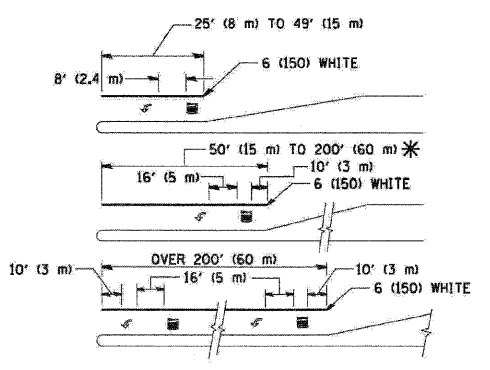


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



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

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

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	4 (100)	SOLID	YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE
FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100)	SKIP-DASH	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
5 (125) ON FREEWAYS	SKIP-DASH	WHITE	WHITE	
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 6 (150)	SOLID	WHITE	NOT LESS THAN 6' (1.8 m) APART
A. DIAGONALS (BIKE & EQUESTRIAN)	12 (300) @ 45°	SOLID	WHITE	2' (600) APART
B. LONGITUDINAL BARS (SCHOOL)	12 (300) @ 90°	SOLID	WHITE	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°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS			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' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	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
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
P.A.U. 2843 DIXIE HWY over BUTTERFIELD CRBCK
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

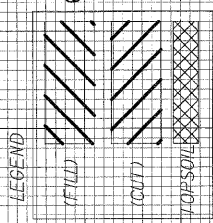
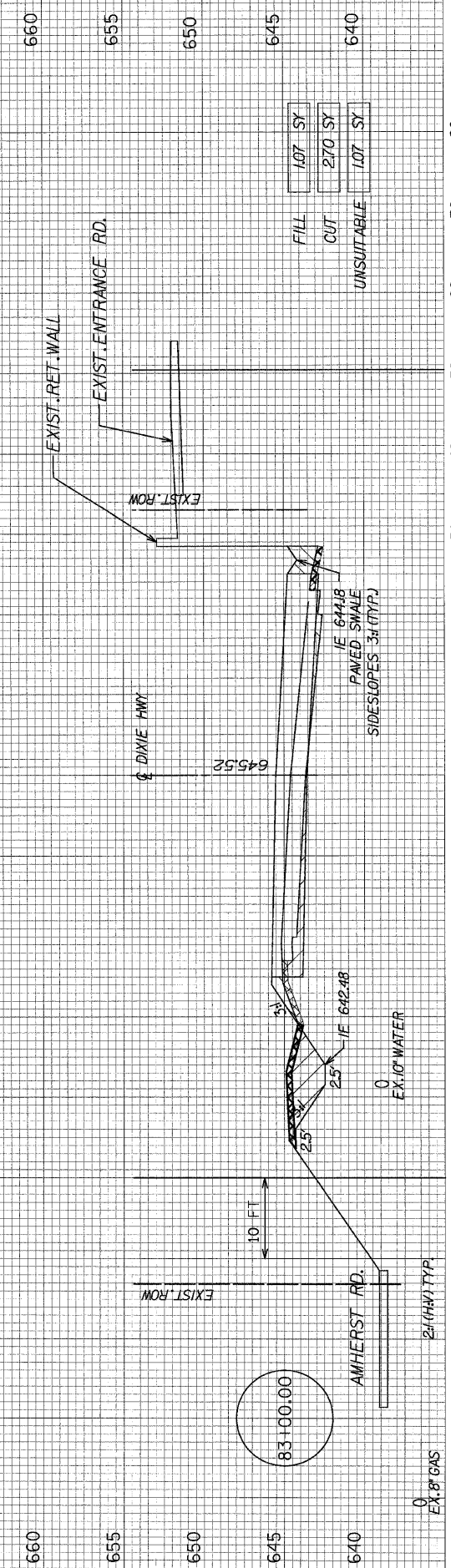
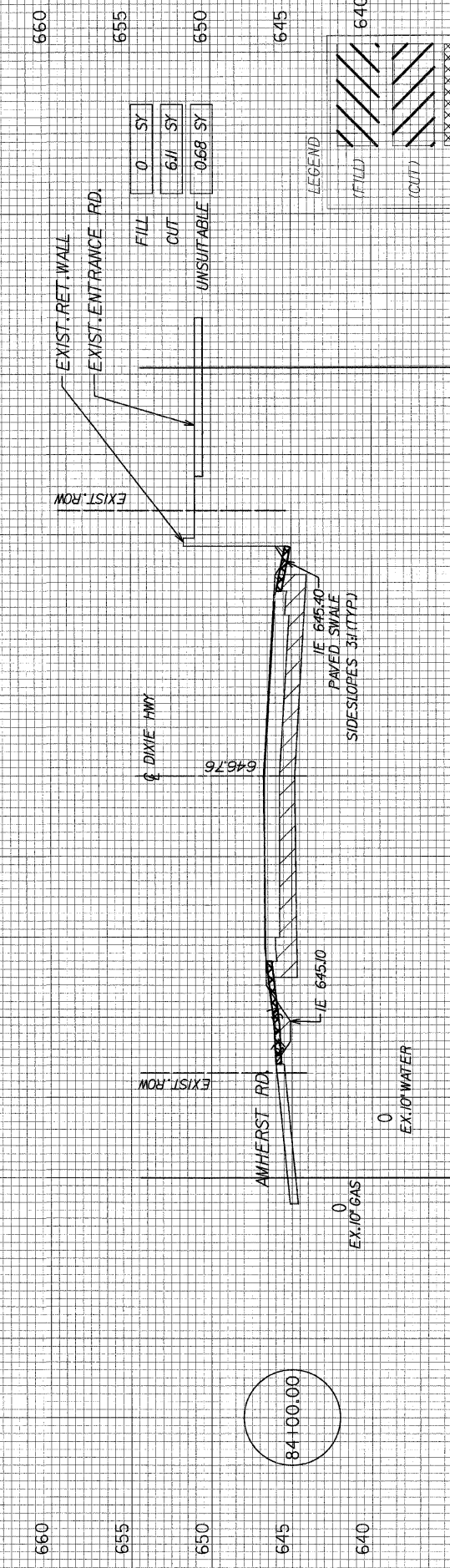
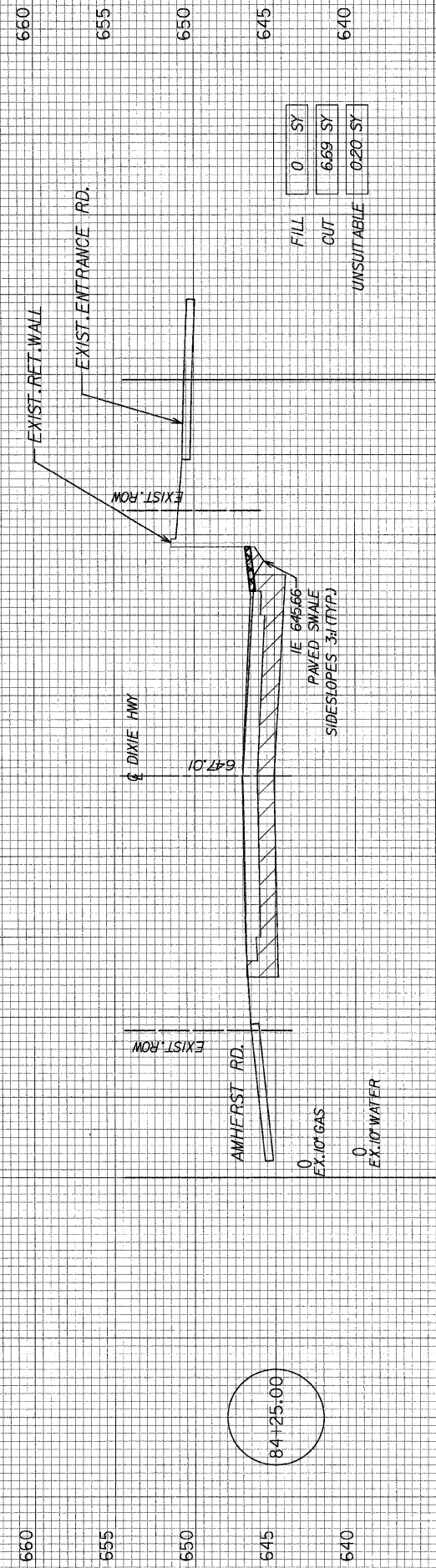
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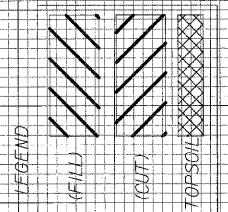
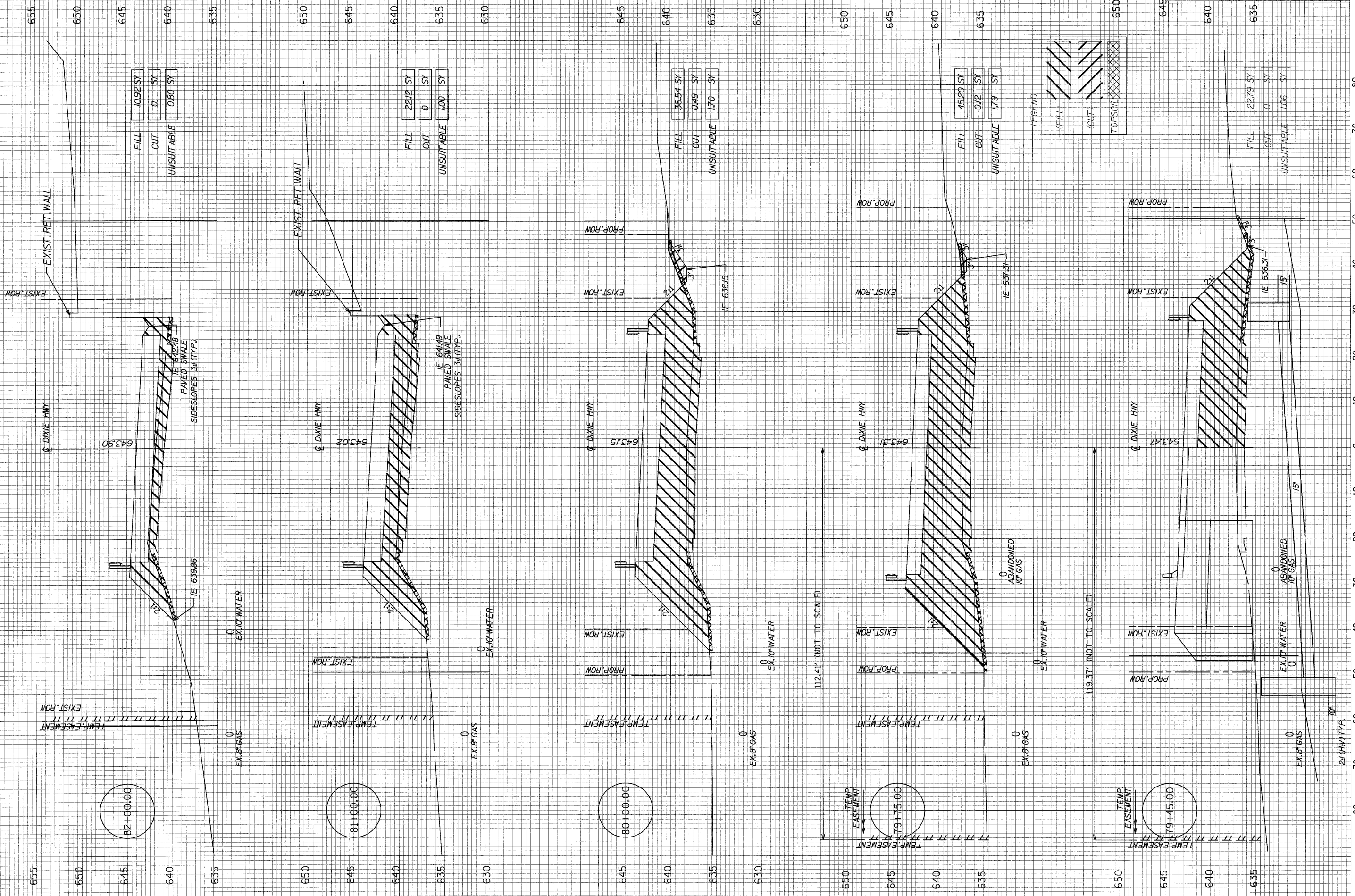
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CHECKED BY

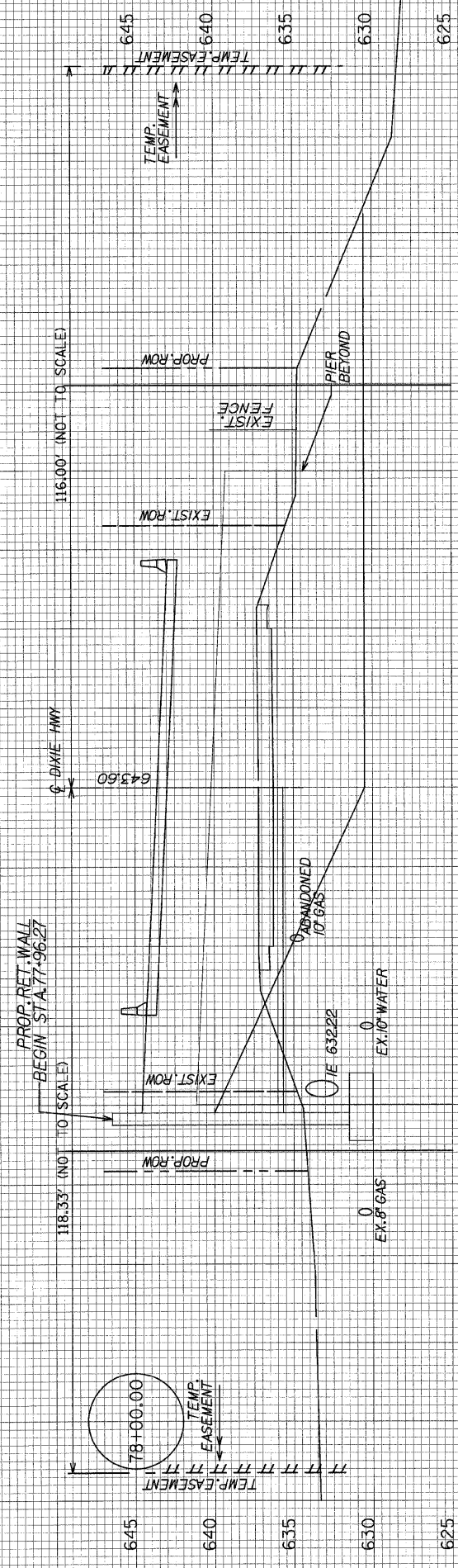
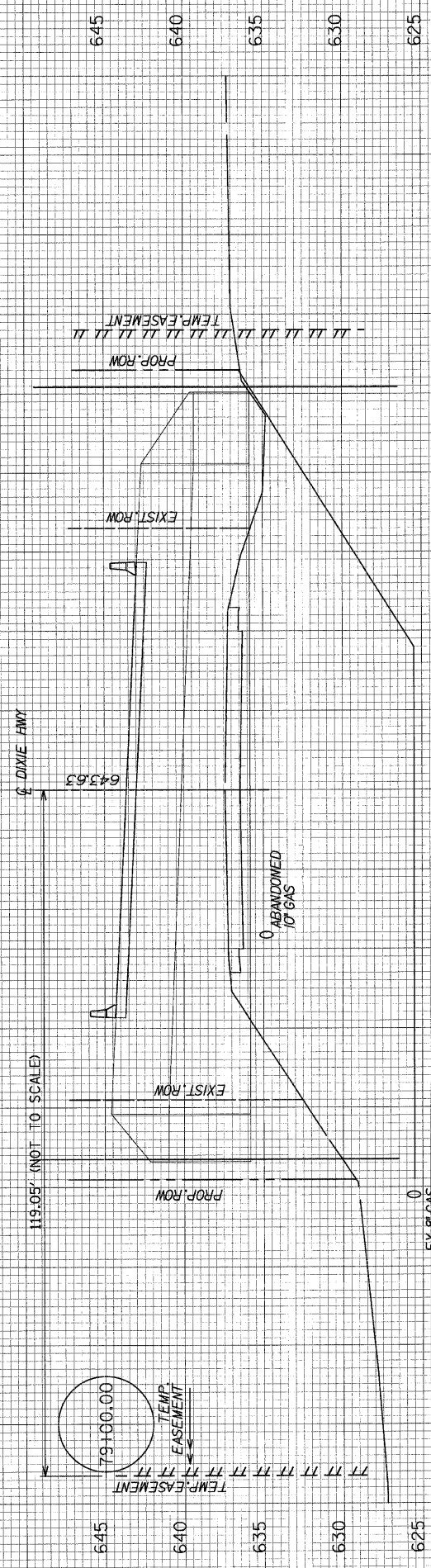
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USER NAME = bbaard

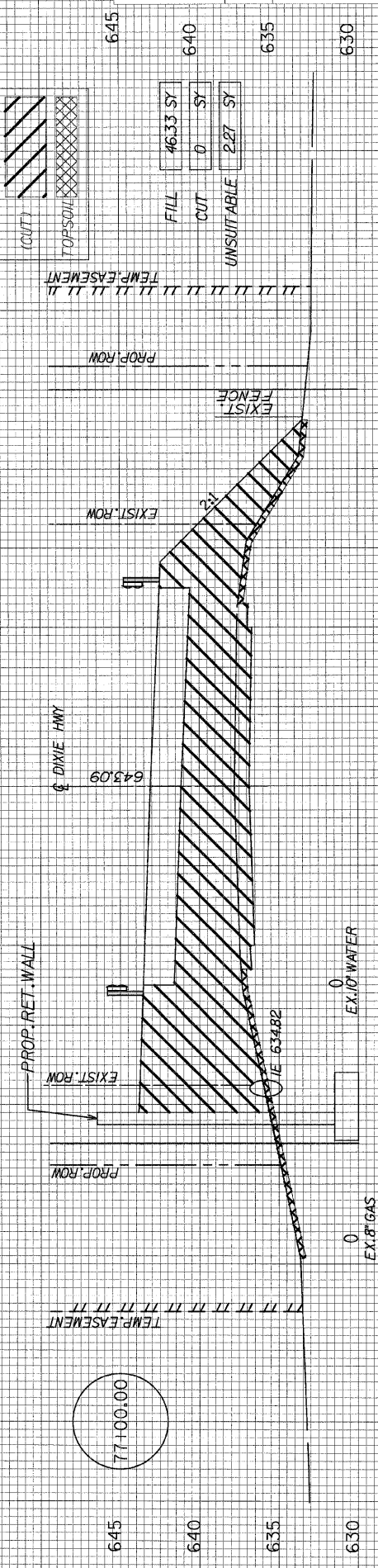
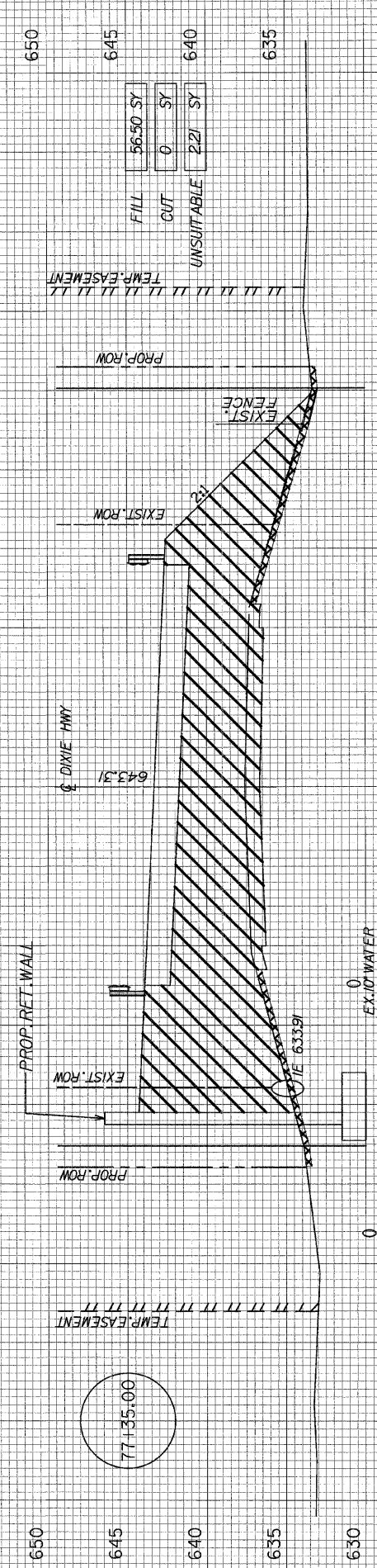
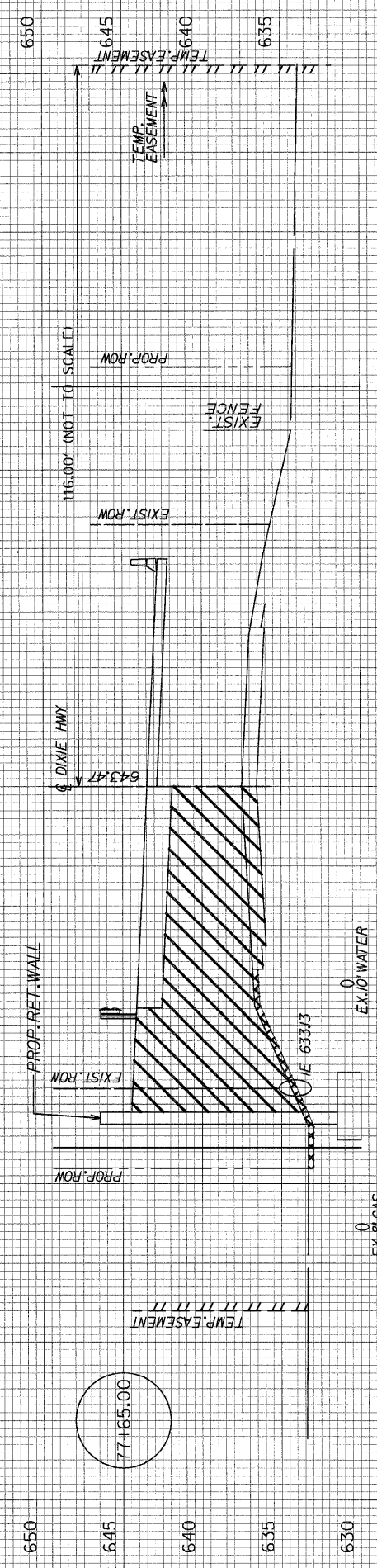




EARTHWORK - HATCHING, CUT & FILL SCALE: VERT. 1"=5' HORIZ. 1"=10' 6-25-09 (2 OF 4)



STRUCTURE EXCAVATION:
BRIDGE - 75 CU YD (ENTIRE STRUCTURE)
RET - WALL - 210 CU YD (ENTIRE STRUCTURE)



Legend for earthwork hatching:

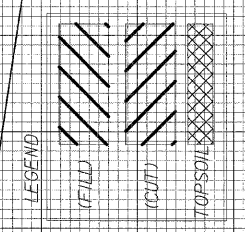
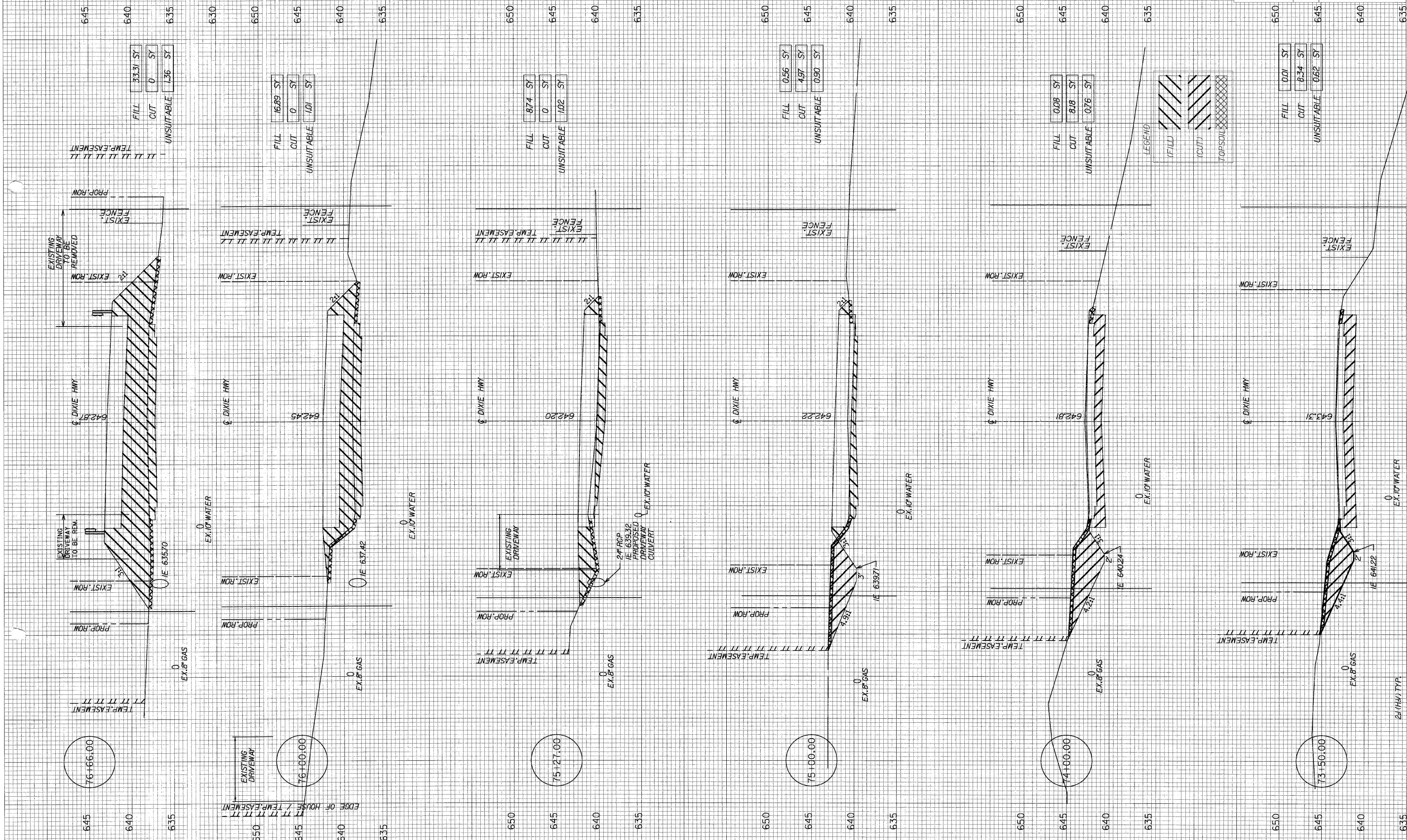
(Diagonal lines /)	FILL	56.50 SY
(Diagonal lines \)	CUT	0 SY
(Cross-hatch)	UNSUITABLE	221 SY

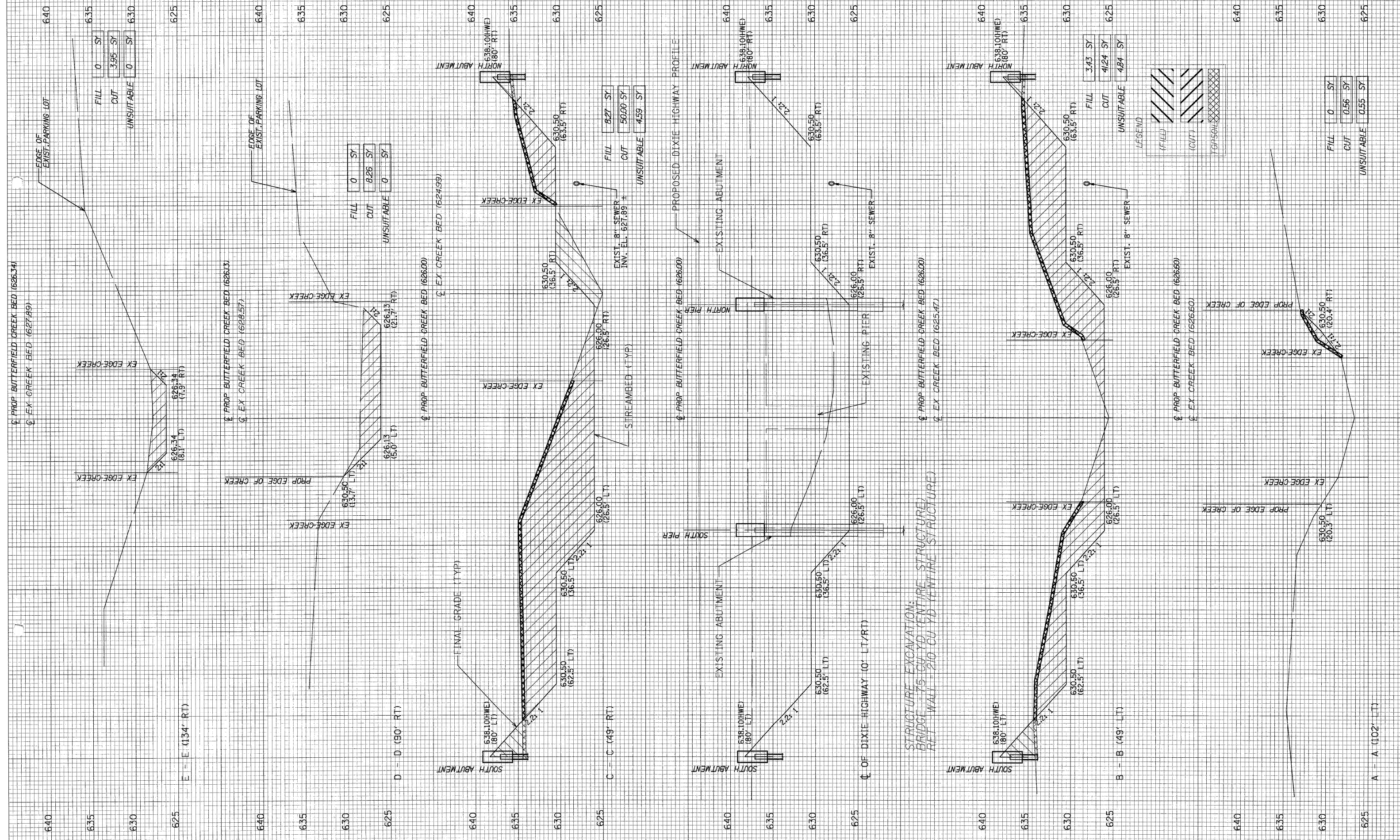
Legend for soil types:

(Diagonal lines /)	(FILL)
(Diagonal lines \)	(CUT)
(Cross-hatch)	TOPSOIL

Legend for earthwork hatching:

(Diagonal lines /)	FILL	46.33 SY
(Diagonal lines \)	CUT	0 SY
(Cross-hatch)	UNSUITABLE	227 SY





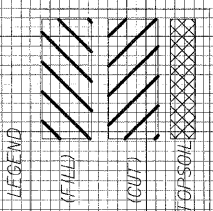
FILL	0	SY
CUT	3.95	SY
UNSUITABLE	0	SY

FILL	0	SY
CUT	8.26	SY
UNSUITABLE	0	SY

FILL	6.27	SY
CUT	50.00	SY
UNSUITABLE	4.59	SY

FILL	3.43	SY
CUT	4.24	SY
UNSUITABLE	4.84	SY

FILL	0	SY
CUT	0.56	SY
UNSUITABLE	0.55	SY



EARTHWORK - HATCHING, CUT & FILL SCALE: VERT. 1"=5' HORIZ. 1"=10' CHANNEL EXCAVATION 6-25-09