

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	1

CONTRACT NO. 60B83

107+2=109

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**F.A.P. 303 /IL. RTE. 173 (OVER PISCASAW CREEK)
SECTION: 131B (1&2) BR
WHITE OAKS ROAD TO OAK GROVE ROAD
ROADWAY AND BRIDGE RECONSTRUCTION
PROJECT: F-BRF-0303(035)
S.N. 056-0089 & S.N. 056-0090
C-91-434-06
McHENRY COUNTY**

DESIGN DESIGNATION

820 (17) OTHER PRINCIPAL ARTERIAL 2.07 (FP 10)
DESIGN SPEED: 40 M.P.H. (WHITE OAKS ROAD TO OAK GROVE ROAD)

TRAFFIC DATA

IL. RTE. 173 5,900 (2005) ADT
6,450 (2017) ADT

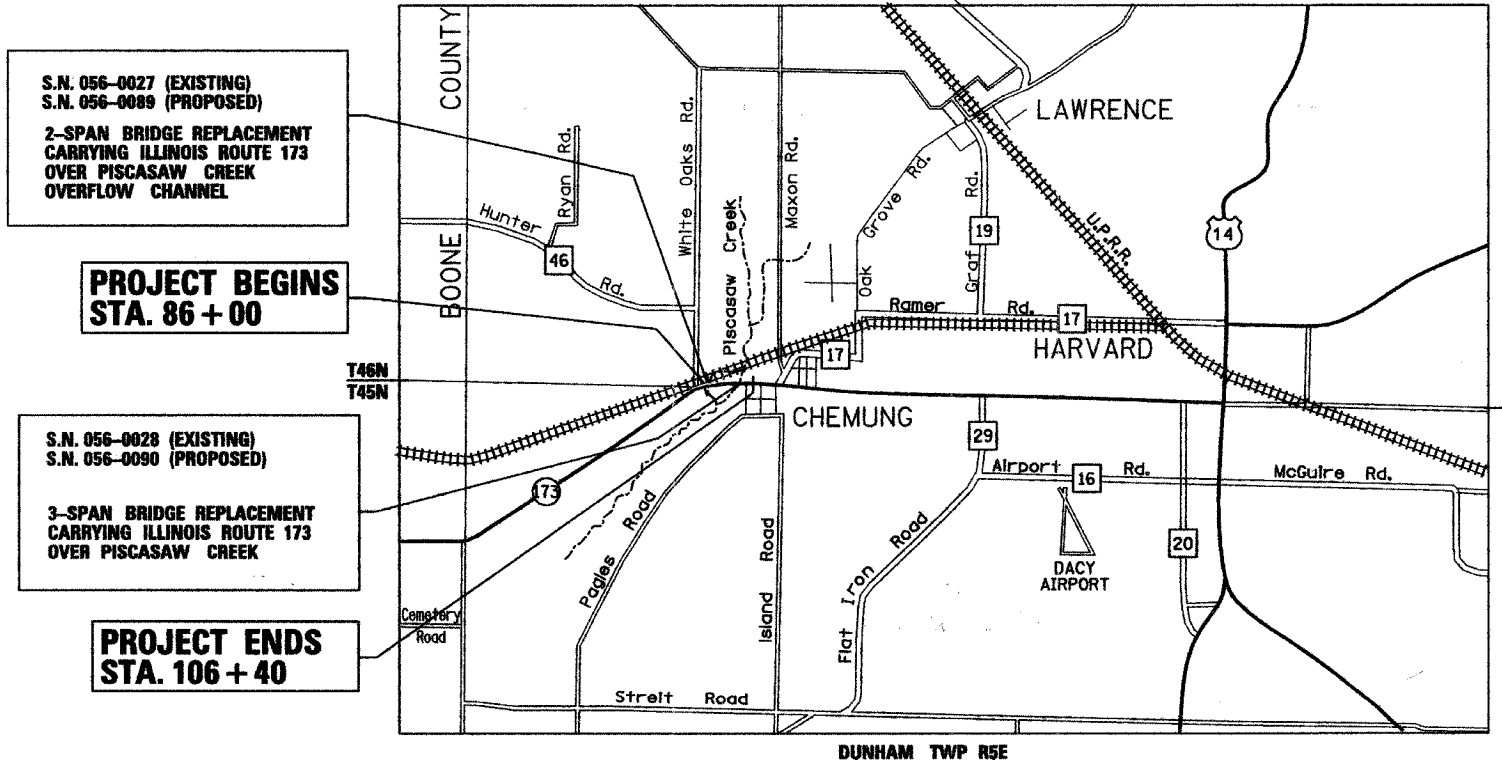
MUNICIPALITY INVOLVED:

CHEMUNG

THIS PROJECT CONSISTS OF THE REMOVAL OF S.N. 056-0027 AND S.N. 056-0028 AND THE CONSTRUCTION OF S.N. 056-0089 AND S.N. 056-0090. THE PROJECT WILL ALSO CONSIST OF THE RECONSTRUCTION AND THE RAISING OF THE PROFILE OF 2,000 FEET OF ILLINOIS ROUTE 173.



I.D.O.T. CONSULTANT PROJECT MANAGER: RUSS SINHA (847) 705-4209

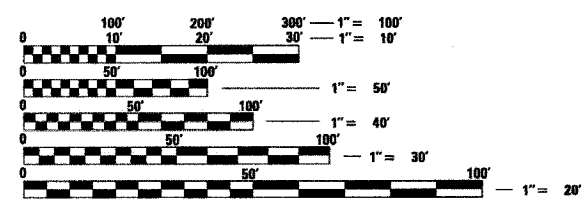


S.N. 056-0027 (EXISTING)
S.N. 056-0089 (PROPOSED)
2-SPAN BRIDGE REPLACEMENT
CARRYING ILLINOIS ROUTE 173
OVER PISCASAW CREEK
OVERFLOW CHANNEL

**PROJECT BEGINS
STA. 86 + 00**

S.N. 056-0028 (EXISTING)
S.N. 056-0090 (PROPOSED)
3-SPAN BRIDGE REPLACEMENT
CARRYING ILLINOIS ROUTE 173
OVER PISCASAW CREEK

**PROJECT ENDS
STA. 106 + 40**



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

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

**GROSS LENGTH OF PROJECT = 2,040.00 FEET = 0.389 MILES
NET LENGTH OF PROJECT = 2,040.00 FEET = 0.389 MILES**

CONTRACT NO. 60B83

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED APRIL 12, 2007

Diana M. O'Keefe / 1/6
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11, 2007
Eric S. Hare
ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2007
Milton R. Seay / 1/0
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



Bhadresh N. Shah / 4-10-07
BHADRESH N. SHAH, S.E., P.E. DATE
EXPIRES: 11-30-08



Birinder S. Sachdeva / 4-10-07
BIRINDER S. SACHDEVA, P.E. DATE
EXPIRES: 11-30-07



CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL 60606
TELEPHONE: 312-372-2023

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHENRY	107	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60B83				

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LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-03	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
482001-01	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-01	SUB-SURFACE DRAINS
601101	CONCRETE HEADWALL FOR PIPE DRAIN
602001	CATCH BASIN, TYPE A
602601	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND LIDS, TYPE 1
606006-01	OUTLET FOR CONCRETE CURB AND GUTTER, TYPE B-15.60 (B-6.24)
609006-03	BRIDGE APPROACH PAVEMENT DRAIN
630001-07	STEEL PLATE BEAM GUARDRAIL
630201-04	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
664001-01	CHAIN LINK FENCE
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS DAY ONLY
701321-08	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-02	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
702001-06	TRAFFIC CONTROL DEVICES
704001-03	TEMPORARY CONCRETE BARRIER
880001	SPAN WIRE MOUNTED SIGNAL AND FLASHING BEACON

SITE DOCUMENTATION

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 ALONG THE PROJECT LIMITS AND BECKS ROAD AS WELL AS THE PISCASAW CREEK CHANNEL AND OVERFLOW CHANNEL USING VIDEOTAPE AND/OR PICTURES. THIS WORK REFERS TO BUT IS NOT LIMITED TO THE ADJACENT BECKS WOOD CONSERVATION AREA, THE EXISTING TREES ALONG THE SLOPES 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 REMOVAL PAY ITEMS AND WILL NOT BE PAID FOR SEPARATELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**INDEX OF SHEETS
 &
 LIST OF STATE STANDARDS
 ILLINOIS ROUTE 173**
 SCALE: NONE
 DATE: APRIL 16, 2007
 DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

Rev.  **CHRISTIAN-ROGE & ASSOCIATES, INC.**
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83

GENERAL NOTES

1. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE RESPECTIVE UTILITIES AND THE McHENRY COUNTY CONSERVATION DISTRICT (MCCD).
3. THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES AND SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT.
4. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE FROM BEST AVAILABLE RECORD INFORMATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISRUPTED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS, OR CATCH BASINS. HE SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. HE SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTIONS WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
8. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE.
9. ELEVATIONS SHOWN ON THE PLANS ARE BASED ON N.A.V.D. 1988.
10. POLLUTION CONTROL: THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.
11. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
12. 10-FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
13. THE CONTRACTOR AS REQUIRED, SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING WITH CONSTRUCTION.
14. THE CONTRACTOR'S OPERATIONS AND TEMPORARY STORAGE ACTIVITIES SHALL BE LIMITED TO WITHIN THE CONSTRUCTION LIMITS. ANY ADDITIONAL STAGING AREAS OR ACTIVITIES OUTSIDE TO THE CONSTRUCTION LIMITS WILL NOT BE ALLOWED. NO EARTH STOCKPILES WILL BE ALLOWED WITHIN THE PROJECT LIMITS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS.

COMMITMENTS

- | | | |
|---|--|--|
| <ol style="list-style-type: none"> 1. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT AND AVOID ANY IMPACT TO THE SPECKLED ADLER TREES, SLIPPERSHELL MUSSELS, AND THE BLANDING'S TURTLE, BOTH OF WHICH HAVE HABITATS WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL BE REQUIRED TO INFORM WORKERS AND SUBCONTRACTORS TO AVOID ANY IMPACT TO THESE TWO SPECIES. | <ol style="list-style-type: none"> 2. THE CONTRACTOR IS REQUIRED TO CONFORM TO THE REQUIREMENTS IN THE INCIDENTAL TAKE PERMITS. THIS SHALL BE ADDRESSED AT THE PRE-CONSTRUCTION MEETING PRIOR TO ANY WORK DONE IN THE AREA. | <ol style="list-style-type: none"> 3. IF ANY BLANDING'S TURTLES ARE FOUND WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL CONTACT MR. ED COLLINS FROM THE McHENRY COUNTY CONSERVATION DISTRICT, (MOBILE) (815) 790-0351 AND/OR (OFFICE) (815) 338-6223, TO IDENTIFY AND RELOCATE THE BLANDING'S TURTLE. |
|---|--|--|

SPECIAL DESIGN / CONSTRUCTION CONSIDERATIONS

1. THE DEPARTMENT HAS AN ENVIRONMENTAL SENSING STATION (ESS) LOCATED IN THE NORTHEAST QUADRANT OF THE PISCASAW CREEK CROSSING AT STATION 102+12. PROTECTION FOR THE ESS WILL BE REQUIRED DURING CONSTRUCTION. ALSO, COORDINATION WITH THE CENTRAL BUREAU OF OPERATIONS WILL BE NECESSARY TO PROPERLY REMOVE AND REINSTALL THE SENSORS LOCATED ON THE BRIDGE DECK OF THE MAIN STRUCTURE.

15. WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

16. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS IN THE CREEK. THE COST OF THIS WORK SHALL BE INCLUDED AS PART OF REMOVAL OF EXISTING STRUCTURE.

17. CONTRACTOR IS FULLY RESPONSIBLE FOR PROVIDING ANY DIVERSION OF CREEK AND PROTECTION OF CREEK AS NEEDED TO FACILITATE SPECIFIED WORK. SUCH TEMPORARY MEASURES ARE SUBJECT TO THE APPROVAL OF THE ENGINEER, THE DEPARTMENT OF NATURAL RESOURCES AND ARMY CORP OF ENGINEERS. THE COST OF THE COFFERDAMS SHALL BE PAID FOR AS SHOWN IN THE PLANS, ALL OTHER TEMPORARY MEASURES, INCLUDING SILT CURTAIN AND ANY OTHER METHODS SHALL BE CONSIDERED INCLUDED IN THE UNIT COST OF THE VARIOUS PAY ITEMS.

18. 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.

19. THE REMOVAL OF EXISTING STORM SEWER, DRAINAGE STRUCTURES, HMA DRIVEWAYS AND ENTRANCE PIPE CULVERTS SHALL BE INCLUDED IN THE COST OF THE CONTRACT WHEN THEY WILL BE REMOVED AS PART OF EARTH EXCAVATION OR DURING THE INSTALLATION OF THE PROPOSED ITEM OF WORK.

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

21. ALL EXISTING SIGNS REMOVED SHALL BE DELIVERED TO IDOT AS DIRECTED BY THE ENGINEER. THE COST OF REMOVING AND DELIVERING THE EXISTING SIGNS TO THE SIGN SHOP WILL BE CONSIDERED AS INCLUDED IN THE BID PRICES OF THE CONTRACT.

22. THE McHENRY COUNTY CONSERVATION DISTRICT MUST BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ALL TREE REMOVAL BEYOND THE LIMITS / LOCATIONS SHOWN IN THE PLANS.

23. THE APPROXIMATE LIMITS OF THE WORK PLATFORM AND RAMPS FOR CONTRACTOR ACCESS TO THE CREEK BED ARE SHOWN ON THE PLAN AND PROFILE SHEET. THE CONTRACTOR SHALL DETERMINE THE LIMITS OF THESE BASED ON HIS OPERATIONS.

THE COST OF ALL EXCAVATION, FILL MATERIAL AND AGGREGATE FOR RAMPS AND PLATFORMS, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVAL OF THE EXISTING STRUCTURES.

24. THE CONTRACTOR SHALL DELIVER ALL STATE OWNED EQUIPMENT TO THE WOODSTOCK TEAM SECTION AT 11916 CATALPA LANE, WOODSTOCK, IL 60098 ON NORMAL WORKING DAYS BETWEEN THE HOURS OF 8 AM TO 2 PM.

THE COST OF REMOVING AND DELIVERING THE BARRICADES, DRUMS AND TEMPORARY SIGNS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR SAND MODULE IMPACT ATTENUATOR TO BE REMOVED.

25. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4670 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES.

26. TWO WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT MS. DEBBIE HANSON, AREA TRAFFIC TECHNICIAN, AT (847) 438-2300.

NOTE: BOXED ITEMS ARE INCIDENTAL.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES AND COMMITMENTS
ILLINOIS ROUTE 173

SCALE: NONE
DATE: APRIL 25, 2007
DRAWN BY: A.C.S.
CHECKED BY: S.J.P.



CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-6274

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES FED. 80% STATE 20%	ROADWAY	OVERFLOW	PISCASAW
				IL.RTE.173	BRIDGE STP FUNDS	BRIDGE FUNDS
				I000-2A	X071-2A	X071-2A
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	393	393		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	112	112		
20200100	EARTH EXCAVATION	CU YD	1,691	1,691		
20101100	TREE TRUNK PROTECTION	EACH	22	22		
20101200	TREE ROOT PRUNING	EACH	22	22		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	895	895		
20300100	CHANNEL EXCAVATION	CU YD	691	691		
20400800	FURNISHED EXCAVATION	CU YD	3,145	3,145		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	241		107	134
20800150	TRENCH BACKFILL	CU YD	33	33		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4,344	4,344		
25000300	SEEDING, CLASS 3	ACRE	0.7	0.7		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	75	75		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	75	75		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	75	75		
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	3388	3388		
25200110	SODDING, SALT TOLERANT	SQ YD	956	956		
25200200	SUPPLEMENTAL WATERING	UNIT	26	26		
28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	50	50		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	600	600		
28000700	MULCH, METHOD 1	ACRE	2	2		
28000720	MULCH, METHOD 2	ACRE	2	2		
28000300	TEMPORARY DITCH CHECKS	EACH	5	5		
28000400	PERIMETER EROSION BARRIER	FOOT	3,400	3,400		
28000500	INLET AND PIPE PROTECTION	EACH	4	4		
28000905	FENCE (EROSION CONTROL), SPECIAL	FOOT	3,400	3,400		
28100103	STONE RIPRAP, CLASS A2	SQ YD	1,206		489	717
28100105	STONE RIPRAP, CLASS A3	SQ YD	72	72		
28100107	STONE RIPRAP, CLASS A4	SQ YD	1134		489	645
28200200	FILTER FABRIC	SQ YD	1192	72	489	631

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES FED. 80% STATE 20%	ROADWAY	OVERFLOW	PISCASAW
				IL.RTE.173	BRIDGE STP FUNDS	BRIDGE FUNDS
				I000-2A	X071-2A	X071-2A
31101900	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	823	823		
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	84	84		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	36	36		
40600300	AGGREGATE (PRIME COAT)	TON	82	82		
40600895	CONSTRUCTING TEST STRIP	EACH	2	2		
40600990	TEMPORARY RAMP	SQ YD	242	242		
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	147	147		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1428	1428		
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	10	10		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	140	140		
40701841	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"	SQ YD	418	418		
40701951	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 1/2"	SQ YD	4,469	4,469		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	540	540		
44000100	PAVEMENT REMOVAL	SQ YD	5,460	5,460		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	217	217		
44000700	APPROACH SLAB REMOVAL	SQ YD	216	216		
44004250	PAVED SHOULDER REMOVAL	SQ YD	2,089	2,089		
48101200	AGGREGATE SHOULDERS, TYPE B	TON	186	186		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2087	2087		
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1			1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1	
50200100	STRUCTURE EXCAVATION	CU YD	487		223	264
50202901	COFFERDAM (LOCATION - 1)	EACH	1		1	
50202902	COFFERDAM (LOCATION - 2)	EACH	1		1	
50202903	COFFERDAM (LOCATION - 3)	EACH	1		1	
50202904	COFFERDAM (LOCATION - 4)	EACH	1		1	
50202905	COFFERDAM (LOCATION - 5)	EACH	1			1
50202906	COFFERDAM (LOCATION - 6)	EACH	1			1
50202907	COFFERDAM (LOCATION - 7)	EACH	1			1
50202908	COFFERDAM (LOCATION - 8)	EACH	1			1

* SPECIALTY ITEMS

Rev.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
ILLINOIS ROUTE 173

SCALE: NONE
DATE: APRIL 25, 2007

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

SUMMARY OF QUANTITIES			TOTAL QUANTITIES FED. 80% STATE 20%	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		ROADWAY IL.RTE.173 I000-2A	OVERFLOW BRIDGE STP FUNDS X071-2A	PISCASAW BRIDGE BRIDGE FUNDS X071-2A
50300225	CONCRETE STRUCTURES	CU YD	315.9		83	232.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	387.5		144	243.5
50300260	BRIDGE DECK GROOVING	SQ YD	1,163		391	772
50300280	CONCRETE ENCASEMENT	CU YD	45.8		19	26.8
50300300	PROTECTIVE COAT	SQ YD	1,452		486	966
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		0.35	0.65
50500505	STUD SHEAR CONNECTORS	EACH	7,581		2,814	4,767
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	125,680		39,900	85,780
50800515	BAR SPLICERS	EACH	1,064		389	675
51201600	FURNISHING STEEL PILES HP12X53	FOOT	3,650		1,026	2,624
51202305	DRIVING PILES	FOOT	3,650		1,026	2,624
51203600	TEST PILE STEEL HP12X53	EACH	7		3	4
51204650	PILE SHOES	EACH	74		21	53
51205200	TEMPORARY SHEET PILING	SQ FT	8,691	7,070	743	878
51500100	NAME PLATES	EACH	2		1	1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	115			115
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	14			14
52100520	ANCHOR BOLTS, 1"	EACH	98		42	56
54213447	END SECTIONS, 12"	EACH	1	1		
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 12"	EACH	2	2		
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 18"	EACH	3	3		
54247110	GRATING FOR CONCRETE FLARED END SECTION, 18"	EACH	2	2		
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"	FOOT	65	65		
55019700	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 18"	FOOT	198	198		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	85		56	29
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	13	5	4	4
60100905	PIPE DRAINS 4"	FOOT	120		60	60
60100945	PIPE DRAINS 12"	FOOT	28	28		
60107700	PIPE UNDERDRAINS 6"	FOOT	240	240		
60108200	PIPE UNDERDRAINS 6" (SPECIAL)	FOOT	56	56		

* SPECIALTY ITEMS

SUMMARY OF QUANTITIES			TOTAL QUANTITIES FED. 80% STATE 20%	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		ROADWAY IL.RTE.173 I000-2A	OVERFLOW BRIDGE STP FUNDS X071-2A	PISCASAW BRIDGE BRIDGE FUNDS X071-2A
60109580	PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	340		158	182
60200205	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		
60202710	CATCH BASINS, TYPE A, 4'-DIAMETER, WITH SPECIAL FRAME AND GRATE	EACH	2	2		
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1		
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1		
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	4.2	4.2		
60900315	TYPE D INLET BOX, STANDARD 609006	EACH	3	3		
60900515	CONCRETE THRUST BLOCKS	EACH	1	1		
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1,825	1,825		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	8		
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	1,062	1,062		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	14	14		
67100100	MOBILIZATION	L SUM	1	1		
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1		
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1		
70103816	TRAFFIC CONTROL SURVEILLANCE	CAL MO	12	12		
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	24	24		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	576	576		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	10,480	10,480		
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	110	110		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	75	75		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	592	592		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2,550	2,550		
70400600	RELOCATE TEMPORARY CONCRETE BARRIER (STATE OWNED)	FOOT	450	450		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5,609	5,609		
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	48	48		
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	25	25		
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1,600	1,600		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	64	64		

Rev.  **CHRISTIAN-ROGE & ASSOCIATES, INC.**
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
ILLINOIS ROUTE 173

SCALE: NONE
DATE: APRIL 25, 2007

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES FED. 80% STATE 20%	ROADWAY	OVERFLOW	PISCASAW
				IL.RTE.173	BRIDGE STP FUNDS	BRIDGE FUNDS
				I000-2A	X071-2A	X071-2A
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	10	10		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	24	24		
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	12	12		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,101	1,101		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	74	74		
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1		
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1		
* X0325752	AERIAL CABLE, 2-1/C NO. 2, ALUMINUM, WITH MESSENGER WIRE	FOOT	320	320		
* X0325753	AERIAL CABLE, 2-1/C NO. 4/0, ALUMINUM, WITH MESSENGER WIRE	FOOT	2,415	2,415		
* 81800320	AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE	FOOT	30	30		
* 82103400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	8	8		
* 83057350	LIGHT POLE, WOOD, 60 FOOT, CLASS 4	EACH	2	2		
* 83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	8	8		
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNITS	EACH	16	16		
* 84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2	2		
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1		
XX003404	TEMPORARY PAVEMENT, 8"	SQ YD	992	992		
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	43	43		
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	14	14		
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	2			2
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1		
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1			1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1		1	
X7030100	WET TEMPORARY PAVEMENT MARKING TAPE , TYPE III	FOOT	2,396	2,396		
Z0001050	AGGREGATE SUBGRADE, 12"	SQ YD	6,238	6,238		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	8	8		
Z0056220	SAND MODULE IMPACT ATTENUATOR TO BE REMOVED	EACH	16	16		
⊙ Z0076600	TRAINEES	HOUR	2,000	2,000		
* X0325754	REPLACEMENT OF SENSORS FOR ROADWAY WEATHER INFORMATION SYSTEM	L SUM	1		0.5	0.5

⊙ Y080
* SPECIALTY ITEMS

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
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REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
ILLINOIS ROUTE 173

SCALE: NONE
DATE: APRIL 25, 2007

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STAGING QUANTITIES

IL RTE. 173						
ITEM		STAGE I (A & B)	STAGE IC	STAGE II (A & B)	TOTAL	UNIT
PAVEMENT MARKING TAPE, TYPE III 4"			1200	1196	2396	FOOT
WORK ZONE PAVEMENT MARKING REMOVAL		13	400	179	592	SQ. FT.
TEMPORARY PAVEMENT MARKING LINE 4"		4,980	1,320	4,180	10,480	FOOT
TEMPORARY PAVEMENT MARKING LINE 8"		55		55	110	FOOT
TEMPORARY PAVEMENT MARKING LINE 24"		25	25	25	75	FOOT
PAVEMENT MARKING REMOVAL		837	264		1101	FOOT
SHORT-TERM PAVEMENT MARKING		40		536	576	FOOT
TEMPORARY PAVEMENT		992			992	SQ. YD.
TEMPORARY CONCRETE BARRIER		1275	1275		2550	FOOT
RELOCATE TEMP. CONC. BARRIER (STATE OWNED)		450			450	FOOT
IMPACT. ATTN. TEMP. (FULLY REDIRECTIVE NARROW), TL2		4	4		8	EACH

EARTHWORK QUANTITIES

LOCATION	EARTH EXCAVATION (CUT AREA) **	UNSUITABLE EXCAVATION	EXCAVATION AVAILABLE FOR EMBANKMENT ADJUSTED FOR 15% SHRINKAGE	EMBANKMENT (FILL AREA)	EARTHWORK BALANCE WASTE (+) OR FURN EMBANK. (-)
	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.
STAGE I	862	455	733	2,522	(1,790)
STAGE II	772	410	656	2,059	(1,403)
BECK'S ROAD	57	30	48	2	48
TOTALS	1,691	895	1,437	4,583	(3,145)

**TREE REMOVAL
SCHEDULE**

STATION	OFFSET	6" TO 15" Code # 2010010	OVER 15" Code # 20010020
091+62	31	---	20
093+08	33	15	---
093+23	28	12	---
093+54	27	9	---
093+83	42	15	---
094+12	38	46	---
094+27	32	8	---
094+39	28	16	---
094+68	27	17	---
094+83	29	14	---
094+89	38	17	---
095+18	35	10	---
095+34	26	17	---
095+55	39	---	20
095+63	41	9	---
095+83	30	10	---
096+54	34	---	17
096+61	30	25	---
096+65	31	7	---
096+86	33	10	---
097+97	34	12	---
097+41	32	14	---
098+20	27	6	---
099+70	62	13	---
099+94	42	13	---
099+97	55	13	---
100+02	47	10	---
100+12	35	24	---
100+18	28	10	16
100+47	33	12	---
101+96	38	9	---
102+39	74	---	22
102+45	65	---	17
TOTAL		393	112

**TREE TRUNK PROTECTION
AND
ROOT PRUNING SCHEDULE**

STATION	OFFSET RT.	EACH Code # 2010100	EACH Code # 20101200
090+53	41	1	1
090+54	57	1	1
092+62	42	1	1
093+28	47	1	1
093+30	44	1	1
095+08	43	1	1
095+22	42	1	1
095+79	42	1	1
096+09	38	1	1
096+74	39	1	1
096+97	40	1	1
097+41	40	1	1
097+82	32	3	3
097+92	30	1	1
100+18	40	1	1
101+41	40	1	1
101+44	44	1	1
102+34	61	1	1
103+06	50	1	1
103+16	38	1	1
TOTAL		22	22

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60883

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES
ILLINOIS ROUTE 173**

SCALE: NONE
DATE: APRIL 25, 2007

DRAWN BY A.C.S.
CHECKED BY S.J.P.



CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

PIPE UNDERDRAIN SCHEDULE

CONTRACT NO. 60883

STATION	CONCRETE HEADWALL (EACH)	CONCRETE HEADWALL LOCATION (LF/RT)	PIPE DRAIN 4" (FEET)	PIPE UNDERDRAIN 6" (FEET)	PIPE UNDERDRAIN (SPECIAL) 6" (FEET)
89+10	1	RT	0'	40'	9'
89+72	1	LF	15'		
89+72	1	RT	15'		
90+74	1	LF	15'		
90+74	1	RT	15'		
91+05	1	RT		40'	9'
94+00	1	RT		40'	9'
97+00	1	RT		40'	9'
98+56	1	RT	15'		
98+92	1	LF	15'		
100+77	1	RT	15'		
101+14	1	LF	15'		
101+50	1	RT		40'	10'
104+00	1	RT		40'	10'
TOTAL	14		120'	240'	56'

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
ILLINOIS ROUTE 173

SCALE: NONE
DATE: APRIL 16, 2007

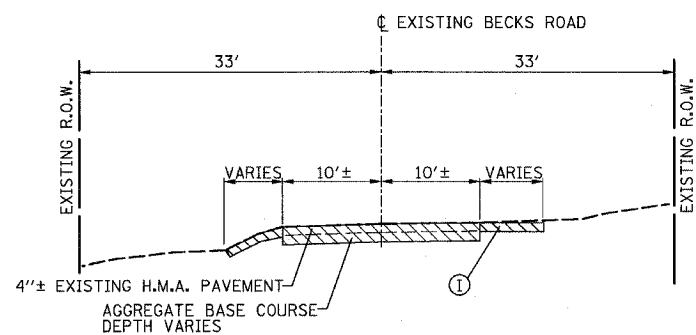
DRAWN BY: A.C.S.
CHECKED BY: S.J.P.



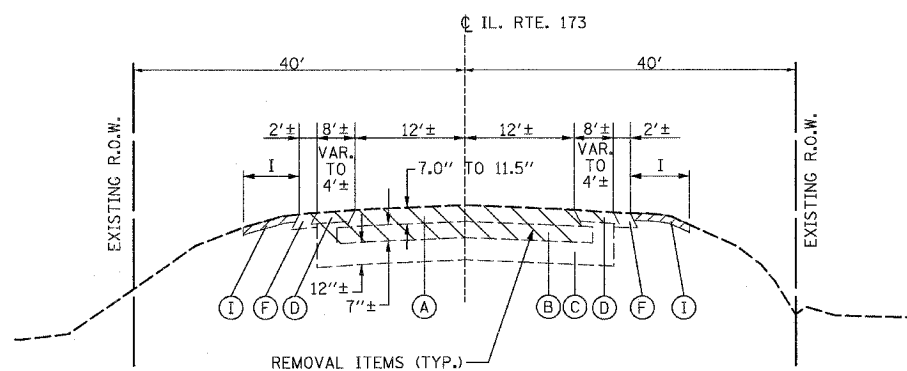
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

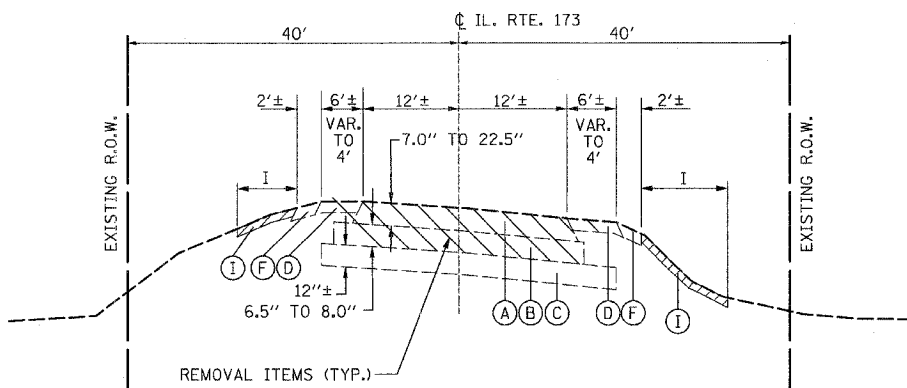
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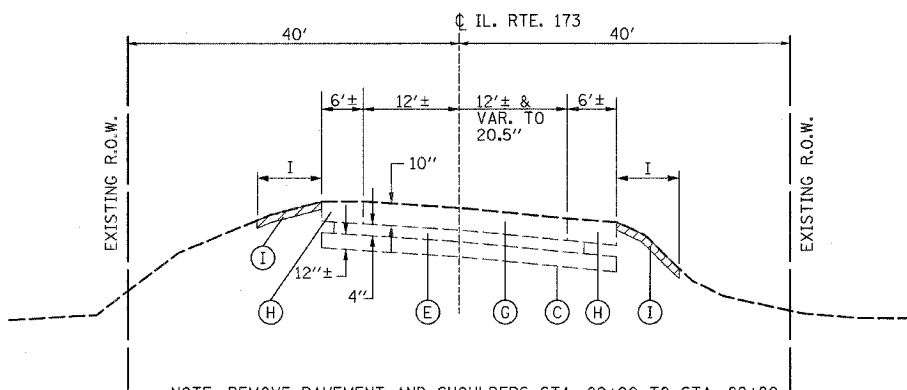
EXISTING TYPICAL SECTION BECKS ROAD



ILLINOIS ROUTE 173 - STA. 97+59 to STA. 105+00



ILLINOIS ROUTE 173 - STA. 90+60 to STA. 97+59



NOTE: REMOVE PAVEMENT AND SHOULDERS STA. 89+00 TO STA. 89+80

ILLINOIS ROUTE 173 - STA. 86+00 to STA. 89+80

EXISTING LEGEND

- (A) EXIST. HOT MIX ASPHALT (HMA) PAVEMENT
- (B) EXIST. PCC BASE COURSE
- (C) EXIST. AGGREGATE SUBGRADE, 12"±
- (D) EXIST. HMA SHOULDER
- (E) EXIST. HMA SUB-BASE
- (F) EXIST. AGGREGATE SHOULDER
- (G) EXIST. P.C.C. PAVEMENT, 10"±
- (H) EXIST. P.C.C. SHOULDER, 10"±
- (I) TOPSOIL STRIPPING, 6" DEPTH & VARIES SEE CROSS-SECTIONS FOR CONSTRUCTION LIMITS

REMOVAL ITEMS

TOPSOIL STRIPPING, 6" AVG. DEPTH

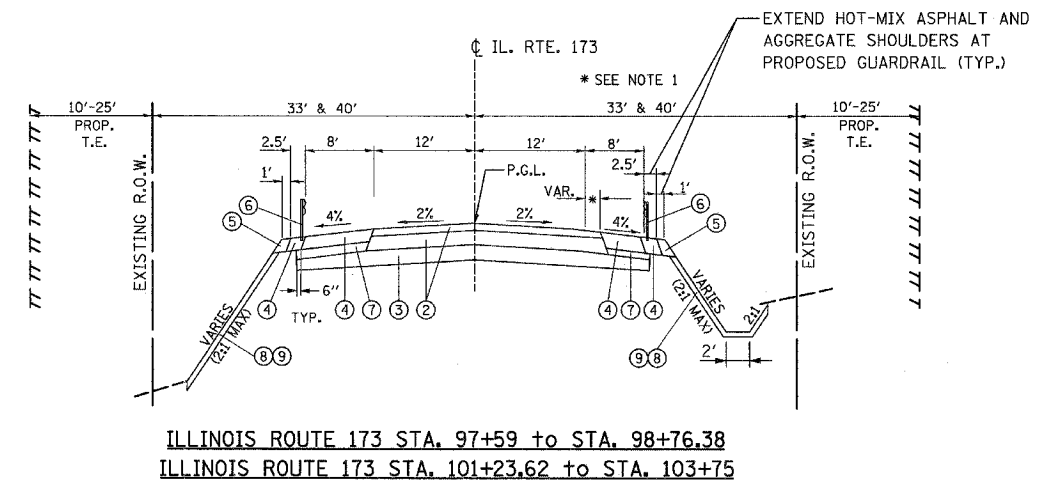
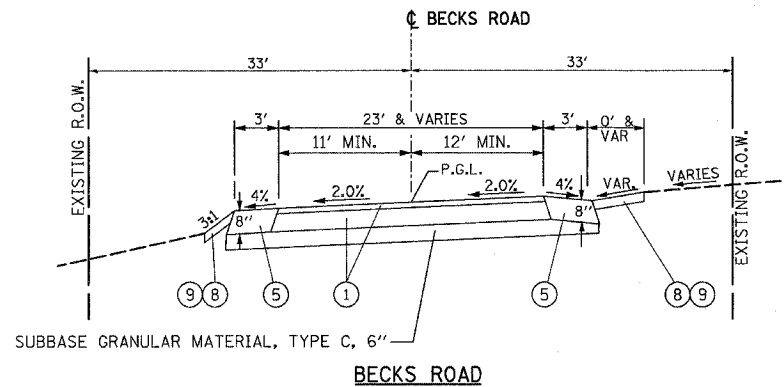
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING TYPICAL SECTIONS
ILLINOIS ROUTE 173 & BECKS ROAD

SCALE: NONE
DATE APRIL 16, 2007

DRAWN BY H.J.B.
CHECKED BY S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

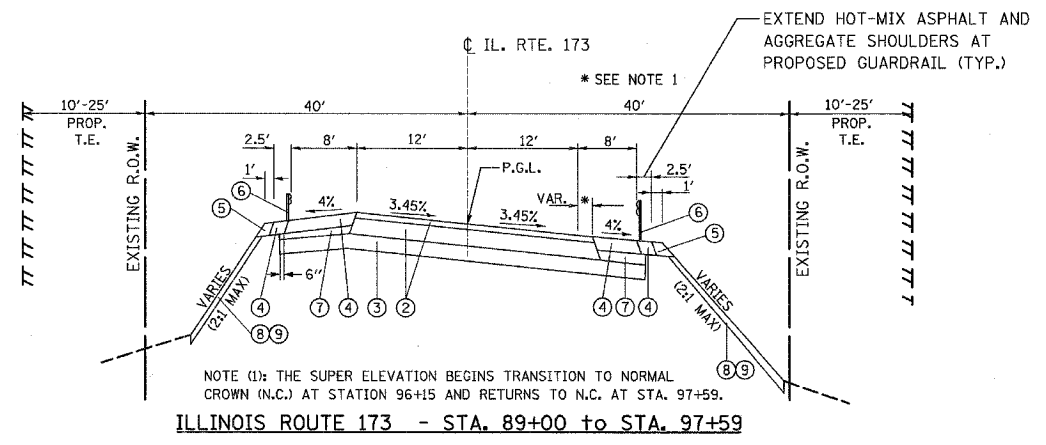
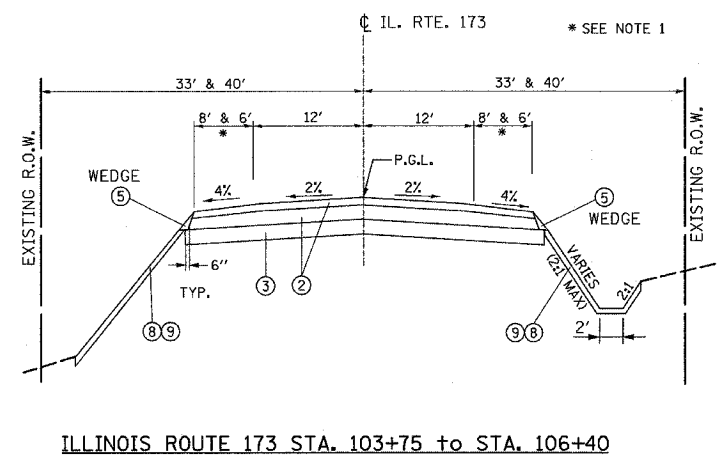


PROPOSED LEGEND

- ① HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"
- ② HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13.5"
- ③ AGGREGATE SUBGRADE, 12"
- ④ HOT-MIX ASPHALT SHOULDERS, 8"
- ⑤ AGGREGATE SHOULDERS, TYPE B
- ⑥ STEEL PLATE BEAM GUARDRAIL TYPE A (PER LIMITS ON PLAN & PROFILE SHEETS)
- ⑦ SUBBASE GRANULAR MATERIAL, TYPE C, 5.5"± AND VARIES
- ⑧ FURNISH AND PLACE TOPSOIL, 4"
- ⑨ SEEDING CLASS 3 AND HEAVY DUTY EROSION CONTROL BLANKET
- ⑩ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, DEPTH VARIES 2.25" TO 22" (MAXIMUM LIFT THICKNESS SHALL PROVIDE A 4" COMPACTED LIFT)
- ⑪ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"

NOTES:

1. HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13.5" TO BE EXTENDED, 4' TYP. TO 8' MAX., FROM PROPOSED EDGE OF PAVEMENT TO PROVIDE FULL DEPTH PAVEMENT FOR TRAFFIC DURING STAGE I-C AND STAGE II A&B. SEE LIMITS ON PLAN AND PROFILE SHEETS.
2. FROM STATION 86+00 TO STATION 89+00, THE EXISTING PAVEMENT WILL REMAIN IN PLACE AND BE OVERLAID. THE HOT-MIX ASPHALT BINDER COURSE WILL VARY IN DEPTH FROM 2.25" TO 22". AS SUCH, THE PROPOSED PAVEMENT IN THIS SECTION WILL BE PAID FOR PER TON OF ITEMS 10 & 11.
3. EXISTING CONCRETE PAVEMENT WILL BE CLEANED AND PRIMED PER ARTICLE 407.06 OF THE 2007 STANDARD SPECIFICATIONS.



APPROACH SLAB LIMITS

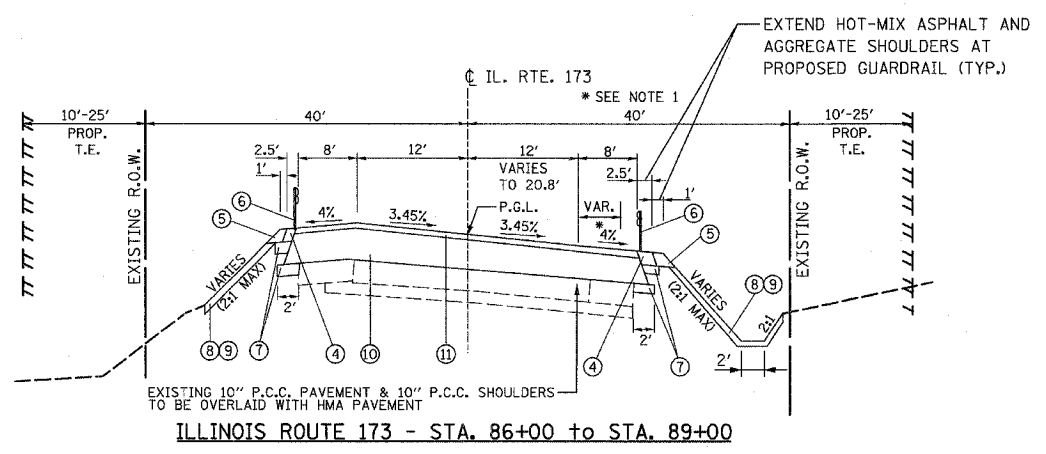
- STA. 89+44.55 TO STA. 89+74.55
- STA. 90+67.05 TO STA. 90+97.05
- STA. 98+76.38 TO STA. 99+06.38
- STA 100+93.62 TO STA. 101+23.62

PAVING OMISSIONS AT BRIDGES

- STA. 89+74.55 TO STA. 90+67.05
- STA. 99+06.38 TO STA. 100+93.62

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
MIXTURE TYPE	AC TYPE	AIR VOIDS	
FULL DEPTH 13.5" & 8"			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 2"	PG 64-22	4% @ 50 Gyr.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; RT.173 - 11.5"	PG 64-22*	4% @ 50 Gyr.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; BECK'S RD - 6"	PG 64-22*	4% @ 50 Gyr.	
PAVEMENT OVERLAY DEPTH VARIES			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	PG 64-22	4% @ 50 Gyr.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 2.25" - 22"	PG 64-22*	4% @ 50 Gyr.	
DRIVEWAYS			
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5mm); 2"	PG 64-22	4% @ 50 Gyr.	
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm); CE - 8"	PG 64-22*	4% @ 50 Gyr.	
TEMPORARY PAVEMENT 8"			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 2"	PG 64-22	4% @ 50 Gyr.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 6"	PG 64-22*	4% @ 50 Gyr.	
HMA SHOULDERS 8"			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5mm); 2"	PG 64-22	4% @ 50 Gyr.	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 6"	PG 64-22*	4% @ 50 Gyr.	
TEMPORARY RAMP 0" - 2.25"			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 0"-2.25"	PG 64-22	4% @ 50 Gyr.	

* THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.



NOTE: THE EXISTING SUPER ELEVATION AT STATION 86+00 TRANSITIONS TO 3.45% AT STA. 86+30.

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**PROPOSED TYPICAL SECTIONS
ILLINOIS ROUTE 173 & BECK'S ROAD**

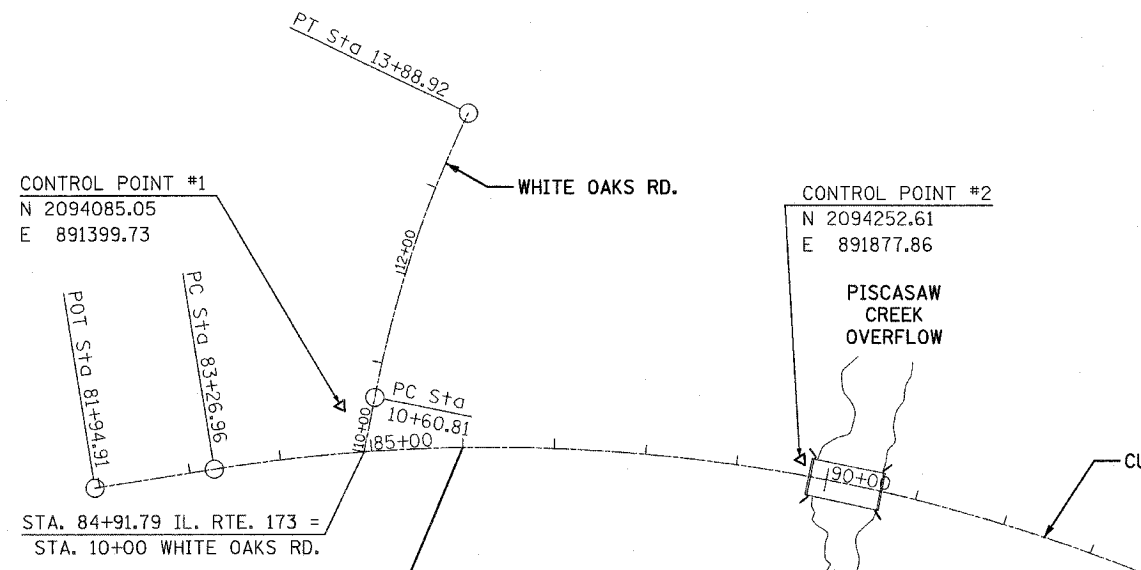
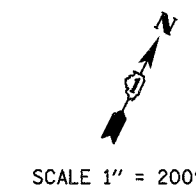
SCALE: NONE
DATE: APRIL 25, 2007

DRAWN BY: H.J.B.
CHECKED BY: S.J.P.

STRUCTURAL TRAFFIC: 6,450	YEAR 2017
PV = 5,740	SU = 387
MU = 323	
ROAD/STREET CLASSIFICATION: RURAL	
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	
P = 89%	S = 6%
M = 5%	
TRAFFIC FACTOR: 4.74 ACTUAL TF = 2.07 AC TYPE = 10	
MINIMUM TF = 4.74%	
AC GRADE: 20 BINDER = N70 SURFACE = MIX D, IL-19, N70	
SUBGRADE SUPPORT RATING:	
SSR = POOR	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHENRY	107	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60B83

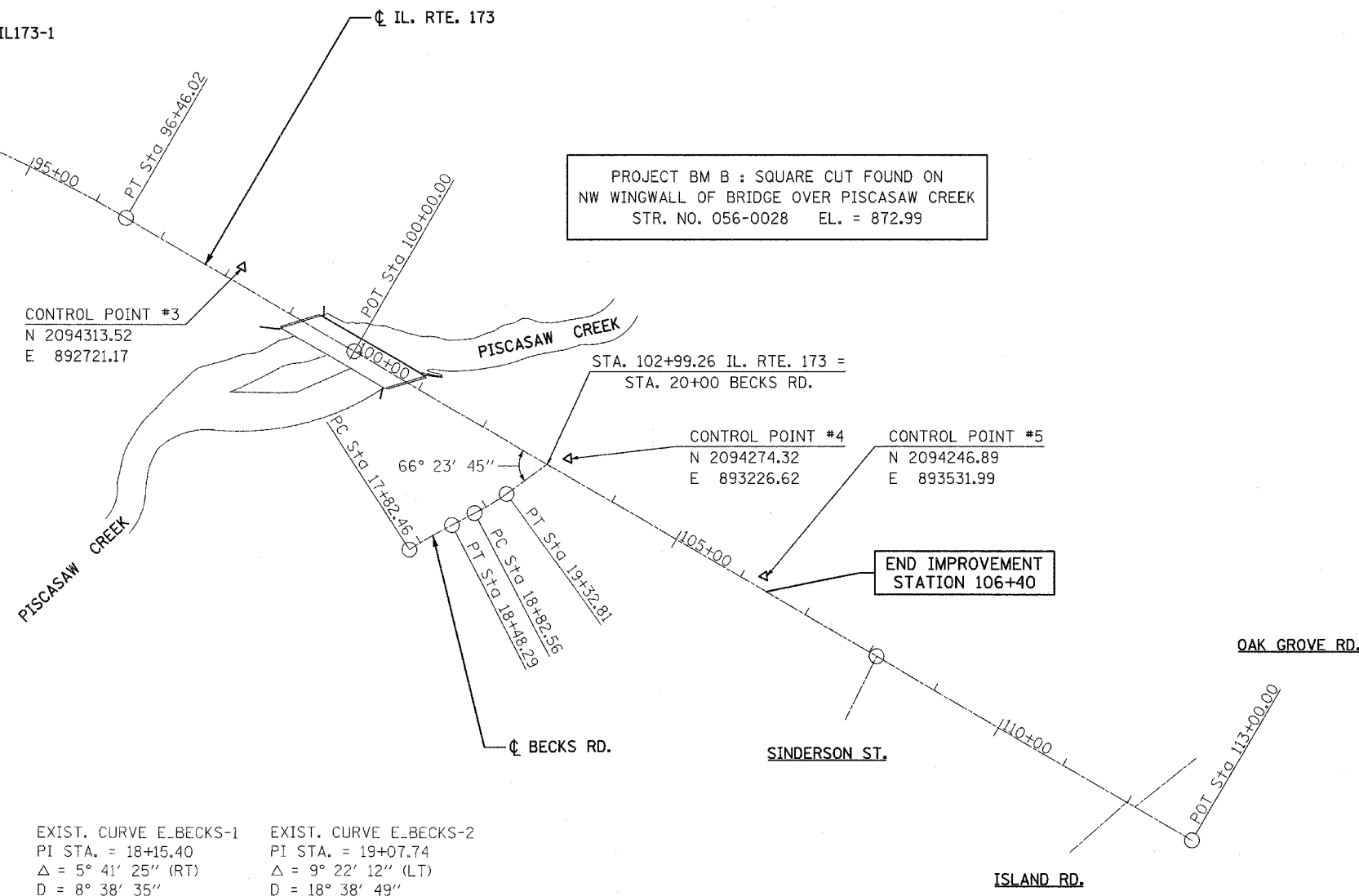


PROP. CURVE P_IL173-1
 PI STA. = 90+13.60
 $\Delta = 39^\circ 17' 04''$ (RT)
 $D = 2^\circ 58' 42''$
 $R = 1,923.83'$
 $T = 686.64'$
 $L = 1,319.06'$
 $E = 118.86'$
 $e = 3.45\%$
 $T.R. = 44'$
 $S.E. RUN = 119'$
 $P.C. STA. = 83+26.96$
 $P.T. STA. = 96+46.02$

BEGIN IMPROVEMENT STATION 86+00

PROJECT BM A : X - CUT FOUND ON NE WINGWALL OF BRIDGE OVER THE OVERFLOW OF PISCASAW CREEK, STR. NO. 056-0027. EL. = 873.72

PROJECT BM B : SQUARE CUT FOUND ON NW WINGWALL OF BRIDGE OVER PISCASAW CREEK STR. NO. 056-0028 EL. = 872.99



EXIST. CURVE E_BECKS-1
 PI STA. = 18+15.40
 $\Delta = 5^\circ 41' 25''$ (RT)
 $D = 8^\circ 38' 35''$
 $R = 662.91'$
 $T = 32.94'$
 $L = 65.83'$
 $E = 0.82'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. RUN = \text{---}$
 $P.C. STA. = 17+82.46$
 $P.T. STA. = 18+48.29$

EXIST. CURVE E_BECKS-2
 PI STA. = 19+07.74
 $\Delta = 9^\circ 22' 12''$ (LT)
 $D = 18^\circ 38' 49''$
 $R = 307.27'$
 $T = 25.18'$
 $L = 50.25'$
 $E = 1.03'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. RUN = \text{---}$
 $P.C. STA. = 18+82.56$
 $P.T. STA. = 19+32.81$

COORDINATE TABLE			
DESCRIPTION	STATION	NORTHING	EASTING
ILLINOIS ROUTE 173			
P.O.T.	81+94.91	2,093,886.45	891,197.02
P.C.	83+26.96	2,093,962.14	891,305.22
P.T.	96+46.02	2,094,304.08	892,552.58
P.O.T.	100+00.00	2,094,277.46	892,905.56
P.O.T.	113+00.00	2,094,179.71	894,201.88
BECKS ROAD			
P.C.	17+82.46	2,094,071.20	893,088.07
P.T.	18+48.29	2,094,125.72	893,124.92
P.C.	18+82.56	2,094,153.29	893,145.26
P.T.	19+32.81	2,094,195.45	893,172.50
INTERSECTION	20+00.00	2,094,254.82	893,203.96

REVISIONS	
NAME	DATE

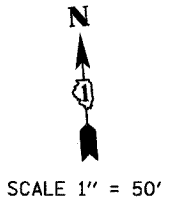
ILLINOIS DEPARTMENT OF TRANSPORTATION
 ALIGNMENT, TIES AND BENCHMARKS
 ILLINOIS ROUTE 173 AND BECKS ROAD

CR
 CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

SCALE: 1" = 200'
 DATE: APRIL 16, 2007
 DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (I&2) BR	McHENRY	107	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60883

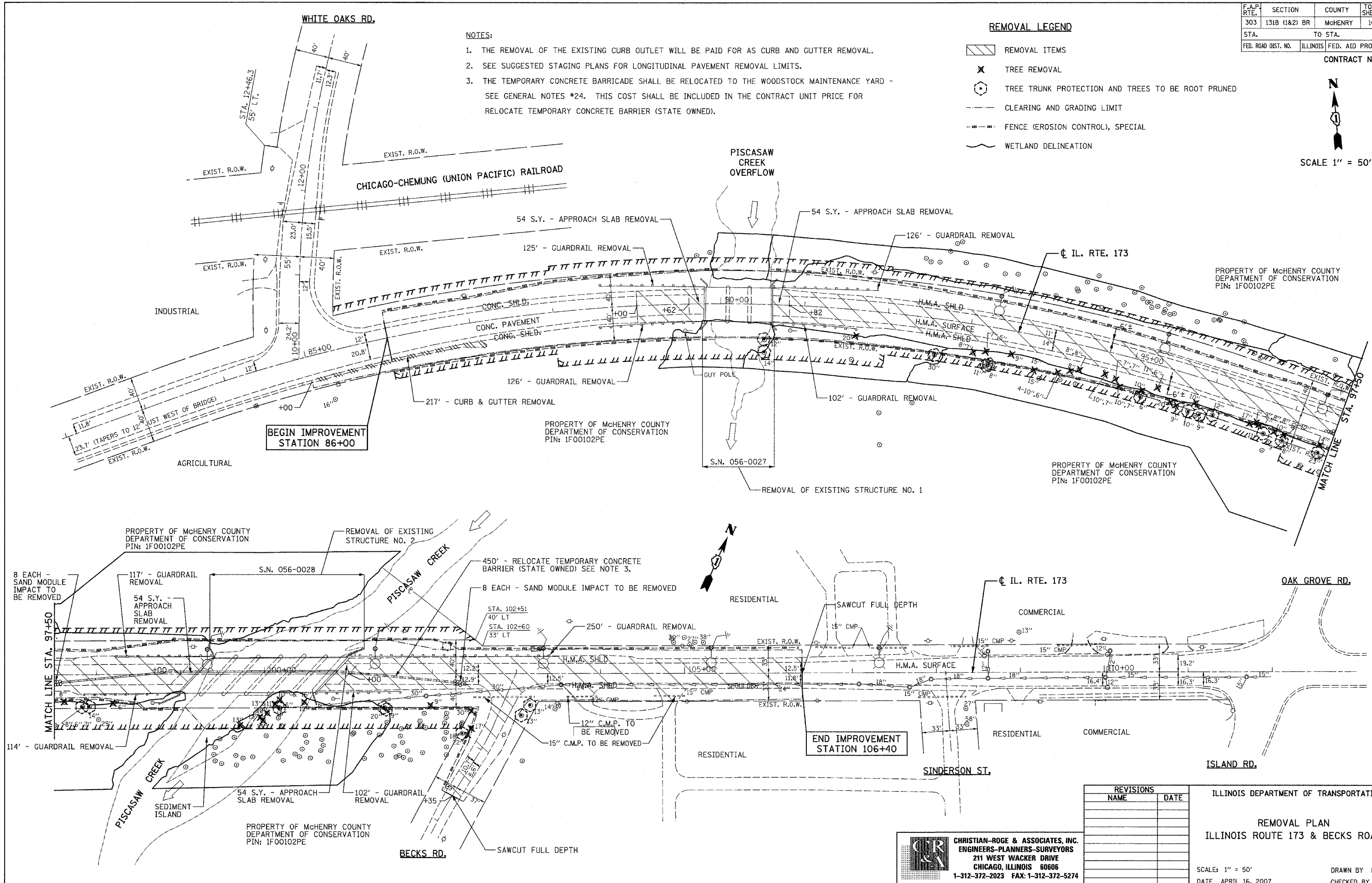


REMOVAL LEGEND

- REMOVAL ITEMS
- TREE REMOVAL
- TREE TRUNK PROTECTION AND TREES TO BE ROOT PRUNED
- CLEARING AND GRADING LIMIT
- FENCE (EROSION CONTROL), SPECIAL
- WETLAND DELINEATION

NOTES:

1. THE REMOVAL OF THE EXISTING CURB OUTLET WILL BE PAID FOR AS CURB AND GUTTER REMOVAL.
2. SEE SUGGESTED STAGING PLANS FOR LONGITUDINAL PAVEMENT REMOVAL LIMITS.
3. THE TEMPORARY CONCRETE BARRICADE SHALL BE RELOCATED TO THE WOODSTOCK MAINTENANCE YARD - SEE GENERAL NOTES #24. THIS COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR RELOCATE TEMPORARY CONCRETE BARRIER (STATE OWNED).



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
REMOVAL PLAN
 ILLINOIS ROUTE 173 & BECK'S ROAD

SCALE: 1" = 50'
 DATE: APRIL 16, 2007
 DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

DATE	
BY	
PLAN	
NO.	
REVISION	
DATE	
BY	
NO.	

DATE	
BY	
PROFILE	
NO.	
REVISION	
DATE	
BY	
NO.	

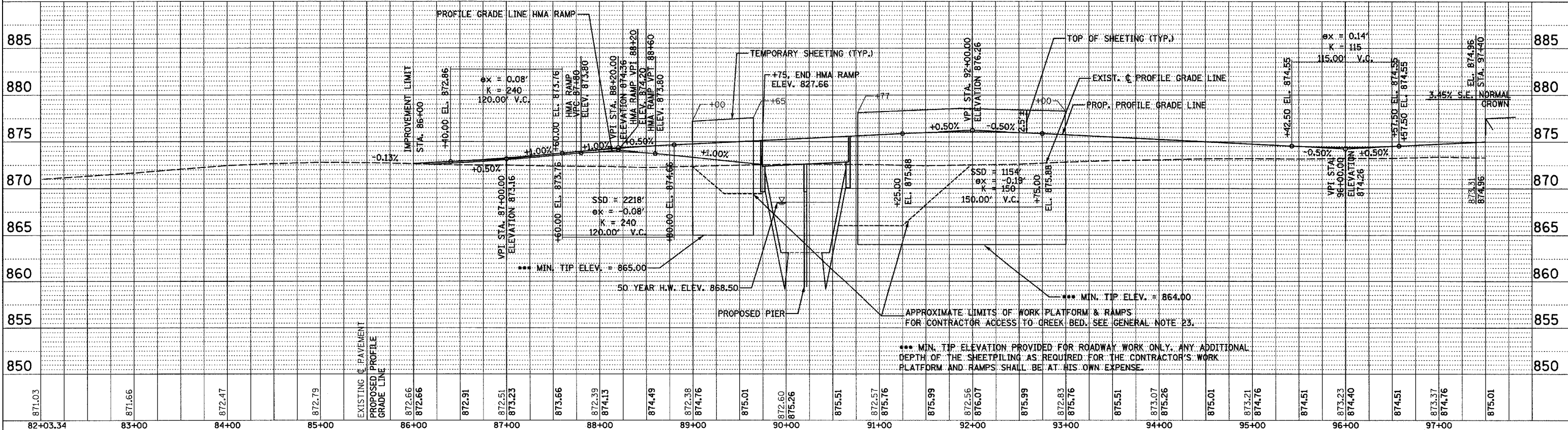
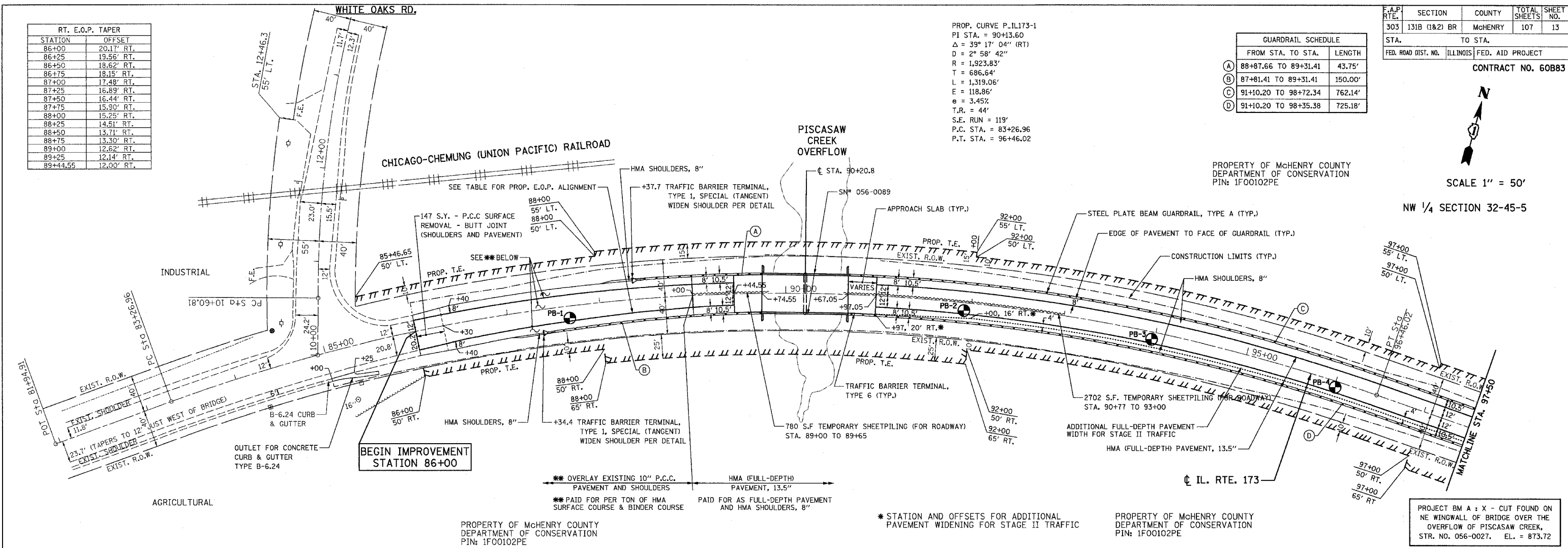
RT. E.O.P. TAPER	
STATION	OFFSET
86+00	20.17' RT.
86+25	19.56' RT.
86+50	18.62' RT.
86+75	18.15' RT.
87+00	17.48' RT.
87+25	16.89' RT.
87+50	16.44' RT.
87+75	15.90' RT.
88+00	15.25' RT.
88+25	14.51' RT.
88+50	13.71' RT.
88+75	13.30' RT.
89+00	12.62' RT.
89+25	12.14' RT.
89+44.55	12.00' RT.

PROP. CURVE P.I.173-1
 PI STA. = 90+13.60
 $\Delta = 39^\circ 17' 04''$ (RT)
 $D = 2^\circ 58' 42''$
 $R = 1,923.83'$
 $T = 686.64'$
 $L = 1,319.06'$
 $E = 118.86'$
 $e = 3.45\%$
 $T.R. = 44'$
 $S.E. RUN = 119'$
 $P.C. STA. = 83+26.96$
 $P.T. STA. = 96+46.02$

GUARDRAIL SCHEDULE		
FROM STA. TO STA.	LENGTH	
(A) 88+87.66 TO 89+31.41	43.75'	
(B) 87+81.41 TO 89+31.41	150.00'	
(C) 91+10.20 TO 98+72.34	762.14'	
(D) 91+10.20 TO 98+35.38	725.18'	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60B83				

SCALE 1" = 50'
 NW 1/4 SECTION 32-45-5



NE 1/4 SECTION 32-46-5

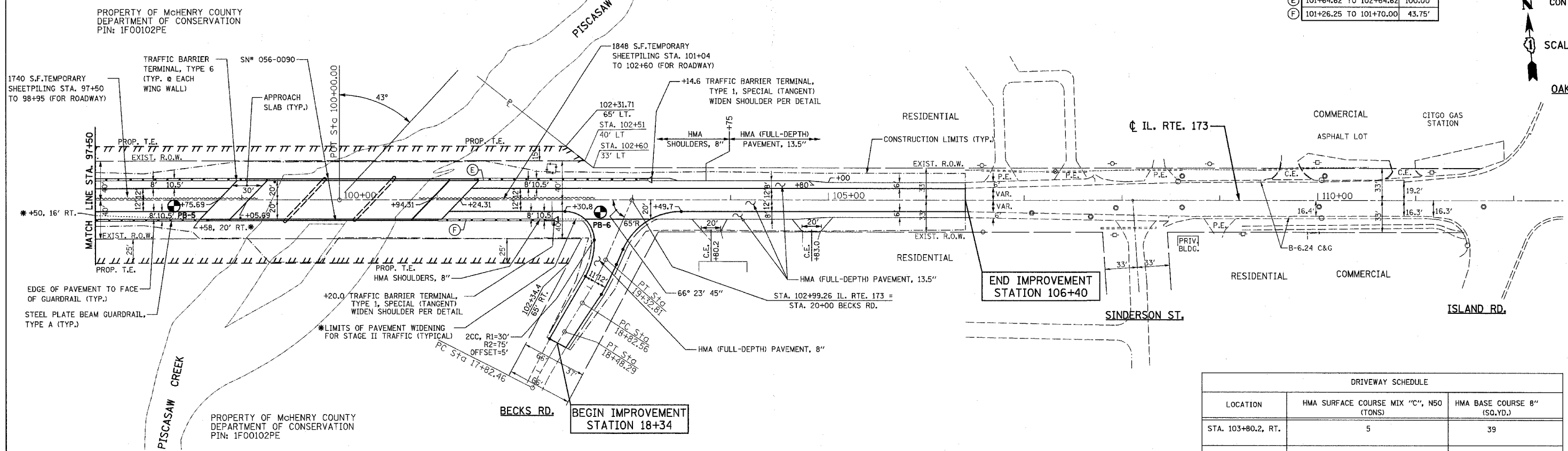
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	14

STA.	TO STA.	ILLINOIS FED. AID PROJECT
101+64.62	TO 102+64.62	
101+26.25	TO 101+70.00	

GUARDRAIL SCHEDULE	
FROM STA. TO STA.	LENGTH
(E) 101+64.62 TO 102+64.62	100.00'
(F) 101+26.25 TO 101+70.00	43.75'

SCALE 1" = 50'

DATE	BY

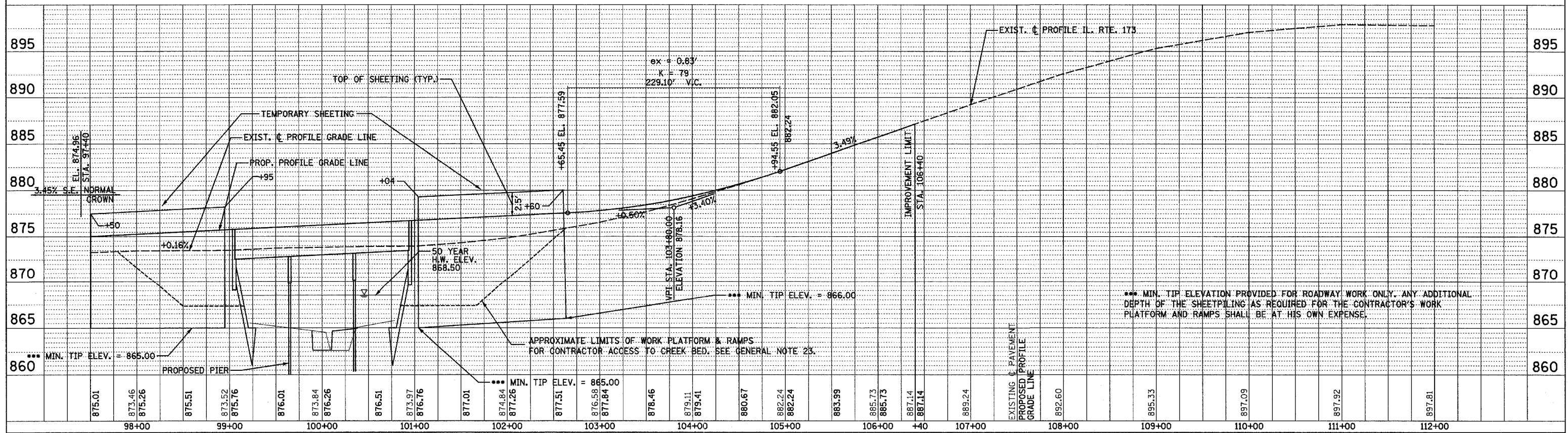


DRIVEWAY SCHEDULE		
LOCATION	HMA SURFACE COURSE MIX "C", N50 (TONS)	HMA BASE COURSE 8" (SQ.YD.)
STA. 103+80.2, RT.	5	39
STA. 104+83.0, RT.	5	45

PROJECT BM B : SQUARE CUT FOUND ON NW WINGWALL OF BRIDGE OVER PISCASAW CREEK, STR. NO. 056-0028. EL. = 872.99

* STATION AND OFFSETS FOR ADDITIONAL PAVEMENT WIDENING FOR STAGE II TRAFFIC

DATE	BY



*** MIN. TIP ELEVATION PROVIDED FOR ROADWAY WORK ONLY. ANY ADDITIONAL DEPTH OF THE SHEETPIILING AS REQUIRED FOR THE CONTRACTOR'S WORK PLATFORM AND RAMPS SHALL BE AT HIS OWN EXPENSE.

DATE: APRIL 25, 2007

PROPOSED PLAN AND PROFILE STA. 97+50 TO 105+00 ILLINOIS ROUTE 173

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

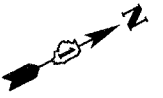
CONTRACT NO. 60B83

PROJECT BM B : SQUARE CUT FOUND ON NW WINGWALL OF BRIDGE OVER PISCASAW CREEK, STR. NO. 056-0028. EL. = 872.99

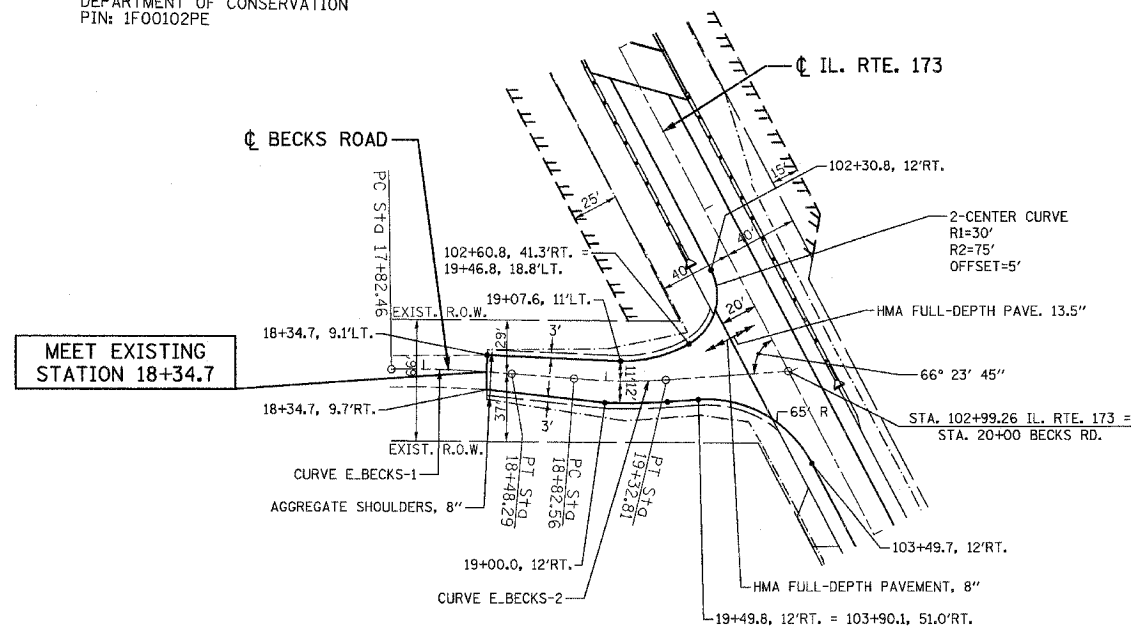
PROPERTY OF McHENRY COUNTY
DEPARTMENT OF CONSERVATION
PIN: 1F00102PE

EXIST. CURVE E.BECKS-1
PI STA. = 18+15.40
 $\Delta = 5^\circ 41' 25''$ (RT)
D = 8° 38' 35"
R = 662.91'
T = 32.94'
L = 65.83'
E = 0.82'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 17+82.46
P.T. STA. = 18+48.29

EXIST. CURVE E.BECKS-2
PI STA. = 19+07.74
 $\Delta = 9^\circ 22' 12''$ (LT)
D = 18° 38' 49"
R = 307.27'
T = 25.18'
L = 50.25'
E = 1.03'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 18+82.56
P.T. STA. = 19+32.81



SCALE 1" = 50'



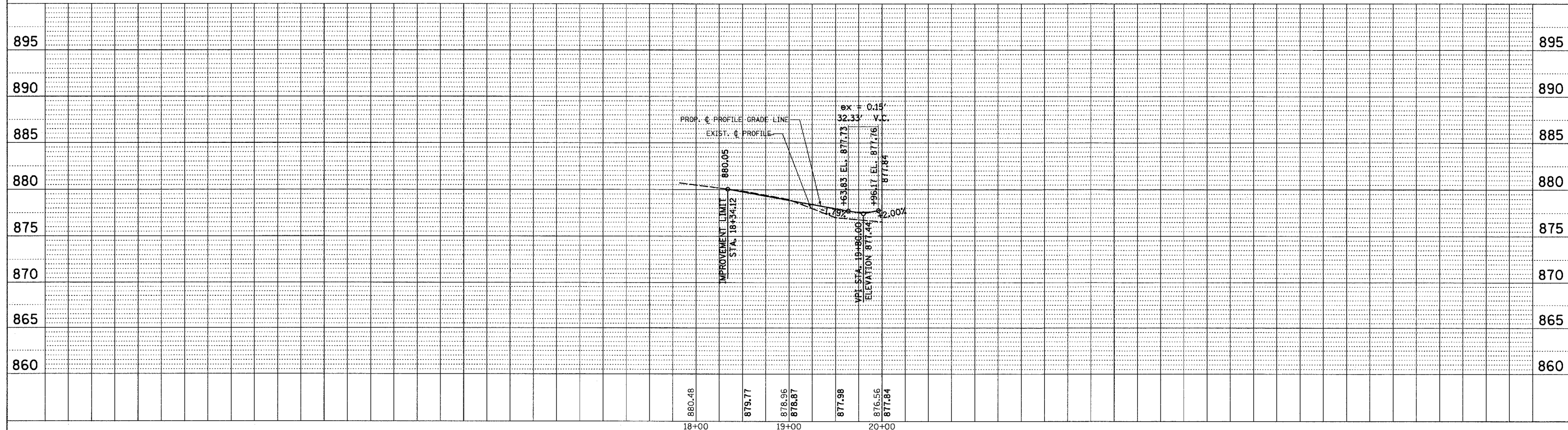
PROPOSED PLAN

DATE	BY

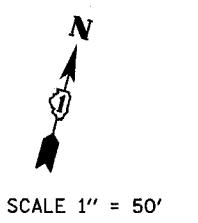
PLAN
REVISIONS
NO. DATE
BY
CHECKED
DATE
FILE NAME

DATE	BY

PROFILE
REVISIONS
NO. DATE
BY
CHECKED
DATE
FILE NAME



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60B83				



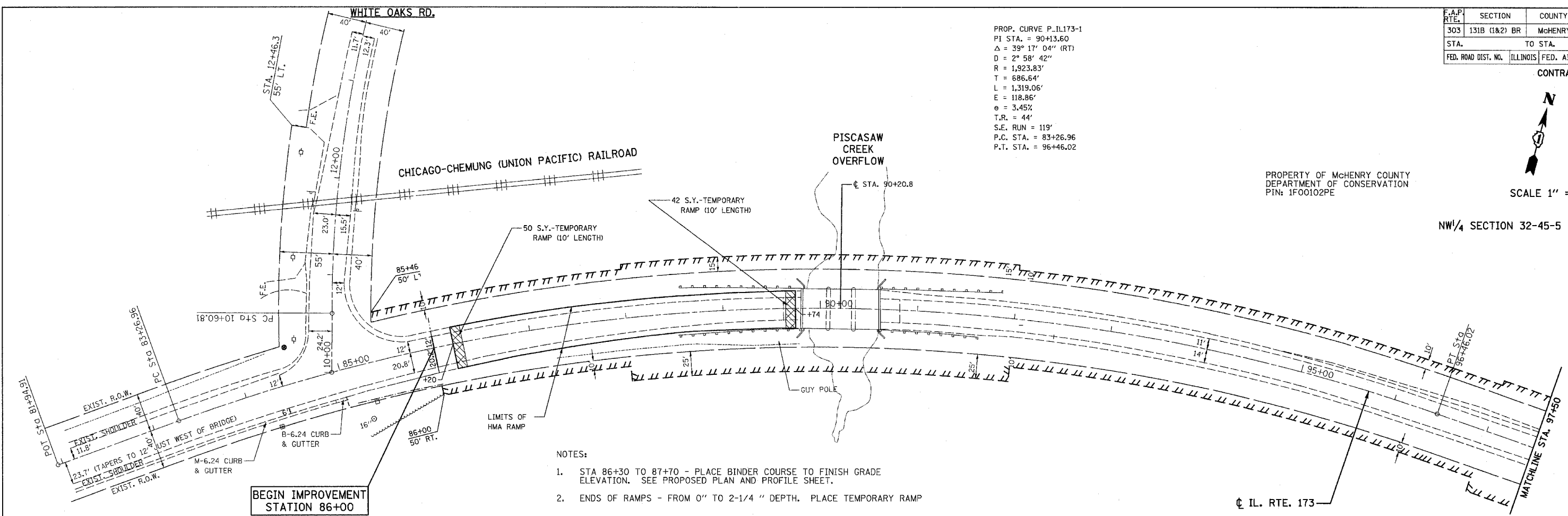
NW/4 SECTION 32-45-5

PROPERTY OF McHENRY COUNTY
DEPARTMENT OF CONSERVATION
PIN: 1F00102PE

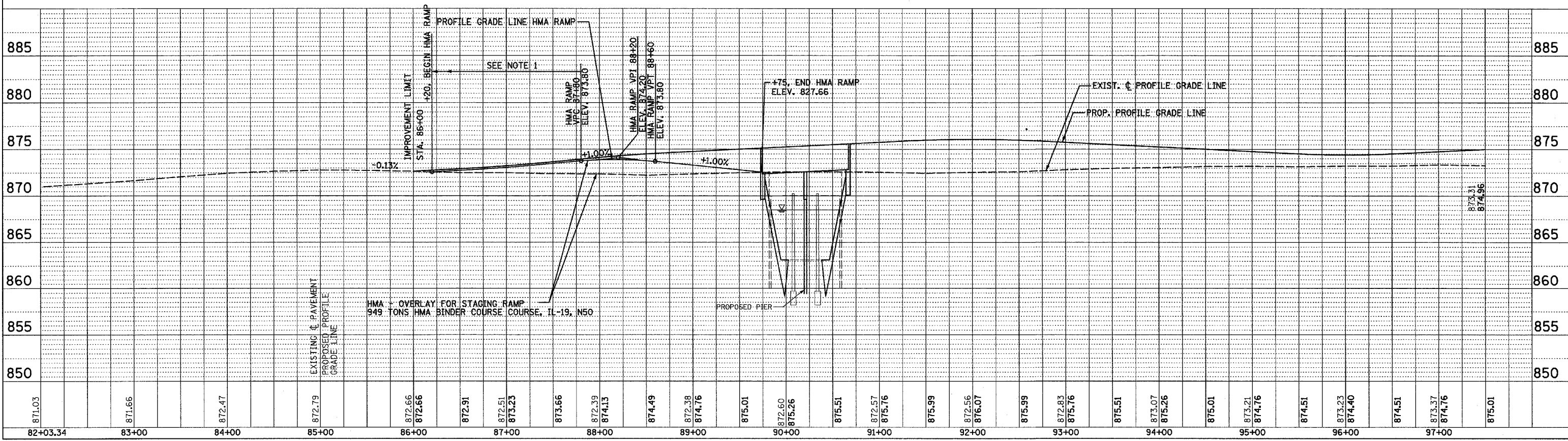
PROP. CURVE P_IL173-1
PI STA. = 90+13.60
 $\Delta = 39^\circ 17' 04''$ (RT)
 $D = 2^\circ 58' 42''$
 $R = 1,923.83'$
 $T = 686.64'$
 $L = 1,319.06'$
 $E = 118.86'$
 $e = 3.45\%$
 $T.R. = 44'$
 $S.E. RUN = 119'$
P.C. STA. = 83+26.96
P.T. STA. = 96+46.02

PLAN	DATE
SURVEYED	
ALIGNED	
CHECKED	
BY	
NO. OF WAY CHECKED	
ROAD FILE NAME	

PROFILE	DATE
SURVEYED	
GRADES CHECKED	
BLM. NOTED	
BY	
STRUCTURE NOTATIONS OK'D	



- NOTES:
1. STA 86+30 TO 87+70 - PLACE BINDER COURSE TO FINISH GRADE ELEVATION. SEE PROPOSED PLAN AND PROFILE SHEET.
 2. ENDS OF RAMPS - FROM 0" TO 2-1/4" DEPTH. PLACE TEMPORARY RAMP
 3. MINIMUM LIFT THICKNESS OF HMA BINDER COURSE SHALL BE 2-1/2". MAXIMUM LIFT THICKNESS SHALL NOT EXCEED 4" IN COMPACTED THICKNESS.
 4. PLACE HMA RAMP IN PRE-STAGE. USE STANDARD 701301. COST SHALL BE INCLUDED IN TRAFFIC CONTROL AND PROTECTION SPECIAL.



DATE: APRIL 25, 2007

IL RTE 173 HMA RAMP DETAIL

SUGGESTED STAGING AND TRAFFIC CONTROL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHEMRY	107	17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60B83				

CONSTRUCTION STAGING

PRE-STAGE

PRE-STAGE CONSTRUCTION

- REMOVE ALL DEBRIS FROM UPSTREAM AND DOWNSTREAM SIDES OF BOTH BRIDGES TO PROVIDE FOR COFFERDAM INSTALLATION AND TO PROVIDE UNRESTRICTED RIVER FLOW DURING CONSTRUCTION.
- INSTALL PROPOSED TEMPORARY SIGNAL AND EXTEND TEMPORARY ROADWAY LIGHTING. TEST SIGNALS AND ENERGIZE TEMPORARY LIGHTING.
- STA. 87+00 TO 89+80, PLACE HMA RAMP, OVERLAY EXISTING PAVEMENT WITH HMA RAMP. SEE PLAN AND PROFILE SHEETS.
- REMOVE SHOULDER AND PLACE TEMPORARY PAVEMENT ALONG NORTH SIDE OF ROADWAY.

STAGE I

STAGE IA - CONSTRUCT STAGE I PORTION OF EACH BRIDGE

- ACTIVATE PROPOSED TEMPORARY SIGNAL, REMOVE EXISTING TEMPORARY SIGNALS, AND PLACE PAVEMENT MARKING FOR SINGLE LANE OF TRAFFIC.
- PLACE TEMPORARY IMPACT ATTENUATORS, TEMPORARY CONCRETE BARRIER AND INSTALL TEMPORARY SHEETING.
- REMOVE THE PAVEMENT AND EXCAVATE EMBANKMENT FOR RAMPS ONLY AS NEEDED TO PROVIDE ACCESS TO THE STREAM BED AND PIERS AND TO CONSTRUCT BRIDGE.
- BEGIN AND COMPLETE THE STAGE I PORTION OF EACH BRIDGE AND APPROACH SLAB.

STAGE IB - STAGE I ROADWAY CONSTRUCTION

- REMOVE THE REMAINING PORTION OF THE EXISTING PAVEMENT AND SHOULDERS.
- STRIP TOPSOIL, PLACE EMBANKMENT AND COMPLETE PAVING UP TO THE TOP OF BINDER COURSE.
- COMPLETE ALL WORK SOUTH OF THE ROAD AND INSTALL GUARDRAIL. SET GUARDRAIL HEIGHT FOR THE FINAL SURFACE COURSE ELEVATION.

STAGE IC (SUBSTAGES IC1 TO I-C3) - FULL WIDTH ROADWAY RE-CONSTRUCTION STA. 103+75 +/- TO 106+40.

- PLACE TEMPORARY STRIPING, TEMPORARY CONCRETE BARRIER, AND ATTENUATORS FOR STAGE II.
- REMOVE EXISTING PAVEMENT AND EXCAVATE TO PROPOSED SUBGRADE FOR HALF WIDTH OF ROADWAY.
- PLACE PROPOSED SUBBASE AND BINDER COURSE TO TOP OF BINDER COURSE FOR ROADWAY AND SHOULDERS. PLACE TOPSOIL, SEEDING AND/OR SODDING.

STAGE II

STAGE IIA - CONSTRUCT STAGE II PORTION OF EACH BRIDGE

- PLACE REMAINDER OF TEMPORARY STRIPING FOR SINGLE LANE ON THE BRIDGES AND PAVEMENT CONSTRUCTED DURING STAGE I.
- REMOVE STAGE I TEMPORARY CONCRETE BARRIER AFTER TRAFFIC HAS BEEN SHIFTED.
- REMOVE THE PAVEMENT AND EXCAVATE EMBANKMENT FOR RAMPS ONLY AS NEEDED TO PROVIDE ACCESS TO THE STREAMBED AND PIERS AND TO CONSTRUCT BRIDGE.
- BEGIN AND COMPLETE THE STAGE II PORTIONS OF EACH BRIDGE AND APPROACH SLABS.

STAGE IIB - WEST BOUND ROADWAY

- REMOVE THE REMAINING PORTION OF THE EXISTING PAVEMENT.
- REMOVE SHOULDERS, STRIP TOPSOIL AND PLACE EMBANKMENT. CUT OFF TEMPORARY SHEETING AND CUT OPENINGS FOR 6" PIPE UNDERDRAINS WHEN STAGE II EMBANKMENT IS 8" BELOW FINISHED SUBGRADE ELEVATION.
- COMPLETE PAVING UP TO THE TOP OF BINDER COURSE AND INSTALL GUARDRAIL. REMOVE TEMPORARY CONCRETE BARRIER.
- PLACE SURFACE COURSE OVER ENTIRE PAVEMENT AND SHOULDER AREA. STRIPE FOR TWO-WAY TRAFFIC AND DEACTIVATE / REMOVE TEMPORARY SIGNALS AND TEMPORARY LIGHTING.

MAINTENANCE OF TRAFFIC

PRE-STAGE

PRE-STAGE MAINTENANCE OF TRAFFIC

- PLACE ADVANCED SIGNING AS SHOWN ON STAGE I SUGGESTED STAGING PLAN.
- USE DAILY SHOULDER AND LANE CLOSURES TO PERFORM PRE-STAGE WORK. IDOT STANDARDS:
 - 701006 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24' FROM PAVEMENT EDGE
 - 701201 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45MPH
 - 701301 LANE CLOSURE SHORT TIME OPERATION
- PLACE WORK ZONE PAVEMENT MARKINGS.

STAGE I

STAGE IA & IB - MAINTENANCE OF TRAFFIC

- ACTIVATE PROPOSED TEMPORARY SIGNALS AND BEGIN ONE LANE TWO-WAY OPERATION ON EXISTING WEST BOUND PAVEMENT AND TEMPORARY PAVEMENT.
- AS NEEDED DURING ACTIVE CONSTRUCTION OPERATIONS CONTRACTOR SHALL PLACE SIGNAL IN RED PHASE AND PLACE FLAGGERS AT STOP BARS AND AT THE CONSTRUCTION ENTRANCE BETWEEN THE BRIDGES. FLAGGERS SHALL CONTROL TRAFFIC MOVEMENTS AS NEEDED WHEN VEHICLES ARE EXITING THE SITE.

STAGE IC (SUBSTAGES I-C1 TO I-C3) - MAINTENANCE OF TRAFFIC

- MAINTAIN TRAFFIC AS SHOWN ON SUBSTAGING SHEETS.
- AS APPROVED BY THE ENGINEER, TWO LANE TWO WAY TRAFFIC MOVEMENTS AND TEMPORARY DEACTIVATION OF THE TRAFFIC SIGNALS WILL BE ALLOWED TO ACCOMMODATE THIS WORK.

STAGE II

STAGE II - MAINTENANCE OF TRAFFIC

- SHIFT TWO-WAY ONE LANE OF TRAFFIC TO COMPLETED EAST BOUND PAVEMENT AND SHOULDER AFTER TEMPORARY CONCRETE BARRIER HAS BEEN PLACED AND THE TEMPORARY IMPACT ATTENUATORS HAVE BEEN RELOCATED. ADJUST TEMPORARY TRAFFIC SIGNAL HEADS AS NEEDED.
- AS NEEDED DURING ACTIVE CONSTRUCTION OPERATIONS CONTRACTOR SHALL PLACE SIGNAL IN RED PHASE AND PLACE FLAGGERS AT STOP BARS AND AT THE CONSTRUCTION ENTRANCE BETWEEN THE BRIDGES. FLAGGERS SHALL CONTROL TRAFFIC MOVEMENTS AS NEEDED WHEN VEHICLES ARE EXITING THE SITE.
- FOR FINAL HMA SURFACE AND PAVEMENT MARKING PLACEMENT AND OTHER END OF CONTRACT WORK, USE DAILY SHOULDER AND LANE CLOSURES AS SHOWN ON IDOT STANDARDS:
 - 701006 OFF-ROAD OPERATIONS, 2L, 2W
 - 701201 LANE CLOSURE, 2L, 2W, DAY ONLY, >= 45MPH
 - 701301 LANE CLOSURE SHORT TIME OPERATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED STAGING AND
TRAFFIC CONTROL GENERAL NOTES
IL. RTE. 173



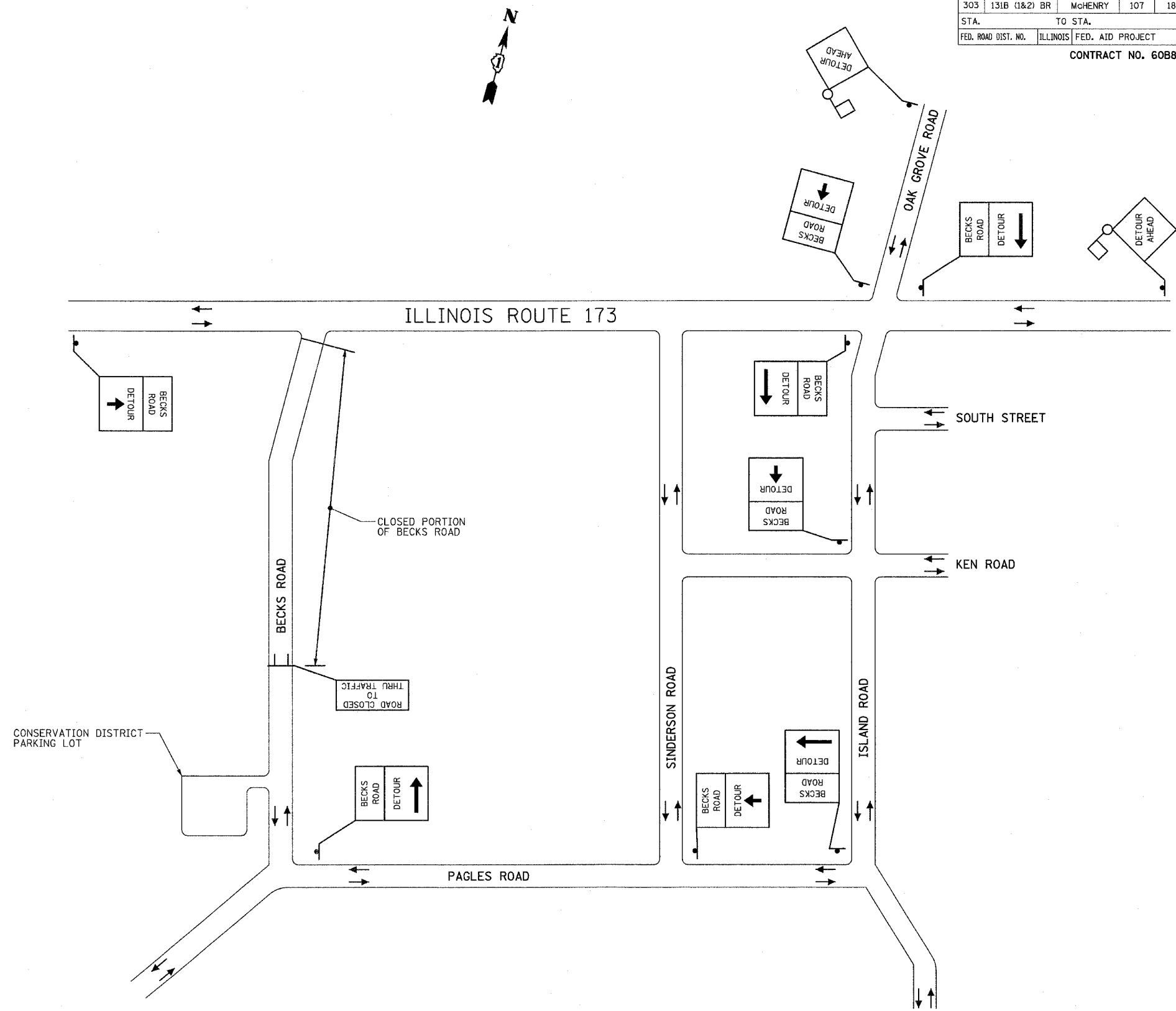
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
DATE: APRIL 16, 2007
DRAWN BY: A.C.S.
CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60B83				

TRAFFIC CONTROL GENERAL NOTES

1. THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
2. THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH BARRICADE USED. (TYPE I OR TYPE II (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL).
3. FLUORESCENT VESTS: ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT VESTS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. THE CONTRACTOR IS ADVISED THAT IN THE EVENT OF SNOW, HE WILL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF ANY MAINTENANCE OF TRAFFIC PROTECTIVE DEVICES REQUIRED FOR HIS OPERATIONS THAT WOULD INTERFERE WITH SNOW REMOVAL OPERATIONS PERFORMED BY THE STATE.
5. TYPE III BARRICADES SHALL BE PLACED AT BOTH ENDS OF THE CLOSED PORTION OF BECK ROAD. THE CONTRACTOR SHALL PROVIDE ENOUGH TYPE III BARRICADES TO CROSS THE ENTIRE ROADWAY AS DEPICTED ON THE PLANS
6. TEMPORARY AGGREGATE ACCESS SHALL BE PROVIDED AT ALL DRIVEWAYS AS DIRECTED BY THE ENGINEER.
7. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
8. CONTRACTOR SHALL USE PAVEMENT MARKING TAPE, TYPE III FOR ALL TEMPORARY LANE MARKINGS ON ALL PERMANENT PAVEMENT. PAVEMENT MARKING TAPE SHALL BE USED ON WET PAVEMENT AS DIRECTED BY THE ENGINEER. TEMPORARY PAVEMENT MARKINGS SHALL BE USED ON SURFACES TO BE REMOVED OR OVERLAID.
9. TEMPORARY INFORMATION SIGNING:
10. EXISTING TRAFFIC CONTROL SIGNS AND MESSAGES THAT ARE IN CONFLICT WITH THE PROPOSED MAINTENANCE OF TRAFFIC SHALL BE TEMPORARILY COVERED OR MODIFIED WITH TEMPORARY OVERLAY AS SHOWN IN PLANS AND AS DIRECTED BY THE ENGINEER.
11. INSTALL ADDITIONAL TEMPORARY SIGN PANEL ASSEMBLY AS SHOWN IN PLANS AND AS DIRECTED BY THE ENGINEER. TO BE PAID FOR BY ITEM "TEMPORARY INFORMATION SIGNING"
12. WHERE REQUIRED BY THE ENGINEER, TEMPORARY PAVEMENT CAN BE ADDED TO THE PROJECT.



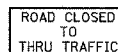
W20-2
(48" x 48")



M4-9
(30" x 24")



(24" x 24")



R11-4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**SUGGESTED STAGING AND TRAFFIC CONTROL
 GENERAL NOTES AND
 DETOUR PLAN**
 IL. RTE. 173 & BECKS RD.

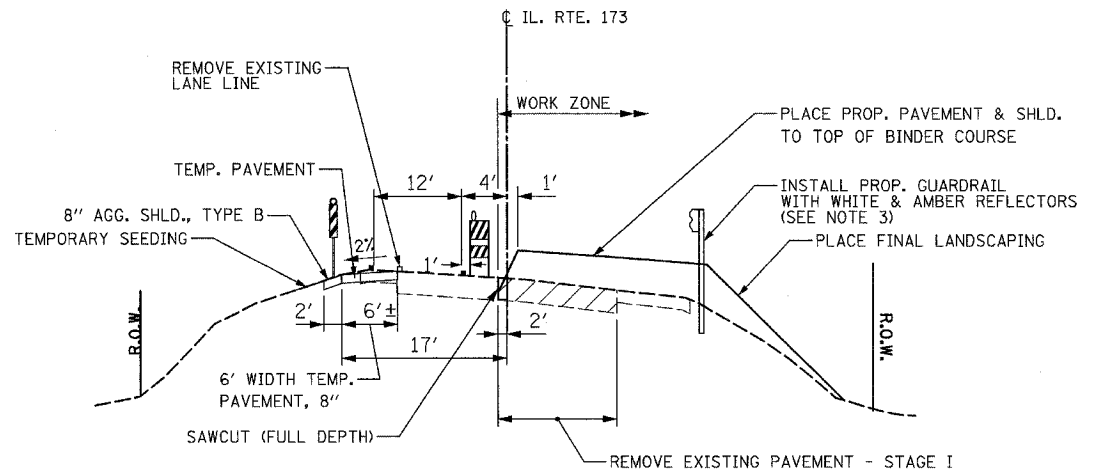
SCALE: NONE
 DATE: APRIL 16, 2007

DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHEMRY	107	19
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 60B83				

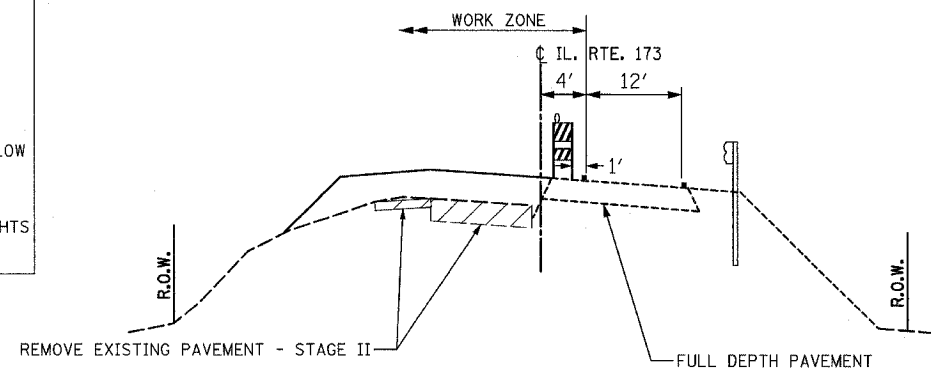
STAGE I-A&B TYPICAL SECTIONS



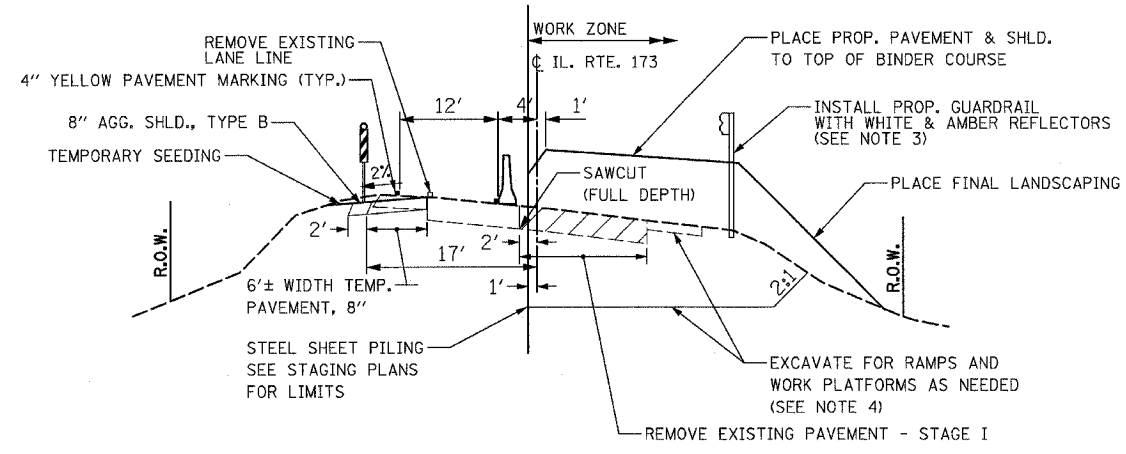
STA. 95+00 TO STA. 97+00
STA. 102+60 TO STA. 106+40

LEGENDS	DESCRIPTION
	DOUBLE SIDED VERTICAL PANEL 1'
	TEMPORARY CONCRETE BARRIER (T.C.B.) W/STEADY BURN LIGHTS
	TEMPORARY PAVEMENT MARKING, 4" YELLOW
	EXISTING PAVEMENT MARKING
	TYPE II BARRICADE W/STEADY BURN LIGHTS

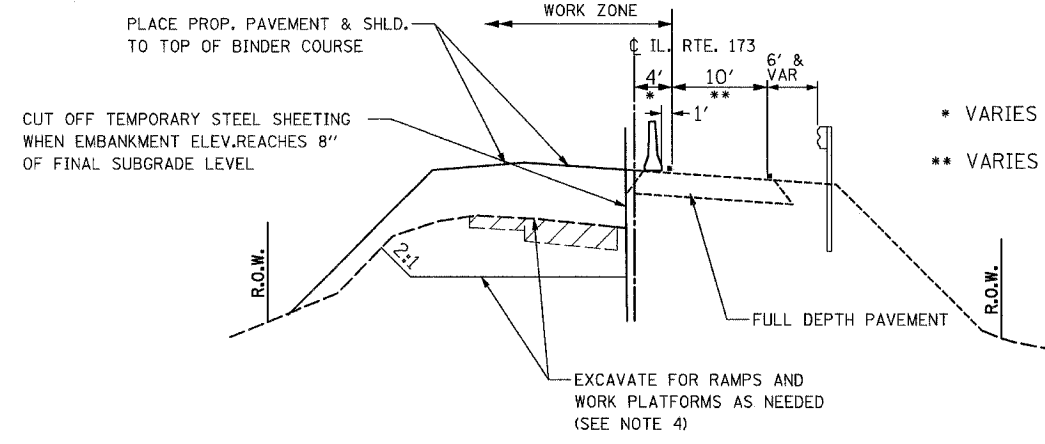
STAGE II-A&B TYPICAL SECTIONS



STA. 95+00 TO STA. 97+00

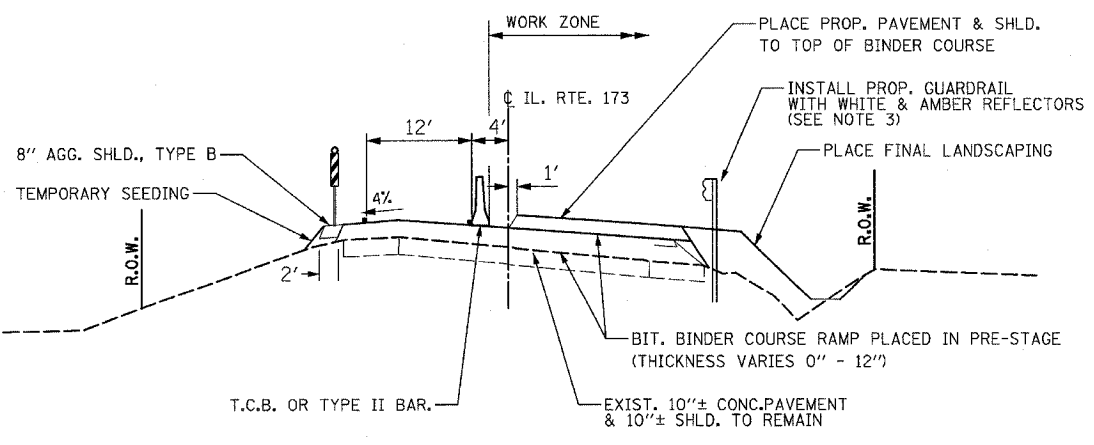


STA. 89+00 TO STA. 95+00
STA. 97+00 TO STA. 102+60



STA. 89+00 TO STA. 95+00
STA. 97+00 TO STA. 103+75

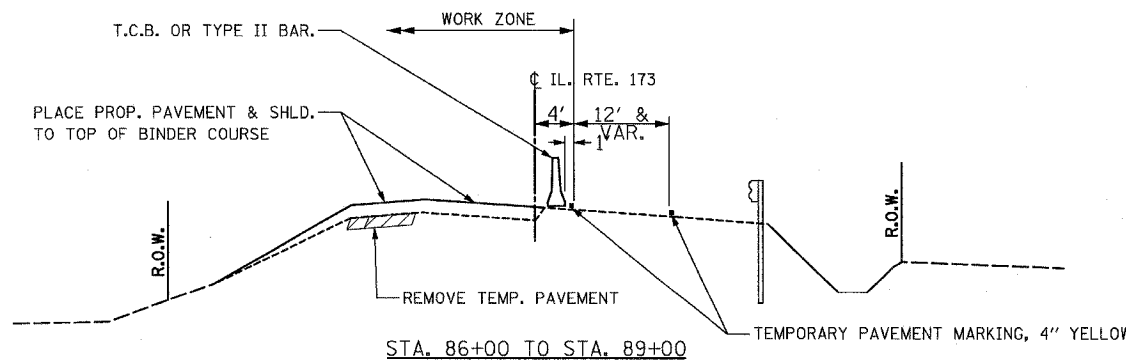
* VARIES TO 8' ON PROPOSED BRIDGES
** VARIES TO 12' ON PROPOSED BRIDGES



STA. 86+00 TO STA. 89+00

NOTES:

- ALL TEMPORARY PAVEMENT MARKINGS ON EXISTING PAVEMENT TO REMAIN IN PLACE AND ON NEW PAVEMENT SHALL BE PAVEMENT MARKING TAPE, TYPE III. REMOVAL OF TAPE, TYPE III TO BE PAID FOR AS "WORK ZONE PAVEMENT MARKING REMOVAL".
- FOR TRAFFIC STAGING SECTIONS AT BRIDGES, SEE DRAWING NOS. 44 & 66.
- AMBER REFLECTORS SHALL BE PLACED FACING WEST BOUND TRAFFIC AND SHALL BE REMOVED AT THE END OF STAGE II.
- THE LOCATION OF RAMPS AND WORK PLATFORMS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE LOCATION, DEPTH, AND WIDTH OF ANY ACCESS TO THE CREEK BED BASED ON HIS OPERATIONS. HOWEVER, THE CONTRACTOR SHALL NOT GO BEYOND THE CONSTRUCTION LIMITS. THE ADDITIONAL COST OF EMBANKMENT, TEMPORARY SHEETING, AND AGGREGATE ALONG WITH ANY ADDITIONAL MATERIAL OR LABOR SHALL BE INCLUDED IN THE COST OF THE STRUCTURAL ITEMS OF WORK.



STA. 86+00 TO STA. 89+00

CHRISTIAN-ROGE & ASSOCIATES, INC.
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CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED CONSTRUCTION STAGING
TYPICAL SECTIONS
ILLINOIS ROUTE 173

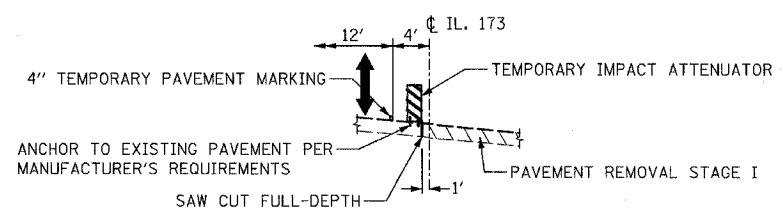
SCALE: NONE
DATE: APRIL 25, 2007
DRAWN BY: A.C.S./ M.A.
CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	20
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

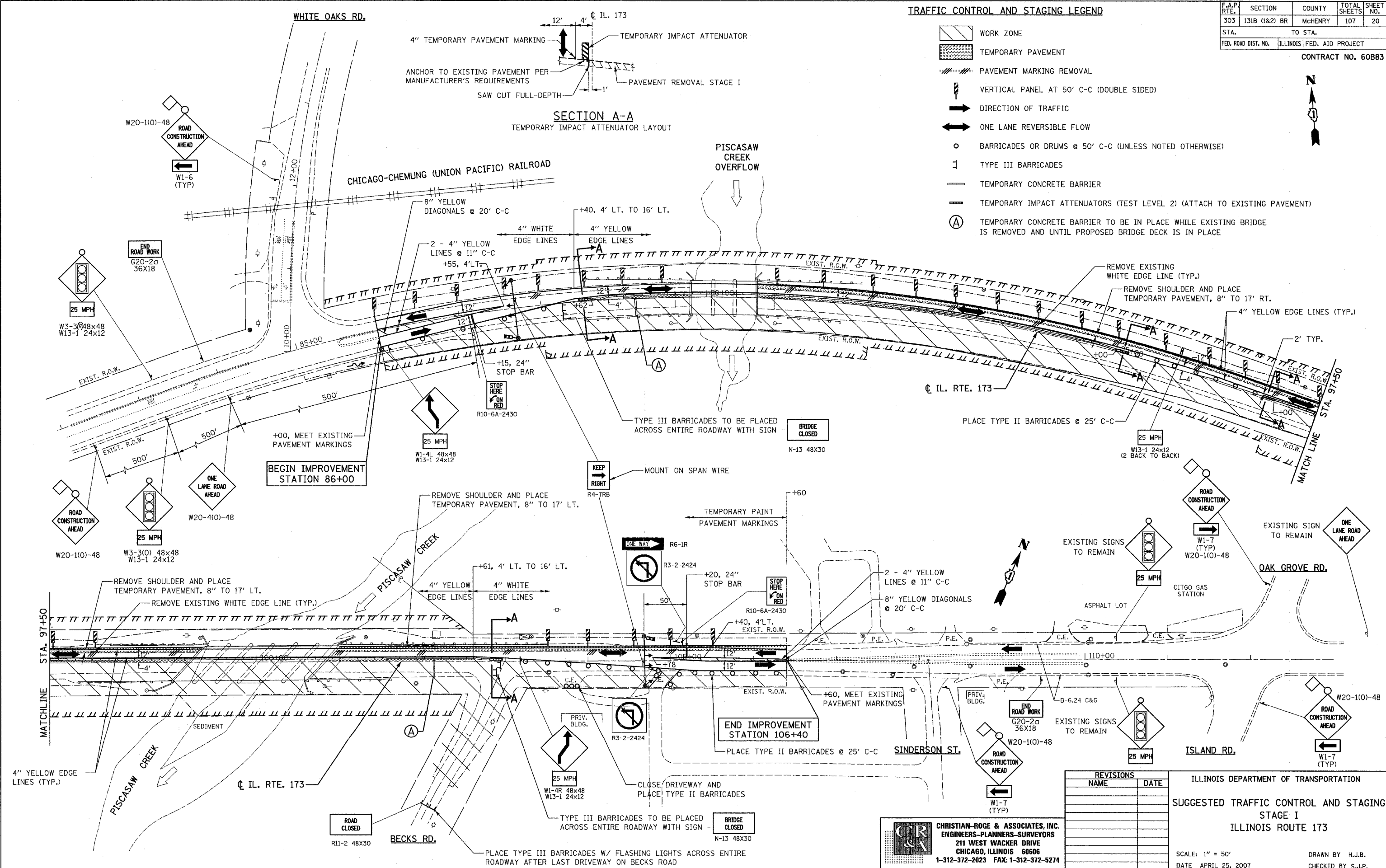
CONTRACT NO. 60883

TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- PAVEMENT MARKING REMOVAL
- VERTICAL PANEL AT 50' C-C (DOUBLE SIDED)
- DIRECTION OF TRAFFIC
- ONE LANE REVERSIBLE FLOW
- BARRICADES OR DRUMS @ 50' C-C (UNLESS NOTED OTHERWISE)
- TYPE III BARRICADES
- TEMPORARY CONCRETE BARRIER
- TEMPORARY IMPACT ATTENUATORS (TEST LEVEL 2) (ATTACH TO EXISTING PAVEMENT)
- TEMPORARY CONCRETE BARRIER TO BE IN PLACE WHILE EXISTING BRIDGE IS REMOVED AND UNTIL PROPOSED BRIDGE DECK IS IN PLACE



SECTION A-A
TEMPORARY IMPACT ATTENUATOR LAYOUT



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUGGESTED TRAFFIC CONTROL AND STAGING
 STAGE I
 ILLINOIS ROUTE 173

SCALE: 1" = 50'
 DATE: APRIL 25, 2007











DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

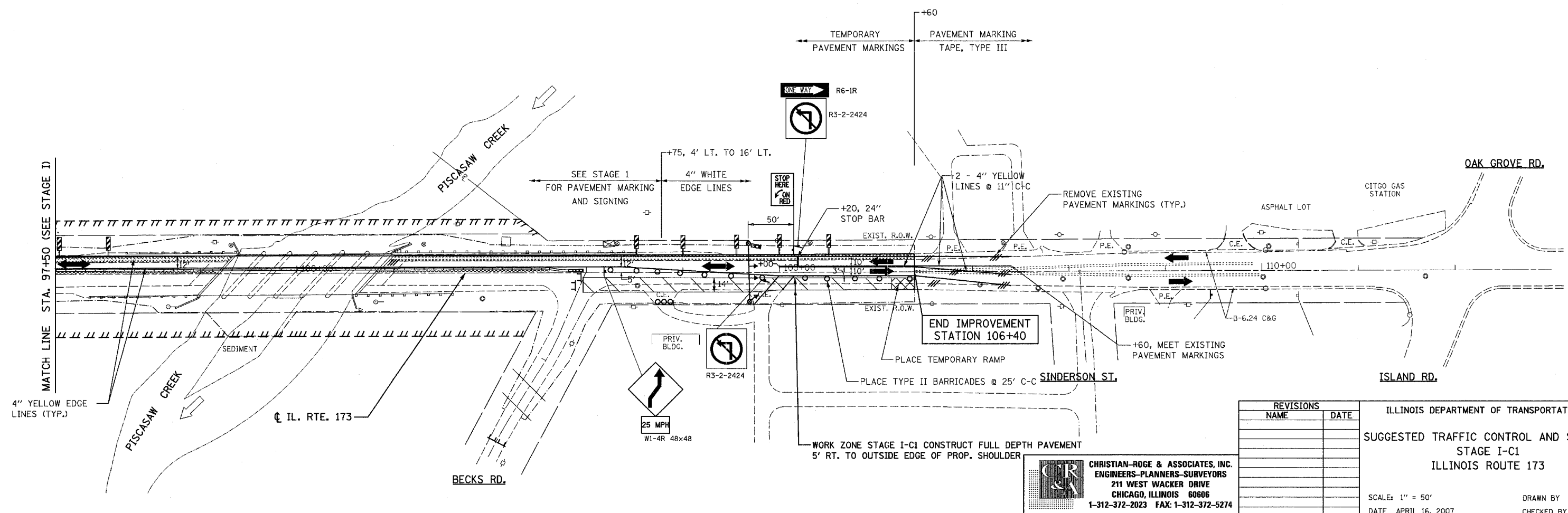
CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60883

TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  TEMPORARY PAVEMENT
-  PAVEMENT MARKING REMOVAL
-  VERTICAL PANEL AT 50' C-C (DOUBLE SIDED)
-  DIRECTION OF TRAFFIC
-  ONE LANE REVERSIBLE FLOW
-  BARRICADES OR DRUMS @ 50' C-C (UNLESS NOTED OTHERWISE)
-  TYPE III BARRICADES
-  TEMPORARY CONCRETE BARRIER
-  TEMPORARY IMPACT ATTENUATORS (TEST LEVEL 2) (ATTACH TO EXISTING PAVEMENT)



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED TRAFFIC CONTROL AND STAGING
 STAGE I-C1
 ILLINOIS ROUTE 173

SCALE: 1" = 50'
 DATE: APRIL 16, 2007











DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

CHRISTIAN-ROGE & ASSOCIATES, INC.
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 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

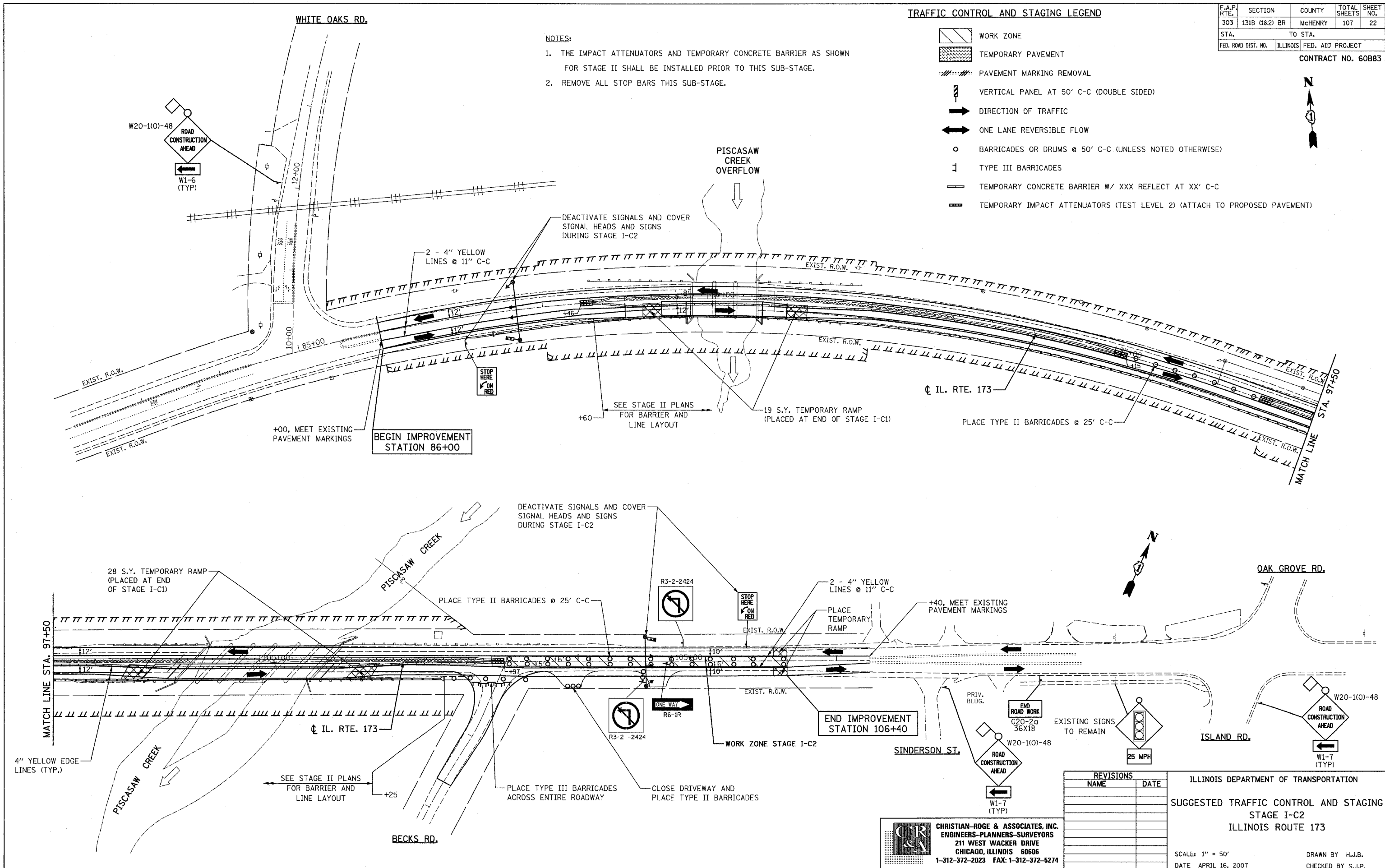
TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  TEMPORARY PAVEMENT
-  PAVEMENT MARKING REMOVAL
-  VERTICAL PANEL AT 50' C-C (DOUBLE SIDED)
-  DIRECTION OF TRAFFIC
-  ONE LANE REVERSIBLE FLOW
-  BARRICADES OR DRUMS @ 50' C-C (UNLESS NOTED OTHERWISE)
-  TYPE III BARRICADES
-  TEMPORARY CONCRETE BARRIER W/ XXX REFLECT AT XX' C-C
-  TEMPORARY IMPACT ATTENUATORS (TEST LEVEL 2) (ATTACH TO PROPOSED PAVEMENT)



NOTES:

1. THE IMPACT ATTENUATORS AND TEMPORARY CONCRETE BARRIER AS SHOWN FOR STAGE II SHALL BE INSTALLED PRIOR TO THIS SUB-STAGE.
2. REMOVE ALL STOP BARS THIS SUB-STAGE.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED TRAFFIC CONTROL AND STAGING
 STAGE I-C2
 ILLINOIS ROUTE 173

SCALE: 1" = 50'
 DATE: APRIL 16, 2007











DRAWN BY H.J.B.
 CHECKED BY S.J.P.

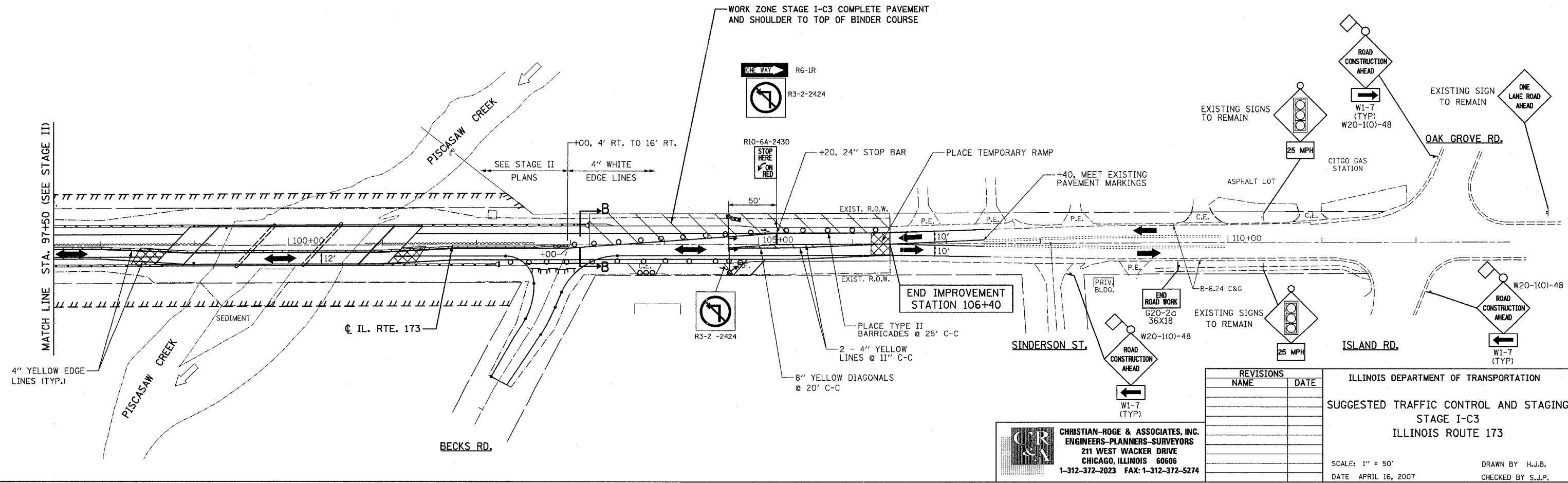
CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	23
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60B83				

NOTE:
 AT THE BEGINNING OF THIS SUB-STAGE, REACTIVATE TEMPORARY SIGNALS AND RESTRIPE THE WEST END OF THE PROJECT AS SHOWN IN STAGE II.

TRAFFIC CONTROL AND STAGING LEGEND

-  WORK ZONE
-  TEMPORARY PAVEMENT
-  PAVEMENT MARKING REMOVAL
-  VERTICAL PANEL AT 50' C-C (DOUBLE SIDED)
-  DIRECTION OF TRAFFIC
-  ONE LANE REVERSIBLE FLOW
-  BARRICADES OR DRUMS @ 50' C-C (UNLESS NOTED OTHERWISE)
-  TYPE III BARRICADES
-  TEMPORARY CONCRETE BARRIER W/ XXX REFLECT AT XX' C-C
-  TEMPORARY IMPACT ATTENUATORS (TEST LEVEL 2) (ATTACH TO PROPOSED PAVEMENT)



REVISIONS	
NAME	DATE

CHRISTIAN-ROGE & ASSOCIATES, INC.
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 CHICAGO, ILLINOIS 60606
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED TRAFFIC CONTROL AND STAGING
 STAGE I-C3
 ILLINOIS ROUTE 173
 SCALE: 1" = 50'
 DATE: APRIL 16, 2007
 DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHENRY	107	24
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

CONTRACT NO. 60B83

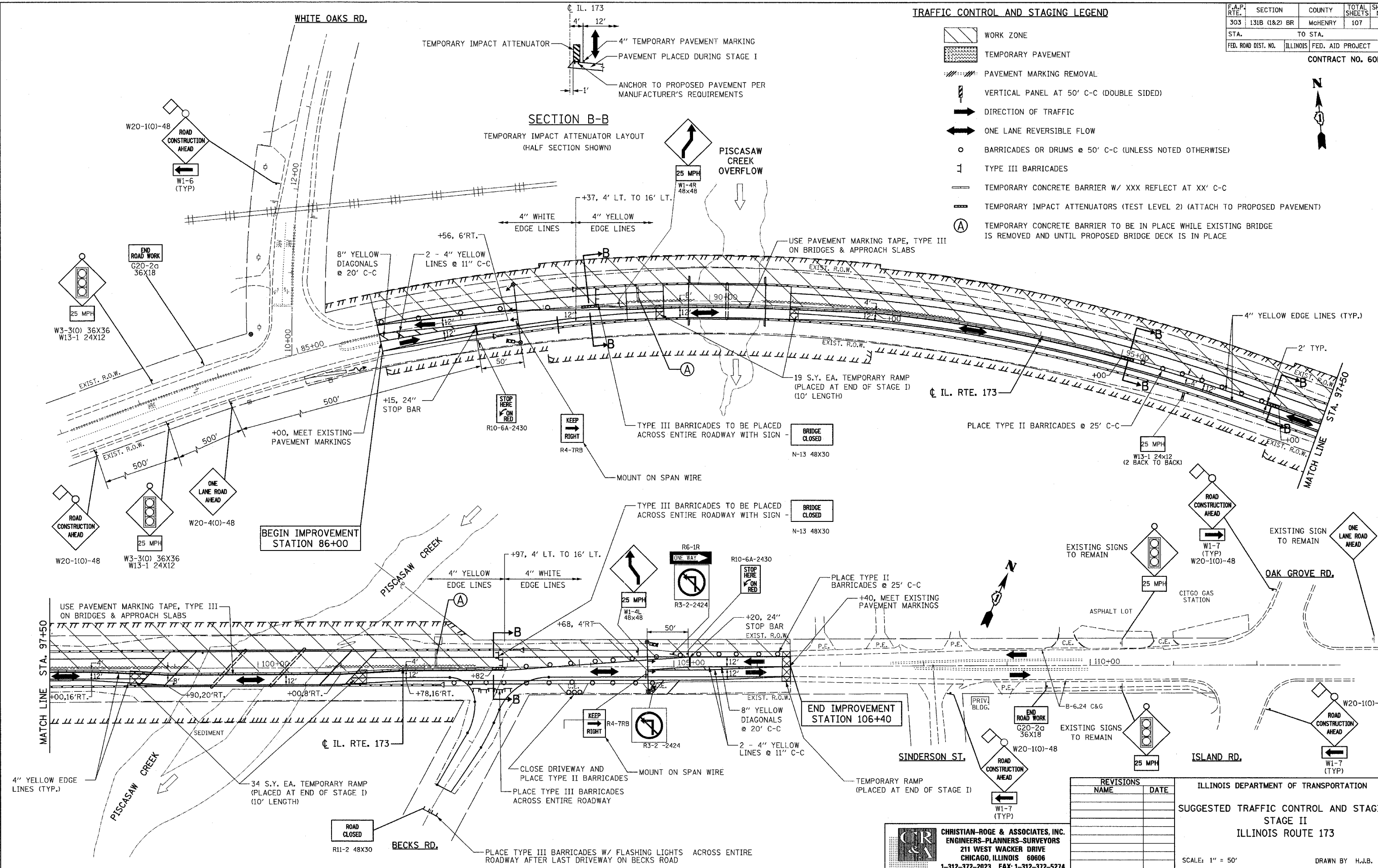
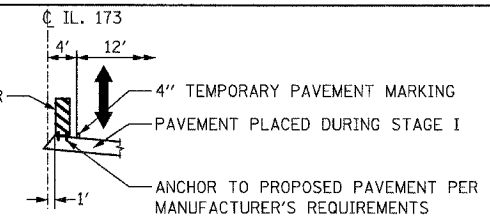
TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- PAVEMENT MARKING REMOVAL
- VERTICAL PANEL AT 50' C-C (DOUBLE SIDED)
- DIRECTION OF TRAFFIC
- ONE LANE REVERSIBLE FLOW
- BARRICADES OR DRUMS @ 50' C-C (UNLESS NOTED OTHERWISE)
- TYPE III BARRICADES
- TEMPORARY CONCRETE BARRIER W/ XXX REFLECT AT XX' C-C
- TEMPORARY IMPACT ATTENUATORS (TEST LEVEL 2) (ATTACH TO PROPOSED PAVEMENT)
- TEMPORARY CONCRETE BARRIER TO BE IN PLACE WHILE EXISTING BRIDGE IS REMOVED AND UNTIL PROPOSED BRIDGE DECK IS IN PLACE



SECTION B-B

TEMPORARY IMPACT ATTENUATOR LAYOUT (HALF SECTION SHOWN)



REVISIONS	
NAME	DATE

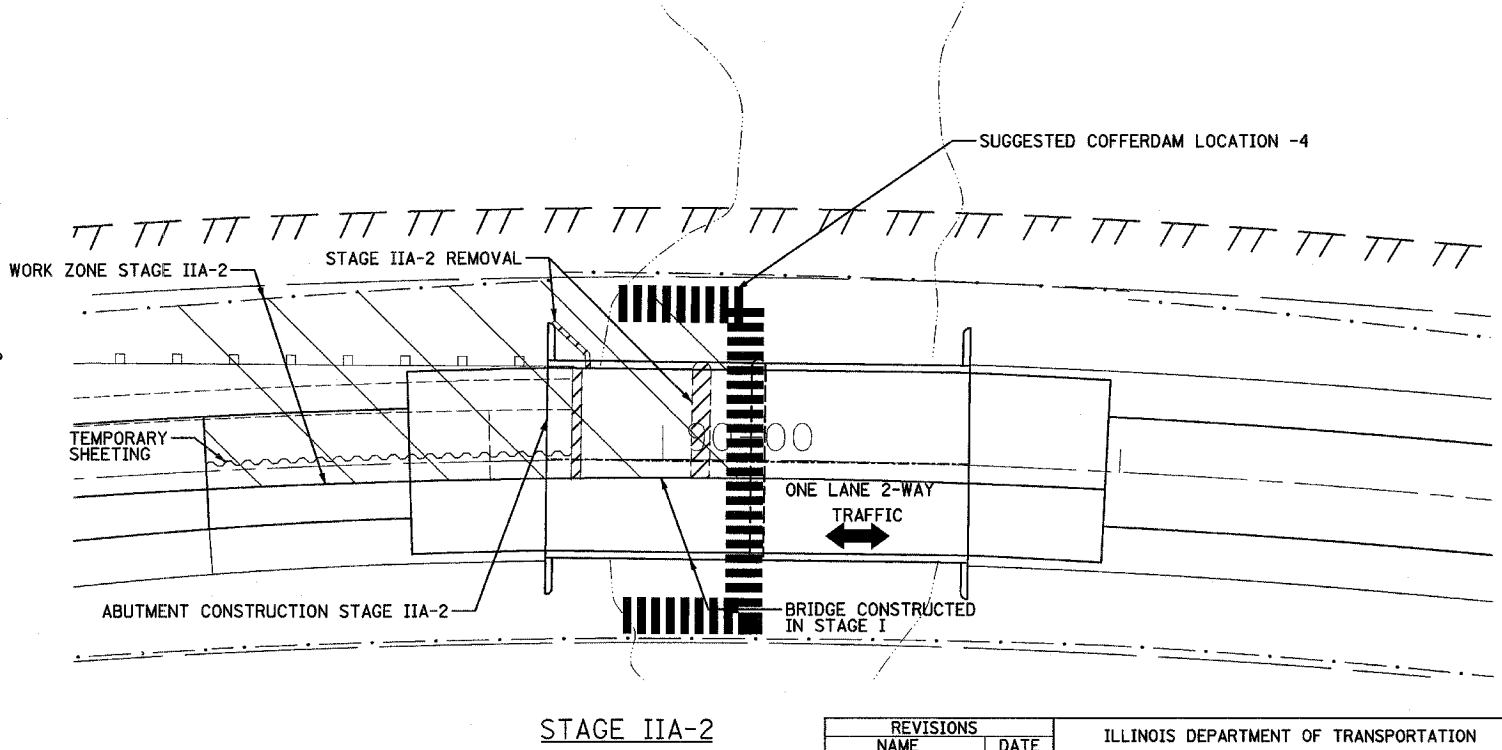
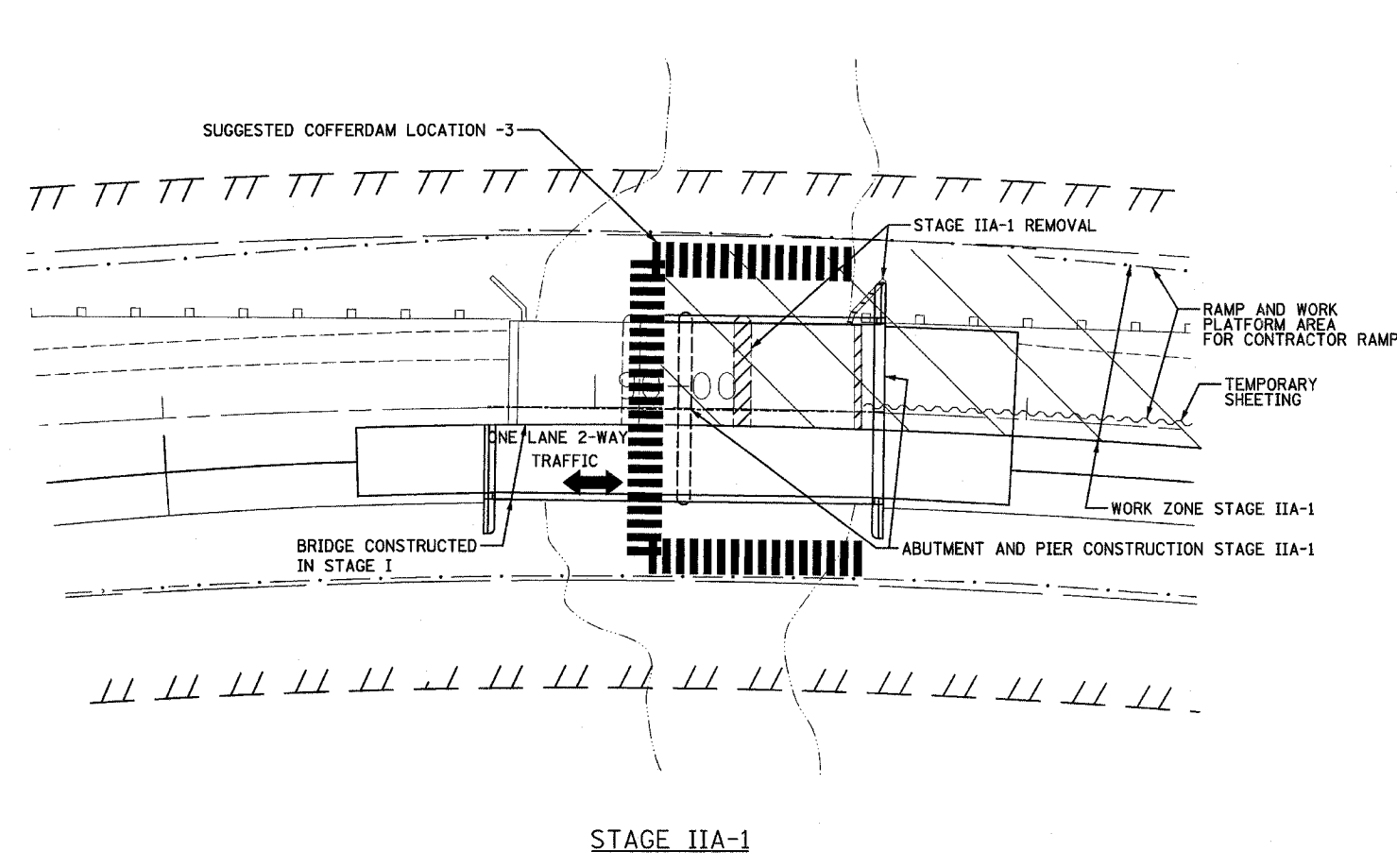
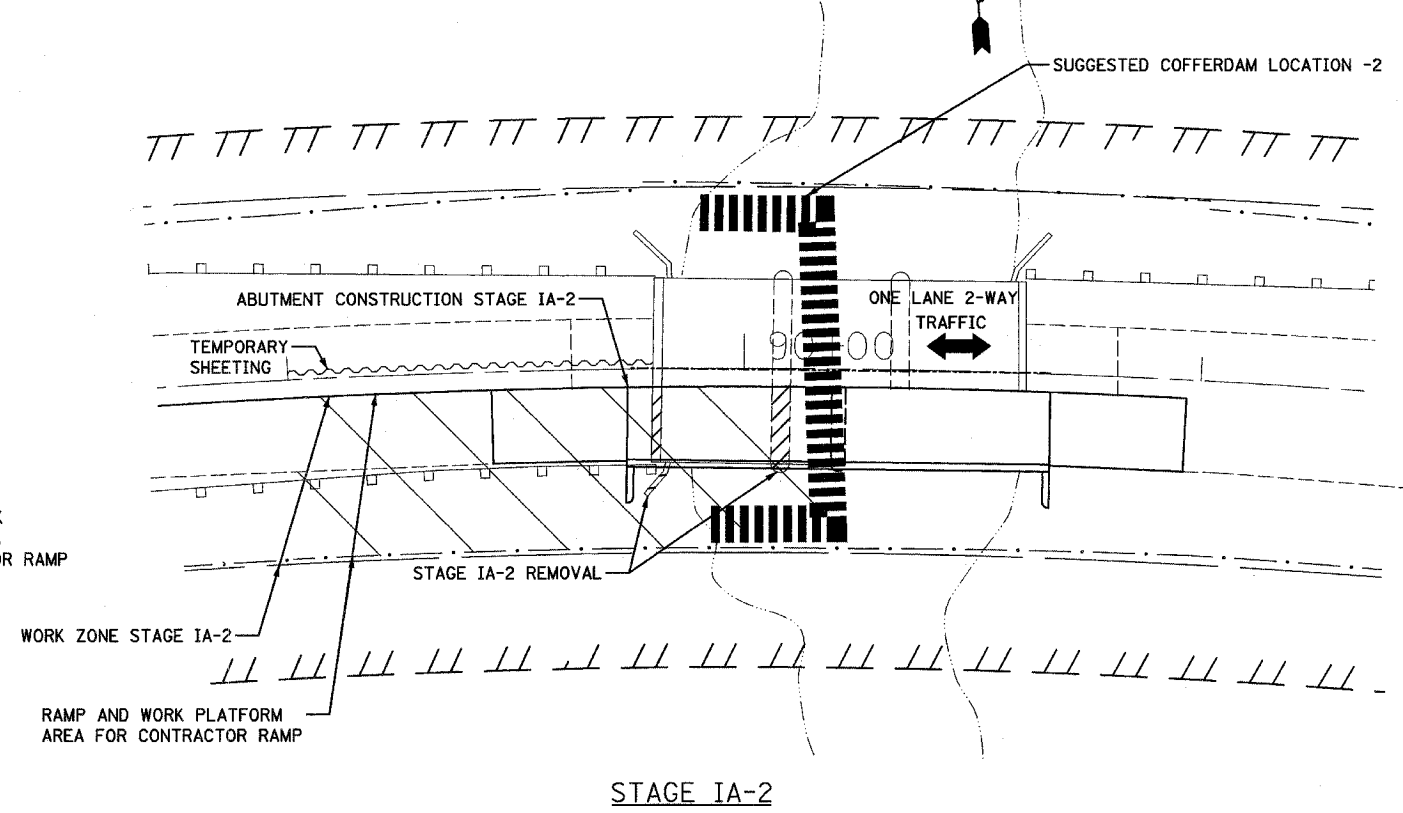
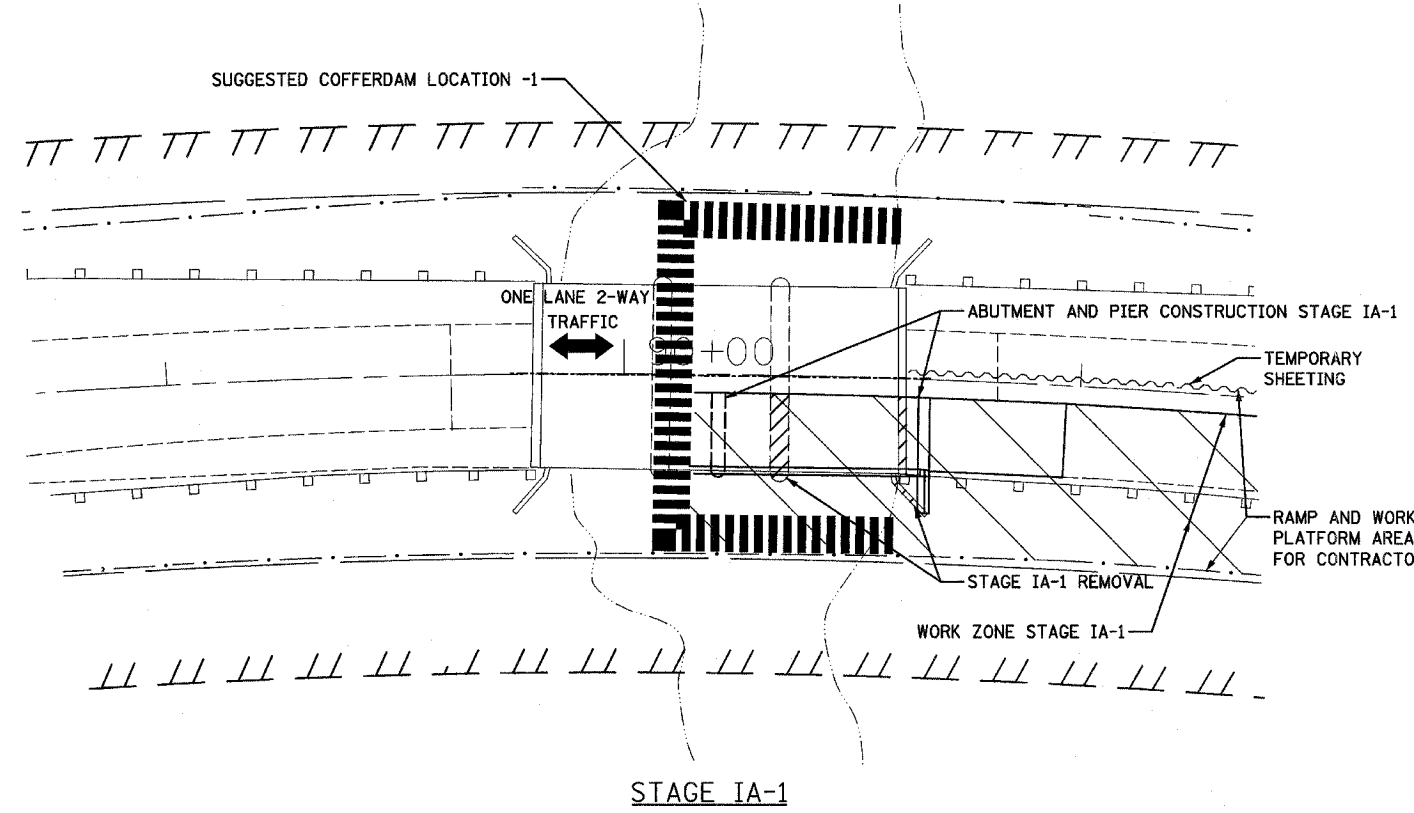
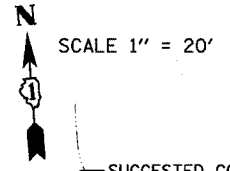
CHRISTIAN-ROGE & ASSOCIATES, INC.
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 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED TRAFFIC CONTROL AND STAGING
 STAGE II
 ILLINOIS ROUTE 173
 SCALE: 1" = 50'
 DATE: APRIL 25, 2007
 DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

PISCASAW CREEK OVERFLOW STRUCTURE - STAGED CONSTRUCTION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	25
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



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 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED STAGED CONSTRUCTION
 ILLINOIS ROUTE 173 OVER
 PISCASAW CREEK OVERFLOW

SCALE: 1" = 20'
 DATE: APRIL 16, 2007

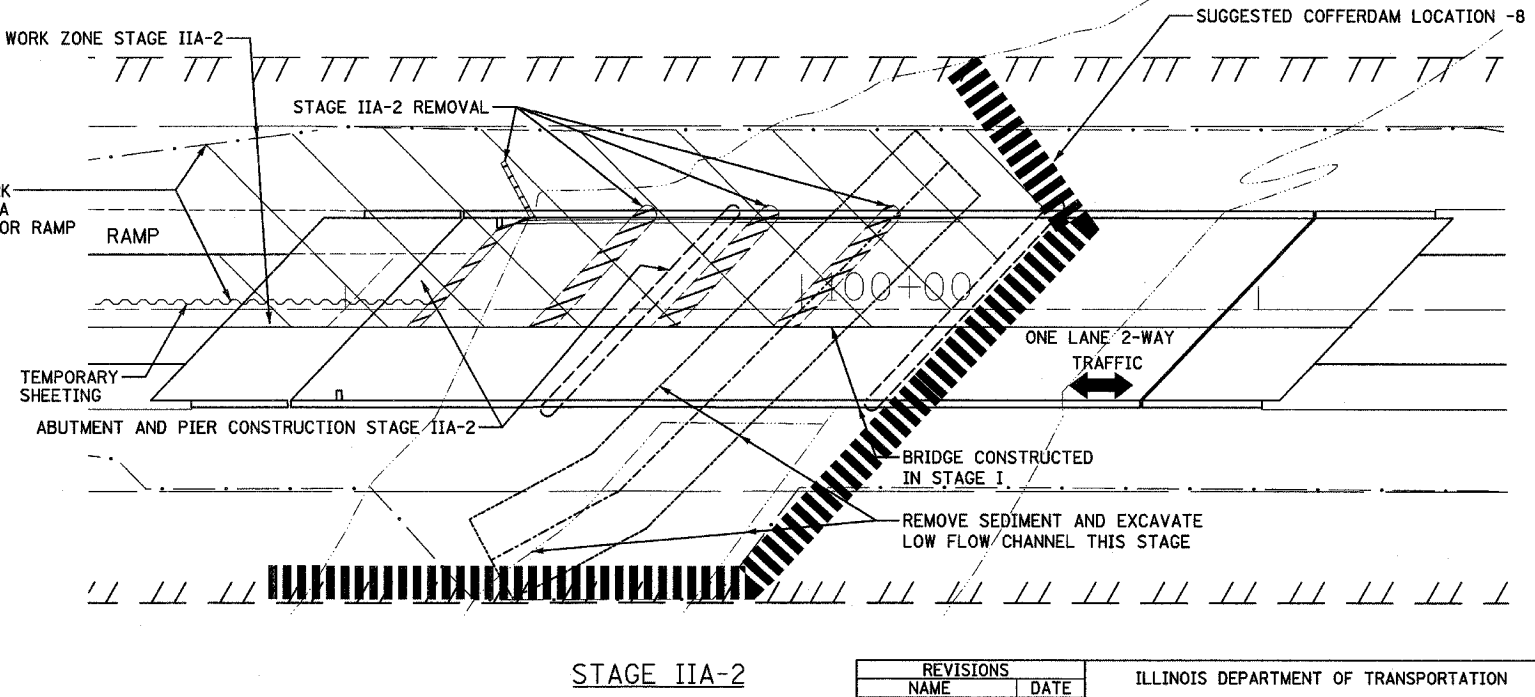
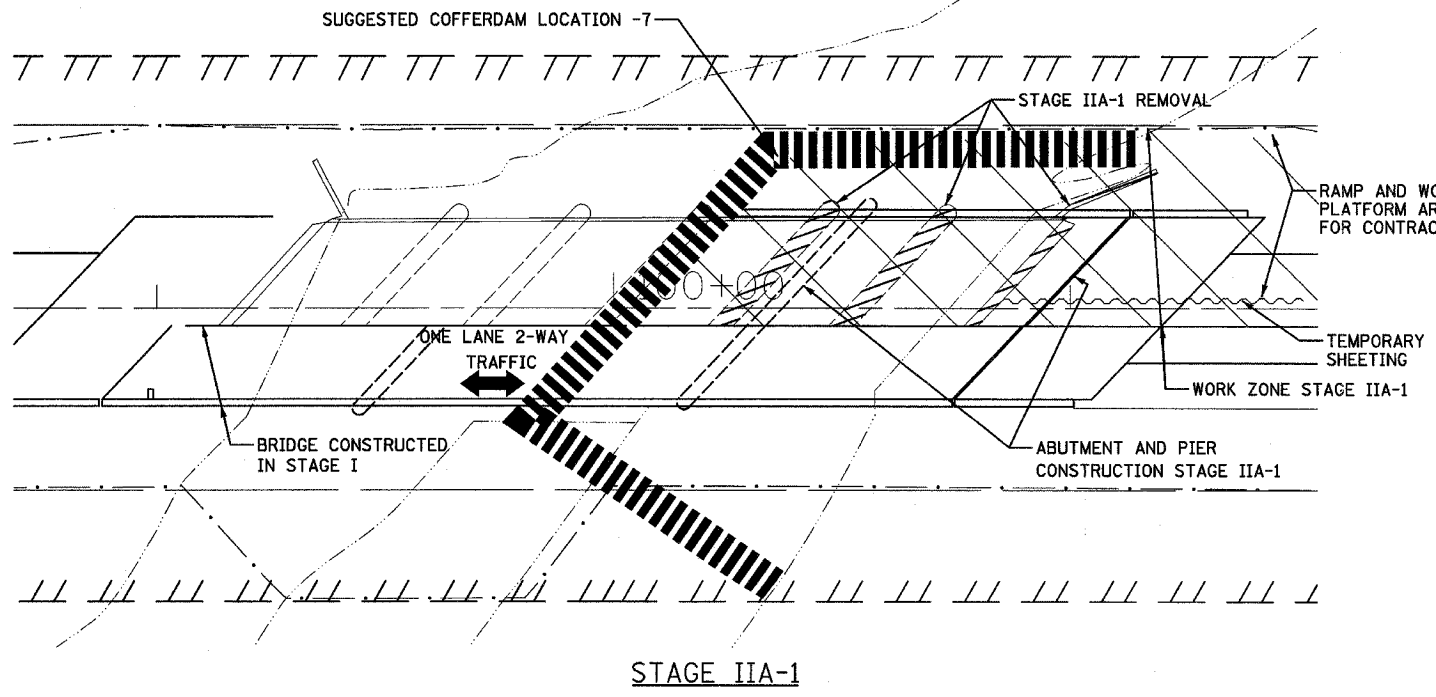
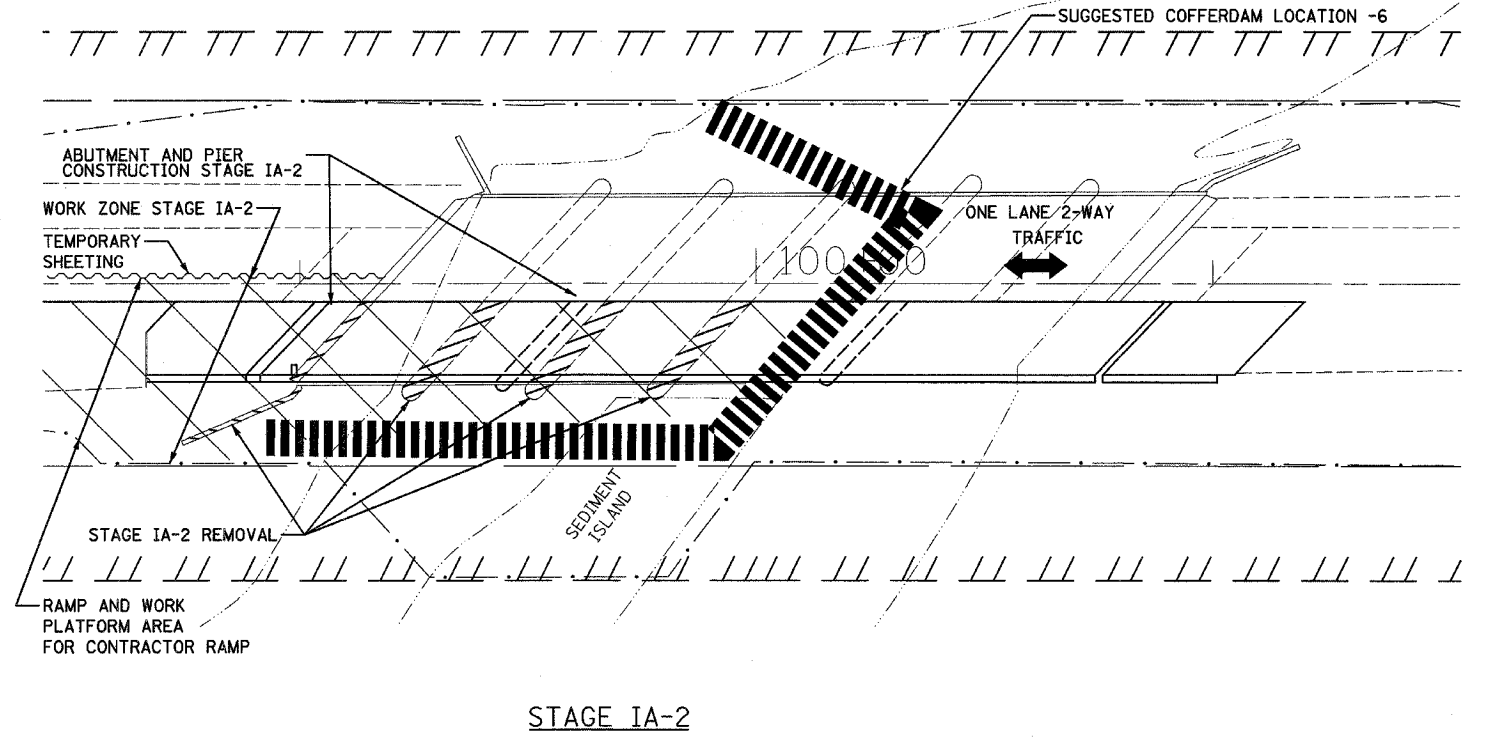
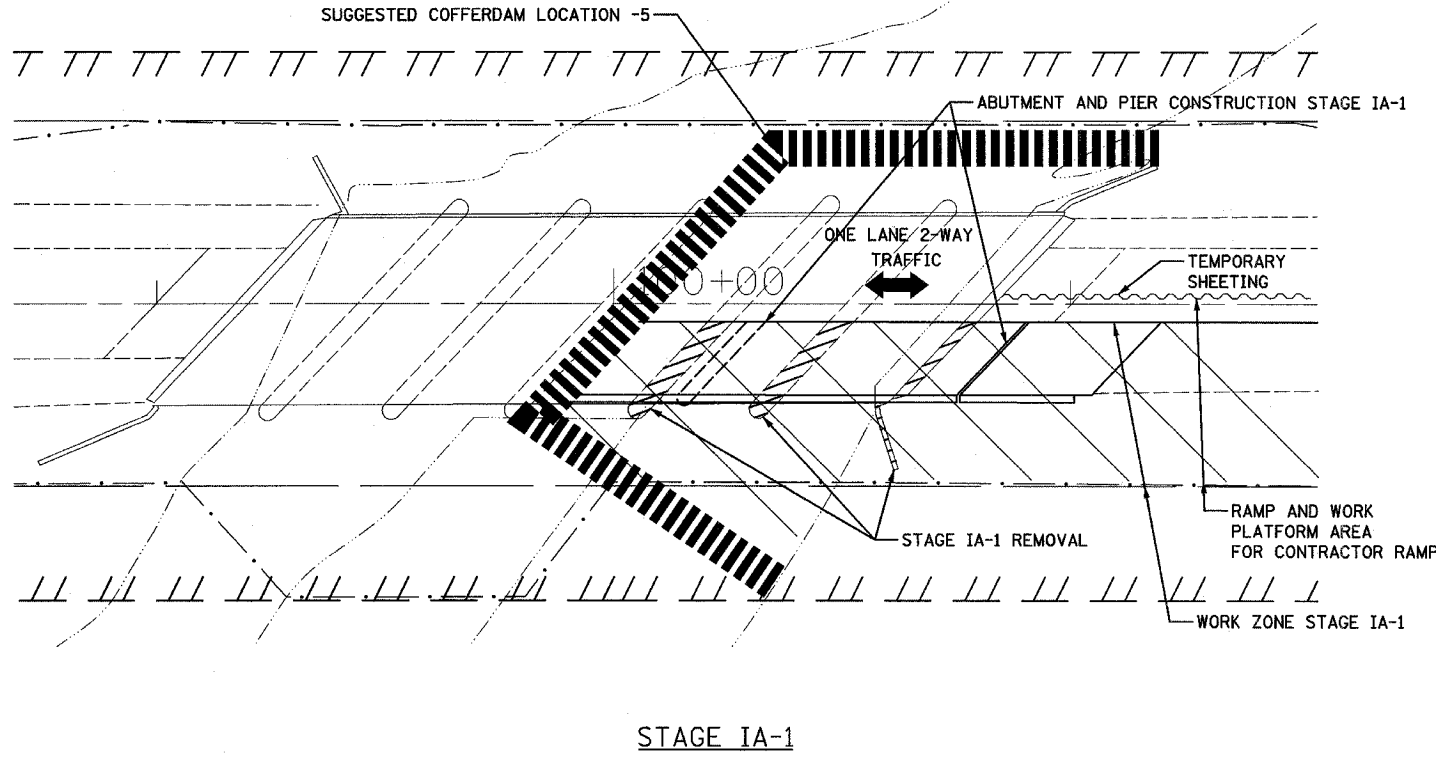
DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

PISCASAW CREEK STRUCTURE - STAGED CONSTRUCTION



SCALE 1" = 20'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHEMRY	107	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60883				



CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
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 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUGGESTED STAGED CONSTRUCTION
 ILLINOIS ROUTE 173 OVER
 PISCASAW CREEK
 SCALE: 1" = 20'
 DATE: APRIL 16, 2007
 DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60B83

STORM WATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM SEWER WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION, OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTORS SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 AND THE DETAILS IN THE PLANS.

SECTION 280, TEMPORARY EROSION CONTROL, OF THE IDOT STANDARD SPECIFICATIONS, ADDITIONALLY SUPPLEMENTS THIS PLAN.

SITE DESCRIPTION - DESCRIPTION OF CONSTRUCTION ACTIVITY:

THE PROJECT CONSISTS OF THE RAISING AND RECONSTRUCTION OF ILLINOIS ROUTE 173, FROM WHITE OAKS ROAD TO OAK GROVE ROAD, ALONG ITS EXISTING ALIGNMENT; AND REPLACING TWO EXISTING BRIDGES OVER THE PISCASAW CREEK.

1. SPECIFICALLY, THE CONSTRUCTION INCLUDES BOTH ROADWAY WORK AND STRUCTURAL WORK.
 - A. THE ROADWAY WORK WILL INCLUDE PAVEMENT REMOVAL, EARTH EXCAVATION, TEMPORARY PAVEMENT PLACEMENT, EMBANKMENT PLACEMENT, TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS, HOT MIX ASPHALT PAVEMENT PLACEMENT, AND NEW GUARDRAILS.
 - B. THE STRUCTURAL WORK WILL INCLUDE REMOVAL OF THE EXISTING BRIDGE DECK, IN-STREAM PIERS AND EXISTING ABUTMENTS. THE PROPOSED WORK WILL INCLUDE THE CONSTRUCTION OF IN-STREAM PIERS, ABUTMENTS WITH RIPRAP PROTECTION, THE PLACEMENT OF NEW BEAMS, AND A NEW CONCRETE DECK.
2. THE MAJORITY OF THIS PROJECT IS LOCATED ADJACENT TO BECKS ROAD, McHENRY COUNTY CONSERVATION DISTRICT'S FOREST PRESERVE AND HAS FIVE WETLANDS ADJACENT TO THE LIMITS OF CONSTRUCTION. THE WETLAND AREAS INCLUDE THE PISCASAW CREEK, ITS OVERFLOW CHANNEL AND A SPECKLED ALDER SWAMP. PISCASAW CREEK IS A CLASS A STREAM AND THE WETLAND CONSISTS OF A HIGH QUALITY SPECKLED ALDER SWAMP.

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

PRE-STAGE ACTIVITIES

1. INSTALL TEMPORARY CHAIN LINK FENCE, PAID FOR AS "FENCE (EROSION CONTROL), SPECIAL", ALONG WITH AN ATTACHED PERIMETER EROSION BARRIER AS SHOWN ON THE PLANS.
2. PERFORM ISOLATED TREE REMOVAL AS SHOWN ON THE PLANS. PROVIDE TREE TRUNK PROTECTION FOR TREES TO REMAIN TO PROTECT THEM AGAINST DAMAGE.
3. REMOVAL OF THE WESTBOUND SHOULDER AND THE PLACEMENT OF TEMPORARY PAVEMENT.
4. INSTALLATION OF WOOD POLES FOR THE TEMPORARY LIGHTING AND TRAFFIC SIGNALS.
5. REMOVAL OF DEBRIS IN THE CHANNEL ADJACENT TO THE BRIDGES TO ALLOW FOR THE PLACEMENT OF THE WATER FILLED COFFERDAMS.

STAGE I ACTIVITIES (EAST-BOUND LANE RECONSTRUCTION)

1. STAGE IA (SUBSTAGES IA-1 AND IA-2)
 - A. THE REMOVAL OF THE EASTBOUND HALF OF THE EXISTING BRIDGE INCLUDING DECK, PIERS AND ABUTMENTS.
 - B. TO LIMIT THE EXPOSED EARTH SURFACE, CONTRACTOR SHALL ONLY REMOVE THE EXISTING PAVEMENT AND EXCAVATION AS NEEDED FOR WORK IN THE STREAMBED FOR PIER REMOVAL AND NEW PIER CONSTRUCTION.
 - C. THE IN-STREAM WORK WILL CONSIST OF THE CONSTRUCTION OF THE PROPOSED PIERS AND PLACEMENT OF THE RIPRAP PROTECTION.
2. STAGE IB
 - A. REMAINDER OF THE PAVEMENT REMOVAL, TOPSOIL STRIPPING, PLACEMENT OF EMBANKMENT WILL BE COMPLETED AND THE ROADWAY PAVED.
 - B. PLACEMENT OF TOPSOIL, SEEDING AND SODDING, ALONG THE EASTBOUND PAVEMENT.

STAGE II ACTIVITIES (WEST-BOUND LANE RECONSTRUCTION)

1. STAGES IIA-1 AND IIA-2 AND STAGE IIB CONSTRUCTION STAGING WORK SEQUENCE AND ACTIVITIES WILL BE THE SAME AS NOTED ABOVE FOR STAGE I.
 - D. ADDITIONALLY, THE CHANNEL OF PISCASAW CREEK WILL BE REGRADED TO REMOVE THE SEDIMENT ISLAND AND PROVIDE A LOW FLOW CHANNEL.

AREA OF CONSTRUCTION SITE

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE APPROXIMATELY 4.0 ACRES OF WHICH 3.4 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN REFERENCED DOCUMENTS

1. INFORMATION ON THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM THE SOIL BORINGS AND THE NATURAL RESOURCES AND CONSERVATION DISTRICT'S SOIL MAP THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
2. PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWING INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE

1. DRAINAGE TRIBUTARY AREAS WILL NOT BE DEVIATED FROM, DURING PRE-CONSTRUCTION, CONSTRUCTION, OR POST CONSTRUCTION STAGES, DUE TO THE PROPOSED IMPROVEMENTS.
2. STORM WATER RUNOFF, FROM THE PAVEMENT, WILL SHEET FLOW OFF THE PAVEMENT TO THE ADJACENT AREAS. THESE AREAS WILL BE PROTECTED WITH BOTH PERIMETER EROSION BARRIER "FENCE (EROSION CONTROL), SPECIAL".
 - A. WHERE THE PAVEMENT IS ADJACENT TO THE WETLAND AREAS, RUNOFF WILL SHEET FLOW OFFSITE DOWN THE EMBANKMENTS TO THE WETLAND AREAS.
 - B. WHERE EXISTING DITCHES, SWALES AND/OR CULVERTS ARE PRESENT, THESE WILL BE MAINTAINED AND THE RUNOFF FROM THE PAVEMENT WILL USE THESE CONVEYANCE STRUCTURES TO DISCHARGE RUNOFF TO THE CREEK AT THE LOCATION OF THE BRIDGE ABUTMENT RIPRAP PROTECTION.



CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
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 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 EROSION AND SEDIMENT CONTROL
 STORM WATER POLLUTION PREVENTION PLAN
 IL. RTE. 173

SCALE: NONE
 DATE: APRIL 16, 2007

DRAWN BY: A.C.S.
 CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	28
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

STORM WATER POLLUTION PREVENTION PLAN (CONTINUED)

EROSION CONTROL AND SEDIMENT CONTROL - DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION

1. THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDES TEMPORARY SEEDING, PERMANENT SEEDING, EROSION CONTROL BLANKET, PROTECTION OF TREES, PRESERVATION OF NATURE VEGETATION, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - A. AREAS OF EXISTING VEGETATION (WOOD AND GRASSLAND) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY THE INSTALLATION OF "FENCE (EROSION CONTROL), SPECIAL". THIS CONSISTS OF A CHAIN LINK FENCE WITH PERIMETER EROSION BARRIER ATTACHED.
 - B. FOR IN-STREAM WORK IN COFFERDAM AREAS, SUMPS SHALL BE INSTALLED AND WATER PUMPED FROM THESE SUMPS SHALL BE FILTERED THROUGH A PORTABLE SEDIMENT TANK PRIOR TO OUTLETING INTO THE WETLAND AREAS OR THE CREEK.
 - C. AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, FENCE (EROSION CONTROL), SPECIAL AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND/OR DIRECTED BY THE ENGINEER.
 - D. BARE AND SPARSELY VEGETATED GROUND IN HIGH ERODABLE AREAS, AS DETERMINED BY THE ENGINEER, SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN DAYS.
 - E. IMMEDIATELY AFTER TREE REMOVAL AND THE PLACEMENT OF TEMPORARY SILT FENCING/PERIMETER BARRIER IS COMPLETED, AREAS WHICH ARE HIGHLY ERODABLE AS DETERMINED BY THE ENGINEER, SHALL BE TEMPORARILY SEEDED WHEN NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN SEVEN DAYS.
2. ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVERSEEDING CAN BE COMPLETED.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS, AS OUTLINED PREVIOUSLY HEREIN, SHALL BE PROTECTED AND FENCED OFF. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING AND SHALL NOT HAVE ACCESS TO, OR BE ABLE TO STORE MATERIALS OR EQUIPMENT IN AREAS OUTSIDE THE CONSTRUCTION LIMITS.
 - A. AREAS WITHIN THE CONSTRUCTION LIMITS, WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER, SHALL REMAIN UNDISTURBED UNTIL THE ROADWAY CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION. DURING STAGE IA AND STAGE IIA, THE CONTRACTOR SHALL NOT BE ALLOWED TO PERFORM PAVEMENT REMOVAL; AND DISTURB OR EXCAVATE ANY AREAS NOT NEEDED FOR THE CONSTRUCTION OF THE PROPOSED BRIDGES. THE EXISTING PAVEMENT SHOULDERS AND GRASS EMBANKMENT SHALL BE LEFT UNDISTURBED UNTIL THE ROADWAY WORK IN STAGE IB OR IIB IS READY TO BEGIN.
 - B. EARTH STOCKPILES SHALL NOT BE ALLOWED WITHIN THE CONSTRUCTION LIMITS.
 - C. ACCESS RAMPS EXCAVATED DOWN TO THE STREAM BED SHALL HAVE "POROUS GRANULAR EMBANKMENT, SUBGRADE" PLACED ON A 20' WIDE SECTION OF THE EXCAVATED SURFACE. THIS SHALL STABILIZED THE WORK AREA. AND SERVE AS A STABILIZED CONSTRUCTION ENTRANCE DURING CONSTRUCTION.

2. AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - A. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - B. TEMPORARILY SEED AND PLACE EROSION CONTROL BLANKET ON ERODABLE BARE EARTH, ON A WEEKLY BASIS, TO MINIMIZE THE AMOUNT OF ERODABLE SURFACE AREA WITHIN THE CONSTRUCTION LIMITS.
 - C. CONSTRUCT ROADSIDE DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.
 - D. CONTINUE BUILDING UP THE EMBANKMENT TO THE PROPOSED GRADE, WHILE AT THE SAME TIME, PLACING PERMANENT EROSION CONTROL SUCH AS RIPRAP DITCH LINING AND CONDUCTING FINAL SHAPING TO THE SLOPES.
 - E. EXCAVATED AREAS AND EMBANKMENTS SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING, IF NOT, THEY SHALL BE TEMPORARILY SEEDED AND COVERED WITH EROSION CONTROL BLANKET IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS. PROPOSED DITCHES SHALL BE SODDED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETE.
3. CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OF OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE. IF POSSIBLE EQUIPMENT SHOULD BE FUELED AND SERVICED OUTSIDE THE LIMITS OF THE MCD PROPERTY.
4. THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY, AFTER RAINS OR EQUIVALENT SNOWFALL OF 0.5 INCHES OR GREATER, AND DURING THE WINTER SHUTDOWN PERIOD. ADDITIONALLY, THE PROJECT SHALL BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER, IN A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE, AND/OR IF OTHER EROSION CONTROL WORK IS NECESSARY.
5. SEDIMENT COLLECTED DURING THE CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF OFF THE SITE, ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EARTH EXCAVATION FOR EROSION CONTROL.
6. THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER IT IS NO LONGER NEEDED OR IT IS NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.
7. WATER FILLED COFFERDAMS ARE PROPOSED TO PROVIDE A DE-WATERED WORKING AREA FOR THE IN-STREAM CONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A SUMP IN EACH OF THESE AREAS FOR DEWATERING AND TO PROVIDE TEMPORARY WORK PLATFORMS TO MINIMIZE DISTURBANCE TO THE STREAM BED.
 - A. FOR OTHER IN-STREAM WORK (I.E. INSTALLATION AND REMOVAL OF COFFERDAMS, SEDIMENT REMOVAL) SILT CURTAINS WILL BE USED BY THE CONTRACTOR TO CONTAIN ALL DISTURBED SEDIMENT.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY, AND ALL PROPOSED TURF AREAS ARE SEEDED AND ESTABLISHED.
2. ONCE PERMANENT EROSION CONTROL SYSTEMS, AS PROPOSED IN THE PLANS, ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED AND CLEANED UP, AND ANY ADDITIONAL DISTURBED TURF AREAS NEED TO BE RESEEDED.

MAINTENANCE AFTER CONSTRUCTION

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY IDOT'S FINAL INSPECTION. MAINTENANCE UP TO THAT DATE WILL BE BY THE CONTRACTOR.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL
STORM WATER POLLUTION PREVENTION PLAN
IL. RTE. 173

SCALE: NONE
DATE: APRIL 16, 2007

DRAWN BY: A.C.S.
CHECKED BY: S.J.P.



CHRISTIAN-ROGE & ASSOCIATES, INC.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	29
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

STORM WATER POLLUTION PREVENTION PLAN (CONTINUED)

MISCELLANEOUS

1. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRES.
2. STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SLIT FENCES WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATES, SILT PANELS, ROLLED EXCELSIOR BLANKETS, URETHANE FOAM/GEOTEXTILE (SILT WEDGES), AND/OR ANY OTHER MATERIAL APPROVED BY THE EROSION AND SEDIMENT CONTROL COORDINATOR.
3. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF OFF THE SITE ON A REGULAR BASIS, AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION FOR EROSION CONTROL.
4. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN, PRIOR TO THE APPROVAL AND USE OF THE PRODUCT. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.
5. ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR ON STANDARD 280001. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 EROSION AND SEDIMENT CONTROL
 STORM WATER POLLUTION PREVENTION PLAN
 IL. RTE. 173

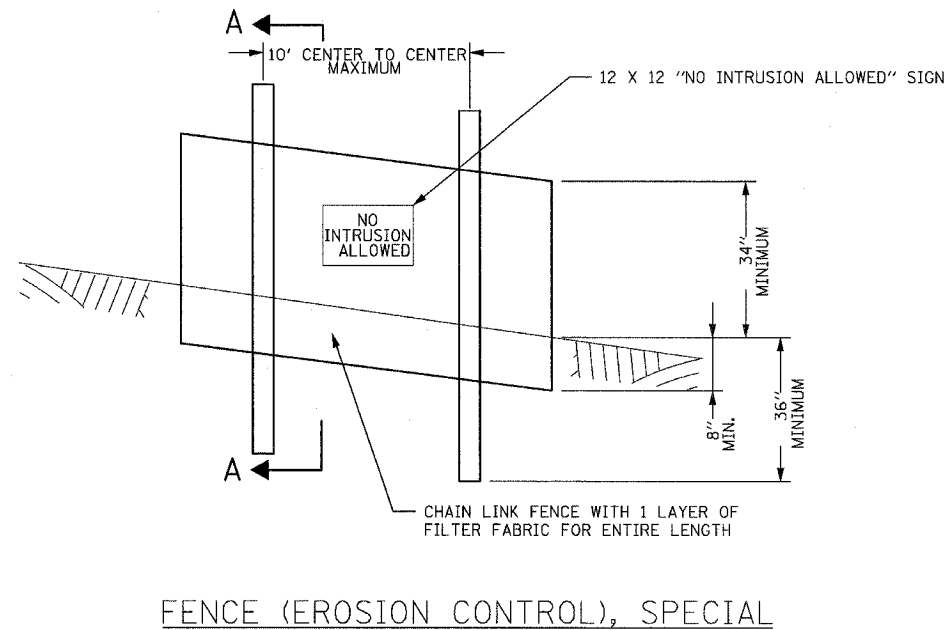
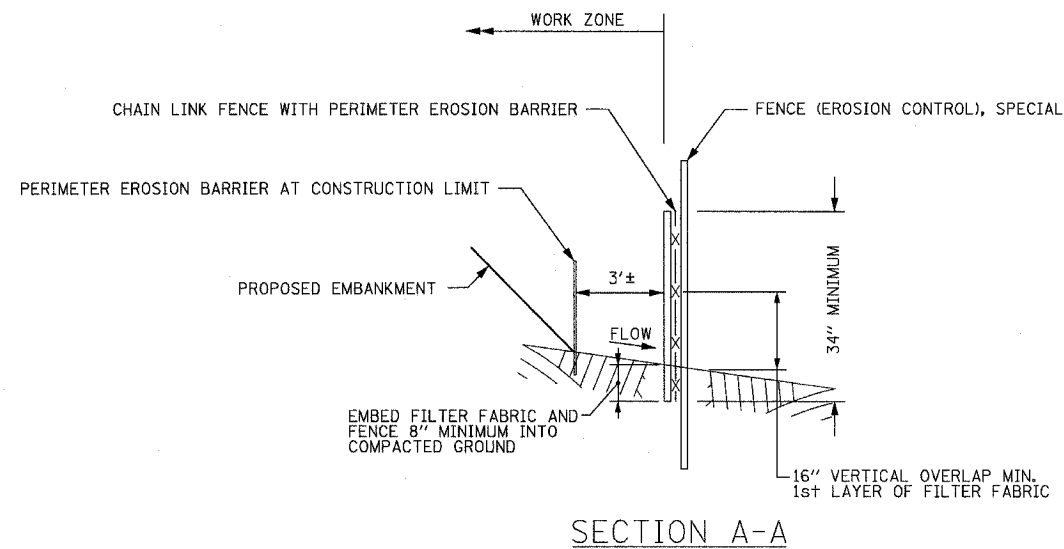
 **CHRISTIAN-ROGE & ASSOCIATES, INC.**
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 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
 DATE APRIL 16, 2007
 DRAWN BY A.C.S.
 CHECKED BY S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

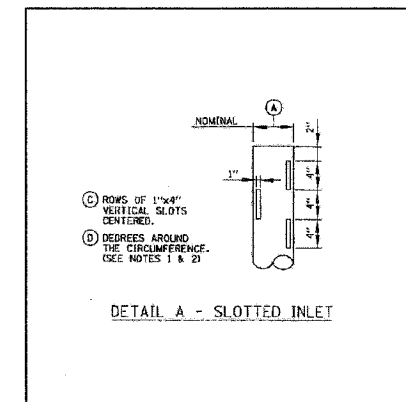
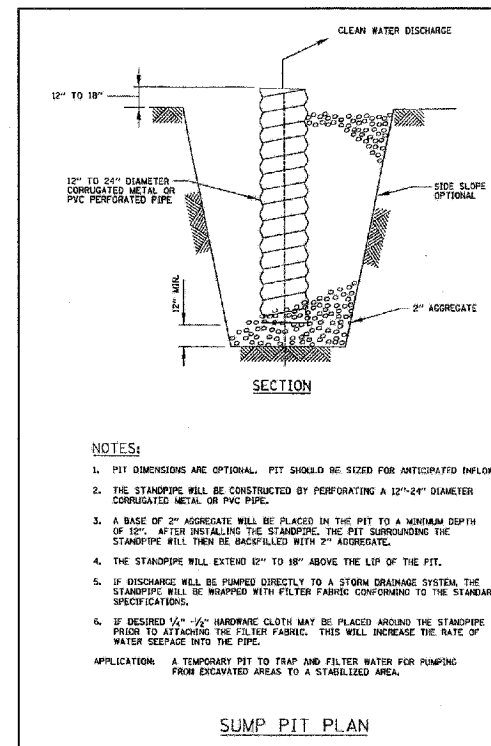
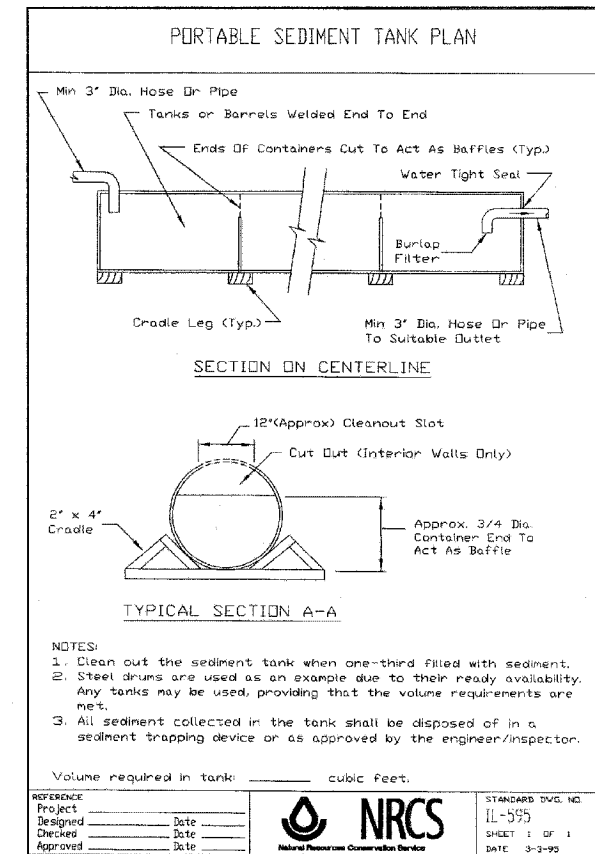
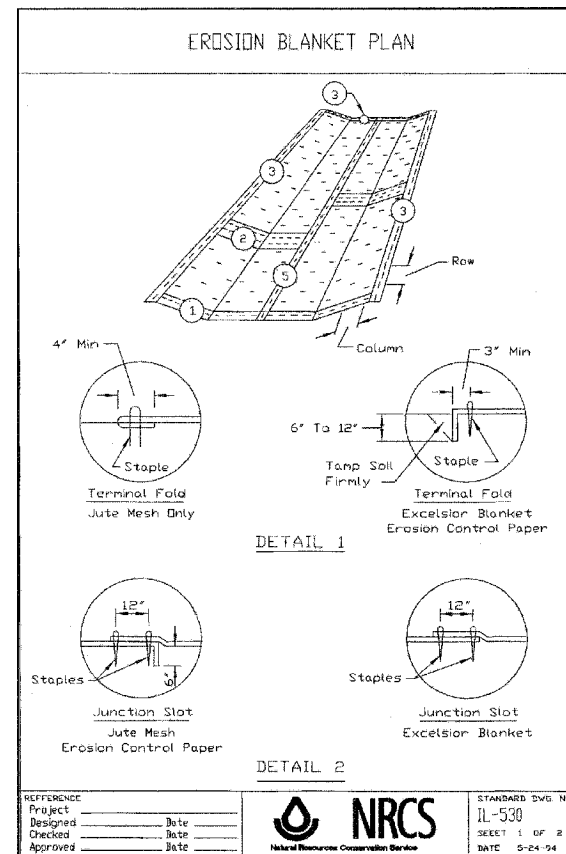
CONTRACT NO. 60B83

EROSION & SEDIMENT CONTROL DETAILS



FENCE (EROSION CONTROL), SPECIAL NOTES:

- FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH IDOT STANDARD 664001 (CHAIN LINK FENCE). THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 8' LENGTH POSTS.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED. ALL POSTS FOR FENCE EROSION CONTROL (SPECIAL) SHALL BE LINE POSTS. PULL POSTS, CORNER POSTS, HORIZONTAL BRACING AND TIE RODS ARE NOT REQUIRED.
- SILT FILTER FABRIC SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- SILT FILTER FABRIC AND CHAIN LINK FENCE SHALL BE EMBEDDED 8" INTO THE GROUND.
- WHEN TWO SECTIONS OF SILT FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 2' HORIZONTALLY.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED. SILT BUILD-UP AGAINST FENCE SHALL BE INSPECTED AFTER EVERY STORM EVENT AND REMOVED WHEN SILT REACHES 50% OF FENCE HEIGHT.
- SILT FILTER FABRIC SHALL CONFORM TO THE STANDARD SPECIFICATION 280.
- FENCE (EROSION CONTROL), SPECIAL SHALL HAVE TWELVE (12)- 12" X 12" "NO INTRUSION ALLOWED" SIGNS. THE COST OF THIS SHALL BE INCLUDED AS PART OF THE UNIT COST FOR FENCE (EROSION CONTROL), SPECIAL.










REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		EROSION AND SEDIMENT CONTROL DETAILS

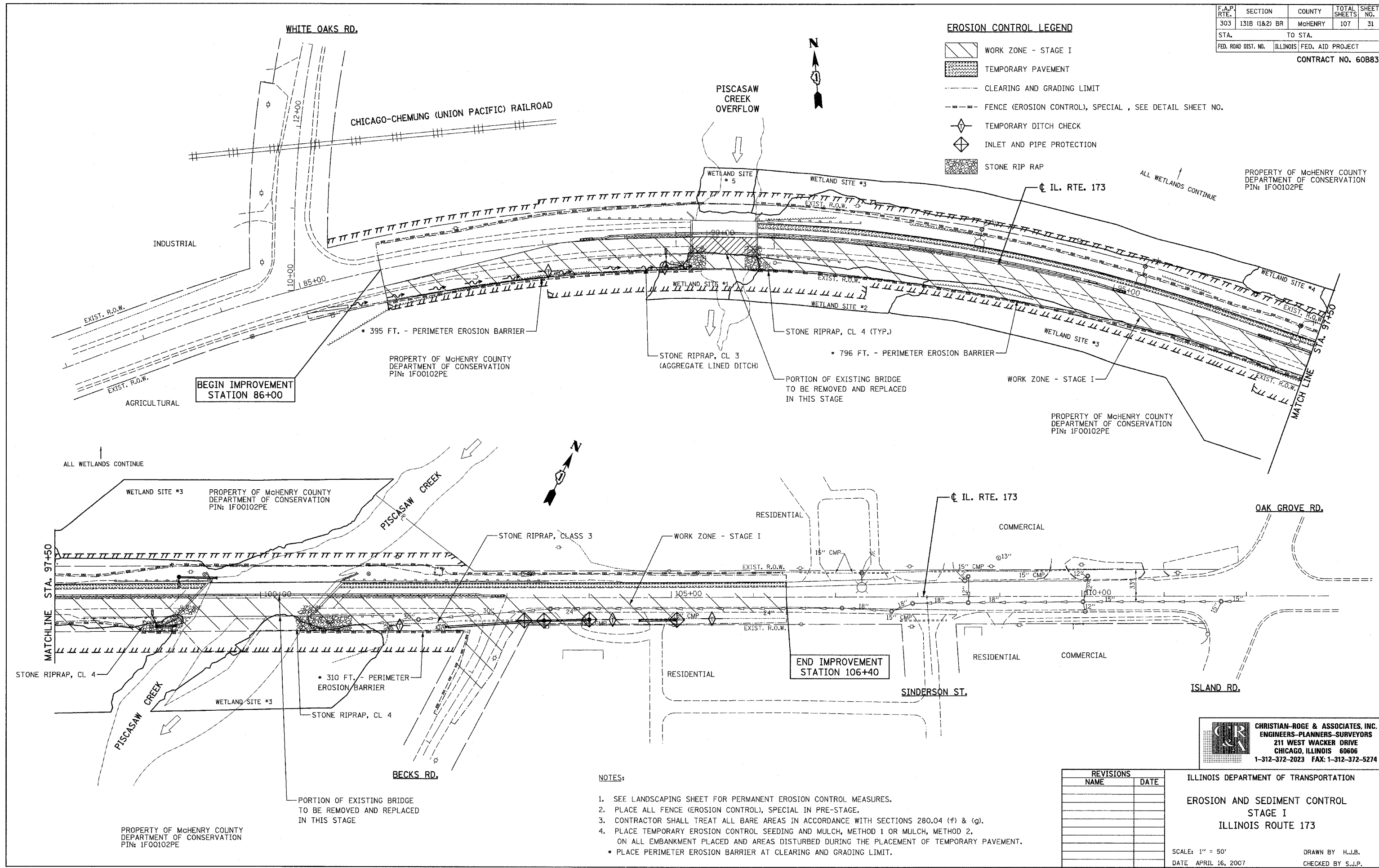
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F.A.P. RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	31
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60B83				

EROSION CONTROL LEGEND

-  WORK ZONE - STAGE I
-  TEMPORARY PAVEMENT
-  CLEARING AND GRADING LIMIT
-  FENCE (EROSION CONTROL), SPECIAL, SEE DETAIL SHEET NO.
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  STONE RIP RAP



PROPERTY OF McHENRY COUNTY
DEPARTMENT OF CONSERVATION
PIN: 1F00102PE

BEGIN IMPROVEMENT
STATION 86+00

END IMPROVEMENT
STATION 106+40

NOTES:

1. SEE LANDSCAPING SHEET FOR PERMANENT EROSION CONTROL MEASURES.
 2. PLACE ALL FENCE (EROSION CONTROL), SPECIAL IN PRE-STAGE.
 3. CONTRACTOR SHALL TREAT ALL BARE AREAS IN ACCORDANCE WITH SECTIONS 280.04 (f) & (g).
 4. PLACE TEMPORARY EROSION CONTROL SEEDING AND MULCH, METHOD 1 OR MULCH, METHOD 2, ON ALL EMBANKMENT PLACED AND AREAS DISTURBED DURING THE PLACEMENT OF TEMPORARY PAVEMENT.
- PLACE PERIMETER EROSION BARRIER AT CLEARING AND GRADING LIMIT.

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




REVISIONS	
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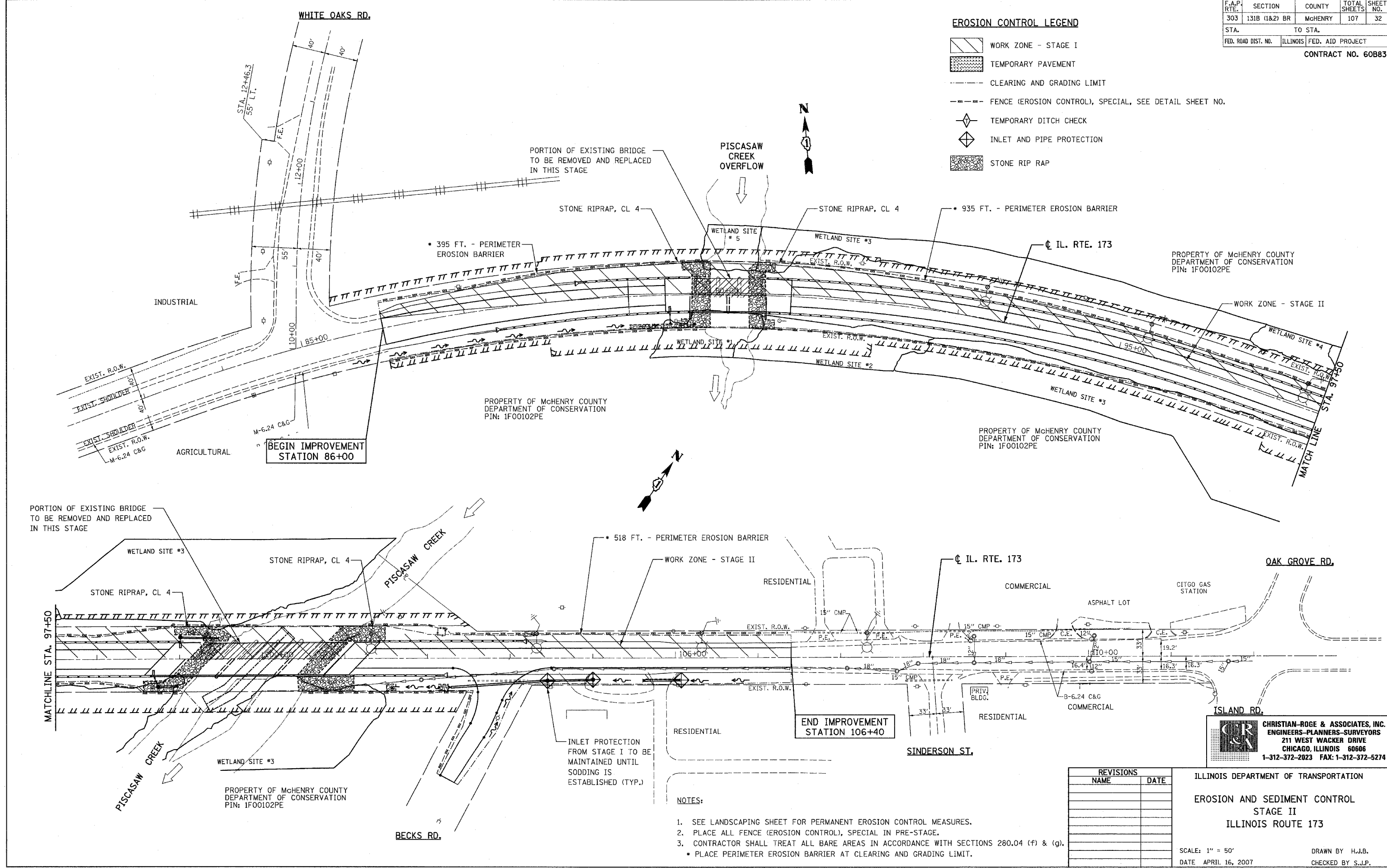
ILLINOIS DEPARTMENT OF TRANSPORTATION
**EROSION AND SEDIMENT CONTROL
STAGE I
ILLINOIS ROUTE 173**

SCALE: 1" = 50'
DATE: APRIL 16, 2007
DRAWN BY: H.J.B.
CHECKED BY: S.J.P.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	32
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60B83				

EROSION CONTROL LEGEND

-  WORK ZONE - STAGE I
-  TEMPORARY PAVEMENT
-  CLEARING AND GRADING LIMIT
-  FENCE (EROSION CONTROL), SPECIAL, SEE DETAIL SHEET NO.
-  TEMPORARY DITCH CHECK
-  INLET AND PIPE PROTECTION
-  STONE RIP RAP



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REVISIONS	
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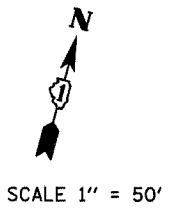
ILLINOIS DEPARTMENT OF TRANSPORTATION
 EROSION AND SEDIMENT CONTROL
 STAGE II
 ILLINOIS ROUTE 173

SCALE: 1" = 50'
 DATE: APRIL 16, 2007
 DRAWN BY: H.J.B.
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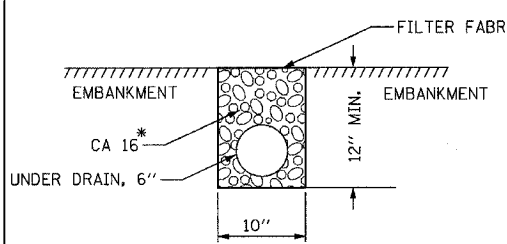
- NOTES:**
- SEE LANDSCAPING SHEET FOR PERMANENT EROSION CONTROL MEASURES.
 - PLACE ALL FENCE (EROSION CONTROL), SPECIAL IN PRE-STAGE.
 - CONTRACTOR SHALL TREAT ALL BARE AREAS IN ACCORDANCE WITH SECTIONS 280.04 (f) & (g).
 - PLACE PERIMETER EROSION BARRIER AT CLEARING AND GRADING LIMIT.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHEMRY	107	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60B83

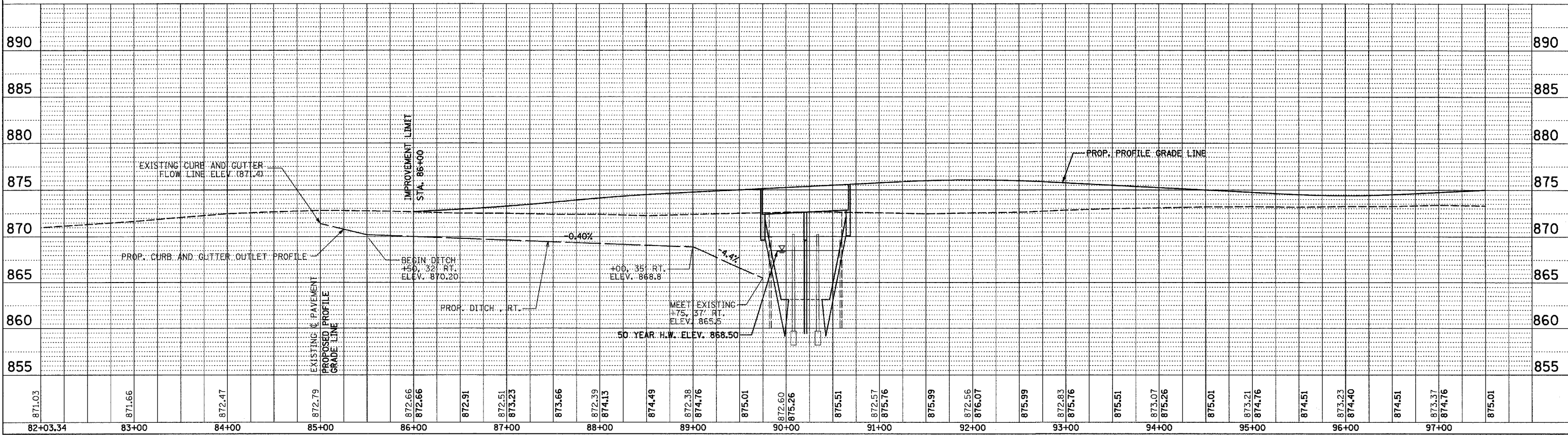
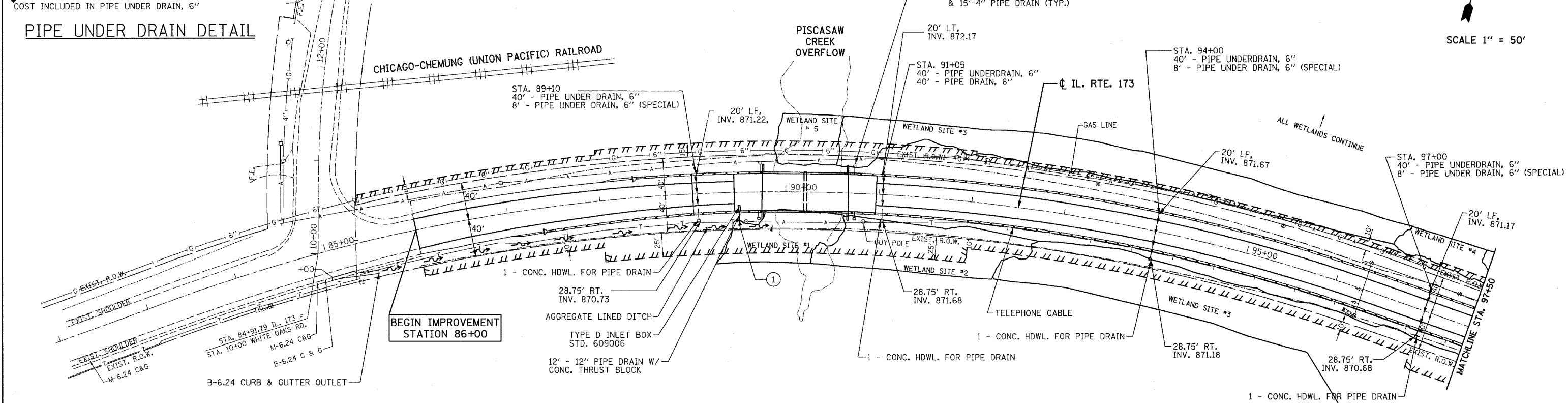


PROJECT BM A : X - CUT FOUND ON NE WINGWALL OF BRIDGE OVER THE OVERFLOW OF PISCASAW CREEK, STR. NO. 056-0027. EL. = 873.72



*COST INCLUDED IN PIPE UNDER DRAIN, 6"
PIPE UNDER DRAIN DETAIL

NOTE:
FROM STA. 86+00 TO STA. 89+00, ALL EXISTING UNDER DRAINS SHALL BE EXTENDED TO FINISHED GRADE, TO BE PAID FOR AS CONCRETE HEADWALL FOR PIPE DRAIN AND PIPE DRAIN TO MATCH THE EXISTING DIAMETER.



DATE	BY	REVISION

DATE	BY	REVISION

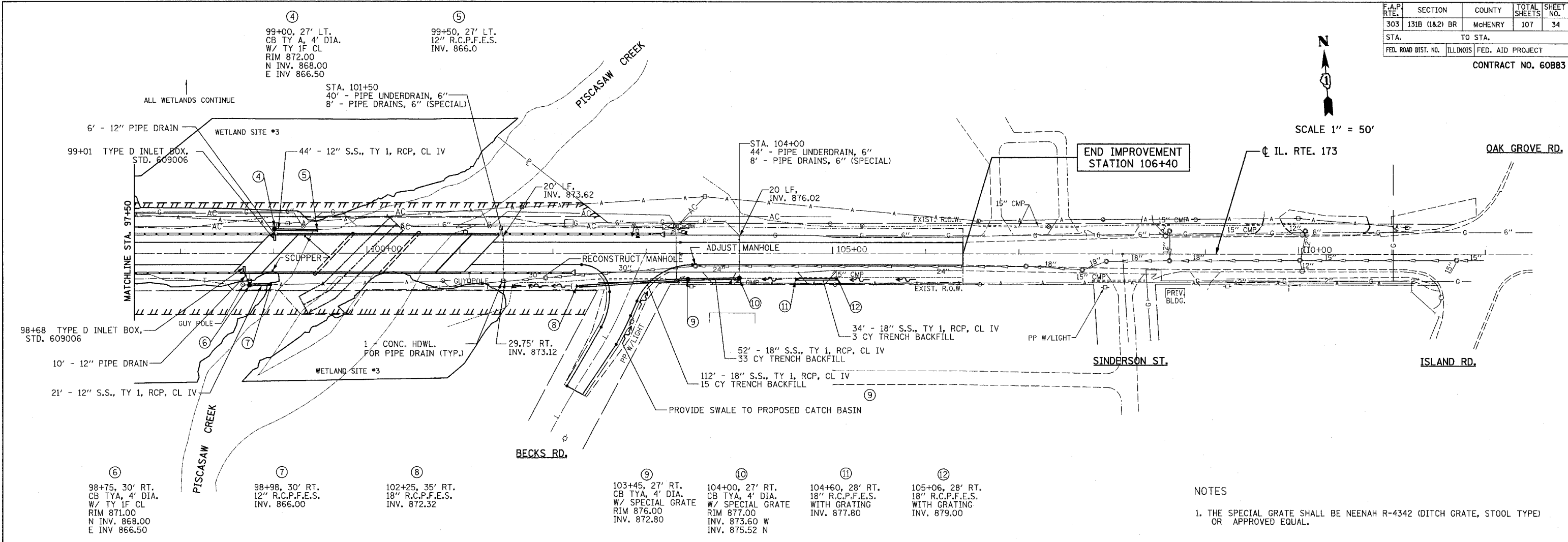
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	34
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60883				



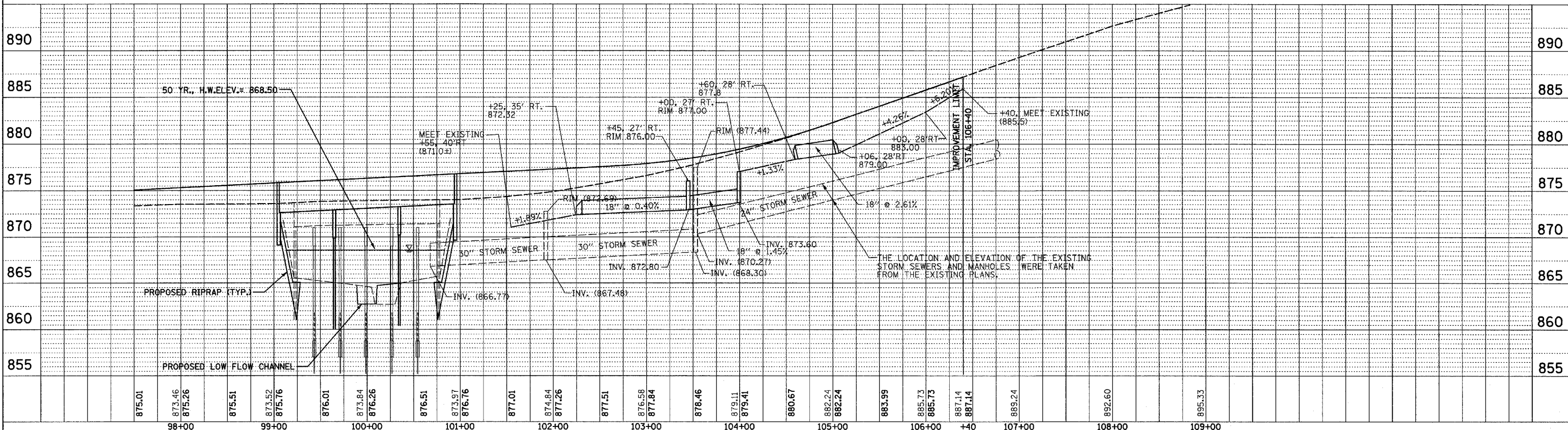
SCALE 1" = 50'

DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY



NOTES
 1. THE SPECIAL GRATE SHALL BE NEENAH R-4342 (DITCH GRATE, STOOL TYPE) OR APPROVED EQUAL.



PART OF SEC. 32, T46N, R5E AND SEC. 5, T45N, R5E OF THE 3RD P.M., MCHENRY COUNTY, ILLINOIS

CONTRACT NO. D-91-064-02

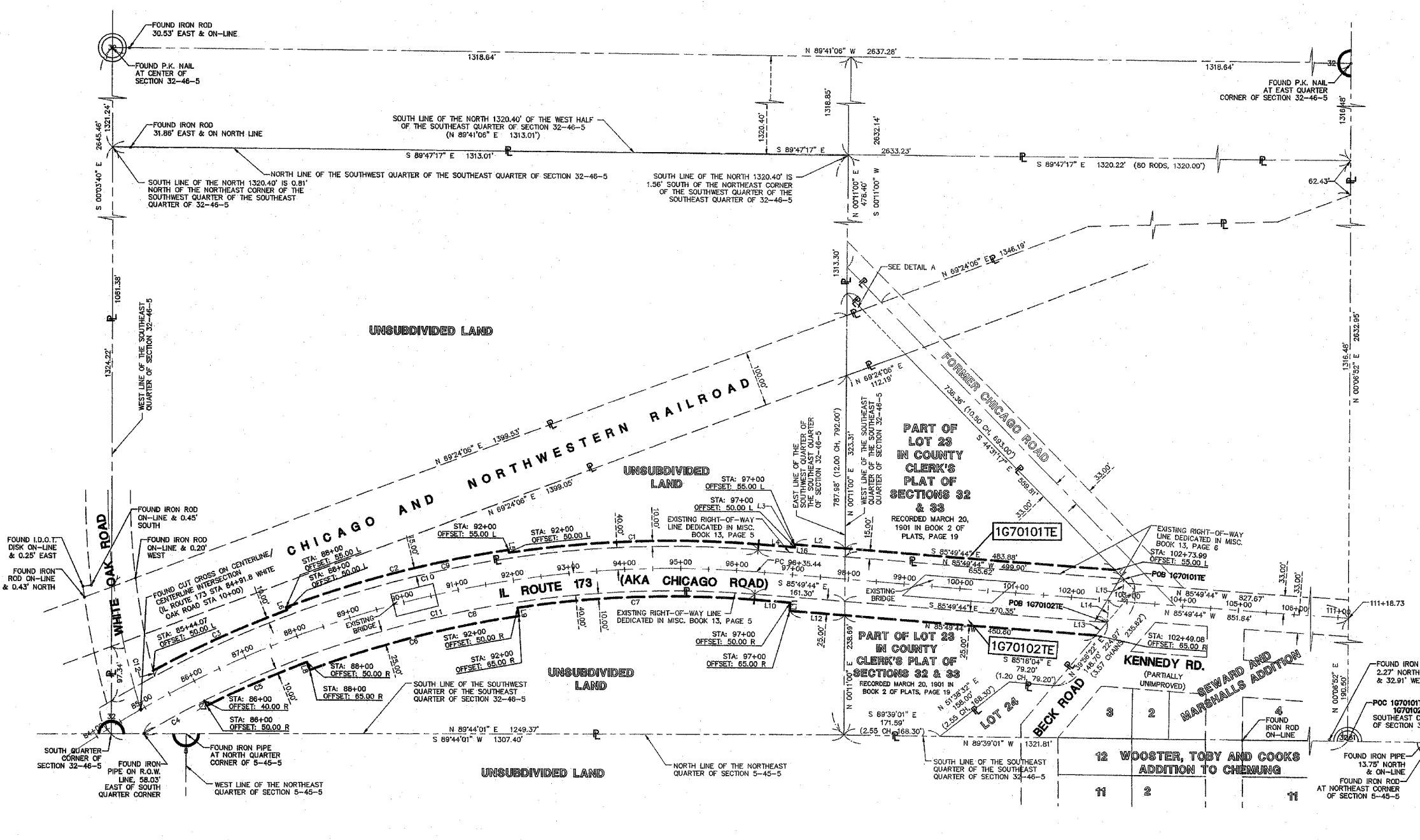
PARCEL No.	OWNER	TOTAL HOLDINGS (ACRES)	PART TAKEN (ACRES)	PREVIOUSLY DEDICATED (ACRES)	REMAINDER	EASEMENT AREA (ACRES)	PERMANENT INDEX NUMBER	PURPOSE OF EASEMENT	ACQUIRED BY
1G70101TE	MCHENRY COUNTY CONSERVATION DISTRICT	40.402	0.000	0.000	40.402	0.519	01-32-477-001 01-32-476-001 01-32-451-004	TEMPORARY	
1G70102TE	MCHENRY COUNTY CONSERVATION DISTRICT	7.277	0.000	0.000	7.277	0.701	01-32-452-002	TEMPORARY	

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PISCASAW CREEK	MCHENRY	107	35
STA. 85+44.07		TO STA. 102+73.99		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APPARENT PROPERTY LINE
- CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORD DATA
- EXISTING BUILDING
- IRON ROD SET
- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- PK NAIL SET
- REPLACED AFTER CONSTRUCTION
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSHED WITH GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OR PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLOR PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I D O T STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.
- LIGHT STANDARD
- P.O.B. = POINT OF BEGINNING
- P.O.C. = POINT OF COMMENCEMENT

STATE OF ILLINOIS)
 COUNTY OF LAKE)
 I, TIMOTHY J. MURPHY, DO HEREBY DECLARE THAT I HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 32, TOWNSHIP 46 NORTH RANGE 5, EAST OF THE THIRD PRINCIPAL MERIDIAN, MCHENRY COUNTY, ILLINOIS; 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 VERNON HILLS, ILLINOIS THIS _____ DAY OF _____ A.D., 2006.
 ILLINOIS PROFESSIONAL LAND SURVEYOR No. 2870; EXPIRES NOVEMBER 30, 2006

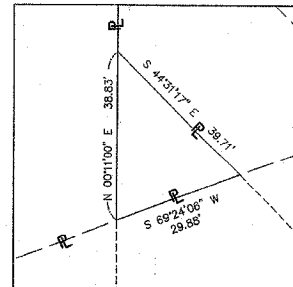


LINE TABLE

LINE	BEARING	LENGTH
L1	S 44°31'17" E	22.72'
L2	S 85°49'44" E	90.11'
L3	N 04°10'16" E	5.00'
L4	S 85°49'44" E	64.56'
L5	S 08°33'26" E	5.00'
L6	N 20°53'21" W	5.00'
L7	N 28°53'14" W	10.00'
L8	N 20°53'21" W	15.00'
L9	S 08°33'26" E	15.00'
L10	N 85°49'44" W	64.56'
L11	N 04°10'16" E	15.00'
L12	N 85°49'44" W	98.48'
L13	S 32°42'22" W	30.81'
L14	S 04°10'16" W	40.00'
L15	N 04°10'16" E	40.00'
L16	N 85°49'44" W	158.72'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	1960.08'	446.84'	N 87°38'25" E	445.87'
C2	1983.08'	411.52'	N 78°08'38" E	410.77'
C3	1960.08'	262.63'	N 65°16'20" E	262.43'
C4	1870.08'	122.63'	S 81°13'58" W	122.61'
C5	1860.08'	194.77'	S 68°08'40" W	194.68'
C6	1845.08'	306.39'	S 73°05'36" W	305.68'
C7	1860.08'	424.04'	S 87°38'25" W	423.12'
C8	1870.08'	103.378'	N 78°36'26" E	103.339'
C9	1950.08'	1118.68'	S 77°44'00" W	1101.46'
C10	1950.08'	1205.18'	S 76°27'58" W	1186.10'
C11	1870.08'	1136.36'	N 78°45'45" E	1118.98'
C12	1277.56'	10.29'	N 14°53'45" W	10.29'



DETAIL A
SCALE: 1"=20'

REVISION DATE	DESCRIPTION	BY
10/03/06	REVISED PER IDOT REVIEW	RYP
09/28/06	REVISED LABELS AND DIMENSIONS	SSG
REVISION DATE	DESCRIPTION	BY

RECORDING: RECORDED ON

1077 SB21 - 3424 SHEET 1 IS A COVER SHEET AND IS NOT RECORDED

MANHARD CONSULTING
 ENGINEERS • SURVEYORS • PLANNERS
 900 WOODLANDS PARKWAY VERNON HILLS, IL 60061
 PH: 847/934-5330 FAX: 847/934-0965

PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 CHICAGO ROAD (IL ROUTE 173)

SECTION: AT PISCASAW CREEK MCHENRY COUNTY
 PROJECT: JOB NO. R-91-002-07
 STATION 85+44.07 TO STATION 102+73.99
 SCALE: 1" = 100' SHEET 2 OF 2

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196
 AS DOCUMENT NO.

Oct 03, 2006 - 08:22 Dwg Name: P:\1047\1017 Projects\SB21\1077\1077-3821.dwg Updated By: RPopack
 R.O.W. PLAT NO. MADE CHECKED LINKED NOTEBOOK NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	36
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



LANDSCAPING LEGEND

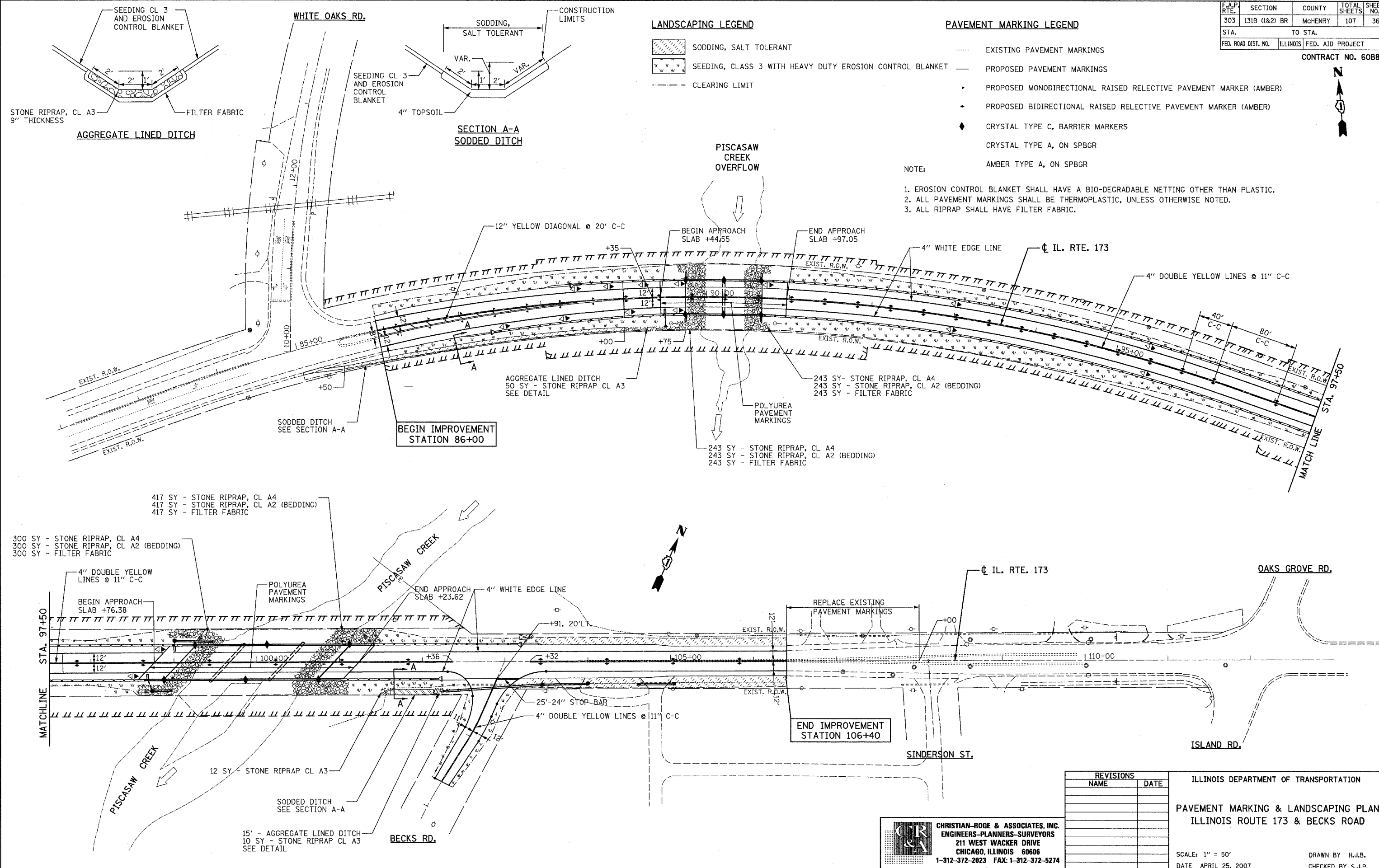
- SODDING, SALT TOLERANT
- SEEDING, CLASS 3 WITH HEAVY DUTY EROSION CONTROL BLANKET
- CLEARING LIMIT

PAVEMENT MARKING LEGEND

- EXISTING PAVEMENT MARKINGS
- PROPOSED PAVEMENT MARKINGS
- PROPOSED MONODIRECTIONAL RAISED RELECTIVE PAVEMENT MARKER (AMBER)
- PROPOSED BIDIRECTIONAL RAISED RELECTIVE PAVEMENT MARKER (AMBER)
- CRYSTAL TYPE C, BARRIER MARKERS
- CRYSTAL TYPE A, ON SPBGR
- AMBER TYPE A, ON SPBGR

NOTE:

1. EROSION CONTROL BLANKET SHALL HAVE A BIO-DEGRADABLE NETTING OTHER THAN PLASTIC.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, UNLESS OTHERWISE NOTED.
3. ALL RIPRAP SHALL HAVE FILTER FABRIC.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKING & LANDSCAPING PLAN
 ILLINOIS ROUTE 173 & BECKS ROAD

SCALE: 1" = 50'
 DATE: APRIL 25, 2007
 DRAWN BY: H.J.B.
 CHECKED BY: S.J.P.

CR & A
 CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	37
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



TEMPORARY TRAFFIC SIGNAL LEGEND

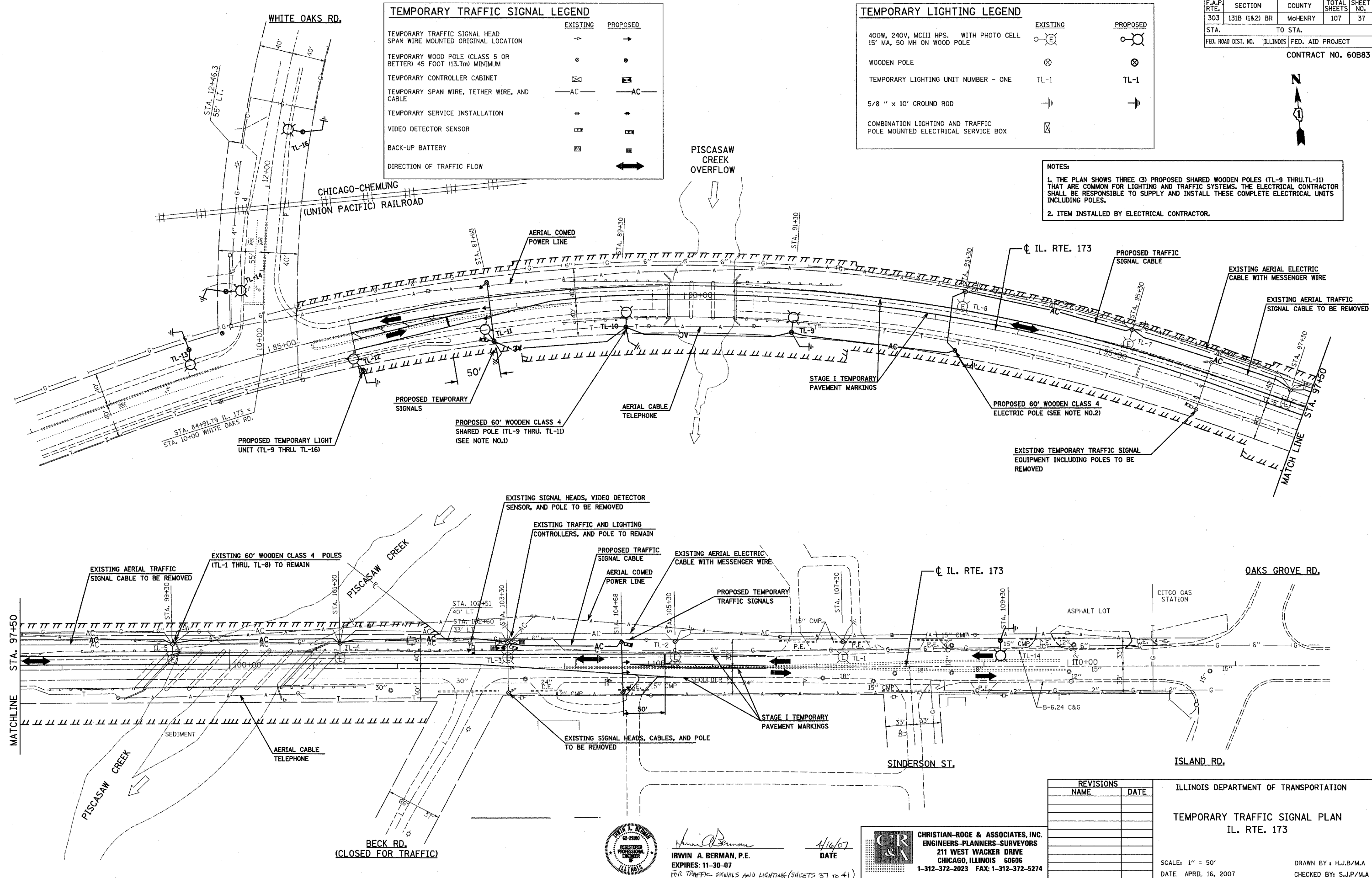
	EXISTING	PROPOSED
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION	⊙	→
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	⊙	⊙
TEMPORARY CONTROLLER CABINET	⊠	⊠
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	—AC—	—AC—
TEMPORARY SERVICE INSTALLATION	⊕	⊕
VIDEO DETECTOR SENSOR	⊠	⊠
BACK-UP BATTERY	⊠	⊠
DIRECTION OF TRAFFIC FLOW	↔	↔

TEMPORARY LIGHTING LEGEND

	EXISTING	PROPOSED
400W, 240V, MCIII HPS. WITH PHOTO CELL 15' MA, 50 MH ON WOOD POLE	⊙	⊙
WOODEN POLE	⊗	⊗
TEMPORARY LIGHTING UNIT NUMBER - ONE	TL-1	TL-1
5/8" x 10' GROUND ROD	⊕	⊕
COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX	⊠	⊠

NOTES:

- THE PLAN SHOWS THREE (3) PROPOSED SHARED WOODEN POLES (TL-9 THRU TL-11) THAT ARE COMMON FOR LIGHTING AND TRAFFIC SYSTEMS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY AND INSTALL THESE COMPLETE ELECTRICAL UNITS INCLUDING POLES.
- ITEM INSTALLED BY ELECTRICAL CONTRACTOR.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN
IL. RTE. 173

SCALE: 1" = 50'

DATE: APRIL 16, 2007

DRAWN BY: H.J.B./M.A
CHECKED BY: S.J.P./M.A



Irwin A. Berman
IRWIN A. BERMAN, P.E.
EXPIRES: 11-30-07
FOR TRAFFIC SIGNALS AND LIGHTING (SHEETS 37 TO 41)

4/16/07
DATE

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 60B83

SEQUENCE OF OPERATION

MOVEMENT	WHITE OAKS RD.		WHITE OAKS RD.		F		
	IL. ROUTE 173		IL. ROUTE 173		L		
	BECK'S RD. (CLOSED)		BECK'S RD. (CLOSED)		A		
PHASE	1		2		S		
INTERVAL	1	2A	2B	3	4A	4B	H
CHANGE TO	2		1		R		
IL. RTE. 173 SIGNAL (W/B)	G	Y	R	R	R	R	R
IL. RTE. 173 SIGNAL (E/B)	R	R	R	G	Y	R	R

ITEM	DESCRIPTION	UNIT	QUANTITY
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89502375	*REMOVE EXISTING TRAFFIC SIGNAL EACH EQUIPMENT	EACH	1

*REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH 1
 THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR UNDER THIS ITEM AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
 8 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
 3 EACH WOODEN POLES
 1 EACH BATTERY BACK-UP

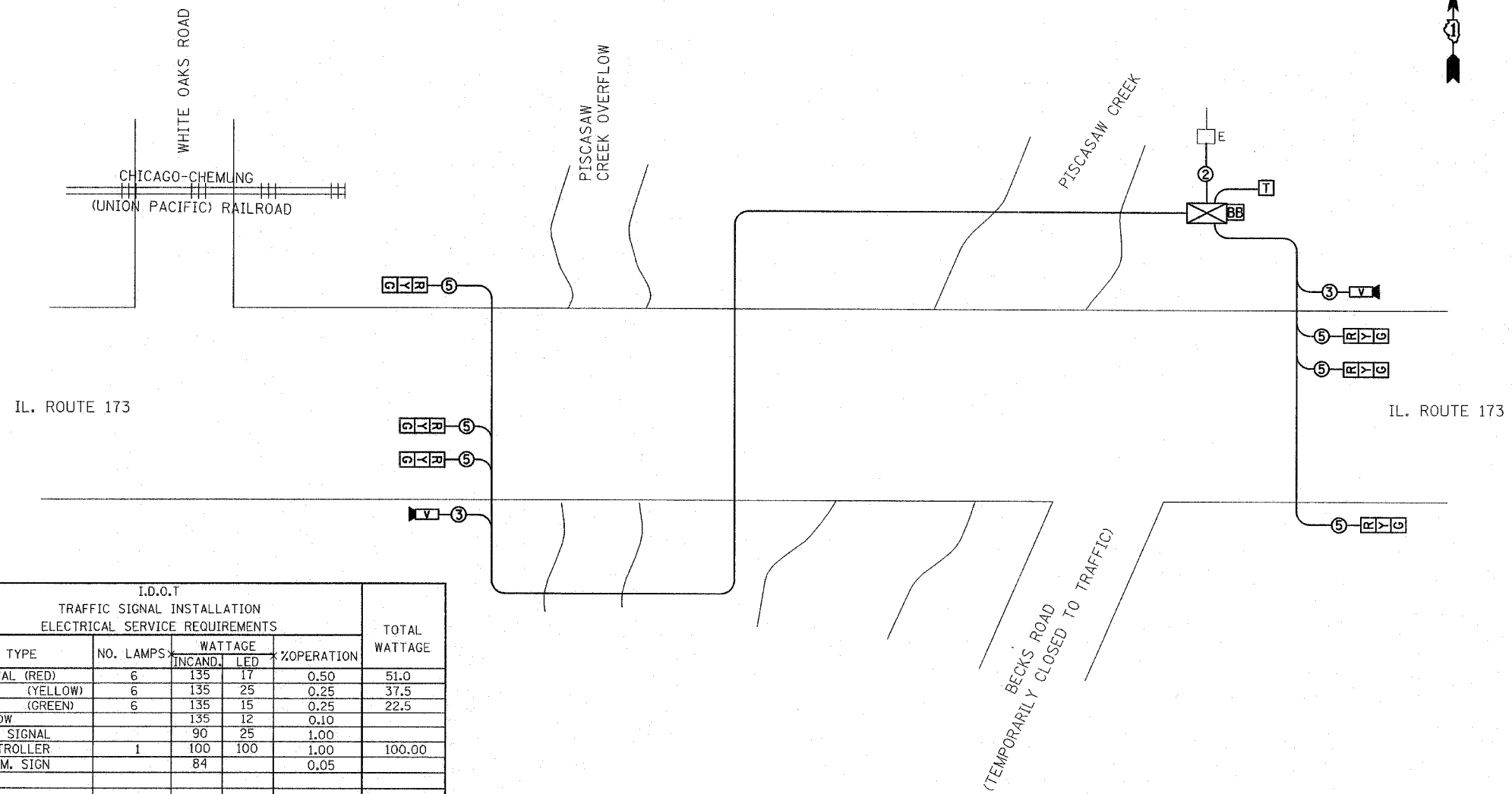
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR UNDER THIS ITEM AND SHALL BE RETURNED TO THE WOODSTOCK MAINTENANCE YARD AT HIS EXPENSE.
 3 EACH VIDEO DETECTOR SENSOR
 1 EACH CONTROLLER

TEMPORARY CABLE DIAGRAM LEGEND

- | | | | | |
|--|---|--|----|--|
| | E | | R | TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm) |
| | E | | X | TEMPORARY CONTROLLER CABINET |
| | E | | T | TEMPORARY SERVICE INSTALLATION |
| | E | | 5 | INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED. |
| | E | | V | VIDEO DETECTOR SENSOR |
| | E | | P | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | E | | T | TELEPHONE CONNECTION |
| | E | | BB | BATTERY-BACK UP |

NOTES:

1. TELEPHONE CONNECTION AND ELECTRIC SERVICE FROM ADJACENT FACILITIES TO CONTROLLER CABINET MUST BE MAINTAINED.
2. USE ROADWAY AND BRIDGE PLANS FOR SUGGESTED STAGING.
3. BECK'S ROAD TO REMAIN CLOSED DURING CONSTRUCTION FOR ANY INGRESS/EGRESS TO/FROM IL. RTE. 173.
4. THE CONTRACTOR SHALL REMOVE ALL EXISTING SPAN WIRE, TETHER WIRE, CABLES, SIGNAL HEADS AND VIDEO DETECTOR SENSORS AND SHALL PROVIDE NEW OF THE SAME FOR THE PROPOSED TEMPORARY SIGNALS.
5. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING.
6. THE PROPOSED TEMPORARY TRAFFIC SIGNAL SHALL BE ACTIVATED, TESTED OPERATIONAL AND APPROVED BY THE ENGINEER BEFORE ANY OF THE EXISTING TRAFFIC SIGNAL EQUIPMENT IS REMOVED.
7. ALL LABOR AND MATERIALS TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE BID PRICE OF TEMPORARY SIGNAL INSTALLTION.
8. REMOVAL OF TEMPORARY SIGNALS SHOULD BE DONE AS DIRECTED BY THE ENGINEER AND MUST BE DONE IN COORDINATION WITH THE REMOVAL OF TEMPORARY LIGHTING.
9. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO SELECT AN APPROPRIATE SIZE OF CONDUCTOR FOR VIDEO DETECTOR SENSORS, WHICH IS IN COMPLIANCE WITH IDOT'S MAXIMUM VOLTAGE DROP PROVISIONS.



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	6	135	17	0.50	51.0
(YELLOW)	6	135	25	0.25	37.5
(GREEN)	6	135	15	0.25	22.5
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	--
ENERGY COSTS TO BE BILLED TO ADDRESS: _____				TOTAL =	211
ENERGY SUPPLY CONTACT: LARRY WOODLE					
PHONE: (708) 235-2327					
COMPANY: COM. ED.					

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2"
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m±L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

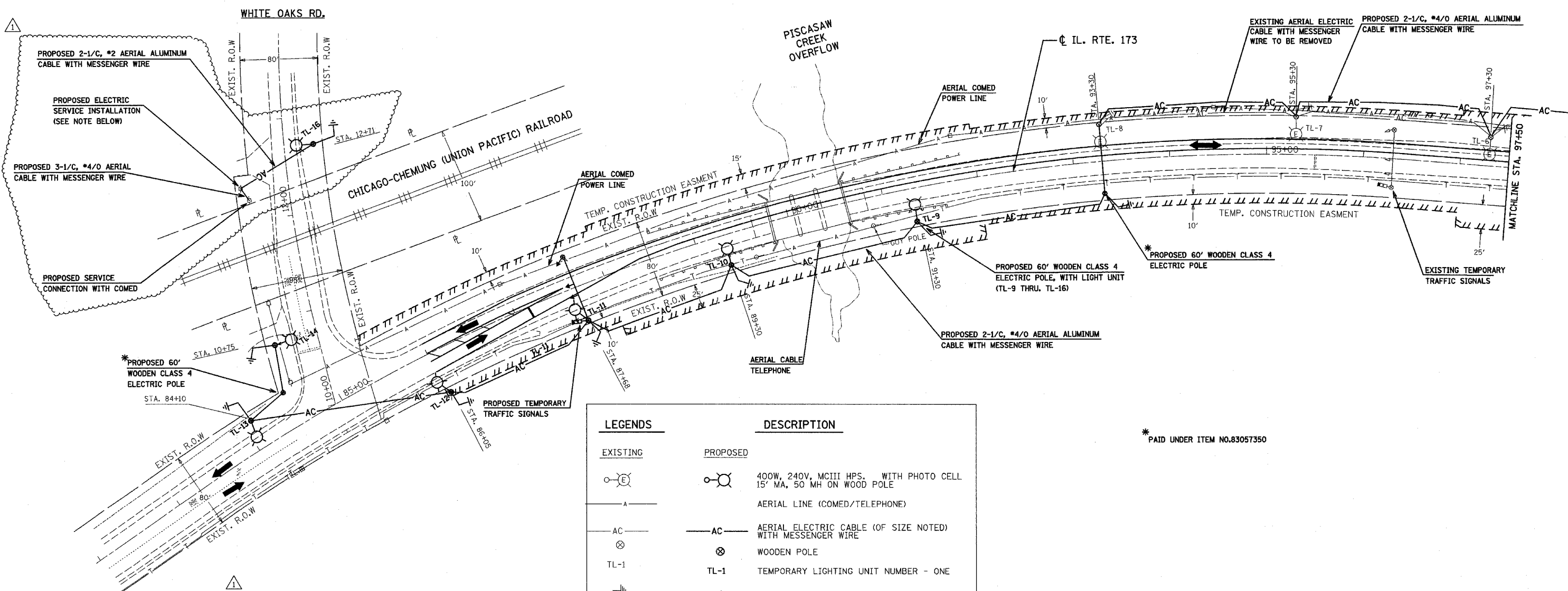
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 IL. RTE 173

SCALE: NONE
 DATE: APRIL 16, 2007

DRAWN BY: M.A.
 CHECKED BY: M.A./S.J.P.



NOTE: PROPOSED ITEM "ELECTRIC SERVICE INSTALLATION" SHALL INCLUDE ELECTRIC SERVICE DISCONNECT BOX (SEE DETAIL ON SHEET NO.41A) WITH ALL NECESSARY CABLES AND PARTS FOR ITS COMPLETE INSTALLATION AND OPERATION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THAT THE AFORMENTIONED ITEM IS COMPATIBLE WITH THE SERVICE PROVIDED BY COMED.

LEGENDS	DESCRIPTION
EXISTING	PROPOSED
	400W, 240V, MCIII HPS. WITH PHOTO CELL 15' MA, 50 MH ON WOOD POLE
	AERIAL LINE (COMED/TELEPHONE)
	AERIAL ELECTRIC CABLE (OF SIZE NOTED) WITH MESSENGER WIRE
	WOODEN POLE
	TL-1 TEMPORARY LIGHTING UNIT NUMBER - ONE
	5/8 " x 10' GROUND ROD
	COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
	TRAFFIC CONTROLLER
	ELECTRIC SERVICE INSTALATION
	COMED POWER POLE

* PAID UNDER ITEM NO.83057350

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE
ADDENDUM 1	05-01-07

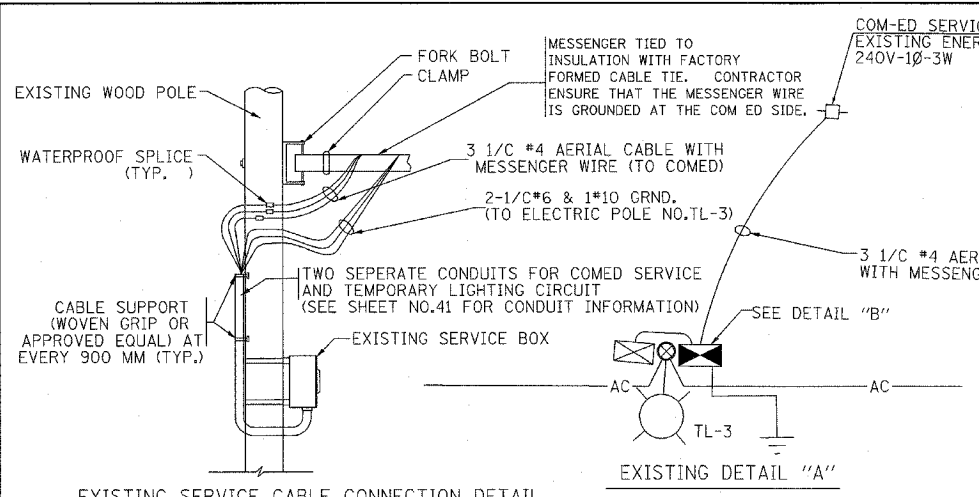
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TEMPORARY LIGHTING PLAN
 IL. RTE. 173

SCALE: 1" = 50'
 DATE: APRIL 25, 2007
 DRAWN BY: M.A.
 CHECKED BY: L.B./M.A./S.J.P.

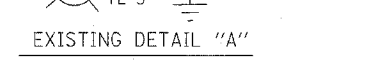
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	40
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



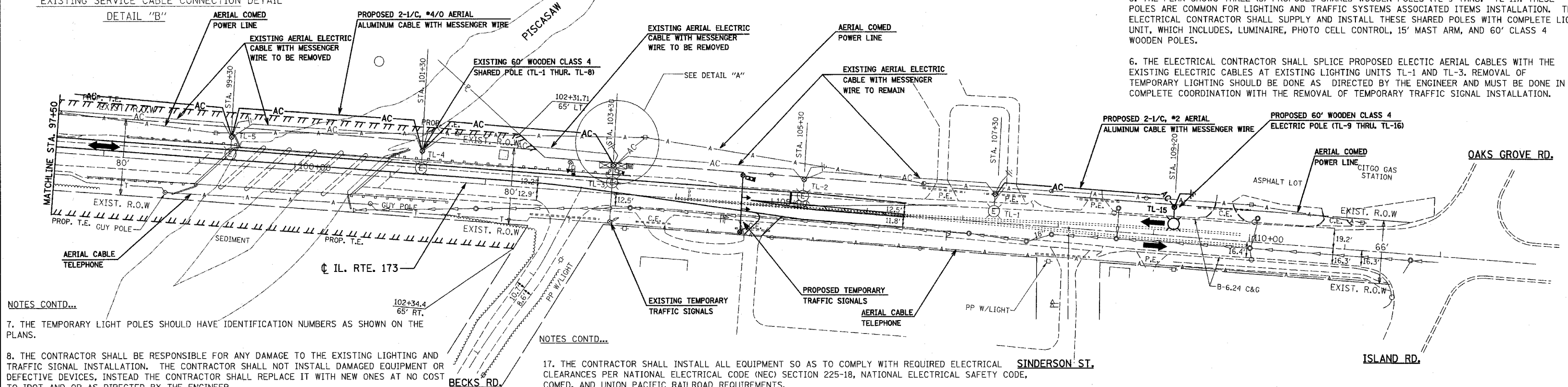
CONTRACT NO. 60B83



EXISTING SERVICE CABLE CONNECTION DETAIL
DETAIL "B"



EXISTING DETAIL "A"



NOTES:

1. THE MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH THE LATEST CODES, STANDARDS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION. ALL WORKS SHOWN ON THE PLANS AND DESCRIBED ELSEWHERE SHALL ALSO CONFORM TO THE LATEST NATIONAL ELECTRICAL CODE.
2. ALL ELECTRICAL EQUIPMENT, COMPONENTS AND DEVICES SHALL BE U/L LISTED.
3. ALL MATERIAL PARTS OF THE LIGHT POLES SHALL BE GROUNDED AND BONDED CONFORMING TO NEC ARTICLE 250.
4. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18' UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES WHEN INSTALLED BEHIND THE GUARDRAIL SHOULD HAVE AT LEAST EIGHT FOOT SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
5. THE PLAN SHOWS THREE (3) PROPOSED SHARED WOODEN POLES (TL-9 THRU. TL-11). THESE POLES ARE COMMON FOR LIGHTING AND TRAFFIC SYSTEMS ASSOCIATED ITEMS INSTALLATION. THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL THESE SHARED POLES WITH COMPLETE LIGHT UNIT, WHICH INCLUDES, LUMINAIRE, PHOTO CELL CONTROL, 15' MAST ARM, AND 60' CLASS 4 WOODEN POLES.
6. THE ELECTRICAL CONTRACTOR SHALL SPLICE PROPOSED ELECTRIC AERIAL CABLES WITH THE EXISTING ELECTRIC CABLES AT EXISTING LIGHTING UNITS TL-1 AND TL-3. REMOVAL OF TEMPORARY LIGHTING SHOULD BE DONE AS DIRECTED BY THE ENGINEER AND MUST BE DONE IN COMPLETE COORDINATION WITH THE REMOVAL OF TEMPORARY TRAFFIC SIGNAL INSTALLATION.

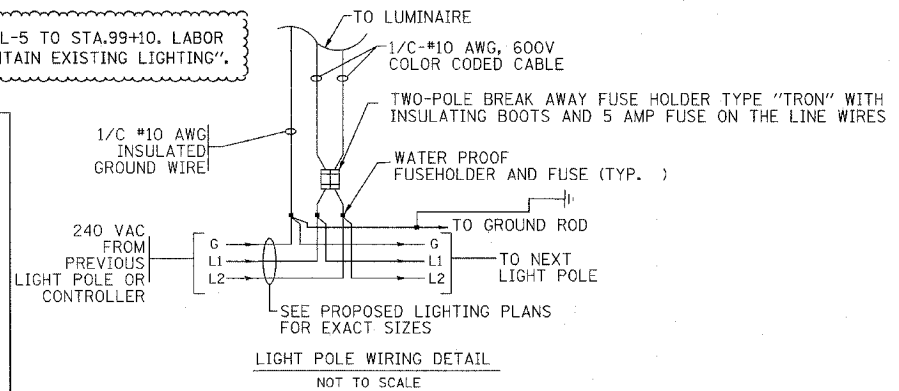
NOTES CONTD...

7. THE TEMPORARY LIGHT POLES SHOULD HAVE IDENTIFICATION NUMBERS AS SHOWN ON THE PLANS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING LIGHTING AND TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL NOT INSTALL DAMAGED EQUIPMENT OR DEFECTIVE DEVICES, INSTEAD THE CONTRACTOR SHALL REPLACE IT WITH NEW ONES AT NO COST TO IDOT, AND OR AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL SPLICE MESSENGER CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT. THE INSTALLATION AND REQUIRED MATERIAL SHALL BE PART OF THE LIGHT POLE PAY ITEM.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT J. U. L. I. E. PRIOR TO THE START OF CONSTRUCTION AND COORDINATE LOCATION OF EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL LOCATE, FLAG AND PROTECT ALL UNDERGROUND UTILITIES PRIOR TO AND DURING CONSTRUCTION. ANY DAMAGED TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT NO COST TO IDOT.
11. THE MATERIAL QUANTITIES AS SHOWN IN THE ELECTRICAL SUMMARY OF QUANTITIES ARE APPROXIMATIONS ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL QUANTITIES PRIOR TO ORDERING MATERIALS.
12. THE CONTRACTOR SHALL FOLLOW THE CONSTRUCTION AND STAGING AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. FURTHERMORE, THE CONTRACTOR SHALL COORDINATE ALL SUCH ACTIVITIES BEING DONE IN THE SAME AREA BY THE UTILITY COMPANIES OR OTHER CONTRACTORS AND SETUP COORDINATION MEETINGS IF NECESSARY WITHOUT ANY ADDITIONAL FINANCIAL COMPENSATION.
13. THE PROPOSED TEMPORARY LIGHTING SHALL BE COMPLETED, TESTED, OPERATIONAL, AND VERIFIED BY IDOT BEFORE COMMENCEMENT OF ANY STAGE I TRAFFIC.
14. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE ENGINEER.
15. ALL EXISTING CABLES FROM CONTROLLER TO THE WEST UP TO POLE NO. TL-8 (BETWEEN ALL POLES FROM TL-3 THRU. TL-8) SHALL BE REMOVED AND REPLACED WITH PROPOSED " AERIAL CABLE 2-1/2, #4/0 ALUMINUM WITH MESSENGER WIRE".
16. LIGHTING SHALL BE KEPT OPERATIONAL AND ACTIVE FROM ONE HOUR BEFORE SUNSET TO ONE HOUR AFTER SUNRISE.

NOTES CONTD...

17. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT SO AS TO COMPLY WITH REQUIRED ELECTRICAL CLEARANCES PER NATIONAL ELECTRICAL CODE (NEC) SECTION 225-18, NATIONAL ELECTRICAL SAFETY CODE, COMED, AND UNION PACIFIC RAILROAD REQUIREMENTS.
18. DURING STAGE II CONSTRUCTION THE CONTRACTOR SHALL RELOCATE POLE NO. TL-5 TO STA. 99+10. LABOR AND MATERIAL FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR "MAINTAIN EXISTING LIGHTING".

LEGENDS	DESCRIPTION
EXISTING	PROPOSED



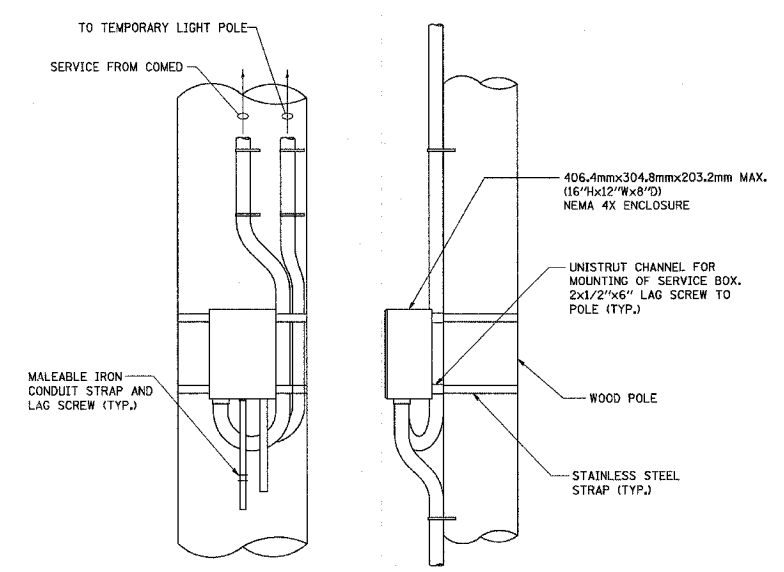
REVISIONS	
NAME	DATE
ADDENDUM 1	05-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY LIGHTING PLAN
IL. RTE. 173
SCALE: 1" = 50'
DATE: APRIL 25, 2007
DRAWN BY: M.A.
CHECKED BY: B.M.A./S.J.P.

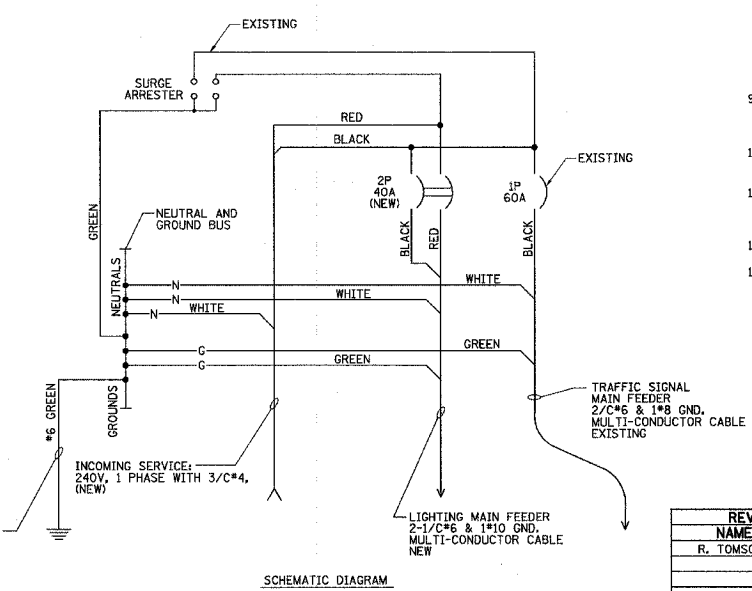
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

NOTES:

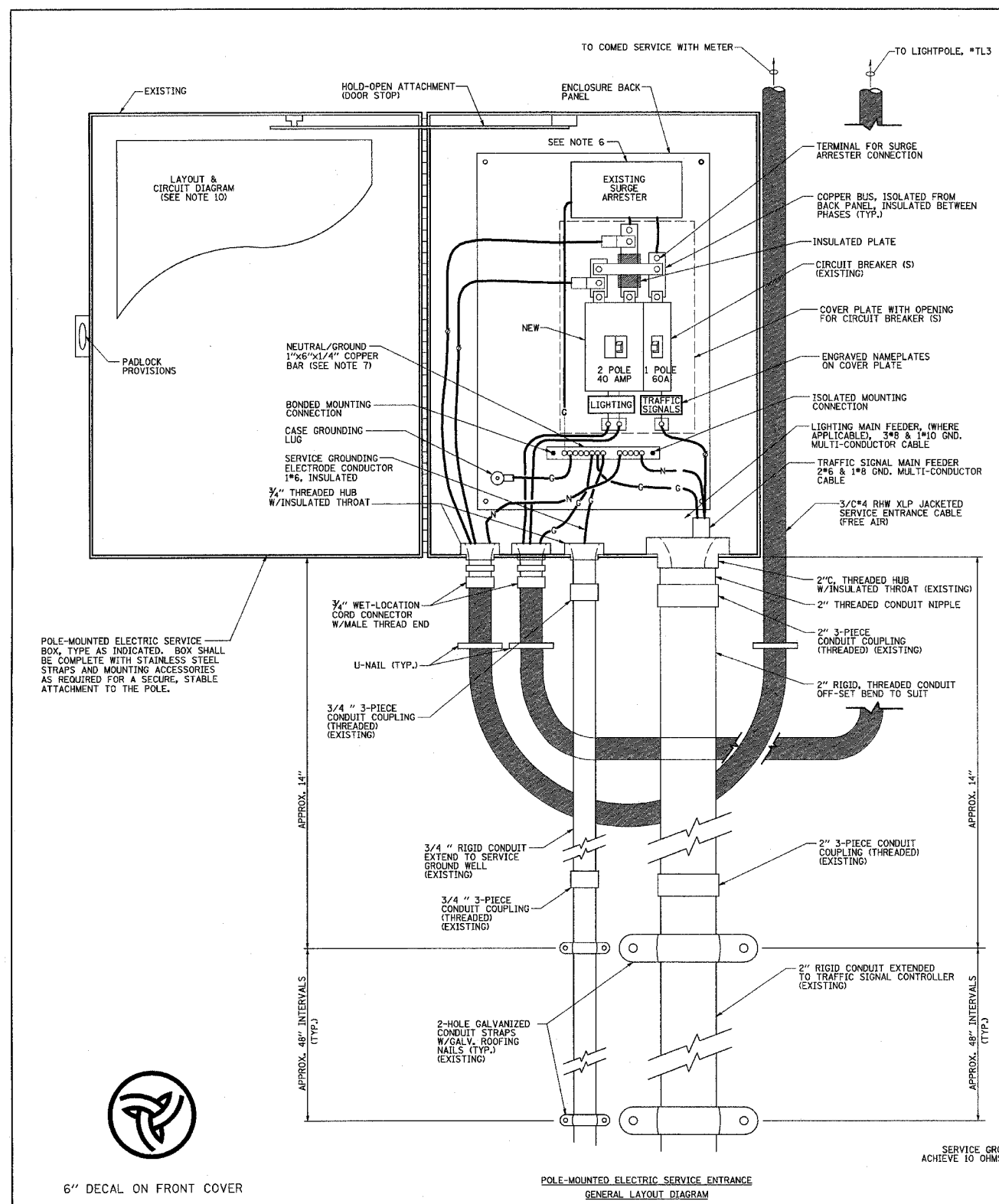
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- THE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL DEPICTS THE BASIC CONSTRUCTION OF THE EQUIPMENT. SLIGHT MODIFICATIONS APPLY FOR DIFFERING SERVICES AND APPLICATIONS AS FOLLOWS:
 - TYPE A FULLY EQUIPPED FOR 240/120V, 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER
 - TYPE A1 FULLY EQUIPPED FOR 240/120V, 3W SERVICE, BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER
 - TYPE B EQUIPPED FOR 120V, SERVICE, COMPLETE WITH 1P, 60A, TRAFFIC SIGNALS MAIN BREAKER
 - TYPE B1 EQUIPPED FOR 120V, SERVICE, COMPLETE WITH 1P, 40A, TRAFFIC SURVEILLANCE MAIN BREAKER
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12" W X 16" H X 8" D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H12085SLP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230.065XST OR APPROVED EQUAL.
- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- LUGS AND CONNECTORS SHALL BE RATED FOR 75° C CONDUCTOR.
- THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



DISCONNECT MOUNTING DETAIL
N.T.S.



SCHEMATIC DIAGRAM



POLE-MOUNTED ELECTRIC SERVICE ENTRANCE
GENERAL LAYOUT DIAGRAM

CIRCUIT NO.	CIRCUIT BREAKER / POLES	UTILITY DESCRIPTION	LOAD ₁ (WATTS)	CURRENT ₂ (AMPERES)
TO WEST OF CONTROLLER	40A / 2P	(12) 400W HPS POLE NOS.TL-3 TO TL-14	5760	25.26
TO EAST OF CONTROLLER		(3) 400W HPS POLE NOS.TL-1, TL-2, & T15	1440	6.32
TOTAL			7200	31.58

TOTAL POWER = 7200WATTS
 TOTAL CURRENT = 31.58AMPERES
 NOTE:
 1. LOAD INCLUDES 20% BALLAST LOSSES FOR LUMINAIRES
 2. CURRENT CALCULATIONS INCLUDE A POWER FACTOR OF 0.95.

EXISTING SERVICE INSTALLATION
FOR INFORMATION ONLY

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60605
 1-312-372-2023 FAX: 1-312-372-5274

REVISIONS	
NAME	DATE
R. TOMSONS	8-13-04

ILLINOIS DEPARTMENT OF TRANSPORTATION
COMBINATION LIGHTING & TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX DETAIL
 SCALE: NONE
 DATE: ##DATE##
 DRAWN BY: []
 CHECKED BY: []

REVISIONS	
NAME	DATE

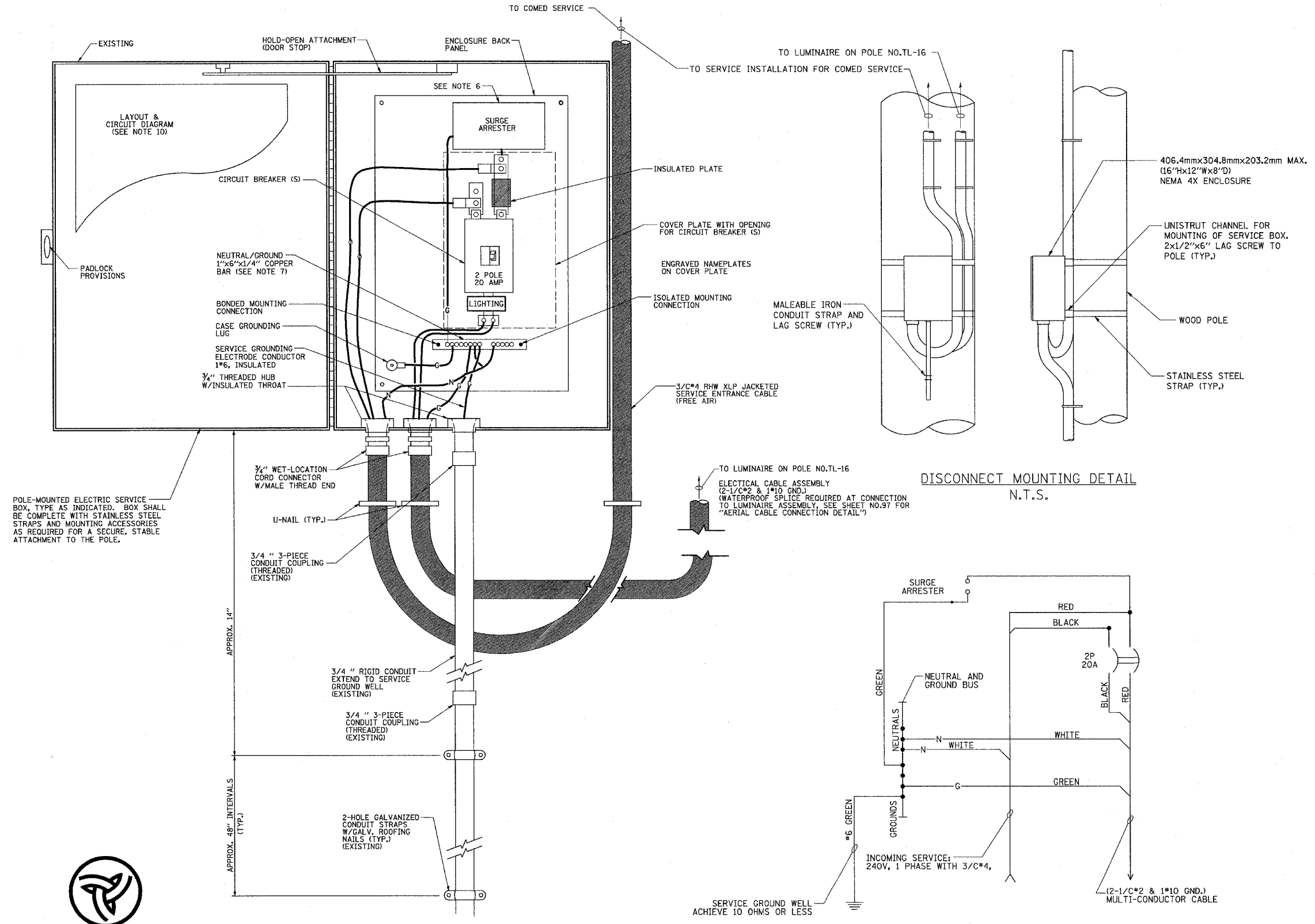
ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY LIGHTING PLAN
 IL. RTE. 173
 SCALE: 1" = 50'
 DATE: APRIL 16, 2007
 DRAWN BY: M.A
 CHECKED BY: L.B./M.A./S.J.P.



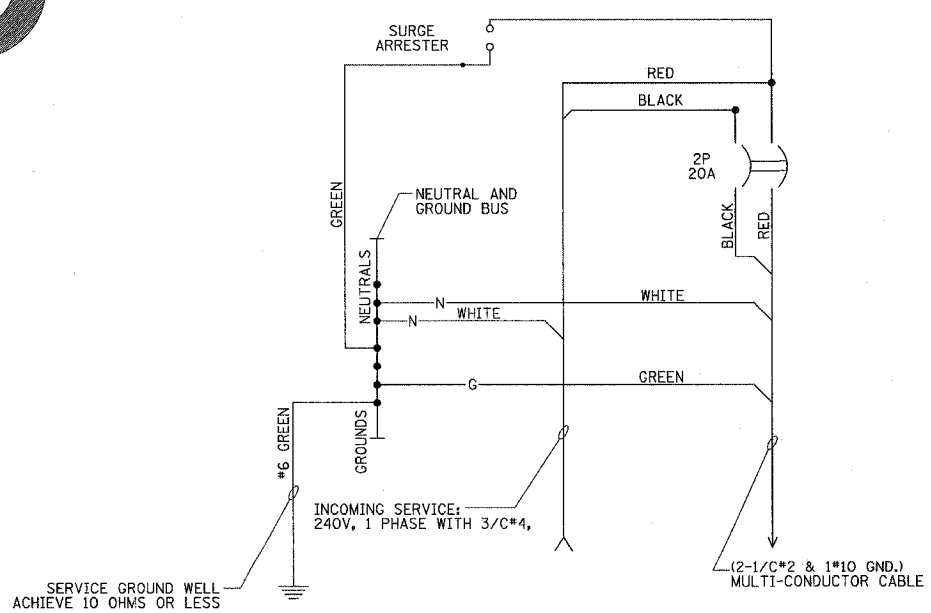
6" DECAL ON FRONT COVER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	41A
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



DISCONNECT MOUNTING DETAIL
N.T.S.



SCHEMATIC DIAGRAM

- NOTES:
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 - CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
 - THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
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 - LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
 - THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.
 - SERVICE CONDUCTORS SHALL BE TERMINATED ACCORDING TO N.E.C. CODE AND GROUNDING AND NEUTRAL CONDUCTORS SHALL BE BONDED THROUGH GROUNDED ELECTRODE CONDUCTOR. SERVICE SHOULD BE RATED ACCORDING TO THE LATEST N.E.C. CODE.
 - PROPOSED ITEM "ELECTRIC SERVICE INSTALLATION" (AS SHOWN ON SHEET 39) SHALL INCLUDE ELECTRIC SERVICE DISCONNECT BOX WITH ALL NECESSARY CABLES AND PARTS FOR ITS COMPLETE INSTALLATION AND OPERATION.

POLE-MOUNTED ELECTRIC SERVICE BOX, TYPE AS INDICATED. BOX SHALL BE COMPLETE WITH STAINLESS STEEL STRAPS AND MOUNTING ACCESSORIES AS REQUIRED FOR A SECURE, STABLE ATTACHMENT TO THE POLE.



6" DECAL ON FRONT COVER

ELECTRIC SERVICE DISCONNECT BOX DETAIL
GENERAL LAYOUT DIAGRAM

REVISIONS	
NAME	DATE
ADDENDUM 1	05-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ELECTRIC SERVICE DISCONNECT BOX DETAIL

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
1-312-372-2023 FAX: 1-312-372-5274

SCALE: NONE
DATE: 05-02-07
DRAWN BY: M.A.
CHECKED BY: I.B.

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	42
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

CONTRACT NO. 60B83

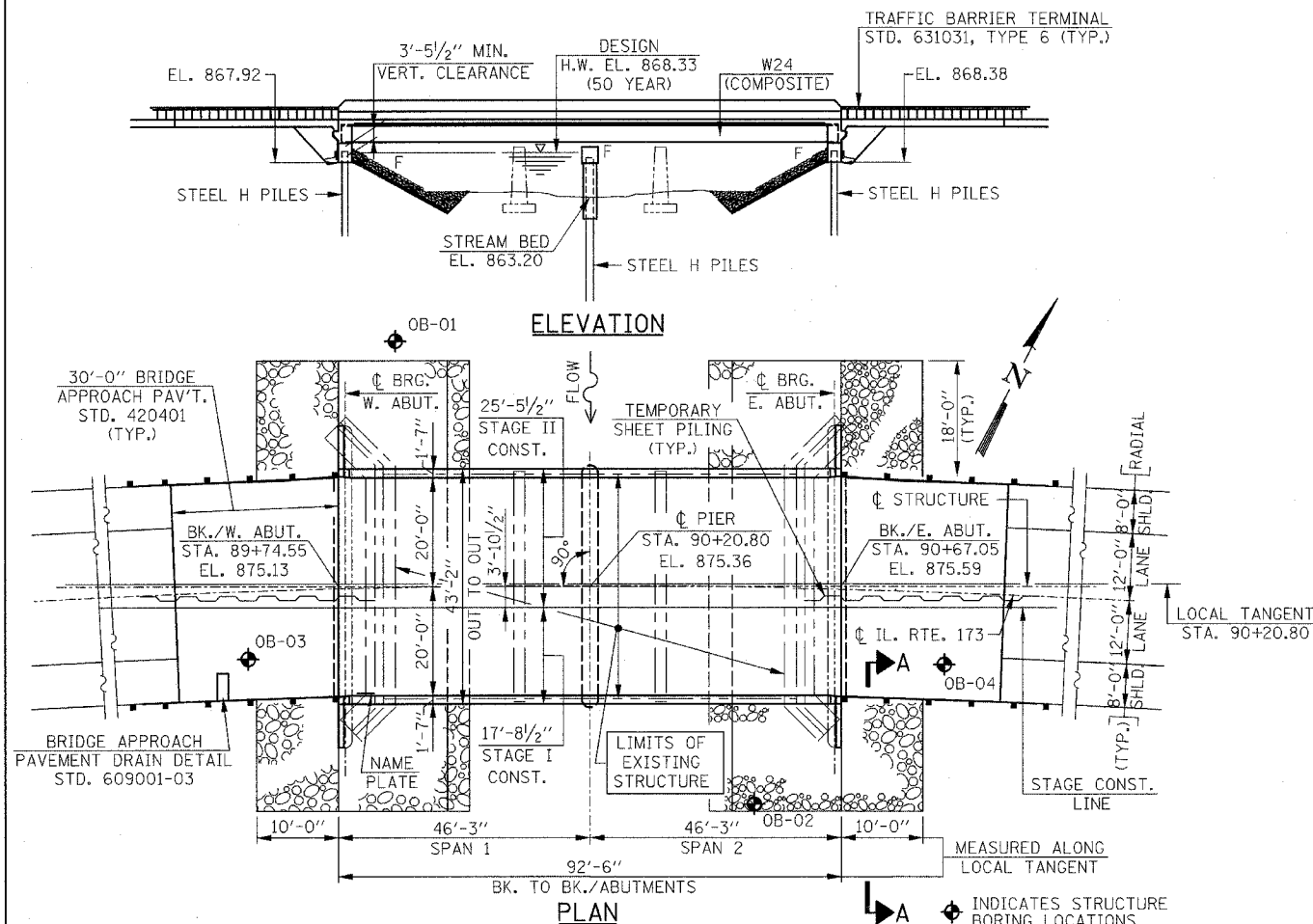
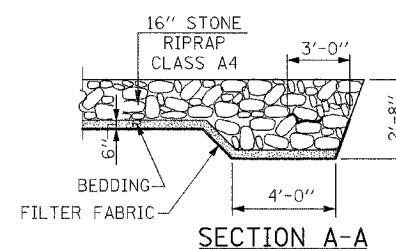
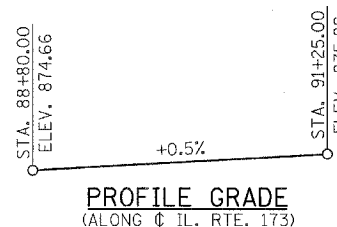
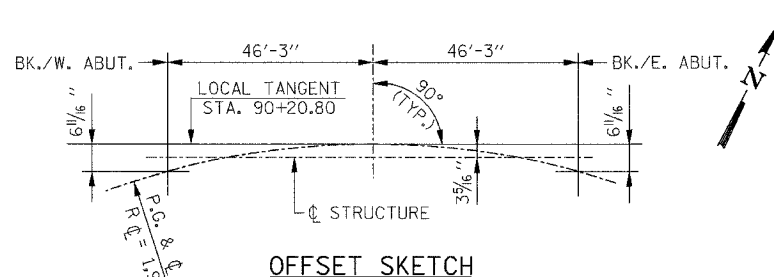
BENCH MARK "A"

X-CUT FOUND ON N.E. WINGWALL OF THE BRIDGE OVER THE OVERFLOW OF PISCASAW CREEK, EXIST. STR. NO. 056-0027, EL. 873.72

EXISTING STRUCTURE: S.N. 056-0027, WAS ORIGINALLY BUILT IN 1929 AS A 3-SPAN CONCRETE SLAB BRIDGE 78' LONG WITH AN OUT TO OUT WIDTH OF 24'-2" SUPPORTED ON CLOSED ABUTMENTS AND SOLID PIERS. SUBSEQUENTLY, IN 1971 THE BRIDGE WAS WIDENED TO THE CURRENT 41'-3" WIDTH AND THE SUPERSTRUCTURE WAS REPLACED WITH PRECAST (NOT PRESTRESSED) REINFORCED CONCRETE CHANNEL BEAMS. IN 1992, THE ASPHALT WEARING SURFACE WAS REPLACED WITH A FOUR INCH REINFORCED CONCRETE WEARING SURFACE. IN 2005, 25 OF THE 33 CHANNEL BEAMS THAT MADE UP THIS STRUCTURE WERE REPLACED.

THE EXISTING STRUCTURE IS TO BE REMOVED AND REPLACED UTILIZING STAGE CONSTRUCTION.

SALVAGE: NONE



DESIGN SCOUR ELEVATION TABLE

LOCATION	W. ABUT.	PIER 1	E. ABUT.
DESIGN SCOUR ELEVATIONS	868.29	845.20	868.74

WATERWAY INFORMATION TABLE

DRAINAGE AREA = 57.22 SQ. MI.		EXIST. LOW GRADE ELEV. = 872.56		MAX. RECORDED H.W.E. = 871.53						
		PROP. LOW GRADE ELEV. = 874.4								
FLOOD	FREQ. (YEAR)	DISCHARGE (CFS) EXIST.	DISCHARGE (CFS) PROP.	WATERWAY OPENING (SQ. FT.) EXIST.	WATERWAY OPENING (SQ. FT.) PROP.	NATURAL H.W.E.	HEAD (FT.) EXIST.	HEAD (FT.) PROP.	HEADWATER ELEV. EXIST.	HEADWATER ELEV. PROP.
DESIGN	10	733.2	765.82	242	264	867.73	0.78	0.77	868.51	868.5
BASE	100	1,057.2	1,080.36	287	314	868.33	1.07	1.05	869.40	869.38
OVERTOPPING	-	-	-	-	-	-	-	-	-	-
MAX. CALC.	500	1,355.7	1,509.36	339	375	869.03	1.52	1.38	870.55	870.41

COMMENTS: ALL ELEVATIONS ARE IN HIGHWAY DATUM
 MAX. RECORDED HWE ESTIMATED FROM HYDROLOGIC INVESTIGATION ATLAS, HA-498
 INVERT ELEVATIONS - UPSTREAM 863.3, DOWNSTREAM 863.1
 TABLE IS PREPARED FOR ANALYSIS WHERE THE RAILROAD BRIDGE IS NOT INCLUDED IN THE HEC-RAS MODEL

CURVE DATA

P.I. STA. = 90+13.60
 Δ = 39°17'04" (RT.)
 D = 2°58'42"
 R = 1,923.83'
 T = 686.64'
 L = 1,319.06'
 E = 118.86'
 e = 3.45%
 T.R. = 44'
 S.E. RUN = 119'
 P.C. STA. = 83+26.96
 P.T. STA. = 96+46.02

STATION 90+20.80
 BUILT 2008 BY
 STATE OF ILLINOIS
 F.A.P. RT. 303 SEC. 131B(1&2)BR
 LOADING HS20
 STRUCTURE NO. 056-0089

NAME PLATE
 SEE STD. 515001

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY

Rajesh N. Shah
 ENGINEER OF BRIDGES AND STRUCTURES



Bhadrachar N. Shah
 BHADRACHAR N. SHAH 04/13/2007
 LICENSED STRUCTURAL ENGINEER
 STATE OF ILLINOIS LIC. NO. 081-004476
 EXPIRES: 11-30-08

LOADING HS20-44
 ALLOW 50#/SQ. FT. FOR FUTURE WEARING SURFACE

DESIGN SPECIFICATIONS

AASHTO 17TH EDITION - 2002

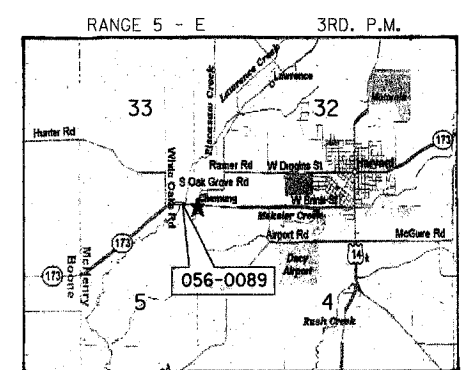
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 PSI
 fy = 60,000 PSI (REINFORCEMENT)
 fy = 50,000 PSI (M270 GR. 50 STRUCTURAL STEEL)

SEISMIC DATA

SEISMIC PERFORMANCE CATEGORY (SPC) = A
 BEDROCK ACCELERATION COEFFICIENT (A) = 0.033g
 SITE COEFFICIENT (S) = 1.0



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 IL. RTE. 173
 OVER

PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089

SCALE: DATE: APRIL 13, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	43
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

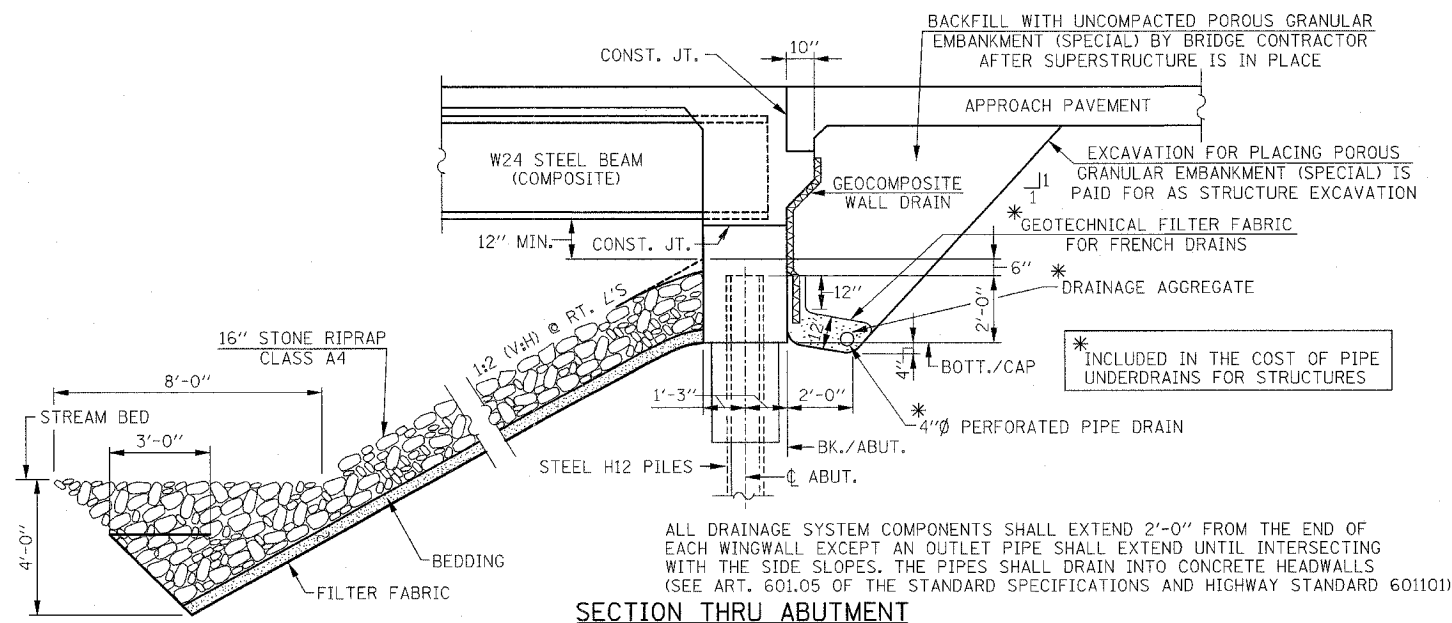
CONTRACT NO. 60B83

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
POROUS GRANULAR EMBANKMENT (SPECIAL)	CU. YD.	-	107	107
STONE RIPRAP, CLASS A4	SQ. YD.	-	490	490
FILTER FABRIC	SQ. YD.	-	402	402
STRUCTURE EXCAVATION	CU. YD.	-	223	223
REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	-	-	1
CONCRETE STRUCTURES	CU. YD.	-	83.1	83.1
CONCRETE SUPERSTRUCTURES	CU. YD.	144	-	144
BRIDGE DECK GROOVING	SQ. YD.	391	-	391
PROTECTIVE COAT	SQ. YD.	486	-	486
REINFORCEMENT BARS, EPOXY COATED	LB.	28,080	11,820	39,900
FURNISHING STEEL PILES HP 12x53	FOOT	-	1,026	1,026
DRIVING PILES HP 12x53	FOOT	-	1,026	1,026
TEST PILES, STEEL HP 12x53	EACH	-	3	3
NAME PLATES	EACH	1	-	1
PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	-	158	158
GEOCOMPOSITE WALL DRAIN	SQ. YD.	-	56	56
CONCRETE ENCASEMENT	CU. YD.	-	18.9	18.9
FURNISHING AND ERECTING STRUCTURE STEEL	L.S.	0.35	-	0.35
STUD SHEAR CONNECTORS	EACH	2,814	-	2,814
TEMPORARY SHEET PILING	SQ. FT.	-	743	743
BAR SPLICERS	EACH	341	48	389
PILE SHOES	EACH	-	21	21
ANCHOR BOLTS 1	EACH	42	-	42
UNDERWATER STRUCTURE EXCAVATION PROTECTION, LOCATION 2	EACH	-	1	1

GENERAL NOTES:

1. CALCULATED WEIGHT OF STRUCTURAL STEEL = 58,000 LBS. (M270, GRADE 50) - 6,000 LBS. (M270, GRADE 36)
2. FASTENERS SHALL BE AASHTO M164 TYPE I, MECHANICALLY GALVANIZED BOLTS, BOLTS 3/4 IN. Ø, HOLES 1/8 IN. Ø, UNLESS OTHERWISE NOTED.
3. NO FIELD WELDING IS PERMITTED EXCEPT AS SPECIFIED IN THE CONTRACT DOCUMENTS.
4. BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 IN. (0.01 FT.). ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARINGS.
5. LOAD CARRYING COMPONENTS DESIGNATED "NTR" SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS, ZONE 2.
6. 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 INTERIOR STEEL SURFACES SHALL BE GRAY, MUNSELL NO. 5B 7/1. THE COLOR OF THE FINAL FINISH COAT FOR THE EXTERIOR AND BOTTOM FLANGE OF THE FASCIA BEAMS SHALL BE REDDISH BROWN MUNSELL NO. 2.5YR 3/4. SEE SPECIAL PROVISION FOR "CLEANING AND PAINTING NEW METAL STRUCTURES".
7. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR. 60 (IL MODIFIED) SEE SPECIAL PROVISIONS.
8. REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
9. LAYOUT OF SLOPE PROTECTION MAY BE VARIED TO SUIT GROUND CONDITIONS IN THE FIELD AS DIRECTED BY THE ENGINEER.
10. FOR PAVEMENT REMOVAL AND CHANNEL EXCAVATION BETWEEN EXISTING AND NEW ABUTMENTS, SEE ROADWAY PLANS.
11. FOR CLEANING OUT AND RESHAPING CHANNEL, SEE ROADWAY PLANS. REMOVAL OF EXISTING DEBRIS IN THE CHANNEL IS INCLUDED WITH PAY ITEM FOR "CHANNEL EXCAVATION".
12. 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.



SECTION THRU ABUTMENT

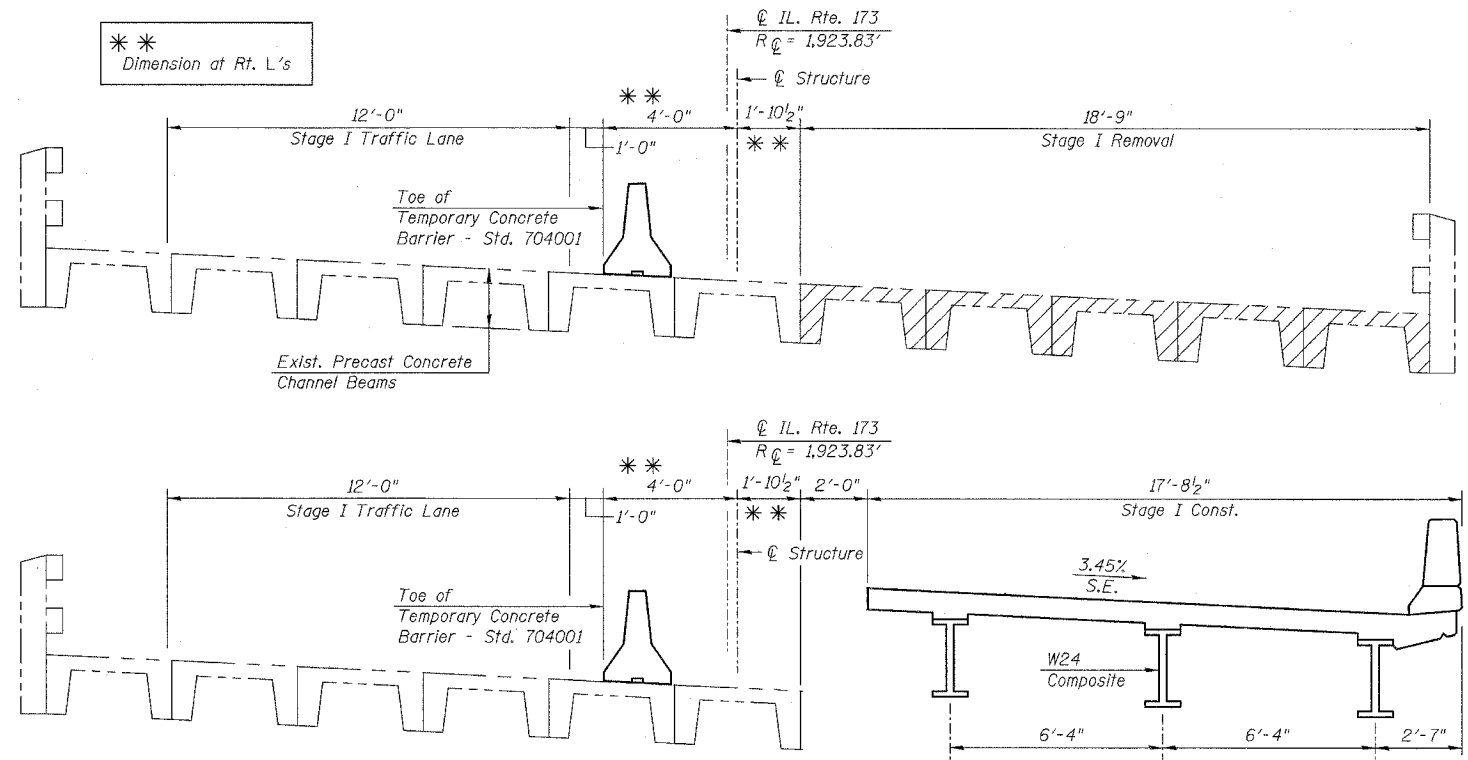
ALL DRAINAGE SYSTEM COMPONENTS SHALL EXTEND 2'-0" FROM THE END OF EACH WINGWALL EXCEPT AN OUTLET PIPE SHALL EXTEND UNTIL INTERSECTING WITH THE SIDE SLOPES. THE PIPES SHALL DRAIN INTO CONCRETE HEADWALLS (SEE ART. 601.05 OF THE STANDARD SPECIFICATIONS AND HIGHWAY STANDARD 601101)

REVISIONS	
NAME	DATE

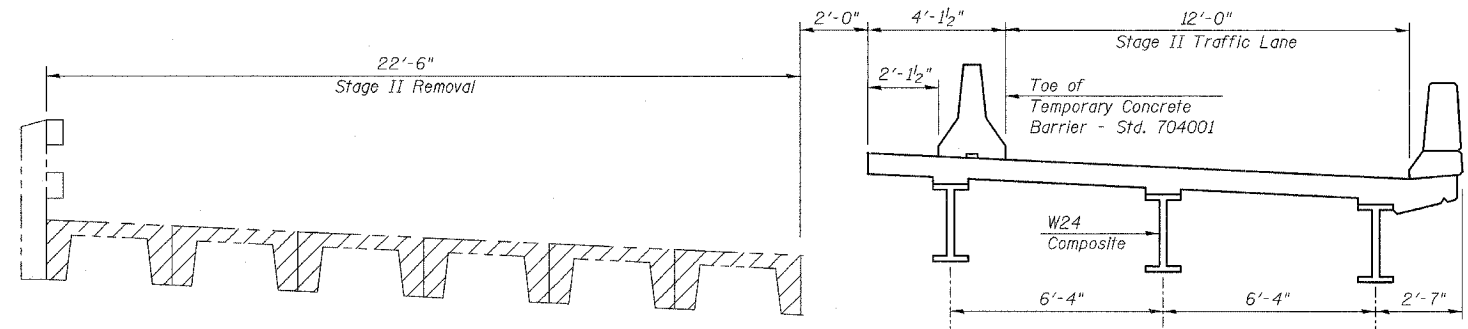
ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL NOTES & TOTAL BILL OF MATERIAL
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
 CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	44
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

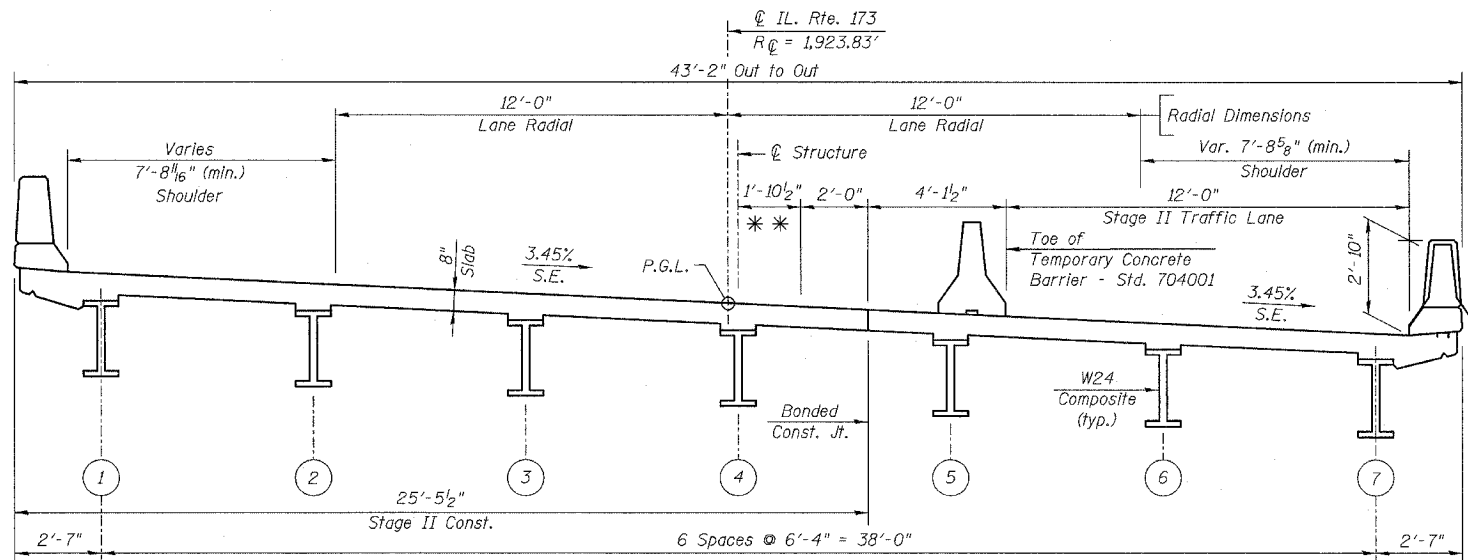
CONTRACT NO. 60B83



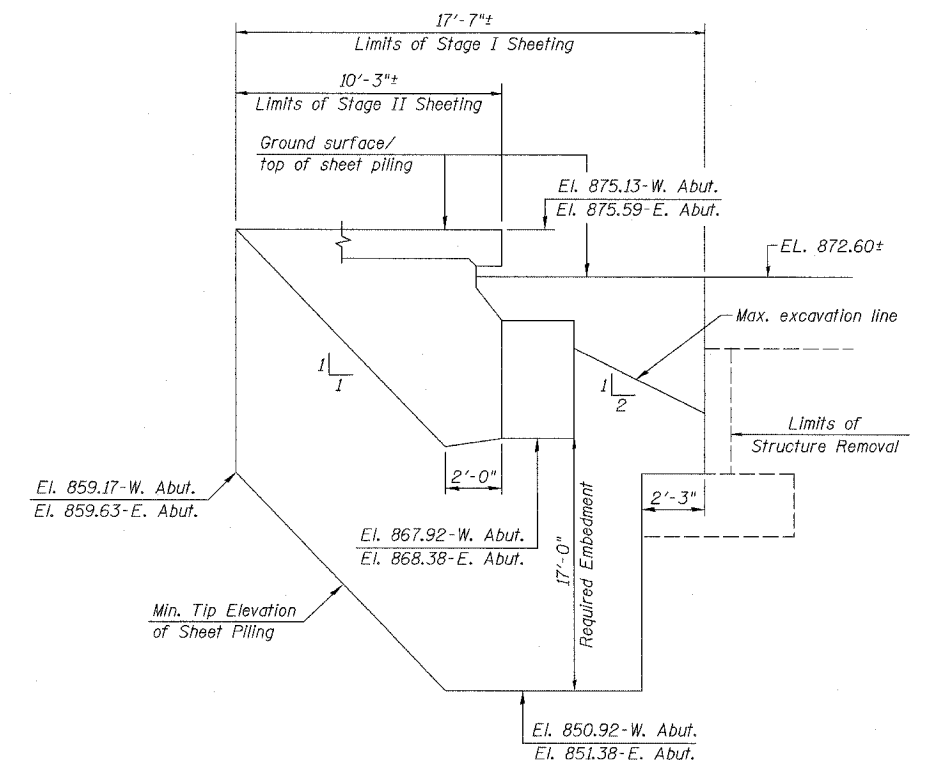
STAGE I CONSTRUCTION
(LOOKING EAST)



STAGE II REMOVAL
(LOOKING EAST)



CROSS SECTION
(LOOKING EAST)



Sheet Piling shall be Anchored to the existing Abutment
Minimum Embedment Depth = 17 ft.
Minimum Section Modulus of Sheet Piling = 14.3 in³/ft.

TEMPORARY SHEET PILING AT ABUTMENTS

Notes:
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.

Dimension at Rt. L's

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING & TEMPORARY SHEET PILING

IL. RTE. 173 OVER

PISCASAW CREEK OVERFLOW

F.A.P. RTE. 303 SECTION: 131B(1&2)BR

McHENRY COUNTY STATION 90+20.80

STRUCTURE NO. 056-0089

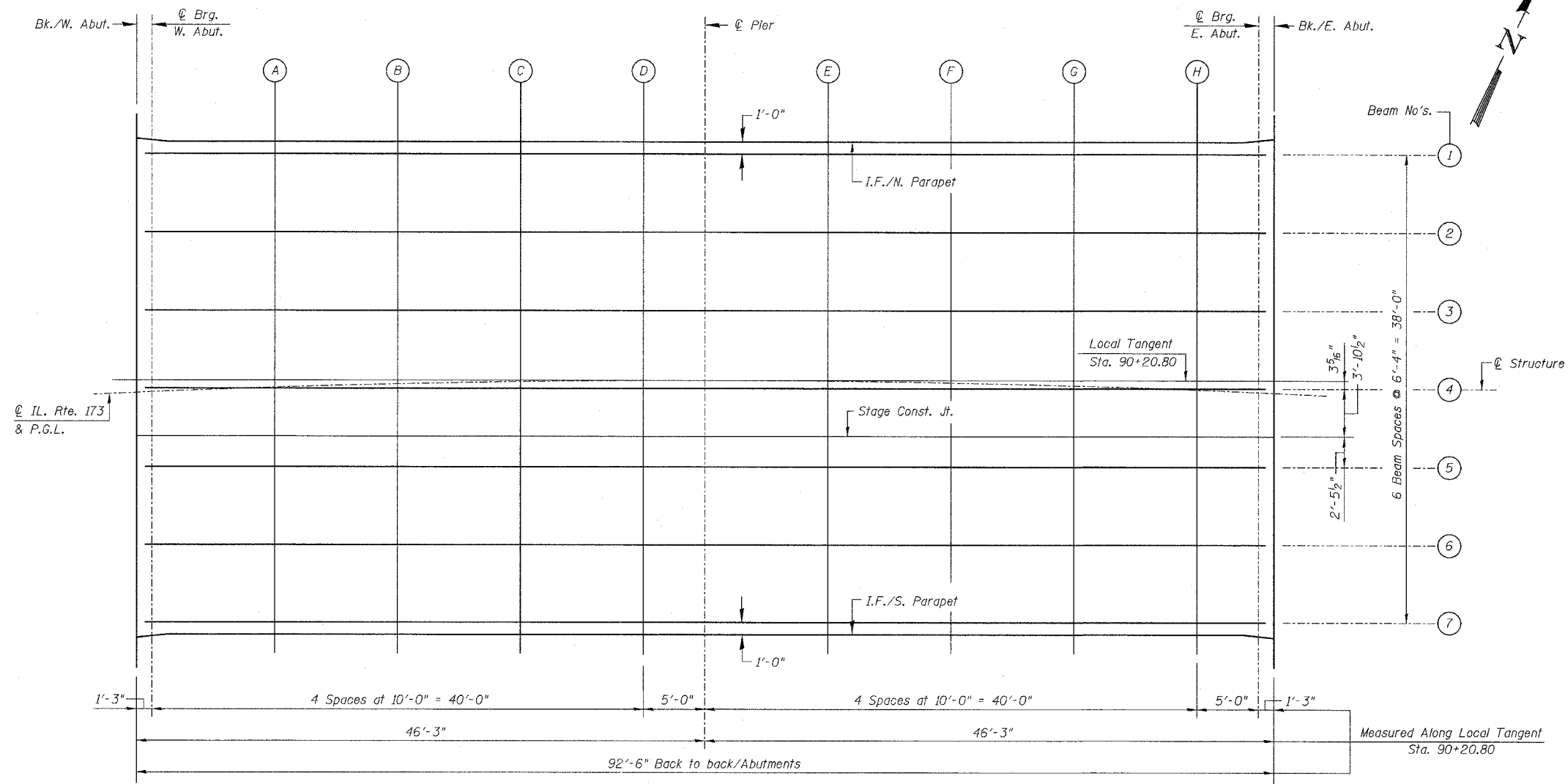
SCALE: DATE: APRIL 13, 2007

DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

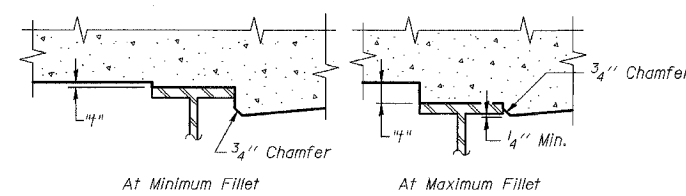
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	45
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

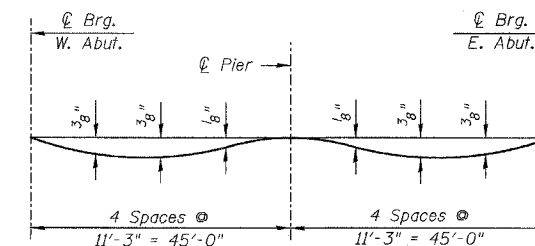


PLAN



To determine "f": 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 the dead load deflection" shown on this sheet, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS



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 sheets S0-05 & S0-06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK ELEVATIONS-I
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

SCALE: DATE: APRIL 13, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

CONTRACT NO. 60B83

INSIDE FACE/NORTH PARAPET

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+75.03	-20.27	875.83	875.83
CL BRG. WEST ABUT.	89+76.26	-20.24	875.84	875.84
A	89+86.16	-20.04	875.88	875.90
B	89+96.06	-19.88	875.92	875.96
C	90+05.95	-19.78	875.97	875.99
D	90+15.85	-19.73	876.02	876.02
CL BRG. PIER	90+20.80	-19.72	876.04	876.04
E	90+30.70	-19.75	876.09	876.10
F	90+40.60	-19.83	876.14	876.17
G	90+50.49	-19.96	876.20	876.23
H	90+60.39	-20.14	876.25	876.27
CL BRG. EAST ABUT.	90+65.34	-20.24	876.28	876.28
BACK OF EAST ABUT.	90+66.57	-20.27	876.29	876.29

BEAM 1

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+75.00	-19.27	875.80	875.80
CL BRG. WEST ABUT.	89+76.24	-19.25	875.80	875.80
A	89+86.14	-19.04	875.85	875.87
B	89+96.04	-18.88	875.89	875.92
C	90+05.94	-18.78	875.94	875.96
D	90+15.85	-18.73	875.98	875.99
CL BRG. PIER	90+20.80	-18.72	876.01	876.01
E	90+30.70	-18.75	876.06	876.07
F	90+40.61	-18.83	876.11	876.14
G	90+50.51	-18.96	876.16	876.19
H	90+60.41	-19.14	876.22	876.23
CL BRG. EAST ABUT.	90+65.36	-19.25	876.25	876.25
BACK OF EAST ABUT.	90+66.60	-19.27	876.25	876.25

BEAM 2

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.85	-12.94	875.58	875.58
CL BRG. WEST ABUT.	89+76.10	-12.91	875.58	875.58
A	89+86.03	-12.71	875.63	875.65
B	89+95.96	-12.55	875.67	875.70
C	90+05.90	-12.45	875.72	875.74
D	90+15.83	-12.40	875.76	875.77
CL BRG. PIER	90+20.80	-12.39	875.79	875.79
E	90+30.74	-12.42	875.84	875.85
F	90+40.67	-12.49	875.89	875.92
G	90+50.61	-12.62	875.95	875.98
H	90+60.54	-12.80	876.00	876.01
CL BRG. EAST ABUT.	90+65.50	-12.91	876.03	876.03
BACK OF EAST ABUT.	90+66.75	-12.94	876.04	876.04

BEAM 3

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.70	-6.61	875.36	875.36
CL BRG. WEST ABUT.	89+75.95	-6.58	875.37	875.37
A	89+85.91	-6.37	875.41	875.43
B	89+95.88	-6.22	875.45	875.48
C	90+05.85	-6.12	875.50	875.52
D	90+15.82	-6.06	875.55	875.55
CL BRG. PIER	90+20.80	-6.06	875.57	875.57
E	90+30.77	-6.08	875.62	875.63
F	90+40.74	-6.16	875.67	875.70
G	90+50.70	-6.29	875.73	875.76
H	90+60.67	-6.47	875.78	875.80
CL BRG. EAST ABUT.	90+65.65	-6.58	875.81	875.81
BACK OF EAST ABUT.	90+66.90	-6.61	875.82	875.82

P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.55	0.00	875.13	875.13
CL BRG. WEST ABUT.	89+75.80	0.00	875.14	875.14
A	89+85.80	0.00	875.19	875.21
B	89+95.80	0.00	875.24	875.27
C	90+05.80	0.00	875.29	875.31
D	90+15.80	0.00	875.34	875.34
CL BRG. PIER	90+20.80	0.00	875.36	875.36
E	90+30.80	0.00	875.41	875.42
F	90+40.80	0.00	875.46	875.49
G	90+50.80	0.00	875.51	875.54
H	90+60.80	0.00	875.56	875.57
CL BRG. EAST ABUT.	90+65.80	0.00	875.59	875.59
BACK OF EAST ABUT.	90+67.05	0.00	875.59	875.59

BEAM 4 & CL STRUCTURE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.55	-0.28	875.14	875.14
CL BRG. WEST ABUT.	89+75.80	-0.25	875.15	875.15
A	89+85.80	-0.04	875.19	875.21
B	89+95.80	0.11	875.23	875.26
C	90+05.80	0.22	875.28	875.30
D	90+15.80	0.27	875.33	875.33
CL BRG. PIER	90+20.80	0.28	875.35	875.35
E	90+30.80	0.25	875.40	875.41
F	90+40.80	0.17	875.46	875.48
G	90+50.80	0.04	875.51	875.54
H	90+60.80	-0.14	875.57	875.58
CL BRG. EAST ABUT.	90+65.80	-0.25	875.59	875.59
BACK OF EAST ABUT.	90+67.05	-0.28	875.60	875.60

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS-II
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DATE: APRIL 13, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	47
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83

STAGE CONST. JT.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.46	3.59	875.01	875.01
CL BRG. WEST ABUT.	89+75.71	3.62	875.01	875.01
A	89+85.73	3.83	875.05	875.08
B	89+95.75	3.99	875.10	875.13
C	90+05.77	4.09	875.15	875.17
D	90+15.79	4.14	875.19	875.20
CL BRG. PIER	90+20.80	4.15	875.22	875.22
E	90+30.82	4.12	875.27	875.28
F	90+40.84	4.05	875.32	875.35
G	90+50.86	3.92	875.38	875.41
H	90+60.88	3.73	875.43	875.44
CL BRG. EAST ABUT.	90+65.89	3.62	875.46	875.46
BACK OF EAST ABUT.	90+67.14	3.59	875.47	875.47

BEAM 5

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.40	6.05	874.92	874.92
CL BRG. WEST ABUT.	89+75.65	6.08	874.93	874.93
A	89+85.68	6.29	874.97	874.99
B	89+95.72	6.45	875.01	875.05
C	90+05.75	6.55	875.06	875.08
D	90+15.78	6.60	875.11	875.11
CL BRG. PIER	90+20.80	6.61	875.13	875.13
E	90+30.83	6.58	875.18	875.19
F	90+40.87	6.51	875.24	875.26
G	90+50.90	6.37	875.29	875.32
H	90+60.93	6.19	875.35	875.36
CL BRG. EAST ABUT.	90+65.95	6.08	875.38	875.38
BACK OF EAST ABUT.	90+67.20	6.05	875.38	875.38

BEAM 6

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.25	12.38	874.70	874.70
CL BRG. WEST ABUT.	89+75.50	12.41	874.71	874.71
A	89+85.57	12.62	874.75	874.77
B	89+95.63	12.78	874.80	874.83
C	90+05.70	12.88	874.84	874.86
D	90+15.77	12.94	874.89	874.89
CL BRG. PIER	90+20.80	12.94	874.92	874.92
E	90+30.87	12.92	874.97	874.98
F	90+40.93	12.84	875.02	875.05
G	90+51.00	12.71	875.07	875.10
H	90+61.07	12.52	875.13	875.14
CL BRG. EAST ABUT.	90+66.10	12.41	875.16	875.16
BACK OF EAST ABUT.	90+67.35	12.38	875.17	875.17

BEAM 7

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.09	18.71	874.48	874.48
CL BRG. WEST ABUT.	89+75.35	18.74	874.49	874.49
A	89+85.45	18.95	874.53	874.55
B	89+95.55	19.11	874.58	874.61
C	90+05.65	19.22	874.62	874.64
D	90+15.75	19.27	874.67	874.68
CL BRG. PIER	90+20.80	19.28	874.70	874.70
E	90+30.90	19.25	874.75	874.76
F	90+41.00	19.17	874.80	874.83
G	90+51.10	19.04	874.86	874.89
H	90+61.20	18.86	874.91	874.92
CL BRG. EAST ABUT.	90+66.25	18.74	874.94	874.94
BACK OF EAST ABUT.	90+67.51	18.71	874.95	874.95

INSIDE FACE/SOUTH PARAPET

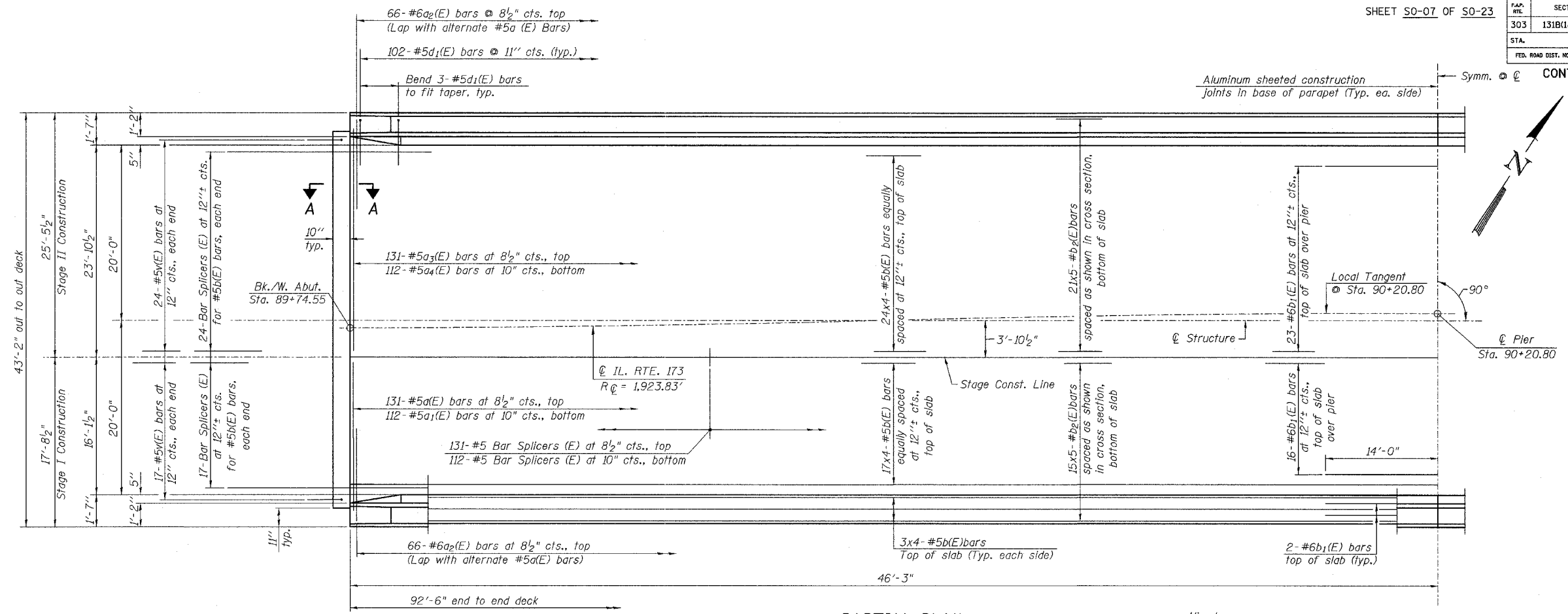
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	89+74.07	19.71	874.45	874.45
CL BRG. WEST ABUT.	89+75.33	19.74	874.45	874.45
A	89+85.43	19.95	874.50	874.52
B	89+95.54	20.11	874.54	874.57
C	90+05.64	20.22	874.59	874.61
D	90+15.75	20.27	874.64	874.64
CL BRG. PIER	90+20.80	20.28	874.66	874.66
E	90+30.91	20.25	874.71	874.72
F	90+41.01	20.17	874.77	874.79
G	90+51.12	20.04	874.82	874.85
H	90+61.22	19.86	874.88	874.89
CL BRG. EAST ABUT.	90+66.27	19.74	874.91	874.91
BACK OF EAST ABUT.	90+67.53	19.71	874.91	874.91

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK ELEVATIONS-III
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DATE: APRIL 13, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

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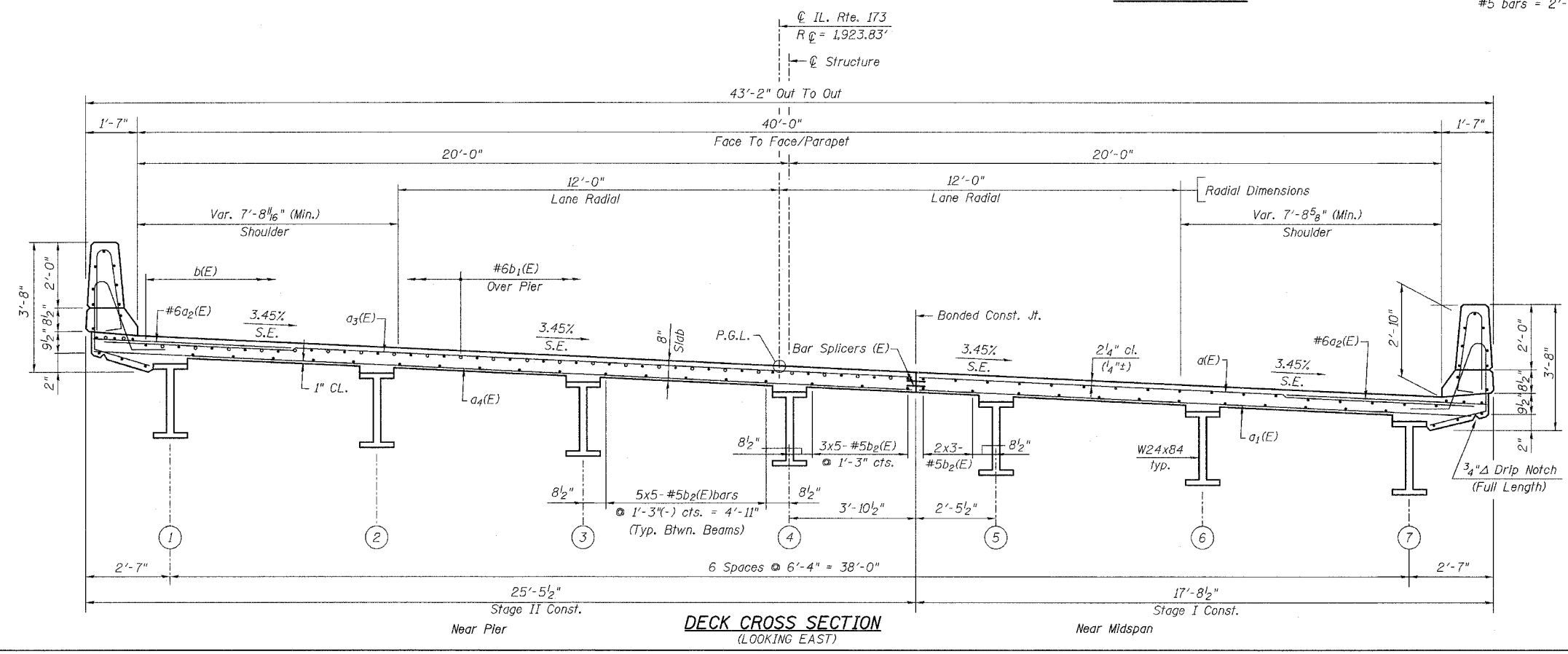
CONTRACT NO. 60B83



PARTIAL PLAN

Min. Lap:
#5 bars = 2'-2"

Notes:
See Sheet SO-08 for superstructure details and Bill of Material.
Bars indicated thus 17x4-#5 etc. indicates 17 lines of bars with 4 lengths per line.
See Sheet SO-08 for parapet reinforcement.
See Sheet SO-12 for Section A-A.



DECK CROSS SECTION
(LOOKING EAST)

Note:
For remainder of detail, see Section thru North Parapet, see Sheet SO-08

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK PLAN & CROSS SECTION
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

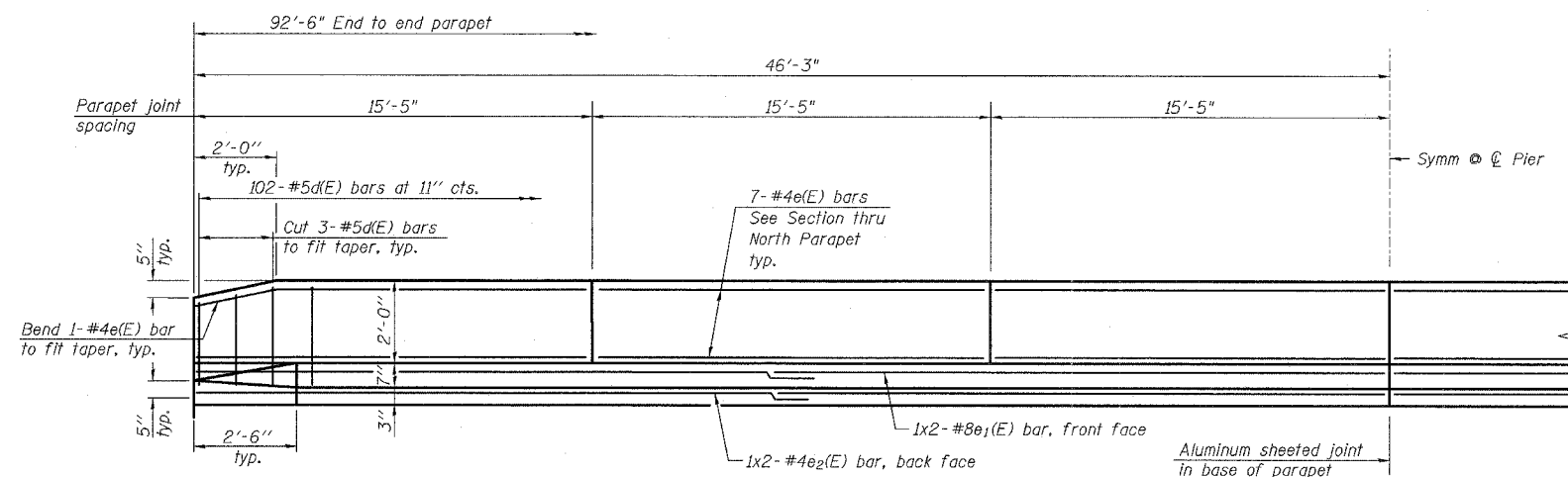
SCALE: DATE: APRIL 13, 2007

DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

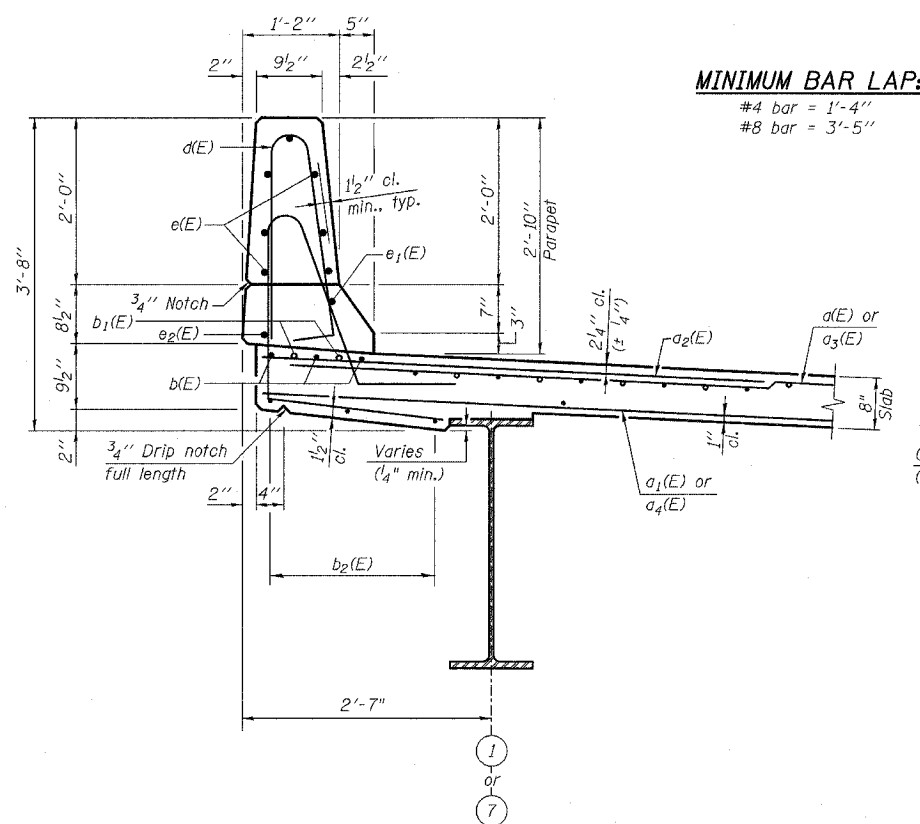
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	49
STA.	TO STA.			
	McHENRY			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

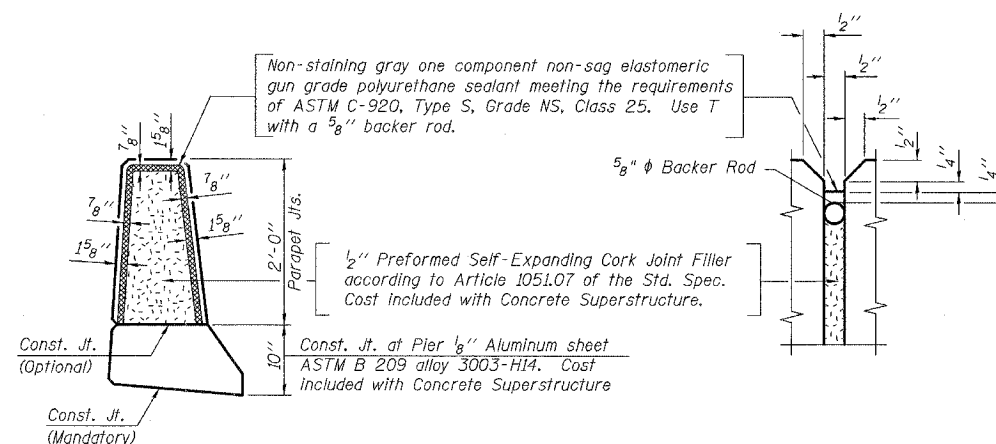


INSIDE ELEVATION OF NORTH PARAPET
(SOUTH PARAPET SIMILAR)



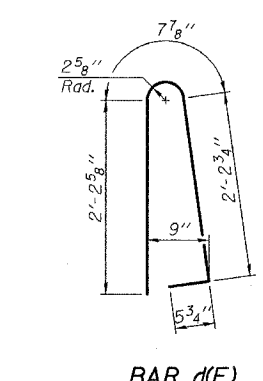
SECTION THRU NORTH PARAPET
(SOUTH PARAPET SIMILAR)

MINIMUM BAR LAP:
#4 bar = 1'-4"
#8 bar = 3'-5"

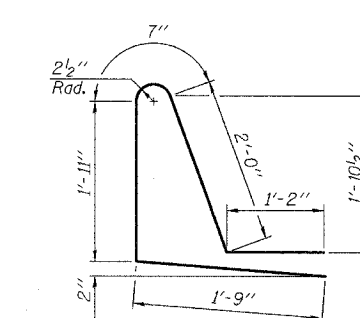


PARAPET JOINT DETAILS

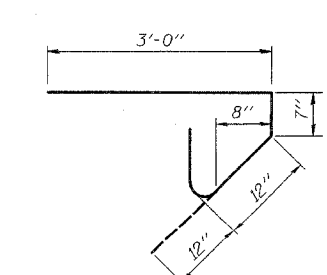
Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SPI prior to painting.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



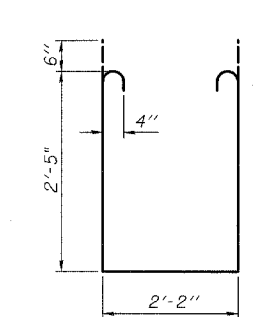
BAR d(E)



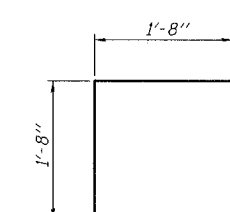
BAR d1(E)



BAR s(E)



BAR s1(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

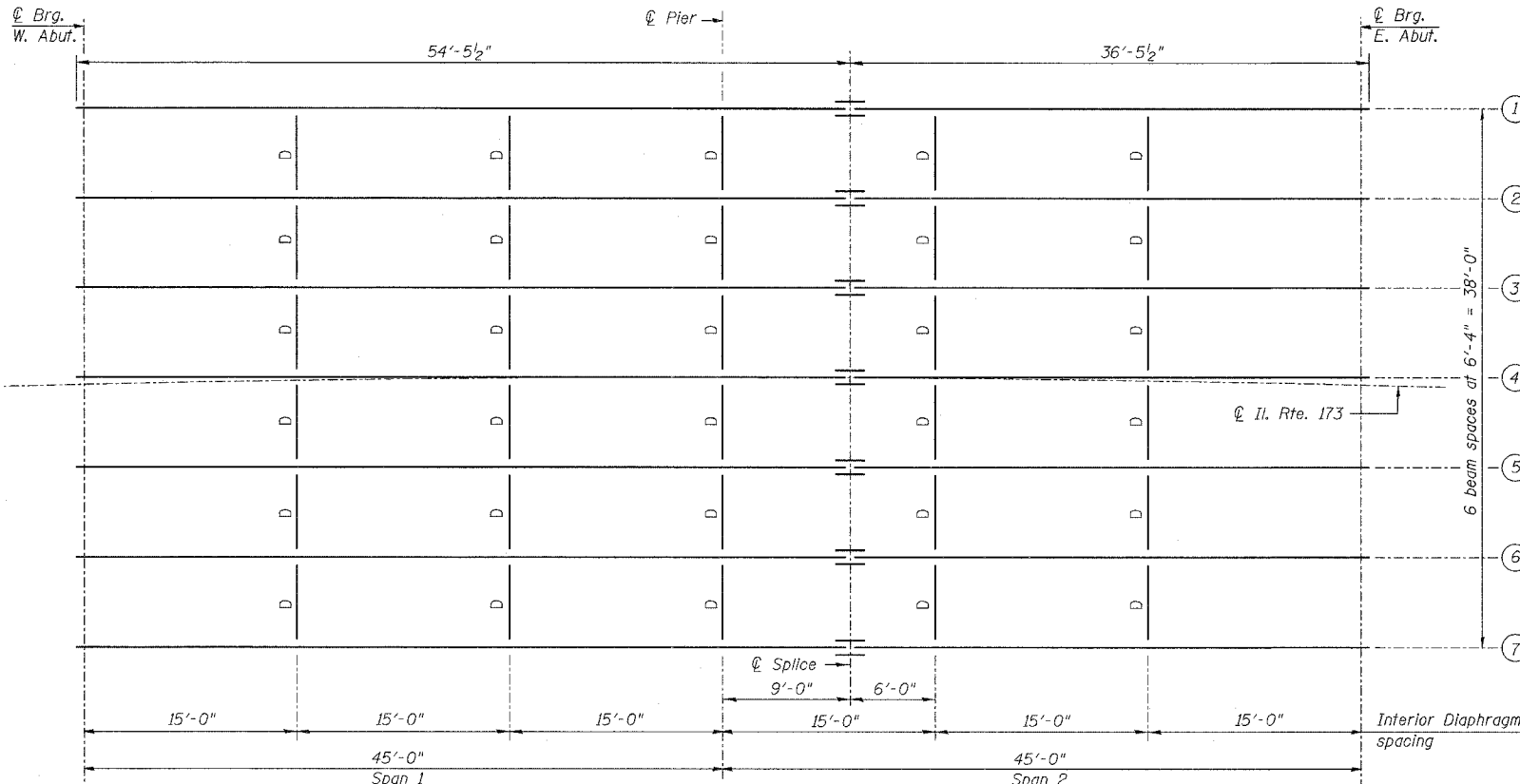
Bar	No.	Size	Length	Shape
d(E)	131	#5	17'-2"	
a1(E)	112	#5	16'-10"	
a2(E)	132	#6	6'-0"	
a3(E)	131	#5	24'-11"	
a4(E)	112	#5	24'-7"	
b(E)	188	#5	24'-9"	
b1(E)	43	#6	28'-0"	
b2(E)	180	#5	20'-2"	
d(E)	204	#5	5'-7"	
d1(E)	204	#5	7'-5"	
e(E)	42	#4	15'-1"	
e1(E)	4	#8	24'-8"	
e2(E)	4	#4	23'-8"	
m(E)	10	#6	17'-4"	
m1(E)	10	#6	25'-1"	
m2(E)	8	#6	7'-0"	
m3(E)	12	#6	9'-1"	
m4(E)	4	#6	6'-10"	
m5(E)	4	#6	8'-3"	
m6(E)	10	#6	5'-11"	
m7(E)	2	#6	2'-2"	
m8(E)	4	#6	2'-3"	
m9(E)	2	#6	3'-6"	
s(E)	86	#5	5'-7"	
s1(E)	86	#4	8'-0"	
v(E)	82	#5	3'-4"	
Reinforcement Bars, Epoxy Coated		Pound	28,080	
Concrete Superstructure		Cu. Yds.	144	
Bar Splicers		Each	341	
Protective Coat		Sq. Yds.	486	
Bridge Deck Grooving		Sq. Yds.	391	

Bars indicated thus 1x2-#5 etc., indicates 1 line of bars with 2 lengths per line

REVISIONS	
NAME	DATE

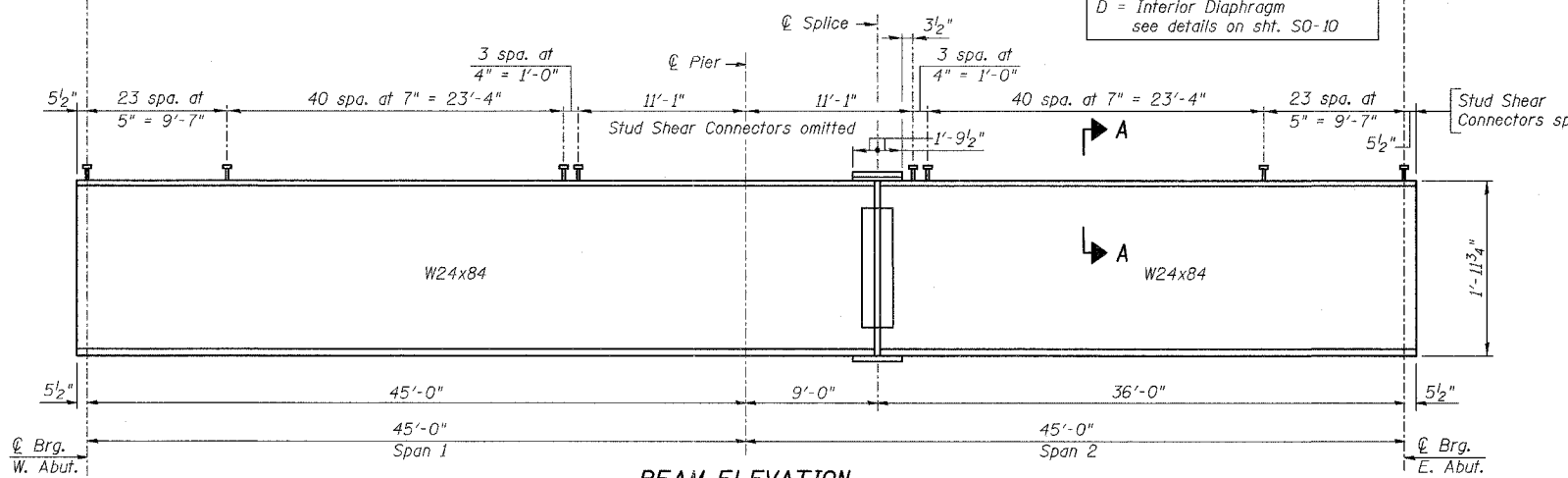
ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPETS, DECK DETAILS & SUPERSTRUCTURE BILL OF MATERIAL
IL. RTE. 173 OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089
SCALE: DRAWN BY: D.L./F.M.
DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

CONTRACT NO. 60B83



FRAMING PLAN

Note:
D = Interior Diaphragm
see details on sht. SO-10

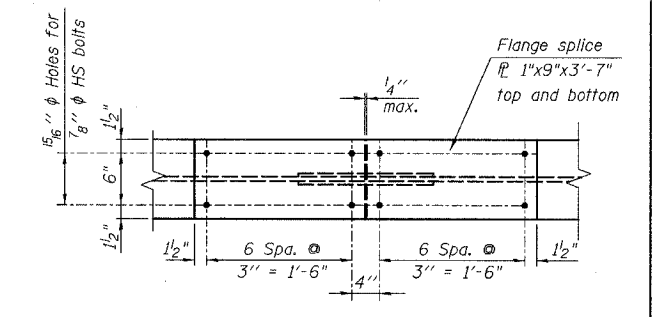


BEAM ELEVATION

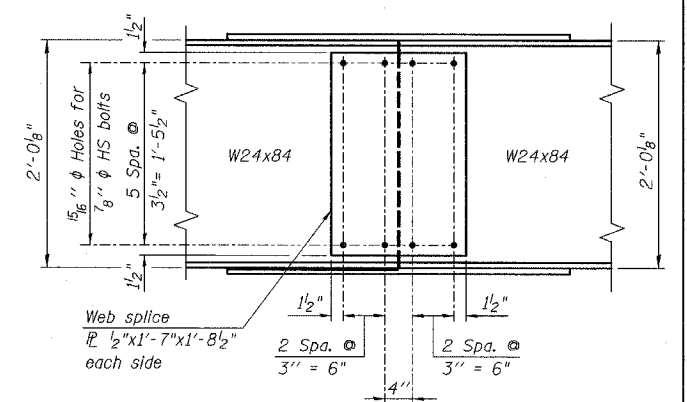
All wide flange beams and splice plate material, except fill plates, shall be AASHTO M 270, Grade 50 and shall meet Notch Toughness Requirements.

Load carrying components designated "NTR" shall conform to the supplemental requirements for Notch Toughness, Zone 2.

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.⁴ and in.³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.⁴ and in.³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
- Z: Plastic Section Modulus of the steel section in non-composite areas (in.³).
- Q: Un-factored non-composite dead load (kips/ft.).
- M_D: Un-factored moment due to non-composite dead load (kip-ft.).
- s_D: Un-factored long-term composite (superimposed) dead load (kips/ft.).
- M_L: Un-factored live load moment (kip-ft.).
- M_{Imp}: Un-factored moment due to impact (kip-ft.).
- M_a: Factored design moment (kip-ft.).
- M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- f_s (Overload): Sum of stresses as computed from the moments below (ksi).
- f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
- VR: Maximum L + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).



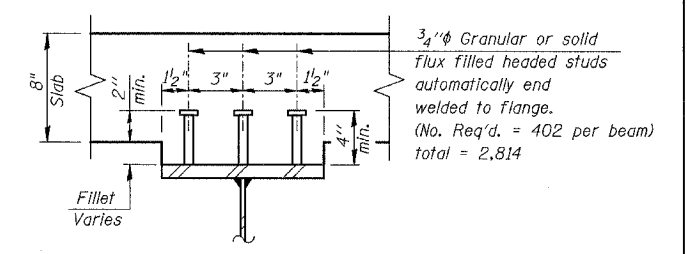
FLANGE SPlice DETAIL



WEB SPlice DETAIL

STUD SHEAR CONNECTOR DETAIL (7 Required)

Note:
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.



SECTION A-A

STUD SHEAR CONNECTOR DETAIL

	0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_s	2,340	2,340
$I_c(n)$	7,926	-
$I_c(3n)$	5,871	-
S_s	194	194
$S_c(n)$	322	-
$S_c(3n)$	290	-
Z	-	-
Q	0.776	1.225
M _D	111	271
s _D	0.449	-
M _{sD}	79	-
M _L	267	122
M _{Imp}	79	36
M _a [M _L + M _{Imp}]	577	264
M _u	997	696
M _u	1,237	-
f _s (non-comp)	6.9	16.8
f _s (comp)	3.3	-
f _s [M _L + M _{Imp}]	21.5	16.4
f _s (Overload)	31.7	33.2
f _s (Total)	-	43.2
VR	41.0	-

*Compact section
**Braced non-compact and partially braced section

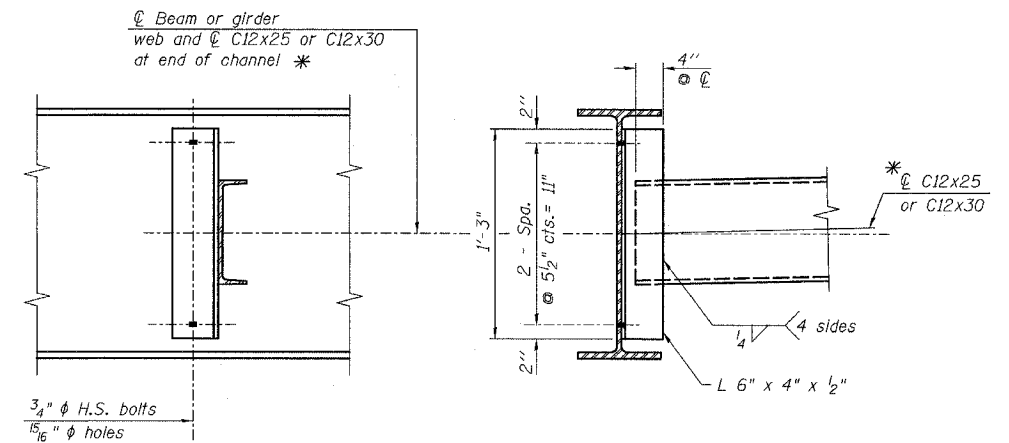
	Abut.	Pier
R _D	21.5	67.1
R _L	32.2	37.2
Imp.	9.5	11.0
R _{Total}	63.2	115.3

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN & STRUCTURAL STEEL DETAILS
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089
SCALE: DATE: APRIL 13, 2007
DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	51
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



INTERIOR DIAPHRAGM D

Note:
Two hardened washers required for each set of oversized holes.

* Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

*****TOP OF BEAM ELEVATIONS**

Beam	℄ Brg. W. Abut.	℄ Pier	℄ Splice	℄ Brg. E. Abut.
1	875.10	875.24	875.27	875.54
2	874.88	875.02	875.05	875.32
3	874.66	874.80	874.83	875.10
4	874.44	874.58	874.61	874.89
5	874.22	874.37	874.40	874.67
6	874.00	874.15	874.18	874.45
7	873.78	873.93	873.96	874.23

***For fabrication only

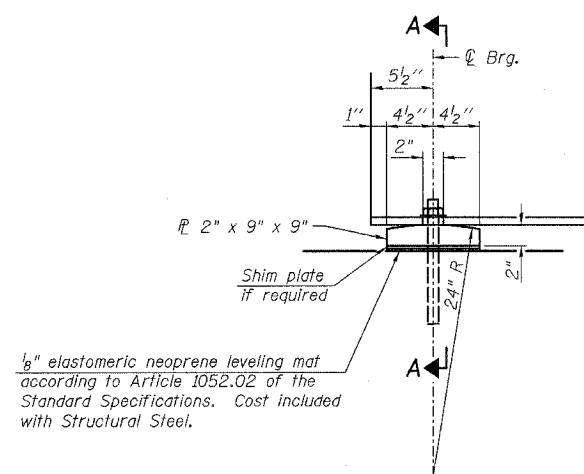
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURAL STEEL DETAILS
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

SCALE: DATE: APRIL 13, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

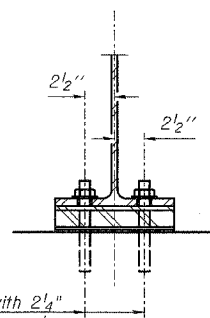
F.A.P. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	52
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



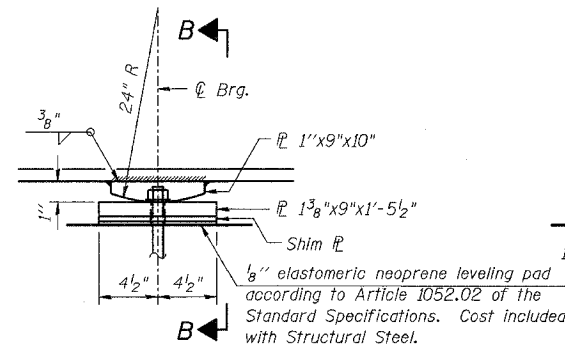
ELEVATION AT ABUTMENT

FIXED BEARING
(14 Required)



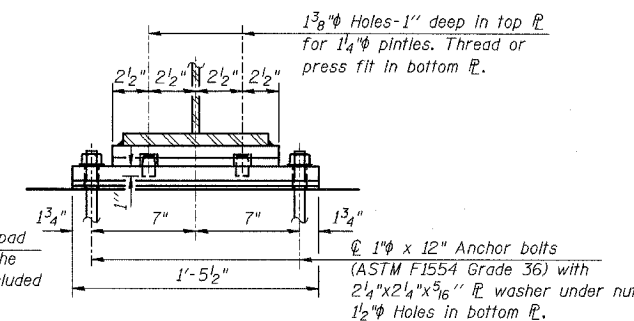
SECTION A-A

1" ϕ x 12" anchor bolts with 2 1/4" x 2 1/4" x 3/16" ϕ washer under nut. 1 3/8" x 2" slotted hole in flange. 1/2" ϕ holes in bearing plate. Contractor has the option of cast in place or drilled installation.

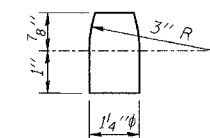


ELEVATION AT PIER

FIXED BEARING
(7 Required)



SECTION B-B



PINTLE

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
Two 1/8" (in.) adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

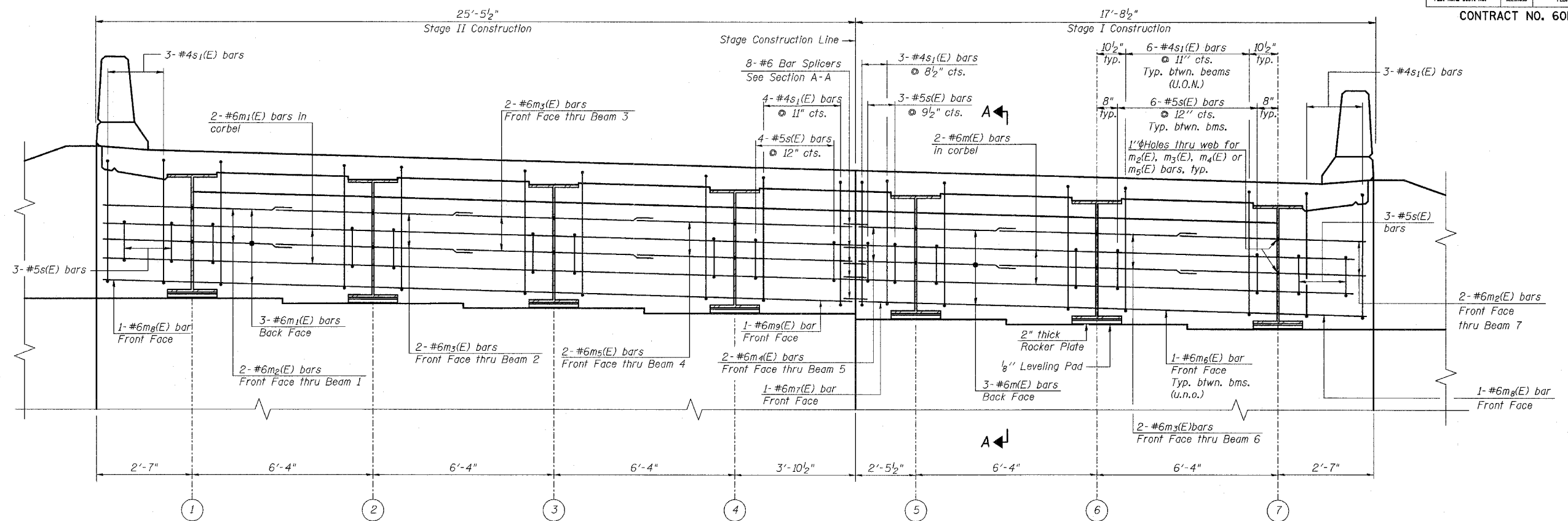
Item	Unit	Total
Anchor Bolts 1" ϕ	Each	42

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEARING DETAILS
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089
SCALE: DATE: APRIL 13, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	53
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

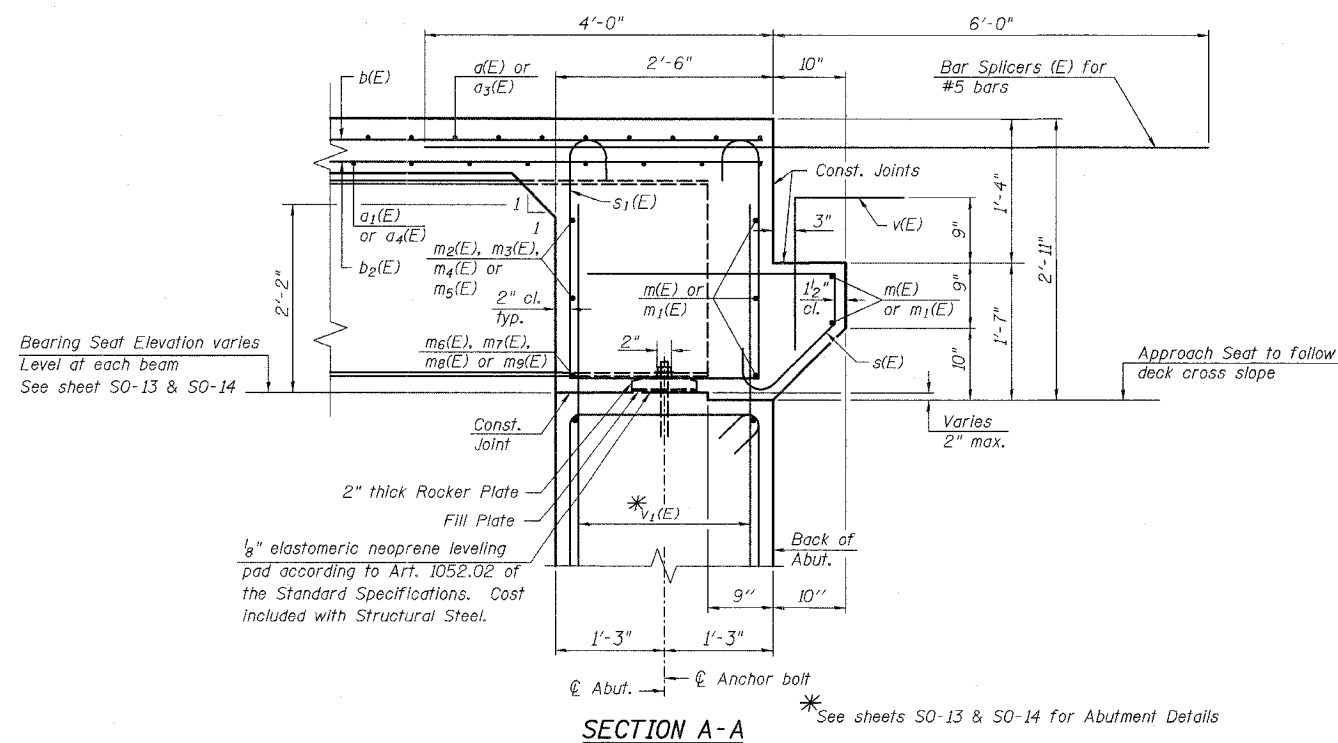
CONTRACT NO. 60B83



DIAPHRAGM ELEVATION AT EAST ABUTMENT
(LOOKING EAST)
(WEST ABUTMENT SIMILAR - OPPOSITE HAND)

LEGEND:
U.O.N. = Unless Otherwise Noted

MIN. BAR LAP
#6 bar = 2'-9"



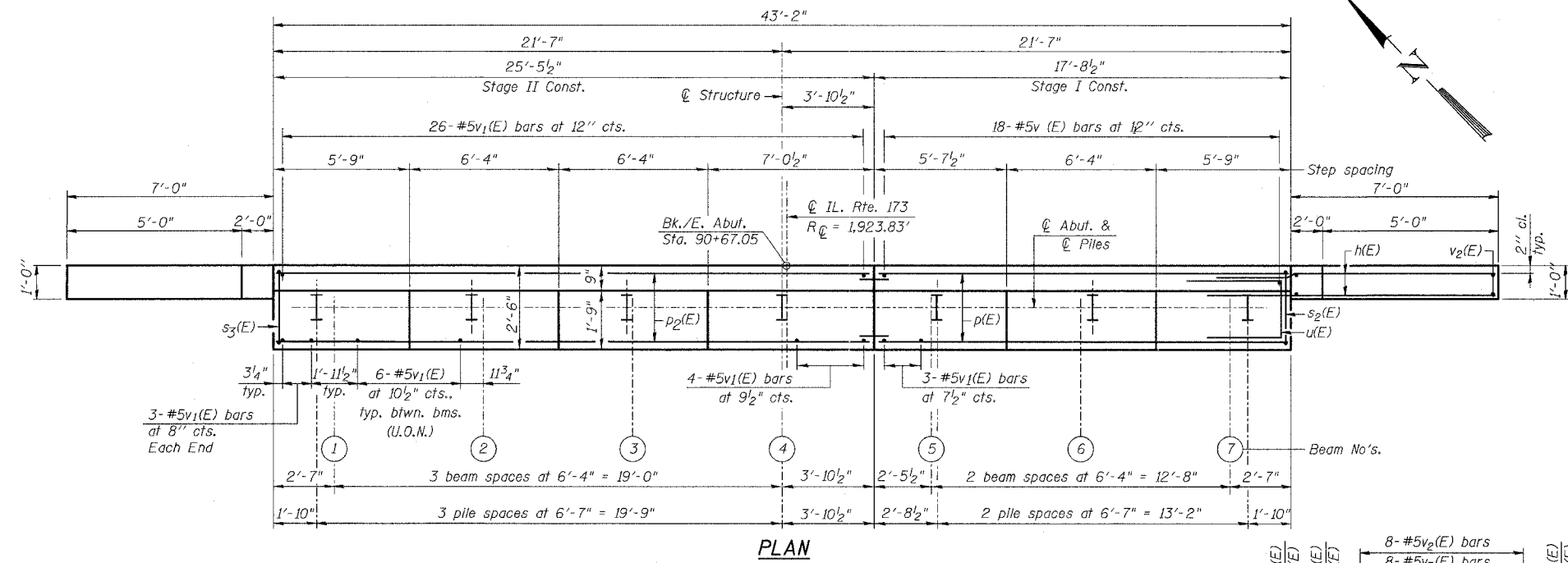
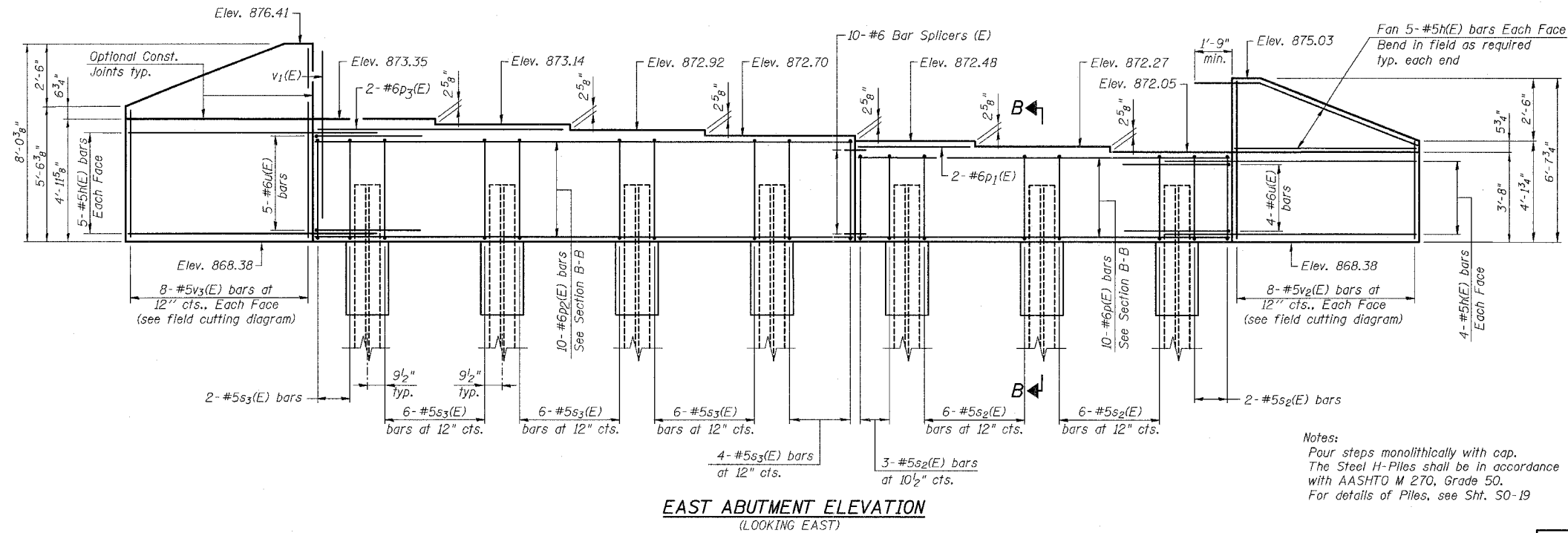
Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet SO-08.
Concrete in diaphragm is included with Concrete Superstructure on sheet SO-08.
For details of bars s(E) & s1(E) see sheet SO-08.
The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For details of bearings see sheet SO-11.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIAPHRAGM DETAILS AT ABUTMENTS
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089
SCALE: DRAWN BY: D.L./F.M.
DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

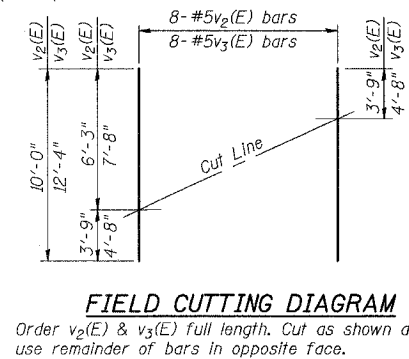
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303	131B(1&2)BR	McHENRY	107	55
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



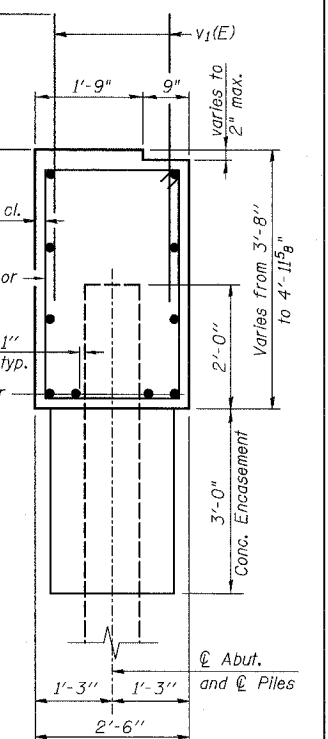
LEGEND:
 U.O.N. = Unless Otherwise Noted

PILE DATA
 Type: Steel HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 139.6 kips
 Est. Length: 57 ft.
 No. Production Piles: 6
 No. Test Piles: 1

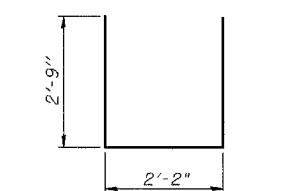


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	38	#5	9'-2"	—
p(E)	10	#6	17'-4"	—
p ₁ (E)	2	#6	5'-3"	—
p ₂ (E)	10	#6	25'-1"	—
p ₃ (E)	2	#6	11'-9"	—
s ₂ (E)	17	#5	11'-7"	□
s ₃ (E)	24	#5	12'-11"	□
u(E)	9	#6	7'-8"	—
v ₁ (E)	87	#5	4'-6"	—
v ₂ (E)	8	#5	10'-0"	—
v ₃ (E)	8	#5	12'-4"	—
Structure Excavation	Cu. Yd.	106		
Concrete Structures	Cu. Yd.	20.4		
Reinforcement Bars, Epoxy Coated	Pound	2,280		
Furnishing Steel Piles HP 12x53	Foot	342		
Driving Piles	Foot	342		
Test Pile Steel HP 12x53	Each	1		
Bar Splicers	Each	10		
Porous Granular Embankment, Special	Cu. Yd.	56		
Stone Riprap, Class A4	Sq. Yd.	241		
Filter Fabric	Sq. Yd.	157		
Pipe Underdrains for Structures, 4"	Foot	79		
Geocomposite Wall Drain	Sq. Yd.	28		
Pile Shoes	Each	7		
Concrete Encasement	Cu. Yd.	2.5		



BARS s₂(E) & s₃(E)



BAR u(E)



For details of Bar Splicers, see Sheet SO-16

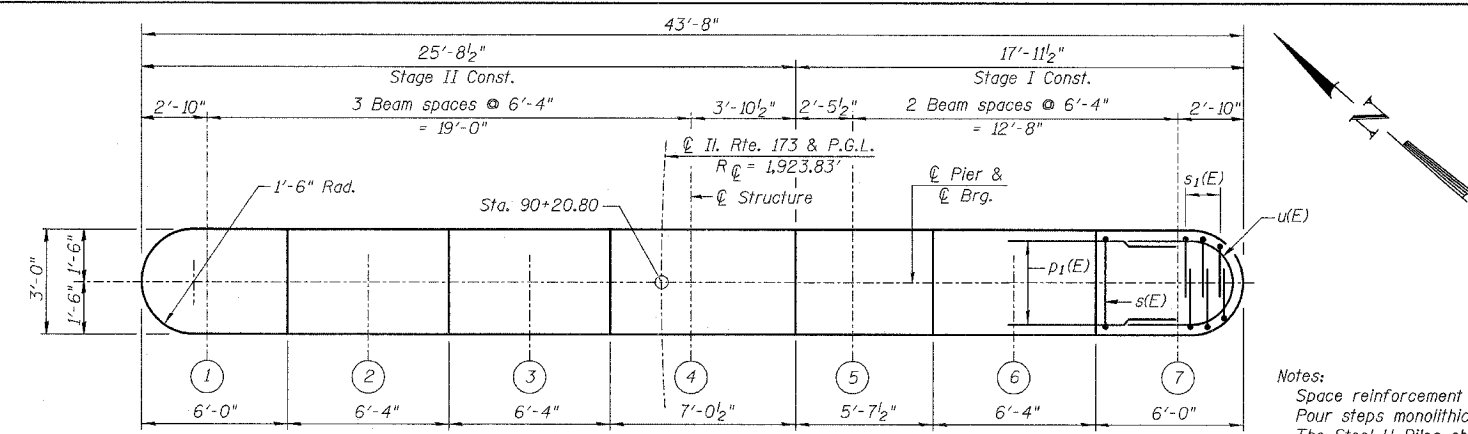
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**EAST ABUTMENT
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089**

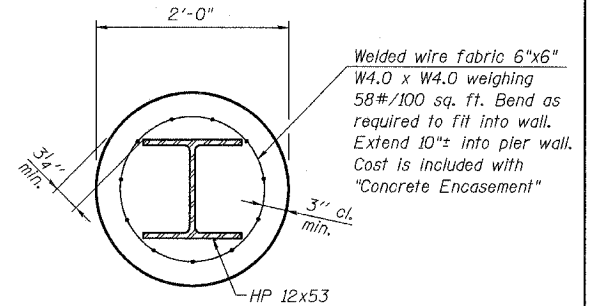
SCALE: DATE: APRIL 13, 2007
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CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS



TOP PLAN

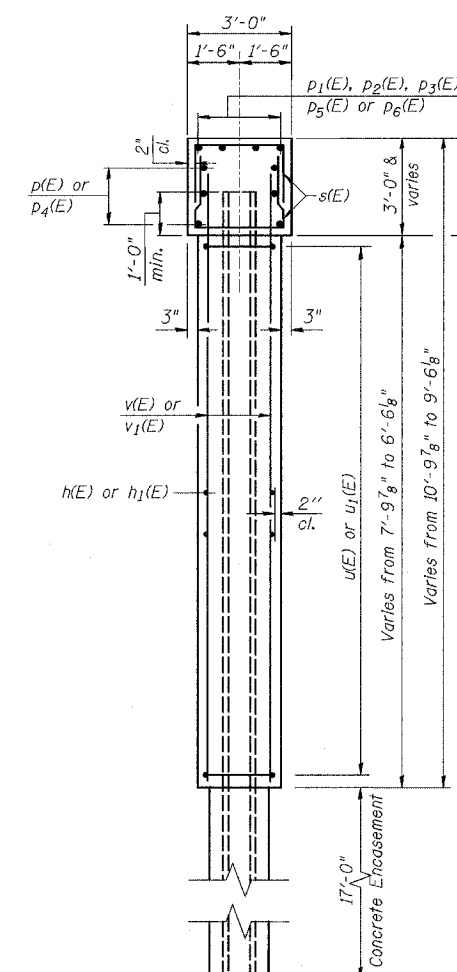
Notes:
Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
The Steel H-Piles shall be in accordance with AASHTO M 270, Grade 50.
For details of Piles and Concrete Encasement, see Sheet SO-



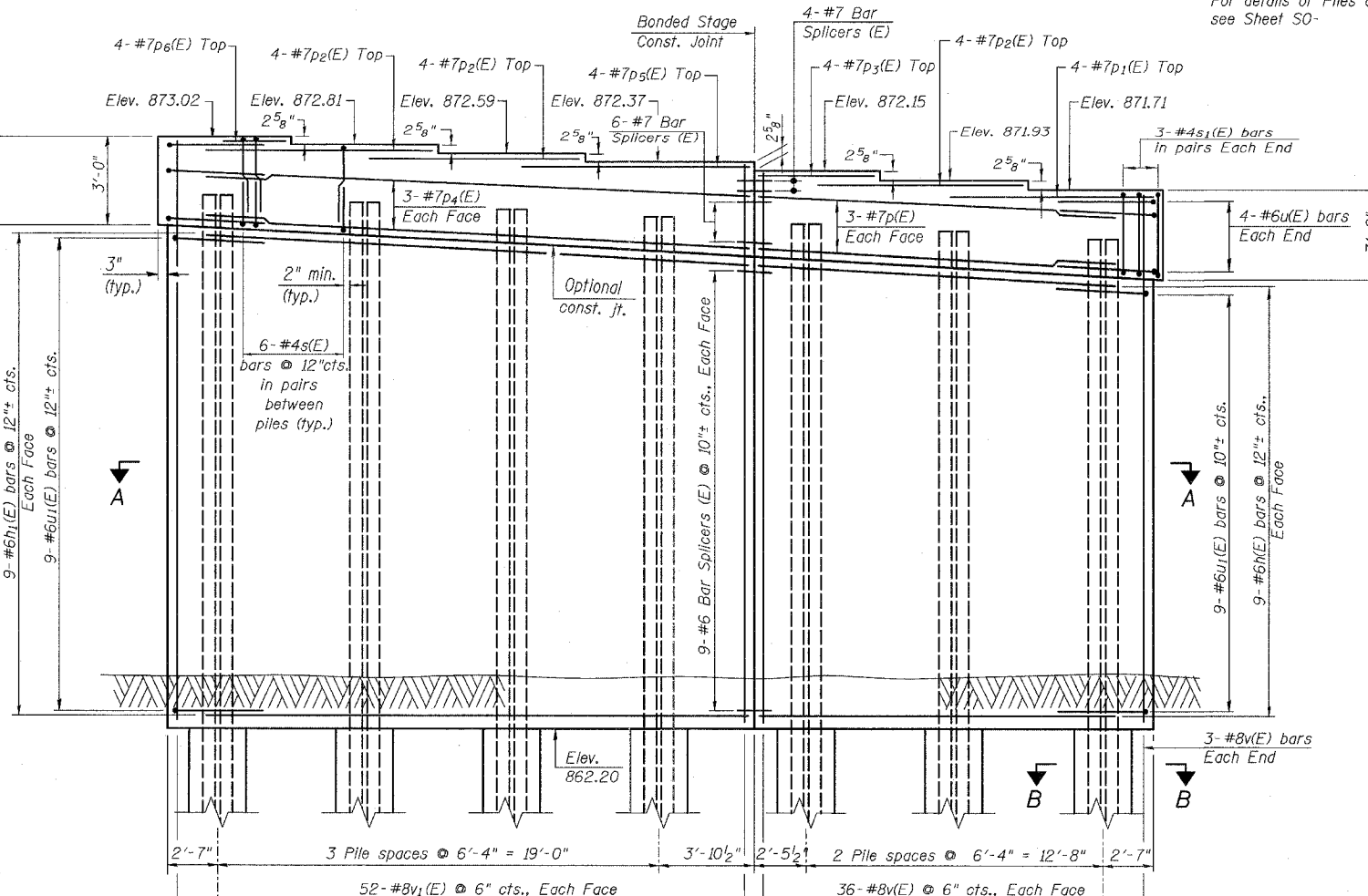
SECTION B-B
PILE ENCASEMENT DETAIL

BILL OF MATERIAL

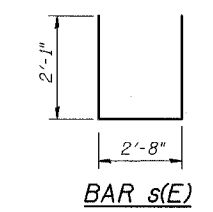
Bar No.	Size	Length	Shape
h(E)	#8	16'-4"	—
h ₁ (E)	#8	24'-1"	—
p(E)	#7	16'-4"	—
p ₁ (E)	#7	9'-5"	—
p ₂ (E)	#7	9'-9"	—
p ₃ (E)	#7	5'-3"	—
p ₄ (E)	#7	24'-1"	—
p ₅ (E)	#7	10'-6"	—
p ₆ (E)	#7	5'-8"	—
s(E)	#4	6'-10"	U
s ₁ (E)	#4	6'-7"	U
u(E)	#6	9'-4"	UU
u ₁ (E)	#6	8'-7"	UU
v(E)	#8	9'-1"	—
v ₁ (E)	#8	9'-9"	—
Structure Excavation	Cu. Yd.	11.4	
Concrete Structures	Cu. Yd.	43.2	
Reinforcement Bars, Epoxy Coated	Pound	7,260	
Furnishing Steel Piles HP 12X53	Foot	342	
Driving Piles	Foot	342	
Test Pile Steel HP 12X53	Each	1	
Concrete Encasement	Cu. Yd.	13.9	
Pile Shoes	Each	7	
Bar Splicers	Each	28	



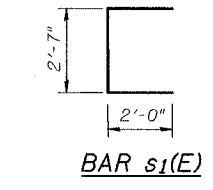
END VIEW



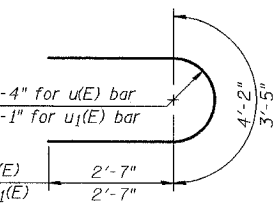
ELEVATION
(Looking East)



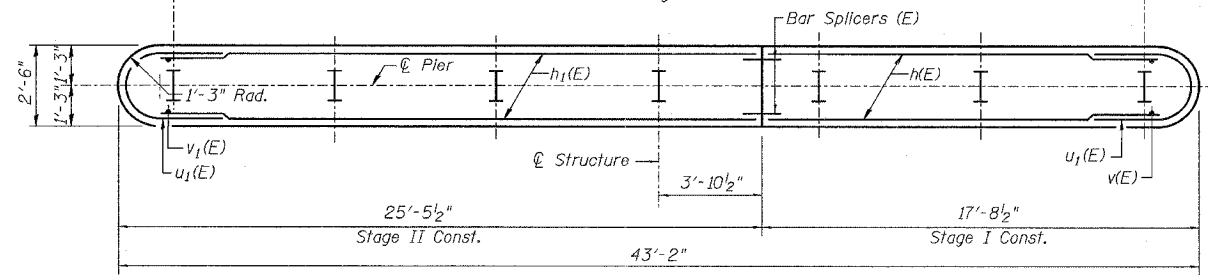
BAR s(E)



BAR s₁(E)



BARS u(E) & u₁(E)



SECTION A-A

PILE DATA

Type: Steel HP 12x53 with Pile Shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 139.6 kips
Est. Length: 57 feet
No. Production Piles: 6
No. Test Piles: 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

SCALE: DRAWN BY: D.L./F.M.
DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	57
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83

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

BAR SPLICER ASSEMBLIES			
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

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

The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

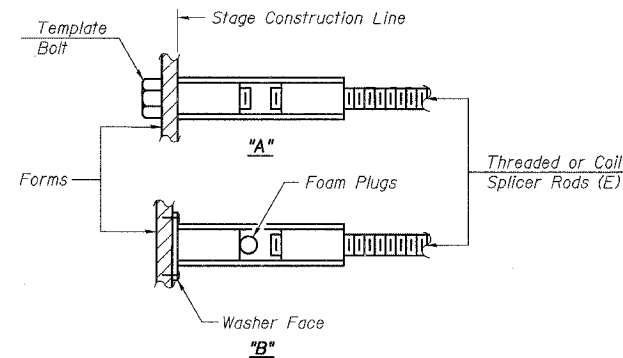
Wire Connector



WELDED SECTIONS

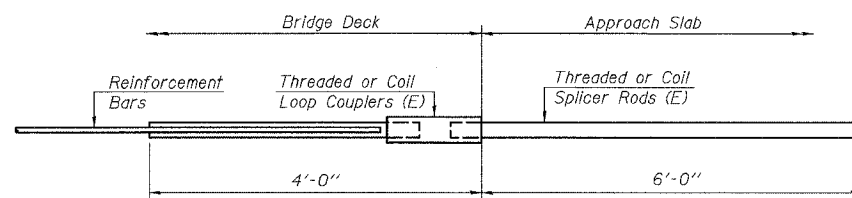
BAR SPLICER ASSEMBLY ALTERNATIVES

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



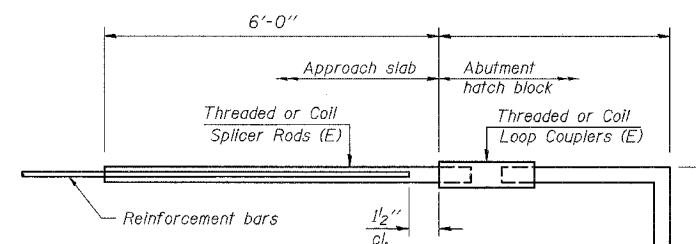
INSTALLATION AND SETTING METHODS

"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.



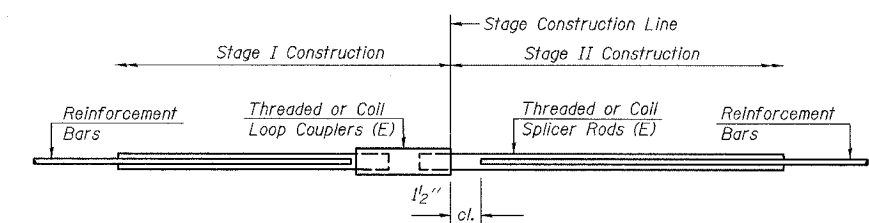
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 82



FOR STUB 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	325	Deck
#6	16	Diaphragm
#6	20	Abutments
#6	18	Pier
#7	10	
Total	389	

REVISIONS	
NAME	DATE

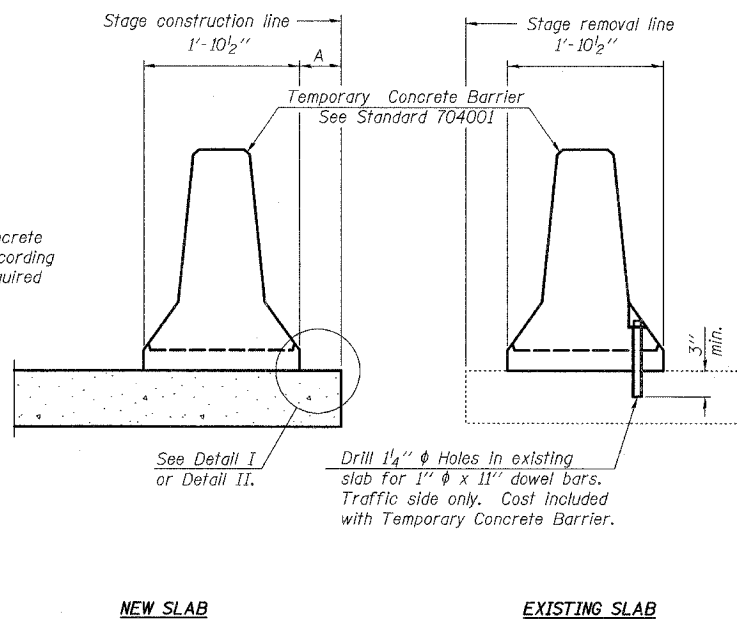
ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

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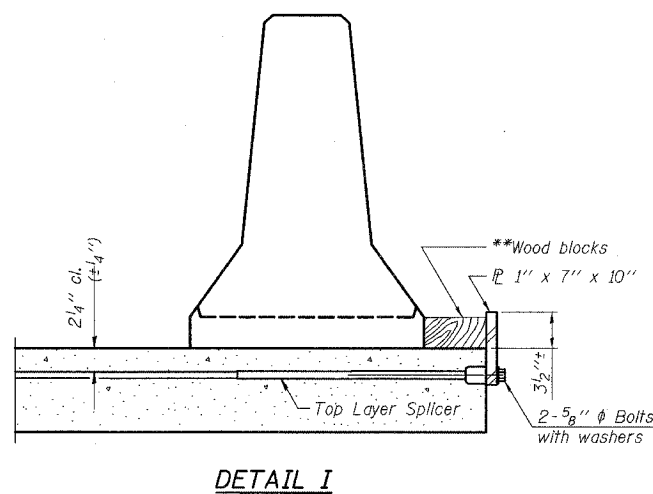
F.A.P. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	58
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

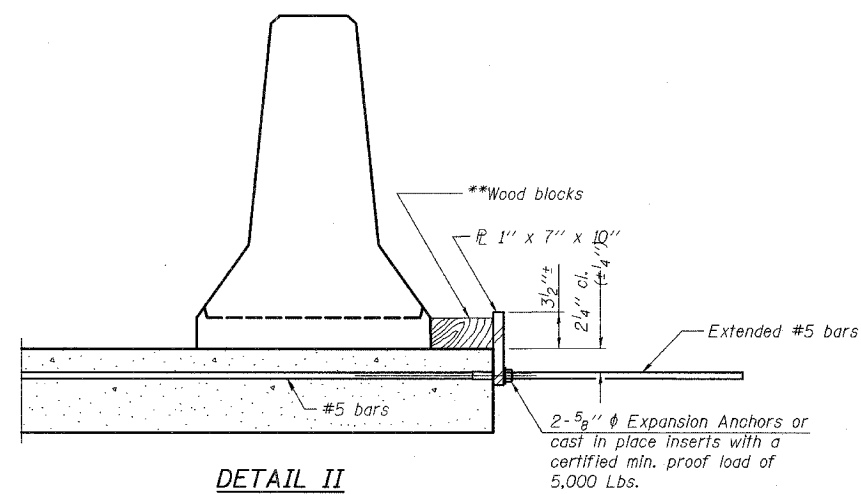
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB



DETAIL I



DETAIL II

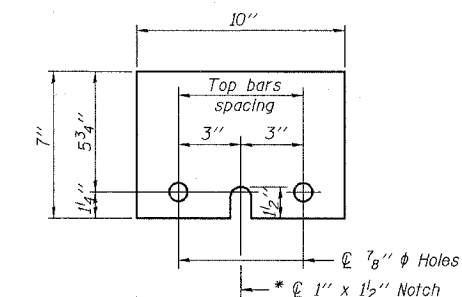
** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{R} 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{R} 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. The 1" x 7" x 10" 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.



STEEL RETAINER \bar{R} 1" x 7" x 10"

* Required only with Detail II

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION

IL. RTE. 173 OVER

PISCASAW CREEK OVERFLOW

F.A.P. RTE. 303 SECTION: 131B(1&2)BR

McHENRY COUNTY STATION 90+20.80

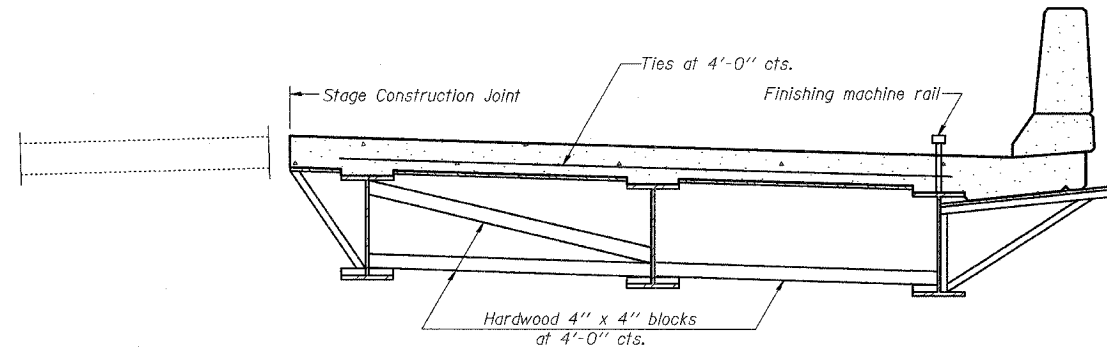
STRUCTURE NO. 056-0089

SCALE: DRAWN BY: D.L./F.M.
DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.H.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

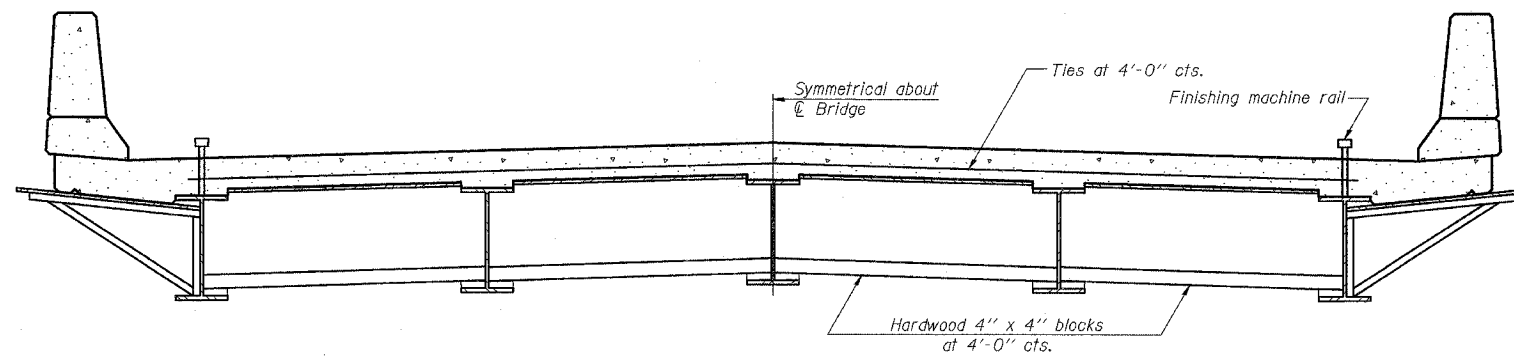
F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	59
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



**FORM BRACES FOR
STAGE CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.
 The finishing machine rails shall be placed on the top flange of the exterior beams.
 The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.
 For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR
STANDARD CONSTRUCTION**

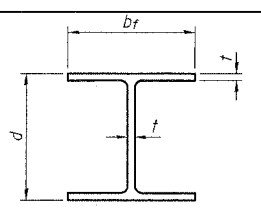
SB-1 11-1-06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CANTILEVER FORMING BRACKETS
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

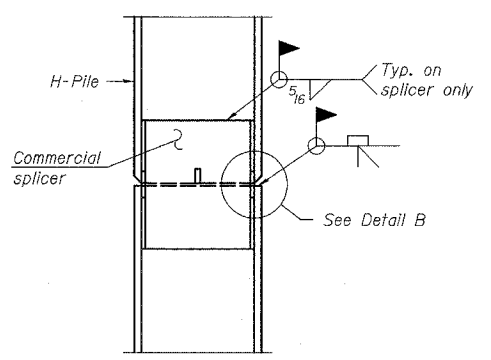
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CHICAGO, ILLINOIS 60627-2000

CONTRACT NO. 60B83

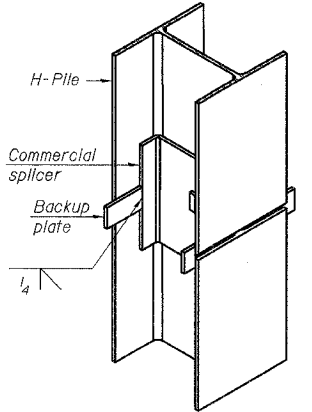


STEEL PILE TABLE

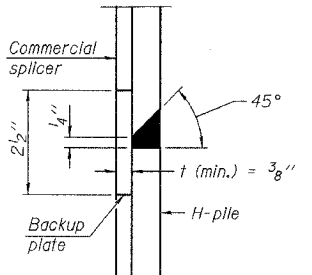
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/4"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/4"	24"
x74	12 1/2"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11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



ELEVATION

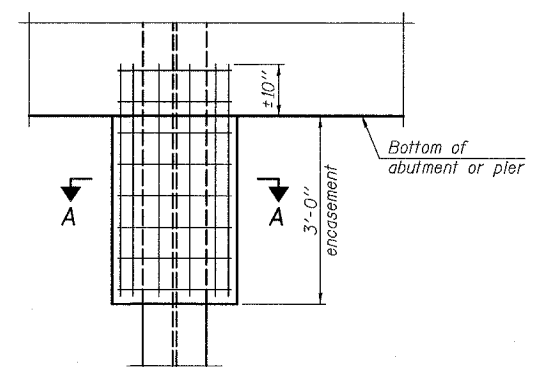


ISOMETRIC VIEW



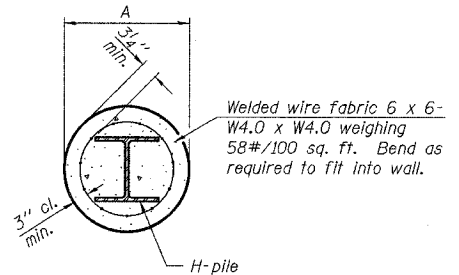
DETAIL "B"

WELDED COMMERCIAL SPLICE



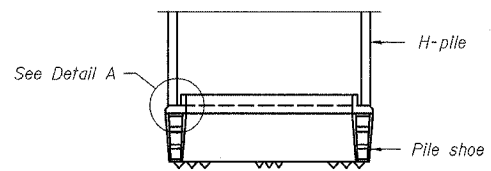
ELEVATION

PILE ENCASEMENT

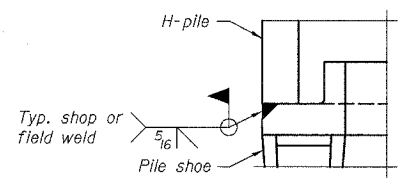


SECTION A-A

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

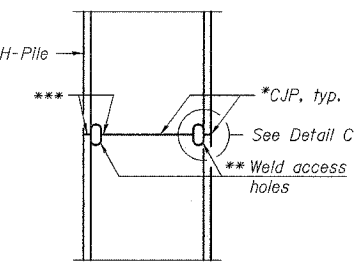


ELEVATION



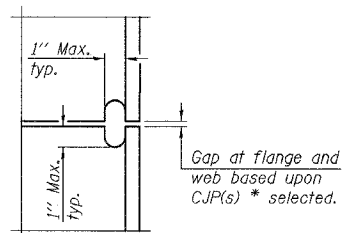
DETAIL A

H-PILE SHOE ATTACHMENT

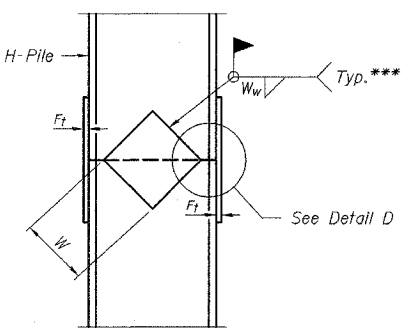


ELEVATION

COMPLETE PENETRATION WELD SPLICE

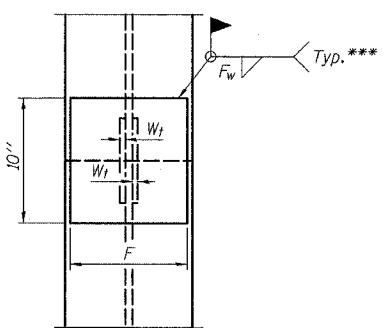


DETAIL C

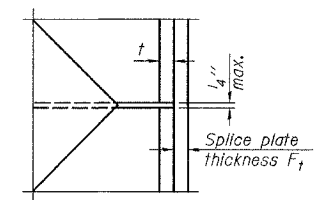


ELEVATION

WELDED PLATE FIELD SPLICE



END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
 ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
 *** Interrupt welds 1/4" from end of each pile.

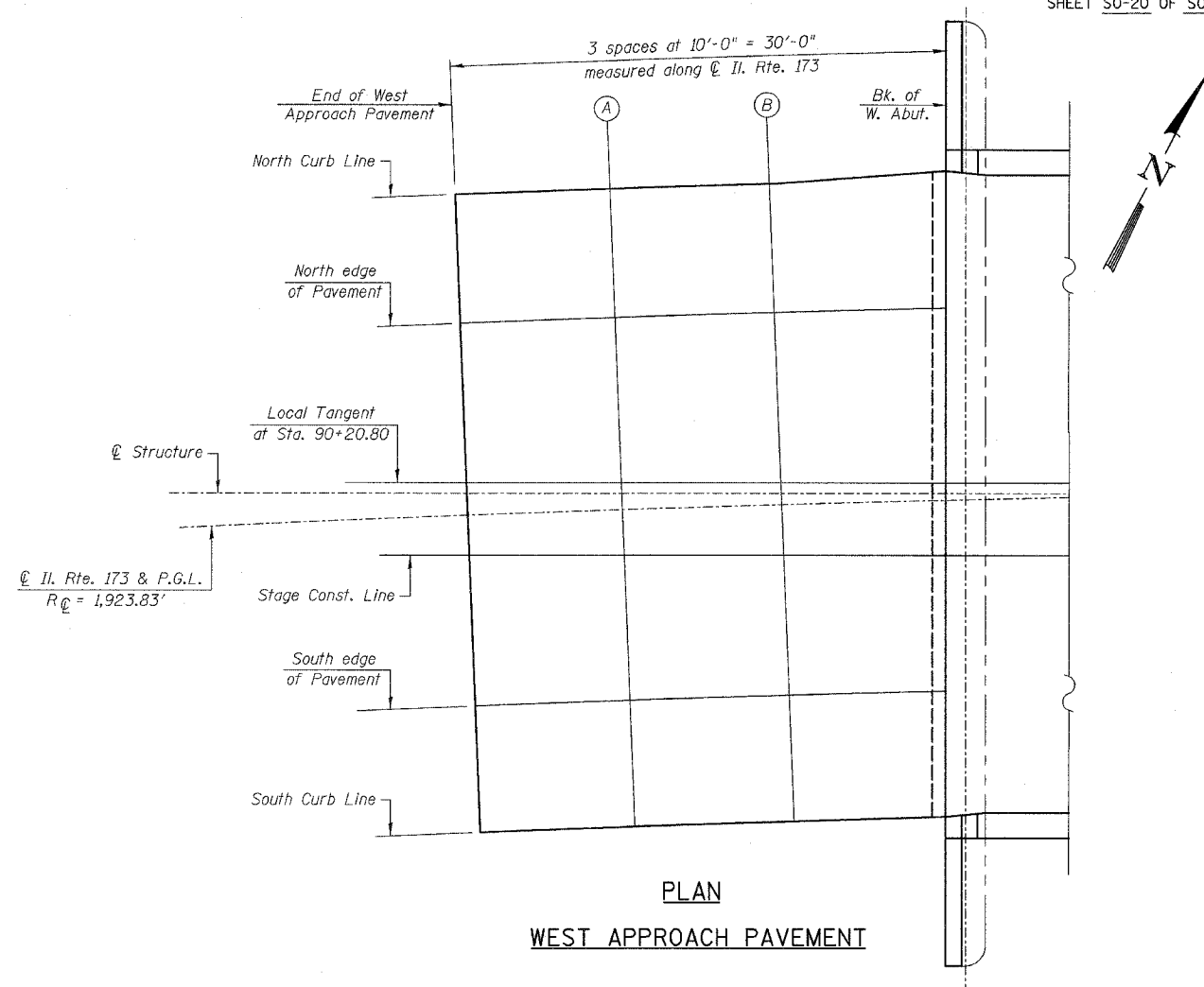
Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 STEEL H-PILE DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
 CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	61
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



PLAN
WEST APPROACH PAVEMENT

NORTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	-20.00	875.67	875.67
A	89+54.55	-20.00	875.72	875.72
B	89+64.55	-20.00	875.77	875.77
BACK OF WEST ABUT.	89+74.55	-20.70	875.85	875.85

NORTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	-12.00	875.40	875.40
A	89+54.55	-12.00	875.45	875.45
B	89+64.55	-12.00	875.50	875.50
BACK OF WEST ABUT.	89+74.55	-12.00	875.55	875.55

CL ROADWAY & P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	0.00	874.98	874.98
A	89+54.55	0.00	875.03	875.03
B	89+64.55	0.00	875.08	875.08
BACK OF WEST ABUT.	89+74.55	0.00	875.13	875.13

STAGE CONSTRUCTION LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	2.64	874.89	874.89
A	89+54.55	3.01	874.93	874.93
B	89+64.55	3.33	874.97	874.97
BACK OF WEST ABUT.	89+74.55	3.59	875.01	875.01

SOUTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	12.00	874.57	874.57
A	89+54.55	12.00	874.62	874.62
B	89+64.55	12.00	874.67	874.67
BACK OF WEST ABUT.	89+74.55	12.00	874.72	874.72

SOUTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	89+44.55	20.00	874.29	874.29
A	89+54.55	20.00	874.34	874.34
B	89+64.55	20.00	874.39	874.39
BACK OF WEST ABUT.	89+74.55	20.14	874.44	874.44

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WEST APPROACH PAVEMENT-ELEVATIONS

IL. RTE. 173 OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

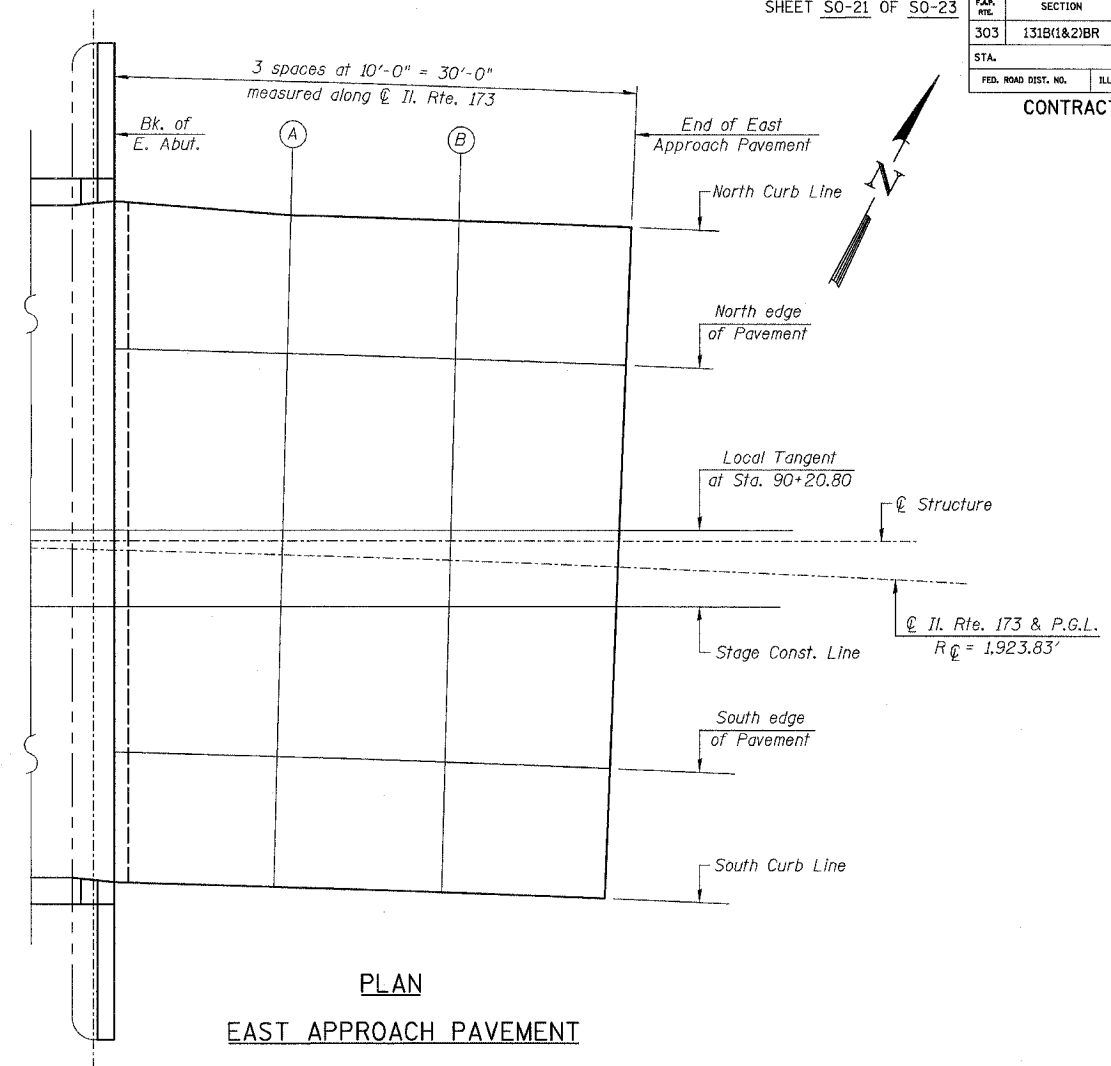
SCALE: DATE: APRIL 13, 2007

DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	62
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83



PLAN
EAST APPROACH PAVEMENT

NORTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	-20.70	876.31	876.31
A	90+77.05	-20.00	876.33	876.33
B	90+87.05	-20.00	876.38	876.38
END E. APPR. PAV'T	90+97.05	-20.00	876.43	876.43

NORTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	-12.00	876.01	876.01
A	90+77.05	-12.00	876.06	876.06
B	90+87.05	-12.00	876.11	876.11
END E. APPR. PAV'T	90+97.05	-12.00	876.16	876.16

CL ROADWAY & P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	0.00	875.59	875.59
A	90+77.05	0.00	875.64	875.64
B	90+87.05	0.00	875.69	875.69
END E. APPR. PAV'T	90+97.05	0.00	875.74	875.74

STAGE CONSTRUCTION LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	3.59	875.47	875.47
A	90+77.05	3.33	875.53	875.53
B	90+87.05	3.01	875.59	875.59
END E. APPR. PAV'T	90+97.05	2.64	875.65	875.65

SOUTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	12.00	875.18	875.18
A	90+77.05	12.00	875.23	875.23
B	90+87.05	12.00	875.28	875.28
END E. APPR. PAV'T	90+97.05	12.00	875.33	875.33

SOUTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	90+67.05	20.14	874.90	874.90
A	90+77.05	20.00	874.95	874.95
B	90+87.05	20.00	875.00	875.00
END E. APPR. PAV'T	90+97.05	20.00	875.05	875.05

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 EAST APPROACH PAVEMENT-ELEVATIONS
 IL. RTE. 173 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

...ADJUST 0.000... 4/13/2007 3:28:57 PM

Wang Engineering, Inc.
 Consulting Geotechnical and Environmental Engineers
 wangeng30@wengeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG OB-01 Page 1 of 2
 WEI Job No.: 950-06-01
 Datum: NGVD
 Elevation: 865.22 Ft
 North: 2894284.78 Ft
 East: 891887.35 Ft
 Station: 89+85
 Offset: 45 LT

Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piascasaw Creek Overflow (PCO)
 Location:

Wang Engineering, Inc.
 Consulting Geotechnical and Environmental Engineers
 wangeng30@wengeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

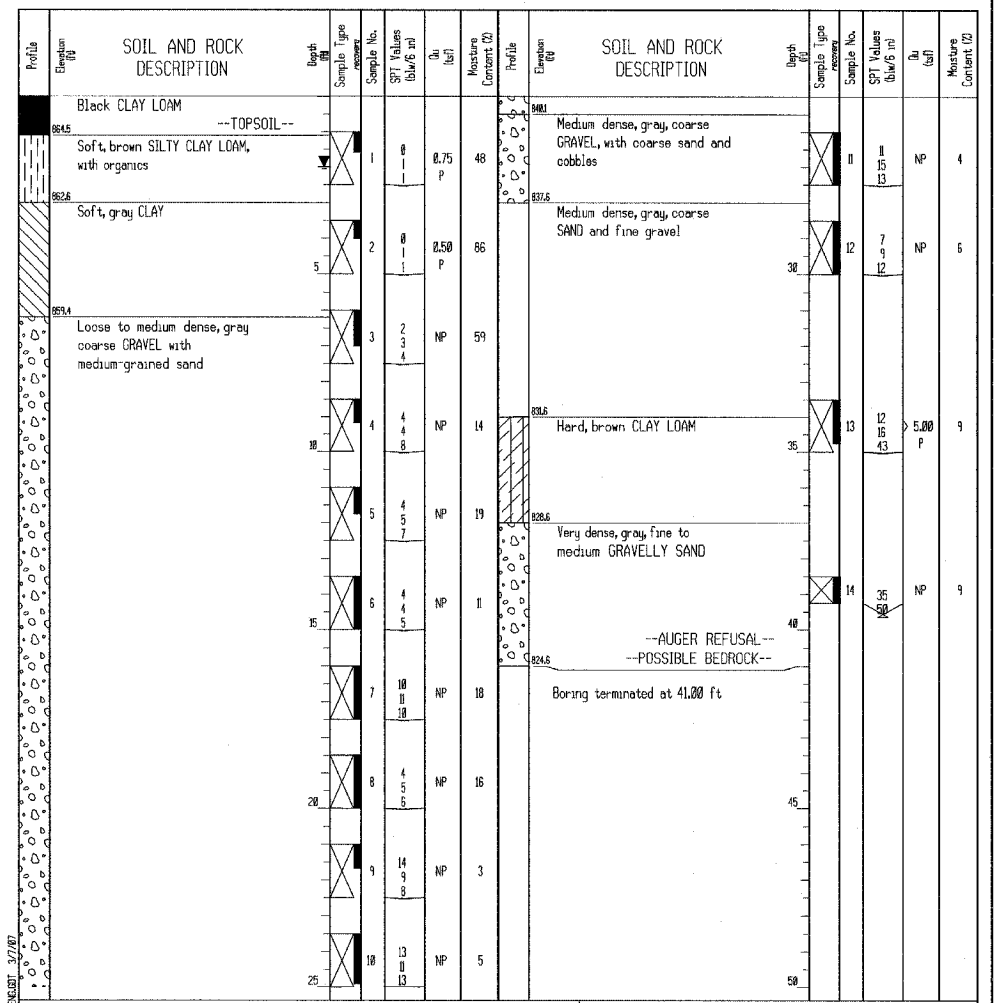
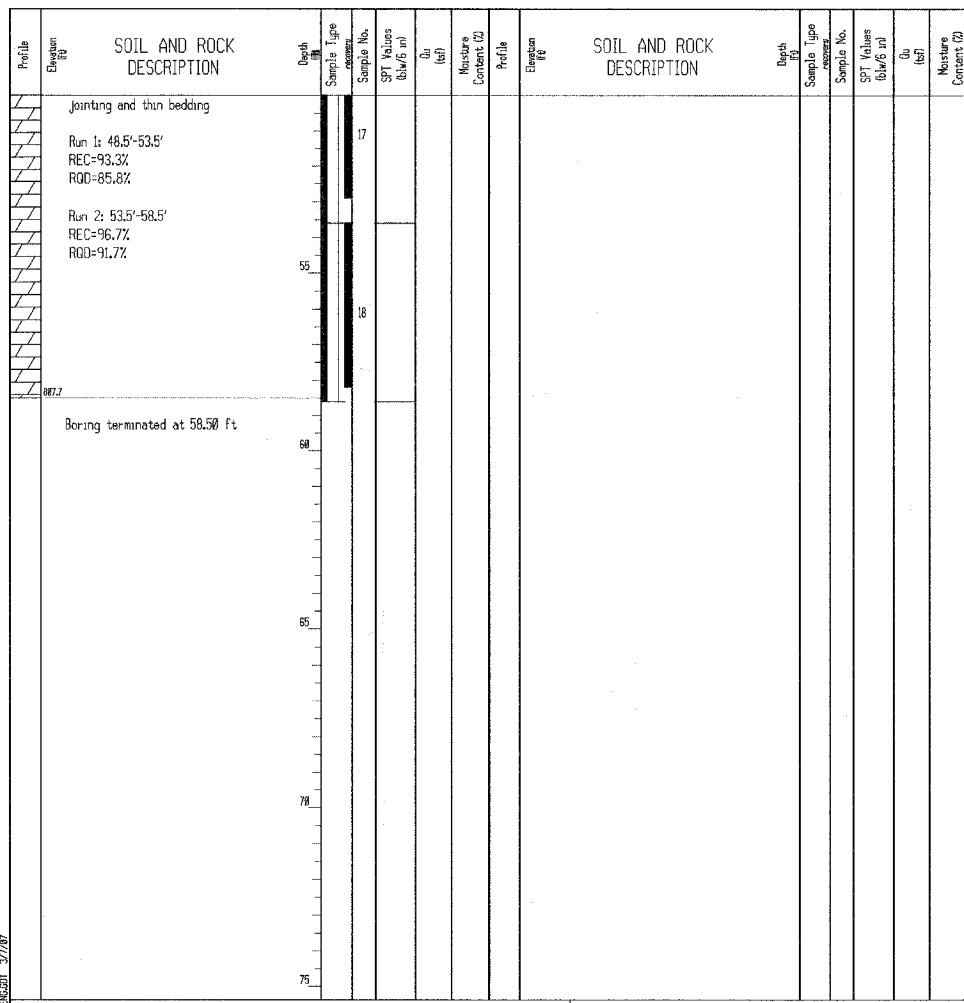
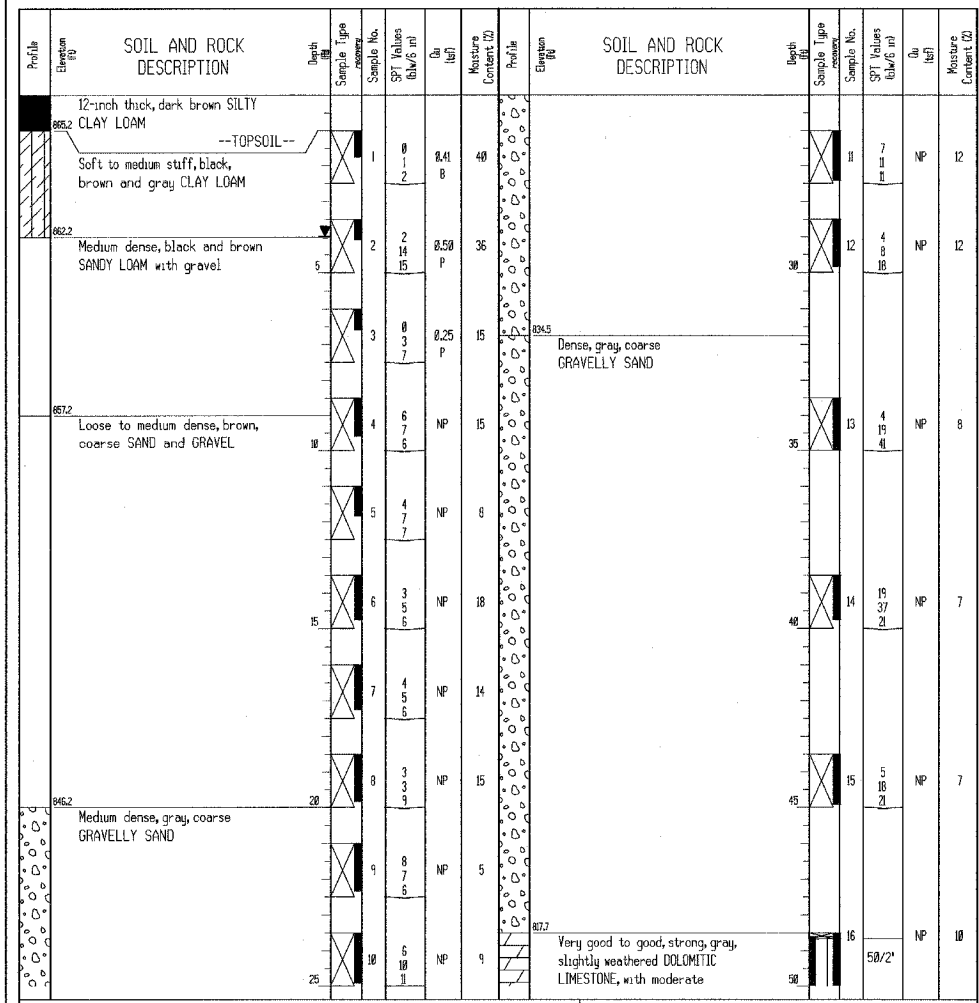
BORING LOG OB-01 Page 2 of 2
 WEI Job No.: 950-06-01
 Datum: NGVD
 Elevation: 865.22 Ft
 North: 2894284.78 Ft
 East: 891887.35 Ft
 Station: 89+85
 Offset: 45 LT

Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piascasaw Creek Overflow (PCO)
 Location:

Wang Engineering, Inc.
 Consulting Geotechnical and Environmental Engineers
 wangeng30@wengeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG OB-02 Page 1 of 1
 WEI Job No.: 950-06-01
 Datum: NGVD
 Elevation: 865.68 Ft
 North: 2894284.11 Ft
 East: 891971.95 Ft
 Station: 90+51
 Offset: 48 RT

Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piascasaw Creek Overflow (PCO)
 Location:



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-19-2006	Complete Drilling	12-19-2006
Drilling Contractor	Precon	Drill Rig	CME-75 ATV
Driller	K&S	Logger	D.Constantine
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 HSA	Depth to Water	NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	12-19-2006	Complete Drilling	12-19-2006
Drilling Contractor	Precon	Drill Rig	CME-75 ATV
Driller	K&S	Logger	D.Constantine
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 HSA	Depth to Water	NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	01-19-2007	Complete Drilling	01-19-2007
Drilling Contractor	Precon	Drill Rig	CME-75 ATV
Driller	S&J	Logger	D.Constantine
Checked by	E. Datz	Time After Drilling	NA
Drilling Method	3.25 HSA	Depth to Water	NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS-I
 IL. RTE. 173
 OVER
 PISCASAW CREEK OVERFLOW
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 90+20.80
 STRUCTURE NO. 056-0089

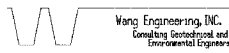
SCALE: DATE: APRIL 13, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

REVISIONS	
NAME	DATE

F.A.P. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET No.
303	131B(1&2)BR	McHENRY	107	64
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83



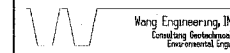
Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG OB-03

WEI Job No.: 950-06-01

Datum: NGVD
Elevation: 957.89 ft
North: 2894225.20 ft
East: 891873.96 ft
Station: 89+58
Offset: 14' RT

Client: Christian-Roge & Associates, Inc.
Project: IL-173 Bridge over Piasasaw Creek Overflow (PCO)
Location:



Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng3@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG OB-04

WEI Job No.: 950-06-01

Datum: NGVD
Elevation: 957.89 ft
North: 2894225.20 ft
East: 891999.16 ft
Station: 90+66
Offset: 15' RT

Client: Christian-Roge & Associates, Inc.
Project: IL-173 Bridge over Piasasaw Creek Overflow (PCO)
Location:

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	U ₁ (ksi)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	U ₁ (ksi)	Moisture Content (%)
958.2	13-inch thick ASPHALT --PAVEMENT--														
955.3	9-inch thick CONCRETE --PAVEMENT--														
	Very stiff to hard, gray and CLAY LOAM --FILL--	4.50	1	5	5	2.21	25								
951.6	Medium stiff, black SILTY CLAY LOAM	8.33	3	2	3	0.33	37								
951.1	Medium dense, gray SANDY GRAVEL	12.00	4	4	5	NP	12								
		16.00	5	3	5	NP	16								
		18.00	6	4	7	NP	12								
		20.00	7	3	6	NP	12								
		21.00	8	3	5	NP	13								
	Boring terminated at 20.00 ft														
GENERAL NOTES Begin Drilling: 03-12-2007 Complete Drilling: 03-12-2007 Drilling Contractor: Precon Drill Rig: CME-75 ATV Driller: S&J Logger: D.Constantine Checked by: R.Edelmann Drilling Method: 3.25 HSA								WATER LEVEL DATA While Drilling: 11.00 ft At Completion of Drilling: 7.00 ft Time After Drilling: NA Depth to Water: NA <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>							

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	U ₁ (ksi)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/6 in)	U ₁ (ksi)	Moisture Content (%)
958.1	12-inch thick ASPHALT --PAVEMENT--														
955.2	10-inch thick CONCRETE --PAVEMENT--														
	Very stiff, dark gray SILTY CLAY LOAM --FILL--	2.50	1	2	4	2.50	26								
		4.26	2	2	4	4.26	21								
951.6	Soft gray CLAY with organic fibers	3.33	3	3	3										
951.1	Loose to medium dense, GRAVELY SAND	8.50	4	0	1	2.50	56								
		14.00	5	0	1	NP	14								
		15.00	6	7	8	NP	15								
		19.00	7	2	4	NP	9								
		20.00	8	3	4	NP	9								
	Boring terminated at 20.00 ft														
GENERAL NOTES Begin Drilling: 03-12-2007 Complete Drilling: 03-12-2007 Drilling Contractor: Precon Drill Rig: CME-75 ATV Driller: S&J Logger: D.Constantine Checked by: R.Edelmann Drilling Method: 3.25 HSA								WATER LEVEL DATA While Drilling: 11.00 ft At Completion of Drilling: 2.50 ft Time After Drilling: NA Depth to Water: NA <small>The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.</small>							

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS-II
IL. RTE. 173
OVER
PISCASAW CREEK OVERFLOW
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 90+20.80
STRUCTURE NO. 056-0089

SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 13, 2007 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

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BENCH MARK "B"

SQUARE CUT FOUND ON N.W. WINGWALL OF THE BRIDGE OVER PISCASAW CREEK, STR. NO. 056-0028, EL. 872.99

EXISTING STRUCTURE: S.N. 056-0028, WAS ORIGINALLY BUILT IN 1929 AND WAS 24'-2" WIDE OUT TO OUT OF DECK. IN 1971 THE BRIDGE WAS WIDENED TO THE CURRENT 42'-0" WIDE OUT TO OUT OF DECK ON CLOSED ABUTMENTS AND SOLID PIERS. THE EXISTING BRIDGE HAS SIX SPANS OF PPC BOX BEAMS. THE TOTAL STRUCTURE LENGTH 160'-6" FROM BACK TO BACK OF THE ABUTMENTS.

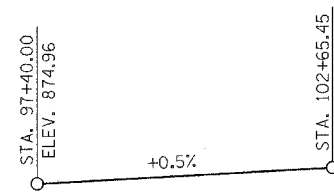
THE EXISTING STRUCTURE IS TO BE REMOVED AND REPLACED UTILIZING STAGE CONSTRUCTION.

SALVAGE: NONE

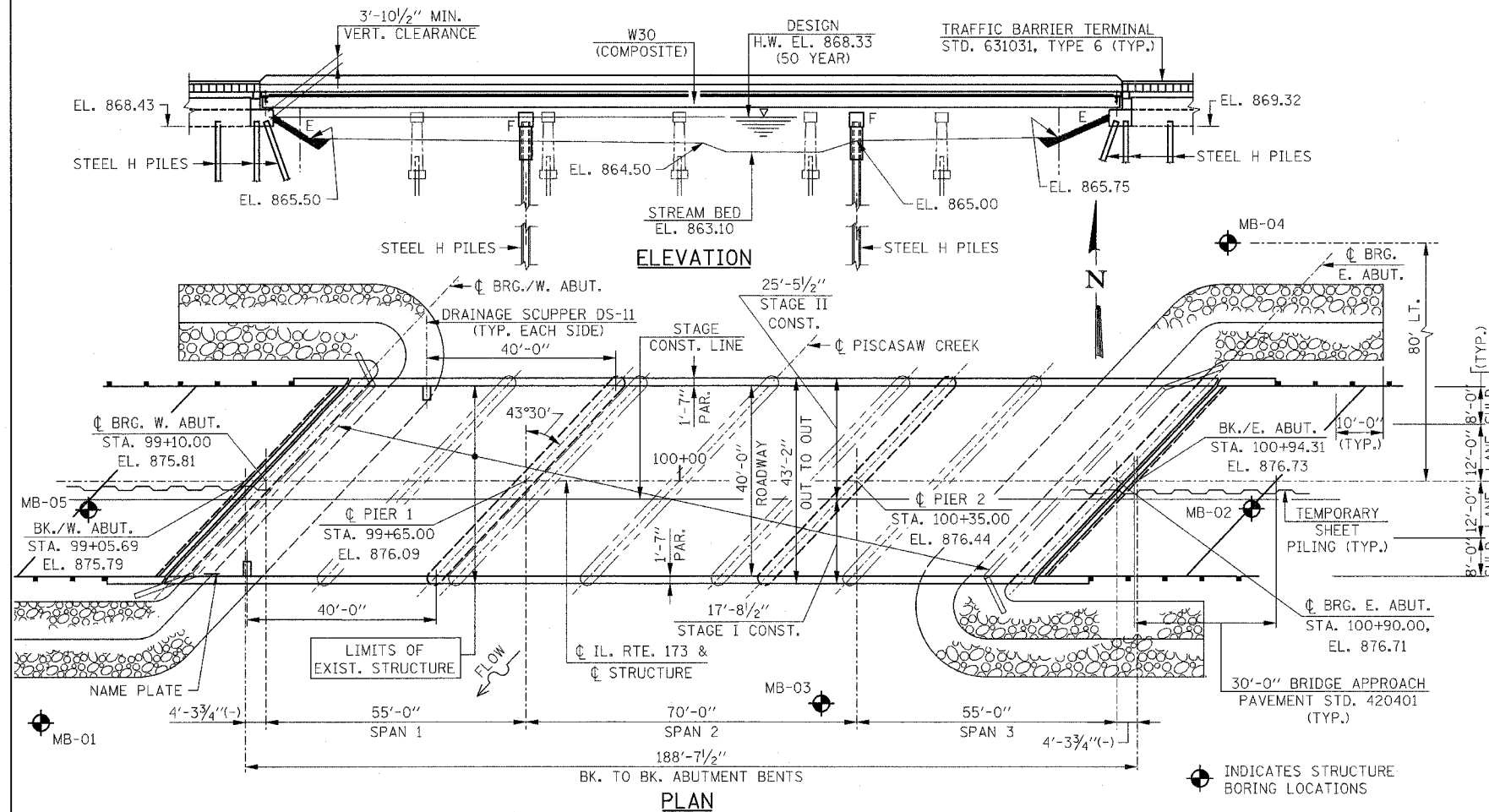
SHEET 501 OF 525		F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		303	131B(1&2)BR	McHENRY	107	65
STA.		TO STA.				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT			
CONTRACT NO. 60B83						

INDEX OF SHEETS

- S01 GENERAL PLAN & ELEVATION
- S02 GENERAL NOTES & TOTAL BILL OF MATERIAL
- S03 CONSTRUCTION STAGING & TEMPORARY SHEET PILING
- S04 DECK ELEVATIONS-I
- S05 DECK ELEVATIONS-II
- S06 DECK ELEVATIONS-III
- S07 DECK PLAN & CROSS SECTION
- S08 PARAPETS, DECK DETAILS & SUPERSTRUCTURE BILL OF MATERIAL
- S09 DRAINAGE SCUPPER, DS-11
- S10 PREFORMED JOINT STRIP SEAL
- S11 FRAMING PLAN & STRUCTURAL STEEL DETAILS
- S12 STRUCTURAL STEEL DETAILS
- S13 BEARING DETAILS
- S14 WEST ABUTMENT
- S15 WEST ABUTMENT DETAILS
- S16 EAST ABUTMENT
- S17 EAST ABUTMENT DETAILS
- S18 PIER 1 & 2
- S19 BAR SPLICER ASSEMBLY DETAILS
- S20 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
- S21 STEEL H-PILE DETAILS
- S22 WEST APPROACH PAVEMENT-ELEVATIONS
- S23 EAST APPROACH PAVEMENT-ELEVATIONS
- S24 SOIL BORING LOGS-I
- S25 SOIL BORINGS LOGS-II



PROFILE GRADE
(ALONG CL. RTE. 173)



DESIGN SCOUR ELEVATION TABLE

LOCATION	W. ABUT.	PIER 1	PIER 2	E. ABUT.
DESIGN SCOUR ELEVATIONS	868.50	849.34	849.34	869.42

WATERWAY INFORMATION TABLE

DRAINAGE AREA = 57.22 SQ. MI.		EXIST. LOW GRADE ELEV. = 872.56		MAX. RECORDED H.W.E. = 871.53						
		PROP. LOW GRADE ELEV. = 874.4								
FLOOD (YEAR)	FREQ. (YEAR)	DISCHARGE (CFS) EXIST.	DISCHARGE (CFS) PROP.	WATERWAY OPENING (SQ. FT.) EXIST.	WATERWAY OPENING (SQ. FT.) PROP.	NATURAL H.W.E.	HEAD (FT.) EXIST.	HEAD (FT.) PROP.	HEADWATER ELEV. EXIST.	HEADWATER ELEV. PROP.
DESIGN	10	1,358.8	1,326.18	318	355	867.73	0.78	0.77	868.51	868.5
BASE	50	1,886.8	1,863.64	375	430	868.33	1.07	1.05	869.40	869.38
OVERTOPPING	100	2,183.83	2,080.18	396	458	868.55	1.21	1.16	869.76	869.71
MAX. CALC.	500	2,740.3	2,586.64	442	520	869.03	1.52	1.38	870.55	870.41

COMMENTS: ALL ELEVATIONS ARE IN HIGHWAY DATUM. MAX. RECORDED HWE ESTIMATED FROM HYDROLOGIC INVESTIGATION ATLAS, HA-498. INVERT ELEVATIONS - UPSTREAM 863.3, DOWNSTREAM 862.9. TABLE IS PREPARED FOR ANALYSIS WHERE THE RAILROAD BRIDGE IS NOT INCLUDED IN THE HEC-RAS MODEL.

LOADING HS20-44
ALLOW 50*/SQ. FT. FOR FUTURE WEARING SURFACE

DESIGN SPECIFICATIONS
AASHTO 17TH EDITION - 2002

DESIGN STRESSES

FIELD UNITS

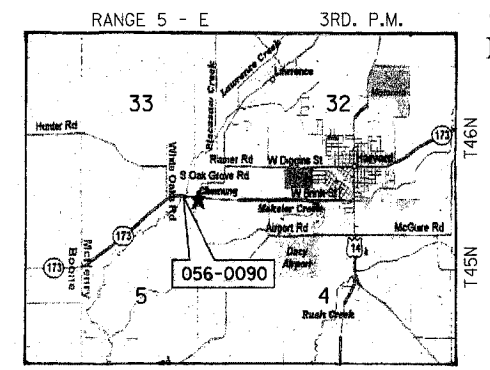
f'c = 3,500 PSI
fy = 60,000 PSI (REINFORCEMENT)
fy = 50,000 PSI (M270 GR. 50 STRUCTURAL STEEL)

SEISMIC DATA

SEISMIC PERFORMANCE CATEGORY (SPC) = A
BEDROCK ACCELERATION COEFFICIENT (A) = 0.033g
SITE COEFFICIENT (S) = 1.0

STATION 100+00
BUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RT. 303 SEC. 131B(1&2)BR
LOADING HS20
STRUCTURE NO. 056-0090

NAME PLATE
SEE STD. 515001



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Paul E. Adams
ENGINEER OF BRIDGES AND STRUCTURES



Bhadesh N. Shah
BHADRESH N. SHAH APRIL 13, 2007
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. NO. 081-004476
EXPIRES: 11-30-08

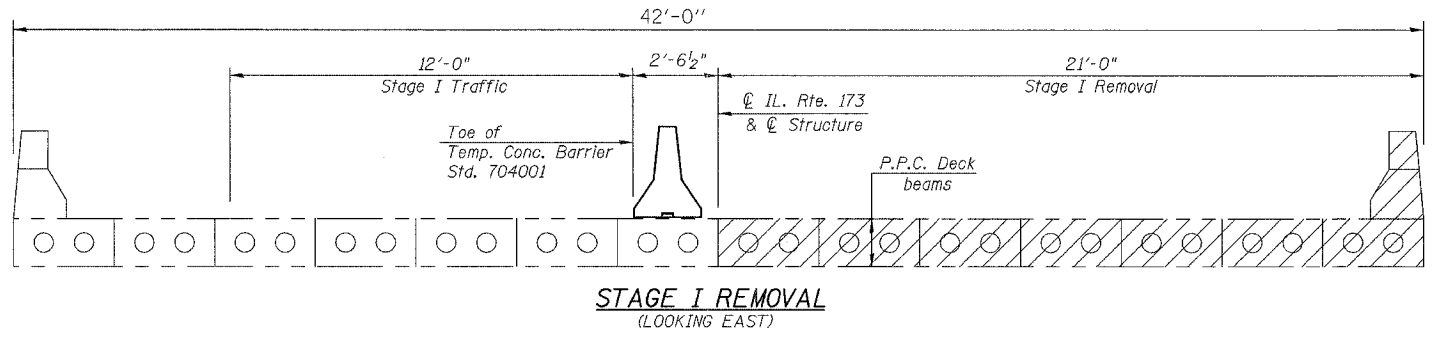
ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090
SCALE: DATE: APRIL 2, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

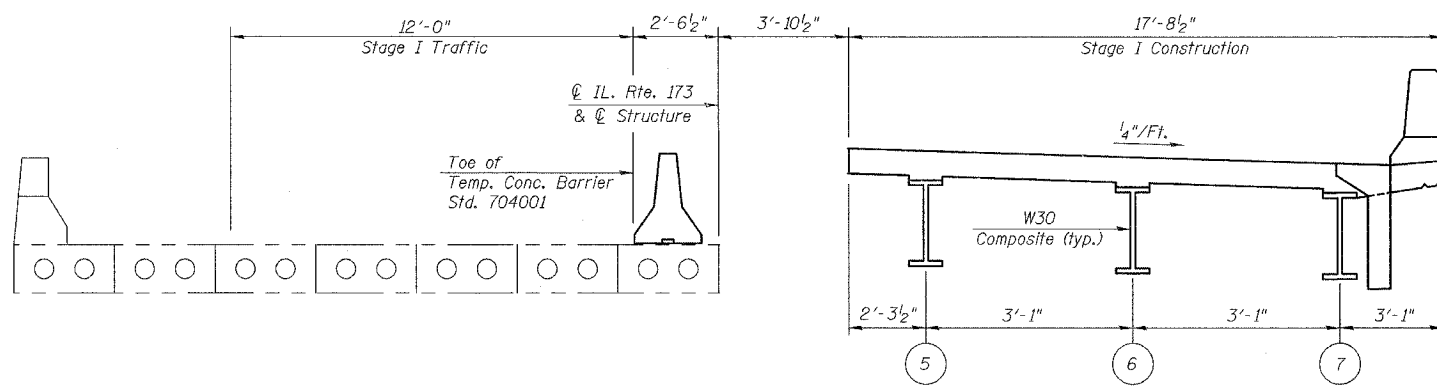
REVISIONS	
NAME	DATE

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	67
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

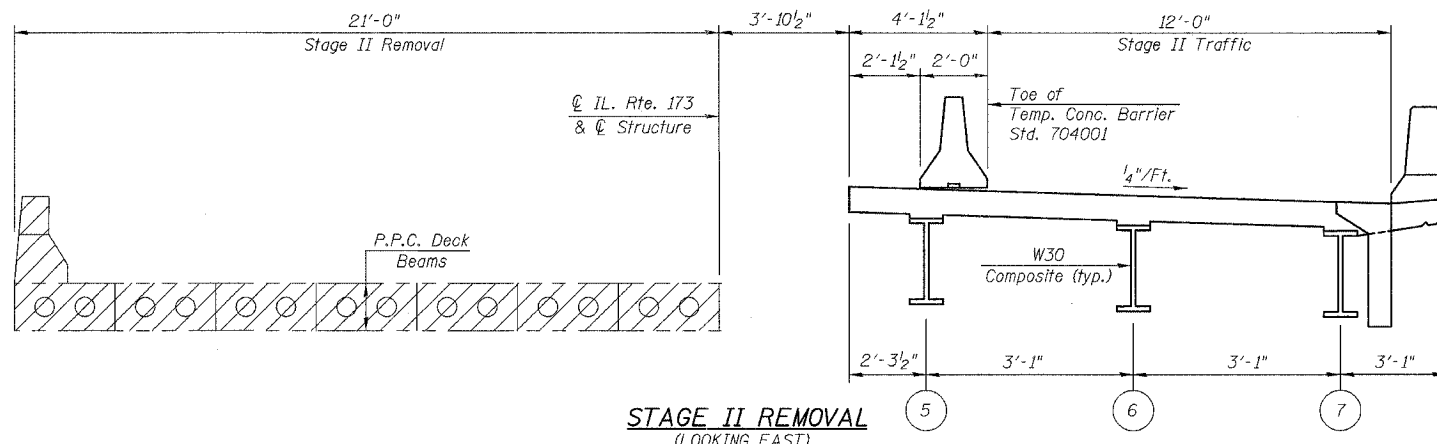
CONTRACT NO. 60B83



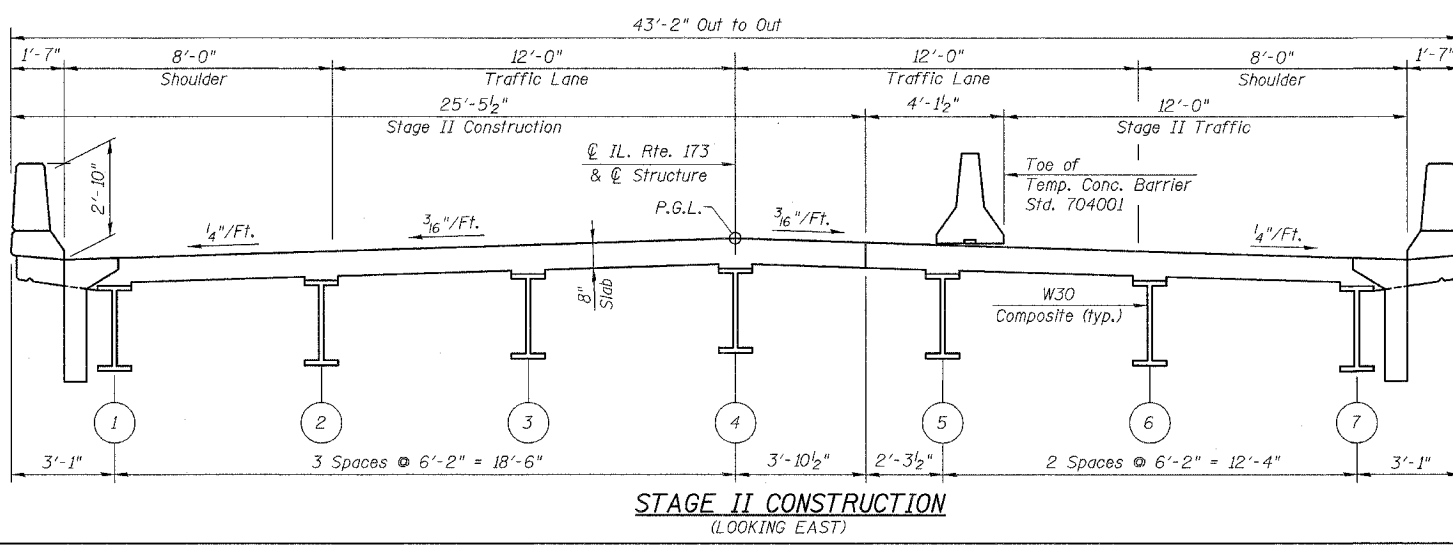
STAGE I REMOVAL
(LOOKING EAST)



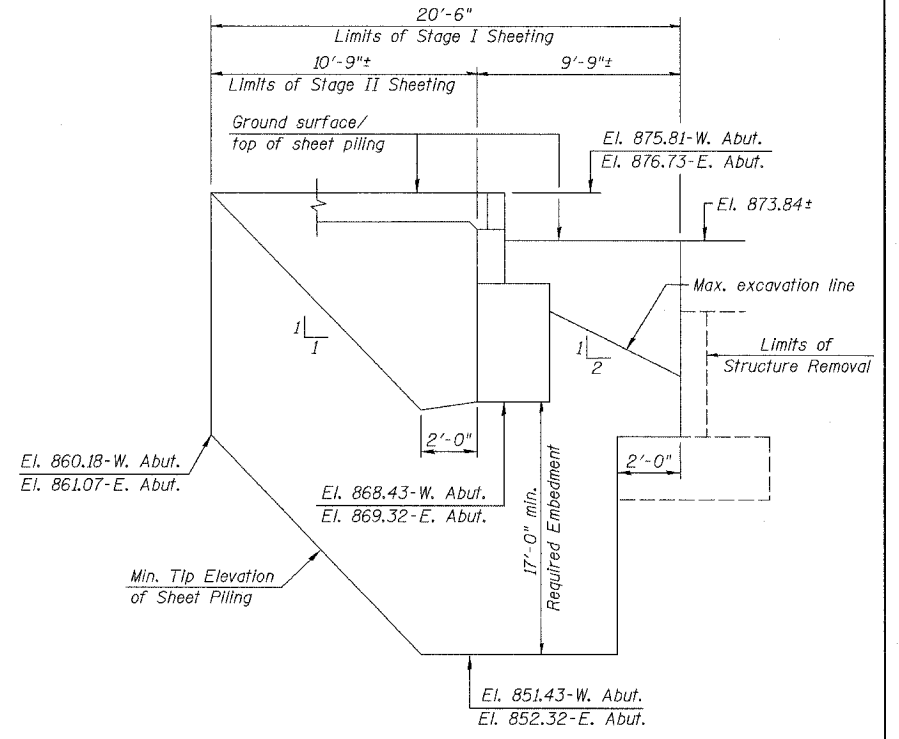
STAGE I CONSTRUCTION
(LOOKING EAST)



STAGE II REMOVAL
(LOOKING EAST)



STAGE II CONSTRUCTION
(LOOKING EAST)



Sheet Piling shall be Anchored to the existing Abutment
Minimum Embedment Depth = 17 ft.
Minimum Section Modulus of Sheet Piling = 14.3 in³/ft.

TEMPORARY SHEET PILING AT ABUTMENTS

Notes:
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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING & TEMPORARY SHEET PILING
IL. RTE. 173 OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

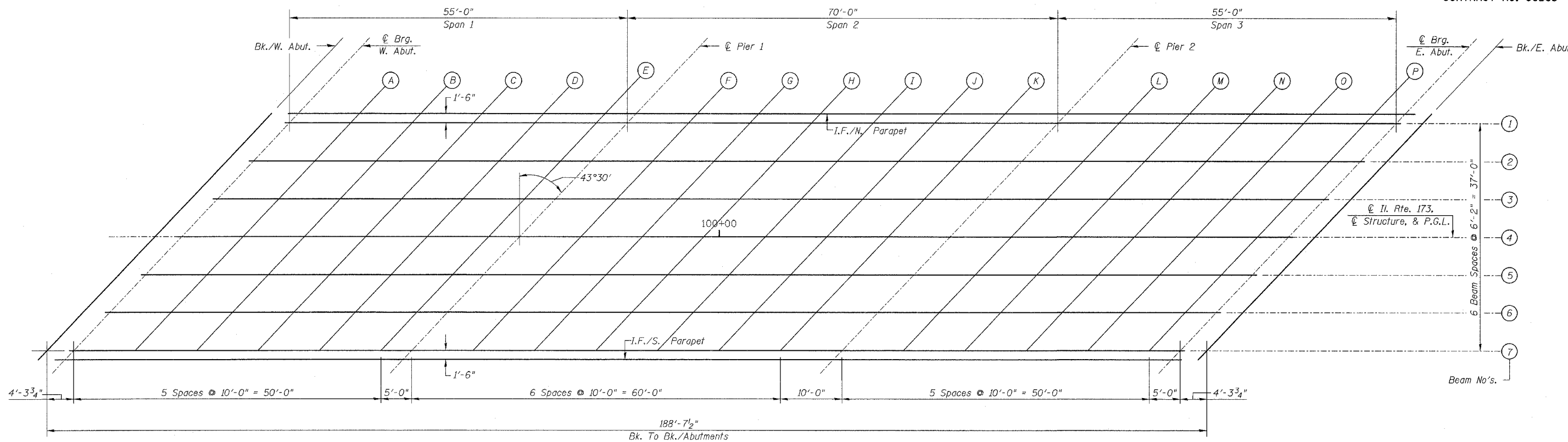
SCALE: DATE: APRIL 2, 2007 DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

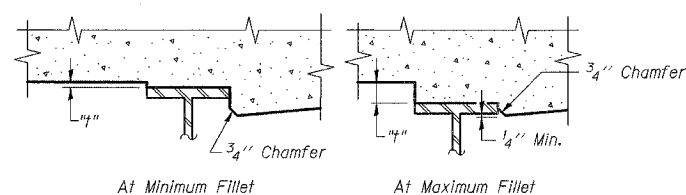
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F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	68
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

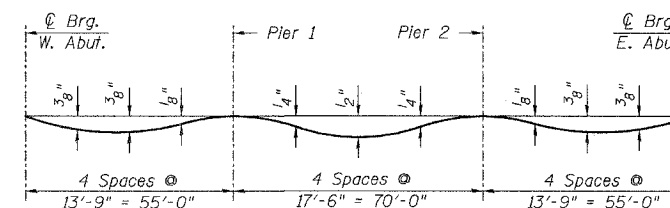


PLAN



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 the dead load deflection" shown on this sheet, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



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 Sht. S05 & S06

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK ELEVATIONS-I
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090
SCALE: DRAWN BY: D.L./F.M.
DATE: APRIL 2, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

INSIDE FACE/NORTH PARAPET

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+24.67	-20.00	875.53	875.53
CL BRG. WEST ABUT.	99+28.98	-20.00	875.55	875.55
A	99+38.98	-20.00	875.60	875.60
B	99+48.98	-20.00	875.65	875.65
C	99+58.98	-20.00	875.70	875.70
D	99+68.98	-20.00	875.75	875.75
E	99+78.98	-20.00	875.80	875.80
CL BRG. PIER 1	99+83.98	-20.00	875.83	875.83
F	99+93.98	-20.00	875.88	875.88
G	100+03.98	-20.00	875.93	875.93
H	100+13.98	-20.00	875.98	875.98
I	100+23.98	-20.00	876.03	876.03
J	100+33.98	-20.00	876.08	876.08
K	100+43.98	-20.00	876.13	876.13
CL BRG. PIER 2	100+53.98	-20.00	876.18	876.18
L	100+63.98	-20.00	876.23	876.23
M	100+73.98	-20.00	876.28	876.28
N	100+83.98	-20.00	876.33	876.33
O	100+93.98	-20.00	876.38	876.38
P	101+03.98	-20.00	876.43	876.43
CL BRG. EAST ABUT.	101+08.98	-20.00	876.45	876.45
BACK OF EAST ABUT.	101+13.29	-20.00	876.47	876.47

BEAM 1

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+23.25	-18.50	875.55	875.55
CL BRG. WEST ABUT.	99+27.56	-18.50	875.58	875.58
A	99+37.56	-18.50	875.63	875.65
B	99+47.56	-18.50	875.68	875.71
C	99+57.56	-18.50	875.73	875.75
D	99+67.56	-18.50	875.78	875.79
E	99+77.56	-18.50	875.83	875.83
CL BRG. PIER 1	99+82.56	-18.50	875.85	875.85
F	99+92.56	-18.50	875.90	875.91
G	100+02.56	-18.50	875.95	875.98
H	100+12.56	-18.50	876.00	876.04
I	100+22.56	-18.50	876.05	876.09
J	100+32.56	-18.50	876.10	876.13
K	100+42.56	-18.50	876.15	876.16
CL BRG. PIER 2	100+52.56	-18.50	876.20	876.20
L	100+62.56	-18.50	876.25	876.26
M	100+72.56	-18.50	876.30	876.32
N	100+82.56	-18.50	876.35	876.38
O	100+92.56	-18.50	876.40	876.43
P	101+02.56	-18.50	876.45	876.46
CL BRG. EAST ABUT.	101+07.56	-18.50	876.48	876.48
BACK OF EAST ABUT.	101+11.87	-18.50	876.50	876.50

BEAM 2

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+17.39	-12.33	875.65	875.65
CL BRG. WEST ABUT.	99+21.70	-12.33	875.68	875.68
A	99+31.70	-12.33	875.73	875.74
B	99+41.70	-12.33	875.78	875.81
C	99+51.70	-12.33	875.83	875.85
D	99+61.70	-12.33	875.88	875.89
E	99+71.70	-12.33	875.93	875.93
CL BRG. PIER 1	99+76.70	-12.33	875.95	875.95
F	99+86.70	-12.33	876.00	876.01
G	99+96.70	-12.33	876.05	876.07
H	100+06.70	-12.33	876.10	876.14
I	100+16.70	-12.33	876.15	876.19
J	100+26.70	-12.33	876.20	876.22
K	100+36.70	-12.33	876.25	876.26
CL BRG. PIER 2	100+46.70	-12.33	876.30	876.30
L	100+56.70	-12.33	876.35	876.36
M	100+66.70	-12.33	876.40	876.42
N	100+76.70	-12.33	876.45	876.48
O	100+86.70	-12.33	876.50	876.53
P	100+96.70	-12.33	876.55	876.56
CL BRG. EAST ABUT.	101+01.70	-12.33	876.58	876.58
BACK OF EAST ABUT.	101+06.01	-12.33	876.60	876.60

SHEET 505 OF 525

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	69
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

BREAK IN CROSS SLOPE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+17.08	-12.00	875.66	875.66
CL BRG. WEST ABUT.	99+21.39	-12.00	875.68	875.68
A	99+31.39	-12.00	875.73	875.73
B	99+41.39	-12.00	875.78	875.78
C	99+51.39	-12.00	875.83	875.83
D	99+61.39	-12.00	875.88	875.88
E	99+71.39	-12.00	875.93	875.93
CL BRG. PIER 1	99+76.39	-12.00	875.96	875.96
F	99+86.39	-12.00	876.01	876.01
G	99+96.39	-12.00	876.06	876.06
H	100+06.39	-12.00	876.11	876.11
I	100+16.39	-12.00	876.16	876.16
J	100+26.39	-12.00	876.21	876.21
K	100+36.39	-12.00	876.26	876.26
CL BRG. PIER 2	100+46.39	-12.00	876.31	876.31
L	100+56.39	-12.00	876.36	876.36
M	100+66.39	-12.00	876.41	876.41
N	100+76.39	-12.00	876.46	876.46
O	100+86.39	-12.00	876.51	876.51
P	100+96.39	-12.00	876.56	876.56
CL BRG. EAST ABUT.	101+01.39	-12.00	876.58	876.58
BACK OF EAST ABUT.	101+05.70	-12.00	876.60	876.60

BEAM 3

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+11.54	-6.17	875.72	875.72
CL BRG. WEST ABUT.	99+15.85	-6.17	875.74	875.74
A	99+25.85	-6.17	875.79	875.81
B	99+35.85	-6.17	875.84	875.88
C	99+45.85	-6.17	875.89	875.92
D	99+55.85	-6.17	875.94	875.96
E	99+65.85	-6.17	875.99	876.00
CL BRG. PIER 1	99+70.85	-6.17	876.02	876.02
F	99+80.85	-6.17	876.07	876.08
G	99+90.85	-6.17	876.12	876.14
H	100+00.85	-6.17	876.17	876.21
I	100+10.85	-6.17	876.22	876.26
J	100+20.85	-6.17	876.27	876.29
K	100+30.85	-6.17	876.32	876.33
CL BRG. PIER 2	100+40.85	-6.17	876.37	876.37
L	100+50.85	-6.17	876.42	876.43
M	100+60.85	-6.17	876.47	876.49
N	100+70.85	-6.17	876.52	876.55
O	100+80.85	-6.17	876.57	876.60
P	100+90.85	-6.17	876.62	876.63
CL BRG. EAST ABUT.	100+95.85	-6.17	876.65	876.65
BACK OF EAST ABUT.	101+00.16	-6.17	876.67	876.67

BEAM 4 & P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+05.69		875.79	875.79
CL BRG. WEST ABUT.	99+10.00		875.81	875.81
A	99+20.00		875.86	875.88
B	99+30.00		875.91	875.94
C	99+40.00		875.96	875.99
D	99+50.00		876.01	876.03
E	99+60.00		876.06	876.07
CL BRG. PIER 1	99+65.00		876.09	876.09
F	99+75.00		876.14	876.15
G	99+85.00		876.19	876.21
H	99+95.00		876.24	876.27
I	100+05.00		876.29	876.32
J	100+15.00		876.34	876.36
K	100+25.00		876.39	876.40
CL BRG. PIER 2	100+35.00		876.44	876.44
L	100+45.00		876.49	876.49
M	100+55.00		876.54	876.56
N	100+65.00		876.59	876.62
O	100+75.00		876.64	876.67
P	100+85.00		876.69	876.70
CL BRG. EAST ABUT.	100+90.00		876.71	876.71
BACK OF EAST ABUT.	100+94.31		876.73	876.73

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK ELEVATIONS-II
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 2, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

STAGE CONST. JT.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	99+02.01	3.88	875.71	875.71
CL BRG. WEST ABUT.	99+06.32	3.88	875.73	875.73
A	99+16.32	3.88	875.78	875.78
B	99+26.32	3.88	875.83	875.83
C	99+36.32	3.88	875.88	875.88
D	99+46.32	3.88	875.93	875.93
E	99+56.32	3.88	875.98	875.98
CL BRG. PIER 1	99+61.32	3.88	876.01	876.01
F	99+71.32	3.88	876.06	876.06
G	99+81.32	3.88	876.11	876.11
H	99+91.32	3.88	876.16	876.16
I	100+01.32	3.88	876.21	876.21
J	100+11.32	3.88	876.26	876.26
K	100+21.32	3.88	876.31	876.31
CL BRG. PIER 2	100+31.32	3.88	876.36	876.36
L	100+41.32	3.88	876.41	876.41
M	100+51.32	3.88	876.46	876.46
N	100+61.32	3.88	876.51	876.51
O	100+71.32	3.88	876.56	876.56
P	100+81.32	3.88	876.61	876.61
CL BRG. EAST ABUT.	100+86.32	3.88	876.63	876.63
BACK OF EAST ABUT.	100+90.63	3.88	876.65	876.65

BEAM 5

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	98+99.84	6.17	875.66	875.66
CL BRG. WEST ABUT.	99+04.15	6.17	875.69	875.69
A	99+14.15	6.17	875.74	875.75
B	99+24.15	6.17	875.79	875.82
C	99+34.15	6.17	875.84	875.86
D	99+44.15	6.17	875.89	875.90
E	99+54.15	6.17	875.94	875.94
CL BRG. PIER 1	99+59.15	6.17	875.96	875.96
F	99+69.15	6.17	876.01	876.02
G	99+79.15	6.17	876.06	876.08
H	99+89.15	6.17	876.11	876.15
I	99+99.15	6.17	876.16	876.20
J	100+09.15	6.17	876.21	876.24
K	100+19.15	6.17	876.26	876.27
CL BRG. PIER 2	100+29.15	6.17	876.31	876.31
L	100+39.15	6.17	876.36	876.37
M	100+49.15	6.17	876.41	876.43
N	100+59.15	6.17	876.46	876.49
O	100+69.15	6.17	876.51	876.54
P	100+79.15	6.17	876.56	876.57
CL BRG. EAST ABUT.	100+84.15	6.17	876.59	876.59
BACK OF EAST ABUT.	100+88.46	6.17	876.61	876.61

BREAK IN CROSS SLOPE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	98+94.30	12.00	875.55	875.55
CL BRG. WEST ABUT.	98+98.61	12.00	875.57	875.57
A	99+08.61	12.00	875.62	875.62
B	99+18.61	12.00	875.67	875.67
C	99+28.61	12.00	875.72	875.72
D	99+38.61	12.00	875.77	875.77
E	99+48.61	12.00	875.82	875.82
CL BRG. PIER 1	99+53.61	12.00	875.84	875.84
F	99+63.61	12.00	875.89	875.89
G	99+73.61	12.00	875.94	875.94
H	99+83.61	12.00	875.99	875.99
I	99+93.61	12.00	876.04	876.04
J	100+03.61	12.00	876.09	876.09
K	100+13.61	12.00	876.14	876.14
CL BRG. PIER 2	100+23.61	12.00	876.19	876.19
L	100+33.61	12.00	876.24	876.24
M	100+43.61	12.00	876.29	876.29
N	100+53.61	12.00	876.34	876.34
O	100+63.61	12.00	876.39	876.39
P	100+73.61	12.00	876.44	876.44
CL BRG. EAST ABUT.	100+78.61	12.00	876.47	876.47
BACK OF EAST ABUT.	100+82.92	12.00	876.49	876.49

SHEET 506 OF 525

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	70
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83

BEAM 6

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	98+93.99	12.33	875.54	875.54
CL BRG. WEST ABUT.	98+98.30	12.33	875.56	875.56
A	99+08.30	12.33	875.61	875.63
B	99+18.30	12.33	875.66	875.69
C	99+28.30	12.33	875.71	875.74
D	99+38.30	12.33	875.76	875.77
E	99+48.30	12.33	875.81	875.81
CL BRG. PIER 1	99+53.30	12.33	875.83	875.83
F	99+63.30	12.33	875.88	875.90
G	99+73.30	12.33	875.93	875.96
H	99+83.30	12.33	875.98	876.02
I	99+93.30	12.33	876.03	876.07
J	100+03.30	12.33	876.08	876.11
K	100+13.30	12.33	876.13	876.15
CL BRG. PIER 2	100+23.30	12.33	876.18	876.18
L	100+33.30	12.33	876.23	876.24
M	100+43.30	12.33	876.28	876.31
N	100+53.30	12.33	876.33	876.37
O	100+63.30	12.33	876.38	876.41
P	100+73.30	12.33	876.43	876.44
CL BRG. EAST ABUT.	100+78.30	12.33	876.46	876.46
BACK OF EAST ABUT.	100+82.61	12.33	876.48	876.48

BEAM 7

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	98+88.13	18.50	875.38	875.38
CL BRG. WEST ABUT.	98+92.44	18.50	875.40	875.40
A	99+02.44	18.50	875.45	875.47
B	99+12.44	18.50	875.50	875.53
C	99+22.44	18.50	875.55	875.58
D	99+32.44	18.50	875.60	875.62
E	99+42.44	18.50	875.65	875.65
CL BRG. PIER 1	99+47.44	18.50	875.68	875.68
F	99+57.44	18.50	875.73	875.74
G	99+67.44	18.50	875.78	875.80
H	99+77.44	18.50	875.83	875.86
I	99+87.44	18.50	875.88	875.91
J	99+97.44	18.50	875.93	875.95
K	100+07.44	18.50	875.98	875.99
CL BRG. PIER 2	100+17.44	18.50	876.03	876.03
L	100+27.44	18.50	876.08	876.08
M	100+37.44	18.50	876.13	876.15
N	100+47.44	18.50	876.18	876.21
O	100+57.44	18.50	876.23	876.25
P	100+67.44	18.50	876.28	876.29
CL BRG. EAST ABUT.	100+72.44	18.50	876.30	876.30
BACK OF EAST ABUT.	100+76.75	18.50	876.32	876.32

INSIDE FACE/SOUTH PARAPET

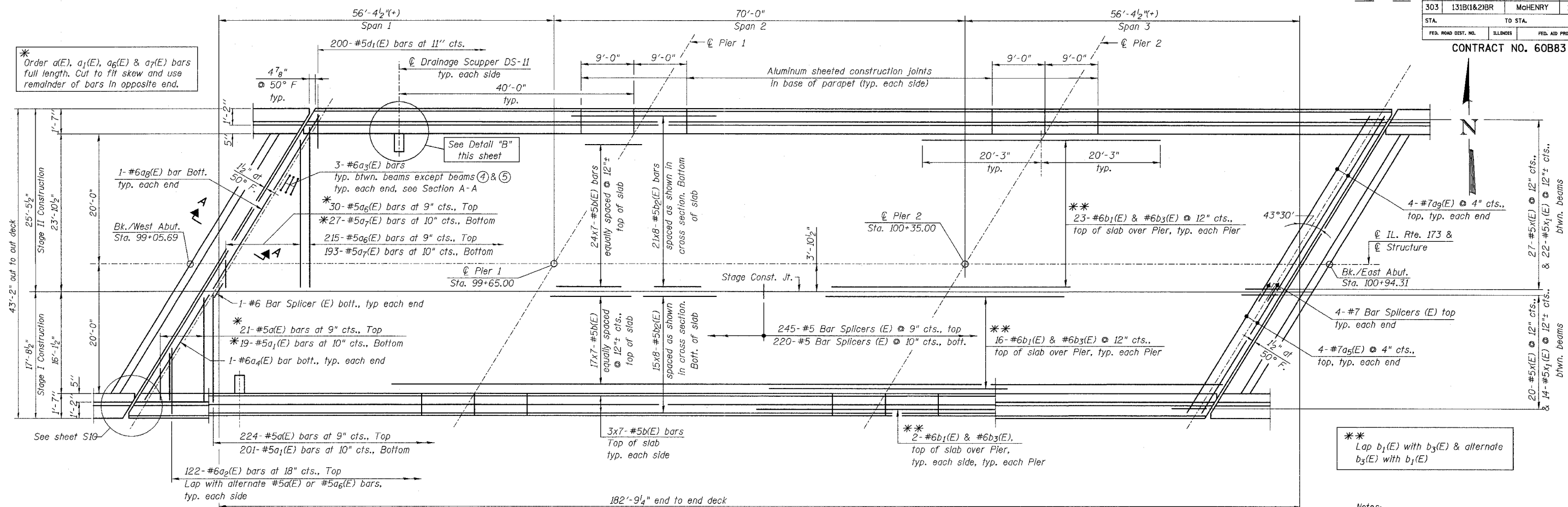
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF WEST ABUT.	98+86.71	20.00	875.34	875.34
CL BRG. WEST ABUT.	98+91.02	20.00	875.36	875.36
A	99+01.02	20.00	875.41	875.41
B	99+11.02	20.00	875.46	875.46
C	99+21.02	20.00	875.51	875.51
D	99+31.02	20.00	875.56	875.56
E	99+41.02	20.00	875.61	875.61
CL BRG. PIER 1	99+46.02	20.00	875.64	875.64
F	99+56.02	20.00	875.69	875.69
G	99+66.02	20.00	875.74	875.74
H	99+76.02	20.00	875.79	875.79
I	99+86.02	20.00	875.84	875.84
J	99+96.02	20.00	875.89	875.89
K	100+06.02	20.00	875.94	875.94
CL BRG. PIER 2	100+16.02	20.00	875.99	875.99
L	100+26.02	20.00	876.04	876.04
M	100+36.02	20.00	876.09	876.09
N	100+46.02	20.00	876.14	876.14
O	100+56.02	20.00	876.19	876.19
P	100+66.02	20.00	876.24	876.24
CL BRG. EAST ABUT.	100+71.02	20.00	876.26	876.26
BACK OF EAST ABUT.	100+75.33	20.00	876.28	876.28

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK ELEVATIONS-III
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 2, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CHICAGO, ILLINOIS 60681-1000
 TEL: (312) 355-3000 FAX: (312) 355-3001
 WWW.IDOT.IL.GOV

CONTRACT NO. 60B83



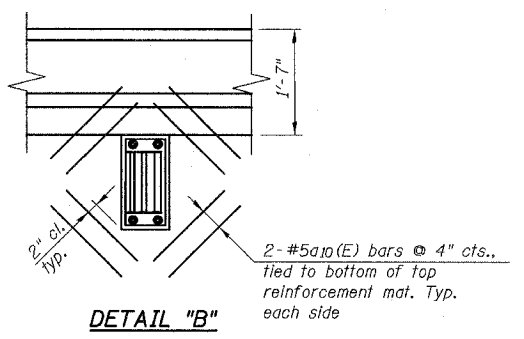
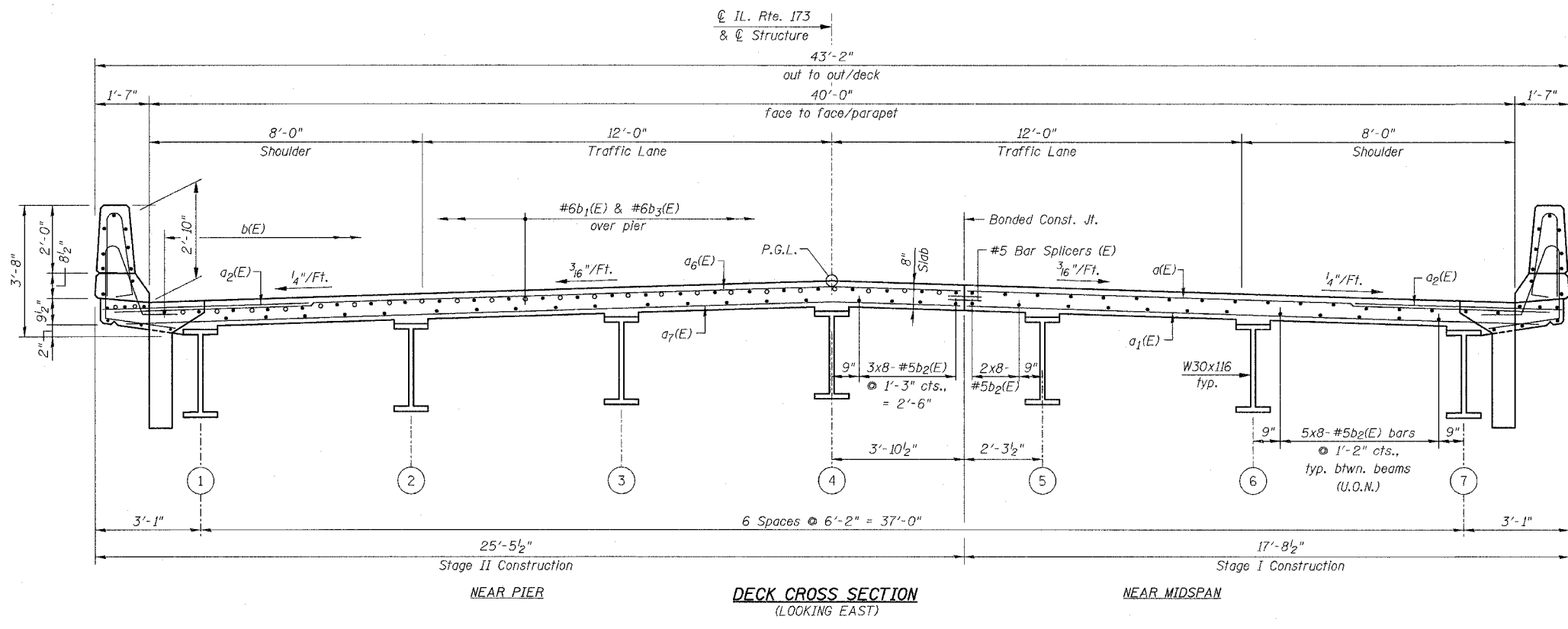
* Order a(E), a₁(E), a₆(E) & a₇(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

** Lap b₁(E) with b₃(E) & alternate b₃(E) with b₁(E)

Notes:
 See sheet S08 for Superstructure details and Bill of Material.
 See sheet S08 for Parapet reinforcement.
 See sheet S08 for Section A-A.
 Bars indicated thus 3x7-#5 etc., indicate 3 lines of bars with 7 lengths per line.

MINIMUM BAR LAP

#5 bar = 2'-2"
 #6 bar = 2'-7"



Note:
 For remainder of detail, see Section Thru Parapet, see sheet S08.

Note:
 Cut longitudinal reinforcement to clear drainage scuppers

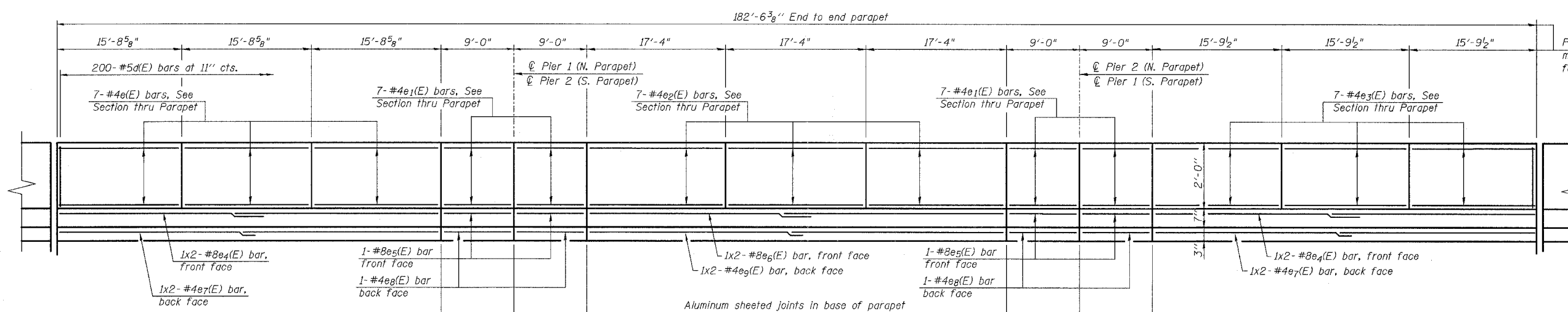
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK PLAN & CROSS SECTION
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

CONTRACT NO. 60B83

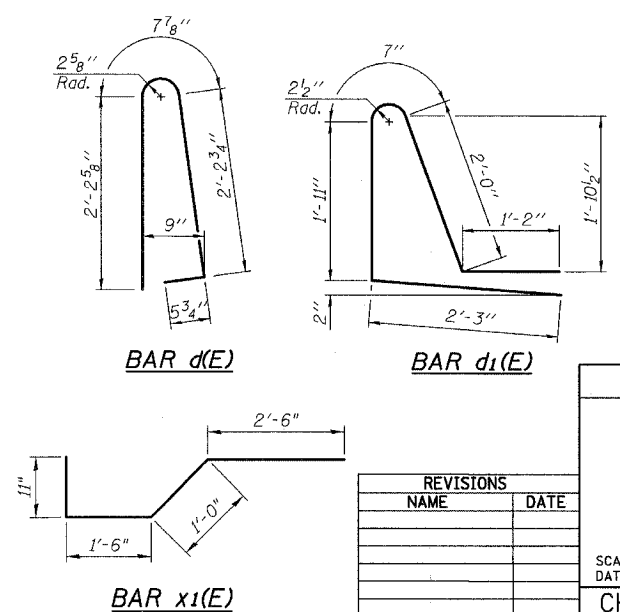
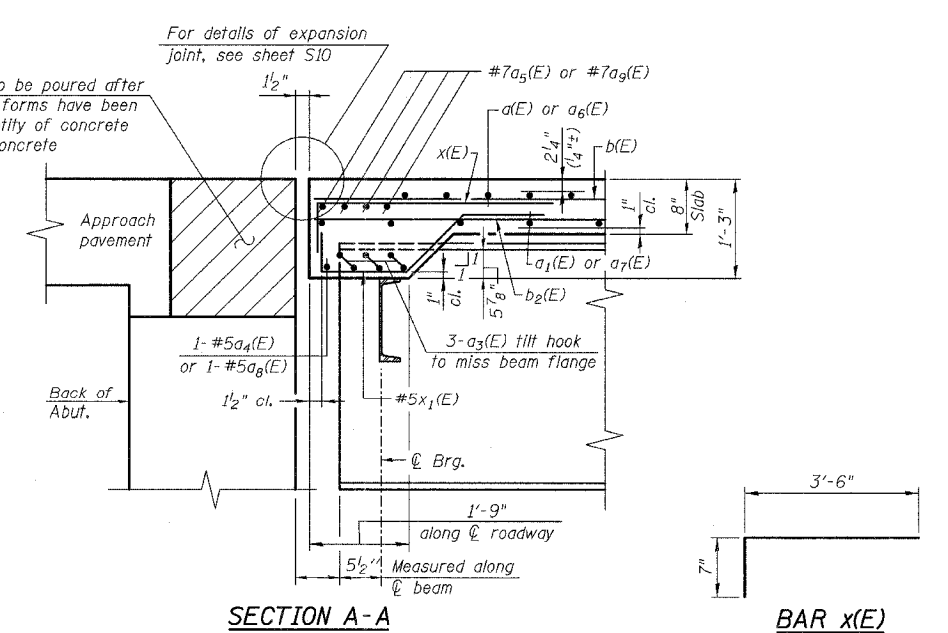
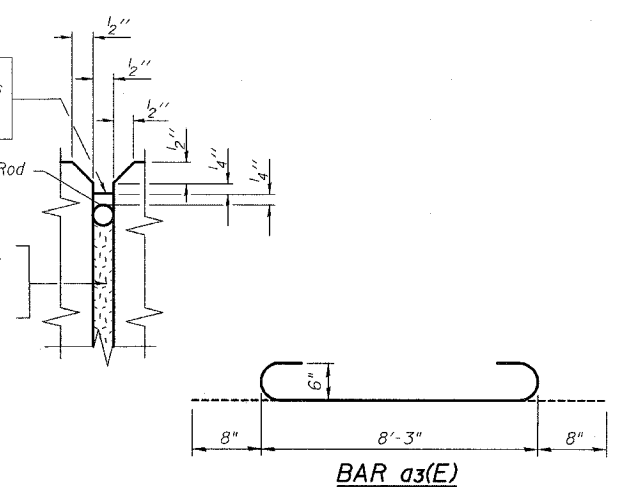
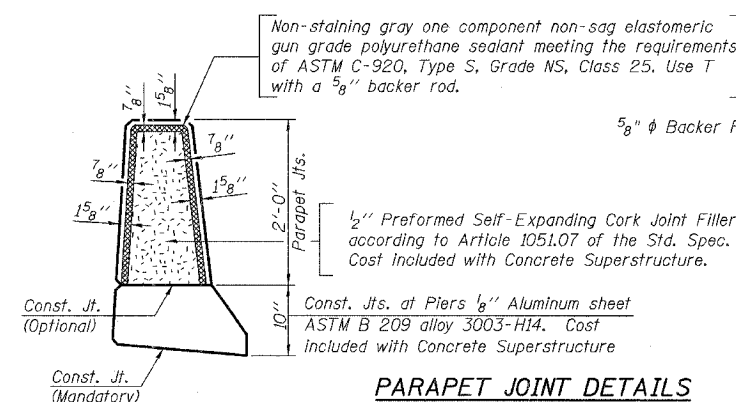
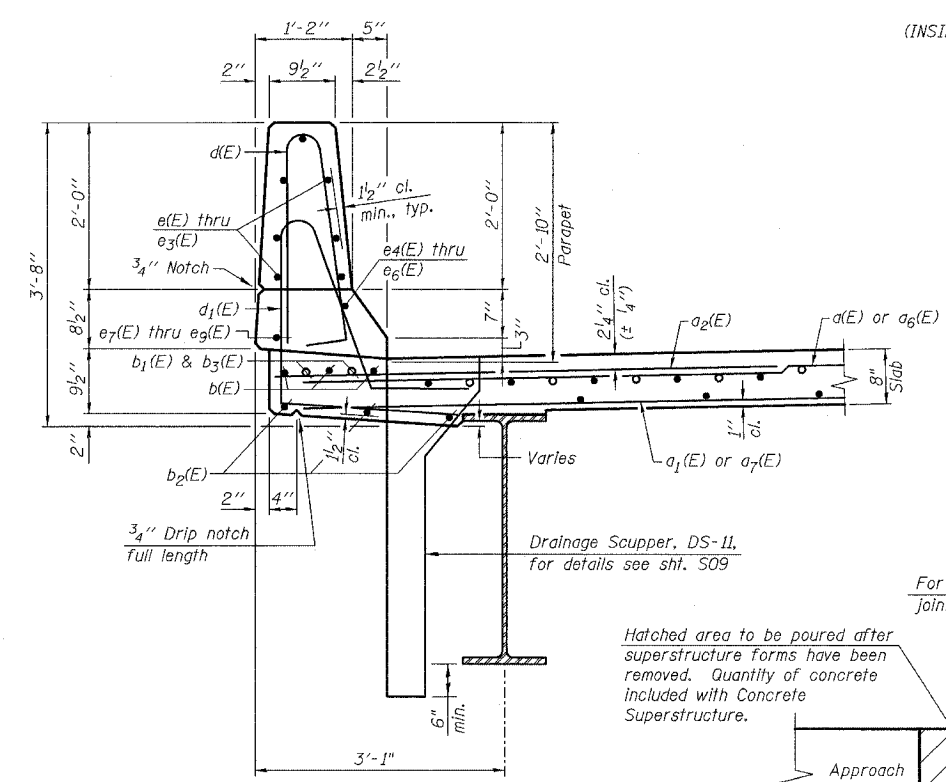


INSIDE ELEVATION OF NORTH PARAPET
(LOOKING NORTH)
(INSIDE FACE OF SOUTH PARAPET OPPOSITE HAND)

MINIMUM BAR LAP
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	245	#5	17'-2"	—
a ₁ (E)	220	#5	16'-10"	—
a ₂ (E)	122	#6	6'-0"	—
a ₃ (E)	30	#6	9'-7"	—
a ₄ (E)	2	#6	23'-7"	—
a ₅ (E)	8	#7	23'-10"	—
a ₆ (E)	245	#5	24'-11"	—
a ₇ (E)	220	#5	24'-7"	—
a ₈ (E)	2	#6	34'-3"	—
a ₉ (E)	8	#7	34'-6"	—
a ₁₀ (E)	16	#5	1'-6"	—
b(E)	329	#5	27'-11"	—
b ₁ (E)	86	#6	30'-0"	—
b ₂ (E)	288	#5	24'-9"	—
b ₃ (E)	86	#6	13'-1"	—
d(E)	400	#5	5'-7"	—
d ₁ (E)	400	#5	7'-11"	—
e(E)	42	#4	15'-4"	—
e ₁ (E)	56	#4	8'-8"	—
e ₂ (E)	42	#4	17'-0"	—
e ₃ (E)	42	#4	15'-5"	—
e ₄ (E)	8	#8	25'-3"	—
e ₅ (E)	8	#8	8'-8"	—
e ₆ (E)	4	#8	27'-7"	—
e ₇ (E)	8	#4	24'-3"	—
e ₈ (E)	8	#4	8'-8"	—
e ₉ (E)	4	#4	26'-6"	—
x(E)	94	#5	4'-1"	—
x ₁ (E)	72	#5	5'-11"	—
Bar Splicers	Each		475	
Reinforcement Bars, Epoxy Coated	Pound		54,930	
Concrete Superstructure	Cu. Yds.		243.5	
Protective Coat	Sq. Yds.		966	
Bridge Deck Grooving	Sq. Yds.		772	



ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPETS, DECK DETAILS & SUPERSTRUCTURE BILL OF MATERIAL
IL. RTE. 173 OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

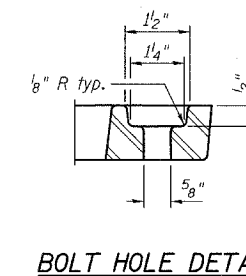
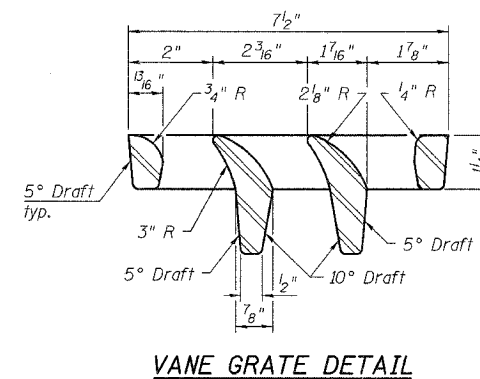
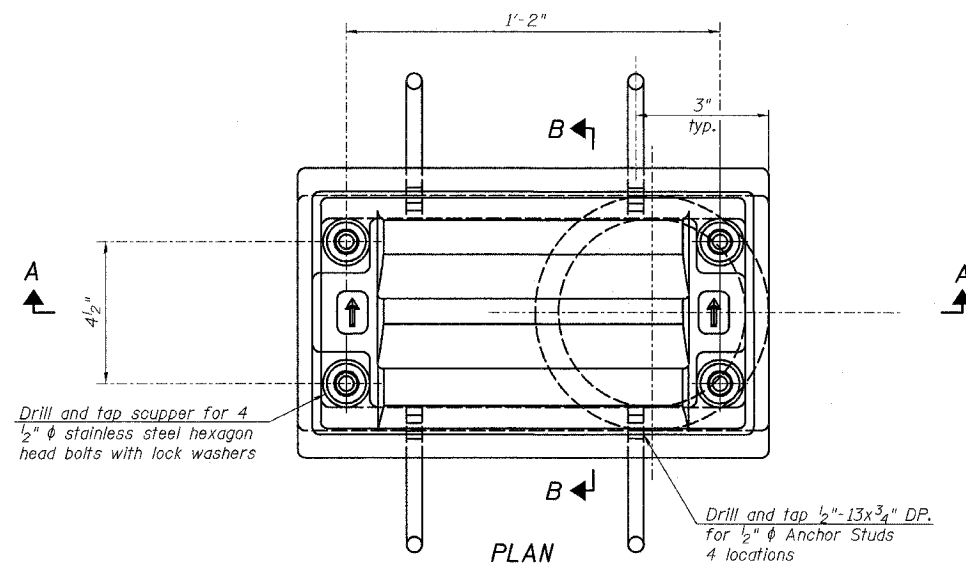
SCALE: DATE: APRIL 2, 2007
DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

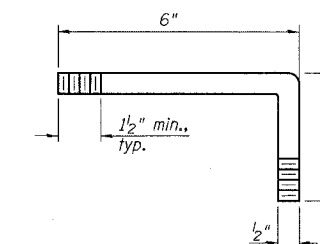
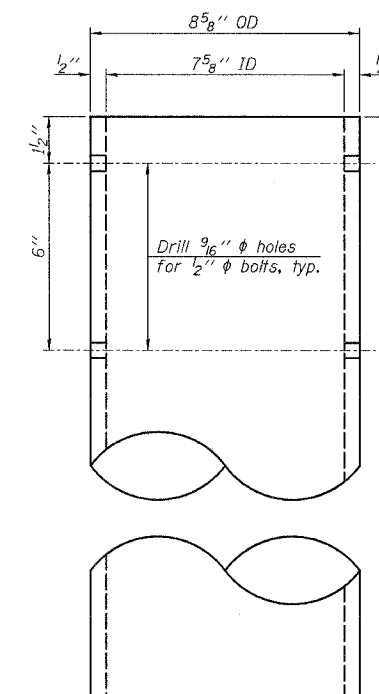
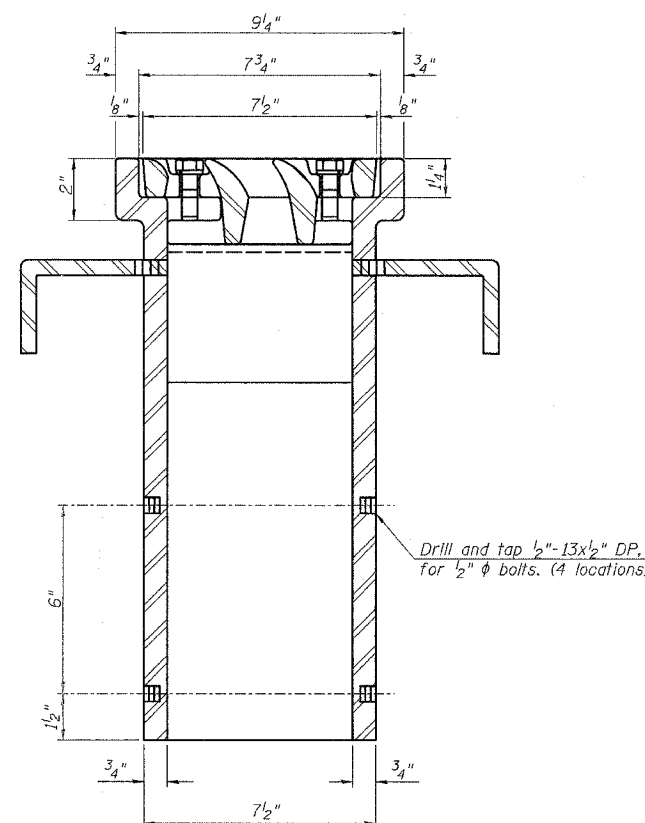
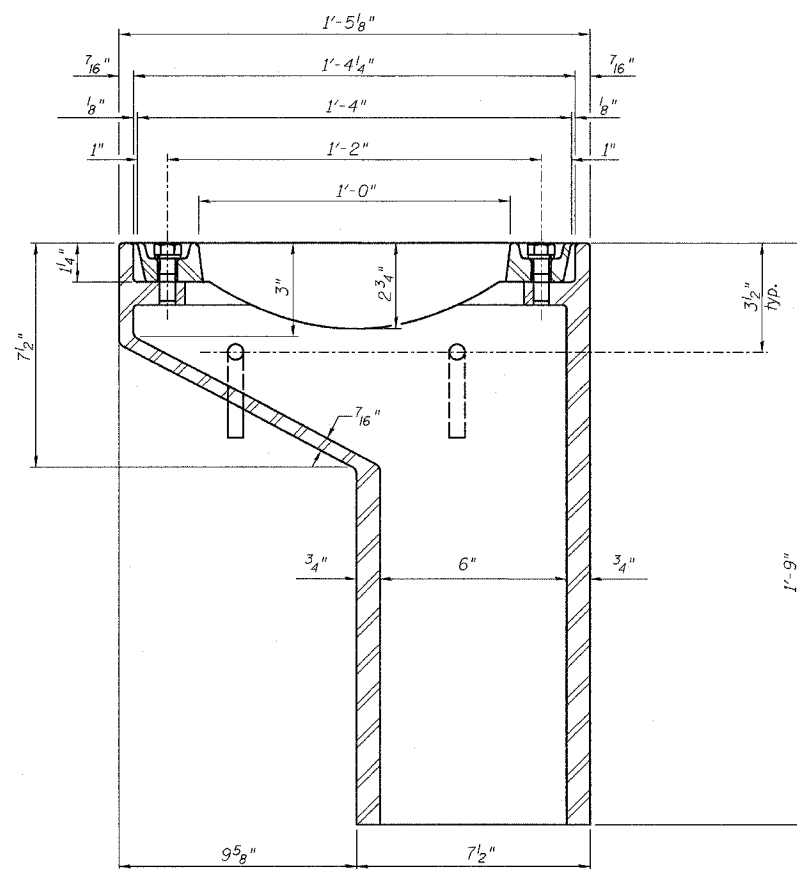
REVISIONS	
NAME	DATE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	73
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83



Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

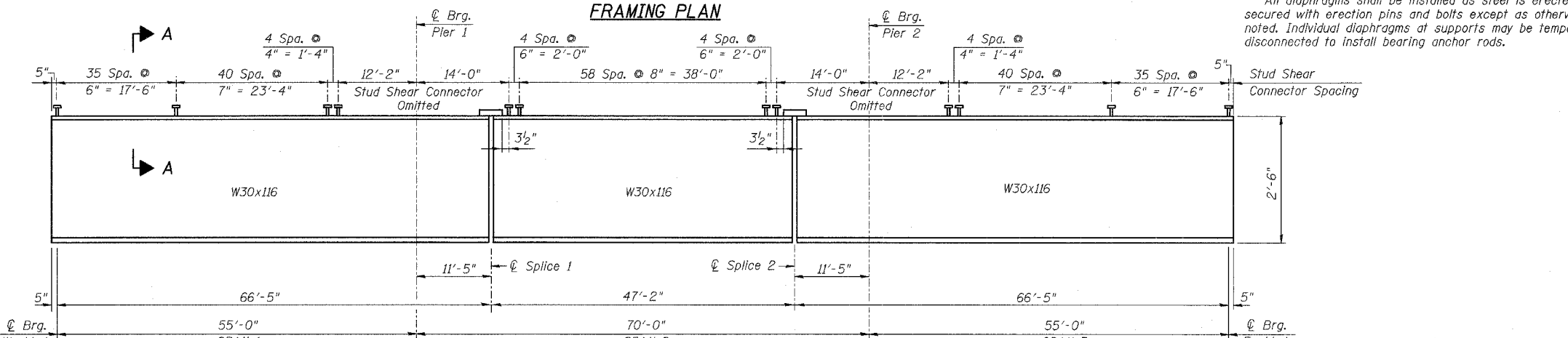
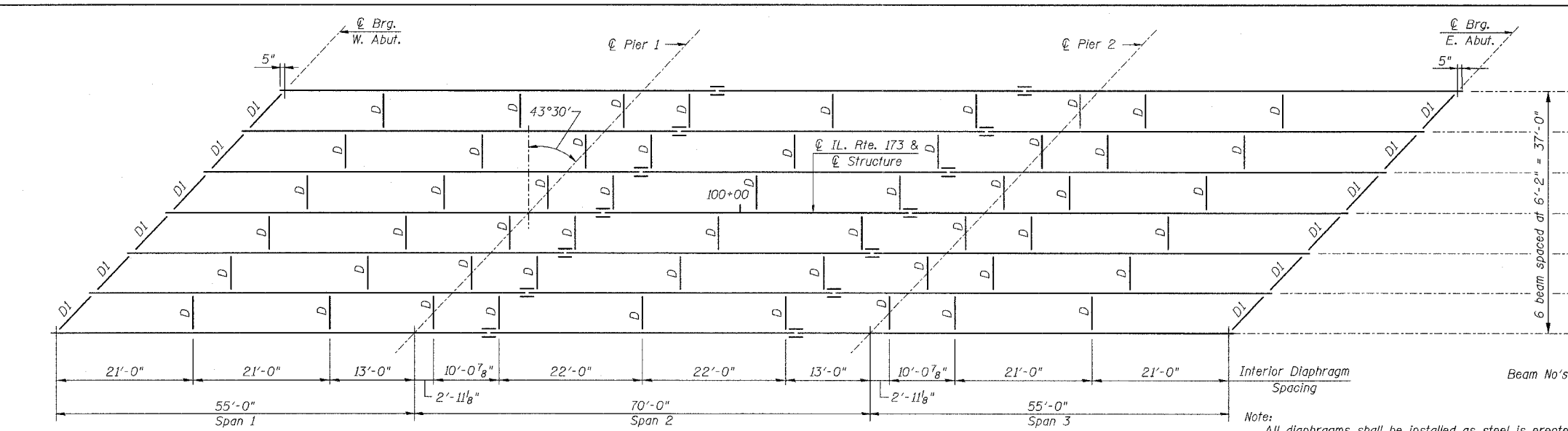


BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DRAINAGE SCUPPER, DS-11
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 2, 2007 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS



BEAM ELEVATION
 All wide flange beams and splice plate material, except fill plates shall be AASHTO M270, Grade 50 and shall meet notch toughness requirements

Note:
 Load carrying components designated "NTR" shall conform to the supplemental requirements for Notch Toughness, Zone 2

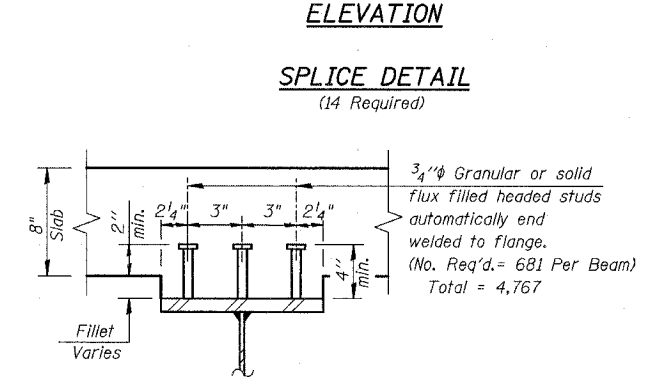
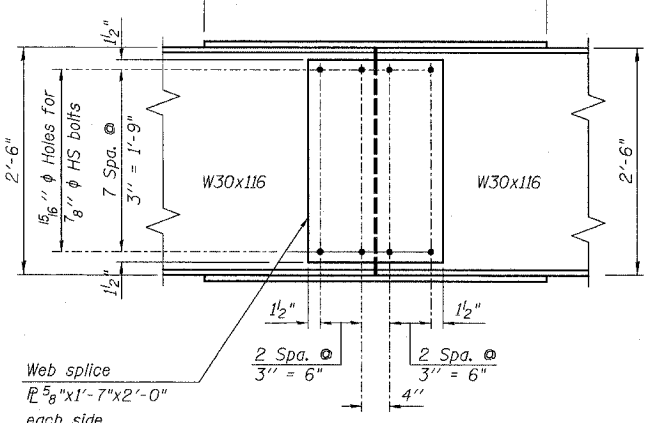
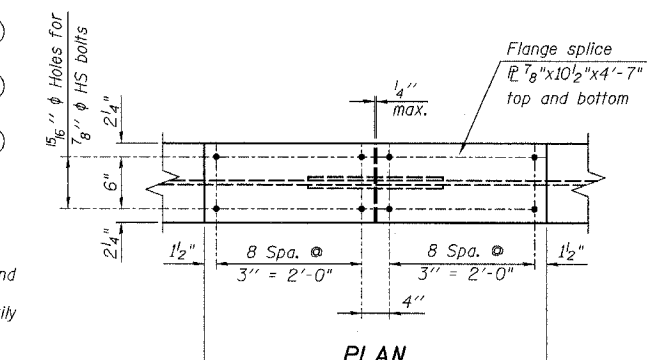
INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. #2
I_s	(in ⁴)	4,930	4,930	4,930
$I_c(n)$	(in ⁴)	14,155	-	14,155
$I_c(3n)$	(in ⁴)	10,303	-	10,303
S_s	(in ³)	329	329	329
$S_c(n)$	(in ³)	502	-	502
$S_c(3n)$	(in ³)	450	-	450
Z	(in ³)	-	-	-
ρ	(k/ft)	0.792	1.232	0.792
M_D	(k)	163	452	173
s_D	(k/ft)	0.44	-	0.44
M_{sD}	(k)	104	-	130
M_L	(k)	350	211	377
M_{Imp}	(k)	98	56	97
$S_3 [M_L + M_{Imp}]$	(k)	747	445	790
M_σ	(k)	1,318	1,166	1,421
M_U	(k)	1,989	-	1,980
f_s non-comp	(ksi)	6.0	16.5	6.3
f_s comp	(ksi)	2.8	-	3.5
$f_s S_3 [M_L + M_{Imp}]$	(ksi)	17.9	16.2	18.9
f_s (Overload)	(ksi)	26.7	32.7	28.7
f_s (Total)	(ksi)	-	42.5	-
VR	(k)	44.4	-	44.9

INTERIOR BEAM REACTION TABLE			
	Abut.	Pier	
R_D	(k)	25.6	85.2
R_L	(k)	32.5	39.2
$Imp.$	(k)	9.1	10.5
R_{Total}	(k)	67.2	134.9

*Compact section
 **Braced non-compact and partially braced section

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).
 $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).
 $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).
 Z : Plastic Section Modulus of the steel section in non-composite areas (in³).
 ρ : Un-factored non-composite dead load (kips/ft.).
 M_D : Un-factored moment due to non-composite dead load (kip-ft.).
 s_D : Un-factored long-term composite (superimposed) dead load (kips/ft.).
 M_{sD} : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_L : Un-factored live load moment (kip-ft.).
 M_{Imp} : Un-factored moment due to impact (kip-ft.).
 M_σ : Factored design moment (kip-ft.).
 M_U : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
 f_s (Overload): Sum of stresses as computed from the moments below (ksi).
 f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
 VR : Maximum $L +$ impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

Notes:
 D = Interior Diaphragm
 D1 = Exterior Diaphragm
 See Details on Sht. S12

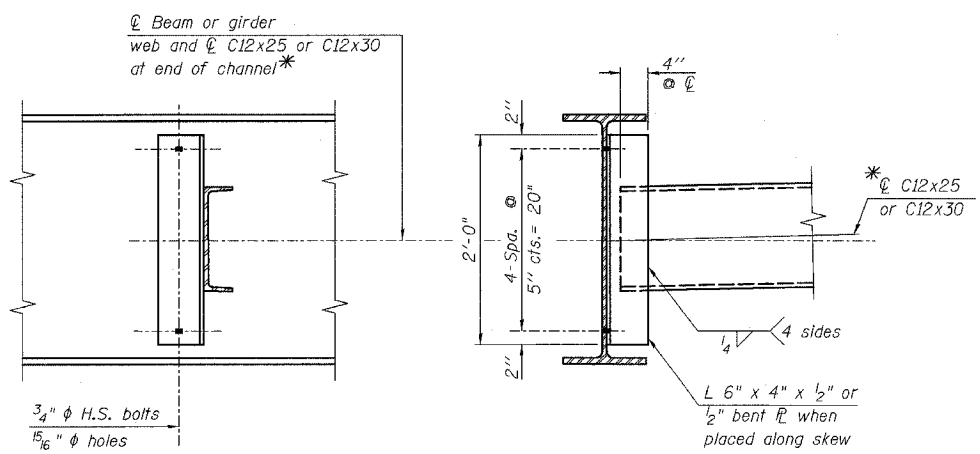


ILLINOIS DEPARTMENT OF TRANSPORTATION
FRAMING PLAN & STRUCTURAL STEEL DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

REVISIONS	
NAME	DATE

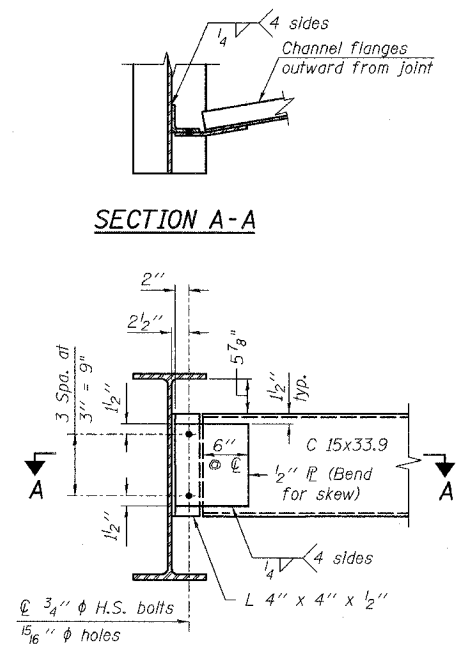
CONTRACT NO. 60B83



INTERIOR DIAPHRAGM D
(48 Required)

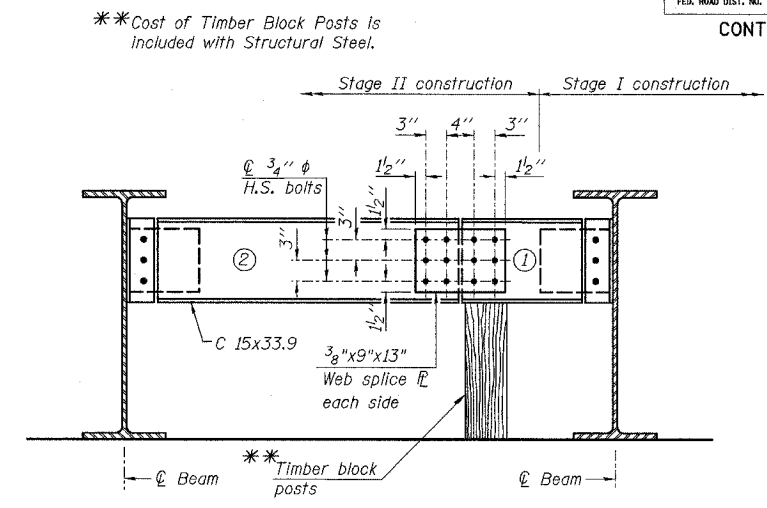
Note:
Two hardened washers required for each set of oversized holes.

* Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.



END DIAPHRAGM D1
(10 Required)

Note:
Two hardened washers required for each set of oversized holes.



END DIAPHRAGM D1
(2 Required)

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

- 1.) Order Diaphragm in two sections.
- 2.) Attach section ① of Diaphragm to Beam
- 3.) Place Timber Block Posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both Beam and section ① of diaphragm during Stage II Construction with splice plates.
- 5.) Remove Timber Block Posts.

***** TOP OF BEAM ELEVATIONS**

Beam	℄ Brg. W. Abut.	℄ Pier #1	℄ Splice #1	℄ Splice #2	℄ Pier #2	℄ Brg. E. Abut.
1	874.87	875.09	875.14	875.38	875.44	875.77
2	874.97	875.19	875.24	875.48	875.54	875.87
3	875.04	875.26	875.31	875.55	875.61	875.94
4	875.10	875.33	875.38	875.61	875.68	876.00
5	874.98	875.20	875.25	875.49	875.55	875.88
6	874.85	875.08	875.12	875.36	875.43	875.75
7	874.69	874.92	874.97	875.20	875.27	875.59

*** For fabrication only

REVISIONS	
NAME	DATE

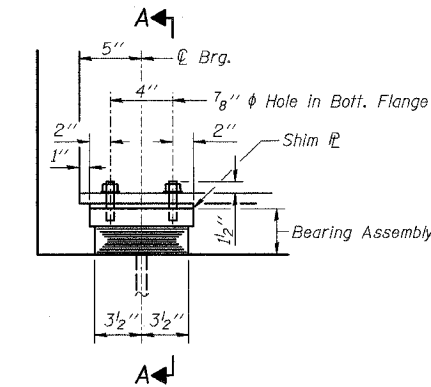
ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURAL STEEL DETAILS
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

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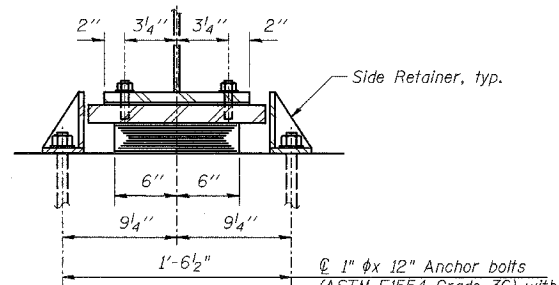
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	77
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



ELEVATION AT ABUT.

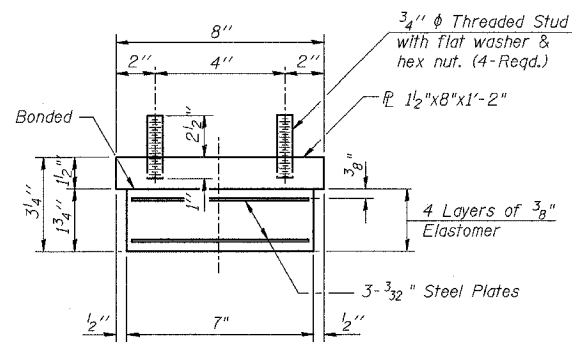


SECTION A-A

Side Retainer, typ.
 1" x 12" Anchor bolts (ASTM F1554 Grade 36) with 2 1/4" x 2 1/4" x 5/16" washer under nut

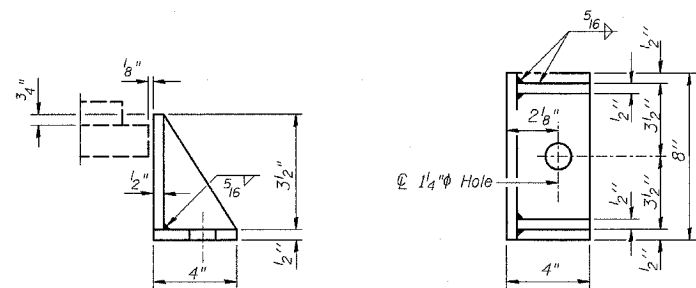
TYPE I ELASTOMERIC EXP. BRG. @ ABUTMENTS

(14 Required)



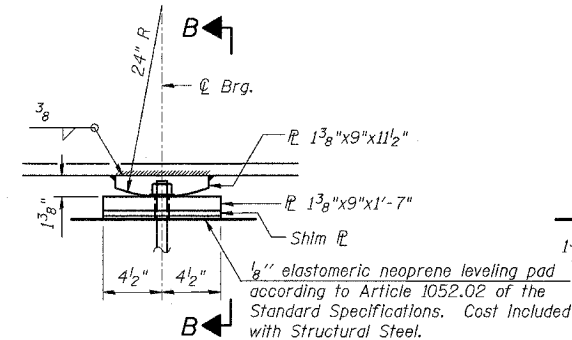
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.

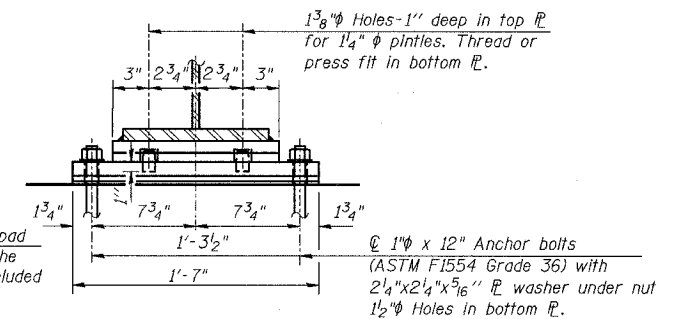


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



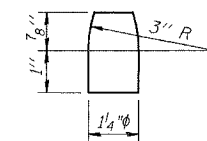
ELEVATION AT PIER



SECTION B-B

FIXED BEARING @ PIER 1 & 2

(14 Required)



PINTLE

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The Structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

Two 1/8" (in.) adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	14
Anchor Bolts 1"	Each	56

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BEARING DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

Bar	No.	Size	Length	Shape
h(E)	6	#5	21'-11"	
h1(E)	10	#5	7'-11"	
h2(E)	10	#5	7'-11"	
h3(E)	10	#4	12'-5"	
h4(E)	12	#4	11'-3"	
h5(E)	5	#6	21'-11"	
h6(E)	6	#5	32'-8"	
h7(E)	5	#6	32'-8"	
h8(E)	10	#4	9'-8"	
n(E)	22	#6	11'-4"	
n1(E)	12	#6	5'-8"	
p(E)	3	#7	22'-3"	
p1(E)	2	#7	24'-6"	
p2(E)	3	#7	26'-9"	
p3(E)	3	#7	34'-10"	
p4(E)	2	#7	34'-3"	
p5(E)	3	#7	32'-0"	
p6(E)	1	#5	18'-5"	
p7(E)	1	#5	16'-3"	
p8(E)	12	#7	11'-6"	
s(E)	55	#4	15'-11"	
s1(E)	26	#4	9'-5"	
s2(E)	5	#4	19'-5"	
u(E)	4	#6	11'-3"	
u1(E)	4	#6	10'-5"	
v(E)	57	#5	3'-1"	
v1(E)	57	#4	3'-0"	
v2(E)	25	#6	5'-10"	
v3(E)	6	#6	5'-10"	
v4(E)	18	#6	5'-10"	
v5(E)	57	#4	3'-7"	
v6(E)	57	#4	4'-9"	

Structure	Quantity	Unit	Value
Structure Excavation		Cu. Yd.	117.2
Concrete Structures		Cu. Yd.	58.5
Reinforcement Bars, Epoxy Coated		Pound	4,890
Furnishing Steel Piles, HP 12x53		Foot	832
Driving Piles		Foot	832
Test Pile Steel HP 12x53		Each	1
Bar Splicers		Each	74
Porous Granular Embankment, Special		Cu. Yd.	66.5
Pipe Underdrains for Structures, 4"		Foot	91
Geocomposite Wall Drains		Sq. Yd.	14.4
Pile Shoes		Each	17

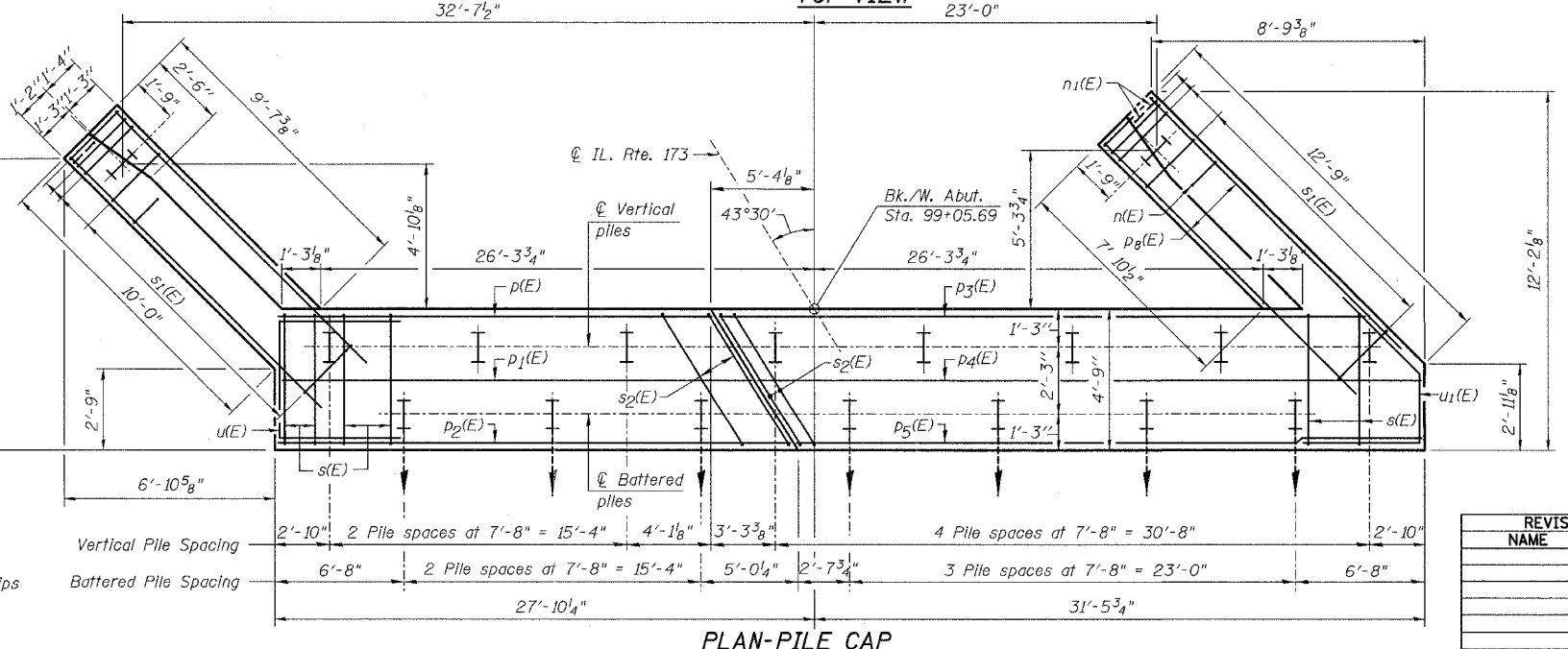
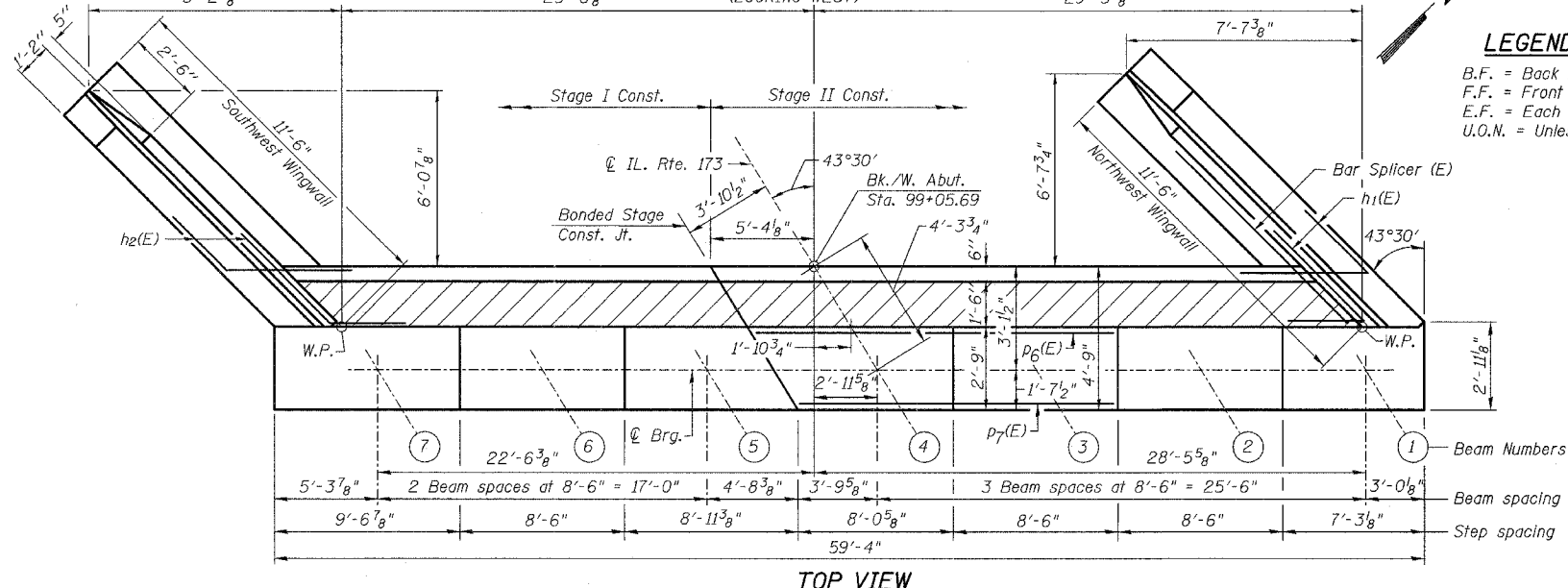
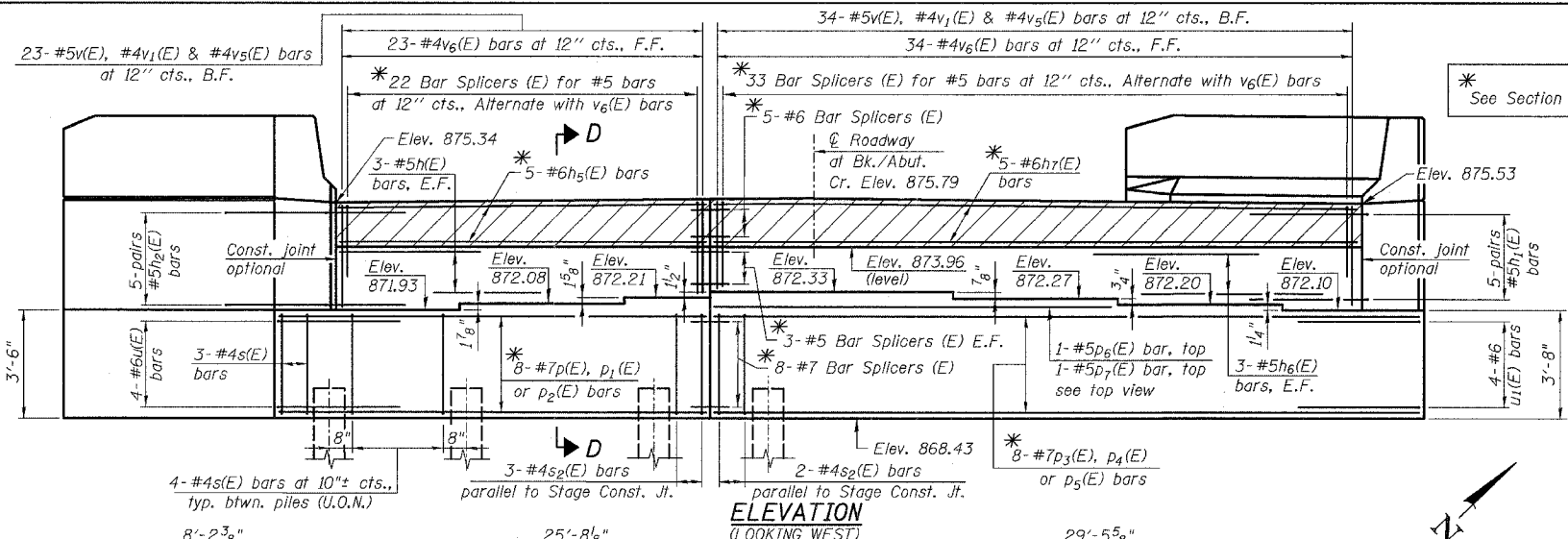
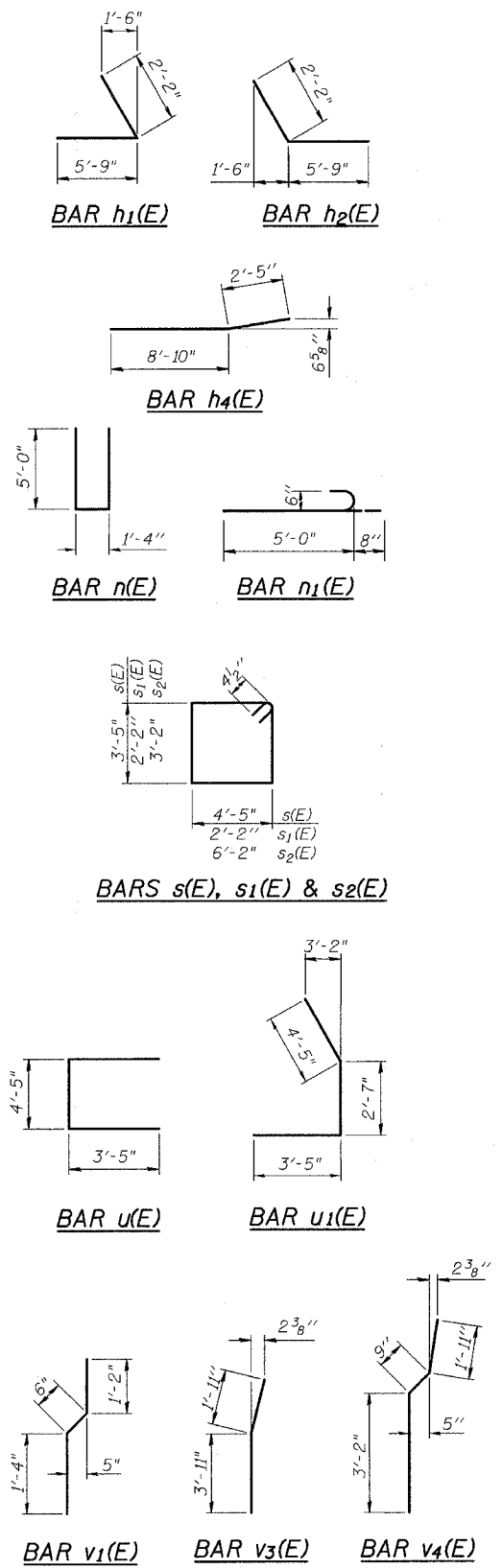
For details of Bar Splicers, see sheet S19
For details of piles see sheet S21
Work this sheet with sheet S15

ILLINOIS DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007
DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

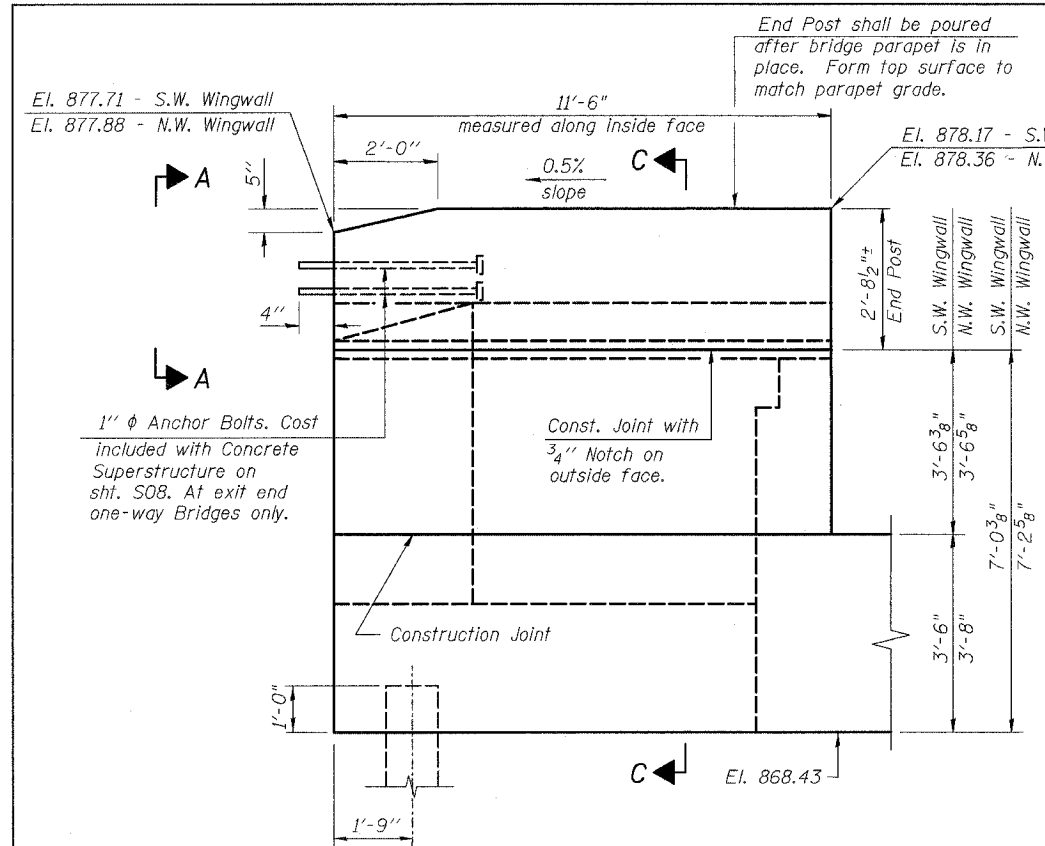
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS



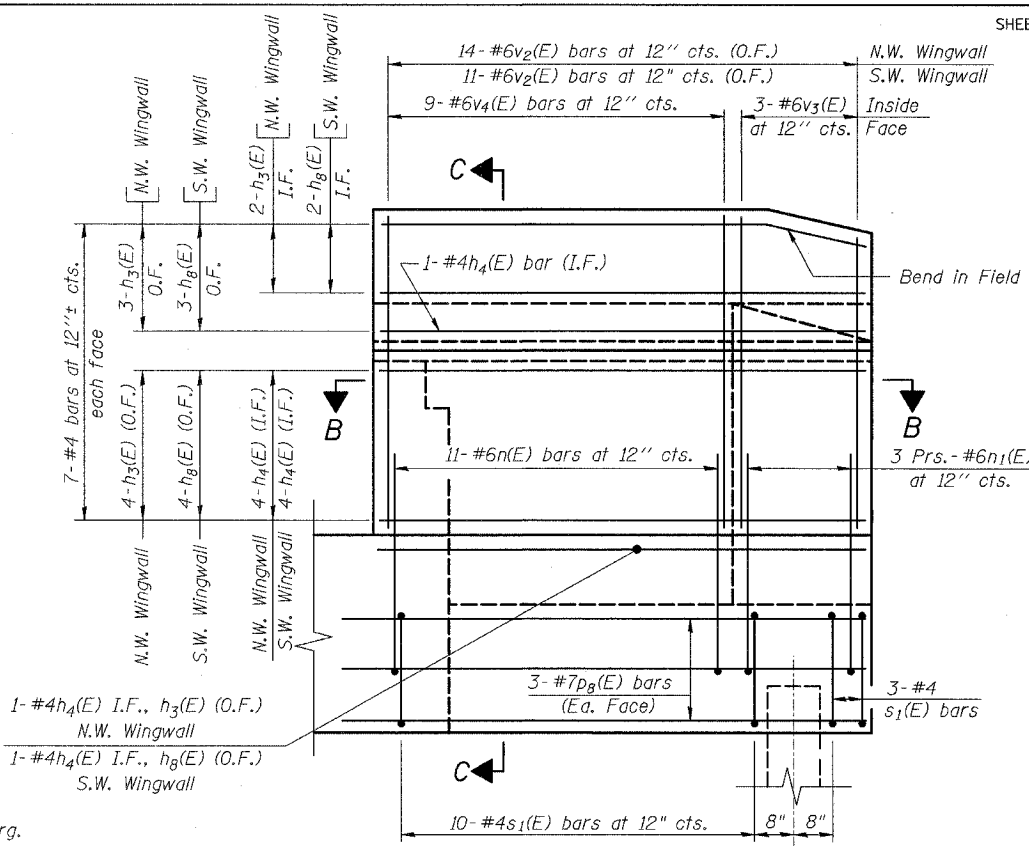
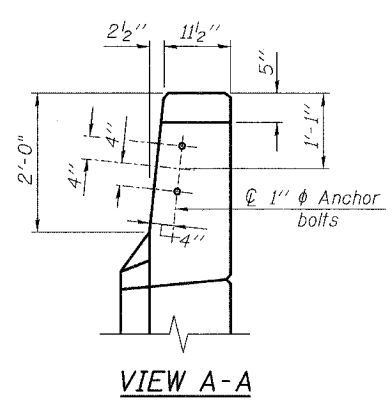
PILE DATA

Type: Steel HP 12x53 with Pile Shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 139.6 kips
Est. Length: 52 ft.
No. Production Piles: 16
No. Test Piles: 1

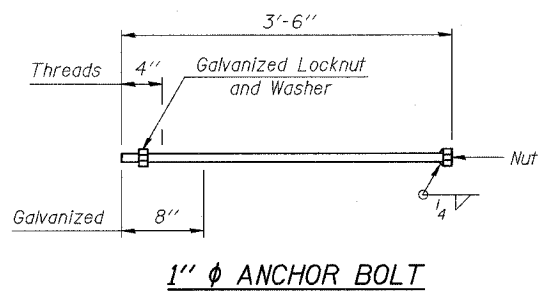
REVISIONS	
NAME	DATE



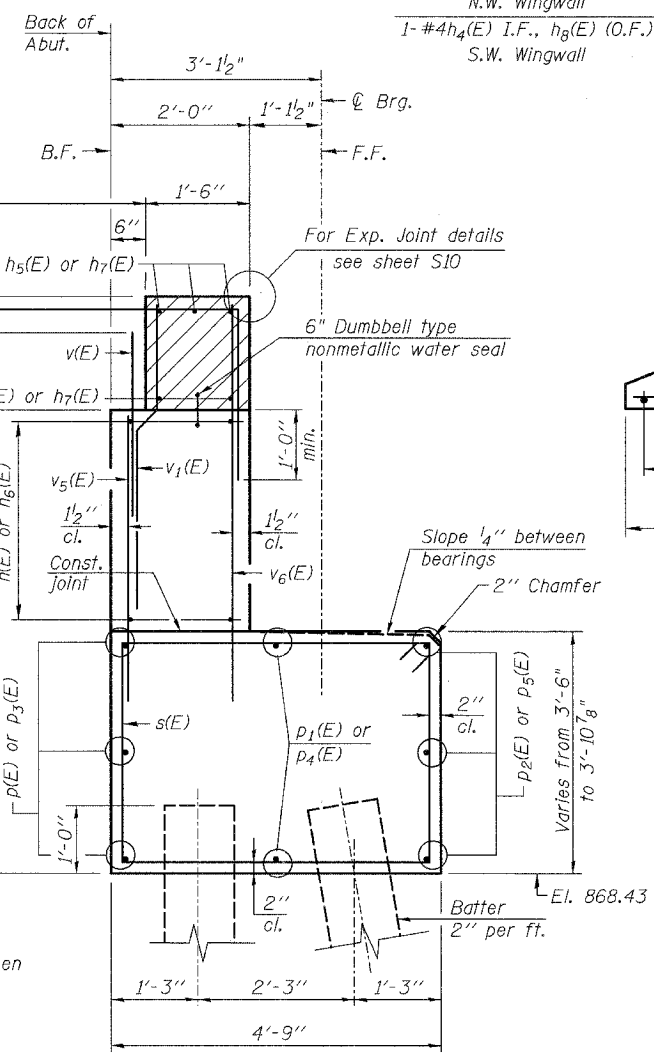
WING WALL ELEVATION
Showing Dimensions



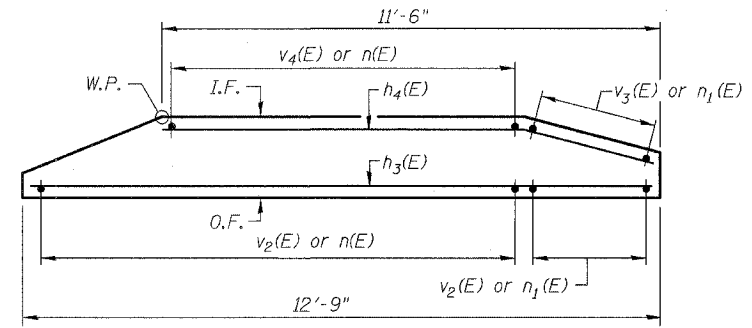
WING WALL ELEVATION
Showing Reinforcement



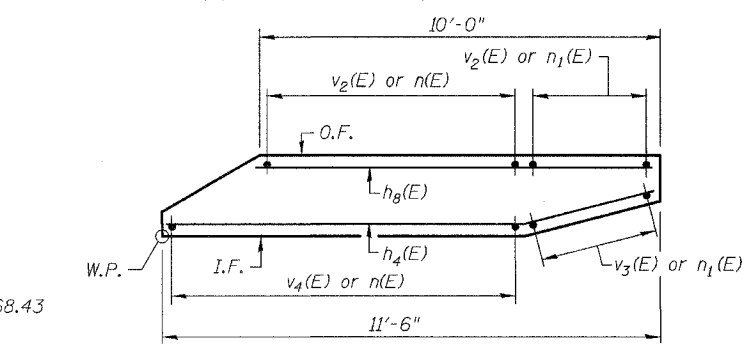
Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Quantity of concrete in end post included with Concrete Superstructure on sheet SOB.
The Steel H-Piles shall be in accordance with AASHTO M 270, Grade 50.



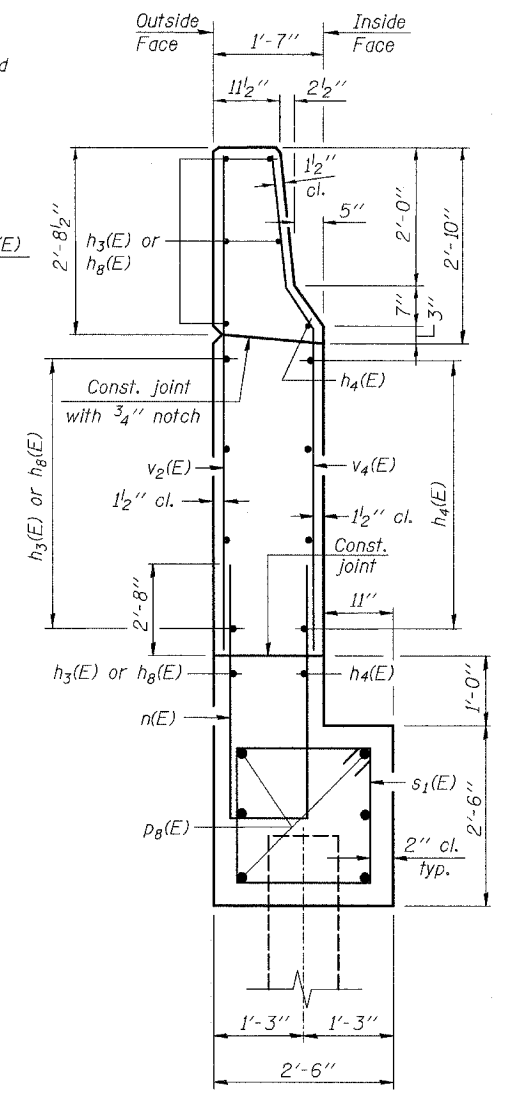
SECTION D-D



SECTION B-B
(NORTHWEST WINGWALL)



SECTION B-B
(SOUTHWEST WINGWALL)



SECTION C-C

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007

DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	L31B(1&2)BR	McHENRY	107	80
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83

ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	6	#5	21'-11"	
h1(E)	10	#5	7'-11"	
h2(E)	10	#5	7'-11"	
h3(E)	10	#4	12'-5"	
h4(E)	12	#4	11'-3"	
h5(E)	5	#6	21'-11"	
h6(E)	6	#5	32'-8"	
h7(E)	5	#6	32'-8"	
h8(E)	10	#4	9'-8"	
n(E)	22	#6	11'-4"	
n1(E)	12	#6	5'-8"	
p10(E)	3	#7	24'-2"	
p11(E)	2	#7	23'-7"	
p12(E)	3	#7	21'-4"	
p13(E)	3	#7	32'-11"	
p14(E)	2	#7	35'-2"	
p15(E)	3	#7	37'-5"	
p16(E)	1	#5	16'-8"	
p17(E)	1	#5	19'-3"	
p18(E)	12	#7	11'-6"	
s(E)	55	#4	15'-11"	
s1(E)	26	#4	9'-5"	
u(E)	4	#6	11'-3"	
u1(E)	4	#6	10'-5"	
v(E)	57	#5	3'-1"	
v1(E)	57	#4	3'-0"	
v2(E)	25	#6	5'-10"	
v3(E)	6	#6	5'-10"	
v4(E)	18	#6	5'-10"	
v5(E)	57	#4	3'-7"	
v6(E)	57	#4	4'-9"	
Structure Excavation	Cu. Yd.	117.9		
Concrete Structures	Cu. Yd.	58.8		
Reinforcement Bars, Epoxy Coated	Pound	4,840		
Furnishing Steel Piles, HP 12x53	Foot	832		
Driving Piles	Foot	832		
Test Pile Steel HP 12x53	Each	1		
Bar Splicers	Each	74		
Porous Granular Embankment, Special	Cu. Yd.	67.2		
Pipe Underdrains for Structures, 4"	Foot	91		
Geocomposite Wall Drains	Sq. Yd.	14.5		
Pile Shoes	Each	17		

For details of Bar Splicers, see sheet S19
For details of piles see sheet S21
Work this sheet with sheet S15

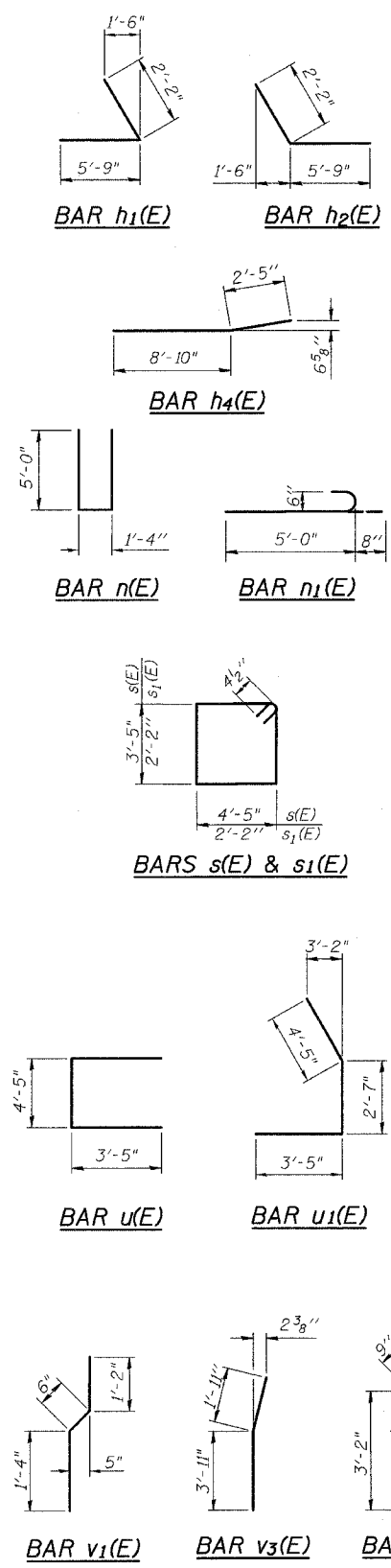
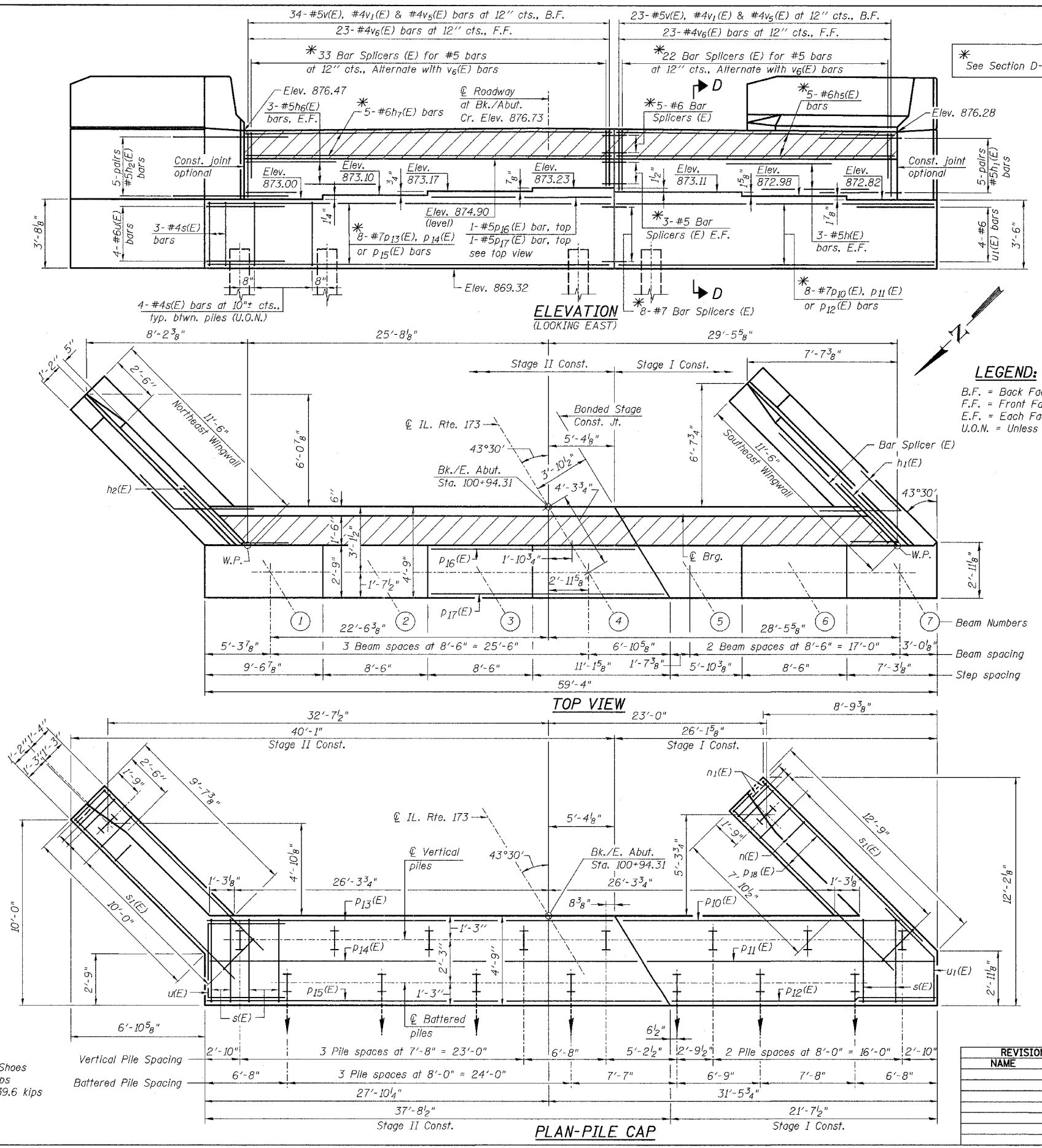
ILLINOIS DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
IL. RTE. 173
OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

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DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

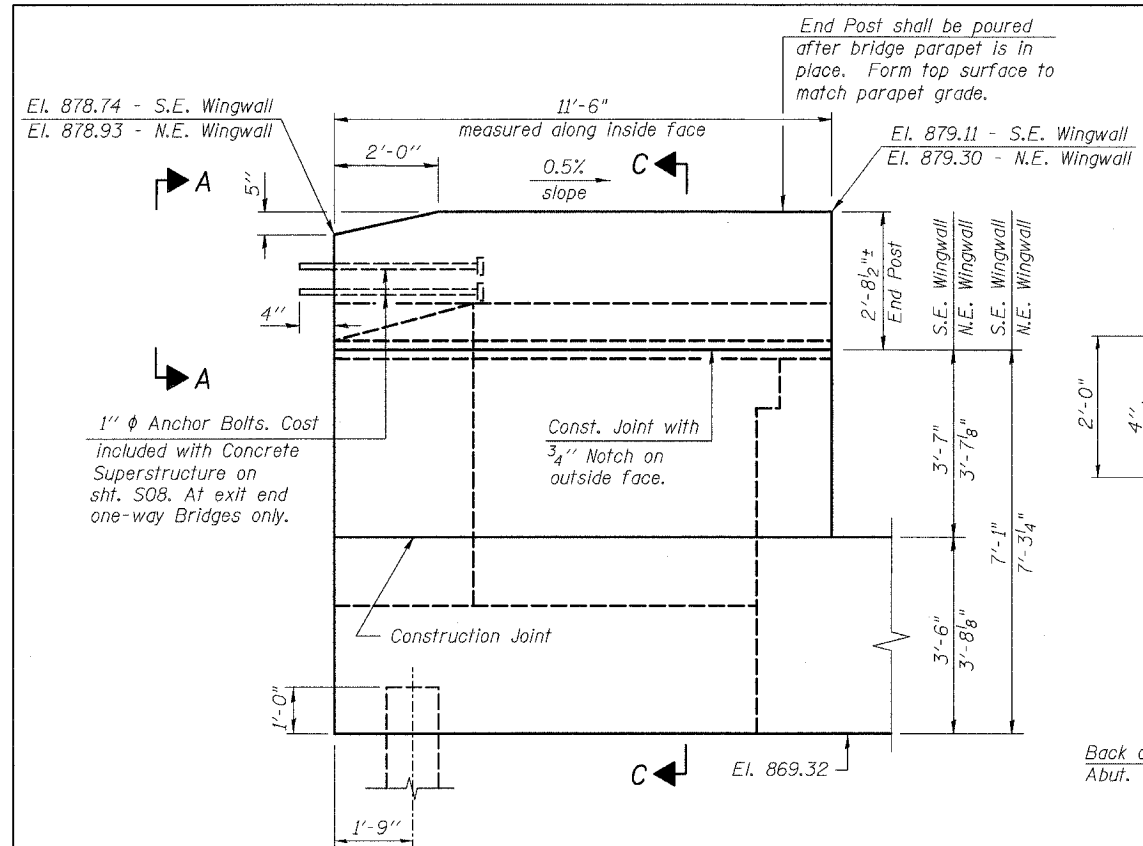
CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

REVISIONS	
NAME	DATE

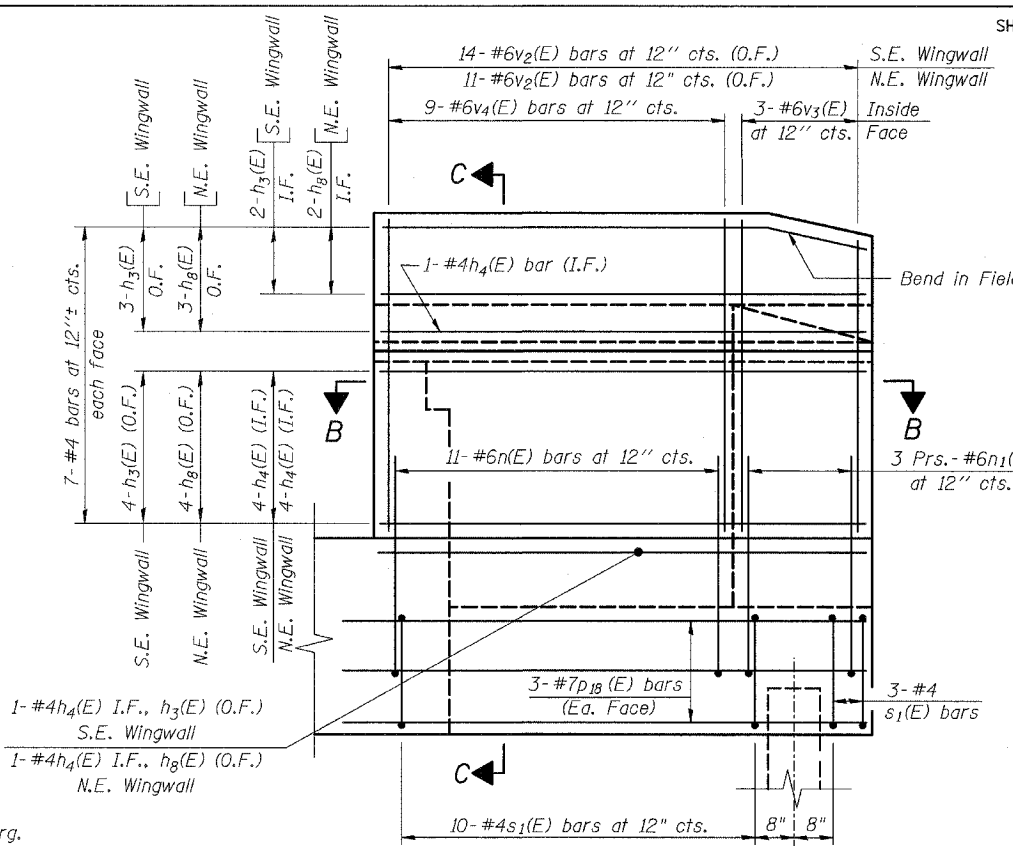
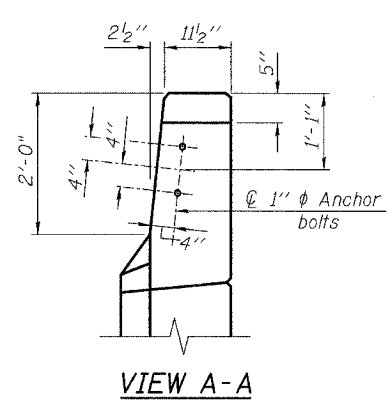


PILE DATA

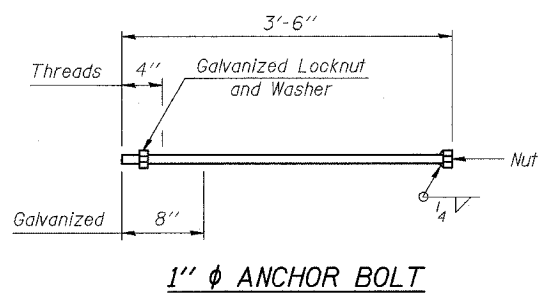
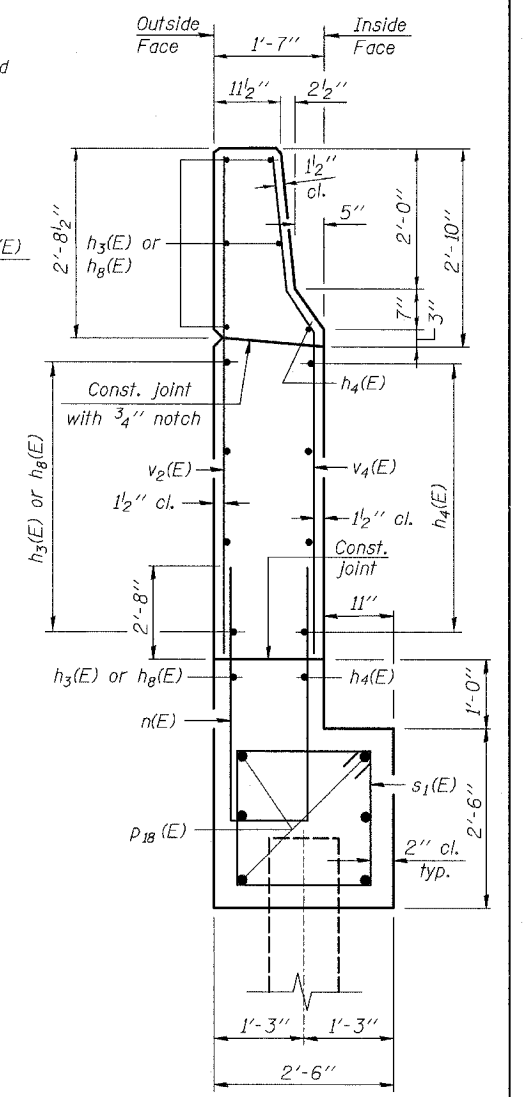
Type: Steel HP 12x53 with Pile Shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 139.6 kips
Est. Length: 52 ft.
No. Production Piles: 16
No. Test Piles: 1



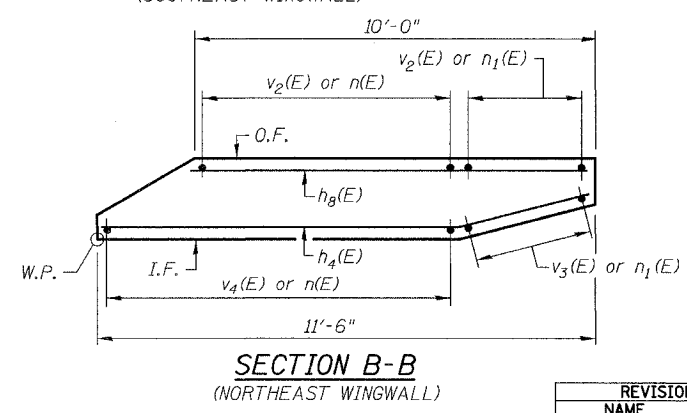
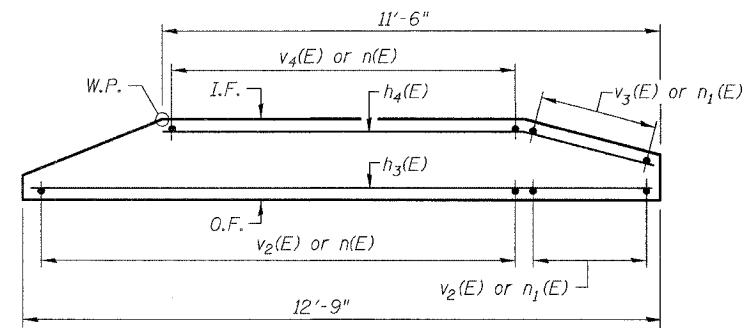
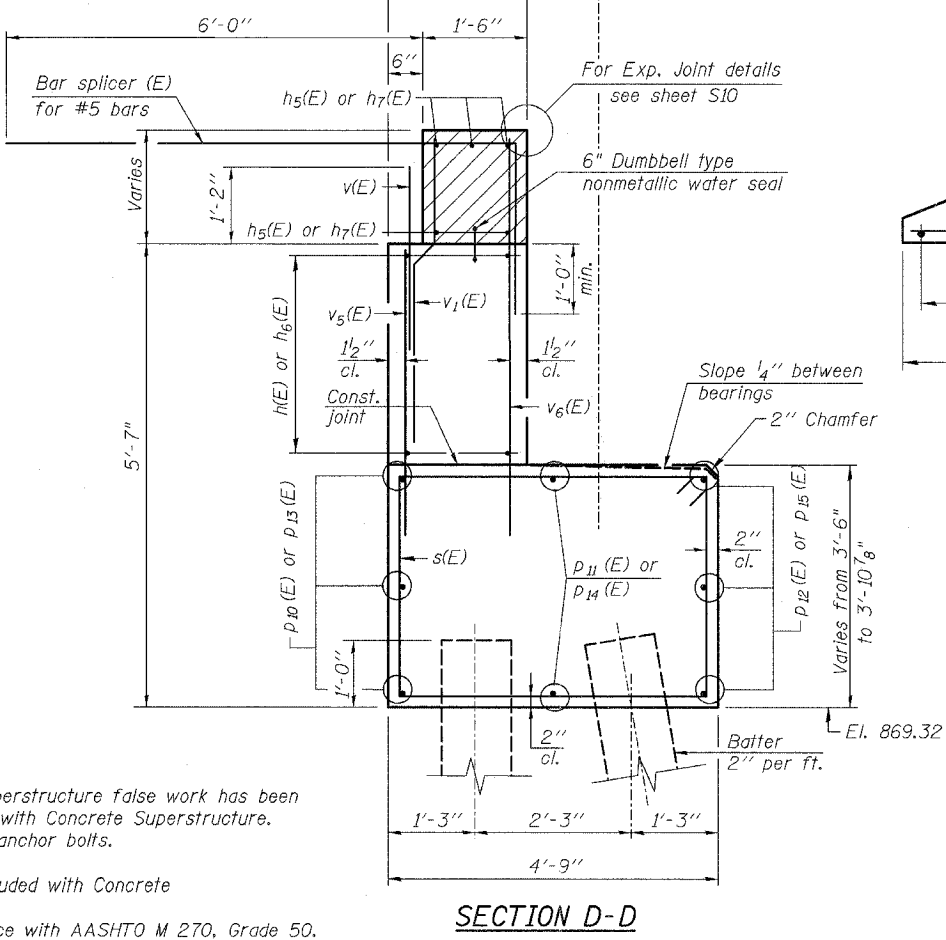
WING WALL ELEVATION
Showing Dimensions



WING WALL ELEVATION
Showing Reinforcement



Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 Quantity of concrete in end post included with Concrete Superstructure on sheet S08.
 The Steel H-Piles shall be in accordance with AASHTO M 270, Grade 50.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007 DRAWN BY: D.L./F.M. CHECKED BY: B.N.S./J.C.N.

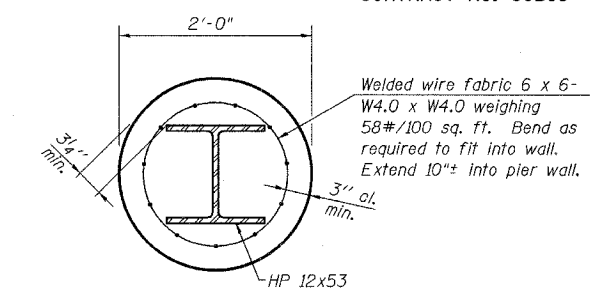
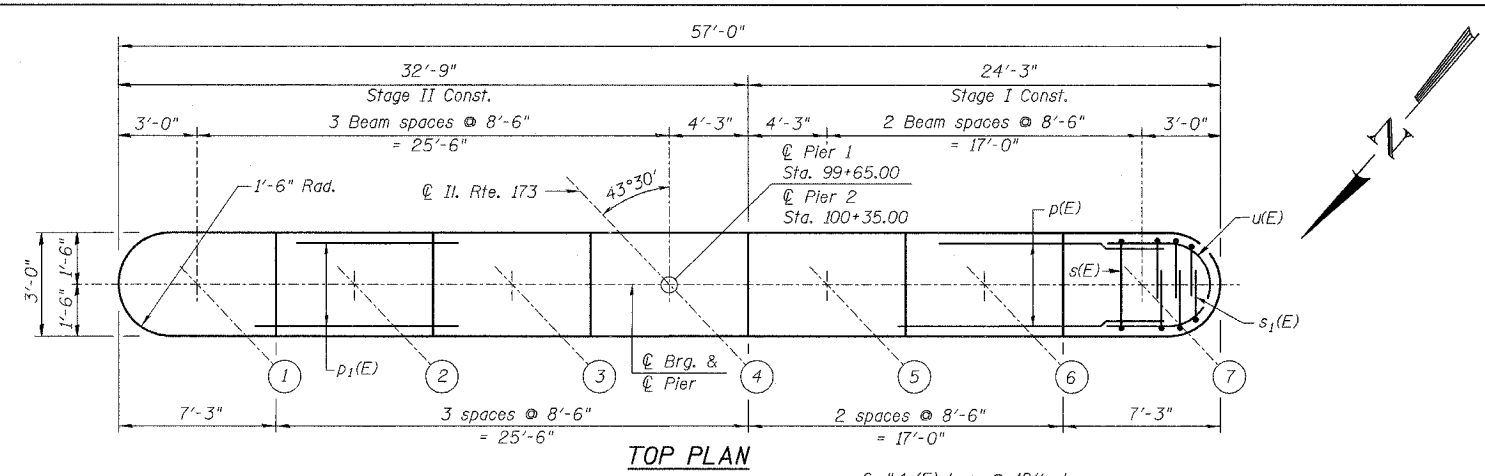
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

CONTRACT NO. 60B83

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 The steel H - piles shall be according to AASHTO M270 Grade 50

PILE DATA
 (For One Pier)

Type: HP 12x53
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 139.6 kips
 Est. Length: 60 feet
 No. Production Piles: 8
 No. Test Piles: 1

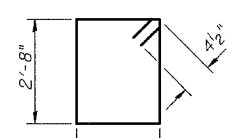


Note:
 Forms for encasement may be omitted when soil conditions permit.

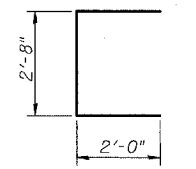
SECTION B-B
PILE ENCASEMENT DETAIL

REINFORCEMENT BAR SCHEDULE
 (For One Pier)

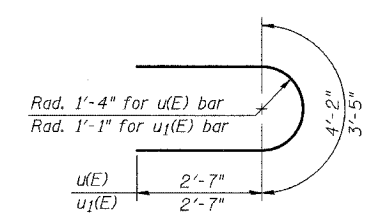
Bar	No.	Size	Length	Shape
h (E)	16	#6	22'-7"	—
h1(E)	16	#6	31'-1"	—
p (E)	10	#7	22'-7"	—
p1(E)	10	#7	31'-1"	—
p2(E)	4	#5	16'-8"	—
s (E)	48	#4	11'-5"	□
s1(E)	12	#4	6'-8"	□
u (E)	8	#6	9'-4"	U
u1(E)	16	#6	8'-7"	U
v (E)	228	#9	9'-6"	—



BAR s(E)



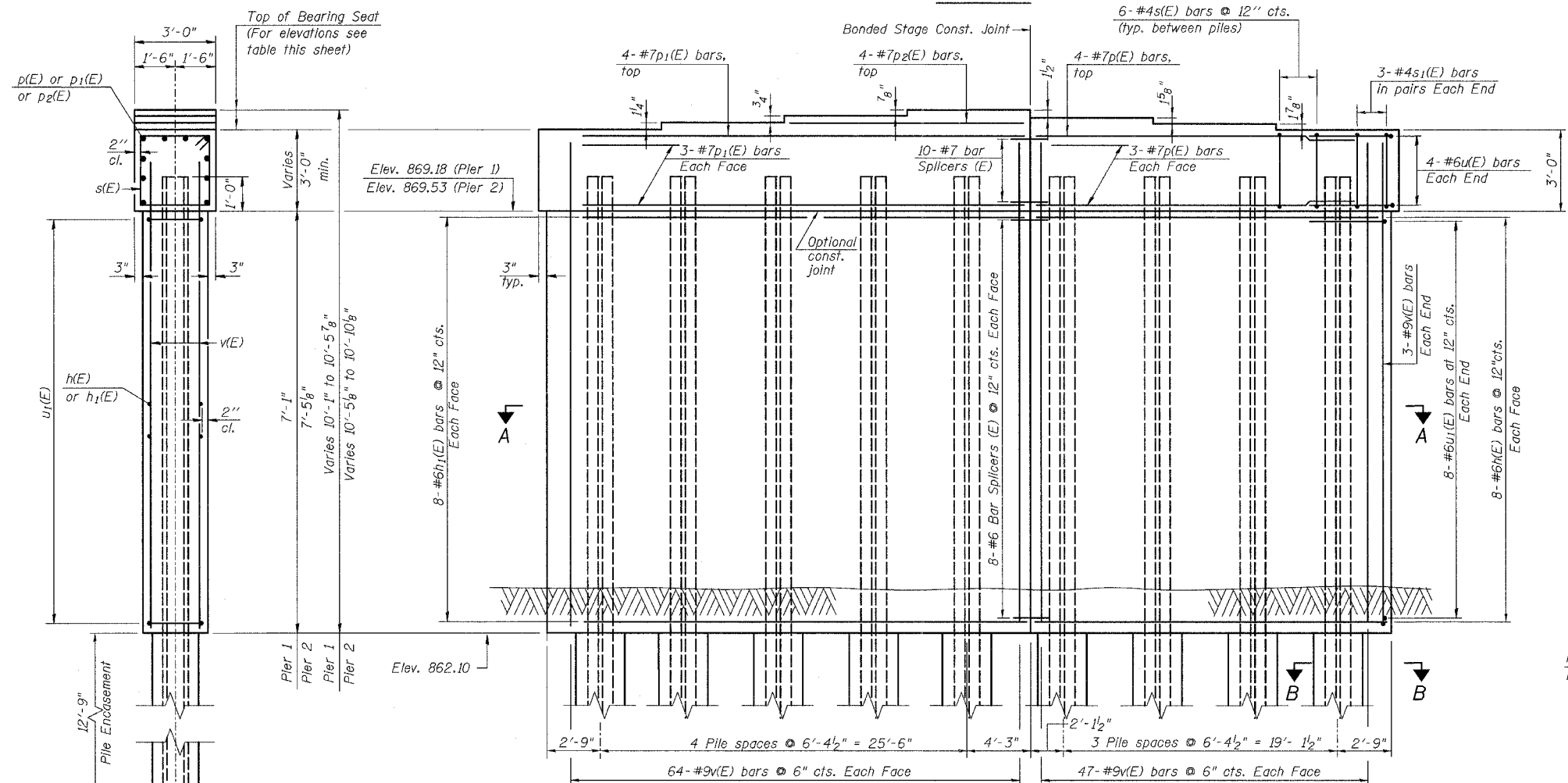
BAR s1(E)



BARS u(E) & u1(E)

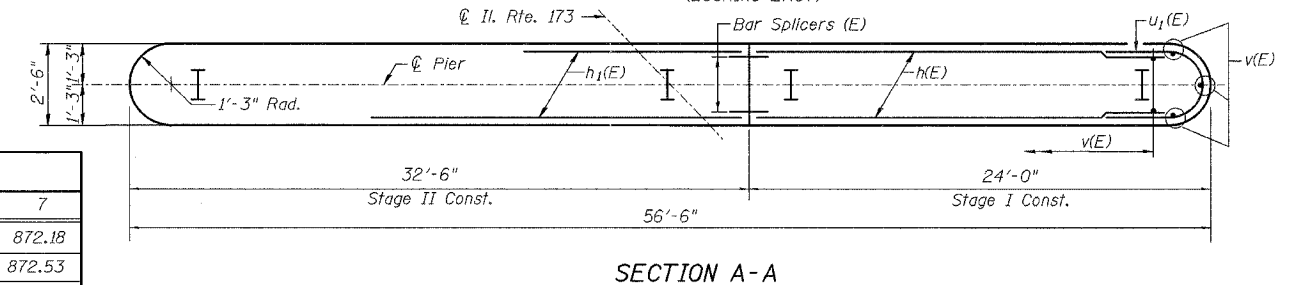
BILL OF MATERIAL

Item	Unit	Total	
		Pier 1	Pier 2
Structure Excavation	Cu. Yd.	14.6	14.6
Concrete Structures	Cu. Yd.	56.9	58.7
Reinforcement Bars, Epoxy Coated	Pound	10,560	10,560
Furnishing Piles, HP 12x53	Foot	480	480
Driving Piles	Foot	480	480
Test Pile, HP 12x53	Each	1	1
Bar Splicers	Each	26	26
Pile Shoes	Each	9	9
Concrete Encasement	Cu. Yd.	13.4	13.4



ELEVATION
 (LOOKING EAST)

END VIEW



SECTION A-A

TOP OF BEARING SEAT ELEVATIONS

Beam Numbers	1	2	3	4	5	6	7
Pier 1	872.35	872.45	872.52	872.59	872.46	872.34	872.18
Pier 2	872.70	872.80	872.87	872.94	872.81	872.69	872.53

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 1 & 2
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007

DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

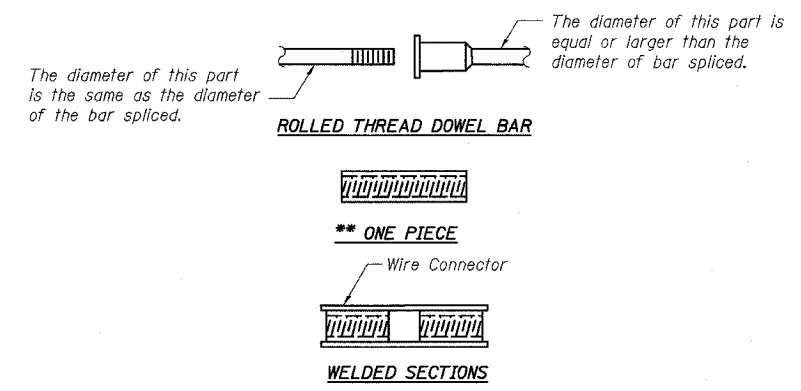
CONTRACT NO. 60B83

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:

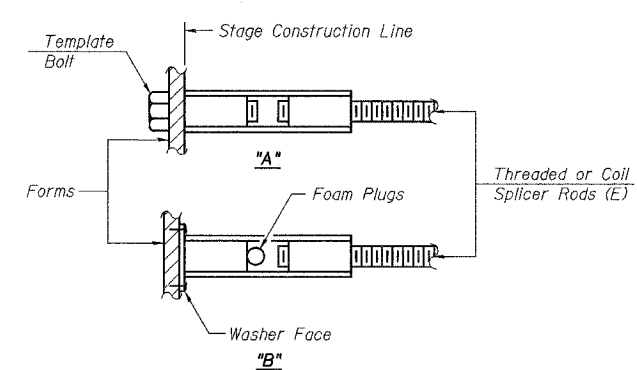
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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



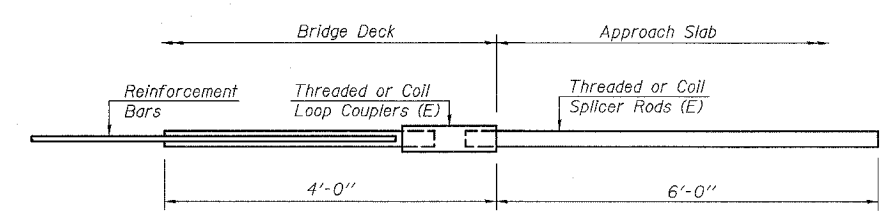
BAR SPLICER ASSEMBLY ALTERNATIVES

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



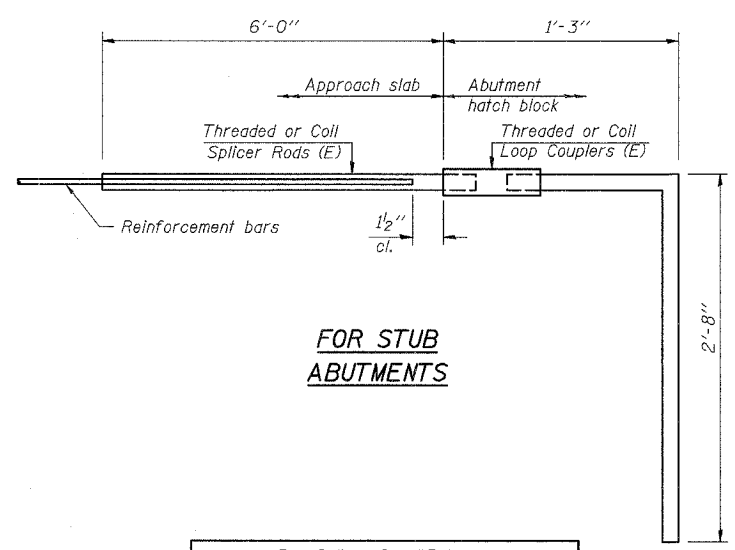
INSTALLATION AND SETTING METHODS

"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.



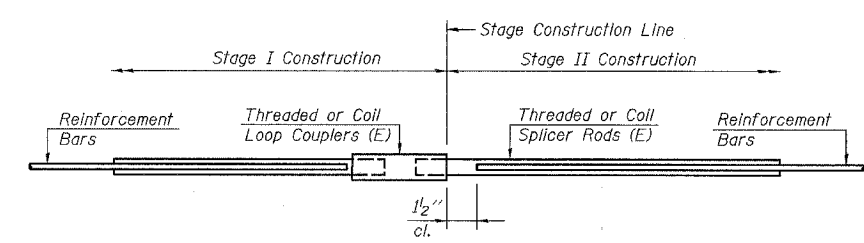
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 110



STANDARD

Bar Size	No. Assemblies Required	Location
#5	465	Deck
#6	2	
#7	8	
#5	122	Abutments
#6	10	
#7	16	
#6	32	Piers
#7	20	
Total	675	

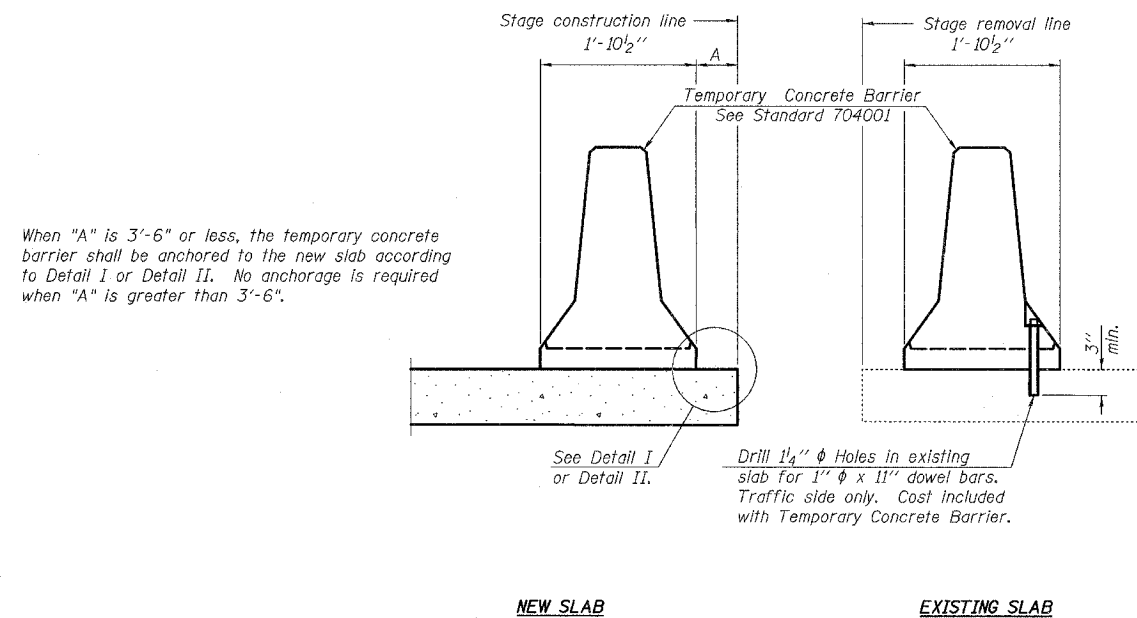
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BAR SPLICER ASSEMBLY DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

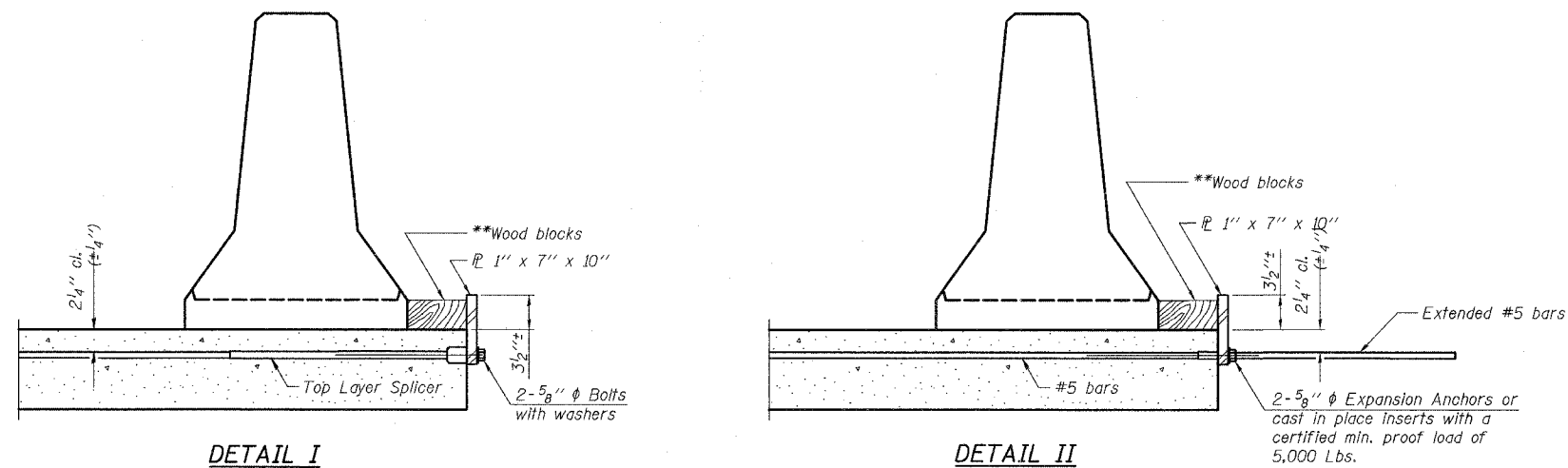
PISCASAW CREEK BRIDGE 5/11/07 4:13:07 PM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	84
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83



SECTIONS THRU SLAB



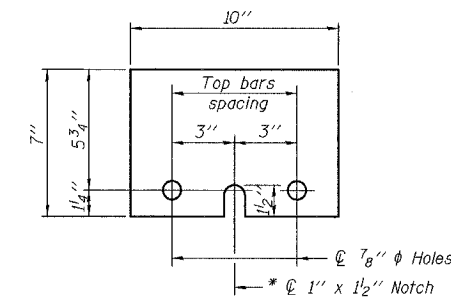
** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} 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{L} 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. The 1" x 7" x 10" 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.



STEEL RETAINER \bar{L} 1" x 7" x 10"
* Required only with Detail II

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

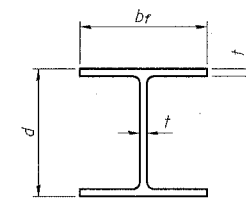
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
IL. RTE. 173 OVER
PISCASAW CREEK
F.A.P. RTE. 303 SECTION: 131B(1&2)BR
McHENRY COUNTY STATION 100+00.00
STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007
DRAWN BY: D.L./F.M.
CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
CHICAGO ILLINOIS

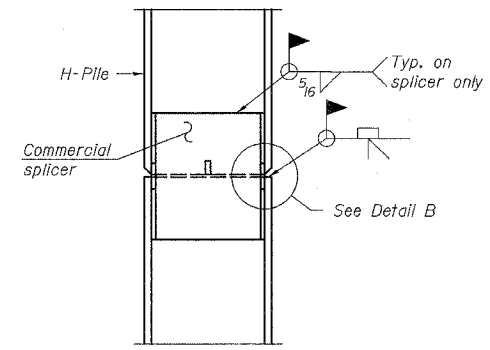
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	85
STA.		TO STA.		
FED. ROAD DIST. NO.	MILEAGE	FED. AID PROJECT		

CONTRACT NO. 60B83

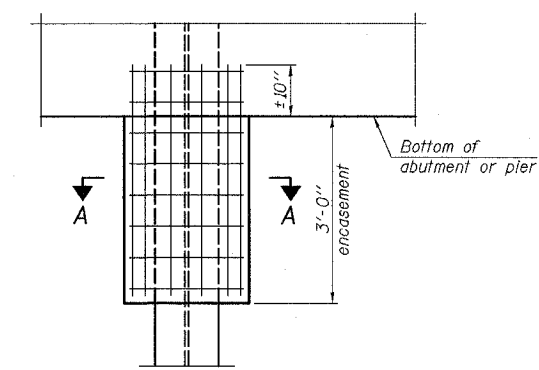


STEEL PILE TABLE

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

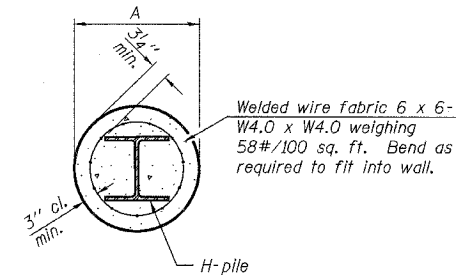


ELEVATION



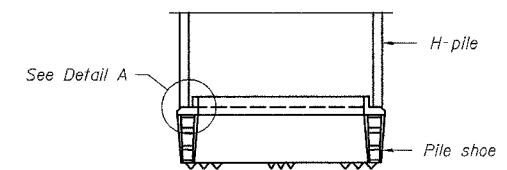
ELEVATION

PILE ENCASUREMENT

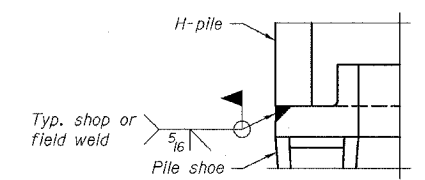


SECTION A-A

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

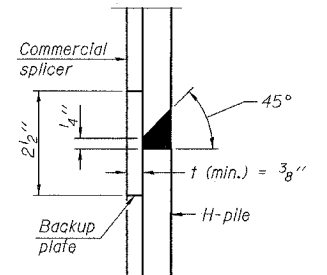


ELEVATION



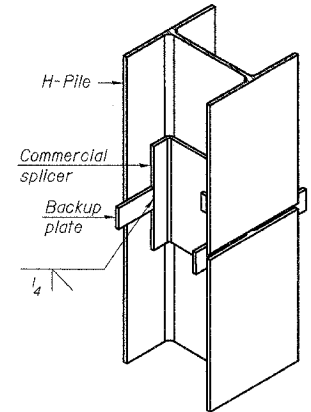
DETAIL A

H-PILE SHOE ATTACHMENT

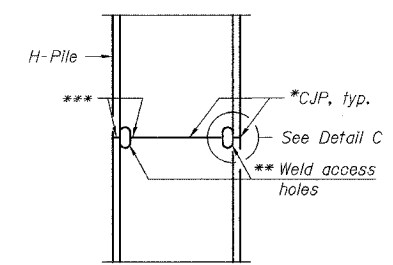


DETAIL "B"

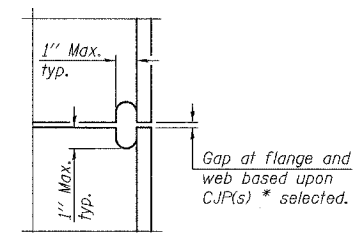
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

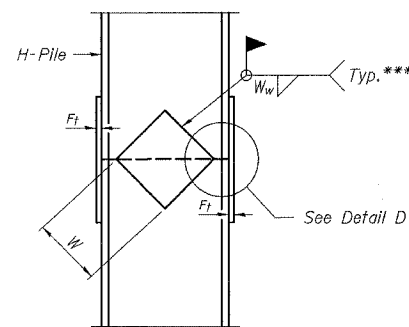


ELEVATION

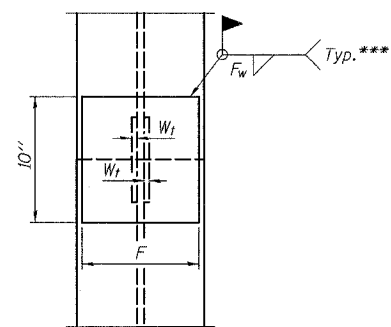


DETAIL C

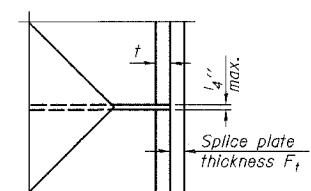
COMPLETE PENETRATION WELD SPLICE



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/8"	1 1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/8"	1 1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5 8/8"	1 1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/8"	1 1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5 8/8"	1 1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5 8/8"	1 1/2"
x63	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1 1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1 1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1 1/2"	3/8"

- * Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
- ** Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
- *** Interrupt welds 1/4" from end of each pile.

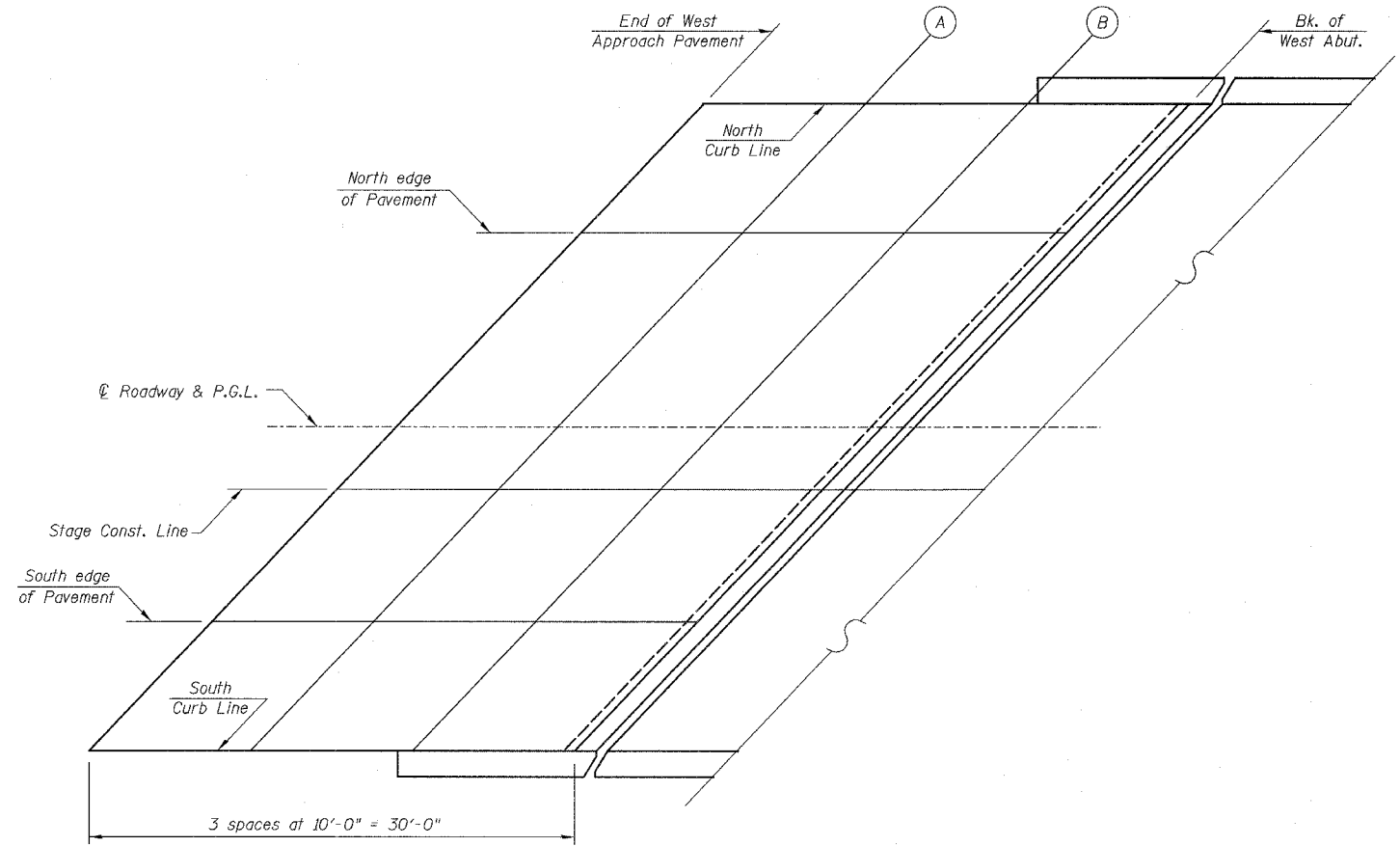
Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STEEL H-PILE DETAILS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DATE: APRIL 2, 2007 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	86
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83



PLAN
WEST APPROACH PAVEMENT

NORTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+94.669	-20.00	875.38	875.38
A	99+04.669	-20.00	875.43	875.43
B	99+14.669	-20.00	875.48	875.48
BACK OF WEST ABUT.	99+24.669	-20.00	875.53	875.53

NORTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+87.078	-12.00	875.51	875.51
A	98+97.078	-12.00	875.56	875.56
B	99+07.078	-12.00	875.61	875.61
BACK OF WEST ABUT.	99+17.078	-12.00	875.66	875.66

CL ROADWAY & P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+75.690	0.00	875.64	875.64
A	98+85.690	0.00	875.69	875.69
B	98+95.690	0.00	875.74	875.74
BACK OF WEST ABUT.	99+05.690	0.00	875.79	875.79

STAGE CONSTRUCTION LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+72.013	3.88	875.56	875.56
A	98+82.013	3.88	875.61	875.61
B	98+92.013	3.88	875.66	875.66
BACK OF WEST ABUT.	99+02.013	3.88	875.71	875.71

SOUTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+64.302	12.00	875.40	875.40
A	98+74.302	12.00	875.45	875.45
B	98+84.302	12.00	875.50	875.50
BACK OF WEST ABUT.	98+94.302	12.00	875.55	875.55

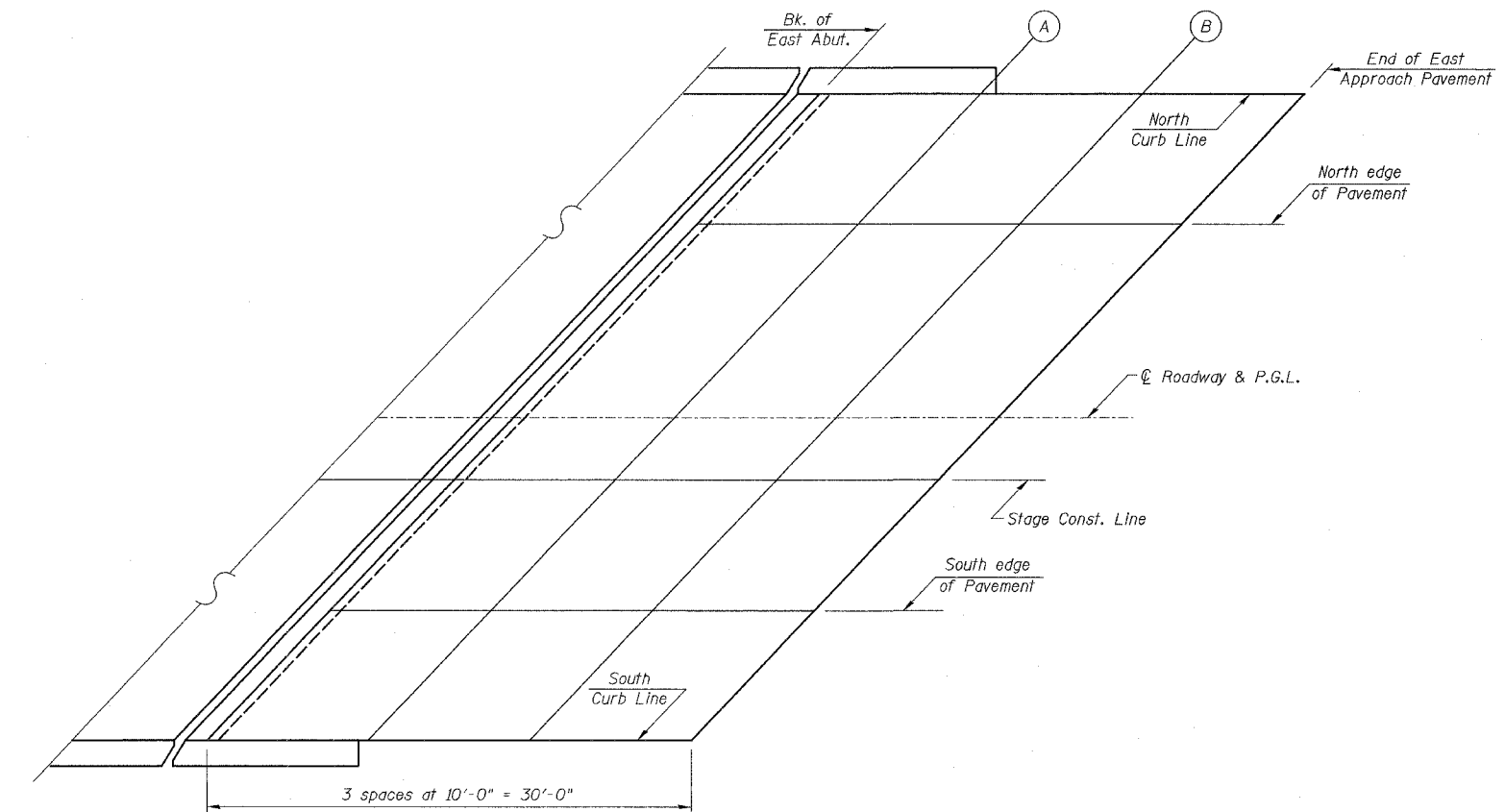
SOUTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
END W. APPR. PAV'T	98+56.711	20.00	875.19	875.19
A	98+66.711	20.00	875.24	875.24
B	98+76.711	20.00	875.29	875.29
BACK OF WEST ABUT.	98+86.711	20.00	875.34	875.34

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 WEST APPROACH PAVEMENT-ELEVATIONS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090
 SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

CONTRACT NO. 60B83



PLAN
EAST APPROACH PAVEMENT

NORTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	101+13.289	-20.00	876.47	876.47
A	101+23.289	-20.00	876.52	876.52
B	101+33.289	-20.00	876.57	876.57
END E. APPR. PAV'T	101+43.289	-20.00	876.62	876.62

NORTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	101+05.698	-12.00	876.60	876.60
A	101+15.698	-12.00	876.65	876.65
B	101+25.698	-12.00	876.70	876.70
END E. APPR. PAV'T	101+35.698	-12.00	876.75	876.75

CL ROADWAY & P.G.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	100+94.310	0.00	876.73	876.73
A	101+04.310	0.00	876.78	876.78
B	101+14.310	0.00	876.83	876.83
END E. APPR. PAV'T	101+24.310	0.00	876.88	876.88

STAGE CONSTRUCTION LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	100+90.633	3.88	876.65	876.65
A	101+00.633	3.88	876.71	876.71
B	101+10.633	3.88	876.76	876.76
END E. APPR. PAV'T	101+20.633	3.88	876.81	876.81

SOUTH EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	100+82.922	12.00	876.49	876.49
A	100+92.922	12.00	876.54	876.54
B	101+02.922	12.00	876.59	876.59
END E. APPR. PAV'T	101+12.922	12.00	876.64	876.64

SOUTH CURB LINE

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS
BACK OF EAST ABUT.	100+75.331	20.00	876.28	876.28
A	100+85.331	20.00	876.33	876.33
B	100+95.331	20.00	876.38	876.38
END E. APPR. PAV'T	101+05.331	20.00	876.43	876.43

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EAST APPROACH PAVEMENT-ELEVATIONS
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DATE: APRIL 2, 2007
 DRAWN BY: D.L./F.M.
 CHECKED BY: B.N.S./J.C.N.

CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

F.A.P. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B(1&2)BR	McHENRY	107	88
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 60B83

W Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N. Main Street
Lombard, IL 60148
Telephone: 630-953-9928
Fax: 630-953-9938

BORING LOG MB-01
WEI Job No.: 950-06-01

Date: NGVD
Elevations: 866.82 Ft
North: 2894237.56 Ft
East: 692767.77 Ft
Station: 90+65
Offset: 51 RT

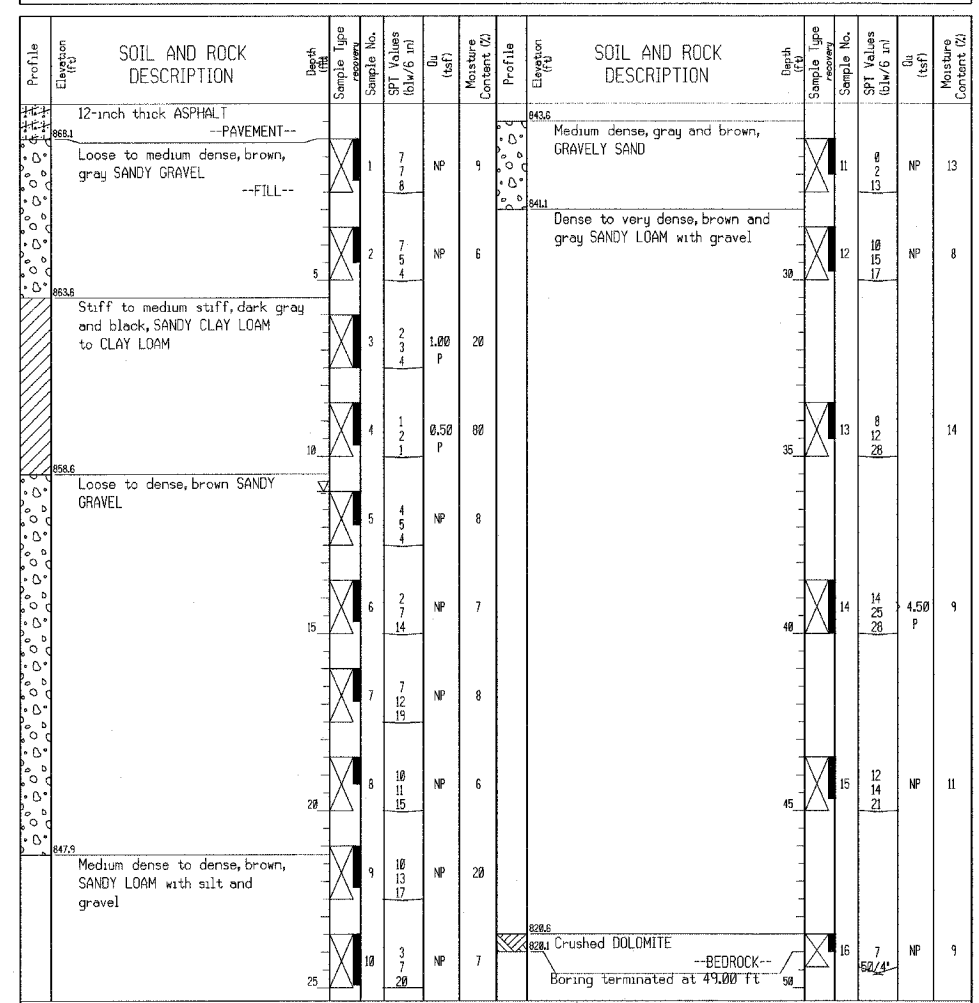
Client: Christian-Roge & Associates, Inc.
Project: IL-173 Bridge over Piascasaw Creek (PCO)
Location:

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	U ₁₀₀ (%)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	U ₁₀₀ (%)	Moisture Content (%)
866.8	12-in thick dark brown to gray SILTY CLAY LOAM --TOPSOIL--	0	1	8	1.00	P	866.8	Soft, dark brown to black CLAY LOAM with organic matter	1	1	8	0.33	33
		1	2	13	0.75	P	862.8	Loose, brown coarse GRAVEL	2	3	28	NP	12
		2	3	14	0.75	P	863.3	Dense, brown coarse GRAVEL with medium-grained sand	3	6	8	NP	9
		3	4	15	0.75	P	863.8	Very dense, brown to light brown coarse GRAVEL with cobbles	4	5	8	NP	14
		4	5	16	0.75	P	864.3	Very stiff, brown LOAM	5	7	11	NP	9
		5	6	17	0.75	P	864.8	Dense to very dense, gray coarse GRAVEL with cobbles	6	14	28	NP	6
		6	7	18	0.75	P	865.3	Very dense, brown coarse GRAVEL with medium-grained sand	7	14	28	NP	6
		7	8	19	0.75	P	865.8	Dense, brown coarse GRAVEL with fine sand and clay	8	4	24	NP	9
		8	9	20	0.75	P	866.3		9	15	30/5.5	NP	12
		9	10	21	0.75	P	866.8		10	15	25/17	NP	10
		10	11	22	0.75	P	867.3		11	15	25/17	NP	10
		11	12	23	0.75	P	867.8		12	15	25/17	NP	10
		12	13	24	0.75	P	868.3		13	15	25/17	NP	10
		13	14	25	0.75	P	868.8		14	15	25/17	NP	10
		14	15	26	0.75	P	869.3		15	15	25/17	NP	10
		15	16	27	0.75	P	869.8		16	15	25/17	NP	10
		16	17	28	0.75	P	870.3		17	15	25/17	NP	10
		17	18	29	0.75	P	870.8		18	15	25/17	NP	10
		18	19	30	0.75	P	871.3		19	15	25/17	NP	10
		19	20	31	0.75	P	871.8		20	15	25/17	NP	10
		20	21	32	0.75	P	872.3		21	15	25/17	NP	10
		21	22	33	0.75	P	872.8		22	15	25/17	NP	10
		22	23	34	0.75	P	873.3		23	15	25/17	NP	10
		23	24	35	0.75	P	873.8		24	15	25/17	NP	10
		24	25	36	0.75	P	874.3		25	15	25/17	NP	10
		25	26	37	0.75	P	874.8		26	15	25/17	NP	10
		26	27	38	0.75	P	875.3		27	15	25/17	NP	10
		27	28	39	0.75	P	875.8		28	15	25/17	NP	10
		28	29	40	0.75	P	876.3		29	15	25/17	NP	10
		29	30	41	0.75	P	876.8		30	15	25/17	NP	10
		30	31	42	0.75	P	877.3		31	15	25/17	NP	10
		31	32	43	0.75	P	877.8		32	15	25/17	NP	10
		32	33	44	0.75	P	878.3		33	15	25/17	NP	10
		33	34	45	0.75	P	878.8		34	15	25/17	NP	10
		34	35	46	0.75	P	879.3		35	15	25/17	NP	10
		35	36	47	0.75	P	879.8		36	15	25/17	NP	10
		36	37	48	0.75	P	880.3		37	15	25/17	NP	10
		37	38	49	0.75	P	880.8		38	15	25/17	NP	10
		38	39	50	0.75	P	881.3		39	15	25/17	NP	10
		39	40	51	0.75	P	881.8		40	15	25/17	NP	10
		40	41	52	0.75	P	882.3		41	15	25/17	NP	10
		41	42	53	0.75	P	882.8		42	15	25/17	NP	10
		42	43	54	0.75	P	883.3		43	15	25/17	NP	10
		43	44	55	0.75	P	883.8		44	15	25/17	NP	10
		44	45	56	0.75	P	884.3		45	15	25/17	NP	10
		45	46	57	0.75	P	884.8		46	15	25/17	NP	10
		46	47	58	0.75	P	885.3		47	15	25/17	NP	10
		47	48	59	0.75	P	885.8		48	15	25/17	NP	10
		48	49	60	0.75	P	886.3		49	15	25/17	NP	10
		49	50	61	0.75	P	886.8		50	15	25/17	NP	10
		50	51	62	0.75	P	887.3		51	15	25/17	NP	10
		51	52	63	0.75	P	887.8		52	15	25/17	NP	10
		52	53	64	0.75	P	888.3		53	15	25/17	NP	10
		53	54	65	0.75	P	888.8		54	15	25/17	NP	10
		54	55	66	0.75	P	889.3		55	15	25/17	NP	10
		55	56	67	0.75	P	889.8		56	15	25/17	NP	10
		56	57	68	0.75	P	890.3		57	15	25/17	NP	10
		57	58	69	0.75	P	890.8		58	15	25/17	NP	10
		58	59	70	0.75	P	891.3		59	15	25/17	NP	10
		59	60	71	0.75	P	891.8		60	15	25/17	NP	10
		60	61	72	0.75	P	892.3		61	15	25/17	NP	10
		61	62	73	0.75	P	892.8		62	15	25/17	NP	10
		62	63	74	0.75	P	893.3		63	15	25/17	NP	10
		63	64	75	0.75	P	893.8		64	15	25/17	NP	10
		64	65	76	0.75	P	894.3		65	15	25/17	NP	10
		65	66	77	0.75	P	894.8		66	15	25/17	NP	10
		66	67	78	0.75	P	895.3		67	15	25/17	NP	10
		67	68	79	0.75	P	895.8		68	15	25/17	NP	10
		68	69	80	0.75	P	896.3		69	15	25/17	NP	10
		69	70	81	0.75	P	896.8		70	15	25/17	NP	10
		70	71	82	0.75	P	897.3		71	15	25/17	NP	10
		71	72	83	0.75	P	897.8		72	15	25/17	NP	10
		72	73	84	0.75	P	898.3		73	15	25/17	NP	10
		73	74	85	0.75	P	898.8		74	15	25/17	NP	10
		74	75	86	0.75	P	899.3		75	15	25/17	NP	10
		75	76	87	0.75	P	899.8		76	15	25/17	NP	10
		76	77	88	0.75	P	900.3		77	15	25/17	NP	10
		77	78	89	0.75	P	900.8		78	15	25/17	NP	10
		78	79	90	0.75	P	901.3		79	15	25/17	NP	10
		79	80	91	0.75	P	901.8		80	15	25/17	NP	10
		80	81	92	0.75	P	902.3		81	15	25/17	NP	10
		81	82	93	0.75	P	902.8		82	15	25/17	NP	10
		82	83	94	0.75	P	903.3		83	15	25/17	NP	10
		83	84	95	0.75	P	903.8		84	15	25/17	NP	10
		84	85	96	0.75	P	904.3		85	15	25/17	NP	10
		85	86	97	0.75	P	904.8		86	15	25/17	NP	10
		86	87	98	0.75	P	905.3		87	15	25/17	NP	10
		87	88	99	0.75	P	905.8		88	15	25/17	NP	10
		88	89	100	0.75	P	906.3		89	15	25/17	NP	10
		89	90	101	0.75	P	906.8		90	15	25/17	NP	10
		90	91	102	0.75	P	907.3		91	15	25/17	NP	10
		91	92	103	0.75	P	907.8		92	15	25/17	NP	10
		92	93	104	0.75	P	908.3		93	15	25/17	NP	10
		93	94	105	0.75	P	908.8		94	15	25/17	NP	10
		94	95	106	0.75	P	909.3		95	15	25/17	NP	10
		95	96	107	0.75	P	909.8		96	15	25/17	NP	10
		96	97	108	0.75	P	910.3		97	15	25/17	NP	10
		97	98	109	0.75	P	910.8		98	15	25/17	NP	10
		98	99	110	0.75	P	911.3		99	15	25/17	NP	10
		99	100	111	0.75	P	911.8		100	15	25/17	NP	10

Wang Engineering, Inc.
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 1145 N. Main Street
 Lombard, IL 60148
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 Fax: 630 953-9938

BORING LOG MB-02 Page 1 of 1
 WEI Job No.: 950-06-01
 Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piscasaw Creek (PCO)
 Location:

Datum: NGVD
 Elevation: 865.14 ft
 North: 2894259.61 ft
 East: 892991.47 ft
 Station: 101+21
 Offset: 6' RT



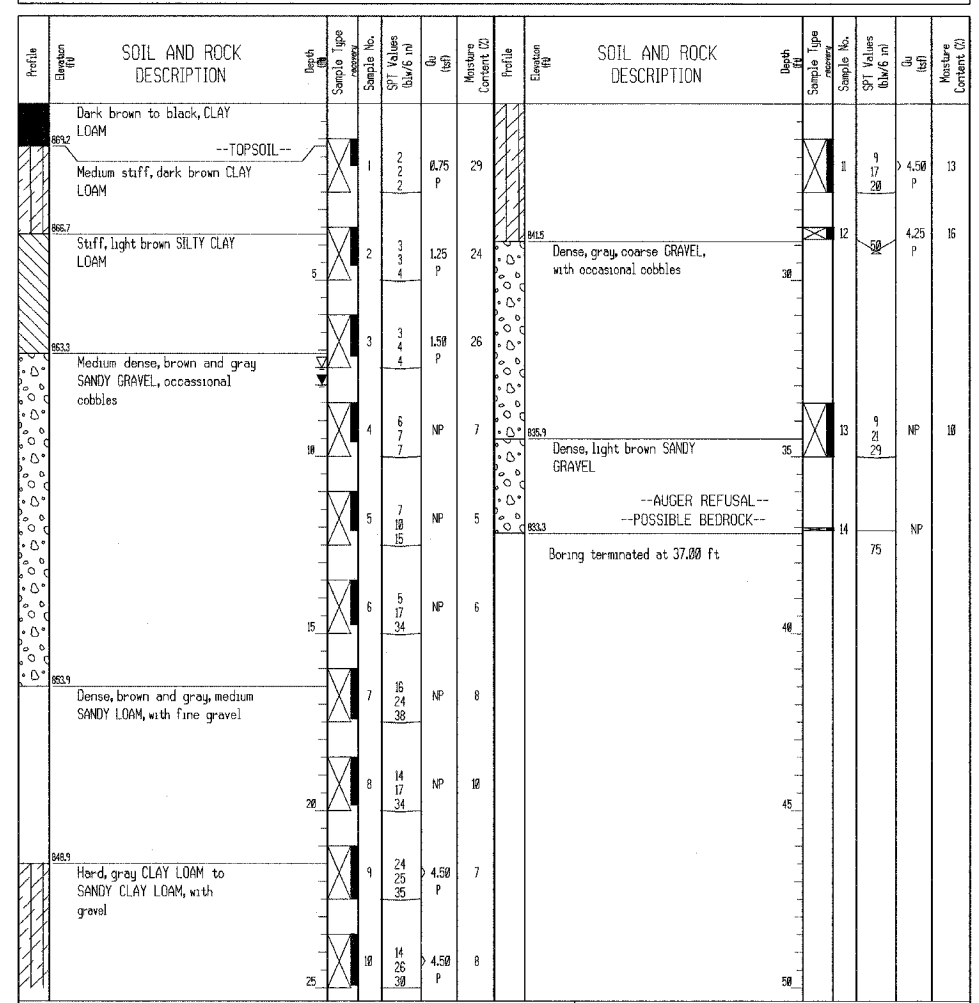
GENERAL NOTES
 Begin Drilling 03-09-2007 Complete Drilling 03-12-2007
 Drilling Contractor Precon Drill Rig CME-75
 Driller S&J Logger D.Constantine Checked by R.Edelman
 Drilling Method 3.25 HSA

WATER LEVEL DATA
 While Drilling 11.00 ft
 At Completion of Drilling NA
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering, Inc.
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 Fax: 630 953-9938

BORING LOG MB-04 Page 1 of 1
 WEI Job No.: 950-06-01
 Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piscasaw Creek (PCO)
 Location:

Datum: NGVD
 Elevation: 878.42 ft
 North: 2894341.77 ft
 East: 89327.78 ft
 Station: 101+16
 Offset: 88 LT



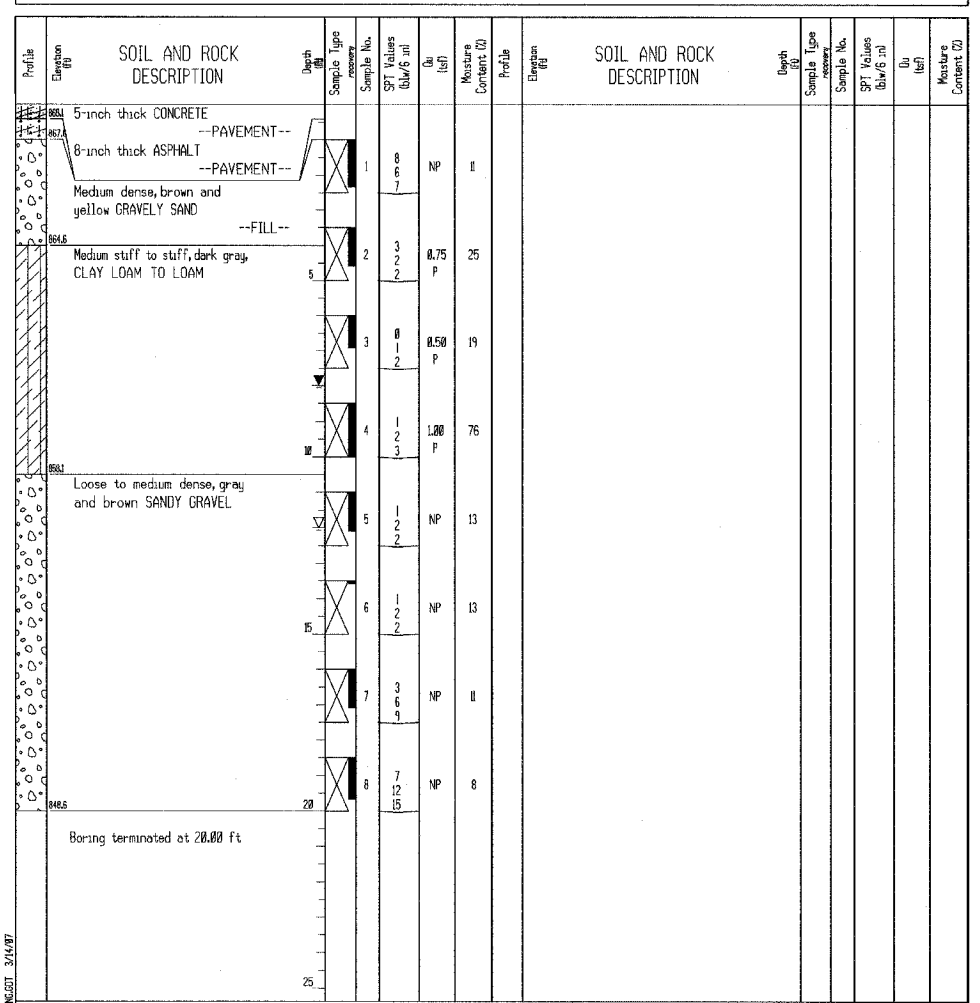
GENERAL NOTES
 Begin Drilling 01-22-2007 Complete Drilling 01-22-2007
 Drilling Contractor Precon Drill Rig CME-75 ATV
 Driller S&J Logger D.Constantine Checked by E. Datz
 Drilling Method 3.25 HSA

WATER LEVEL DATA
 While Drilling 7.50 ft
 At Completion of Drilling 8.00 ft
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering, Inc.
 Consulting Geotechnical and Environmental Engineers
 wangeng30@wangen.com
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 Lombard, IL 60148
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 Fax: 630 953-9938

BORING LOG MB-05 Page 1 of 1
 WEI Job No.: 950-06-01
 Client: Christian-Roge & Associates, Inc.
 Project: IL-173 Bridge over Piscasaw Creek (PCO)
 Location:

Datum: NGVD
 Elevation: 865.56 ft
 North: 2894274.86 ft
 East: 892784.24 ft
 Station: 90+75
 Offset: 6' RT



GENERAL NOTES
 Begin Drilling 03-12-2007 Complete Drilling 03-12-2007
 Drilling Contractor Precon Drill Rig CME-75 ATV
 Driller S&J Logger D.Constantine Checked by R.Edelman
 Drilling Method 3.25 HSA

WATER LEVEL DATA
 While Drilling 12.00 ft
 At Completion of Drilling 8.00 ft
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SOIL BORING LOGS-II
 IL. RTE. 173
 OVER
 PISCASAW CREEK
 F.A.P. RTE. 303 SECTION: 131B(1&2)BR
 McHENRY COUNTY STATION 100+00.00
 STRUCTURE NO. 056-0090

SCALE: DRAWN BY: D.L./F.M.
 DATE: APRIL 2, 2007 CHECKED BY: B.N.S./J.C.N.

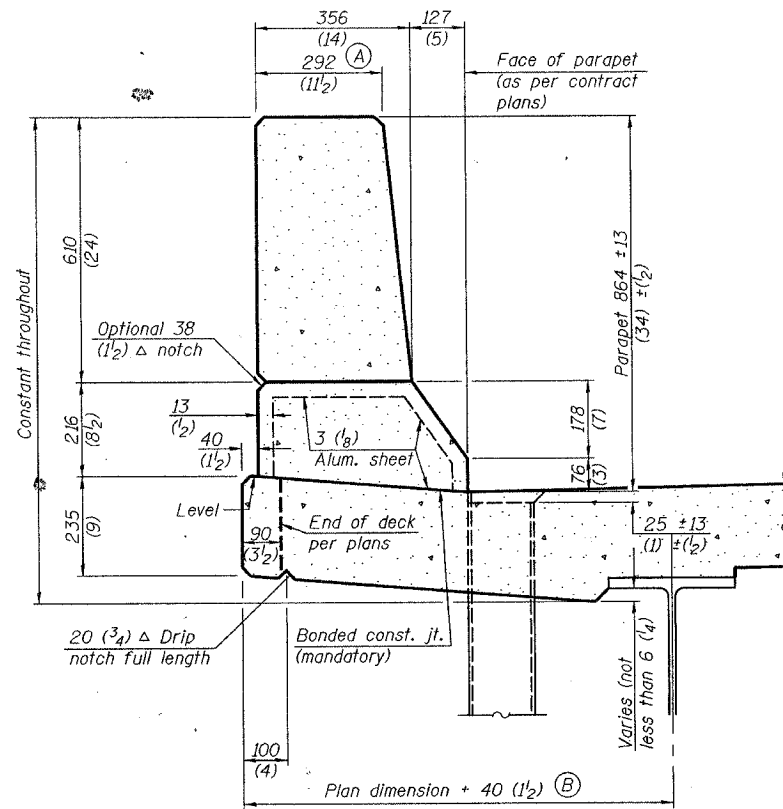
CHRISTIAN-ROGE & ASSOC., INC.
 CHICAGO ILLINOIS

REVISIONS	
NAME	DATE

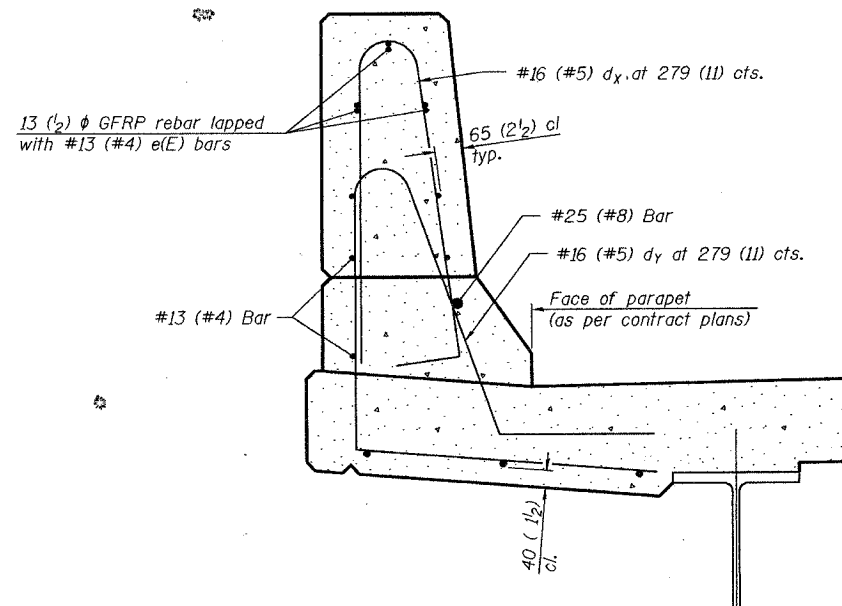
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
FAP 303	131B (182) 2x	McHenry	107	89A	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

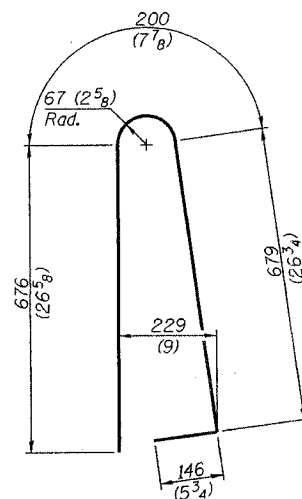
Contract #



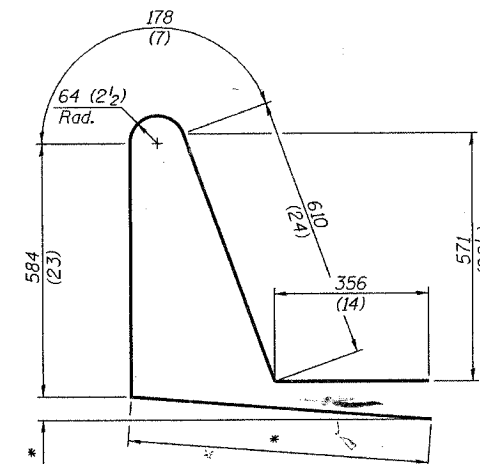
SECTION
(Showing dimensions)



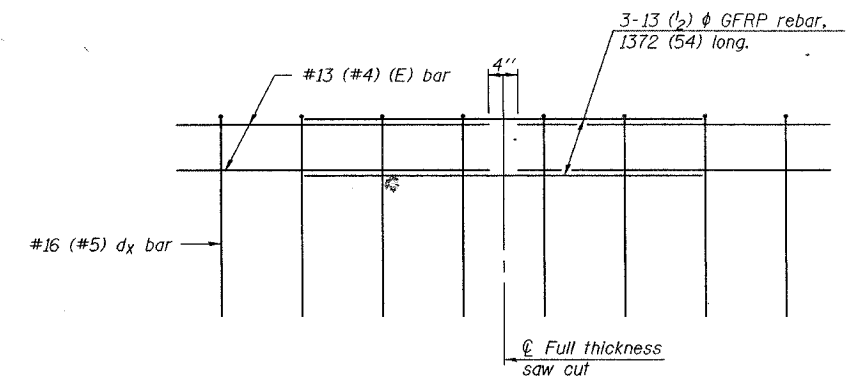
SECTION
(Showing required reinforcement)



BAR dx(e)



BAR dx(e)
* Per contract plans



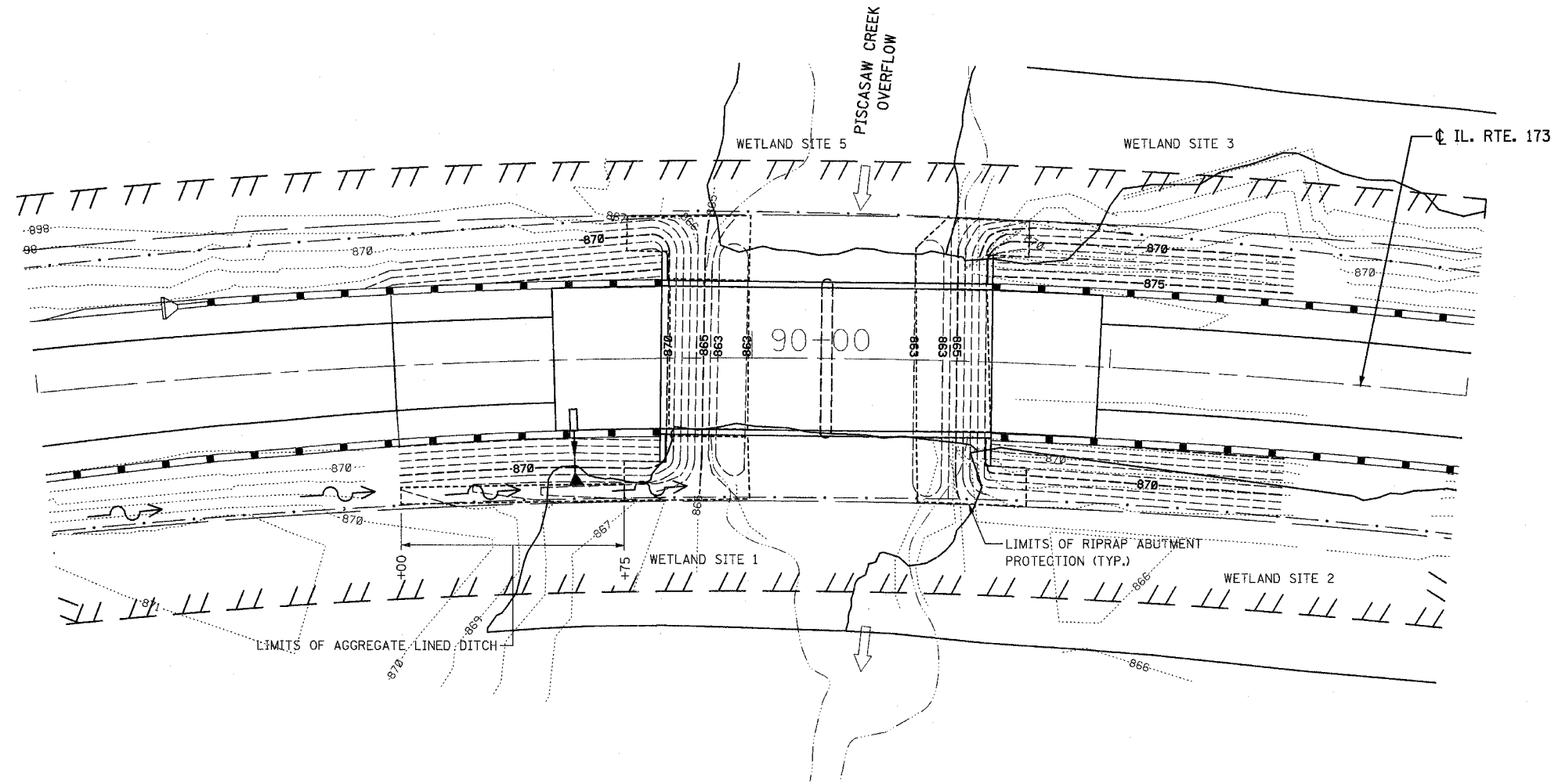
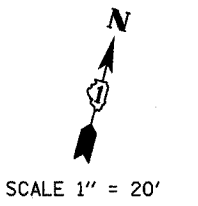
GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section)

GENERAL NOTES
All dimensions shall remain the same as shown on contract plans, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B= 0.0422 m³/m (.0165 cu. yds./ft.) of parapet. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all other locations. Adjust/add joint locations to maintain 3 to 6 meter (10 to 20 foot) spacing.

**CONCRETE PARAPET
SLIPFORMING OPTION**

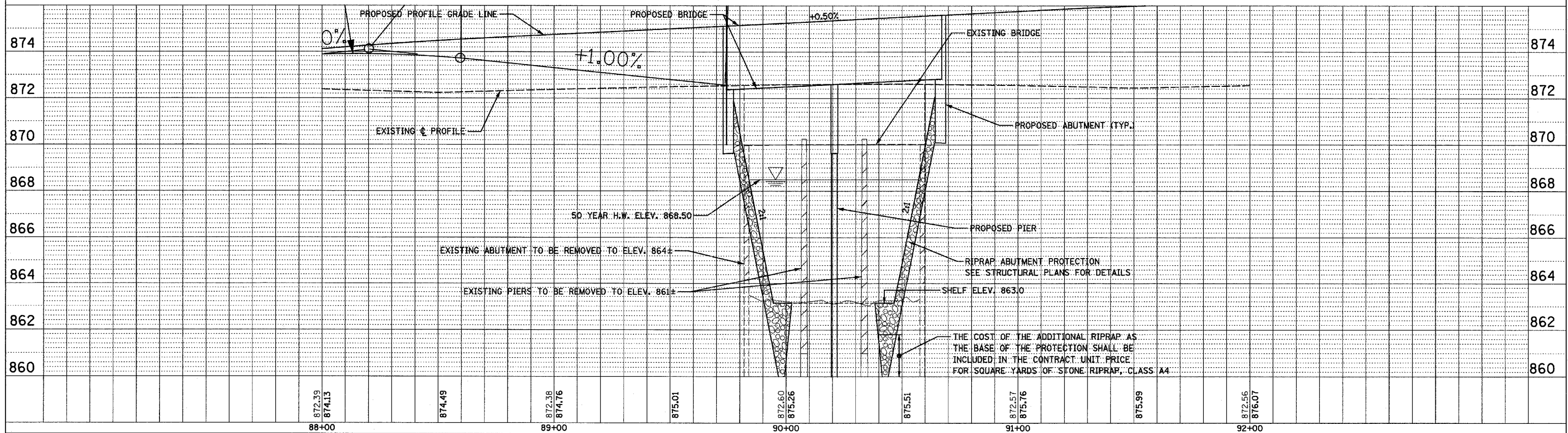
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	90
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNED	
NO.	CHECKED	
	BY	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES	
NO.	CHECKED	
	BY	
	NOTATION	

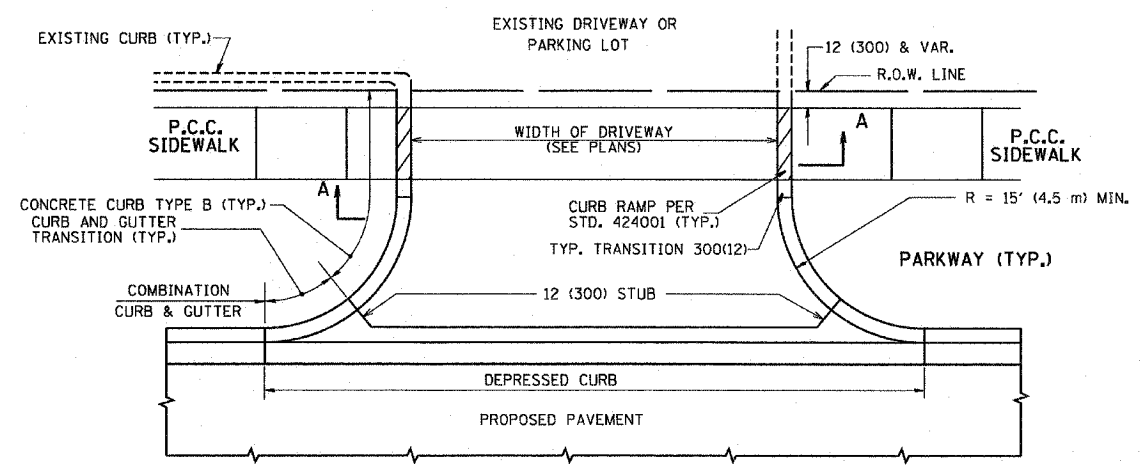


DATE: APRIL 16, 2007

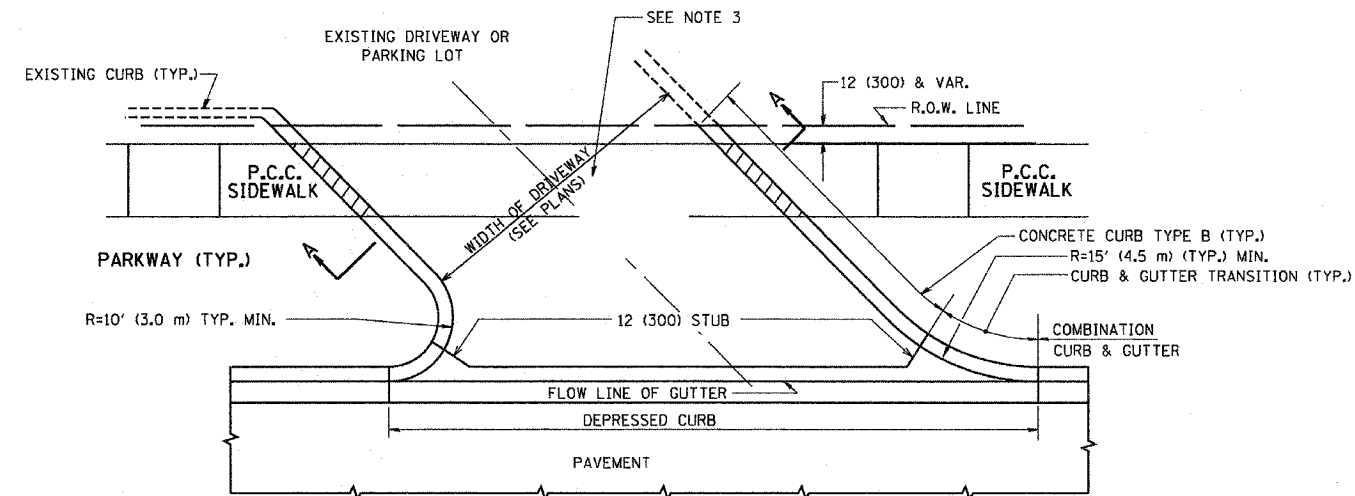
PROPOSED GRADING PLAN ILLINOIS ROUTE 173 BRIDGE OVER PISCASAW CREEK OVERFLOW

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	92
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT

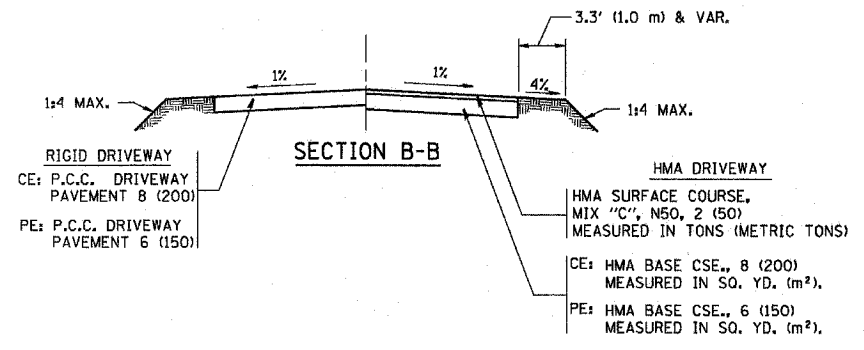
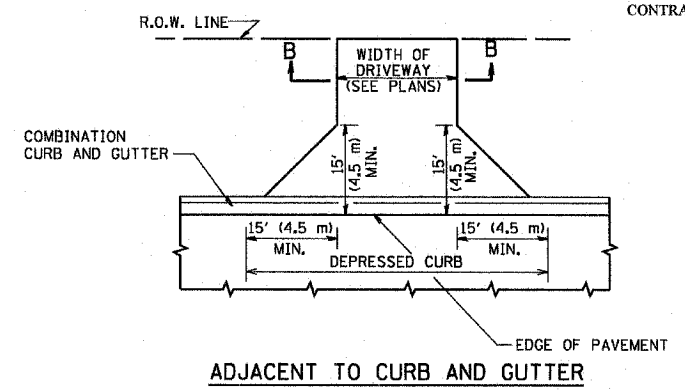
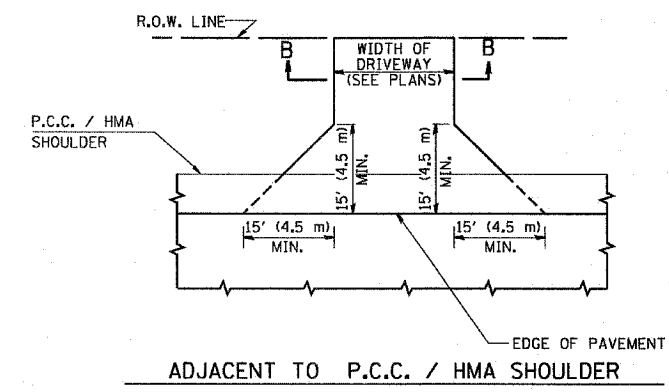
CONTRACT NO. 60B83



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)
HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)
AGGREGATE BASE CSE., TYPE A 8 (200) MEASURED IN SQ. YD. (m²).

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.

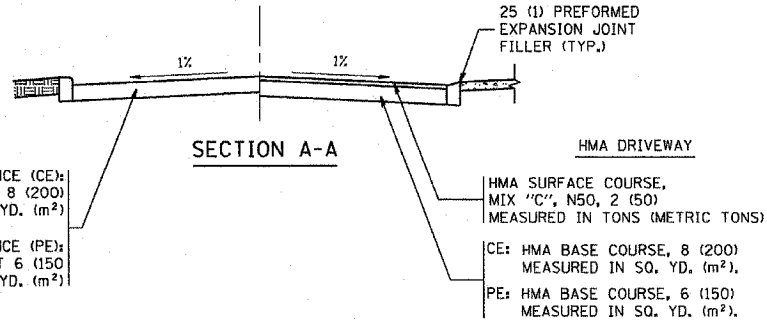
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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.



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

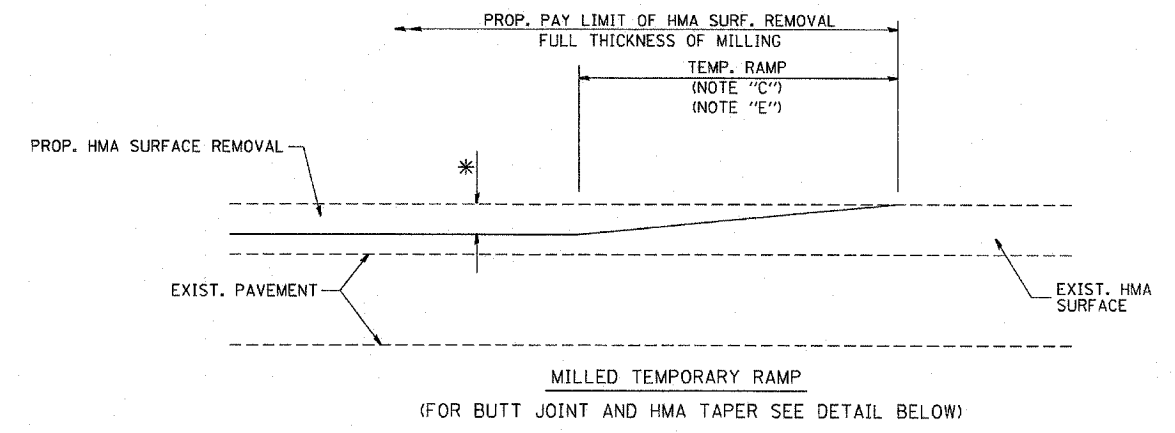
ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

VERT. SCALE: NONE
HORIZ. SCALE: 1"=10'
PLOT DATE: 1/18/2007
DRAWN BY: [blank]
CHECKED BY: [blank]

PLOT DATE: 1/18/2007
FILE NAME: c:\projects\131b\131b.dgn
USER: [blank]

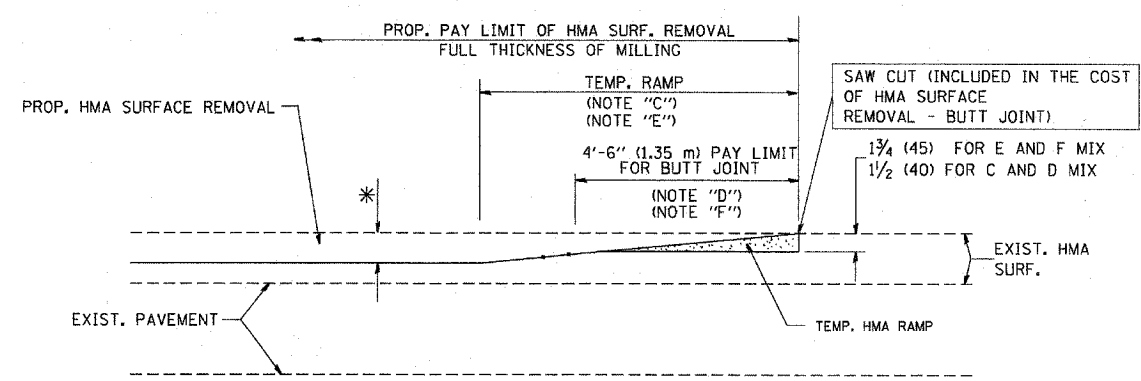
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	93
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO 60B83



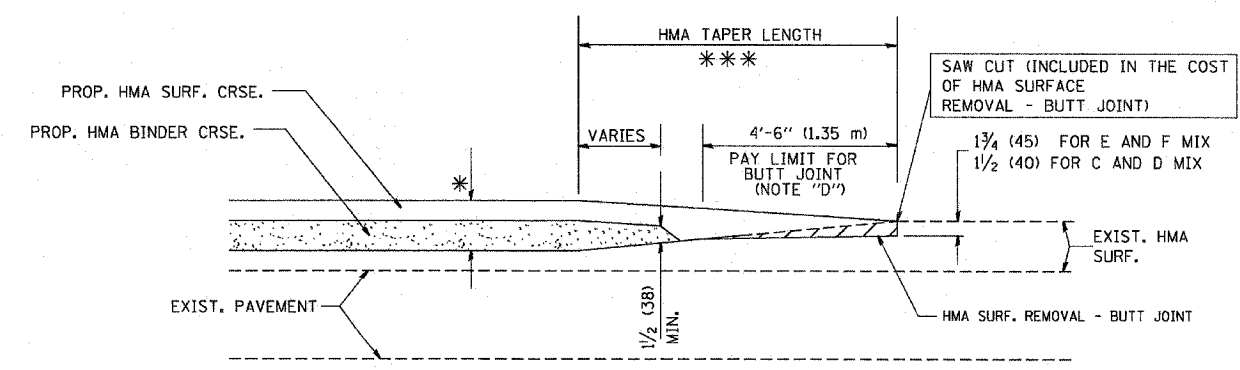
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1



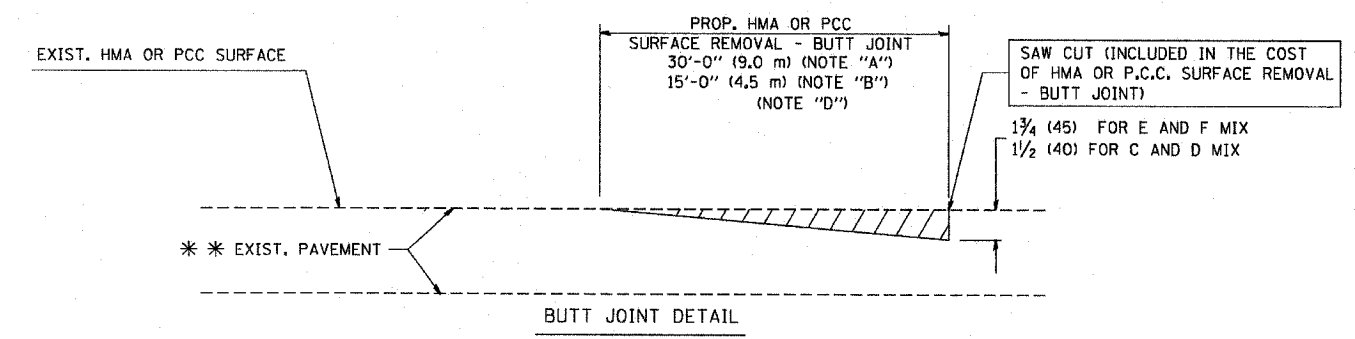
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP

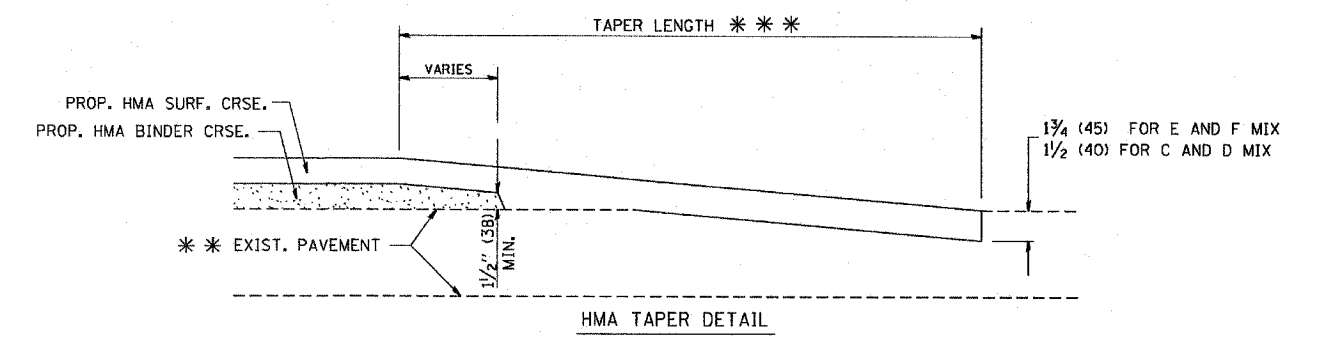


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

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

NOTES

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

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. COMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER
DETAILS

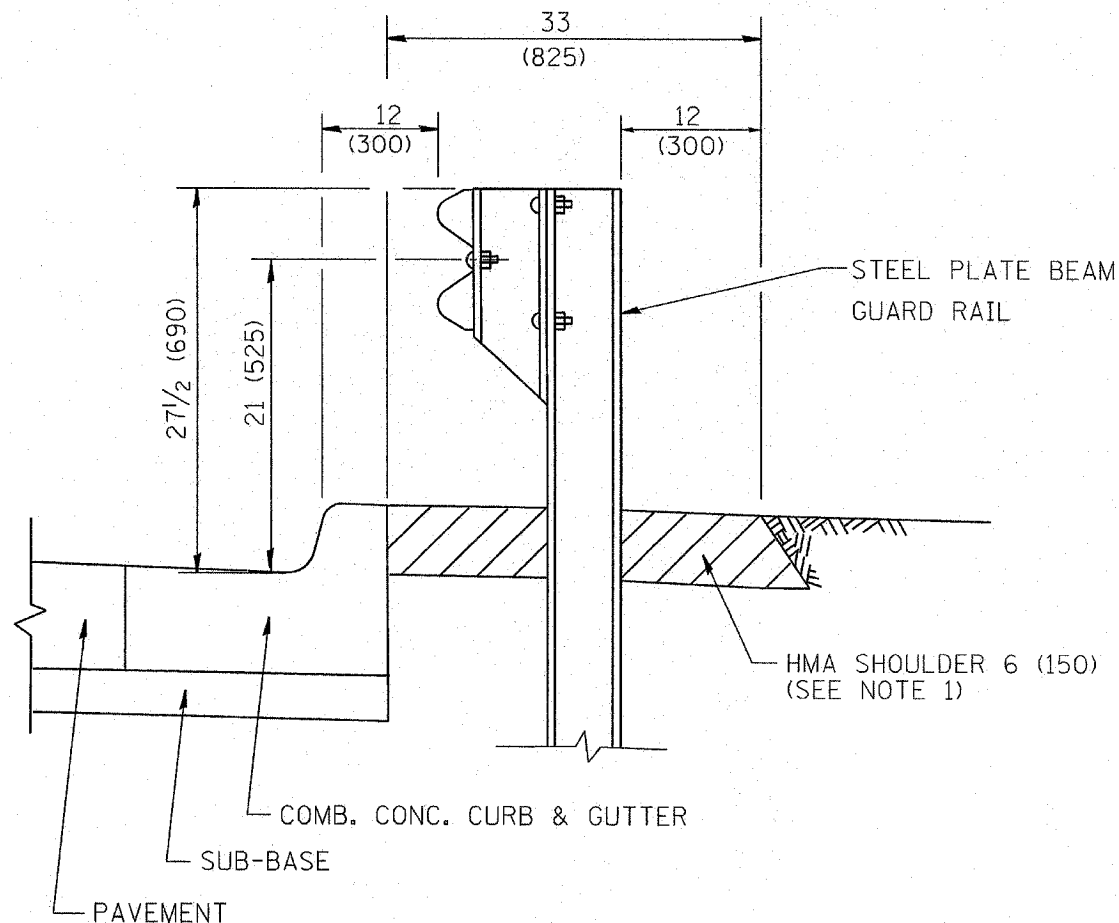
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HORIZ. SCALE: 1"=10'
PLOT DATE: 1/18/2007

DRAWN BY
CHECKED BY

BD400-05 (VI-BD32)
REVISION DATE: 01/01/07

PLOT DATE = 1/18/2007
 FILE NAME = c:\projects\131b\131b05.dgn
 USER NAME = jrburke

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			107	94
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

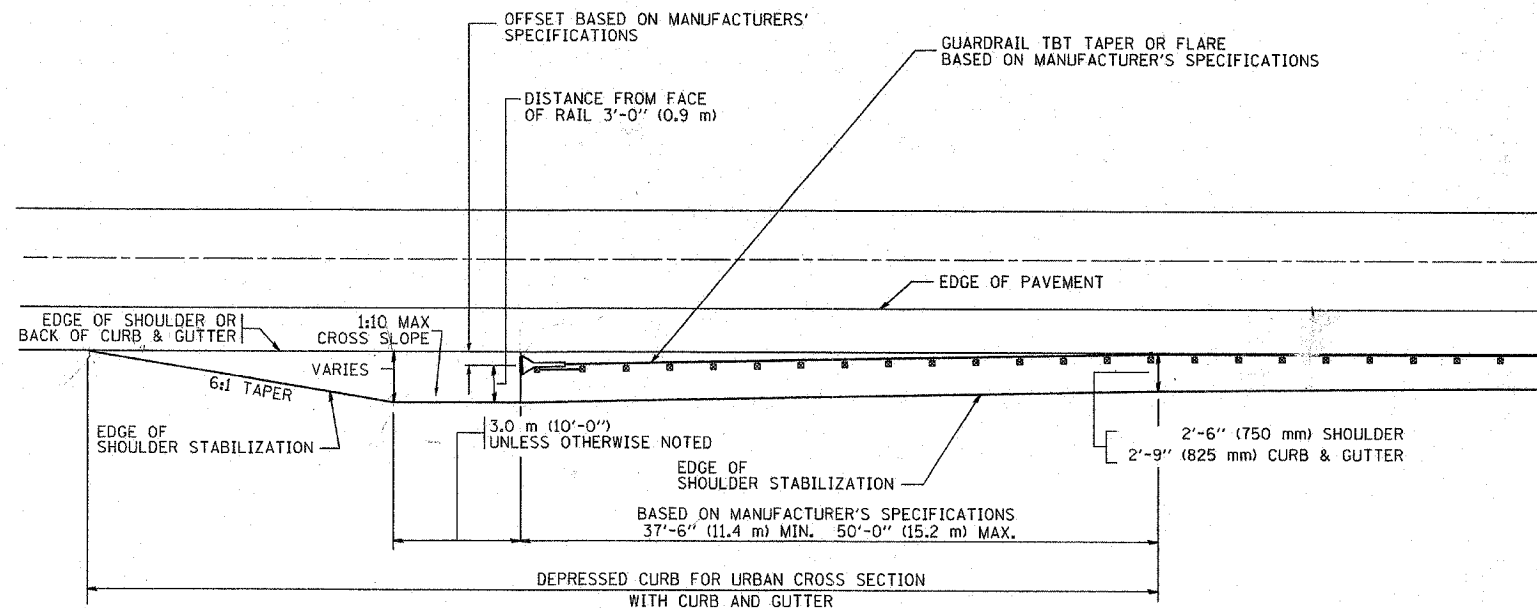


- NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

BASIS OF PAYMENT: HMA SHOULDER 6 (150) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDER 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER
 [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL

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

REVISIONS	
NAME	DATE
M. DE YONG	09-22-90
M. DE YONG	07-14-92
R. SHAH	09/09/94
R. SHAH	10/25/94
R. SHAH	02/23/95
A. ABBAS	03/21/97
E. GOMEZ	08/28/00
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.

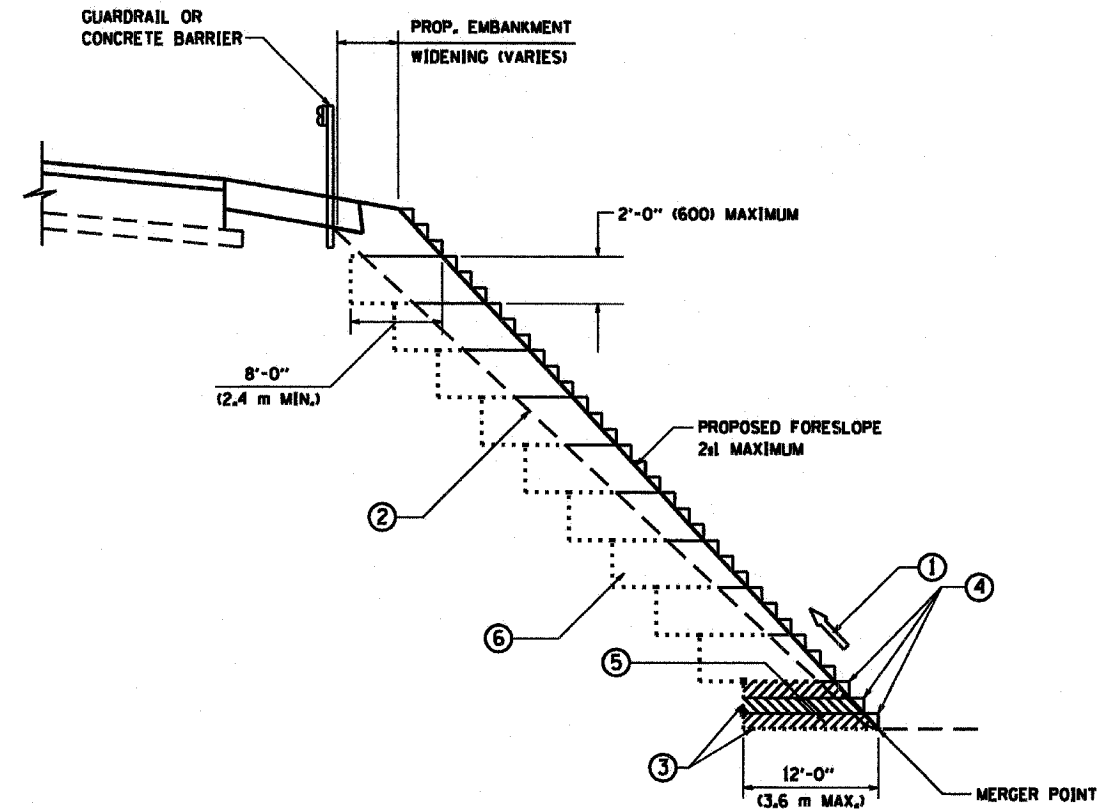
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 HORIZ. 1/18/2007
 PLOT DATE: 1/18/2007

DRAWN BY Jls
 CHECKED BY

PLOT DATE = 1/18/2007
 FILE NAME = c:\pwork\projects\bd600\bd600.dgn
 PLOT SCALE = 1/18/2007 / IN.
 USER NAME = drvkosgn

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	95
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m)

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

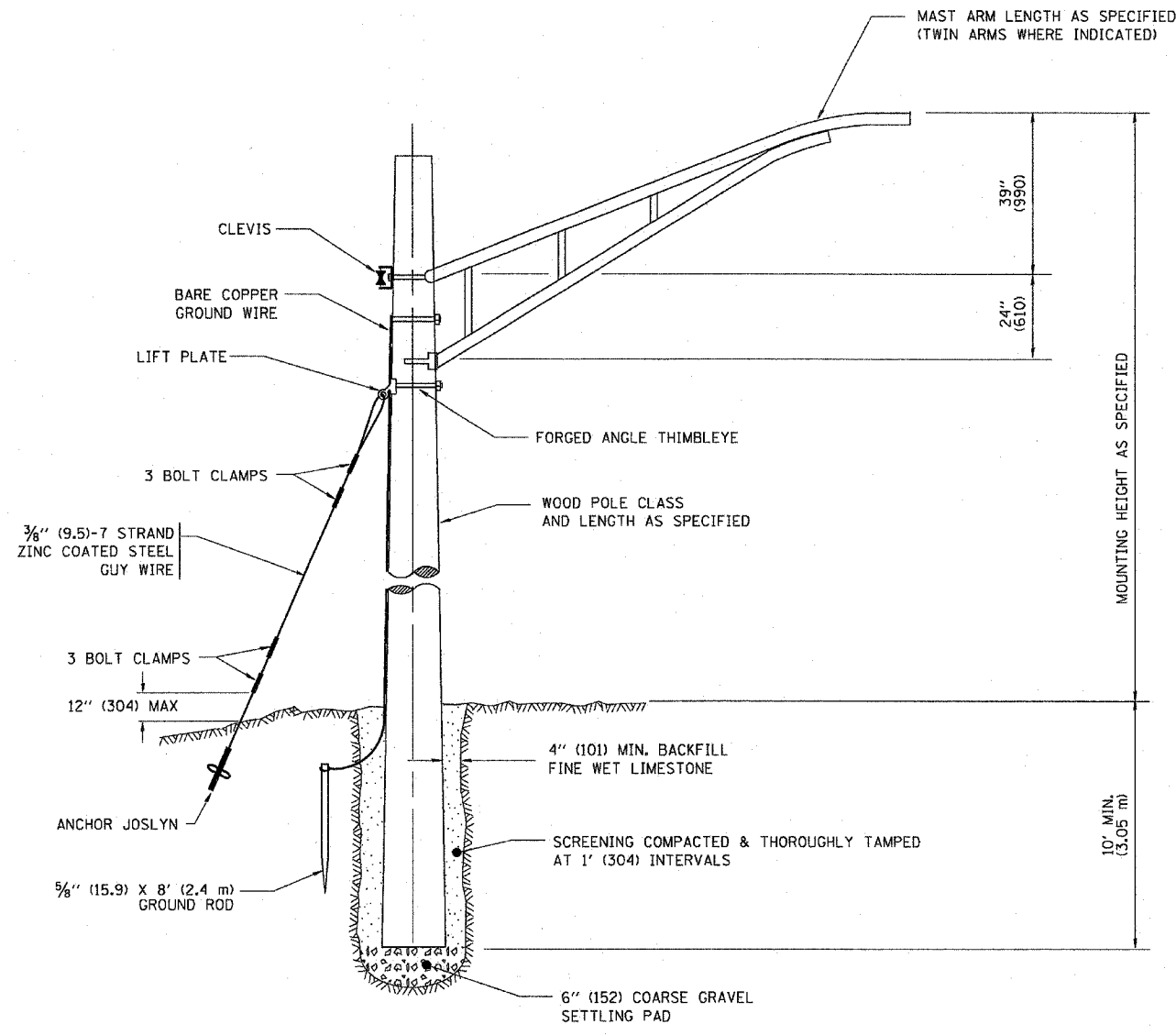
**BENCHING DETAIL
FOR EMBANKMENT
WIDENING**

SCALE: VERT.
HORIZ.
DATE: 1/18/2007

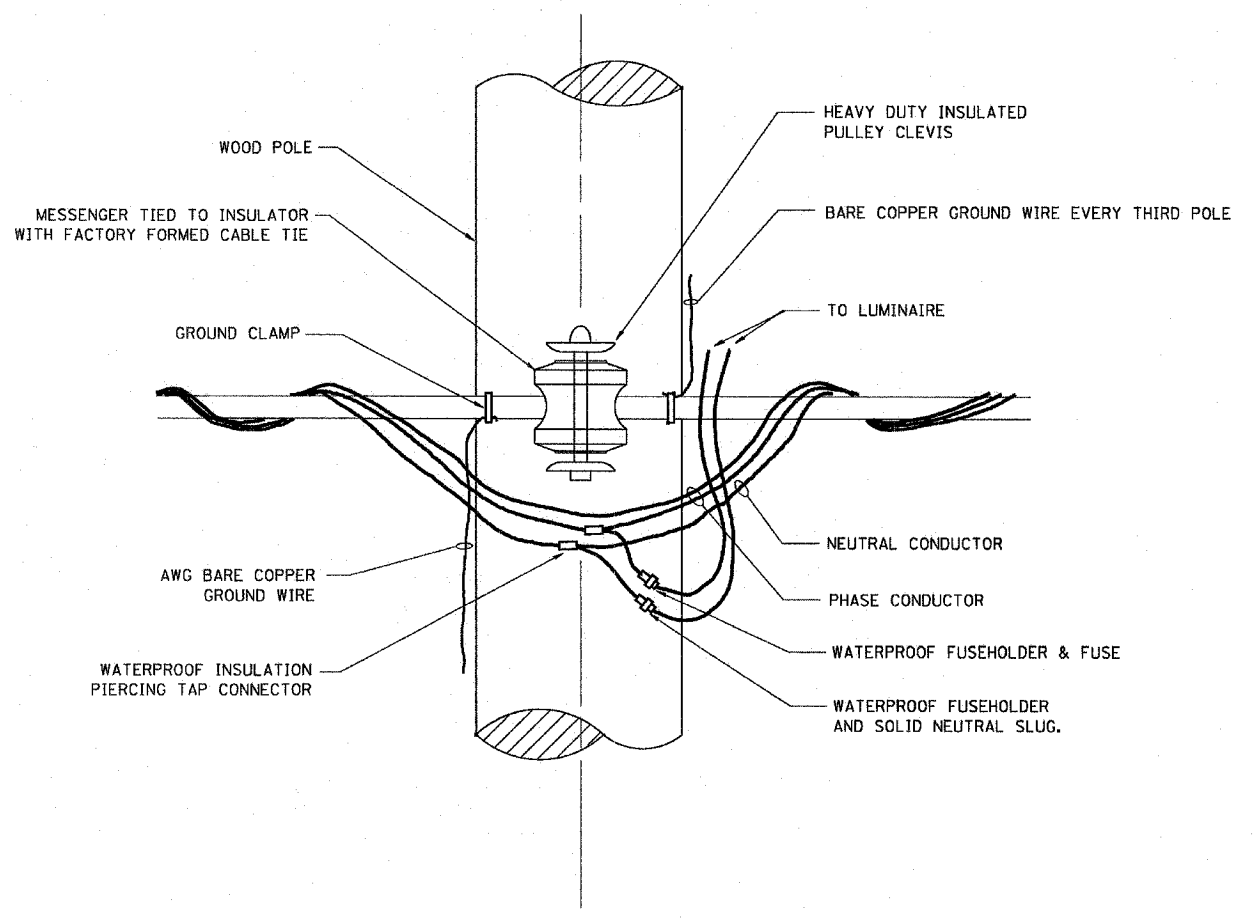
DRAWN BY: CADD
CHECKED BY: S.E.B.
BD-51

REVISION DATE: 01/01/07

PLOT DATE: 1/18/2007
FILE NAME: K:\projects\60B83\60B83.dwg
PLOT SCALE: 1/8"=1'-0"
USER NAME: bsmard



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

- NOTES:**
1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

PLOT DATE = 1/17/2007
 PLOT SCALE = 50/800 / IN
 USER NAME = ulrichkd

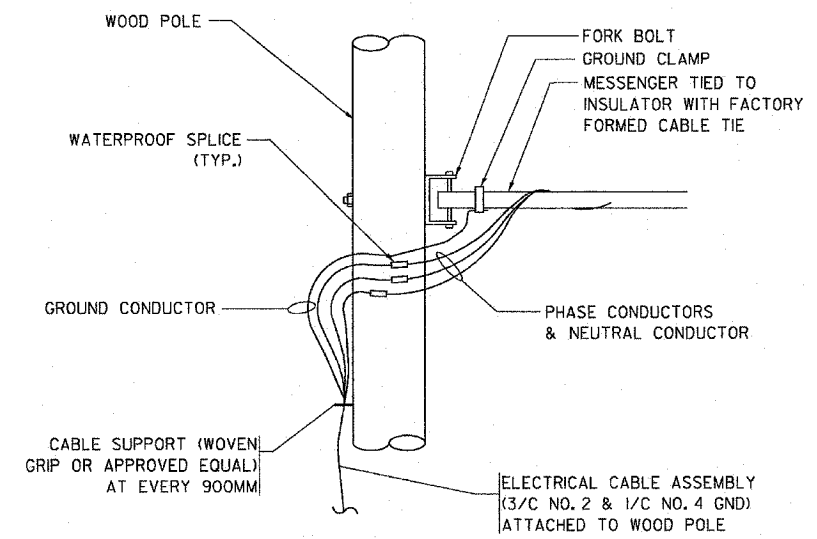
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

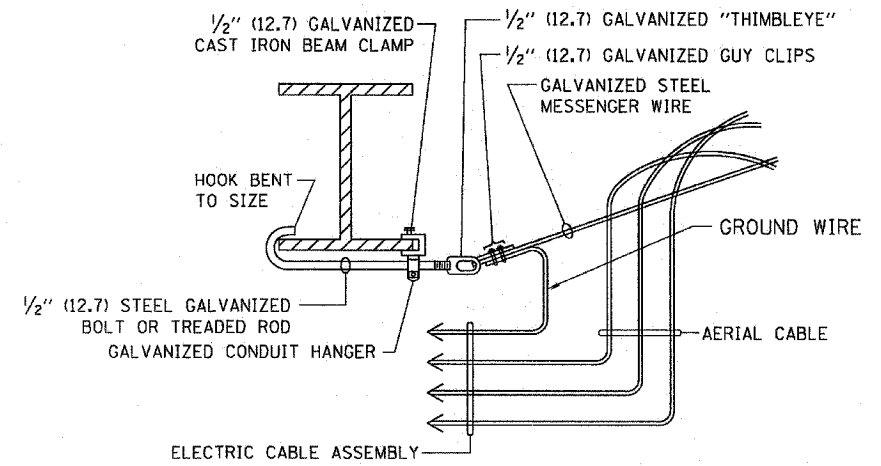
**TEMPORARY LIGHT POLE
DETAILS**

SCALE: VERT.
HORIZ.
DATE: 1/17/2007

DRAWN BY
CHECKED BY
BE-800
REVISION DATE: 01/01/07



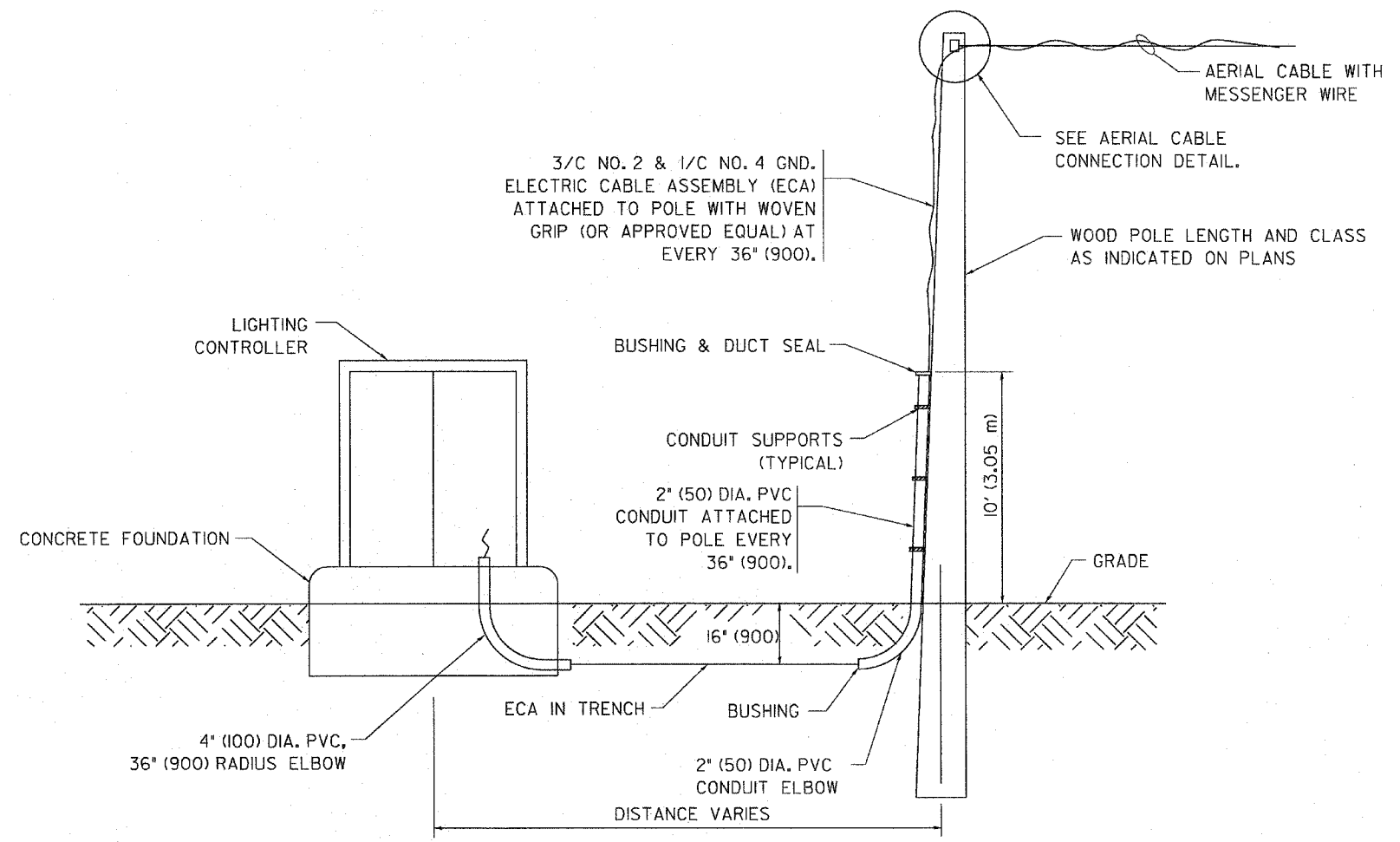
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY AERIAL CABLE INSTALLATION

SCALE: VERT. _____
HORIZ. _____
DATE: 1/17/2007

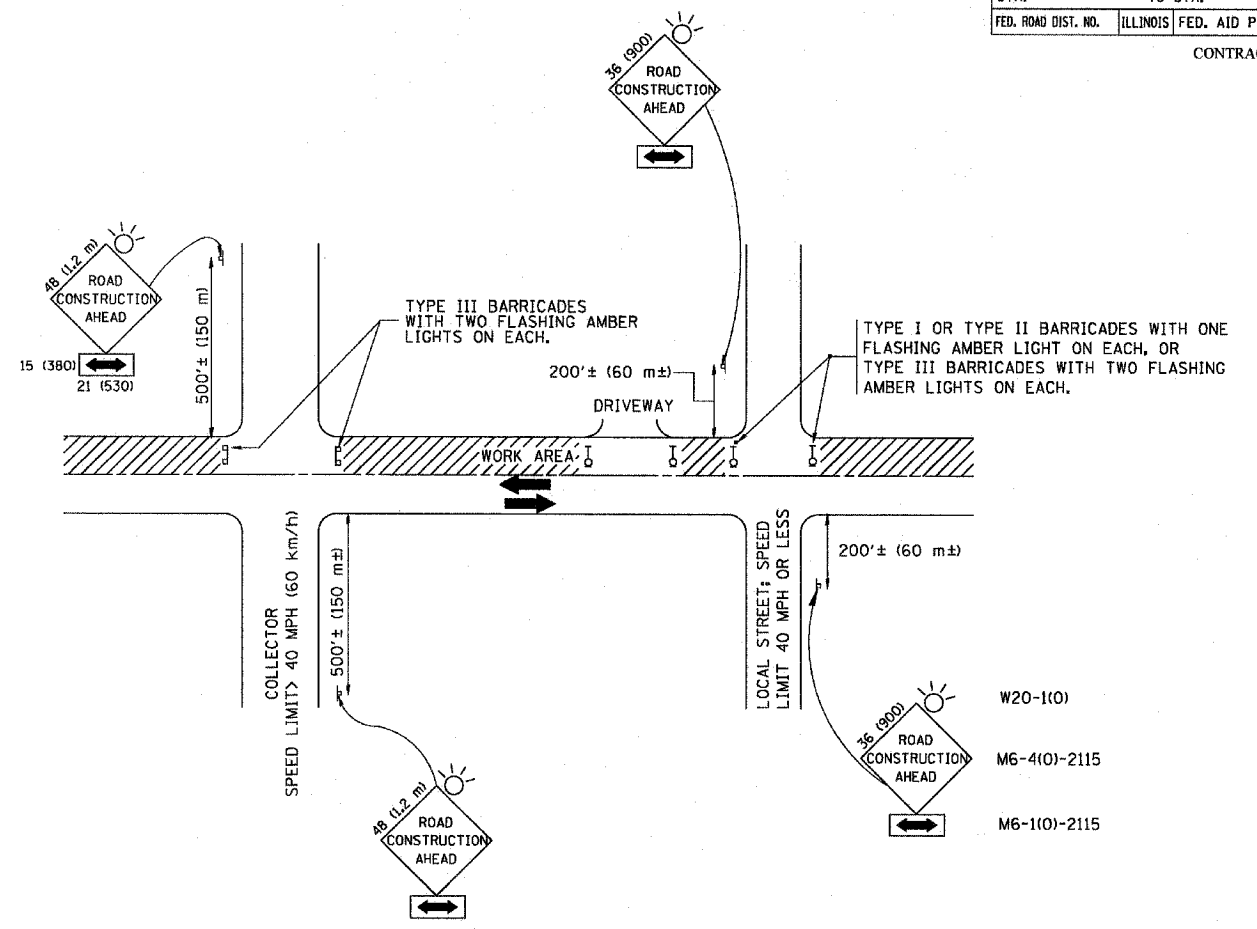
DRAWN BY _____
CHECKED BY _____
BE-801

REVISION DATE: 01/01/07

PLOT DATE = 1/17/2007
 PLOT SCALE = 50%
 USER NAME = jfrankd

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	98
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60B83



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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

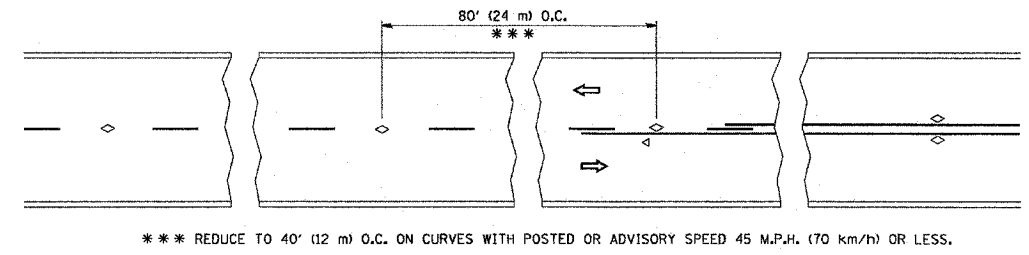
All dimensions are in millimeters (inches) unless otherwise shown.

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

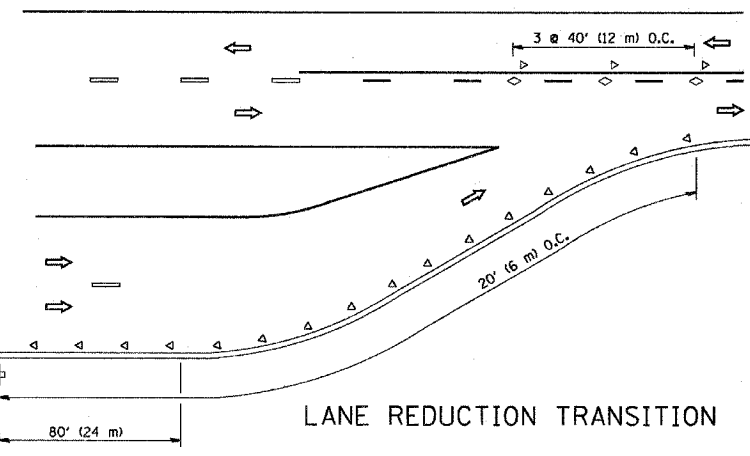
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: DATE: 1/17/2007
 DRAWN BY: CHECKED BY: TC-10
 REVISION DATE: 01/06/00

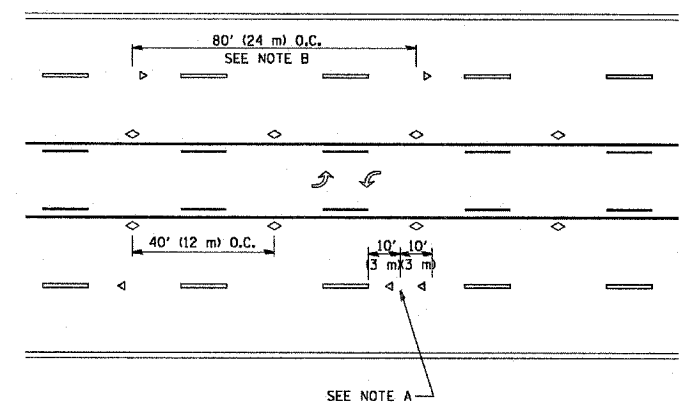
PLOT DATE = 1/17/2007
 FILE NAME = K:\data\std\std10.dgn
 USER NAME = jrb
 USER = jrb



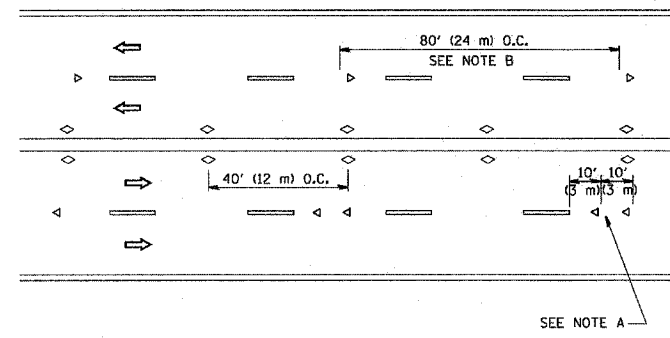
TWO-LANE/TWO-WAY



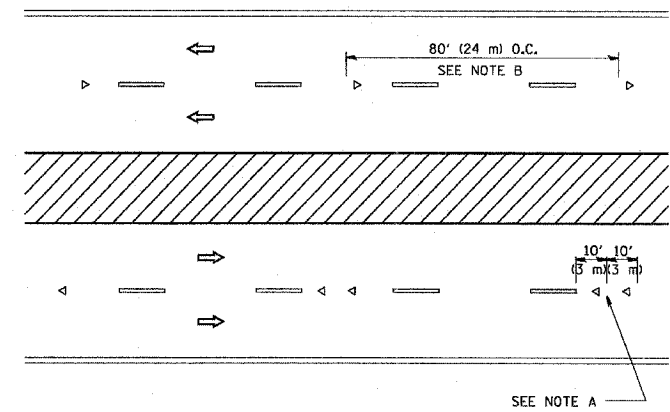
LANE REDUCTION TRANSITION



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

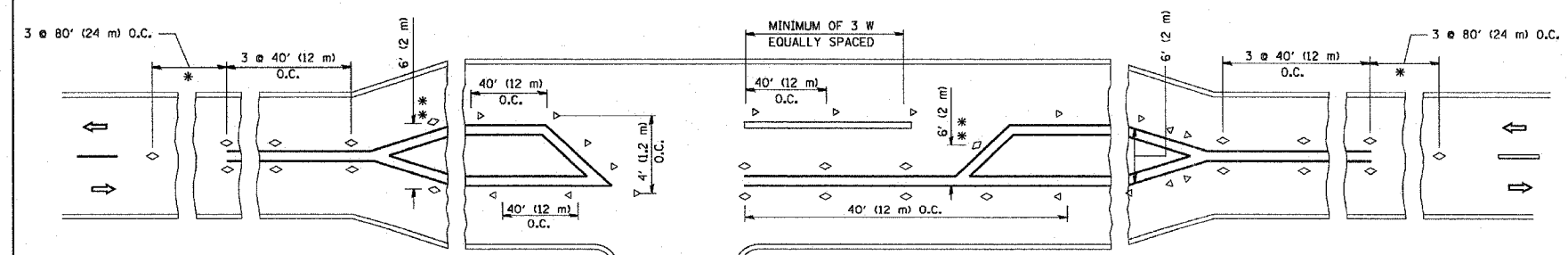
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◇ TWO-WAY AMBER MARKER

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.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

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

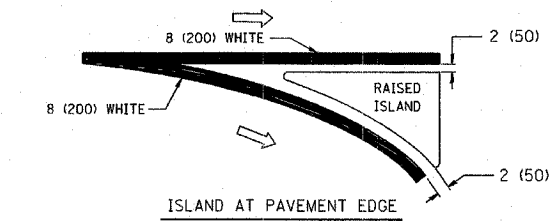
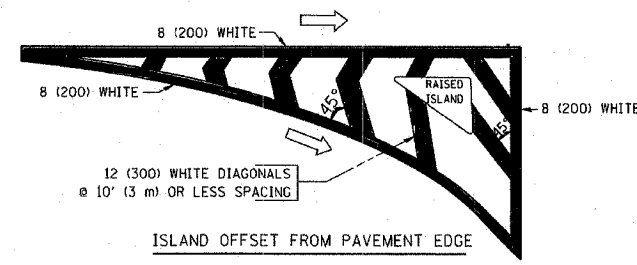
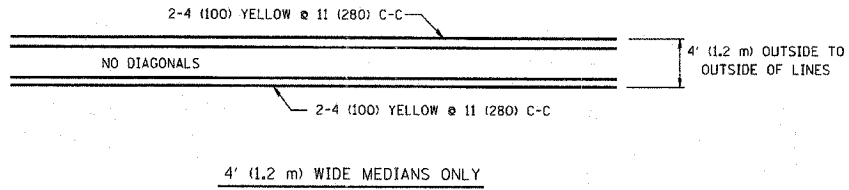
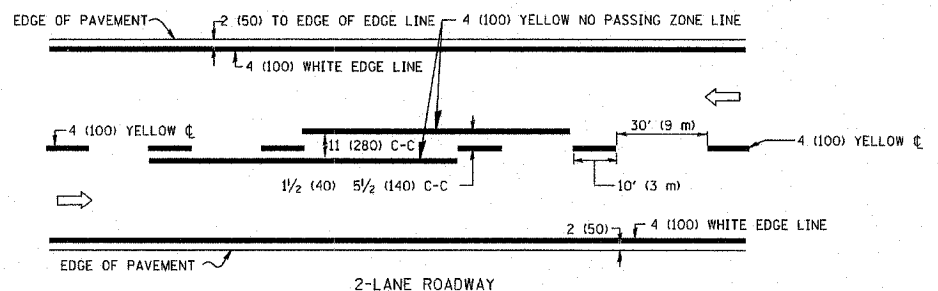
All dimensions are in millimeters (inches) unless otherwise shown.

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)**

SCALE: NONE
 DATE: 1/17/2007
 DRAWN BY CADD
 CHECKED BY
 TC-11
 REVISION DATE: 01/06/00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			107	100
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

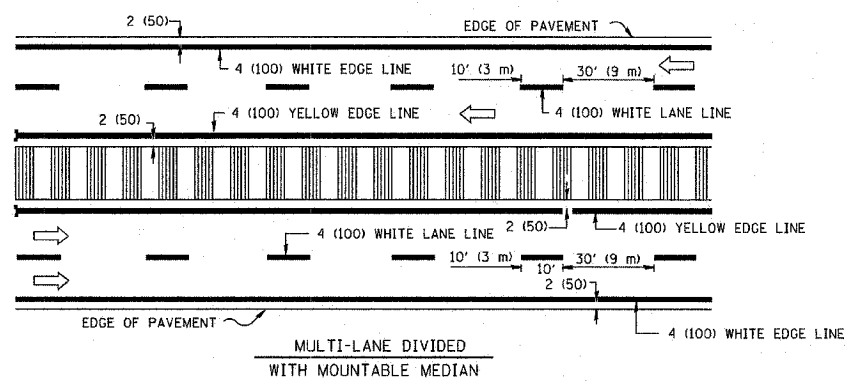
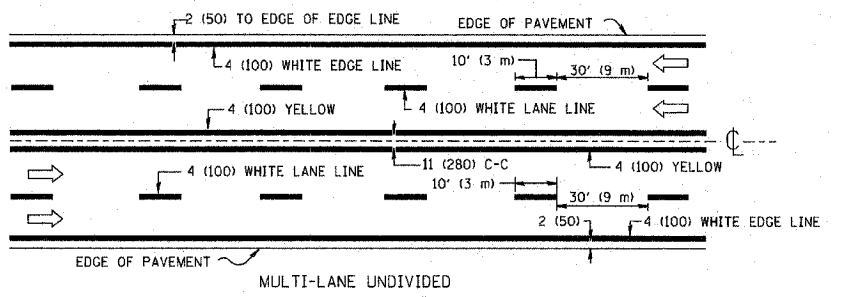


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100)	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (22.5 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

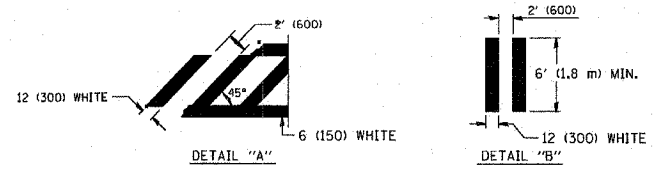
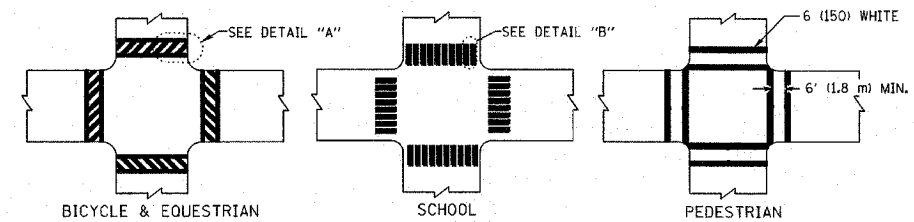
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

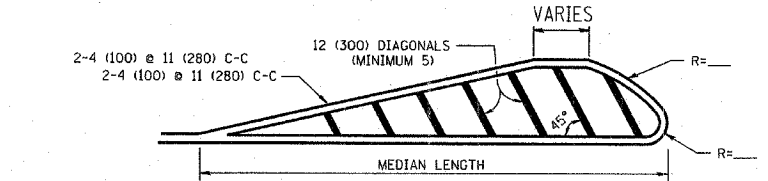


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



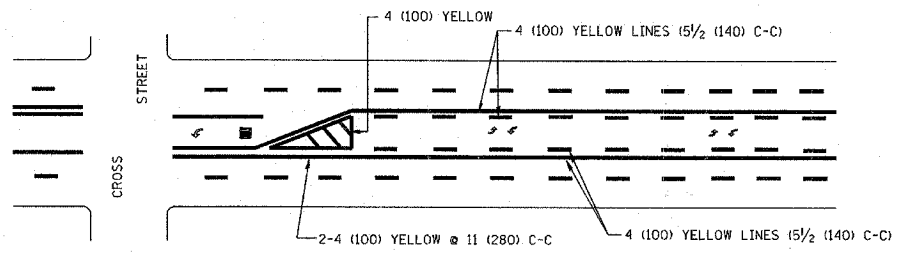
TYPICAL CROSSWALK MARKING



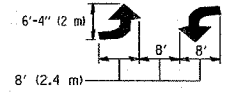
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (22.5 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

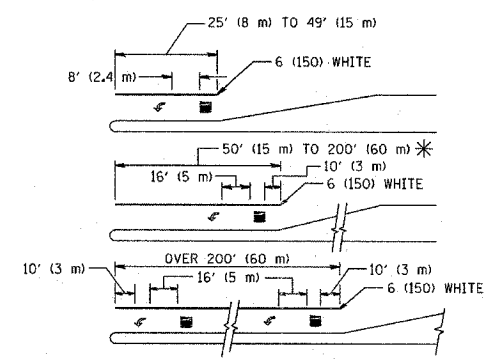


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



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

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

DISTRICT ONE

TYPICAL PAVEMENT MARKINGS

SCALE: NONE

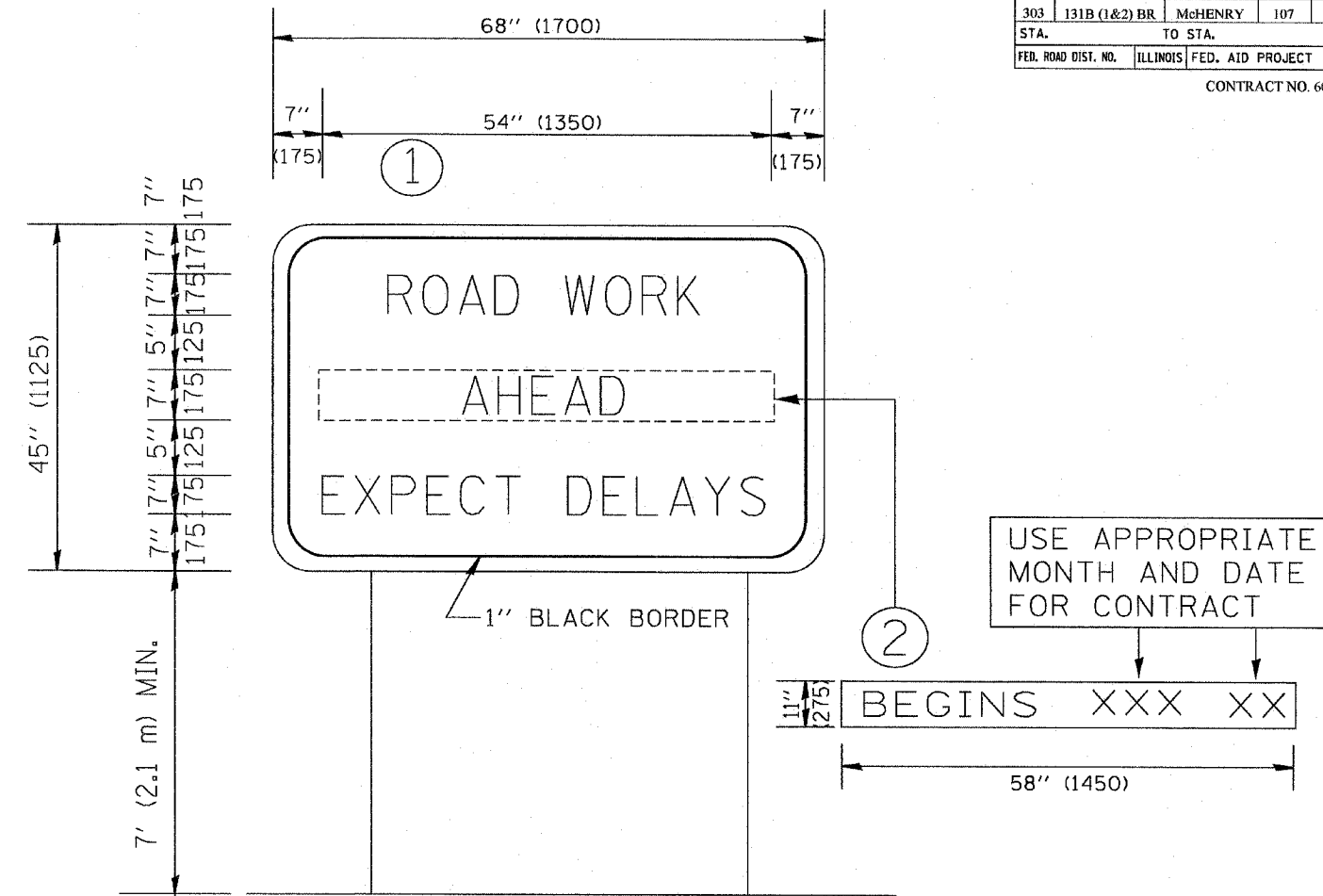
DATE: 1/17/2007

DRAWN BY CAD

CHECKED BY

TC-13

REVISION DATE: 01/06/00



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.)

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

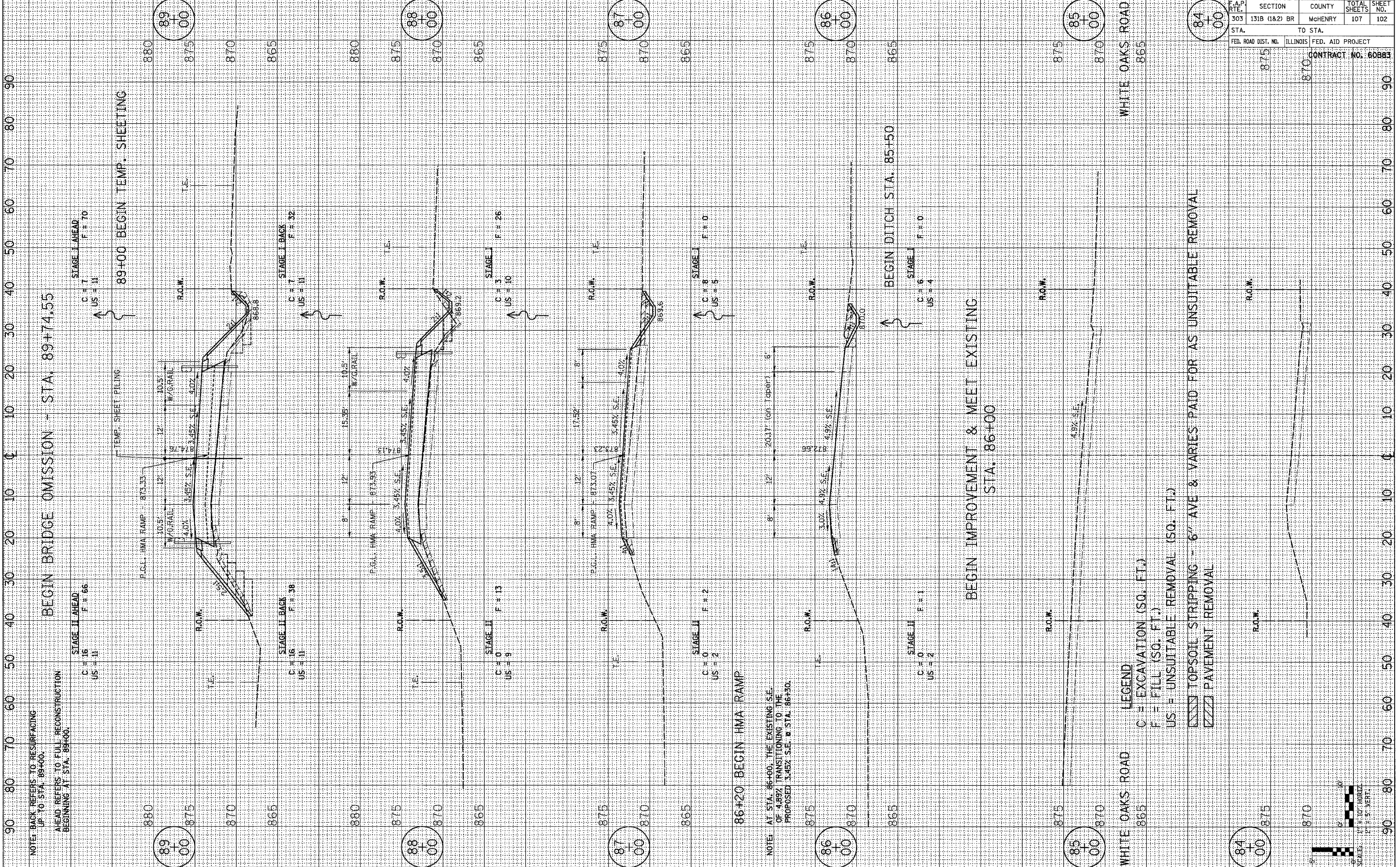
REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INFORMATION SIGNING

SCALE: DATE: 1/17/2007
 DRAWN BY DESIGN CHECKED BY
 TC22 REVISION DATE: 02/02/99

PLAN	SURVEYED	BY	DATE
	DESIGNED		
	CHECKED		
	IN CHARGE		
	DATE		
	NO.		

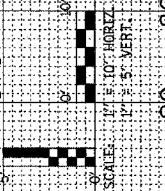
PROFILE	SURVEYED	BY	DATE
	DESIGNED		
	CHECKED		
	IN CHARGE		
	DATE		
	NO.		



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHEMRY	107	102
STA.	TO STA.		CONTRACT NO. 60BB3	
875	870			
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

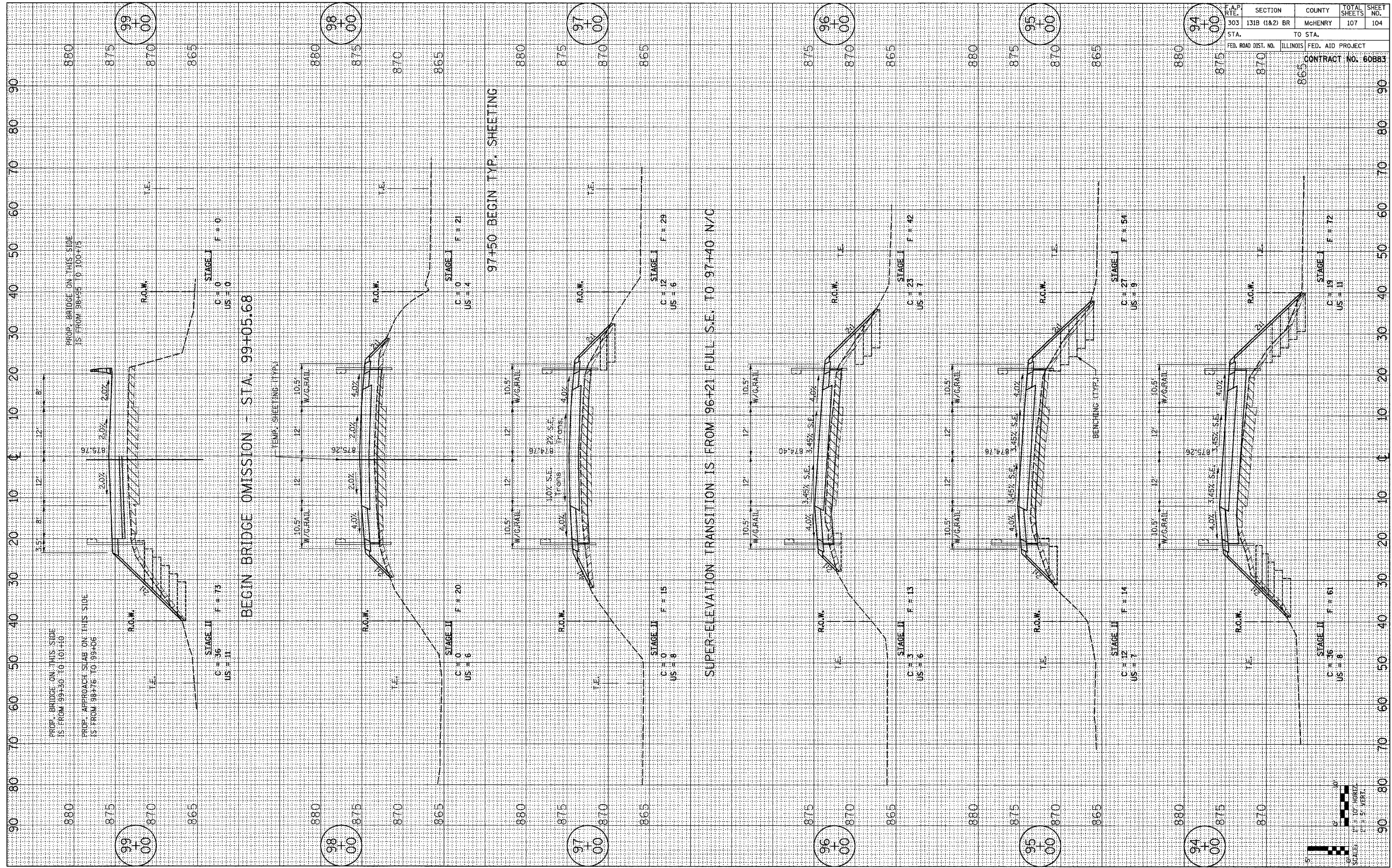
DATE: APRIL 16, 2007

CROSS SECTIONS ILLINOIS ROUTE 173



PLAN	REVISIONS	DATE
NO.	BY	
NOTE BOOK	PLOTTED	
NO.	ALIGNMENT CHECKED	
	AND FILE NAME	

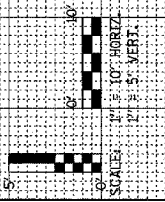
PROFILE	REVISIONS	DATE
NO.	BY	
NOTE BOOK	GRADES CHECKED	
NO.	STRUCTURE NOTATIONS CHKD	



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	104
STA.	TO STA.		FED. AID PROJECT	
	ILLINOIS		CONTRACT NO. 60B83	

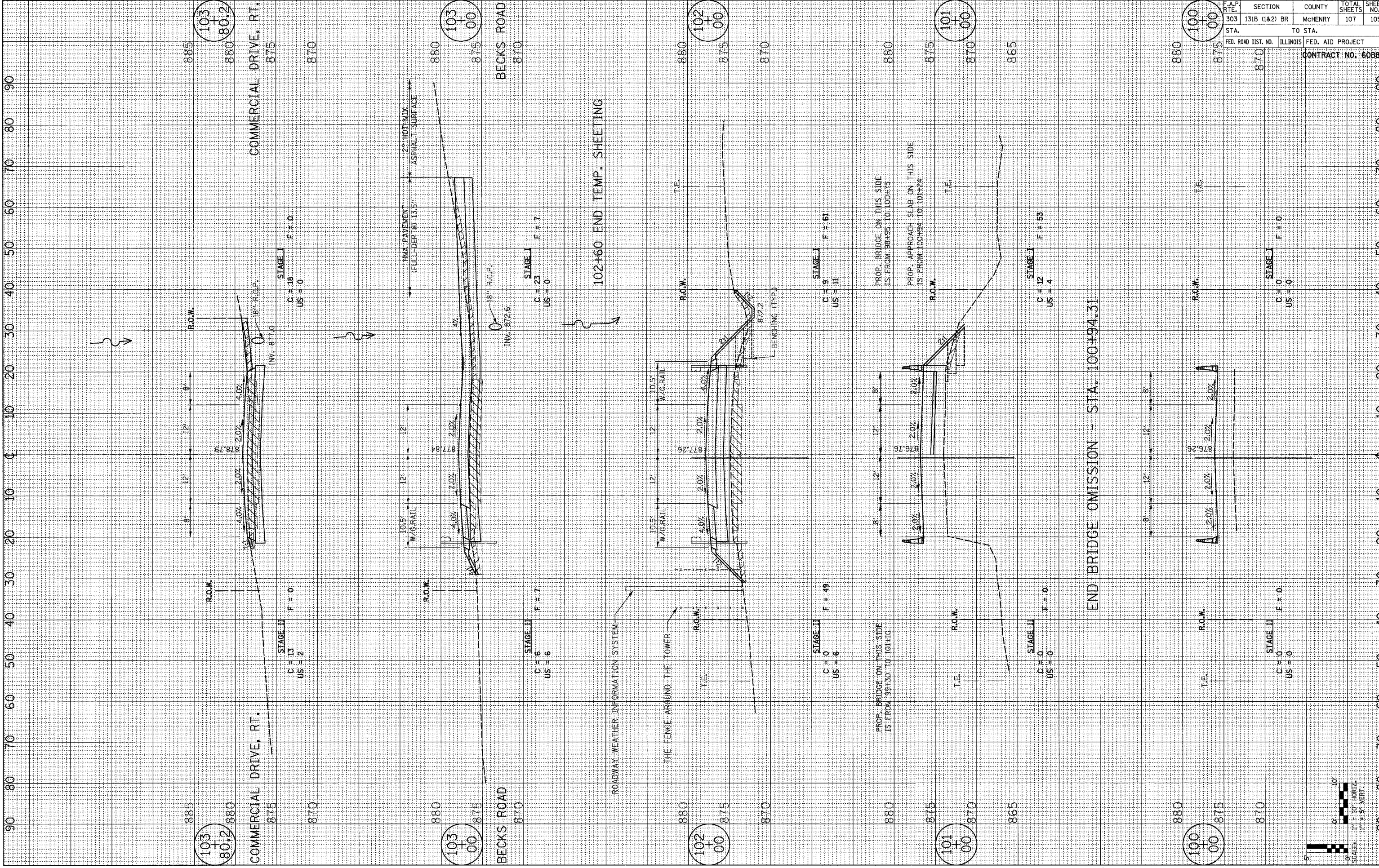
DATE: APRIL 16, 2007

CROSS SECTIONS ILLINOIS ROUTE 173



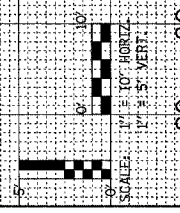
PLAN	SURVEYED	BY	DATE
	ALIGNED		
	CHECKED		
	BY		
	NO.		

PROFILE	SURVEYED	BY	DATE
	GRADED		
	CHECKED		
	BY		
	NO.		



DATE: APRIL 16, 2007

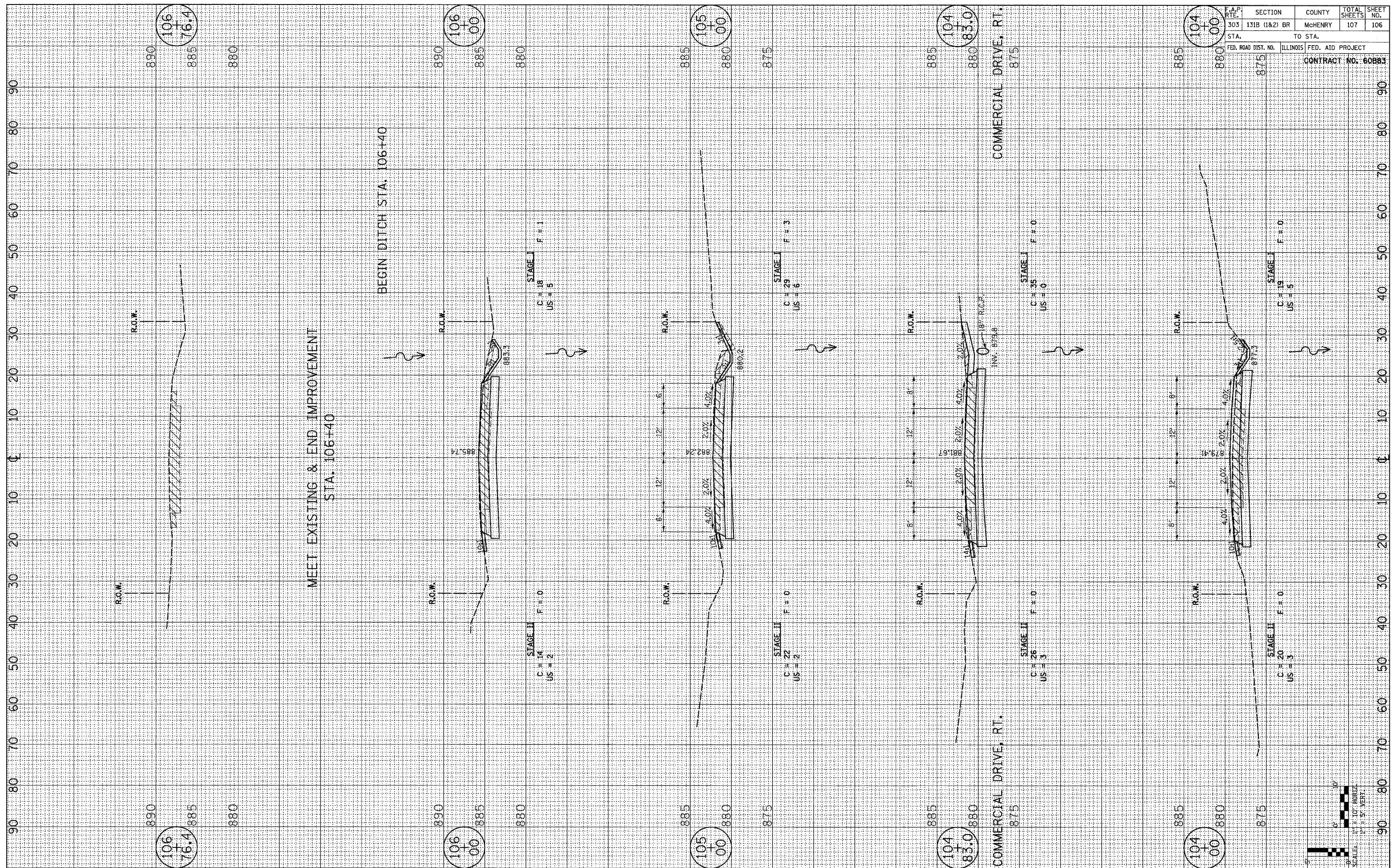
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303	131B (1&2) BR	MCHENRY	107	105
STA.	TO STA.		FED. AID PROJECT	
870	870		CONTRACT NO. 60B83	



CROSS SECTIONS ILLINOIS ROUTE 173

PLAN	REVISED	BY	DATE
NO.	NO.		
NO.	NO.		
NO.	NO.		
NO.	NO.		
NO.	NO.		

PROFILE	REVISED	BY	DATE
NO.	NO.		
NO.	NO.		
NO.	NO.		
NO.	NO.		
NO.	NO.		



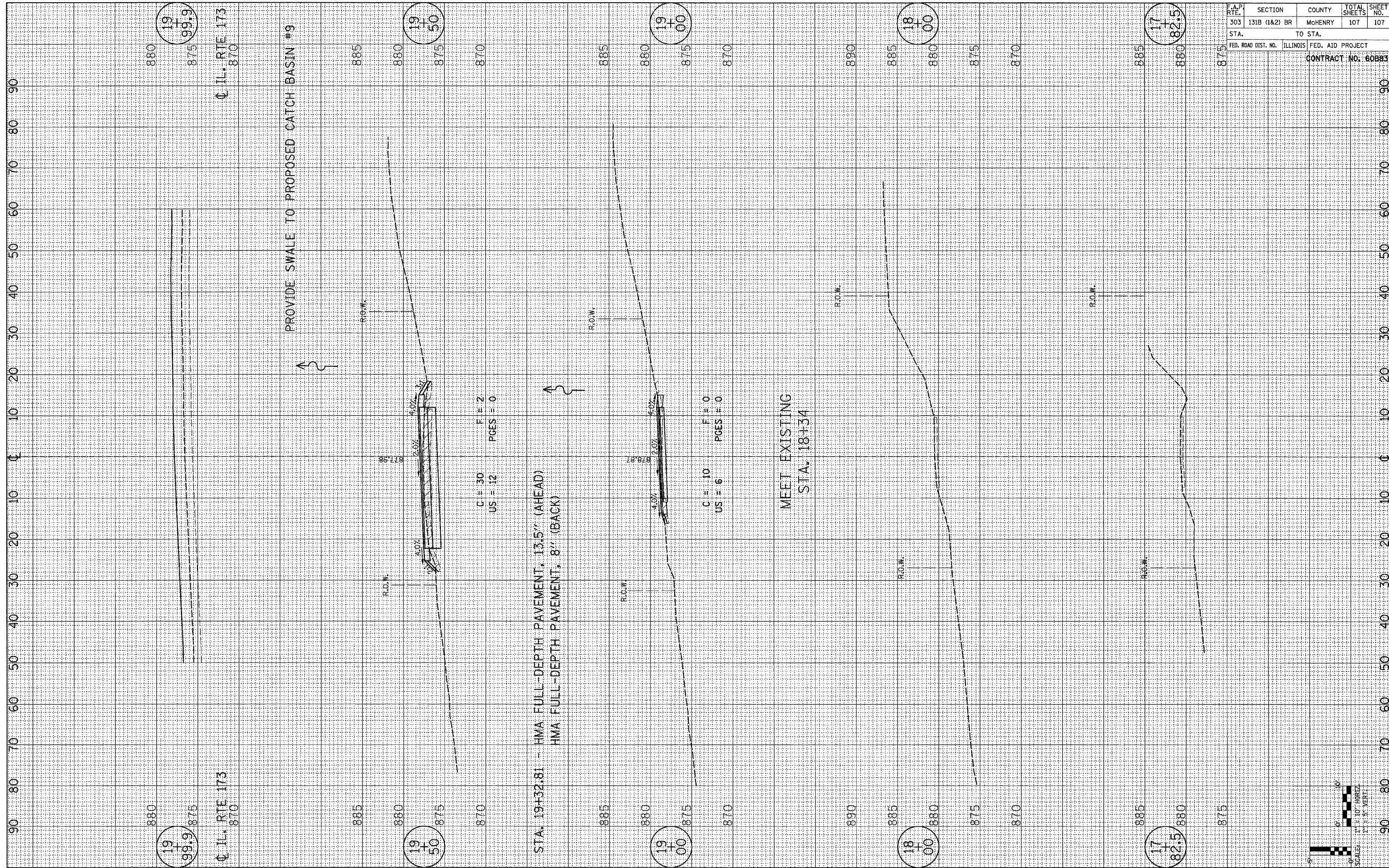
F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	McHENRY	107	106
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO. 60883		

DATE: APRIL 16, 2007

CROSS SECTIONS ILLINOIS ROUTE 173

PLAN	SUBMITTED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	CADD FILE NAME		

PROFILE	SUBMITTED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		



F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
303	131B (1&2) BR	MCHENRY	107	107
STA.	TO STA.		CONTRACT NO. 60883	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

