

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	1
		ILLINOIS	CONTRACT NO. 63583	

+2 C710

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**FEDERAL AID HIGHWAY**

**BLVIN STREET**  
**OVER NIPPERSINK CREEK**  
**SECTION 08-00355-00-BR**  
**PROJECT BRS-011(049)**  
**JOB C-91-098-09**  
**BRIDGE REPLACEMENT**  
**McHENRY COUNTY**



LOCATION OF SECTION INDICATED THUS: - ■ -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED	<i>March 24, 2011</i> Joseph Q. Popalski COUNTY OF MCHENRY, COUNTY ENGINEER
PASSED	<i>April 13, 2011</i> Chris A. Lukowicz DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	<i>April 13, 2011</i> Diana M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

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**OF THE STATE OF ILLINOIS**

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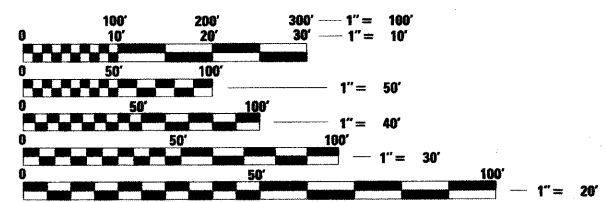
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- BLR-22-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**DESIGN DESIGNATION**

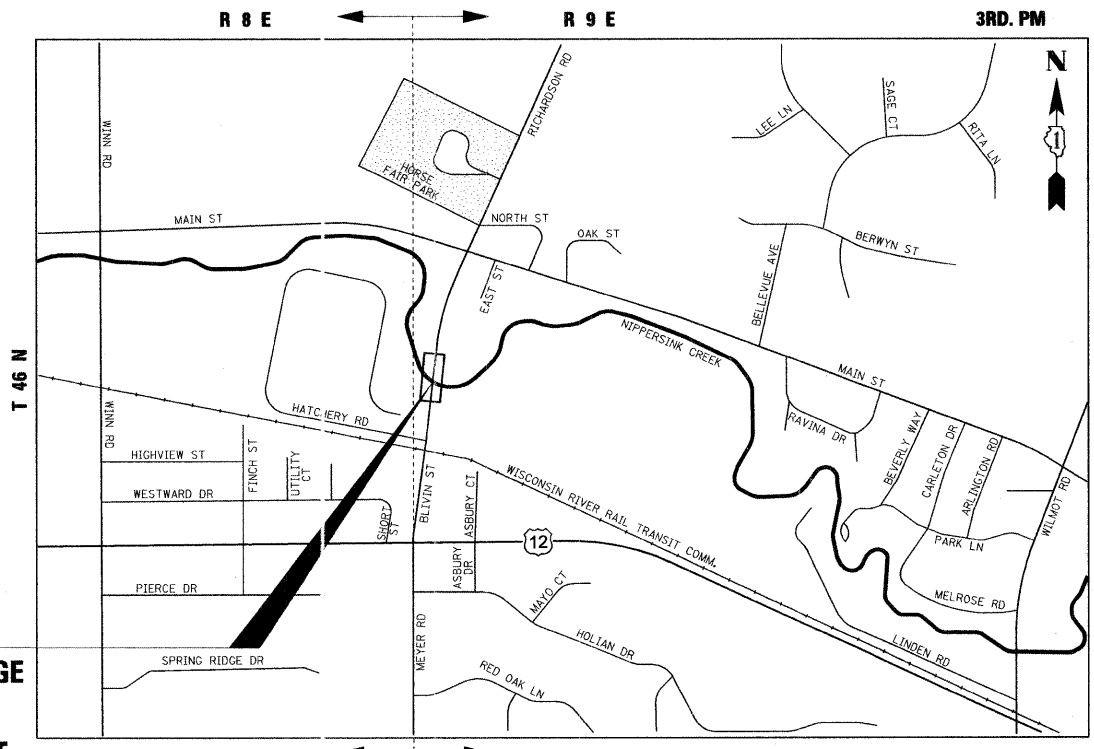
**BLVIN STREET - LOCAL ROAD**      POSTED SPEED LIMIT BLVIN STREET: 35 MPH  
**ADT BLVIN STREET: 1,200 (2009)**      DESIGN SPEED LIMIT BLVIN STREET: 40 MPH  
**ADT BLVIN STREET: 2,000 (2030)**



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

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

**PROJECT LOCATION**  
**BLVIN STREET BRIDGE**  
**REPLACEMENT**  
**BEGIN IMPROVEMENT**  
**AT STA. 211 + 61.18**  
**END IMPROVEMENT**  
**AT STA. 215 + 45.00**  
**EXIST SN 056-3024**  
**PROP SN 056-3191**



**LOCATION MAP**

MAP SCALE: NTS  
 BURTON TOWNSHIP

**PROJECT LOCATED IN**  
**THE VILLAGE OF SPRING GROVE**

BLVIN STREET GROSS AND NET LENGTH = 383.82 FT. = 0.08 MILE



*Craig A. Lukowicz*  
 CRAIG A. LUKOWICZ  
 ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-041788  
 MY LICENSE EXPIRES ON 11-30-11.      DATE 3/22/11

CONSULTING ENGINEERS, SCIENTISTS & LAND SURVEYORS  
  
**Bollinger, Lach & Associates, Inc.**  
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 P(630) 438 6400 F(630) 438 6444 www.bollingerlach.com  
 ITASCA • CHICAGO • LAKE GENEVA • SOUTH BEND • INDIANAPOLIS

**CONTRACT NO. 63583**

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

**GENERAL NOTES**

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007 (HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS); THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS," ADOPTED JANUARY 1, 2011; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS", SIXTH EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
3. THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION FOR TRAFFIC AS CALLED FOR IN THE APPLICATION OF TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE PLANS.

UTILITIES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
2. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION LR105.
3. THE FOLLOWING UTILITIES ARE PRESENT WITHIN THE PROJECT LIMITS:

COM ED FRONTIER COMMUNICATIONS  
 MIKE LENOX DON BELMORE  
 PROJECT ENGINEER 815-544-6171  
 815-490-2869

NICOR COMCAST  
 CONSTANCE LANE MARTHA GIERAS  
 630-388-3830 630-600-6352

STAKING

1. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
2. ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN AT POINTS OF CURVE, ETC., ARE TOP OF CURB, UNLESS OTHERWISE NOTED.
3. STRUCTURE OFFSET. LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE FOLLOWING POINTS: A) FOR STRUCTURES FALLING IN THE CURB LINE--TO THE EDGE OF PAVEMENT; B) FOR ALL OTHER STRUCTURES--TO THE CENTER OF THE STRUCTURE.
4. ALL ELEVATIONS ARE ON U.S.G.S. DATUM NAVD 88.
5. ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR STRUCTURES, BACKS OF CURB, ETC. ARE FROM THE CENTERLINE AS SHOWN ON THE PLANS.

SEWERS AND WATER MAINS

1. ANY LOOSE MATERIAL, DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROPOSED DRAINAGE ITEMS.

2. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN AN OPERATING CONDITION TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROPOSED DRAINAGE ITEMS.

3. ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT FOR ANY MANHOLE, CATCH BASIN, INLET, DRY WELL VALVE VAULT, OR METER VAULT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: FOR STORM SEWER STRUCTURES--"STORM", FOR SANITARY SEWER STRUCTURES--"SANITARY", FOR WATER SYSTEM STRUCTURES--"WATER". ANY ADDITIONAL COST FOR THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE FRAME AND CLOSED LID PROVIDED.

4. FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION AND CROSS SLOPE OF THE AREA IN WHICH THEY ARE LOCATED.

5. ALL OPEN LIDS AND GRATES SHALL BE STAMPED WITH "DUMP NO WASTE" AND "DRAINS TO WATERWAY." IF NO ROOM ON THE LID, A PLAQUE WITH THIS TEXT SHALL BE IMBEDDED IN THE CURB ADJACENT TO THE FRAME AND GRATE. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROPOSED DRAINAGE ITEMS.

BACKFILL

1. ALL TRENCH BACKFILL QUANTITIES FOR STORM SEWER HAS BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE.

SIGNS

1. THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. THIS WORK WILL BE PERFORMED ACCORDING TO ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.

2. ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

1. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
2. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.
3. ALL SIGNS SHALL BE RE-ERECTED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. HORIZONTAL LOCATION FROM THE EDGE OF PAVEMENT SHALL BE AS DESIGNATED BY THE ENGINEER.
4. ALL UNUSED SIGNS WILL BE RETURNED TO THE COUNTY.

5. LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS AND SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT ACCORDING TO ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.

3. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847)-705-4470 A MINIMUM OF 72 HOURS PRIOR TO PLACING ANY SIGNS OR TRAFFIC CONTROL DEVICES ON STATE HIGHWAYS.

MISCELLANEOUS

1. THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS, AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT, UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER.

2. SAW CUTTING OF PAVEMENTS, SHOULDERS, ETC. SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN, STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

3. THE THICKNESSES OF HOT MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE HOT MIX ASPHALT MIXTURES ARE TO BE PLACED.

4. PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, P.C.C. SIDEWALK, P.C.C. DRIVEWAY PAVEMENT, AND AS DIRECTED BY THE ENGINEER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

6. WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

7. THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT

8. THE CONTRACTOR SHALL PREPARE THE SUBGRADE IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS PRIOR TO THE REMOVAL OF ANY UNSTABLE MATERIALS.

9. ALL DISTURBED AREAS WITHIN THE PROJECT THAT ARE NOT OTHERWISE SURFACED SHALL BE CLEARED, LAYERED WITH TOPSOIL, AND SEEDED OR SODDED AS SHOWN IN THE PLANS.

10. USE A FERTILIZER WITH AN ANALYSIS OF 1:1 RATIO AT THE FOLLOWING RATE PER ACRE:

NITROGEN FERTILIZER NUTRIENT	SEEDING	SODDING
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS.	60 LBS.
POTASSIUM FERTILIZER NUTRIENT	90 LBS.	60 LBS.

11. SUPPLEMENTAL WATERING SHALL BE PERFORMED WHEN DIRECTED BY THE ENGINEER AT A RATE OF 3 GAL PER SQ. YD.

12. THE CONTRACTOR SHALL DISPOSE OF ALL SIDEWALK, CURB AND GUTTER, PAVEMENT, AND ALL OTHER EXCAVATED MATERIAL. NOT FOR SALVAGE AT HIS EXPENSE. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE EACH DAY.

13. FOR STEEL BARS CERTIFICATION, PLEASE CONTACT KAMIL RIZKO, IDOT BUREAU OF MATERIALS AT (847) 705-4688.

14. NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN OR NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FOR CONCENTRATED FLOWS OR STREAM FLOW. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.

15. ORIGINAL NAMEPLATE SHALL BE DETACHED AND RETURNED TO THE MCDOT CONSTRUCTION MANAGER.

16. PRIOR TO START OF CONSTRUCTION, MCHENRY COUNTY DOT OFFICIALS SHALL COORDINATE WITH THE MCHENRY COUNTY CONSERVATION DISTRICT IN THE TEMPORARY RELOCATION OF BLACK SANDSHELL MUSSELS. NO CONSTRUCTION ACTIVITIES SHALL OCCUR PRIOR TO COMPLETION OF MUSSEL RELOCATION.

FILE NAME = W:\755-010 Blivin Phase II\CADD\Sheets\755010-ahc-gnnote.dgn



USER NAME = dbruckelmeier	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**GENERAL NOTES**

SCALE: NONE SHEET NO. 2 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	2
			CONTRACT NO. 63583	
FED ROAD DIST NO. 1 [ILLINOIS] FED AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BLIVIN STREET	80% FED 20% COUNTY URBAN BRIDGE 0011
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	124		124
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	64		64
20101000	TEMPORARY FENCE	FOOT	452		452
20200100	EARTH EXCAVATION	CU YD	349		349
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	117		117
20300100	CHANNEL EXCAVATION	CU YD	1,238		1,238
20800150	TRENCH BACKFILL	CU YD	61.0		61.0
20900110	POROUS GRANULAR BACKFILL	CU YD	45.0		45.0
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	1,408		1,408
* 25000210	SEEDING, CLASS 2A	ACRE	0.13		0.13
* 25000310	SEEDING, CLASS 4	ACRE	0.10		0.10
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	24.3		24.3
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	24.3		24.3
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	24.3		24.3
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,118		1,118
* 25200110	SODDING, SALT TOLERANT	SQ YD	290		290
* 25200200	SUPPLEMENTAL WATERING	UNIT	97		97
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	49		49
28000315	AGGREGATE DITCH CHECKS	TON	9.2		9.2
28000400	PERIMETER EROSION BARRIER	FOOT	1,250		1,250
28000500	INLET AND PIPE PROTECTION	EACH	3		3
28000510	INLET FILTERS	EACH	10		10
28100101	STONE RIPRAP, CLASS A1	SQ YD	10		10
28100109	STONE RIPRAP, CLASS A5	SQ YD	263		263
28200200	FILTER FABRIC	SQ YD	1,135		1,135
28500400	ARTICULATED BLOCK REVETMENT MAT	SQ YD	1,100		1,100
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.23		0.23
40600300	AGGREGATE (PRIME COAT)	TON	1.15		1.15
40701801	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 6"	SQ YD	412		412
42001300	PROTECTIVE COAT	SQ YD	42		42
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	91		91
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	29		29

\* SPECIALTY ITEMS

FILE NAME = W:\755-010 Blivin Phase II\CADD\_Sheets\755010-ant-500.dgn



USER NAME = dbruckelmejer  
 PLOT SCALE = 20.0000' / IN.  
 PLOT DATE = 3/25/2011

DESIGNED - DBB  
 DRAWN - DBB  
 CHECKED - CRF  
 DATE - 03-28-11

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**BLIVIN STREET OVER  
NIPPERSINK CREEK**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 3 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	3
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BLIVIN STREET	80% FED 20% COUNTY URBAN BRIDGE 0011
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	190		190
44000100	PAVEMENT REMOVAL	SQ YD	771		771
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	125		125
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	137		137
44000600	SIDEWALK REMOVAL	SQ FT	375		375
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	46		46
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	128		128
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50104650	SLOPE WALL REMOVAL	SQ YD	440		440
50200100	STRUCTURE EXCAVATION	CU YD	267		267
50300225	CONCRETE STRUCTURES	CU YD	84.9		84.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	386.4		386.4
50300260	BRIDGE DECK GROOVING	SQ YD	584		584
50300280	CONCRETE ENCASEMENT	CU YD	61.0		61.0
50300300	PROTECTIVE COAT	SQ YD	1,095		1,095
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	3,276		3,276
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	89,560		89,560
50800515	BAR SPLICERS	EACH	82		82
* 50901750	PARAPET RAILING	FOOT	354		354
51201800	FURNISHING STEEL PILES HP14X73	FOOT	1,222		1,222
51202305	DRIVING PILES	FOOT	1,222		1,222
51203800	TEST PILE STEEL HP14X73	EACH	4		4
51500100	NAME PLATES	EACH	1		1
52100520	ANCHOR BOLTS, 1"	EACH	48		48
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1		1
54247110	GRATING FOR CONCRETE FLARED END SECTION 18"	EACH	1		1
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	20		20
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	142		142
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	30		30
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	19		19
55100500	STORM SEWER REMOVAL 12"	FOOT	95		95

\* SPECIALTY ITEMS

FILE NAME = W:\755-010 Blivin Phase II\CADD\_Sheets\755010-int-500.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
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	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 4 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	4
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BLIVIN STREET	80% FED 20% COUNTY URBAN BRIDGE 0011
55100700	STORM SEWER REMOVAL 15"	FOOT	32		32
55100900	STORM SEWER REMOVAL 18"	FOOT	10		10
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	52		52
60107700	PIPE UNDERDRAINS 6"	FOOT	218		218
60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1		1
60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME AND GRATE	EACH	1		1
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1		1
60219000	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1		1
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1		1
60404800	FRAMES AND GRATES, TYPE 11	EACH	1		1
60500060	REMOVING INLETS	EACH	5		5
60603401	GUTTER OUTLET (SPECIAL)	FOOT	64		64
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	105		105
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	112.5		112.5
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1		1
63200310	GUARDRAIL REMOVAL	FOOT	167		167
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5		5
67100100	MOBILIZATION	L SUM	1		1
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	916		916
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4'	FOOT	415		415
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	61.2		61.2
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	481		481
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	20		20
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	7		7
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	6		6
* A2001224	TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 3" CALIPER, BALLED AND BURLAPPED	EACH	7		7
* A2007122	TREE, QUERCUS RUBRA (RED OAK), 3" CALIPER, BALLED AND BURLAPPED	EACH	7		7
* A2008024	TREE, TILIA CORDATA (LITTLE LEAF LINDEN), 3" CALIPER, BALLED AND BURLAPPED	EACH	6		6
X0325405	FILL EXISTING STORM SEWERS	CU YD	5		5
X0326474	DROP STRUCTURE NUMBER 1	EACH	1		1
X0426200	DEWATERING	L SUM	1		1
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	113		113

\* SPECIALTY ITEMS

FILE NAME = W:\755-010 Blvin Phase II\CADD\Sheets\755010-ent-500.dgn



USER NAME = dbruckelmeyer  
 PLOT SCALE = 20.0000' / IN.  
 PLOT DATE = 4/6/2011

DESIGNED - DBB  
 DRAWN - DBB  
 CHECKED - CRF  
 DATE - 03-28-11

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**BLIVIN STREET OVER  
NIPPERSINK CREEK**

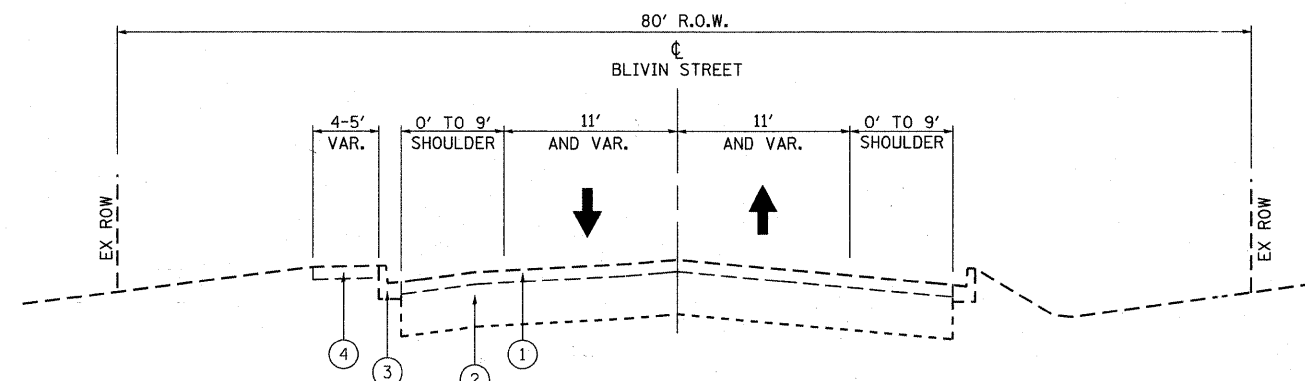
**SUMMARY OF QUANTITIES**

SCALE: NONE SHEET NO. 5 OF 69 SHEETS STA. TO STA.

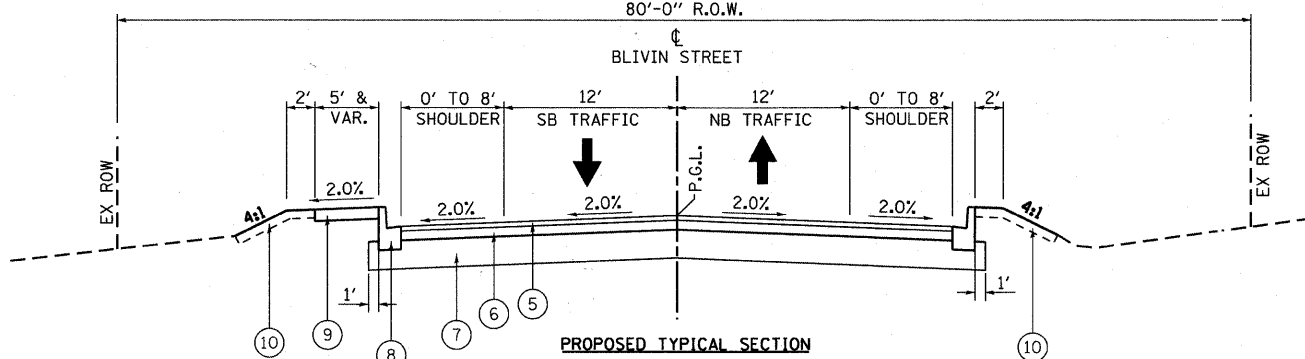
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	5
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				



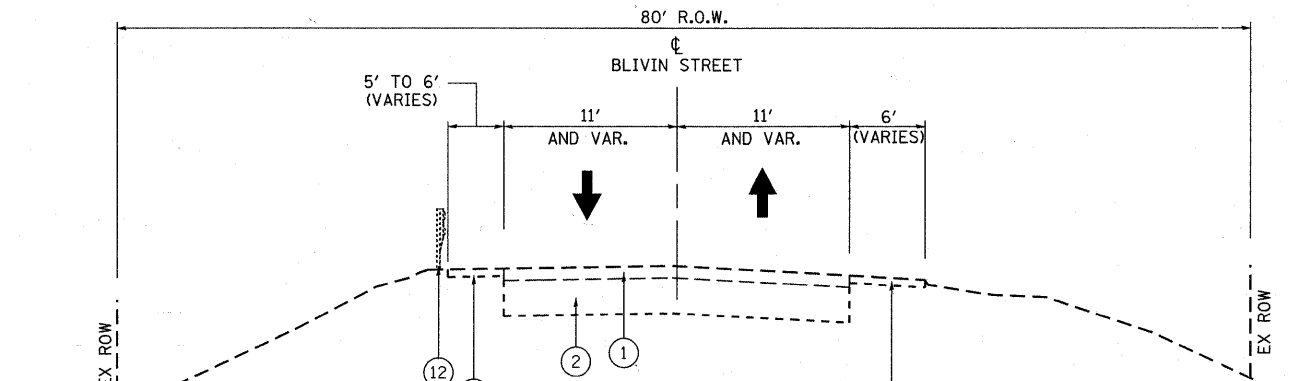




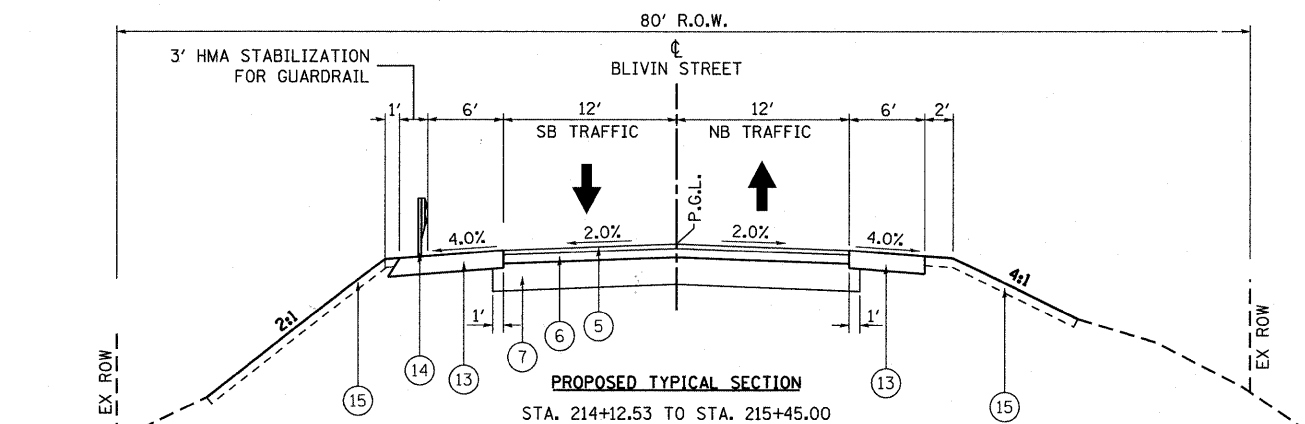
**EXISTING TYPICAL SECTION**  
 STA. 211+61.18 TO STA. 211+93.86  
 (BRIDGE OMISSION STA. 211+93.86 TO STA. 214+12.53)



**PROPOSED TYPICAL SECTION**  
 STA. 211+61.18 TO STA. 211+93.86  
 (BRIDGE OMISSION STA. 211+93.86 TO STA. 214+12.53)



**EXISTING TYPICAL SECTION**  
 STA. 214+12.53 TO STA. 215+45.00



**PROPOSED TYPICAL SECTION**  
 STA. 214+12.53 TO STA. 215+45.00

**LEGEND**

- ① EXISTING HOT-MIX ASPHALT CONCRETE, 3" TO 6" & VARIES (REM)
- ② EXISTING AGGREGATE BASE, 24" (12" REM)
- ③ EXISTING CONCRETE CURB AND GUTTER (REM)
- ④ EXISTING PCC SIDEWALK (REM)
- ⑤ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑥ PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 4"
- ⑦ PROPOSED AGGREGATE SUBGRADE, 12"
- ⑧ PROPOSED COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.12
- ⑨ PROPOSED PCC SIDEWALK 5"
- ⑩ PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
- ⑪ EXISTING AGGREGATE SHOULDER, 6" (REM) - TO BE PAID FOR AS EARTH EXCAVATION
- ⑫ EXISTING STEEL PLATE BEAM GUARDRAIL, TYPE A (REM)
- ⑬ PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
- ⑭ PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A
- ⑮ PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SEEDING, CLASS 2A & HEAVY DUTY EROSION CONTROL BLANKET

HMA MIXTURE REQUIREMENTS CHART		
MIXTURE TYPE	AIR VOIDS @ Ndes	THICKNESS
<b>FULL DEPTH PAVEMENT, 6"</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.	2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 GYR.	4" (2 LIFTS)
<b>SHOULDER RECONSTRUCTION</b>		
HOT-MIX ASPHALT SHOULDERS, HMA BINDER (IL-19mm)	2% @ 30 GYR.	8" (3 LIFTS)
<b>BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.	2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 GYR.	4"-19" (2 LIFTS)
<b>STABILIZED DRIVEWAYS, 8"</b>		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.	2"
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm)	4% @ 70 GYR.	6" (2 LIFTS)

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

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

FILE NAME = W:\755-010 Blivin Phase II\CADD\Sheets\755-010-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000

**B** Bollinger, Lach & Associates, Inc.  
 MASCATA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

<b>TYPICAL SECTIONS</b>	
SCALE: N.T.S.	SHEET NO. 8 OF 69 SHEETS
STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	8
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				

\*TREES WITH SIZE NOT IDENTIFIED ON PLANS ASSUMED 6"Ø.  
ENGINEER TO ADJUST QUANTITY IN FIELD IF LARGER

INLET FILTERS			
NO.	LOCATION STA.	OFFSET	QUANTITY (EACH)
BLIVIN ST.			
1	211+81.99	14.45 LT	1
2	211+81.99	14.98 RT	1
3	211+84.51	34.29 RT	1
4	212+16.19	36.75 RT	1
5	212+21.37	16.31 RT	1
6	212+21.13	14.42 LT	1
7	213+84.01	14.59 LT	1
8	213+84.35	15.29 RT	1
9	214+49.14	26.99 RT	1
10	214+63.48	20.76 LT	1
TOTAL			10

COMBINATION CONCRETE CURB & GUTTER		
LOCATION STA. - STA.	TYPE	
	*CONCRETE C&G TRANSITION (FT)	B-6.12 (FT)
BLIVIN ST.		
211+61.18 - 211+96.33 RT		35.5
212+05.86 - 212+06.12 RT	4.0	
214+12.53 - 214+17.53 RT	5.0	
214+17.53 - 214+27.53 RT	10.0	
211+61.18 - 211+96.33 LT		35.5
214+12.53 - 214+17.53 LT	5.0	
214+17.53 - 214+27.53 LT	10.0	
TOTAL		71.0

\*ALL TRANSITIONS TO BE PAID FOR AS B-6.12 C&G

TEMPORARY FENCE			
NO.	STATION	OFFSET (FT)	QUANTITY (FT)
1	211+81.18	36.45 LT	50.2
2	213+55.33	108.76 RT	50.2
3	213+63.28	112.68 RT	50.2
4	214+60.67	40.21 LT	50.2
5	214+92.49	30.37 LT	50.2
6	214+92.57	33.35 LT	50.2
7	213+53.58	28.46 LT	50.2
8	215+35.46	28.59 LT	50.2
9	215+44.08	29.68 LT	50.2
TOTAL			451.8

TREE REMOVAL* (6-15 UNITS)			
NO.	STATION	OFFSET (FT)	QUANTITY (UNIT)
1	212+10.00	32.55 LT	6
2	212+13.55	32.55 LT	6
3	212+29.62	36.56 LT	6
4	212+35.27	45.29 LT	6
5	212+35.43	49.45 LT	6
6	213+57.33	41.77 LT	6
7	213+58.35	44.09 LT	6
8	213+58.81	43.00 LT	6
9	213+59.91	34.83 LT	14
10	213+62.84	42.79 LT	6
11	213+75.13	40.42 LT	6
12	213+86.91	31.53 LT	6
13	214+02.8	32.34 LT	8
14	214+46.74	31.66 LT	8
15	214+76.52	30.77 LT	10
16	212+59.27	33.26 RT	6
17	213+53.30	84.44 RT	12
TOTAL			124

REMOVING INLETS			
NO.	LOCATION STA. - STA.	OFFSET	QUANTITY (EACH)
BLIVIN ST.			
1	212+16.18	36.81 RT	1
2	212+21.12	14.13 LT	1
3	212+21.37	16.31 RT	1
4	213+84.01	14.66 LT	1
5	213+84.30	15.13 RT	1
TOTAL			5

FILL EXISTING STORM SEWERS	
LOCATION STATION-STATION	CLSM (CY)
BLIVIN ST.	
212+16.18-212+58.21	5.0
TOTAL	
	5.0

INLET AND PIPE PROTECTION			
NO.	LOCATION STA.	OFFSET	QUANTITY (EACH)
BLIVIN ST.			
1	212+34.84	37.43 LT	1
2	212+68.12	34.60 RT	1
3	213+74.09	34.80 LT	1
TOTAL			3

COMBINATION CURB & GUTTER REMOVAL	
LOCATION STA. - STA.	QUANTITY (FOOT)
BLIVIN ST.	
211+61.18 - 212+28.28 LT	69.0
211+61.18 - 212+28.28 RT	68.0
TOTAL	
	137.0

TREE REMOVAL (15 UNITS & LARGER)			
NO.	STATION	OFFSET (FT)	QUANTITY (UNIT)
1	212+43.85	44.88 LT	28
2	212+71.54	55.43 RT	20
3	213+53.72	75.89 RT	16
TOTAL			64

P.C.C. SIDEWALK, 5"	
LOCATION STA. - STA.	QUANTITY (SQ. FT)
BLIVIN ST.	
211+61.18 - 211+93.86 LT	190.0
TOTAL	
	190.0

STORM SEWER REMOVAL				
LOCATION STATION-STATION	12" RCP (FT)	15" RCP (FT)	18" RCP (FT)	*12" CMP (FT)
BLIVIN ST.				
212+21.24 C	22.0			
212+21.24 RT	31.0			
211+84.44-212+16.18 RT		32.0		
212+58.21-212+68.21 RT			10.0	
212+84.03 LT				21.0
212+84.27 RT				21.0
TOTAL		53.0	32.0	10.0
				42.0

\*12" CMP REMOVAL TO BE PAID FOR AS STORM SEWER REMOVAL, 12"

STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FT POSTS	
LOCATION STA. - STA.	LENGTH (FT)
BLIVIN ST.	
214+41.28-215+45.00 LT	112.5
TOTAL	
	112.5

PAVEMENT MARKERS		
LOCATION STA. - STA.	RECESSED REFLEC. MARKERS (EACH)	RAISED REFLEC. MARKERS (BRIDGE) (EACH)
211+61.18 - 211+93.86	1	
211+93.86 - 214+27.53		7
214+27.53 - 215+45.00	3	
TOTAL		7

NOTE:

BASIS OF MEASUREMENT AND PAYMENT PER STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS UNLESS MARKED IN THE MARGIN WITH "SPL" WHICH IDENTIFIES THOSE ITEMS WHICH ARE RULED BY SECTIONS OF THE CONTRACT SPECIAL PROVISIONS.

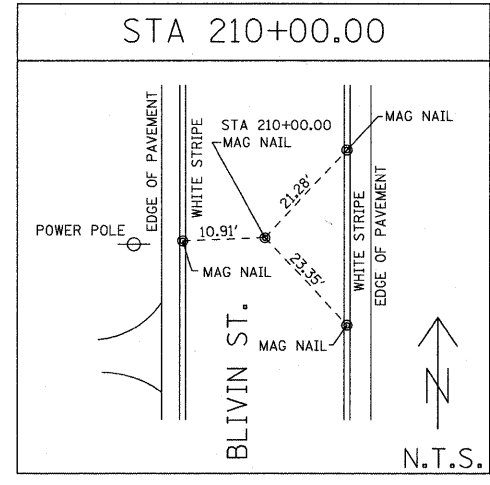
PROPOSED ROADWAY PAVEMENT					
LOCATION STATION-STATION	AGGREGATE SUBGRADE, 12" (SQ. YD)	HOT-MIX ASPHALT PAVEMENT (FULL DEPTH, 6") (SQ. YD.)	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) (SQ. YD.)	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6" (SQ. YD.)	STABILIZED DRIVEWAY, 8" (SQ. YD.)
BLIVIN ST.					
211+61.18 - 211+78.86	92.0	80.0			
211+78.86 - 211+93.86	59.0		49.0		
214+12.53 - 214+27.53	51.0		42.0		
214+27.53 - 215+45.00	369.0	332.0			
DRIVEWAY (P.E.) @ STA 211+93.86				29.0	
DRIVEWAY (C.E.) @ STA 214+63.95					94.0
TOTAL		571.0	412.0	91.0	29.0

ARTICULATED BLOCK REVETMENT MAT			
LOCATION STA. - STA.	OFFSET	QUANTITY (SQ. YD.)	STONE RIRPAP CLASS A5 (SQ. YD.)
BLIVIN ST.			
212+21.85-212+89.60	33.74-53.33 LT	575	123
212+21.87-212+89.71	39.26-38.56 RT		
213+17.54-213+81.51	31.27-40.42 LT	525	140
212+17.64-213+85.64	34.73-37.58 RT		
TOTAL		1100	263

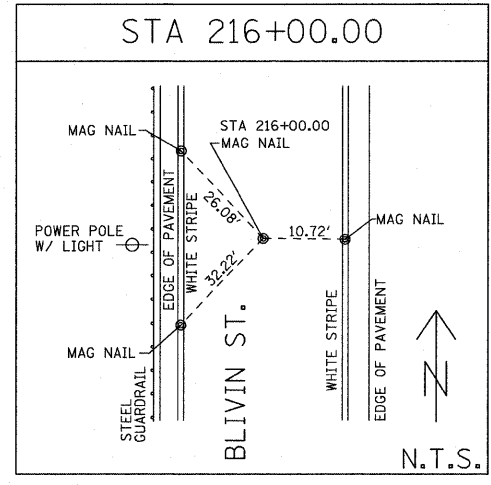
EARTHWORK QUANTITIES																		
STA	CUT (SF)	AVERAGE	LENGTH	AVERAGE	TOTAL (CY)	STA	FILL (SF)	AVERAGE	LENGTH	TOTAL	TOTAL (CY)	STA	UNSUITABLES (SF)	AVERAGE	LENGTH	TOTAL	TOTAL (CY)	
211+63.18	0					211+63.18	0					211+63.18	0					
211+81.99	44.1	22.05	18.81	414.76	15.36	211+81.99	22.4	11.2	18.81	210.67	7.80	211+81.99	10.3	5.15	18.81	96.87	3.59	
211+93.86	65.3	54.7	11.87	649.29	24.05	211+93.86	24.8	23.6	11.87	280.13	10.38	211+93.86	10.5	10.4	11.87	123.45	4.57	
212+00	62.8	64.05	6.14	393.27	14.57	212+00	25.2	25	6.14	153.50	5.69	212+00	11.6	11.05	6.14	67.85	2.51	
212+23.86	38.9	50.85	23.86	1213.28	44.94	212+23.86	24.2	24.7	23.86	589.34	21.83	212+23.86	11.6	11.6	23.86	276.78	10.25	
212+50	0	19.45	26.14	508.42	18.83	212+50	0	12.1	26.14	316.29	11.71	212+50	0	5.8	26.14	151.61	5.62	
213+00	0	0	50	0.00	0.00	213+00	0	0	50	0.00	0.00	213+00	0	0	50	0.00	0.00	
213+50	0	0	50	0.00	0.00	213+50	0	0	50	0.00	0.00	213+50	0	0	50	0.00	0.00	
213+82.53	19.8	9.9	32.53	322.05	11.93	213+82.53	48.1	24.05	32.53	782.35	28.98	213+82.53	19.4	9.7	32.53	315.54	11.69	
214+00	25.6	22.7	17.47	396.57	14.69	214+00	52	50.05	17.47	874.37	32.38	214+00	18.4	18.9	17.47	330.18	12.23	
214+12.53	51.2	38.4	12.53	481.15	17.82	214+12.53	39.3	45.65	12.53	571.99	21.18	214+12.53	19.1	18.75	12.53	234.94	8.70	
214+25	28.5	39.85	12.47	496.93	18.40	214+25	15	27.15	12.47	338.56	12.54	214+25	18.9	19	12.47	236.93	8.78	
214+41.95	30.6	29.55	16.95	500.87	18.55	214+41.95	25.98	20.49	16.95	347.31	12.86	214+41.95	13.1	16	16.95	271.20	10.04	
214+50	40.1	35.35	8.05	284.57	10.54	214+50	10.8	18.39	8.05	148.04	5.48	214+50	5.4	9.25	8.05	74.46	2.76	
214+63.95	41.2	40.65	13.95	567.07	21.00	214+63.95	11.5	11.15	13.95	155.54	5.76	214+63.95	5.1	5.25	13.95	73.24	2.71	
215+00	35.4	38.3	36.05	1380.71	51.14	215+00	9.8	10.65	36.05	383.93	14.22	215+00	14	9.55	36.05	344.28	12.75	
215+43	42.3	38.85	43	1670.55	61.87	215+43	5.8	7.8	43	335.40	12.42	215+43	13.9	13.95	43	599.85	22.22	
215+50	0	21.15	7	148.05	5.48	215+50	0	2.9	7	20.30	0.75	215+50	0	6.95	7	48.65	1.80	
TOTAL					349.17	TOTAL					203.99	TOTAL					116.63	

EARTHWORK QUANTITIES - SUMMARY TABLE				
EARTH EX. (CU YD)	ADJ. EARTH EX. (15%)	EMBANKMENT (CU YD)	BALANCE WASTE (+) OR SHORTAGE (-)	UNSUITABLE (CU YD)
350	298	204	94	117

CHANNEL EXCAVATION					
STA	CUT (SF)	AVERAGE	LENGTH	TOTAL	TOTAL (CY)
W. ROW +10	154	219.5	50	10975	406.5
C BRIDGE	285				
E. ROW	231	258	40	10320	382.2
E. ROW + 70'	115	173	70	12110	448.5
TOTAL					1237.2

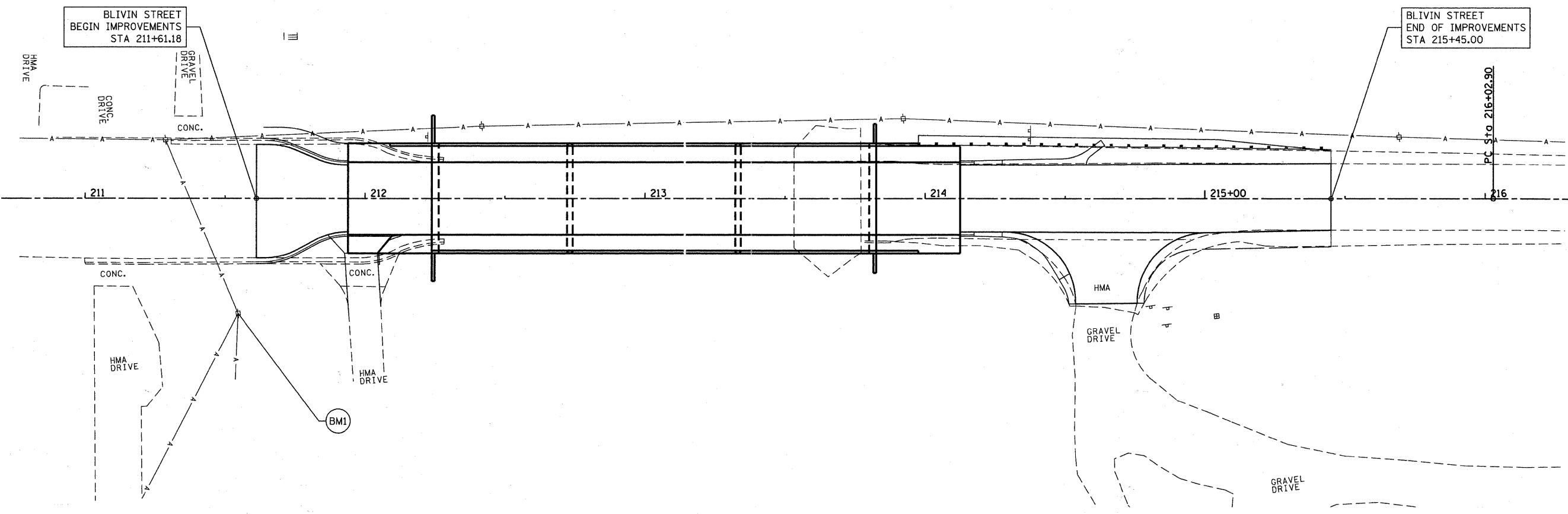


STA 210+00.00  
N 35,904.02  
E 3,052.13



STA 216+00.00  
N 36,499.83  
E 3,122.91

- BENCHMARKS**
- BM1 RR SPIKE IN W. FACE POWERPOLE - 1ST POWERPOLE  
S. OF NIPPERSINK CREEK BRIDGE ON E. SIDE OF  
BLIVIN STREET  
ELEV=772.16 (NGVD 29)
  - BM2 RR SPIKE IN E. FACE POWERPOLE - 2ND POWERPOLE  
S. OF RAILROAD TRACKS ON W. SIDE OF  
BLIVIN STREET  
ELEV=780.87 (NGVD 29)



FILE NAME = M:\255-010 Blivin Phase II\CADD\_Sheets\01080111-shr-ATB.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

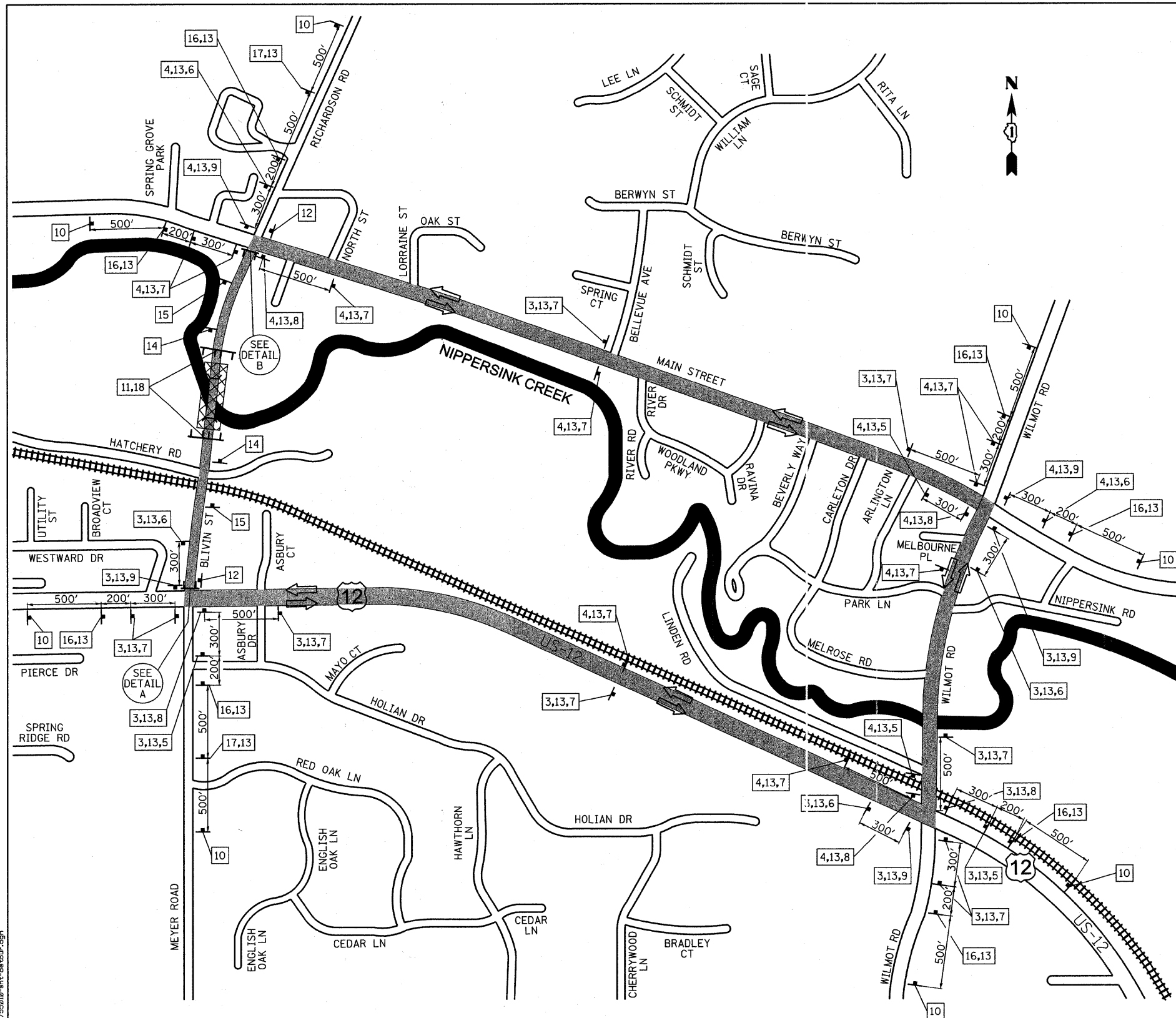
**BLIVIN STREET OVER NIPPERSINK CREEK**

**ALIGNMENT, TIES, AND BENCHMARKS**

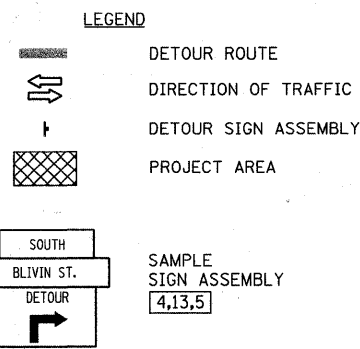
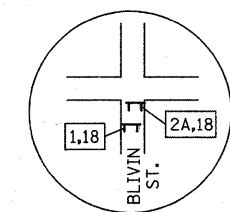
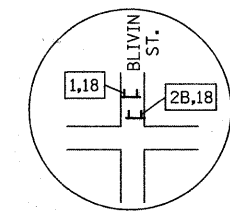
SCALE: 1"=20' SHEET NO. 10 OF 69 SHEETS STA. 211+61.18 TO STA. 215+45.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	10
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				





- NOTES**
1. THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM; TRAFFIC CONTROL AND PROTECTION TEMPORARY DETOUR.
  2. ALL DETOUR SIGNS SHALL BE POST MOUNTED PER APPLICABLE SIGN MOUNTING STANDARDS.
  3. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE PROPOSED DETOUR ROUTE EQUIPMENT WITH THE REMOVAL OF ANY EXISTING DETOUR ROUTE SIGNAGE AND MATERIALS FURNISHED AND ERECTED BY OTHERS. THE COST OF REMOVAL OF THE EXISTING DETOUR ROUTE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED WITH THE COST OF THE PROPOSED DETOUR. THE CONTRACTOR SHALL CONTACT THE MCHENRY COUNTY DOT TO COORDINATE THE WORK AT LEAST 2 WEEKS IN ADVANCE OF INSTALLATION OF THE PROPOSED DETOUR.
  4. SIGN LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH THE APPROVAL OF THE ENGINEER.
  5. ALL DETOUR SIGNING SHALL BE NEW OR IN LIKE NEW CONDITION.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DETOUR SIGNING AND APPURTENANCES ARE OPERATIONAL 24 HOURS A DAY, 7 DAYS A WEEK WHILE DETOUR IS IN EFFECT. THIS INCLUDES MAINTAINING THE VISIBILITY OF ALL CONSTRUCTION AND DETOUR SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.



- SIGN LEGEND**
1. ROAD CLOSED SIGNS R11-4 60" x 30" MOUNTED ABOVE THE TOP OF TYPE III BARRICADE
  - 2A. DETOUR ARROW SIGN M4-10L 48" x 18" TYPICAL MOUNTED ABOVE THE TOP OF TYPE III BARRICADE
  - 2B. DETOUR ARROW SIGN M4-10R 48" x 18" TYPICAL MOUNTED ABOVE THE TOP OF TYPE III BARRICADE
  3. NORTH DIRECTION SIGNS M3-1 24" x 12"
  4. SOUTH DIRECTIONS SIGNS M3-3 24" x 12"
  5. DETOUR ARROW SIGNS M4-9R 30" x 21"
  6. DETOUR ARROW SIGNS M4-9L 30" x 21"
  7. DETOUR ARROW SIGNS M4-9 30" x 21"
  8. DETOUR ARROW SIGNS M4-9 30" x 21"
  9. DETOUR ARROW SIGNS M4-9 30" x 21"
  10. DETOUR ROUTE SIGN SPECIAL\* 60" X 36"
  11. BRIDGE OUT SIGNS R11-2 48" x 30" MOUNTED ABOVE THE TOP OF TYPE III BARRICADE WITH ORANGE WARNING FLAGS, 18" X 18" MIN.
  12. END DETOUR SIGNS M4-8a 24" x 18"
  13. ROAD NAME SIGNS\* 42" x 12"
  14. ADVANCE ROAD CLOSED SIGNS W20-3 48" x 48" WITH AMBER FLASHING LIGHT AND ORANGE WARNING FLAG, 18" X 18" MIN.
  15. ADVANCE ROAD CLOSED SIGN W20-3 48" x 48" WITH AMBER FLASHING LIGHT & ORANGE WARNING FLAG, 18" X 18" MIN.
  16. ADVANCE DETOUR SIGN W20-2 48" x 48" WITH AMBER FLASHING LIGHT & ORANGE WARNING FLAG, 18" X 18" MIN.
  17. ADVANCE ROAD CLOSED SIGN W20-3 48" x 48" WITH AMBER FLASHING LIGHT & ORANGE WARNING FLAG, 18" X 18" MIN.
  18. TYPE III BARRICADE WITH TWO AMBER FLASHING LIGHTS AND STD. REFLECTORIZED SHEETING ON BOTH SIDES
- \* SIGN SHALL BE BLACK LEGEND ON FLOURESCENT ORANGE SHEETING WITH STANDARD BLACK BORDERS. ROAD NAME PLATE SHALL USE DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6 INCHES WITH 5 INCH LOWER CASE LETTERS. SIGN SHALL HAVE STANDARD BLACK BORDER.

FILE NAME = W:\955-010 Blivin Phase I\CAD\Sheets\755910-ah-tr-detour.dgn

**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

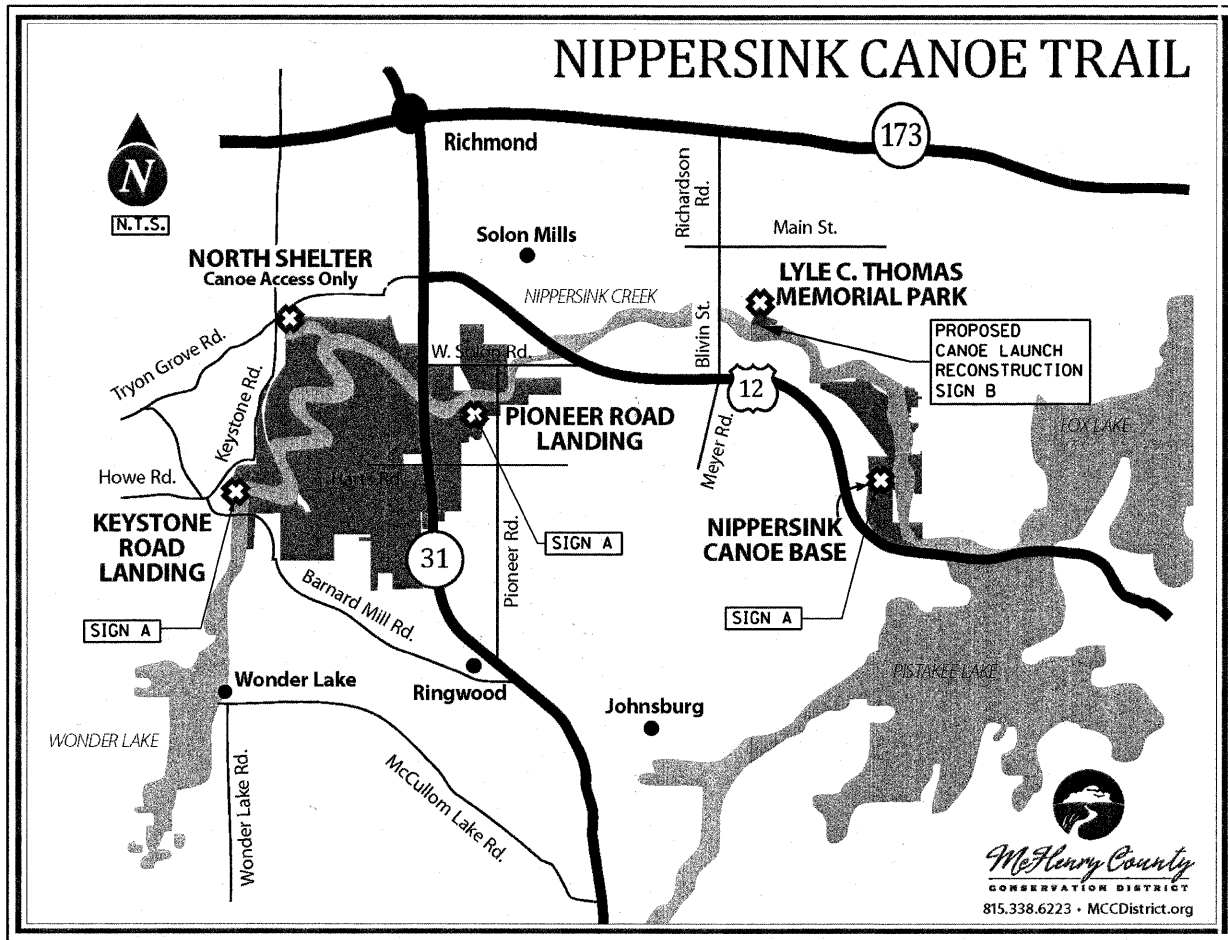
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PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**BLIVIN STREET DETOUR PLAN**

SCALE: 1"=400' SHEET NO. 11 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	11
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT			CONTRACT NO. 63583	



**Notes:**

Information signing is proposed to be installed at canoe launch sites along the Nippersink Creek Canoe Trail to inform users of the bridge work at Blivin Street which spans Nippersink Creek. Signs are proposed to be installed at McHenry County Conservation District (MCCD) facilities Keystone Road Landing, Pioneer Road Landing and Nippersink Canoe Base informing users of the Blivin Street bridge work and the temporary closure of the canoe access launch off of Blivin Street at Lyle C. Thomas Memorial Park. A sign is also proposed at the Blivin Street entrance to the canoe launch to inform the public the launch is closed during construction.

**Proposed Plan Elements:**

The proposed signs informing users at the various launch locations other than Blivin Street shall be black legend on orange sheeting with standard black border (SIGN A). The sign located at the Blivin Street (Lyle C. Thomas Memorial Park) facility shall be black legend on white sheeting with standard black border and shall omit the words "Blivin Street" (SIGN B).

The signs shall be constructed by the Contractor according to the "Standard Highway Signs" book and applicable MUTCD requirements. The message will be as shown to fit the proposed sign panel dimension of 24 inch wide by 30 inch in height. Any modification to the proposed message shall be approved by the Engineer in coordination with the MCCD. (Mo/Yr) and (Mo/Yr) will be determined when the County authorizes construction. Contractor shall be responsible for coordinating with the County to determine appropriate dates.

The Contractor shall install the black-on-orange sign panel assembly (SIGN A) at the following MCCD facilities: Keystone Road Landing, Pioneer Road Landing, and Nippersink Canoe Base.

The sign shall be mounted within the MCCD facility in a conspicuous location as coordinated by the Contractor with the Engineer and the MCCD two weeks in advance of the start of the Blivin Street bridge work.

The Contractor is required to maintain the sign panel assemblies at all times during the course of the project until authorized by the Engineer to remove them.

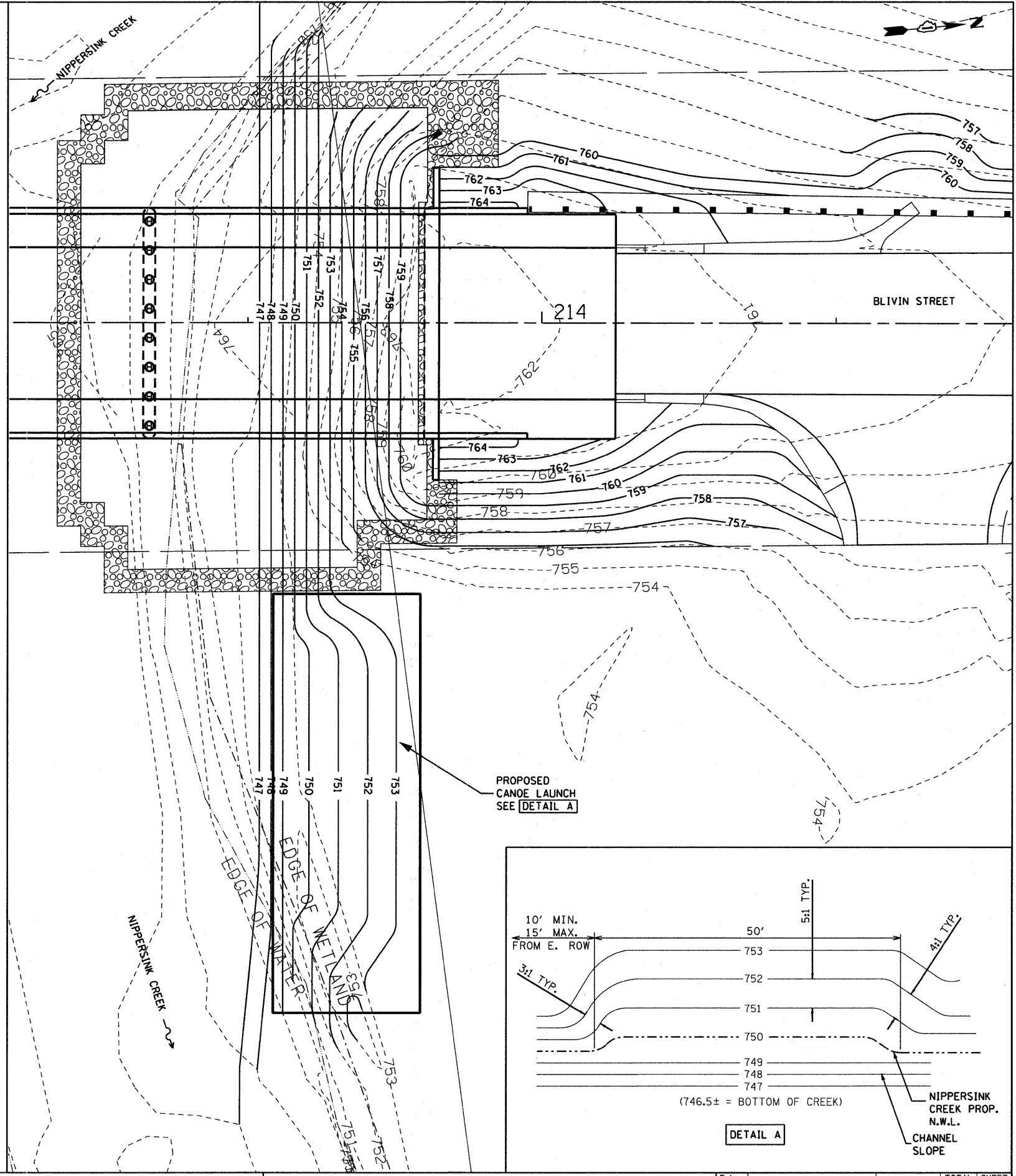
The sign panel assemblies shall be paid for as "TEMPORARY INFORMATION SIGNING".

BLIVIN STREET BRIDGE  
UNDER CONSTRUCTION  
(MO/YR) TO (MO/YR)  
TEMPORARY CANOE  
LAUNCH OPEN  
PROCEED WITH CAUTION

SIGN A

BRIDGE UNDER  
CONSTRUCTION  
(MO/YR) TO (MO/YR)  
TEMPORARY CANOE  
LAUNCH OPEN  
PROCEED WITH CAUTION

SIGN B



FILE NAME: \\M:\955-010 Blivin Phase II\CADD\_Sheets\955010-INT-MCCD\Detail.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

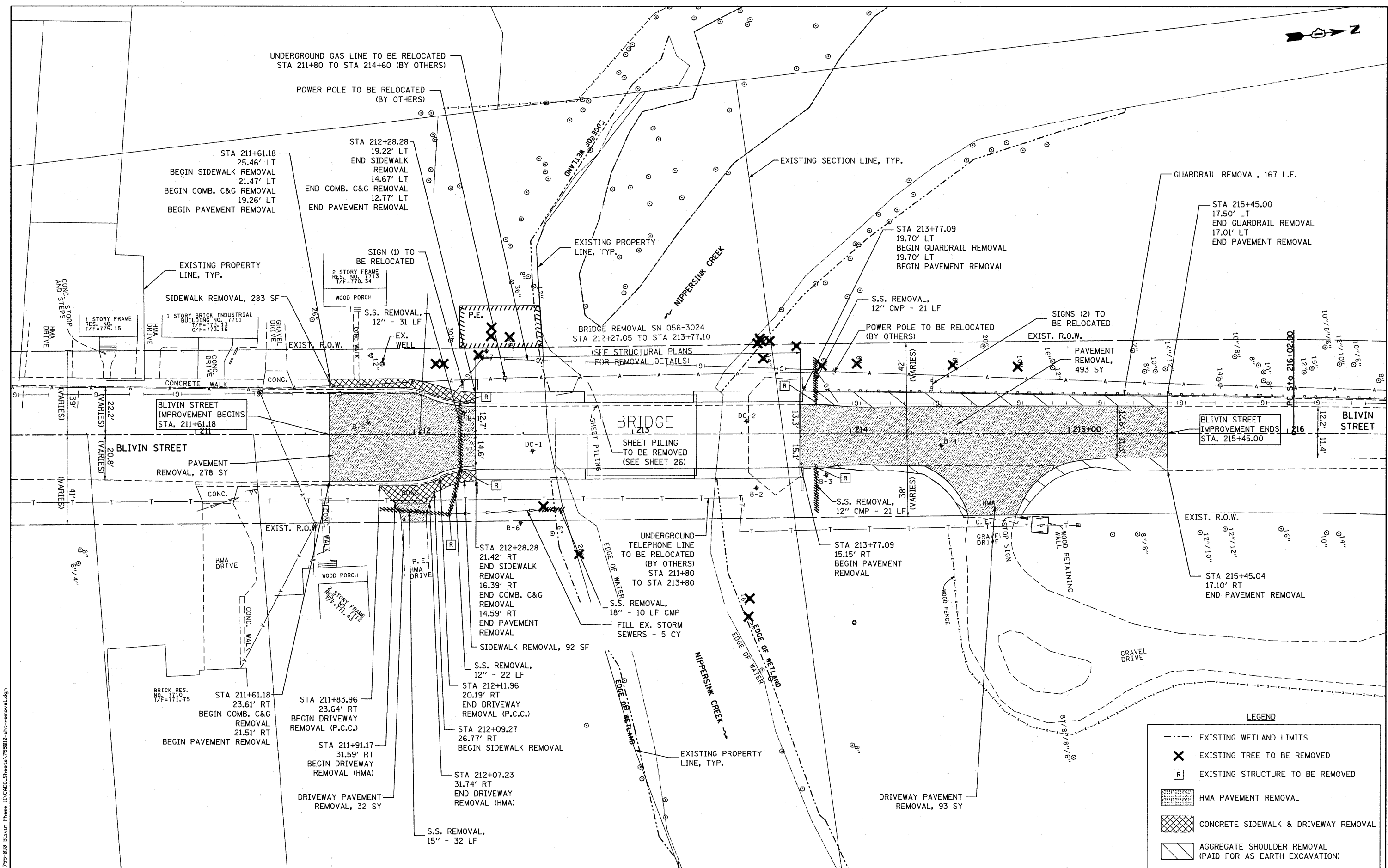
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PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**CANOE LAUNCH DETAILS AND TEMPORARY SIGNING PLAN**

SCALE: 1"=10' SHEET NO. 12 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	12
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				



**LEGEND**

- EXISTING WETLAND LIMITS
- EXISTING TREE TO BE REMOVED
- EXISTING STRUCTURE TO BE REMOVED
- HMA PAVEMENT REMOVAL
- CONCRETE SIDEWALK & DRIVEWAY REMOVAL
- AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION)

FILE NAME = W:\755-010 Blivin Phase II\CADD\_Sheets\755010-ah-r-removal.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeijer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

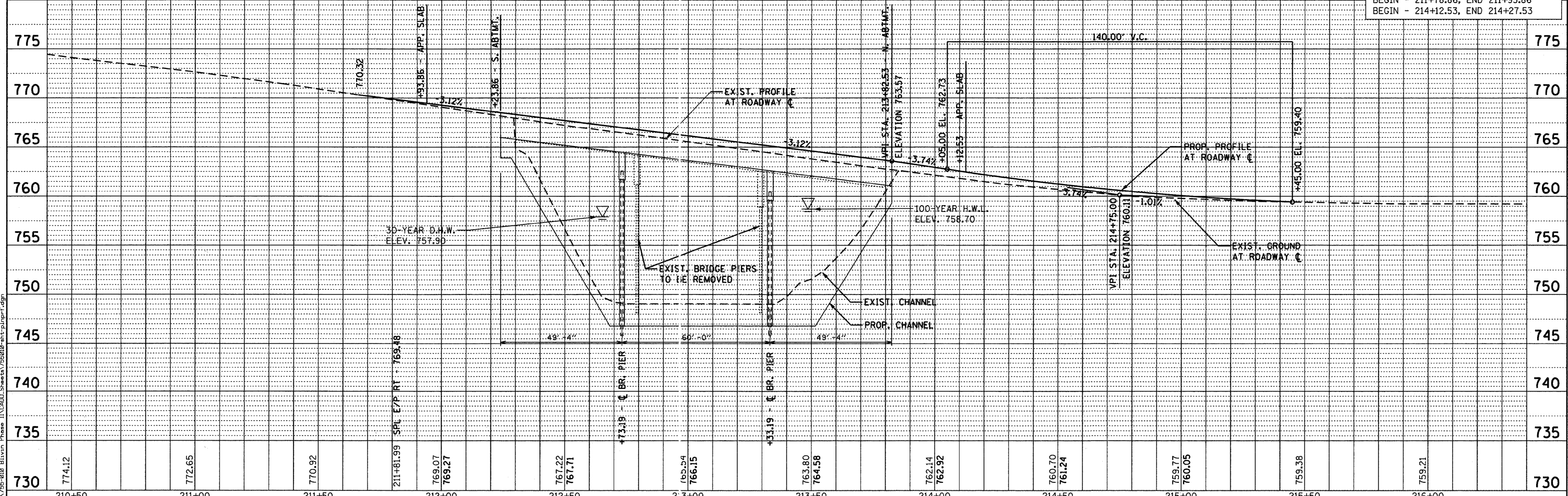
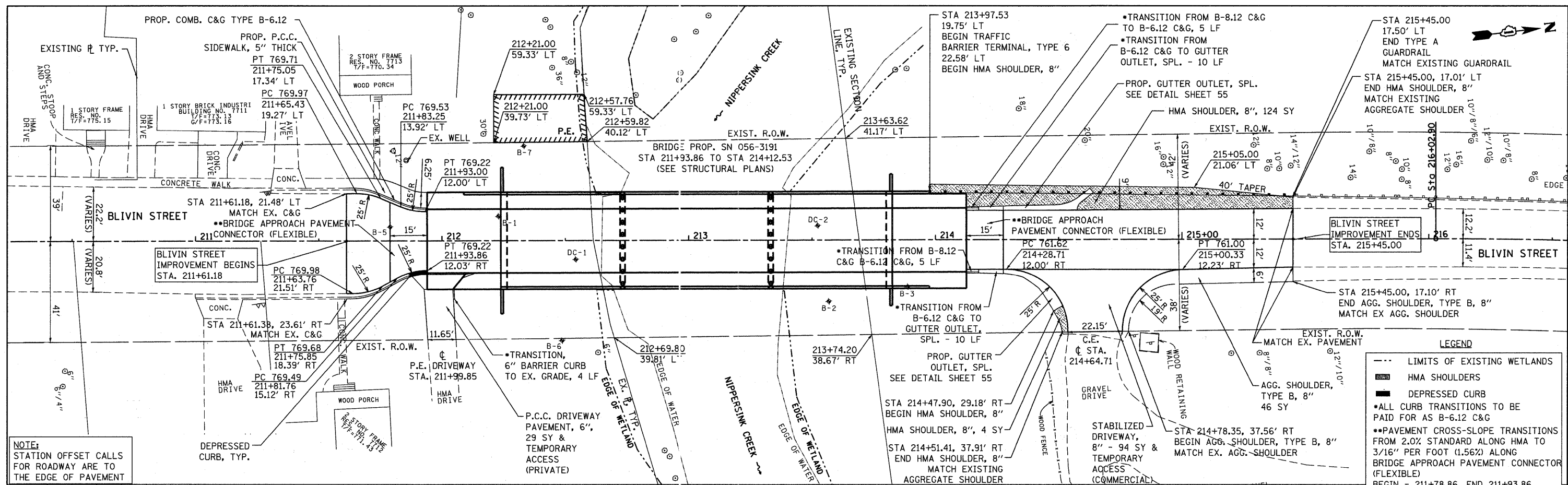
**REMOVAL PLAN**

SCALE: 1"=20'    SHEET NO. 13 OF 69 SHEETS    STA. 211+61.18 TO STA. 215+45.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	13
CONTRACT NO. 63583				
FED ROAD DIST NO. 1    ILLINOIS    FED AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
DATE	
BY	
NOTE BOOK	
NO.	
DATE	
BY	
FILE NAME	

DATE	
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NOTE BOOK	
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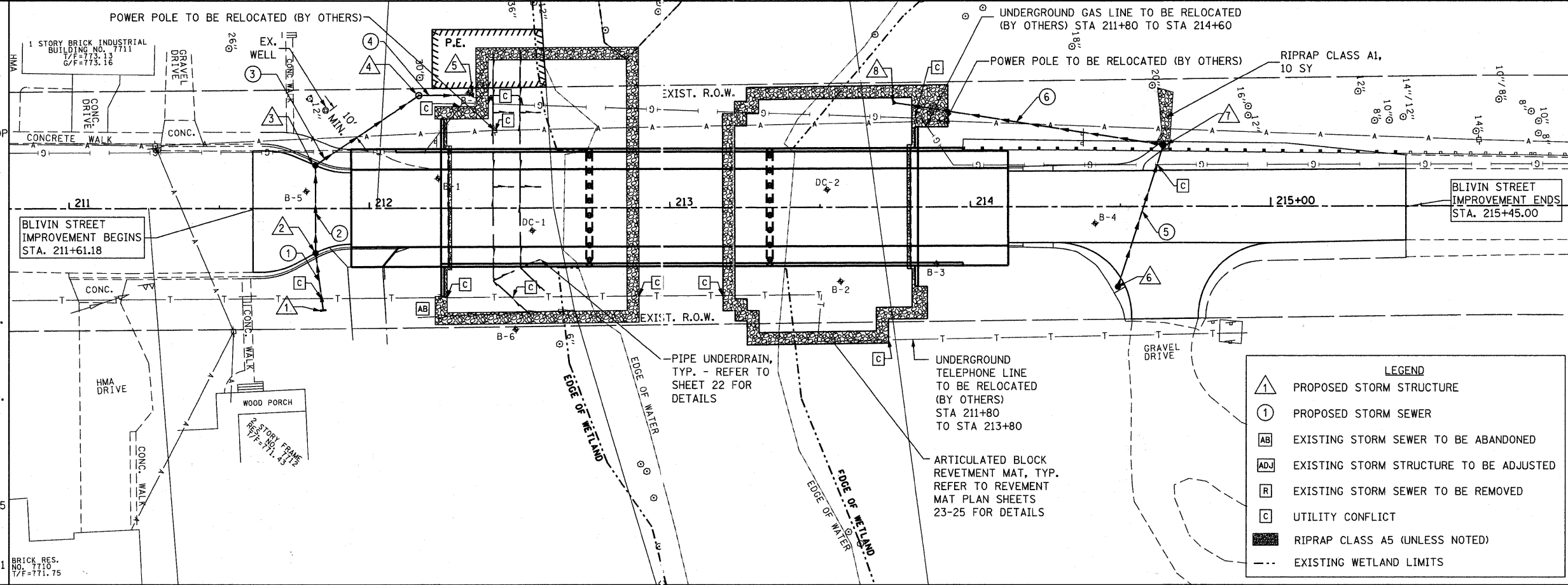
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	PLOT SCALE = 20.0000' / IN. PLOT DATE = 4/6/2011	DRAWN - DBB CHECKED - CRF DATE - 03-28-11	REVISED - REVISED - REVISED - REVISED -			



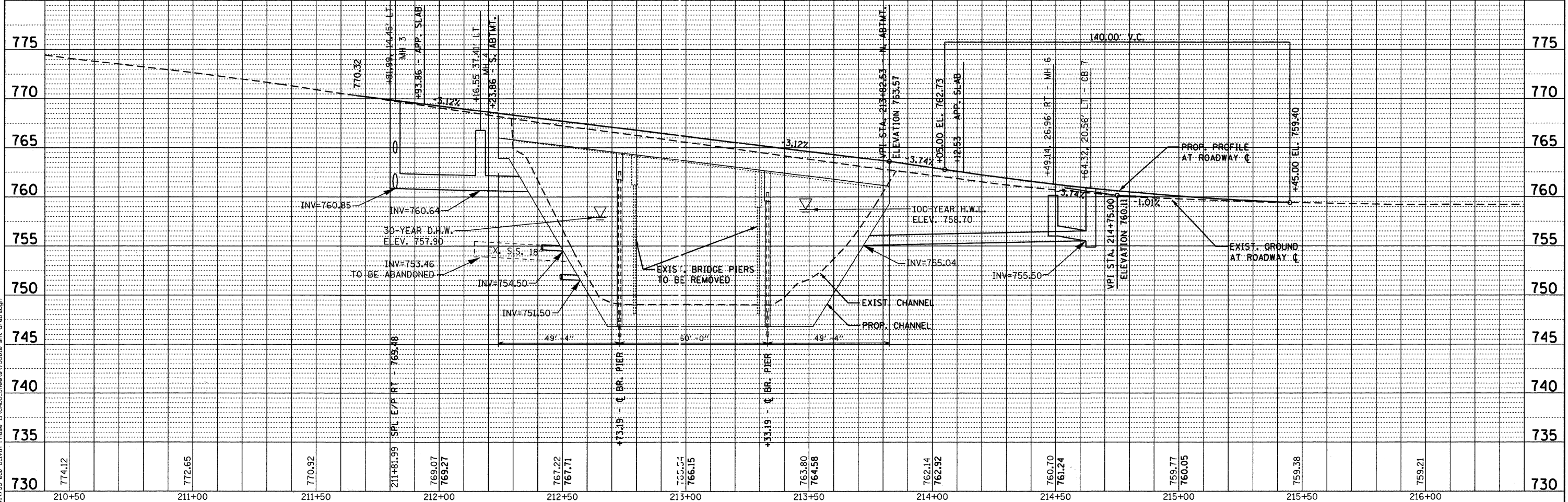
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BY	
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BY	
PLAN	
NO.	

- 1 INLET, TYPE A, 2'Ø  
TYPE 8 GRATE  
RIM=767.45  
211+84.51, 34.29'RT  
INV=764.95, 15'W
- 2 CB, TYPE A, 4'Ø R.D.  
TYPE 11 F&G  
RIM=769.48  
211+81.99, 15.00'RT  
INV=764.75, 15'E,W
- 3 MH, TYPE A, 4'Ø DROP  
TYPE 11 F&G  
RIM=769.54  
211+81.99, 14.45'LT  
INV=764.45, 15'E  
INV=760.85, 18'NW
- 4 MH, TYPE A, 4'Ø  
TYPE 1 F&G, CL  
RIM=766.75  
212+16.55, 37.41'LT  
INV=760.64, 18'SE,N
- 5 FES, 18"  
W/GRATE  
212+34.85, 37.49'LT  
INV=760.55, 18'S
- 6 MH, TYPE A, 4'Ø, R.D.  
W/FLAT TOP  
TYPE 8 GRATE  
RIM=759.00  
214+49.14, 26.96' RT  
INV=756.00, 12'NW
- 7 CB, TYPE A, 4'Ø, R.D.  
W/FLAT TOP  
TYPE 8 GRATE  
RIM=760.25  
214+64.32, 20.56'LT  
INV=755.50, 12'SE,SW
- 8 12" PIPE  
NO GRATE (IN ACBM)  
SEE DETAIL SHEET 25  
213+74.22, 34.79'LT  
INV=755.04, 12'N



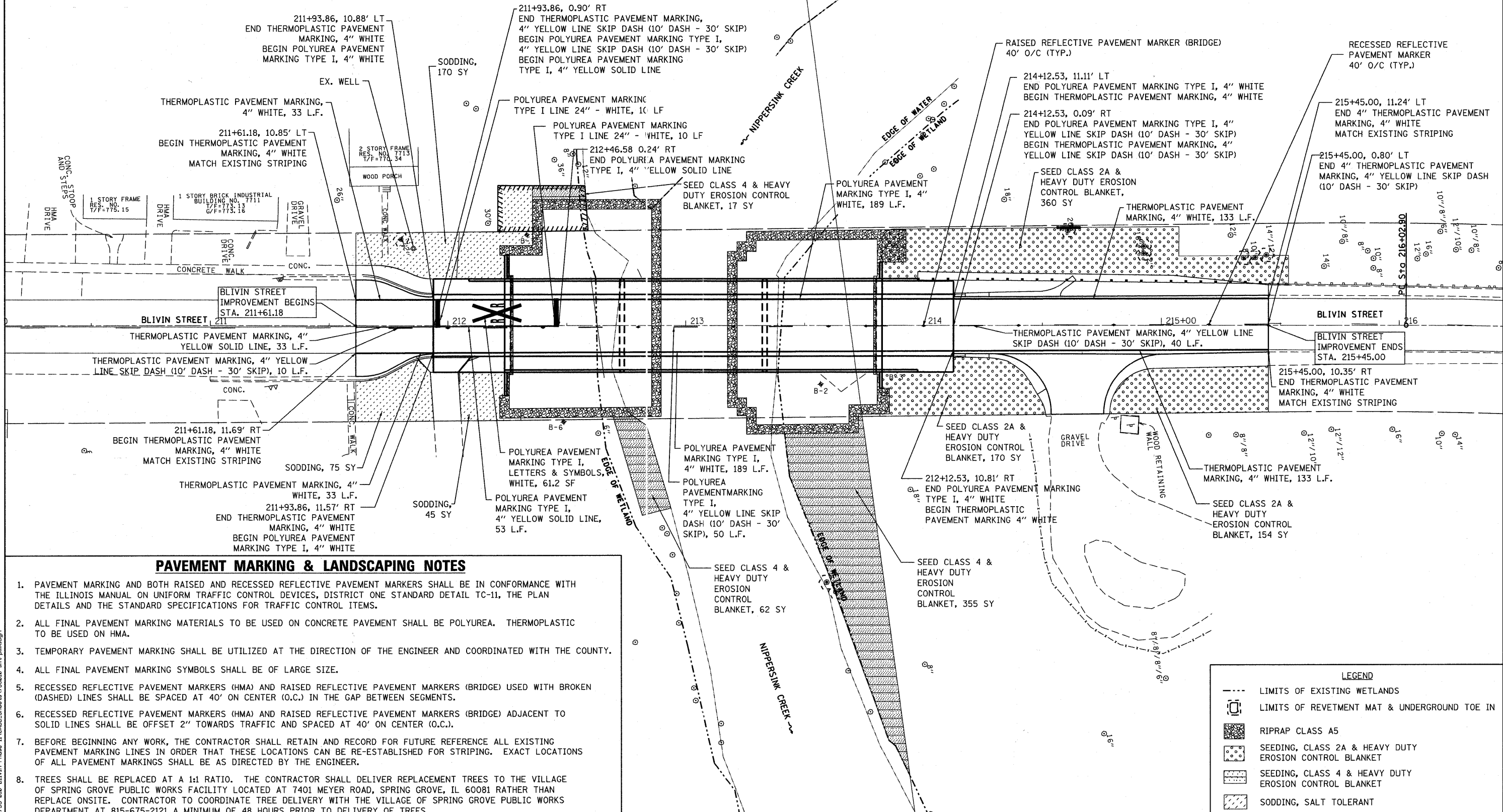
- LEGEND**
- △ PROPOSED STORM STRUCTURE
  - PROPOSED STORM SEWER
  - AB EXISTING STORM SEWER TO BE ABANDONED
  - ADJ EXISTING STORM STRUCTURE TO BE ADJUSTED
  - R EXISTING STORM SEWER TO BE REMOVED
  - C UTILITY CONFLICT
  - RIPRAP CLASS A5 (UNLESS NOTED)
  - - - EXISTING WETLAND LIMITS
- NOTES:**
- 1) STATION/OFFSET CALLS FOR ROADWAY MEASURED TO EDGE OF PAVEMENT.
  - 2) STORM WATER STRUCTURE OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE CENTER OF THE STRUCTURE



775	770	765	760	755	750	745	740	735	730		
210+50	211+00	211+50	212+00	212+50	213+00	213+50	214+00	214+50	215+00	215+50	216+00



STA. 211+61.18 TO STA. 215+56.14			
ITEM	SODDING	SEEDING	QUANTITY
NITROGEN FERTILIZER NUTRIENT	60 LBS/AC X 0.060 AC = 3.60 LBS	90 LBS/AC X 0.23 AC = 20.70 LBS	24.30 LBS
PHOSPHORUS FERTILIZER NUTRIENT	60 LBS/AC X 0.060 AC = 3.60 LBS	90 LBS/AC X 0.23 AC = 20.70 LBS	24.30 LBS
POTASSIUM FERTILIZER NUTRIENT	60 LBS/AC X 0.060 AC = 3.60 LBS	90 LBS/AC X 0.23 AC = 20.70 LBS	24.30 LBS



**PAVEMENT MARKING & LANDSCAPING NOTES**

- PAVEMENT MARKING AND BOTH RAISED AND RECESSED REFLECTIVE PAVEMENT MARKERS SHALL BE IN CONFORMANCE WITH THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, DISTRICT ONE STANDARD DETAIL TC-11, THE PLAN DETAILS AND THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
- ALL FINAL PAVEMENT MARKING MATERIALS TO BE USED ON CONCRETE PAVEMENT SHALL BE POLYUREA. THERMOPLASTIC TO BE USED ON HMA.
- TEMPORARY PAVEMENT MARKING SHALL BE UTILIZED AT THE DIRECTION OF THE ENGINEER AND COORDINATED WITH THE COUNTY.
- ALL FINAL PAVEMENT MARKING SYMBOLS SHALL BE OF LARGE SIZE.
- RECESSED REFLECTIVE PAVEMENT MARKERS (HMA) AND RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) USED WITH BROKEN (DASHED) LINES SHALL BE SPACED AT 40' ON CENTER (O.C.) IN THE GAP BETWEEN SEGMENTS.
- RECESSED REFLECTIVE PAVEMENT MARKERS (HMA) AND RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) ADJACENT TO SOLID LINES SHALL BE OFFSET 2" TOWARDS TRAFFIC AND SPACED AT 40' ON CENTER (O.C.).
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- TREES SHALL BE REPLACED AT A 1:1 RATIO. THE CONTRACTOR SHALL DELIVER REPLACEMENT TREES TO THE VILLAGE OF SPRING GROVE PUBLIC WORKS FACILITY LOCATED AT 7401 MEYER ROAD, SPRING GROVE, IL 60081 RATHER THAN REPLACE ONSITE. CONTRACTOR TO COORDINATE TREE DELIVERY WITH THE VILLAGE OF SPRING GROVE PUBLIC WORKS DEPARTMENT AT 815-675-2121 A MINIMUM OF 48 HOURS PRIOR TO DELIVERY OF TREES.

LEGEND				
	LIMITS OF EXISTING WETLANDS		LIMITS OF RETEMENT MAT & UNDERGROUND TOE IN	
	RIPRAP CLASS A5		SEEDING, CLASS 2A & HEAVY DUTY EROSION CONTROL BLANKET	
	SEEDING, CLASS 4 & HEAVY DUTY EROSION CONTROL BLANKET		SODDING, SALT TOLERANT	

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbrucke1meyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/28/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**PAVEMENT MARKING AND LANDSCAPING**

SCALE: 1"=20'	SHEET NO. 16 OF 69 SHEETS	STA. 211+61.18 TO STA. 215+45.00	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				08-00355-00-BR	MCHENRY	69	16
			CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT							

FILE NAME = W:\755-010 Blivin Phase II\CADD\Sheets\755010-ah-tpmk.dgn



**GENERAL NOTES:**

1. ALL DISTURBED AREAS AND WORK AREAS MUST BE ISOLATED FROM CHANNEL FLOWS AT ALL TIMES. EXACT MEANS AND METHODS SHOULD BE DISCUSSED DURING A SCHEDULED PRECONSTRUCTION MEETING. THE MCSWCD MUST BE IN AGREEMENT WITH OVERALL EXACT METHOD OF DIVERSION/ISOLATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

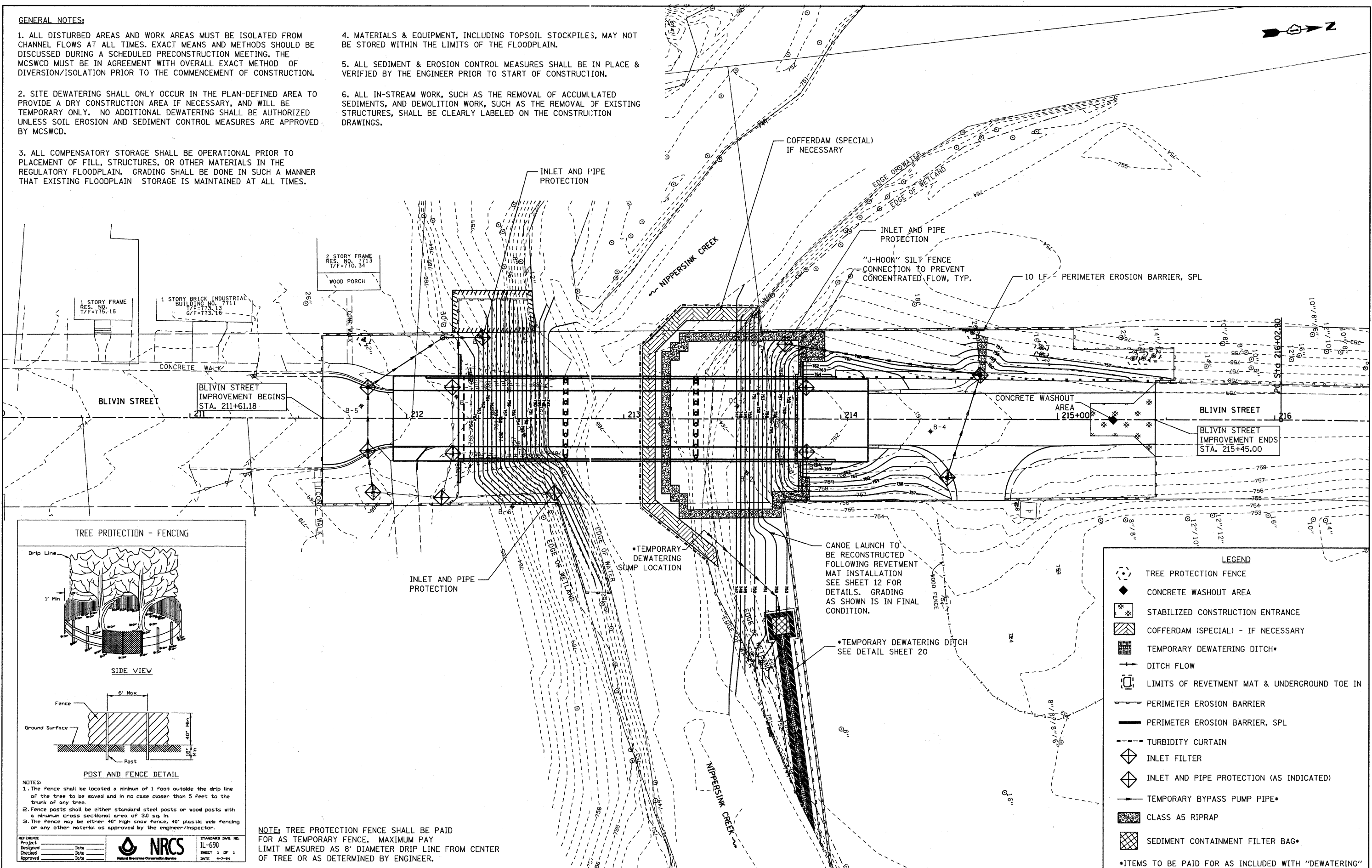
2. SITE DEWATERING SHALL ONLY OCCUR IN THE PLAN-DEFINED AREA TO PROVIDE A DRY CONSTRUCTION AREA IF NECESSARY, AND WILL BE TEMPORARY ONLY. NO ADDITIONAL DEWATERING SHALL BE AUTHORIZED UNLESS SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE APPROVED BY MCSWCD.

3. ALL COMPENSATORY STORAGE SHALL BE OPERATIONAL PRIOR TO PLACEMENT OF FILL, STRUCTURES, OR OTHER MATERIALS IN THE REGULATORY FLOODPLAIN. GRADING SHALL BE DONE IN SUCH A MANNER THAT EXISTING FLOODPLAIN STORAGE IS MAINTAINED AT ALL TIMES.

4. MATERIALS & EQUIPMENT, INCLUDING TOPSOIL STOCKPILES, MAY NOT BE STORED WITHIN THE LIMITS OF THE FLOODPLAIN.

5. ALL SEDIMENT & EROSION CONTROL MEASURES SHALL BE IN PLACE & VERIFIED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION.

6. ALL IN-STREAM WORK, SUCH AS THE REMOVAL OF ACCUMULATED SEDIMENTS, AND DEMOLITION WORK, SUCH AS THE REMOVAL OF EXISTING STRUCTURES, SHALL BE CLEARLY LABELED ON THE CONSTRUCTION DRAWINGS.



**TREE PROTECTION - FENCING**

**NOTES:**

- The fence shall be located a minimum of 1 foot outside the drip line of the tree to be saved and in no case closer than 5 feet to the trunk of any tree.
- Fence posts shall be either standard steel posts or wood posts with a minimum cross sectional area of 3.0 sq. in.
- The fence may be either 40' high snow fence, 40' plastic web fencing or any other material as approved by the engineer/inspector.

**NOTE:** TREE PROTECTION FENCE SHALL BE PAID FOR AS TEMPORARY FENCE. MAXIMUM PAY LIMIT MEASURED AS 8' DIAMETER DRIP LINE FROM CENTER OF TREE OR AS DETERMINED BY ENGINEER.

DESIGNED - DBB	REVISED -
DRAWN - DBB	REVISED -
CHECKED - CRF	REVISED -
DATE - 03-28-11	REVISED -

REFERENCE: PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWS. NO. IL-690  
 SHEET 1 OF 1  
 DATE 4-7-94

**NRCS**  
 National Resource Conservation Service

**LEGEND**

- TREE PROTECTION FENCE
- CONCRETE WASHOUT AREA
- STABILIZED CONSTRUCTION ENTRANCE
- COFFERDAM (SPECIAL) - IF NECESSARY
- TEMPORARY DEWATERING DITCH\*
- DITCH FLOW
- LIMITS OF REVETMENT MAT & UNDERGROUND TOE IN
- PERIMETER EROSION BARRIER
- PERIMETER EROSION BARRIER, SPL
- TURBIDITY CURTAIN
- INLET FILTER
- INLET AND PIPE PROTECTION (AS INDICATED)
- TEMPORARY BYPASS PUMP PIPE\*
- CLASS A5 RIPRAP
- SEDIMENT CONTAINMENT FILTER BAG\*

\*ITEMS TO BE PAID FOR AS INCLUDED WITH "DEWATERING"

FILE NAME = W:\755-010 Blivin Phase IN\CADD\_Sheets\755010-eh-eroc.dgn

**Bollinger, Lach & Associates, Inc.**  
 ITASCA, ILLINOIS

USER NAME = dbruckelmeyer  
 PLOT SCALE = 20.0000' / IN.  
 PLOT DATE = 3/25/2011

DESIGNED - DBB  
 DRAWN - DBB  
 CHECKED - CRF  
 DATE - 03-28-11

REVISED -  
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 REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

**EROSION AND SEDIMENT CONTROL PLAN**  
**STAGE I**

SCALE: 1"=20' SHEET NO. 17 OF 69 SHEETS STA. 211+61.18 TO STA. 215+45.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	17
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT			CONTRACT NO. 63583	

**GENERAL NOTES:**

1. ALL DISTURBED AREAS AND WORK AREAS MUST BE ISOLATED FROM CHANNEL FLOWS AT ALL TIMES. EXACT MEANS AND METHODS SHOULD BE DISCUSSED DURING A SCHEDULED PRECONSTRUCTION MEETING. THE MCSWCD MUST BE IN AGREEMENT WITH OVERALL EXACT METHOD OF DIVERSION/ISOLATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

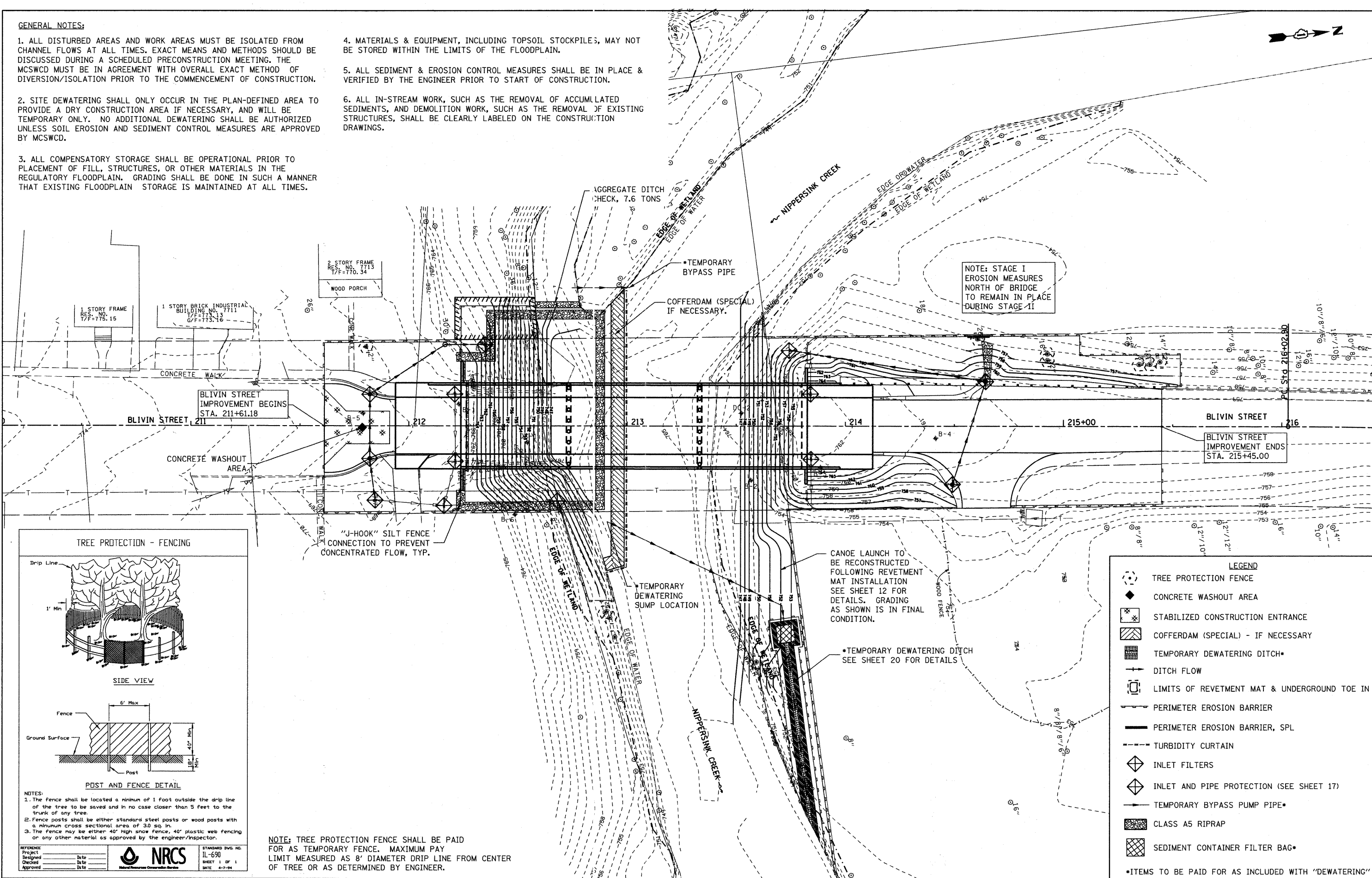
2. SITE DEWATERING SHALL ONLY OCCUR IN THE PLAN-DEFINED AREA TO PROVIDE A DRY CONSTRUCTION AREA IF NECESSARY, AND WILL BE TEMPORARY ONLY. NO ADDITIONAL DEWATERING SHALL BE AUTHORIZED UNLESS SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE APPROVED BY MCSWCD.

3. ALL COMPENSATORY STORAGE SHALL BE OPERATIONAL PRIOR TO PLACEMENT OF FILL, STRUCTURES, OR OTHER MATERIALS IN THE REGULATORY FLOODPLAIN. GRADING SHALL BE DONE IN SUCH A MANNER THAT EXISTING FLOODPLAIN STORAGE IS MAINTAINED AT ALL TIMES.

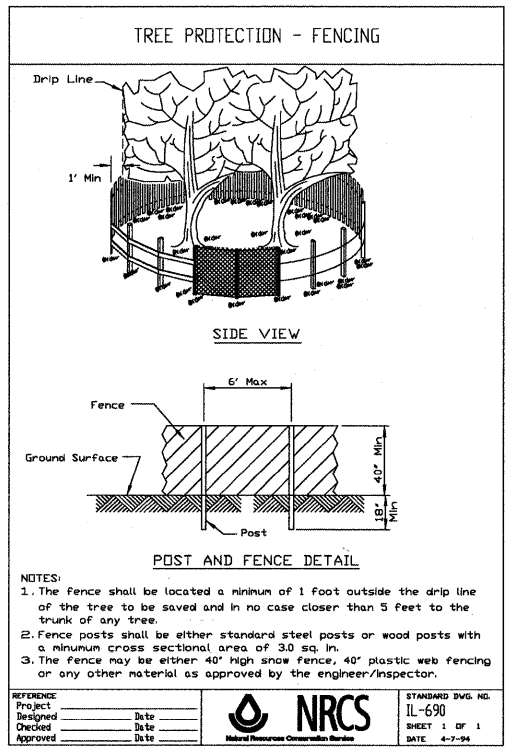
4. MATERIALS & EQUIPMENT, INCLUDING TOPSOIL STOCKPILES, MAY NOT BE STORED WITHIN THE LIMITS OF THE FLOODPLAIN.

5. ALL SEDIMENT & EROSION CONTROL MEASURES SHALL BE IN PLACE & VERIFIED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION.

6. ALL IN-STREAM WORK, SUCH AS THE REMOVAL OF ACCUMULATED SEDIMENTS, AND DEMOLITION WORK, SUCH AS THE REMOVAL OF EXISTING STRUCTURES, SHALL BE CLEARLY LABELED ON THE CONSTRUCTION DRAWINGS.



NOTE: STAGE I EROSION MEASURES NORTH OF BRIDGE TO REMAIN IN PLACE DURING STAGE II



**LEGEND**

- TREE PROTECTION FENCE
- CONCRETE WASHOUT AREA
- STABILIZED CONSTRUCTION ENTRANCE
- COFFERDAM (SPECIAL) - IF NECESSARY
- TEMPORARY DEWATERING DITCH\*
- DITCH FLOW
- LIMITS OF REVETMENT MAT & UNDERGROUND TOE IN
- PERIMETER EROSION BARRIER
- PERIMETER EROSION BARRIER, SPL
- TURBIDITY CURTAIN
- INLET FILTERS
- INLET AND PIPE PROTECTION (SEE SHEET 17)
- TEMPORARY BYPASS PUMP PIPE\*
- CLASS A5 RIPRAP
- SEDIMENT CONTAINER FILTER BAG\*

\*ITEMS TO BE PAID FOR AS INCLUDED WITH "DEWATERING"

NOTE: TREE PROTECTION FENCE SHALL BE PAID FOR AS TEMPORARY FENCE. MAXIMUM PAY LIMIT MEASURED AS 8' DIAMETER DRIP LINE FROM CENTER OF TREE OR AS DETERMINED BY ENGINEER.

FILE NAME = W:\755-00 Blivin Phase II\CADD\_Sheets\755000-ent-eroc2.dgn

<p><b>Bollinger, Lach &amp; Associates, Inc.</b> ITASCA, ILLINOIS</p>	USER NAME = dbruckmeijer PLOT SCALE = 20.0000' / IN. PLOT DATE = 3/25/2011	DESIGNED - DBB DRAWN - DBB CHECKED - CRF DATE - 03-28-11	REVISED - REVISED - REVISED - REVISED -	<b>BLIVIN STREET OVER NIPPERSINK CREEK</b>		<b>EROSION AND SEDIMENT CONTROL PLAN</b> <b>STAGE II</b>		F.A. RTE. _____ SECTION 08-00355-00-BR COUNTY MCHENRY TOTAL SHEETS 69 SHEET NO. 18	CONTRACT NO. 63583 FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT
	SCALE: 1"=20'    SHEET NO. 18 OF 69 SHEETS    STA. 211+61.18 TO STA. 215+45.00								
	STANDARD DWG. NO. IL-690 SHEET 1 OF 1 DATE 4-7-94								

**GENERAL NOTES**

1. TEMPORARY FENCE SHOULD BE ERECTED ALONG THE DRIP LINE OF EXISTING TREES TO REMAIN WITHIN THE LIMITS OF CONSTRUCTION. AFTER TREES ARE SAFELY FENCED NOTHING IS TO BE STORED, DRIVEN, OR DISTURBED INSIDE THE FENCE. REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
2. EROSION CONTROL WORK ITEMS ARE CONSIDERED TO BE HIGH PRIORITY ITEMS ON THIS CONTRACT. THE ENGINEER WILL IMPLEMENT ALL PROVISIONS OF THE SPECIFICATION NECESSARY TO ASSURE THAT EROSION CONTROL ITEMS ARE CONSTRUCTED AND MAINTAINED IN A TIMELY WAY. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES WHICH WILL POTENTIALLY CREATE ERODABLE CONDITIONS.
3. THE LANDSCAPING AND EROSION CONTROL MEASURES SHOWN ARE BUT A GRAPHICAL REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOB SITE INSPECTION BETWEEN THE CONTRACTOR AND THE ENGINEER.
4. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO THE IDOT STANDARDS AND SPECIFICATIONS AND SPECIAL PROVISIONS, LATEST EDITION.
5. THE MCHENRY COUNTY SOIL AND WATER CONSERVATION DISTRICT (MCSWCD) AND CORPS OF ENGINEERS (USACOE) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

**CONTACTS:**

TOM MATTINGLY URBAN EROSION CONTROL SPECIALIST MCSWCD 815-338-0099	SOREN HALL REGULATORY SPECIALIST USACOE 312-846-5532
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6. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
7. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE MCSWCD AND CORPS OF ENGINEERS. WORK SHALL BE PAID FOR USING CONTRACT PAY ITEMS, OR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
8. ALL EROSION CONTROL MEASURES MUST BE INSPECTED EVERY 7 DAYS AND AFTER EACH 1/2" RAIN EVENT.
9. EROSION CONTROL BLANKET AND/OR STRAW MULCH WITH NETTING (DEPENDING ON SLOPE, SLOPE LENGTH, AND FLOW RATES) SHALL BE INSTALLED ON ALL SLOPES AND IN CRITICAL AREAS (I.E. PERIMETERS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.
10. IN AREAS WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WHERE WORK HAS TEMPORARILY CEASED FOR 14 DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE 7th DAY AFTER WORK HAS CEASED.
11. NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW. THE STREAM BANKS SHOULD BE STABILIZED AT THE END OF EACH DAY. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.
12. THE CHANNEL BANK MUST BE SEEDED AND STABILIZED WITH HEAVY DUTY EROSION CONTROL BLANKET CONFORMING TO ARTICLE 251.04 PRIOR TO ACCEPTING FLOWS. HEAVY DUTY EROSION CONTROL BLANKET SHALL BE PAID FOR IN SQUARE YARDS.
13. DURING CONSTRUCTION ON THE BANKS AND IN THE CREEK, WORK MUST BE TIMED TO TAKE PLACE DURING LOW OR NO FLOW CONDITIONS.
14. IF DEWATERING IS NECESSARY, THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AND PUMPED INTO THE DEWATERING SYSTEM SHOWN ON THE EROSION CONTROL PLANS FOR STAGE I AND STAGE II CONSTRUCTION PRIOR TO REJOINING THE FLOW OF THE CREEK.
15. THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED WITH REVETMENT MAT AND RIPRAP PRIOR TO ACCEPTING FLOWS. THE BOTTOM OF THE TEMP SWALE MUST BE BROUGHT BACK TO ITS ORIGINAL GRADE AND STABLE ENOUGH TO ACCEPT FLOWS.
16. THE CONTRACTOR SHALL MAKE SURE THAT NO DEBRIS BE DROPPED INTO THE CHANNEL WHEN THE BRIDGE IS DEMOLISHED. NO ADDITIONAL COMPENSATION WILL BE PROVIDED AND THE COST FOR THIS TASK WILL BE INCLUDED IN THE COST OF THE REMOVAL OF EXISTING STRUCTURES.
17. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER AND MCSWCD FOR REVIEW.
18. SITE DEWATERING SHALL ONLY OCCUR IN THE PLAN-DEFINED AREA TO PROVIDE A DRY CONSTRUCTION AREA IF NECESSARY, AND WILL BE TEMPORARY ONLY. NO ADDITIONAL DEWATERING SHALL BE AUTHORIZED UNLESS SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE APPROVED BY MCSWCD.
19. THE DISTURBANCE SHALL BE LIMITED TO THE MINIMUM WIDTH NECESSARY TO COMPLETE THE AUTHORIZED WORK.

20. LOW GROUND-PRESSURE EQUIPMENT IS RECOMMENDED FOR WORK IN WETLANDS. IF AFTER CAREFUL CONSIDERATION, THE COUNTY ACCEPTS A PROPOSAL TO USE HEAVY EQUIPMENT TO ACCOMPLISH THE WORK, THE PLACEMENT OF TIMBER MATS OR OTHER PROTECTIVE MEASURES SHALL BE UTILIZED TO MINIMIZE SOIL DISTURBANCE.
21. ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITIES WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITY.
22. THE CONTRACTOR IS REQUIRED TO RESTORE THE CONSTRUCTION AREA TO PRE-CONSTRUCTION CONDITIONS, INCLUDING GRADING TO ORIGINAL CONTOURS AND REVEGETATING DISTURBED AREAS WITH NATIVE VEGETATION (SEE PLANTING SEED MIX LIST OR OTHER VEGETATION APPROVED BY THE COUNTY) IMMEDIATELY UPON COMPLETION OF THE PROJECT.

**SOIL EROSION AND SEDIMENTATION CONTROL SPECIFICATIONS:**

**1. GENERAL**

- A. ALL COSTS ASSOCIATED WITH SOIL EROSION AND SEDIMENTATION CONTROL IS THE CONTRACTORS RESPONSIBILITY UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATIONS.
- B. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ALL APPLICABLE PROVISIONS OF THE COUNTY CODE, THE ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL, IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL, AND ANY LOCAL, COUNTY, STATE AND/OR FEDERAL STORM WATER MANAGEMENT AND/OR SOIL EROSION AND POLLUTION CONTROL ORDINANCES.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION AND OR GROUND COVER HAS BEEN ESTABLISHED WITH COVERAGE OF AT LEAST 70 PERCENT.
- D. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE. EROSION CONTROL PRACTICES SHALL BE PERFORMED AND MAINTAINED AS THE PROJECT REQUIRES AT NO EXPENSE TO THE COUNTY.

**2. IMPLEMENTATION**

- A. BEFORE STARTING CLEARING AND SITE GRADING WORK, A STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER EROSION BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. IF DIRECTED BY THE DESIGNATED EROSION CONTROL INSPECTOR OR LOCAL ENFORCEMENT OFFICER AND/OR COUNTY ENGINEER, THE CONTRACTORS SHALL INSTALL ADDITIONAL SOIL AND EROSION CONTROL MEASURES AS NEEDED UTILIZING BEST MANAGEMENT PRACTICES.
- B. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MONITORED PERIODICALLY FOR ITS EFFECTIVENESS TO COLLECT DIRT WHICH COULD LEAVE THE SITE VIA CONSTRUCTION VEHICLES. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.
- C. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, IF NECESSARY, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY, AT THE CONTRACTORS EXPENSE.
- D. ANY PUBLIC AND/OR PRIVATE ROADS THAT ARE ADJACENT TO THE SITE AND USED FOR INGRESS AND EGRESS, SHALL BE MONITORED AND CLEANED AS SOON AS SOIL IS DEPOSITED ON THESE SURFACES.
- E. INLET FILTERS SHALL BE INSTALLED AND MAINTAINED IN INTAKE STRUCTURES (I.E., INLETS, CATCH BASINS).
- F. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 14 DAYS, SEDIMENT AND EROSION CONTROL SHALL BE PROVIDED AROUND SUCH STOCKPILE. ANY PART OF THE STOCKPILE TO REMAIN UNTOUCHED FOR 21 DAYS MUST BE PROTECTED WITH TEMPORARY SOIL AND EROSION CONTROL MEASURES WITHIN 14 DAYS OF THE LAST DAY THE STOCKPILE WAS DISTURBED. MATERIALS & EQUIPMENT, INCLUDING TOPSOIL STOCKPILES, MAY NOT BE STORED WITHIN THE LIMITS OF THE FLOODPLAIN.
- G. ANY DISTURBED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 14 DAYS AFTER ACTIVITY HAS CEASED UNLESS ACTIVITY WILL RESUME WITHIN 21 DAYS FROM INITIAL CEASE IN ACTIVITY. TEMPORARY COVER SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.

**3. MAINTENANCE AND INSPECTIONS**

- A. THE CONTRACTOR SHALL BE RESPONSIBLE UNLESS OTHERWISE SPECIFIED IN THE PROJECT SPECIFICATIONS FOR THE INSTALLATION AND MAINTENANCE OF THE SOIL EROSION AND SEDIMENTATION CONTROL FOR THIS SITE. PRIOR TO ANY CONSTRUCTION ACTIVITY THE INITIAL SOIL EROSION AND SEDIMENTATION CONTROL MUST BE INSPECTED AND APPROVED BY THE REQUIRED AGENCY AND/OR QUALIFIED PERSONNEL.
- B. QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN PERMANENTLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCH OR GREATER OR EQUIVALENT SNOWFALL.
- C. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF/OR POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING. BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN THE PLAN AND POLLUTION PREVENTION MEASURES IDENTIFIED IN THE PLAN SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. SUCH MODIFICATIONS SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITH SEVEN (7) CALENDAR DAYS FOLLOWING THE INSPECTION.
- D. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL/ENGINEER MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE (3) YEARS AFTER THE DATE OF INSPECTION. THE ENGINEER SHALL COMPLETE AND SUBMIT WITHIN 24 HOURS AN INCIDENCE OF NON-COMPLIANCE OBSERVED DURING AN INSPECTION CONDUCTED, SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NON-COMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NON-COMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NON-COMPLIANCE. AN INCIDENCE OF NON-COMPLIANCE IS DEFINED AS ANY NOTICEABLE DISCHARGE OF ANY SEDIMENT LEAVING THE SITE.

**4. TYPICAL CONSTRUCTION SEQUENCING:**

PRIOR TO START OF CONSTRUCTION, MCHENRY COUNTY DOT OFFICIALS SHALL COORDINATE WITH THE MCHENRY COUNTY CONSERVATION DISTRICT IN THE TEMPORARY RELOCATION OF BLACK SANDSHELL MUSSELS. NO CONSTRUCTION ACTIVITIES SHALL OCCUR PRIOR TO COMPLETION OF MUSSEL RELOCATION.

1. INSTALL SOIL EROSION AND SEDIMENT CONTROL (SE/SC) MEASURES
  - A. SELECTIVE VEGETATION REMOVAL FOR PERIMETER EROSION BARRIER INSTALLATION
  - B. PERIMETER EROSION BARRIER INSTALLATION
  - C. CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
  - D. STABILIZED CONSTRUCTION ENTRANCES & CONCRETE WASHOUT AREAS
2. TREE REMOVAL WHERE NECESSARY (CLEAR AND GRUB)
3. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS, ETC.)
- BEGIN STAGE I CONSTRUCTION:
4. INSTALL DEWATERING SYSTEM
5. INSTALL COFFERDAM DIVERSION (IF REQUIRED) & TURBIDITY CURTAIN TO ISOLATE UPSTREAM
6. DEWATER THE WORK AREA (IF REQUIRED)
7. EXCAVATE CHANNEL
8. STABILIZE BANK & BED
9. INSTALL INLET & OUTLET PROTECTION FOR EXISTING STORM SEWERS
10. DEMO THE EXISTING STRUCTURES
11. CONSTRUCT PIERS
12. INSTALL ABUTMENTS AND REVETMENT MAT
13. INSTALL STRUCTURAL STEEL, POUR MAIN DECK
14. STRIP TOPSOIL AND GRADE SITE
15. INSTALL STORM SEWER AND ASSOCIATED INLET & OUTLET PROTECTION
16. INSTALL ROADWAYS
17. PERMANENTLY STABILIZE DISTURBED AREAS
- REPEAT FOR STAGE II CONSTRUCTION
18. REMOVE ALL TEMPORARY SESC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

NOTE: SOIL EROSION AND SEDIMENT CONTROL INSPECTIONS MUST OCCUR EVERY SEVEN CALENDAR DAYS AND AFTER EVERY 1/2" OR GREATER RAINFALL EVENT.

FILE NAME: W:\755-010 Blvln Phase II\CADD\_Sheets\755010-sh-eros3.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbrucke1meyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLVIN STREET OVER NIPPERSINK CREEK**

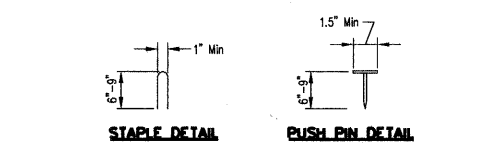
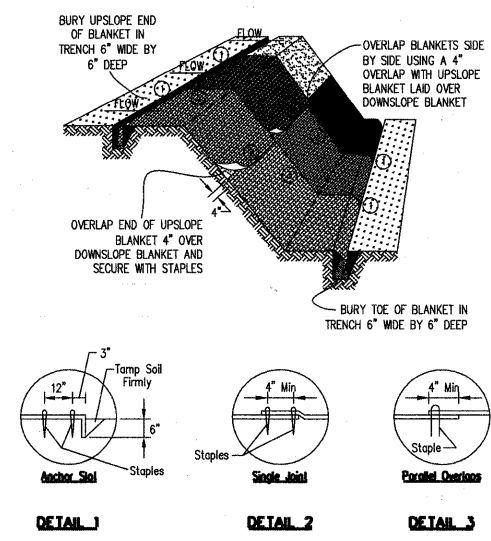
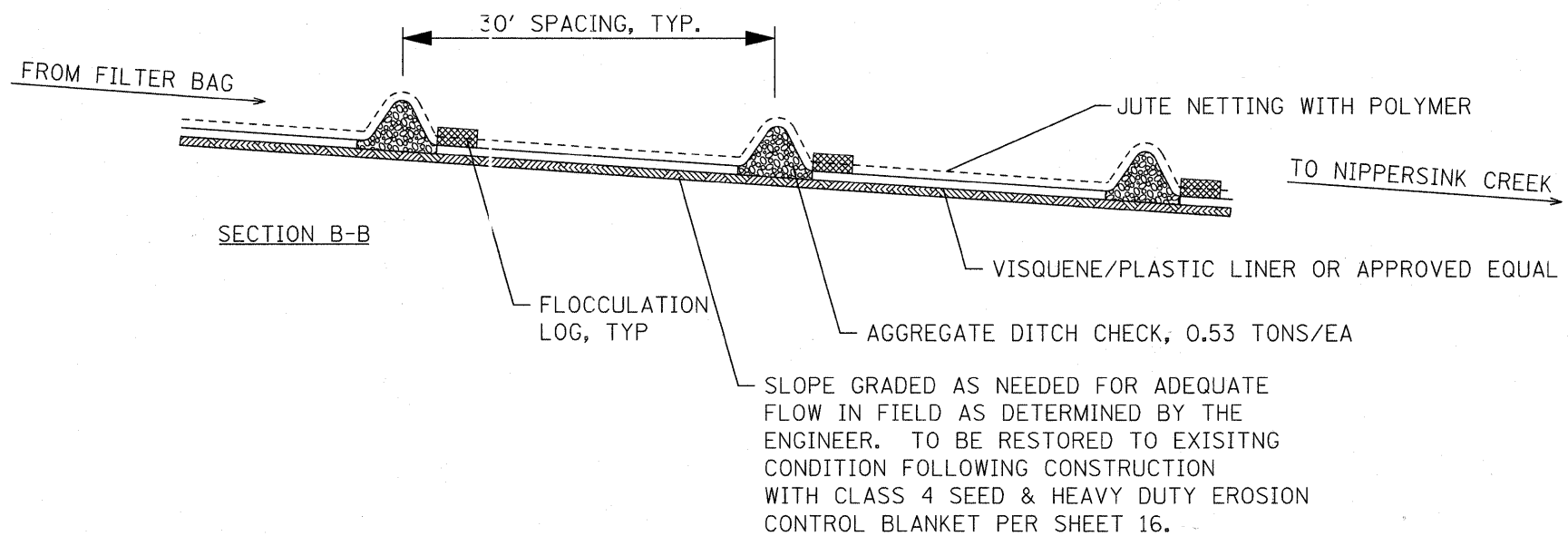
**EROSION AND SEDIMENT CONTROL NOTES**

SCALE: N.T.S. SHEET NO. 19 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	19
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT			CONTRACT NO. 63583	

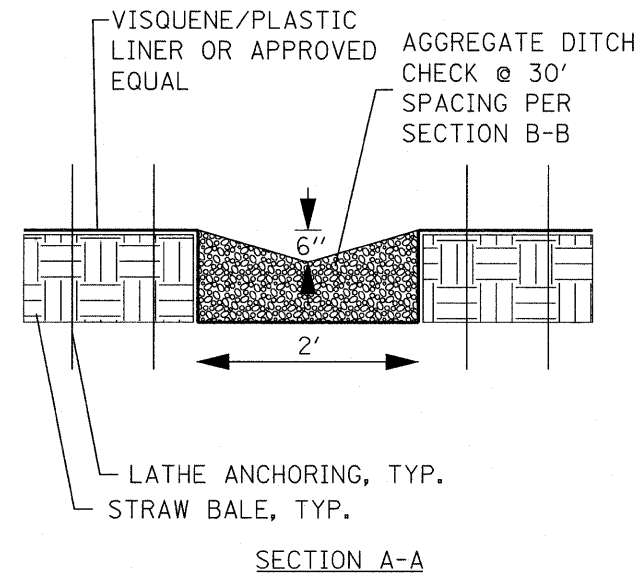
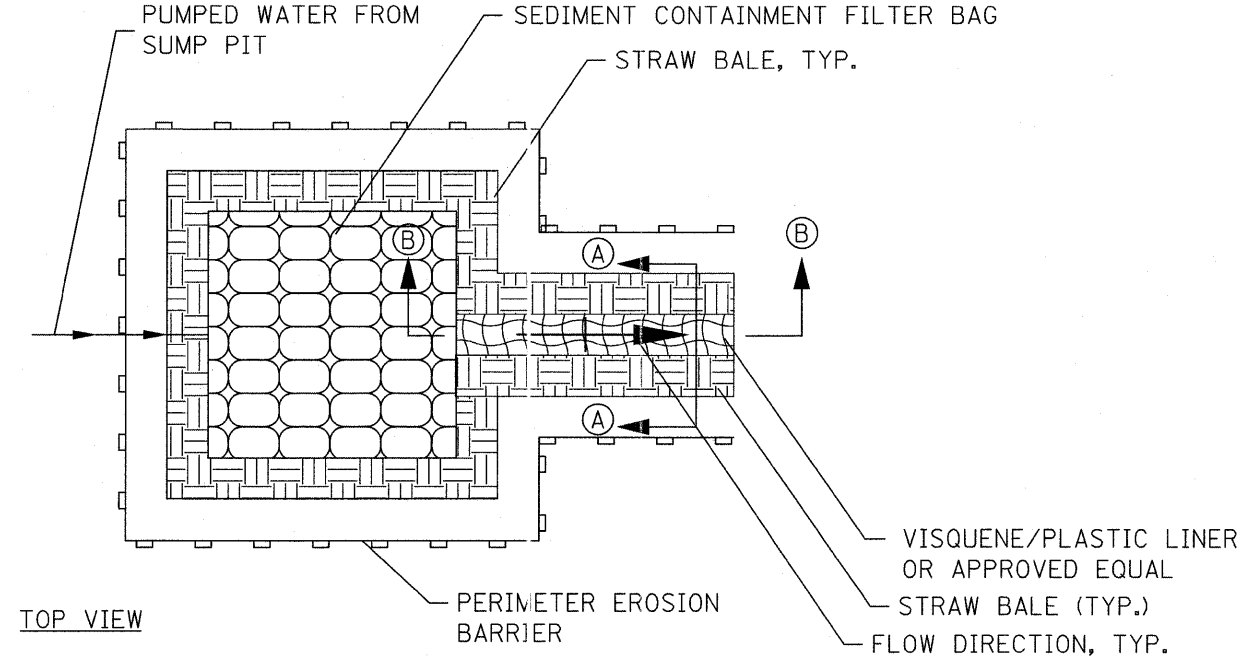
TEMPORARY DEWATERING DITCH DETAIL

**NOTE:**  
 TEMPORARY DEWATERING DITCH AND ALL ITEMS SHOWN HEREIN WITH THE EXCEPTION OF AGGREGATE DITCH CHECKS AND PERIMETER EROSION BARRIER TO BE PAID FOR AS "DEWATERING" - LUMP SUM AS DESCRIBED IN THE PROJECT SPECIFICATIONS.



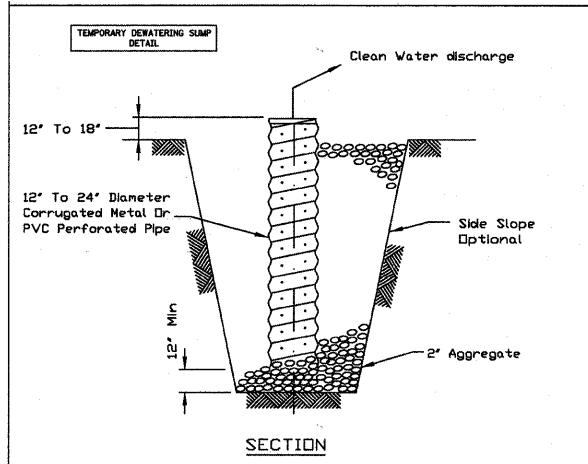
- NOTES:**
1. Staples shall be placed in a diamond pattern at 2 per s.y. for stiched blankets. Non-stiched shall use 4 staples per s.y. of material. This equates to 200 staples with stiched blanket and 400 staples with non-stiched blanket per 100 s.y. of material.
  2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
  3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
  4. All anchor slots shall be stapled at approximately 12" intervals.

EROSION CONTROL BLANKET INSTALLATION DETAILS



TEMPORARY DEWATERING SUMP NOTES:

1. IF DETWATERING IS NECESSARY, THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AT THE LOCATION SHOWN ON SHOWN ON THE EROSION CONTROL PLANS FOR STAGE I AND STAGE II CONSTRUCTION AND PUMPED INTO A DEWATERING SYSTEM PRIOR TO REJOINING THE FLOW OF THE CREEK.
2. REFER TO PROJECT SPECIFICATIONS FOR DEWATERING SUMP USE AND METHODOLOGY. SUMP PIT AND ALL APPURTENANCES SHOWN IN THE DETAIL SHALL BE PAID FOR IN THE COST FOR "DEWATERING."



- NOTES:**
1. Pit dimensions are optional.
  2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
  3. A base of 2" aggregate will be placed in the pit to a minimum depth of 12". After installing the standpipe, the pit surrounding the standpipe will then be backfilled with 2" aggregate.
  4. The standpipe will extend 12" to 18" above the lip of the pit.
  5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with filter fabric before installation.
  6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

REFERENCE Project	DESIGNED - DBB	REVISD -
Designed	DRAWN - DBB	REVISD -
Checked	CHECKED - CRF	REVISD -
Approved	DATE - 03-28-11	REVISD -



STANDARD DWG. NO.	IL-650
SHEET 1 OF 1	
DATE	8-11-94

**Bollinger, Lach & Associates, Inc.**  
 ITASCA, ILLINOIS

USER NAME = dbrucke1meyer	DESIGNED - DBB	REVISD -
PLOT SCALE = 20,0000' / IN.	DRAWN - DBB	REVISD -
PLOT DATE = 4/6/2011	CHECKED - CRF	REVISD -
	DATE - 03-28-11	REVISD -

BLIVN STREET OVER NIPPERSINK CREEK

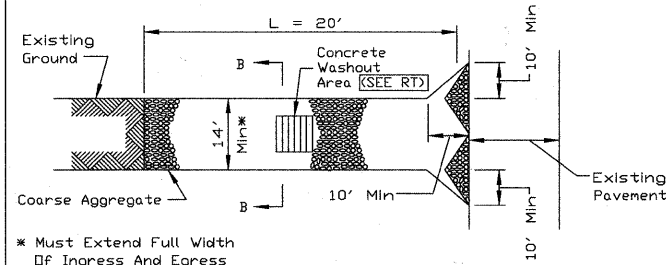
EROSION AND SEDIMENT CONTROL DETAILS

SCALE: N.T.S.	SHEET NO. 20 OF 69 SHEETS	STA. TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				08-00355-00-BR	MCHENRY	69	20
			CONTRACT NO. 63583				
			FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				

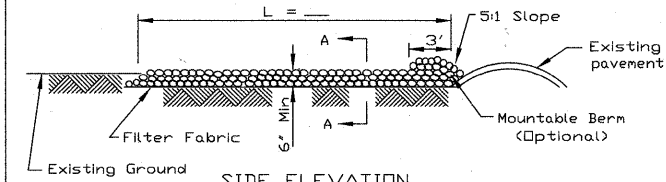
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STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



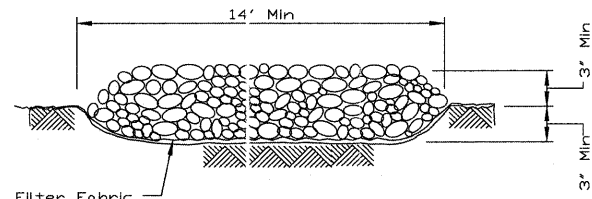
SIDE ELEVATION

NOTES:

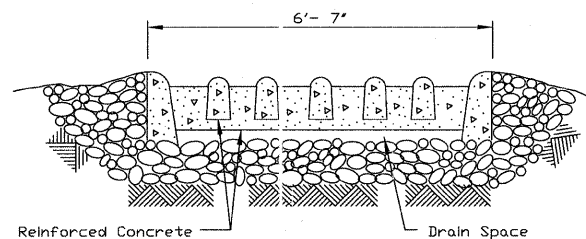
1. Filter fabric shall meet the requirements of material specifications established in Article 1080.03 of the Standard Specifications and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE Project _____	DESIGNED _____	CHECKED _____	APPROVED _____	DATE _____	DATE _____	DATE _____	DATE _____
				STANDARD DWG. NO.	IL-630	SHEET 1 OF 2	
				DATE	8-18-94		

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



SECTION B-B

REFERENCE Project _____	DESIGNED _____	CHECKED _____	APPROVED _____	DATE _____	DATE _____	DATE _____	DATE _____
				STANDARD DWG. NO.	IL-630	SHEET 2 OF 2	
				DATE	8-18-94		

TEMPORARY COFFERDAM SYSTEM NOTES

THE TEMPORARY COFFERDAM SYSTEM SHALL BE DESIGNED AND CONSTRUCTED BY THE CONTRACTOR. THE WIDTH OF THE COFFERDAM SYSTEM PERPENDICULAR TO THE CREEK SHALL BE DETERMINED BY THE "ENCROACHMENT VERSUS WATER SURFACE ELEVATION" OPERATION CURVES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS, SHEET 21. THESE CURVES REPRESENT ACCEPTABLE WATER SURFACE PROFILES DIRECTLY UPSTREAM OF THE COFFERDAM SYSTEM FOR VARIOUS DISCHARGES AT VARIOUS ENCROACHMENTS. DISCHARGES AND ASSOCIATED WATER SURFACE PROFILES REPRESENT THE 2-YEAR STORM EVENT AS DIRECTED BY THE ARMY CORPS OF ENGINEERS.

THE CONTRACTOR SHALL AT ALL TIMES OPERATE WITHIN THE LIMITS STATED ABOVE. IN ADDITION TO THESE LIMITS THE CONTRACTOR SHALL NOT CONSTRUCT A COFFERDAM OR MULTIPLE COFFERDAMS WITH A TOTAL ENCROACHMENT WIDER THAN 30 FEET PERPENDICULAR TO THE CREEK. THE CONTRACTOR SHALL DETERMINE THE MAXIMUM WIDTH OF THE COFFERDAM SYSTEM PERPENDICULAR TO THE CREEK BASED UPON THE ENCROACHMENT VERSUS DISCHARGE OPERATION CURVES. THE CONTRACTOR SHALL PHASE CONSTRUCTION SUCH THAT THE COFFERDAM SYSTEM ALLOWS PASSAGE OF THE 2-YEAR STORM EVENT FLOWS IN THE CREEK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS IF THE CONTRACTOR CHOOSES TO BUILD AND/OR OPERATE THE COFFERDAM SYSTEM SUCH THAT THE "ENCROACHMENT VERSUS DISCHARGE" OPERATION CURVES ARE VIOLATED. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PERMITTING OR WORK RELATED TO OBTAINING PERMITS.

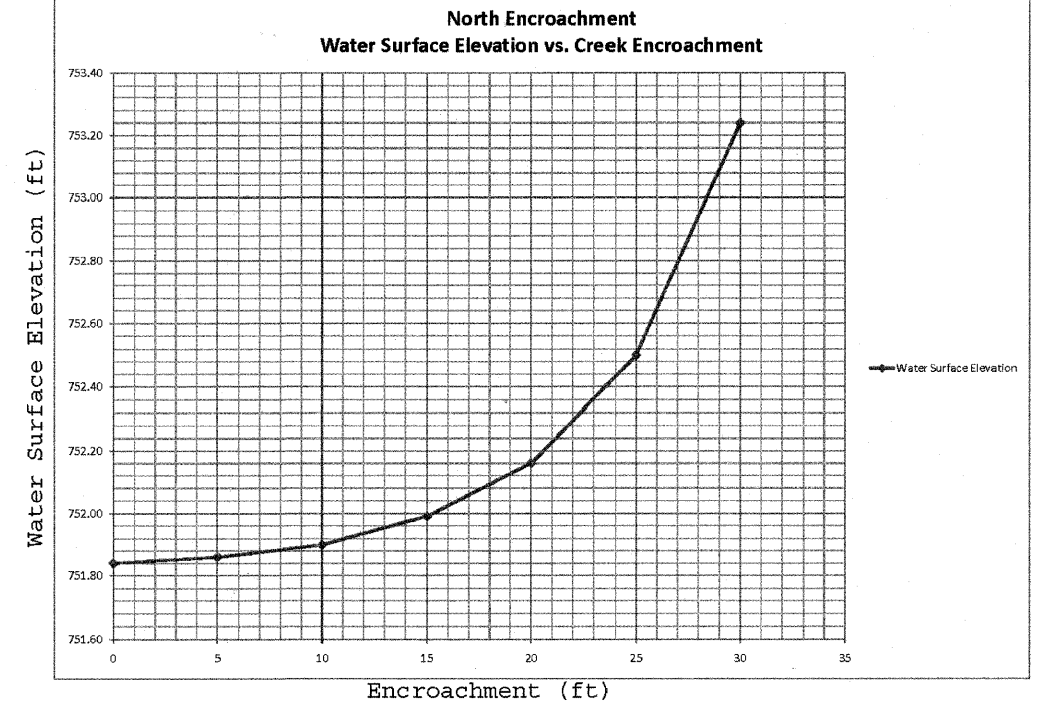
THE CONTRACTOR SHALL ASSUME ALL RISK OF DAMAGES TO EQUIPMENT AND MATERIALS CAUSED BY COFFERDAM OVERTOPPING OR FAILURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL PERSONNEL IN CASE OF OVERTOPPING OR FAILURE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING THE COFFERDAM SYSTEM AND CONSTRUCTION PHASING. WHERE REQUIRED THE COFFERDAM SYSTEM SHALL BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS.

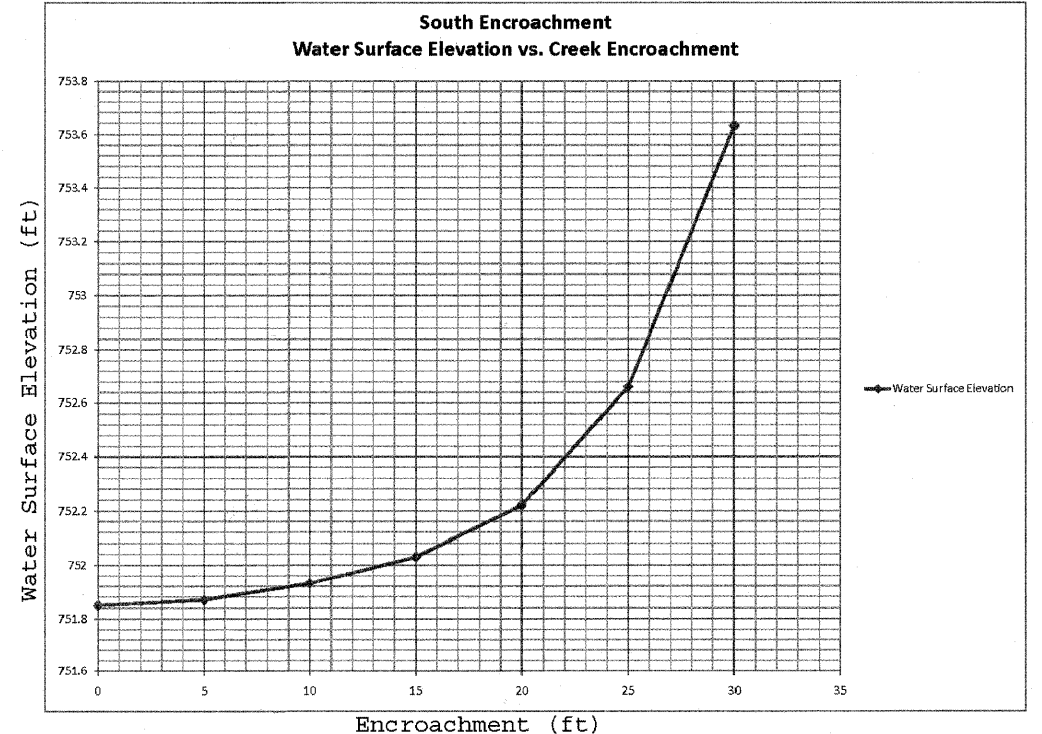
THE COFFERDAM SYSTEM SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION AND INSTALLATION OF ARTICULATED CONCRETE BLOCK REVETMENT MAT WITHIN THE STREAM.

COFFERDAM SYSTEM TO BE PAID FOR AS COFFERDAM (SPECIAL).

COFFERDAM (SPECIAL) - ENCROACHMENT CURVES



Elevations reflect the 2-year storm event at section 6.597 just upstream of the proposed bridge. Zero encroachments coincides with the existing stream bank. Encroachments larger than 30 feet are not allowed.



Elevations reflect the 2-year storm event at section 6.597 just upstream of the proposed bridge. Zero encroachment coincides with the existing stream bank. Encroachments larger than 30 feet are not allowed.

SOIL PROTECTION CHART

STABILIZATION CHART	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SEEDING, CLASS 2A	A		**	**	**			A				
SEEDING, CLASS 4	B		**	**	**			B				
SODDING**	C		**	**	**			C				

\*\* SUPPLEMENTAL WATERING AS NECESSARY TO ESTABLISH GROWTH

REFER TO LANDSCAPE PLANS FOR SODDING & SEEDING LOCATIONS

FILE NAME = W:\755-918 Blvin Phase II\CADD\Sheets\755-918-01-erod-encr-5.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

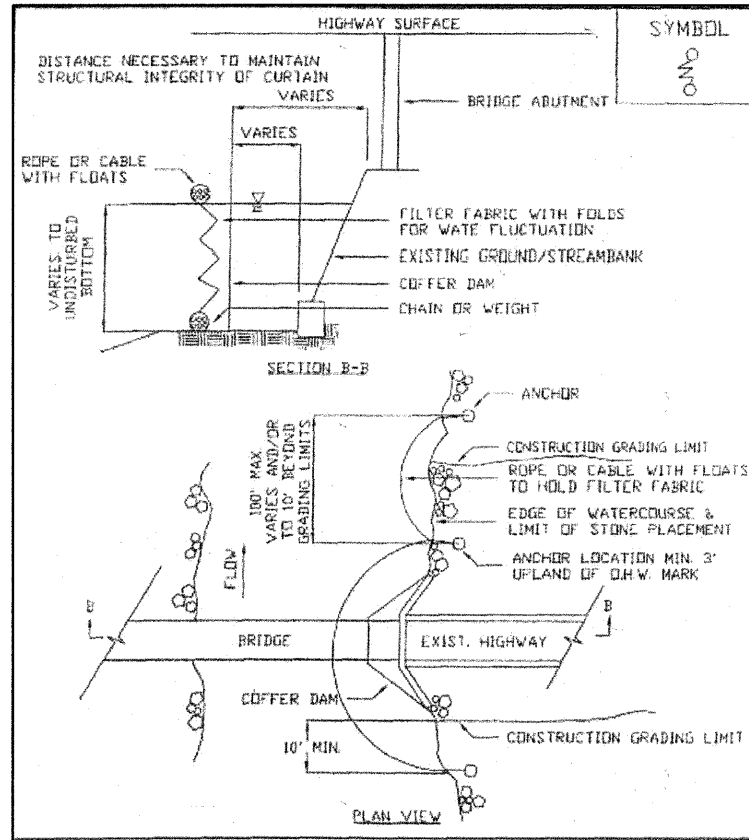
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PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

BLVIN STREET OVER NIPPERSINK CREEK

EROSION AND SEDIMENT CONTROL DETAILS

SCALE: N.T.S. SHEET NO. 21 OF 69 SHEETS STA. TO STA.

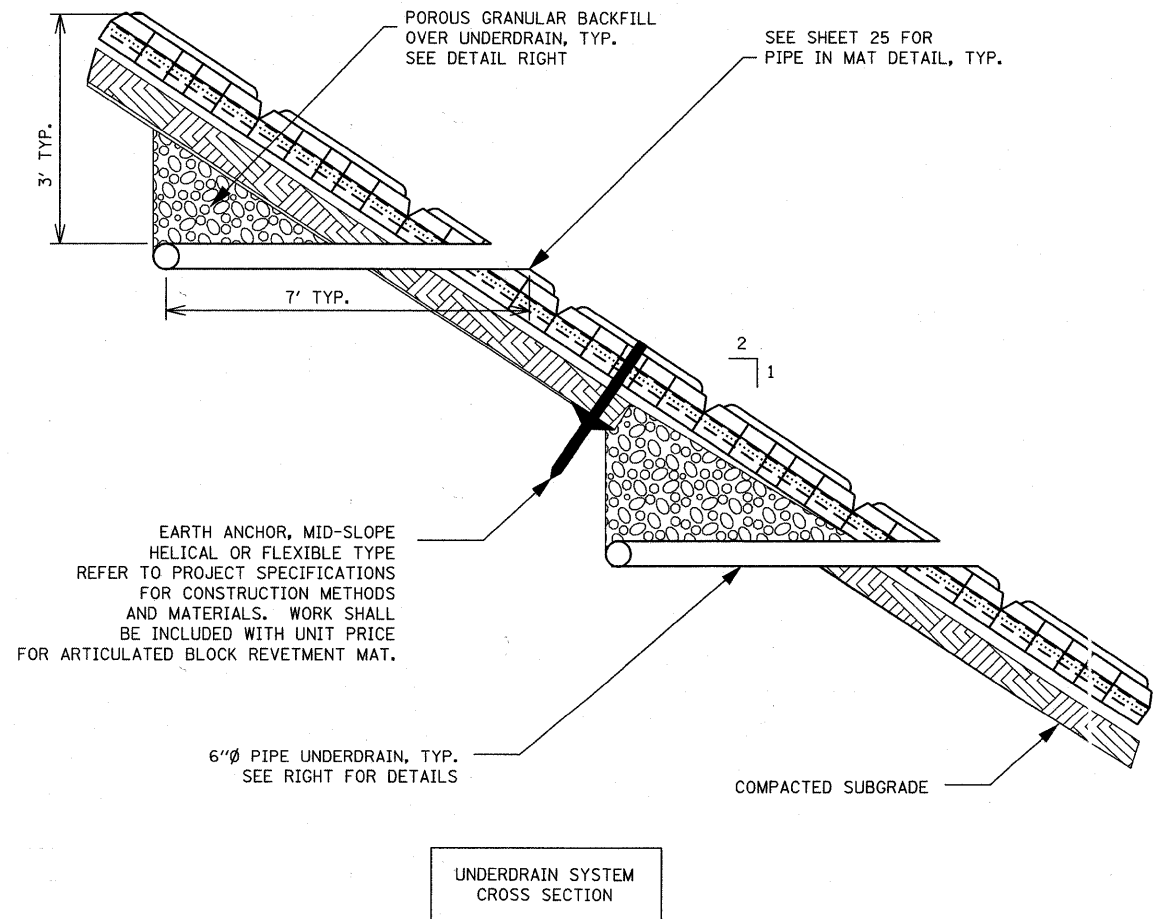
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	21
FED ROAD DIST NO. 1 ILLINOIS			CONTRACT NO. 63583	
FED AID PROJECT				



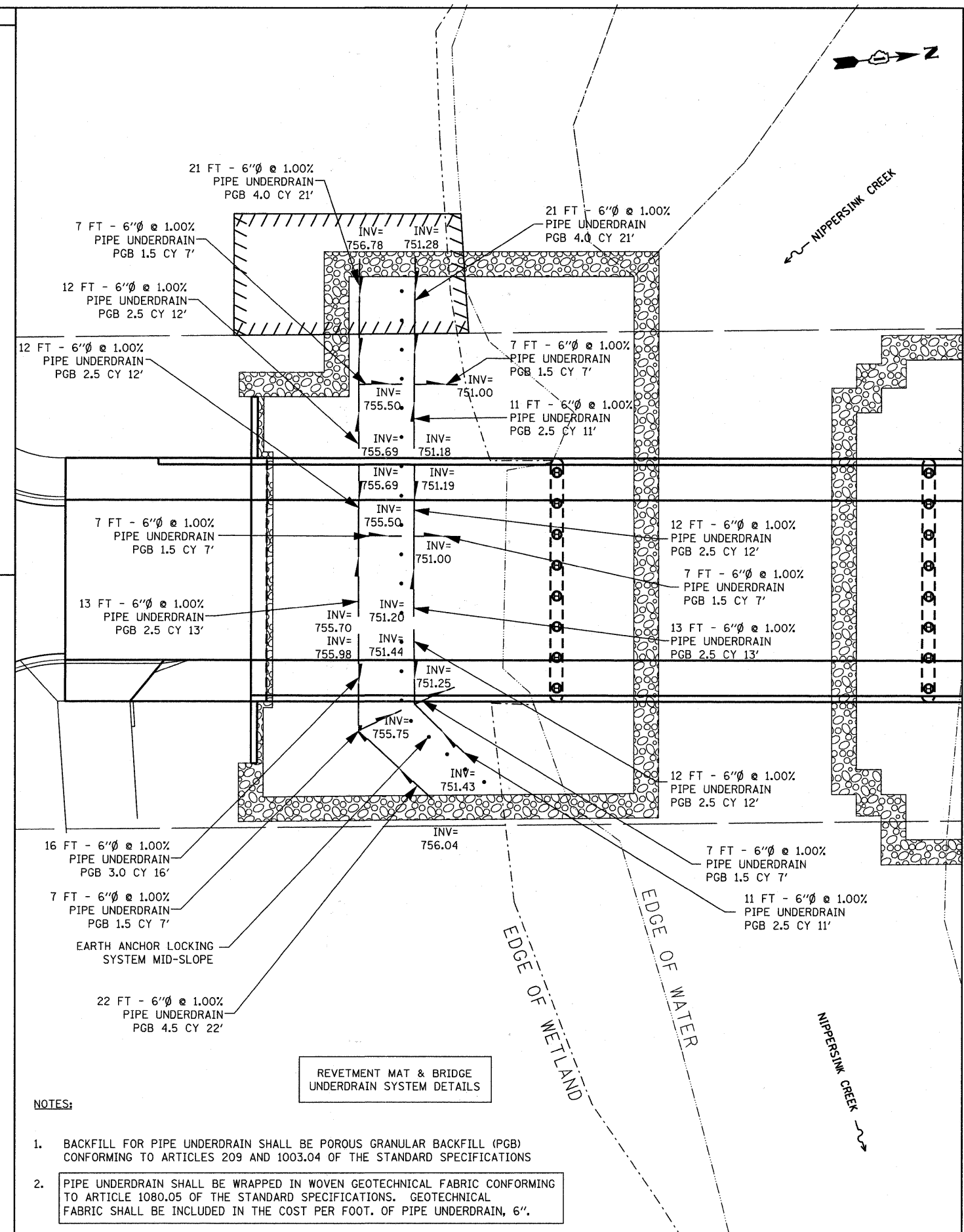
**NOTES:**

1. THE TURBIDITY CURTAIN SHALL BE A MAXIMUM OF 100 FT LONG FOR EACH SECTION OF CURTAIN REQUIRED. LAST SECTION SHALL CONNECT TO PERIMETER EROSION BARRIER AT EACH END FOR ANCHORING.
2. THE TURBIDITY CURTAIN SHALL BE PLACED AS CLOSE TO THE WORK AS POSSIBLE WITHOUT INTERFERING WITH CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL CONTINUALLY MONITOR THE INSTALLATION, TAKING INTO ACCOUNT WEATHER PATTERNS AND PREVAILING WIND DIRECTIONS THAT MAY AFFECT WATER LEVELS, VELOCITY, AND MOVEMENT OF THE TURBIDITY CURTAIN.
4. THE TURBIDITY CURTAIN SHALL BE REMOVED BY PULLING TOWARDS THE SHORE TO MINIMIZE ESCAPE OF SEDIMENTS INTO THE WATERWAY.
5. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE THAT ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY. THE WEIGHTED ANCHOR SYSTEM SHALL BE INCLUDED IN THE COST OF THE TURBIDITY CURTAIN.

TURBIDITY CURTAIN  
DETAIL



UNDERDRAIN SYSTEM  
CROSS SECTION



REVETMENT MAT & BRIDGE  
UNDERDRAIN SYSTEM DETAILS

**NOTES:**

1. BACKFILL FOR PIPE UNDERDRAIN SHALL BE POROUS GRANULAR BACKFILL (PGB) CONFORMING TO ARTICLES 209 AND 1003.04 OF THE STANDARD SPECIFICATIONS
2. PIPE UNDERDRAIN SHALL BE WRAPPED IN WOVEN GEOTECHNICAL FABRIC CONFORMING TO ARTICLE 1080.05 OF THE STANDARD SPECIFICATIONS. GEOTECHNICAL FABRIC SHALL BE INCLUDED IN THE COST PER FOOT. OF PIPE UNDERDRAIN, 6".

FILE NAME = M:\755-010 Blivin Phase I\CAD\Drawings\755-010-01-01-01-01.dwg

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeier	DESIGNED - DBB	REVISED -
PLOT SCALE = 10.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 4/6/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

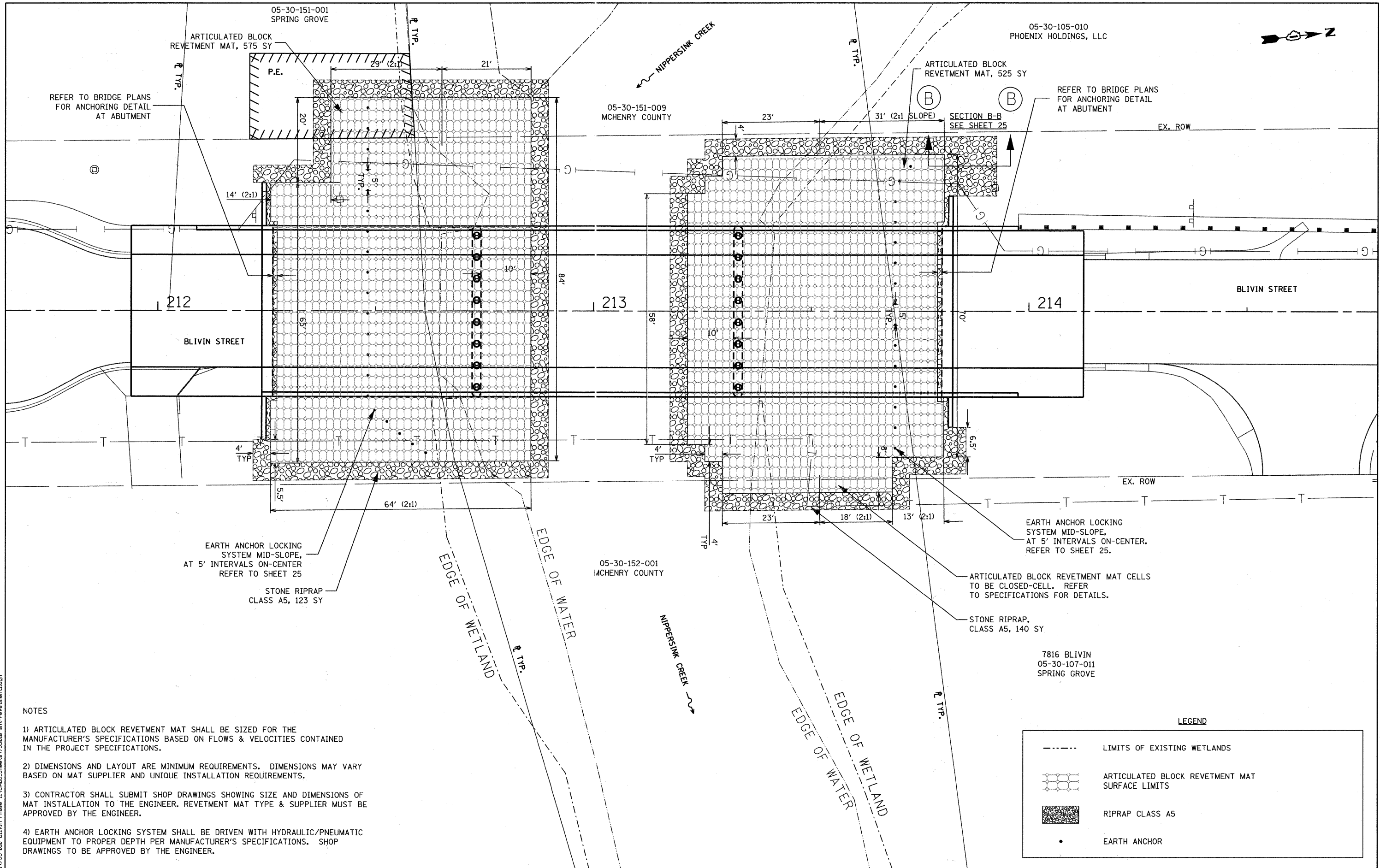
**BLIVIN STREET OVER  
NIPPERSINK CREEK**

**EROSION AND SEDIMENT CONTROL DETAILS**

SCALE: 1"=10' SHEET NO. 22 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	22
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT			CONTRACT NO. 63583	





- NOTES**
- 1) ARTICULATED BLOCK REVETMENT MAT SHALL BE SIZED FOR THE MANUFACTURER'S SPECIFICATIONS BASED ON FLOWS & VELOCITIES CONTAINED IN THE PROJECT SPECIFICATIONS.
  - 2) DIMENSIONS AND LAYOUT ARE MINIMUM REQUIREMENTS. DIMENSIONS MAY VARY BASED ON MAT SUPPLIER AND UNIQUE INSTALLATION REQUIREMENTS.
  - 3) CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING SIZE AND DIMENSIONS OF MAT INSTALLATION TO THE ENGINEER. REVETMENT MAT TYPE & SUPPLIER MUST BE APPROVED BY THE ENGINEER.
  - 4) EARTH ANCHOR LOCKING SYSTEM SHALL BE DRIVEN WITH HYDRAULIC/PNEUMATIC EQUIPMENT TO PROPER DEPTH PER MANUFACTURER'S SPECIFICATIONS. SHOP DRAWINGS TO BE APPROVED BY THE ENGINEER.

**LEGEND**

	LIMITS OF EXISTING WETLANDS
	ARTICULATED BLOCK REVETMENT MAT SURFACE LIMITS
	RIPRAP CLASS A5
	EARTH ANCHOR

FILE NAME = M:\755-010 Blivin Phase II\CADD\Sheets\755010-shr-rev1.dwg

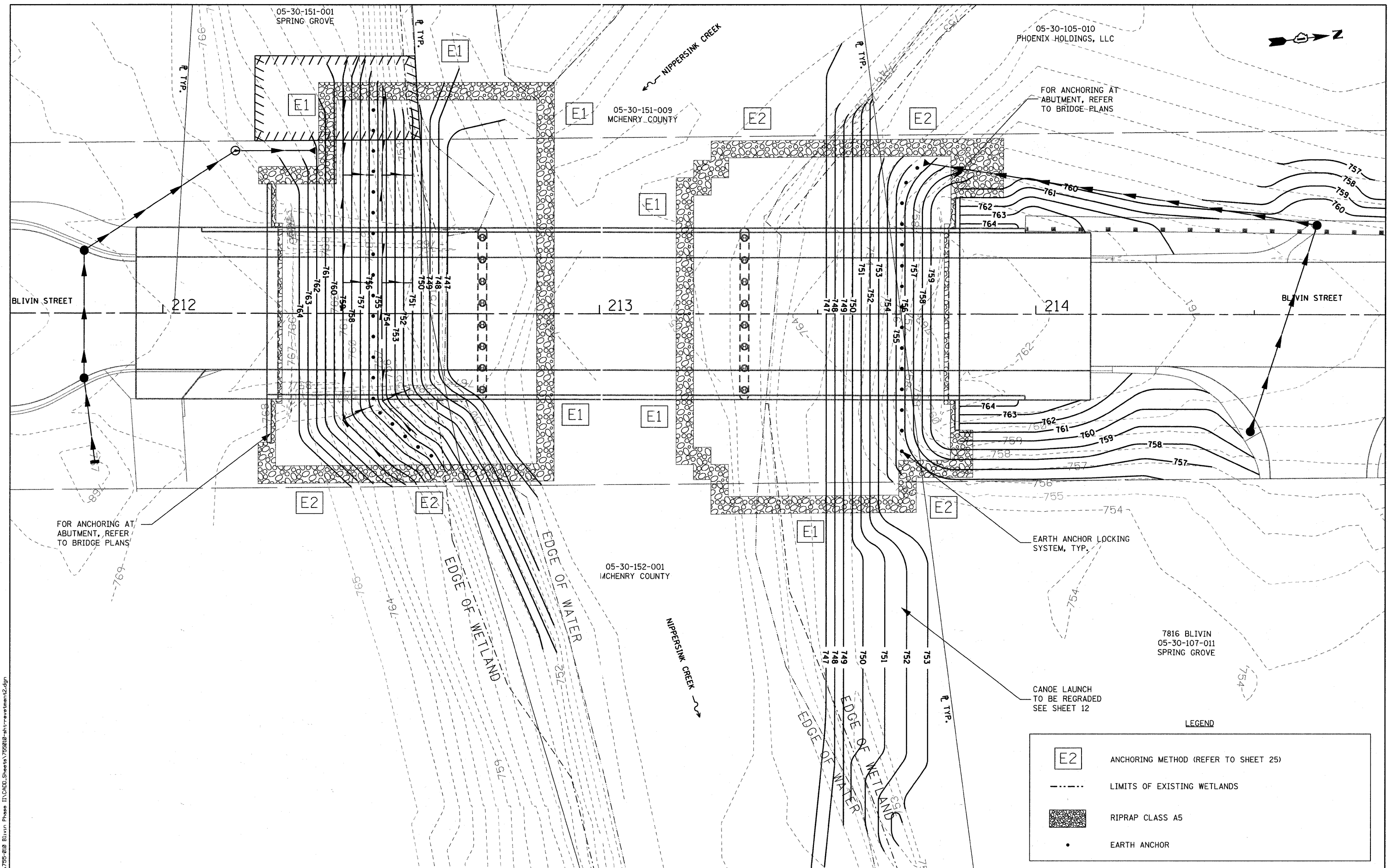
**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 10.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER NIPPERSINK CREEK**

<b>REVETMENT MAT LAYOUT</b>		
SCALE: 1"=10'	SHEET NO. 23 OF 69 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	23
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				



FILE NAME = W:\755-010 Blivin Phase I\CAD\Drawings\755010-sh-r-revetment2.dgn

**BL** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 10,0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

**BLIVIN STREET OVER  
NIPPERSINK CREEK**

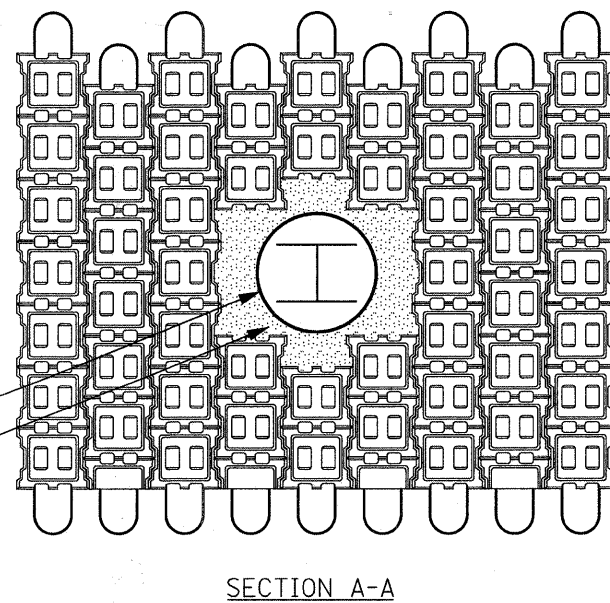
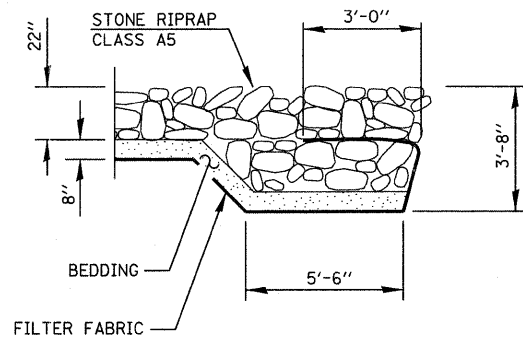
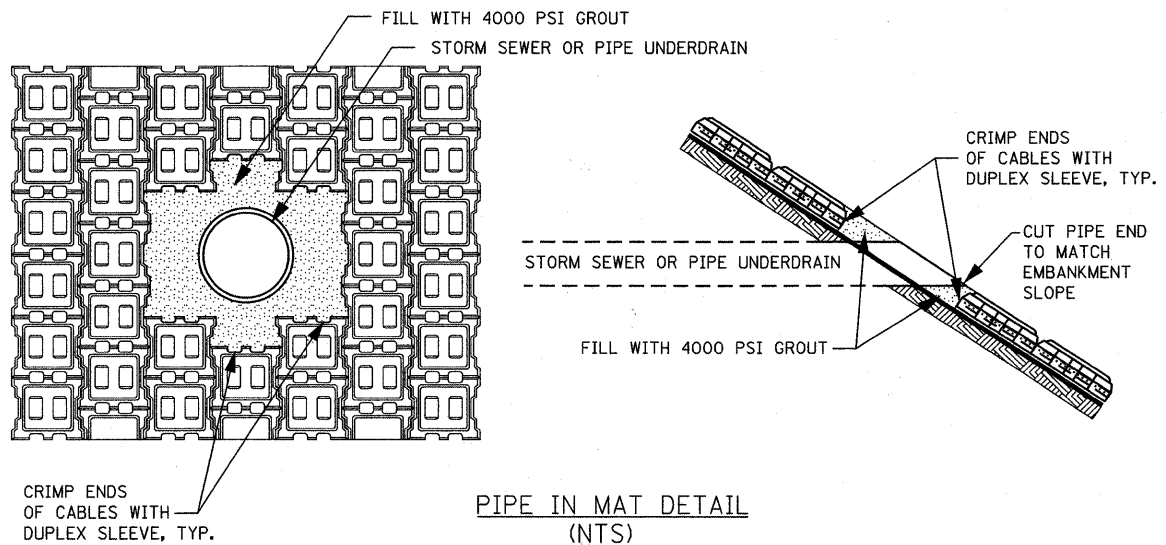
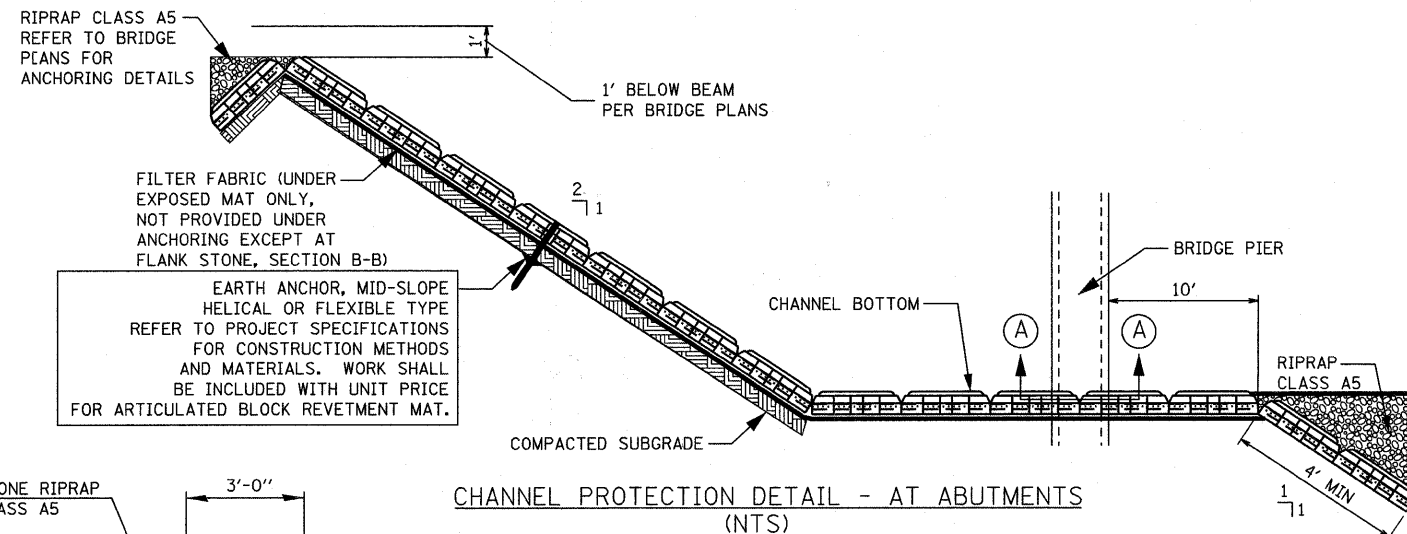
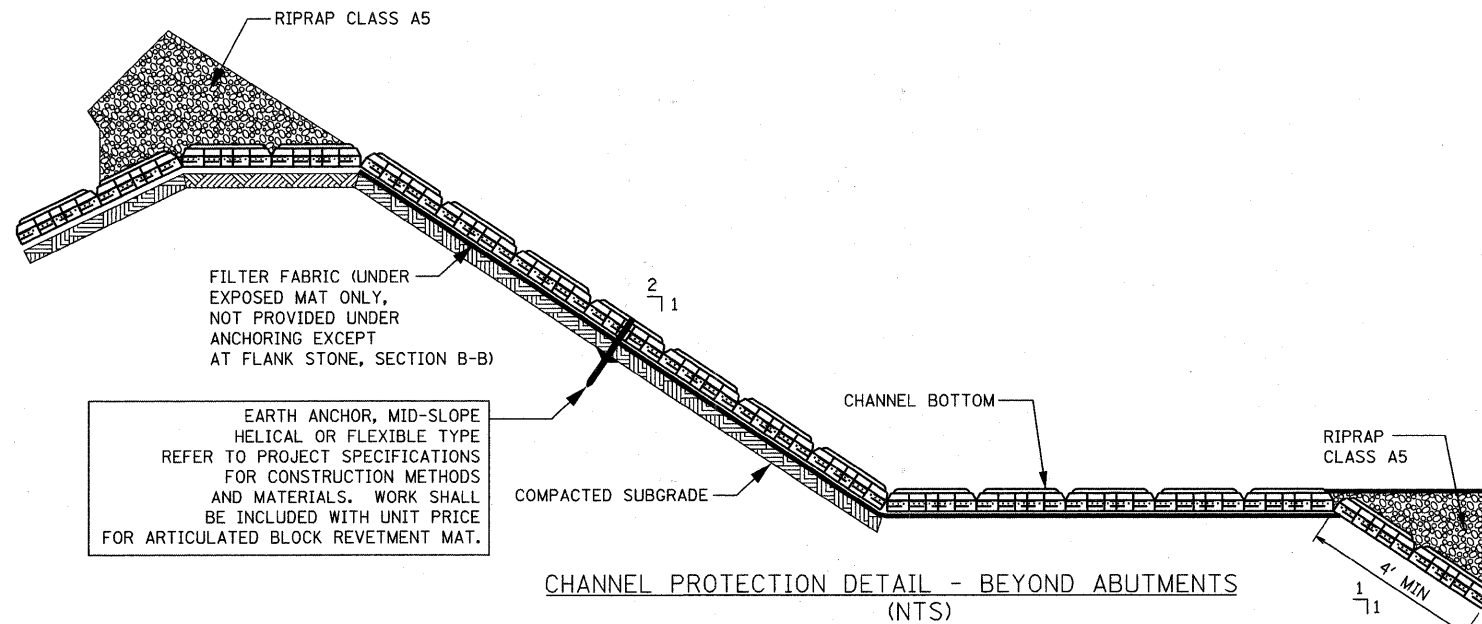
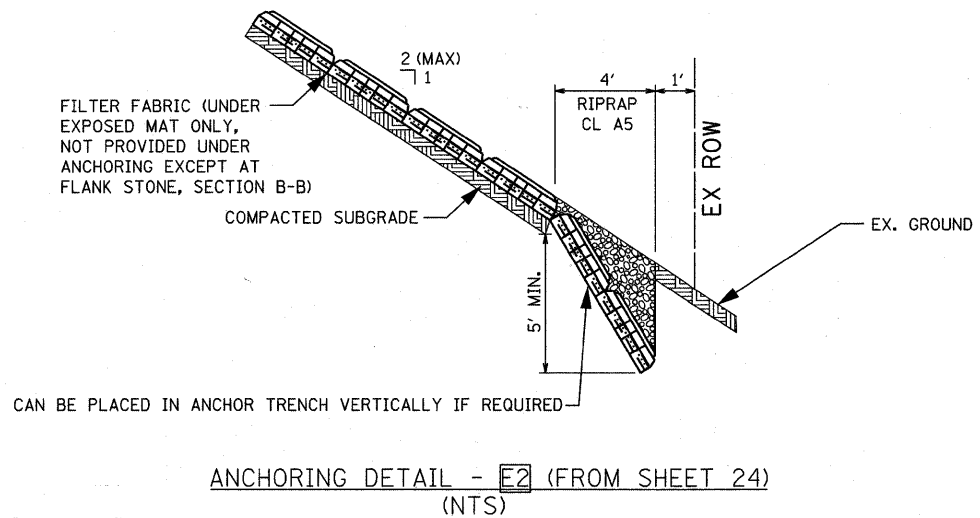
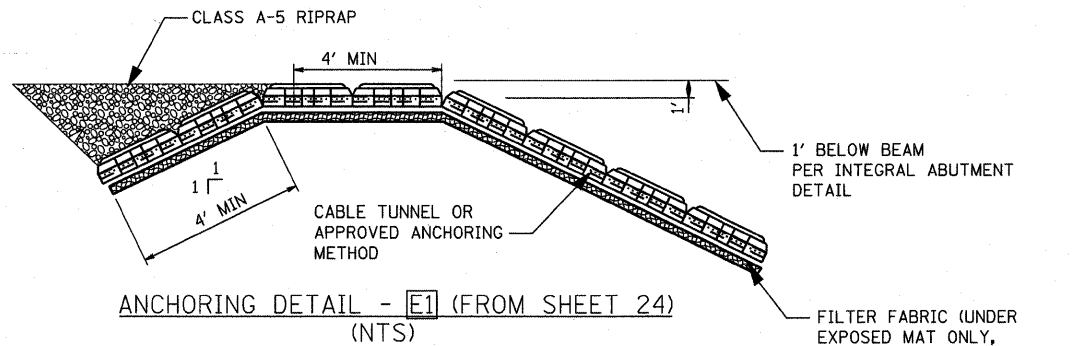
**REVETMENT MAT GRADING PLAN  
UNDERNEATH BRIDGE**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	24
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				

**LEGEND**

<span style="border: 1px solid black; padding: 2px;">E2</span>	ANCHORING METHOD (REFER TO SHEET 25)
-----	LIMITS OF EXISTING WETLANDS
	RIPRAP CLASS A5
•	EARTH ANCHOR

SCALE: 1"=10'      SHEET NO. 24 OF 69 SHEETS      STA.      TO STA.



FILE NAME = W:\95-010 Blvin Phase II\CADD\_Sheets\95-010-01-11-rev01.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbrucke1meyer  
PLOT SCALE = 20.0000' / IN.  
PLOT DATE = 4/6/2011

DESIGNED - DBB  
DRAWN - DBB  
CHECKED - CRF  
DATE - 03-28-11

REVISED -  
REVISED -  
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REVISED -

**BLVIN STREET OVER  
NIPPERSINK CREEK**

**REVETMENT MAT DETAILS**

SCALE: N.T.S. SHEET NO. 25 OF 69 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	25
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				





**GENERAL NOTES**

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts (in painted areas and M164 Type 3 in unpainted areas). Bolts 7/8 in. φ, holes 15/16 in. φ, unless otherwise noted.

Calculated weight of Structural Steel = 125,850 lb.

All structural steel shall be AASHTO M 270 Grade 50W. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

No field welding is permitted except as specified in the contract documents.

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

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

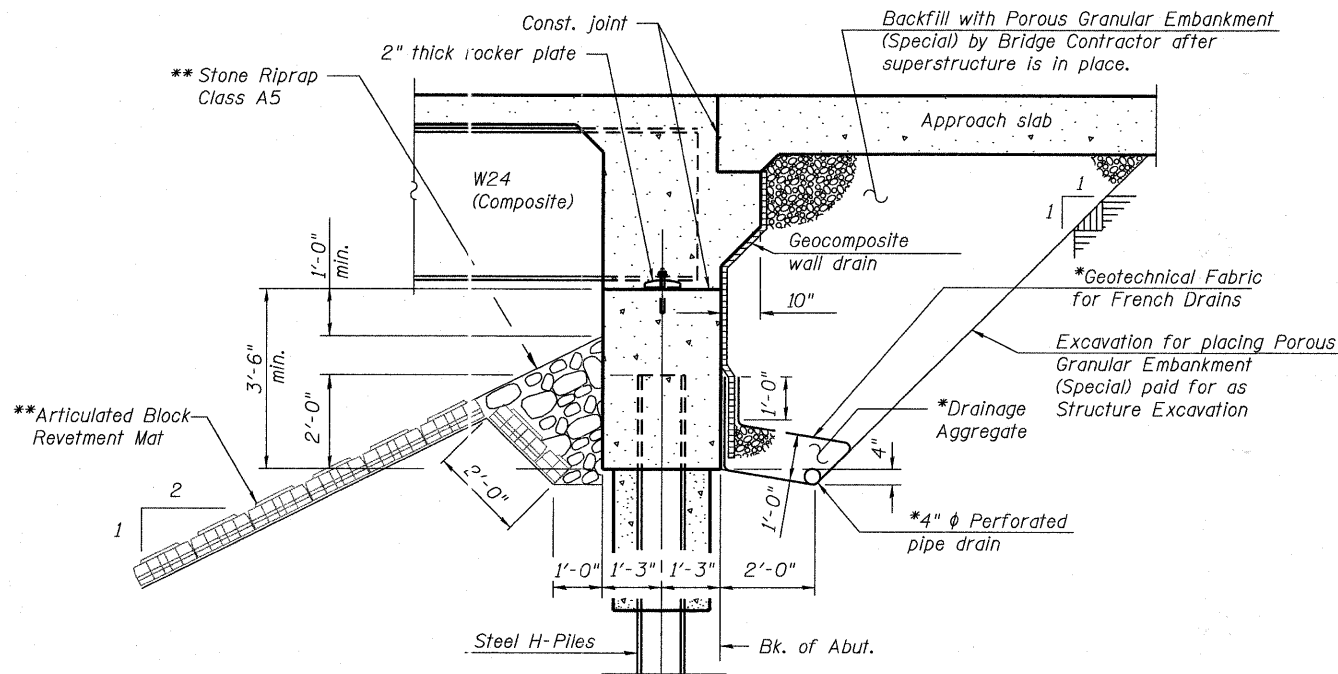
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 in. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

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

The contractor is advised that the existing structure contains members that are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the existing structure when developing construction procedures for removal. See Special Provision for "Demolition Plans for Removal of Existing Structures".

\*\*\* A temporary cofferdam system is shown in the Erosion and Sediment Control Details for the installation of articulated concrete block revetment. Contractor shall coordinate Underwater Structure Excavation Protection with this work.



**SECTION THRU INTEGRAL ABUTMENT**

\*Included in the cost of Pipe Underdrains for Structures.  
 \*\*Included in the cost of revetment mat items, see Roadway Plans.

Note:  
 All drainage system components shall extend to 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 Article 601.05 of the Standard Specifications and Highway Standard 601101). \*

NIPPERSINK CREEK  
 BUILT 201 BY McHENRY COUNTY  
 DIVISION OF TRANSPORTATION  
 SEC. 08-00355-00-BR  
 STA. 213+03.19  
 STR. NO. 056-3191 LOADING HL-93

**NAME PLATE**  
 See Std. 515001

**INDEX OF SHEETS**

1. General Plan and Elevation
2. Index, General Notes, Name Plate, and Section thru Abutment
3. Top of Slab Elevations
4. Top of Slab Elevations
5. Top of Approach Slab Elevations
6. Superstructure Plan and Section
7. Sidewalk Plan and Elevation
8. Diaphragm Details
9. Superstructure Details
10. South Bridge Approach Slab Plan
11. North Bridge Approach Slab Plan
12. Approach Slab Details
13. Parapet Railing Details
14. Framing Plan
15. Structural Steel Details
16. Bearing Details
17. South Abutment
18. North Abutment
19. Piers 1 & 2
20. H-Piles (F-HP)
21. Bar Splicer Details (BSD-1)
22. Cantilever Forming Bracket (SB-1)
23. Boring Logs
24. Boring Logs
25. Boring Logs
26. Boring Logs
27. Boring Logs
28. Boring Logs

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	113	113
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	267	267
Concrete Structures	Cu. Yd.	-	84.9	84.9
Concrete Superstructure	Cu. Yd.	386.4	-	386.4
Bridge Deck Grooving	Sq. Yd.	584	-	584
Concrete Encasement	Cu. Yd.	-	61.0	61.0
Protective Coat	Sq. Yd.	1,095	-	1,095
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	3,276	-	3,276
Reinforcement Bars, Epoxy Coated	Pound	81,350	8,210	89,560
Bar Splicers	Each	82	-	82
Furnishing Steel Piles HP 14X73	Foot	-	1,222	1,222
Test Pile, Steel HP 14X73	Each	-	4	4
Driving Piles	Foot	-	1,222	1,222
Name Plates	Each	1	-	1
Anchor Bolts, 1" φ	Each	-	48	48
Geocomposite Wall Drain	Sq. Yd.	-	52	52
Pipe Underdrains for Structures, 4"	Foot	-	122	122
Parapet Railing	Foot	354	-	354
Slope Wall Removal	Sq. Yd.	-	440	440
Form Liner Textured Surface, Special	Sq. Ft.	1,691	-	1,691
*** Underwater Structure Excavation Protection-Location 1	Each	-	1	1
*** Underwater Structure Excavation Protection-Location 2	Each	-	1	1

FILE NAME = M:\755-010 Blvin Phase II\CADD Sheets\Structure\755-010\_SHT-02\_S- GENERAL NOTES AND INDEX.dgn

**Bollinger, Lach & Associates, Inc.**  
 TASCA, ILLINOIS

USER NAME = gonzo10  
 PLOT SCALE =  
 PLOT DATE = 3/25/2011

DESIGNED - SRT  
 CHECKED - JJI  
 DRAWN - GM  
 CHECKED - JJI

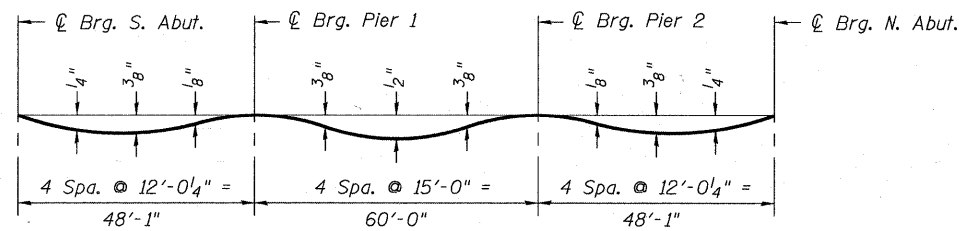
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**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLVIN STREET OVER NIPPERSINK CREEK**

**GENERAL NOTES, INDEX, BILL OF MATERIAL**  
**STRUCTURE NO. 056-3191**

SCALE: SHEET NO. 2 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	27
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	

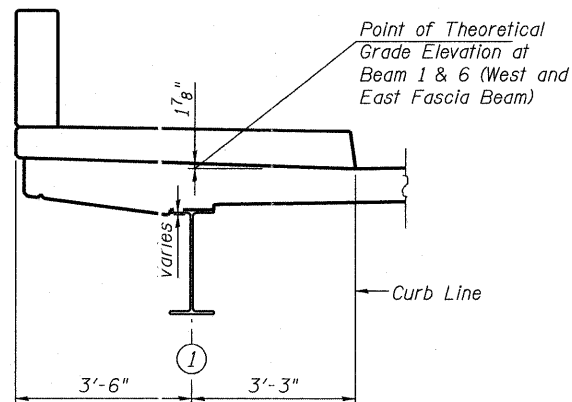


**DEAD LOAD DEFLECTION DIAGRAM**

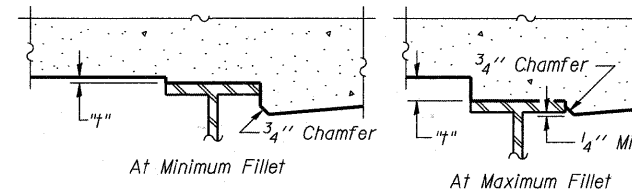
(Includes weight of concrete only.)

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 below and on Sheet 4 of 28.



**SECTION THRU SIDEWALK**

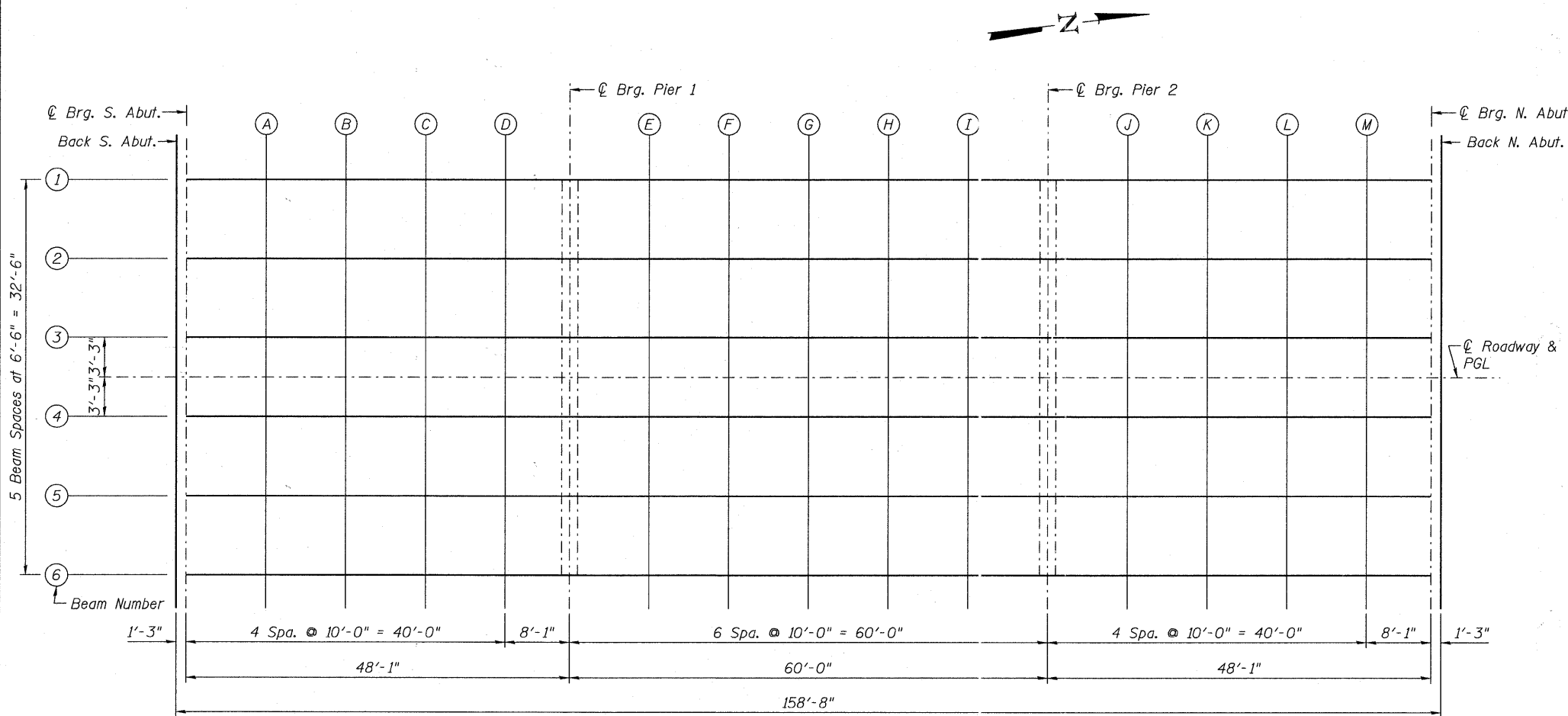


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Sheets 3 and 4. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**

**BEAM #1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	-16.25	768.27	768.27
CL South Abut.	212+25.11	-16.25	768.23	768.23
A	212+35.11	-16.25	767.92	767.94
B	212+45.11	-16.25	767.61	767.64
C	212+55.11	-16.25	767.30	767.32
D	212+65.11	-16.25	766.98	766.99
CL Brg. Pier 1	212+73.19	-16.25	766.73	766.73
E	212+83.19	-16.25	766.42	766.44
F	212+93.19	-16.25	766.11	766.14
G	213+03.19	-16.25	765.80	765.84
H	213+13.19	-16.25	765.48	765.52
I	213+23.19	-16.25	765.17	765.19
CL Brg. Pier 2	213+33.19	-16.25	764.86	764.86
J	213+43.19	-16.25	764.55	764.56
K	213+53.19	-16.25	764.24	764.26
L	213+63.19	-16.25	763.92	763.96
M	213+73.19	-16.25	763.61	763.63
CL North Abut.	213+81.28	-16.25	763.36	763.36
Back of North Abut.	213+82.53	-16.25	763.32	763.32



**PLAN**

FILE NAME = M:\755-210 Blivin Phase II\CADD\_Sheets\Structural\755-210\_S-7\_top\_of\_slab1.dgn

	USER NAME = gonzalo	DESIGNED - SRT	REVISED -	<b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b>	<b>TOP OF SLAB ELEVATIONS</b> <b>STRUCTURE NO. 056-3191</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -		SCALE:	SHEET NO. 3 OF 28 SHEETS	STA.	TO STA.	08-00355-00-BR	MCHENRY	69
	PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -							CONTRACT NO. 63583	
		CHECKED - JJI	REVISED -							ILLINOIS FED. AID PROJECT	



**BEAM #2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	-9.75	768.37	768.37
CL South Abut.	212+25.11	-9.75	768.33	768.33
A	212+35.11	-9.75	768.02	768.04
B	212+45.11	-9.75	767.71	767.74
C	212+55.11	-9.75	767.40	767.42
D	212+65.11	-9.75	767.09	767.09
CL Brg. Pier 1	212+73.19	-9.75	766.83	766.83
E	212+83.19	-9.75	766.52	766.54
F	212+93.19	-9.75	766.21	766.25
G	213+03.19	-9.75	765.90	765.94
H	213+13.19	-9.75	765.59	765.62
I	213+23.19	-9.75	765.27	765.29
CL Brg. Pier 2	213+33.19	-9.75	764.96	764.96
J	213+43.19	-9.75	764.65	764.66
K	213+53.19	-9.75	764.34	764.36
L	213+63.19	-9.75	764.03	764.06
M	213+73.19	-9.75	763.71	763.73
CL North Abut.	213+81.28	-9.75	763.46	763.46
Back of North Abut.	213+82.53	-9.75	763.42	763.42

**BEAM #3**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	-3.25	768.47	768.47
CL South Abut.	212+25.11	-3.25	768.44	768.44
A	212+35.11	-3.25	768.12	768.15
B	212+45.11	-3.25	767.81	767.84
C	212+55.11	-3.25	767.50	767.52
D	212+65.11	-3.25	767.19	767.19
CL Brg. Pier 1	212+73.19	-3.25	766.94	766.94
E	212+83.19	-3.25	766.62	766.64
F	212+93.19	-3.25	766.31	766.35
G	213+03.19	-3.25	766.00	766.04
H	213+13.19	-3.25	765.69	765.72
I	213+23.19	-3.25	765.38	765.39
CL Brg. Pier 2	213+33.19	-3.25	765.06	765.06
J	213+43.19	-3.25	764.75	764.76
K	213+53.19	-3.25	764.44	764.47
L	213+63.19	-3.25	764.13	764.16
M	213+73.19	-3.25	763.82	763.83
CL North Abut.	213+81.28	-3.25	763.56	763.56
Back of North Abut.	213+82.53	-3.25	763.52	763.52

**☉ ROADWAY & PGL**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	0.00	768.53	768.53
CL South Abut.	212+25.11	0.00	768.49	768.49
A	212+35.11	0.00	768.17	768.20
B	212+45.11	0.00	767.86	767.89
C	212+55.11	0.00	767.55	767.57
D	212+65.11	0.00	767.24	767.25
CL Brg. Pier 1	212+73.19	0.00	766.99	766.99
E	212+83.19	0.00	766.67	766.69
F	212+93.19	0.00	766.36	766.40
G	213+03.19	0.00	766.05	766.10
H	213+13.19	0.00	765.74	765.77
I	213+23.19	0.00	765.43	765.44
CL Brg. Pier 2	213+33.19	0.00	765.11	765.11
J	213+43.19	0.00	764.80	764.81
K	213+53.19	0.00	764.49	764.52
L	213+63.19	0.00	764.18	764.21
M	213+73.19	0.00	763.87	763.88
CL North Abut.	213+81.28	0.00	763.61	763.61
Back of North Abut.	213+82.53	0.00	763.58	763.58

**BEAM #4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	3.25	768.47	768.47
CL South Abut.	212+25.11	3.25	768.44	768.44
A	212+35.11	3.25	768.12	768.15
B	212+45.11	3.25	767.81	767.84
C	212+55.11	3.25	767.50	767.52
D	212+65.11	3.25	767.19	767.19
CL Brg. Pier 1	212+73.19	3.25	766.94	766.94
E	212+83.19	3.25	766.62	766.64
F	212+93.19	3.25	766.31	766.35
G	213+03.19	3.25	766.00	766.04
H	213+13.19	3.25	765.69	765.72
I	213+23.19	3.25	765.38	765.39
CL Brg. Pier 2	213+33.19	3.25	765.06	765.06
J	213+43.19	3.25	764.75	764.76
K	213+53.19	3.25	764.44	764.47
L	213+63.19	3.25	764.13	764.16
M	213+73.19	3.25	763.82	763.83
CL North Abut.	213+81.28	3.25	763.56	763.56
Back of North Abut.	213+82.53	3.25	763.52	763.52

**BEAM #5**

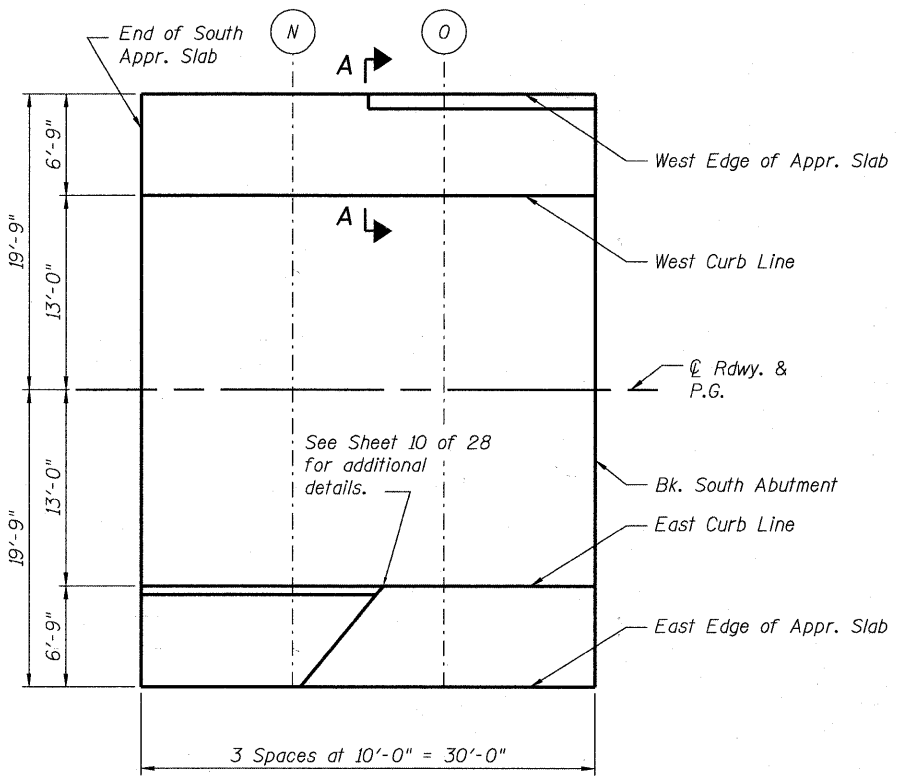
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	9.75	768.37	768.37
CL South Abut.	212+25.11	9.75	768.33	768.33
A	212+35.11	9.75	768.02	768.04
B	212+45.11	9.75	767.71	767.74
C	212+55.11	9.75	767.40	767.42
D	212+65.11	9.75	767.09	767.09
CL Brg. Pier 1	212+73.19	9.75	766.83	766.83
E	212+83.19	9.75	766.52	766.54
F	212+93.19	9.75	766.21	766.25
G	213+03.19	9.75	765.90	765.94
H	213+13.19	9.75	765.59	765.62
I	213+23.19	9.75	765.27	765.29
CL Brg. Pier 2	213+33.19	9.75	764.96	764.96
J	213+43.19	9.75	764.65	764.66
K	213+53.19	9.75	764.34	764.36
L	213+63.19	9.75	764.03	764.06
M	213+73.19	9.75	763.71	763.73
CL North Abut.	213+81.28	9.75	763.46	763.46
Back of North Abut.	213+82.53	9.75	763.42	763.42

**BEAM #6**

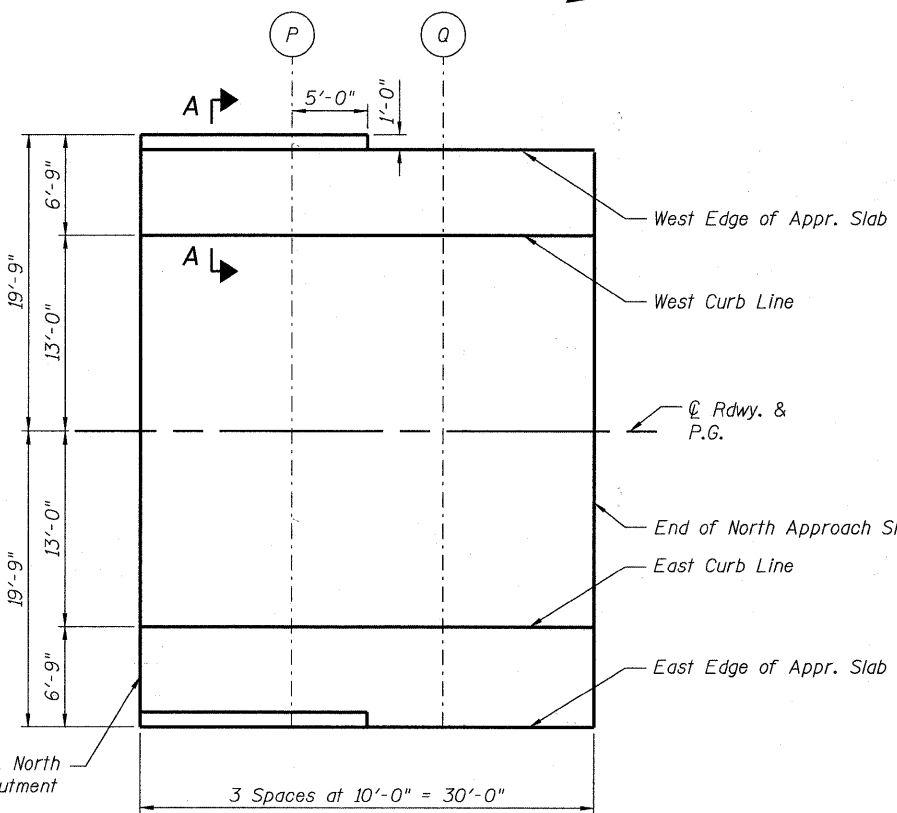
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	212+23.86	16.25	768.27	768.27
CL South Abut.	212+25.11	16.25	768.23	768.23
A	212+35.11	16.25	767.92	767.94
B	212+45.11	16.25	767.61	767.64
C	212+55.11	16.25	767.30	767.32
D	212+65.11	16.25	766.98	766.99
CL Brg. Pier 1	212+73.19	16.25	766.73	766.73
E	212+83.19	16.25	766.42	766.44
F	212+93.19	16.25	766.11	766.14
G	213+03.19	16.25	765.80	765.84
H	213+13.19	16.25	765.48	765.52
I	213+23.19	16.25	765.17	765.19
CL Brg. Pier 2	213+33.19	16.25	764.86	764.86
J	213+43.19	16.25	764.55	764.56
K	213+53.19	16.25	764.24	764.26
L	213+63.19	16.25	763.92	763.96
M	213+73.19	16.25	763.61	763.63
CL North Abut.	213+81.28	16.25	763.36	763.36
Back of North Abut.	213+82.53	16.25	763.32	763.32

FILE NAME = \\N755-010 Blivin Phase II\CADD\_Sheets\Structure\N755-010 SH-04 S-Top of Slab2.dwg

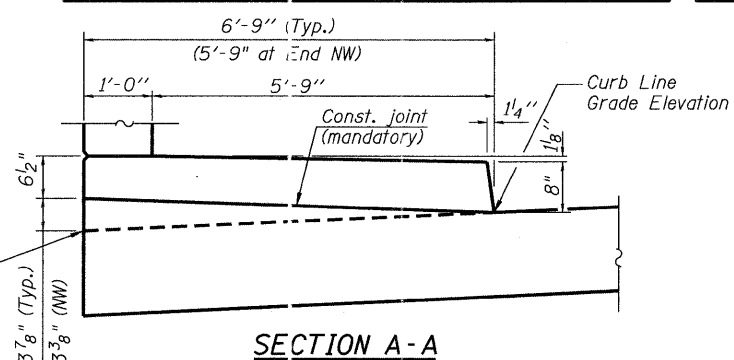
 <b>Bollinger, Lach &amp; Associates, Inc.</b> ITASCA, ILLINOIS	USER NAME = gonzo	DESIGNED - SRT	REVISED -	<b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b>	<b>TOP OF SLAB ELEVATIONS</b> <b>STRUCTURE NO. 056-3191</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -		08-00355-00-BR	MCHENRY	69	29				
	PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -		CONTRACT NO. 63583							
		CHECKED - JJI	REVISED -		SCALE:	SHEET NO. 4 OF 28 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			



**PLAN**  
(South Approach)



**PLAN**  
(North Approach)



**SECTION A-A**

**WEST EDGE OF APPR. SLAB**

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	211+93.86	-19.75	769.15
N	212+03.86	-19.75	768.84
O	212+13.86	-19.75	768.52
Bk. of S. Abut.	212+23.86	-19.75	768.21

**WEST CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	211+93.86	-13.00	769.25
N	212+03.86	-13.00	768.94
O	212+13.86	-13.00	768.63
Bk. of S. Abut.	212+23.86	-13.00	768.32

**☉ ROADWAY & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	211+93.86	0.00	769.46
N	212+03.86	0.00	769.15
O	212+13.86	0.00	768.83
Bk. of S. Abut.	212+23.86	0.00	768.52

**EAST CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	211+93.86	13.00	769.66
N	212+03.86	13.00	769.35
O	212+13.86	13.00	769.04
Bk. of S. Abut.	212+23.86	13.00	768.72

**EAST EDGE OF APPR. SLAB**

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pav't.	211+93.86	19.75	769.77
N	212+03.86	19.75	769.45
O	212+13.86	19.75	769.14
Bk. of S. Abut.	212+23.86	19.75	768.83

**SOUTH APPROACH**

**WEST EDGE OF APPR. SLAB**

Location	Station	Offset	Theoretical Grade Elevations
Bk. of N. Abut.	213+82.53	-19.75	763.26
P	213+92.53	-19.75	762.89
Q	214+02.53	-18.75	762.53
End N. Appr. Pav't.	214+12.53	-18.75	762.16

**WEST CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. of N. Abut.	213+82.53	-13.00	763.37
P	213+92.53	-13.00	762.99
Q	214+02.53	-13.00	762.62
End N. Appr. Pav't.	214+12.53	-13.00	762.25

**☉ ROADWAY & P.G.**

Location	Station	Offset	Theoretical Grade Elevations
Bk. of N. Abut.	213+82.53	0.00	763.57
P	213+92.53	0.00	763.19
Q	214+02.53	0.00	762.82
End N. Appr. Pav't.	214+12.53	0.00	762.45

**EAST CURB LINE**

Location	Station	Offset	Theoretical Grade Elevations
Bk. of N. Abut.	213+82.53	13.00	763.77
P	213+92.53	13.00	763.40
Q	214+02.53	13.00	763.02
End N. Appr. Pav't.	214+12.53	13.00	762.66

**EAST EDGE OF APPR. SLAB**

Location	Station	Offset	Theoretical Grade Elevations
Bk. of N. Abut.	213+82.53	19.75	763.88
P	213+92.53	19.75	763.50
Q	214+02.53	19.75	763.13
End N. Appr. Pav't.	214+12.53	19.75	762.76

**NORTH APPROACH**

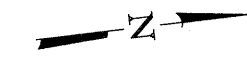
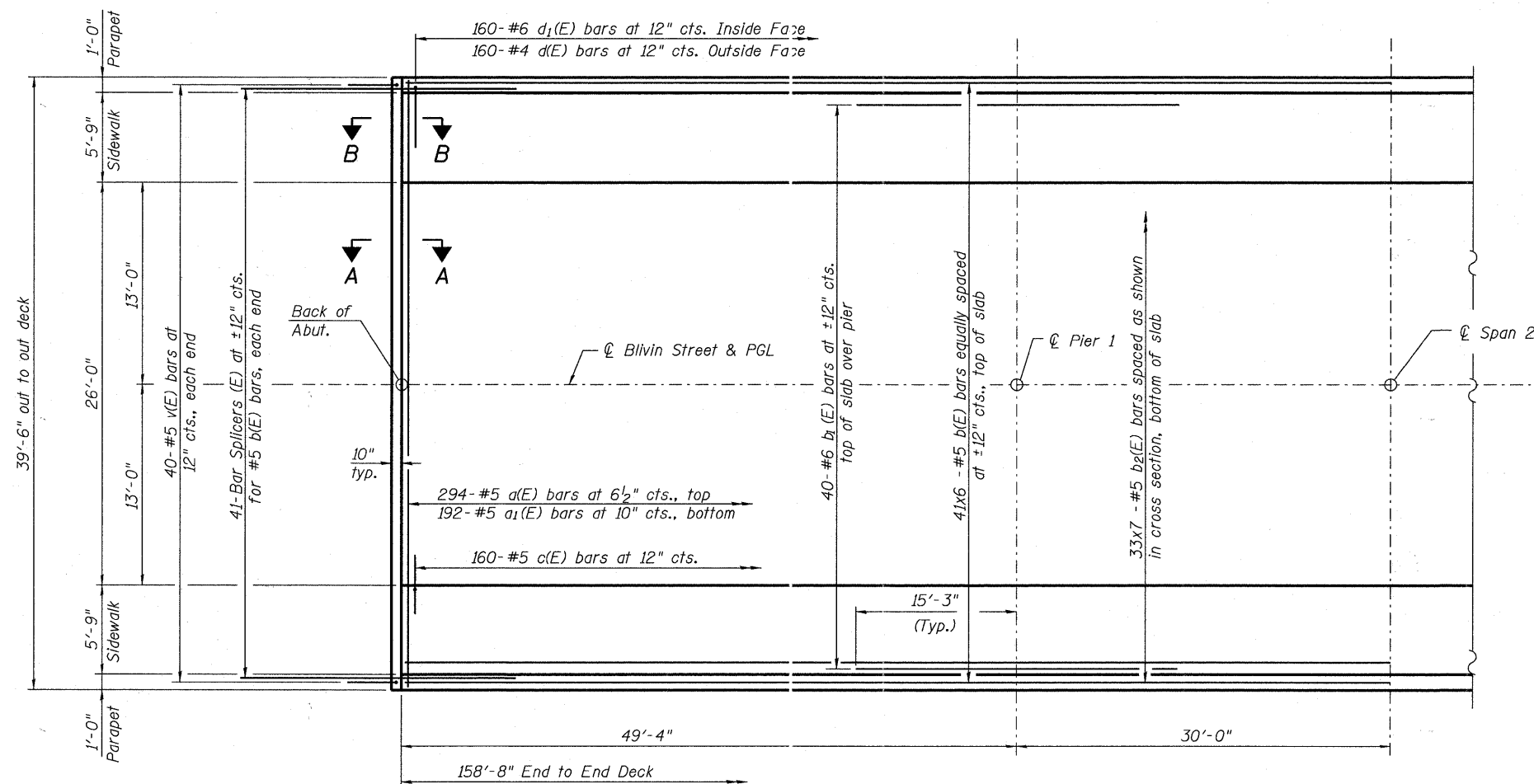
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**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

USER NAME = gonzalo	DESIGNED - SRT	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
	CHECKED - JJI	REVISED -

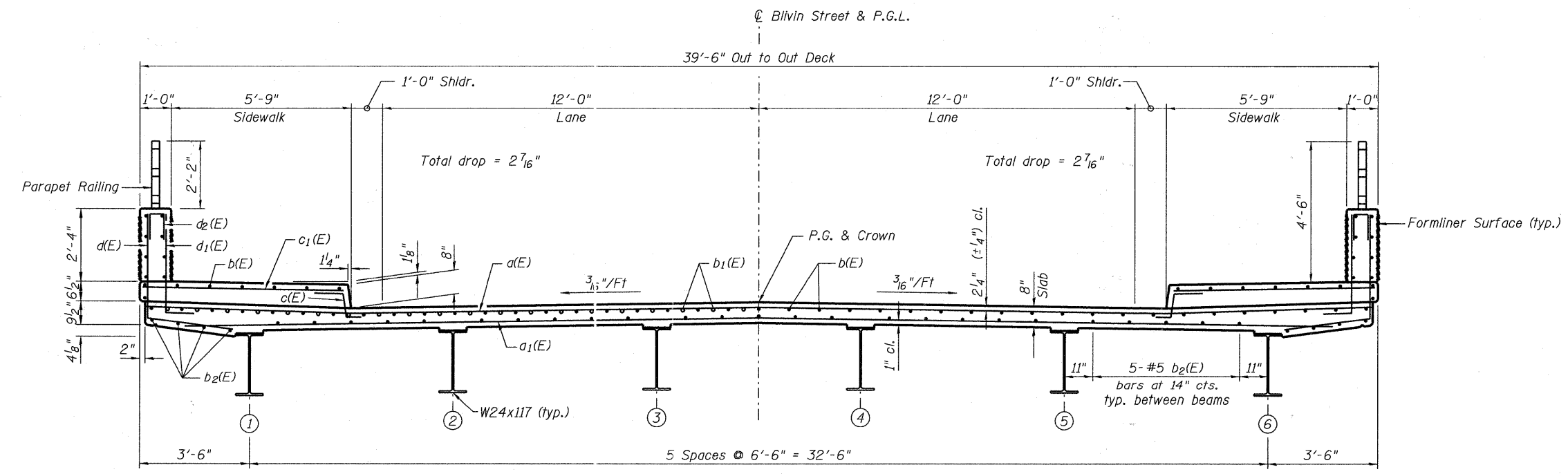
McHENRY COUNTY	TOP OF APPROACH SLAB ELEVATIONS
DIVISION OF TRANSPORTATION	STRUCTURE NO. 056-3191
BLIVIN STREET OVER NIPPERSINK CREEK	SCALE: 5 SHEET NO. 5 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	McHENRY	69	30
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	



Notes:  
 See Sheet 9 of 28 for superstructure details and Bill of Material.  
 Bars indicated thus 39 x 6-#5 etc. indicates 39 lines of bars with 6 lengths per line.  
 See Sheet 7 of 28 for parapet reinforcement.

Minimum Bar Lap  
 #5 Bar = 2'-7"



NEAR PIER

CROSS SECTION  
 (Looking North)

NEAR MIDSPAN

FILE NAME = M:\755-010 Blivin Phase II\CADD\_Sheets\Structure\1755-010\_SHT-06\_S- SUPERSTRUCTURE.dgn

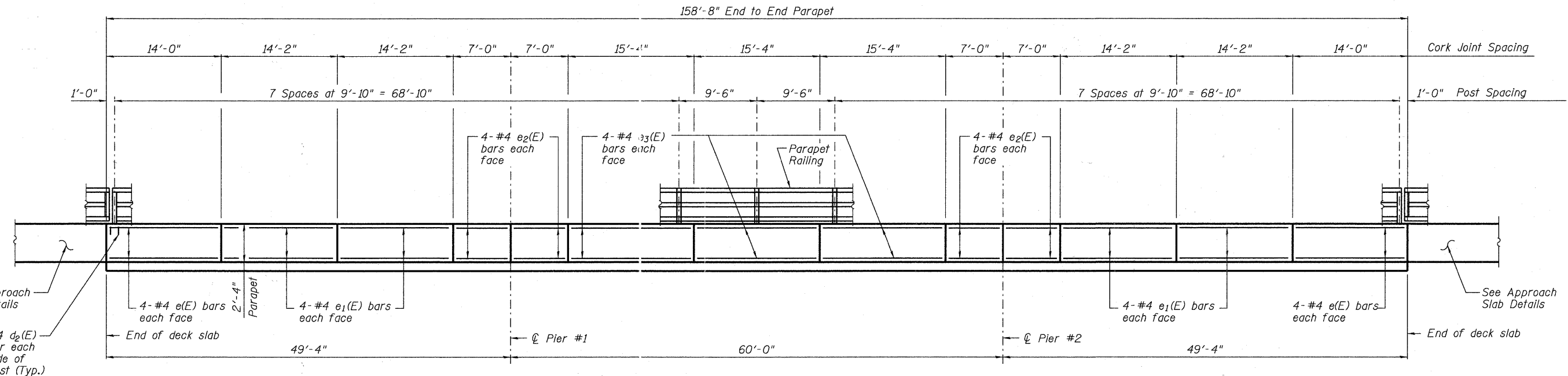
**Bollinger, Lach & Associates, Inc.**  
 ITASCA, ILLINOIS

USER NAME = gonzalo	DESIGNED - SRT	REVISED -
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PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
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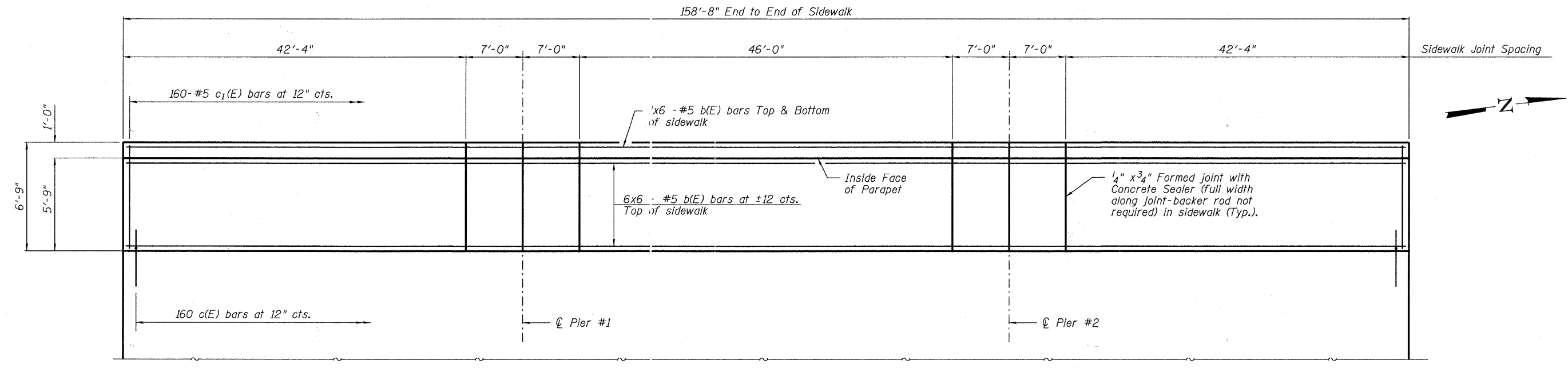
**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

**SUPERSTRUCTURE PLAN AND SECTION**  
**STRUCTURE NO. 056-3191**  
 SCALE: SHEET NO. 6 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHEMRY	69	31
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	



**INSIDE ELEVATION OF WEST PARAPET**  
(East Parapet Similar)



**WEST SIDEWALK PLAN**  
(East Sidewalk Similar)

Minimum Bar Lap  
#5 Bar = 2'-7"

Notes:  
Inside elevation at parapet view is exaggerated vertically to show reinforcement.  
Bars indicated this 6x6-#5 etc. indicates 6 lines of bars with 6 lengths per line.  
See Sheet 9 of 28 for Superstructure Details and Bill of Material.

FILE NAME = H:\755-010 Blivin Phase I\CAD\Drawings\Structural\755-010\_SIDEWALK PLAN AND PARAPET ELEV.dwg

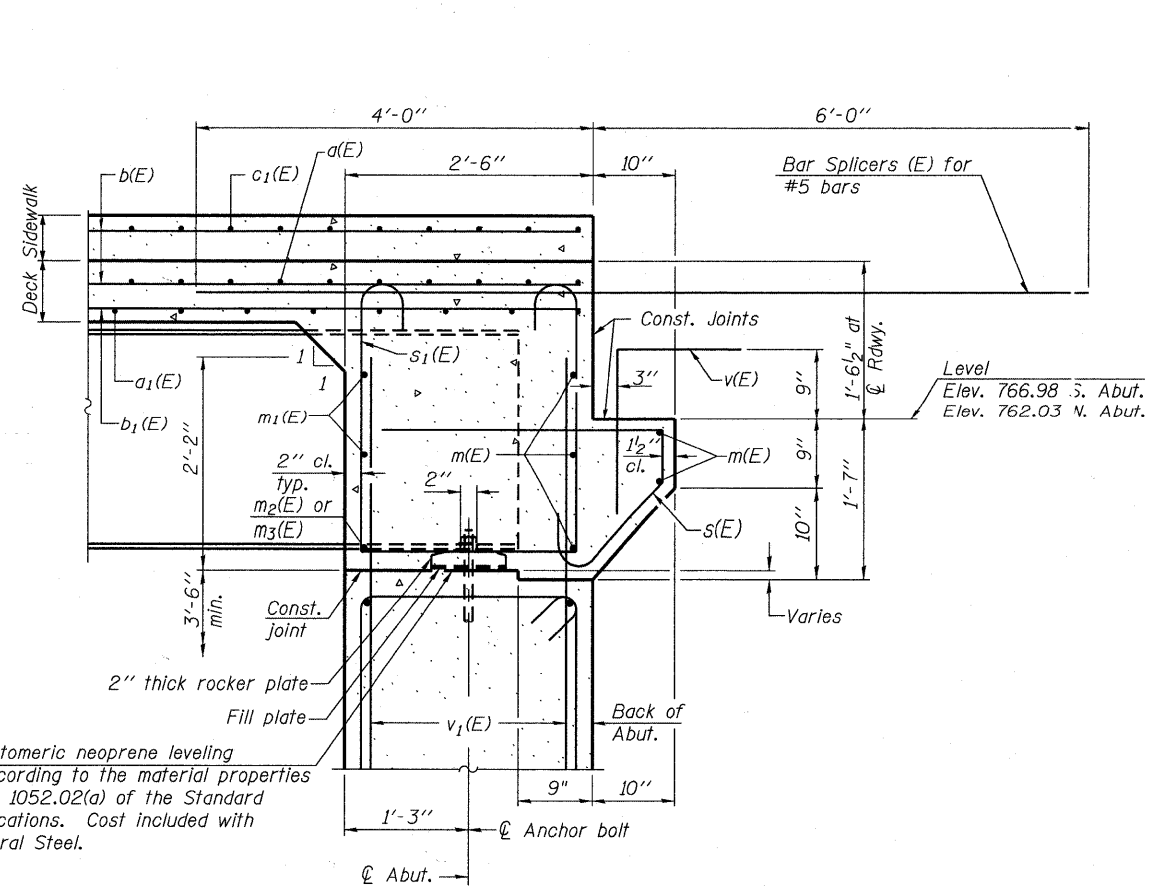
**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

USER NAME = gonzalo	DESIGNED - SRT	REVISED -
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PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
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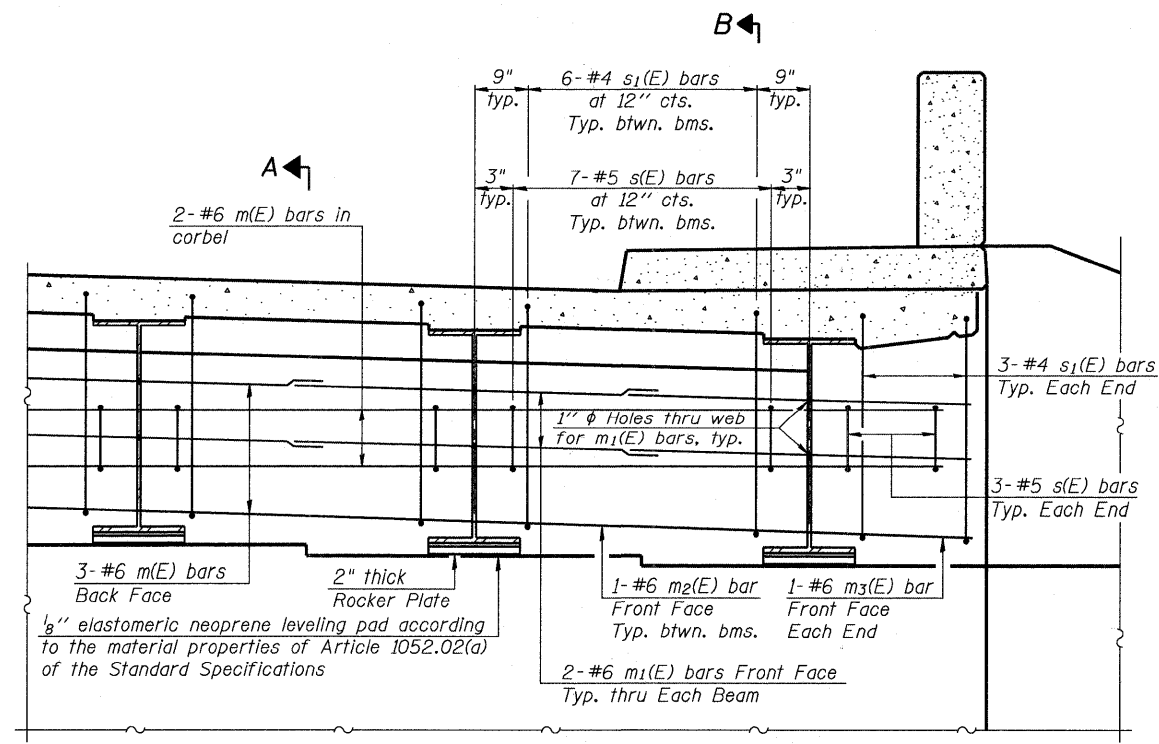
**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

<b>SIDEWALK PLAN AND PARAPET ELEVATION</b>	
<b>STRUCTURE NO. 056-3191</b>	
SCALE:	SHEET NO. 7 OF 28 SHEETS STA. TO STA.

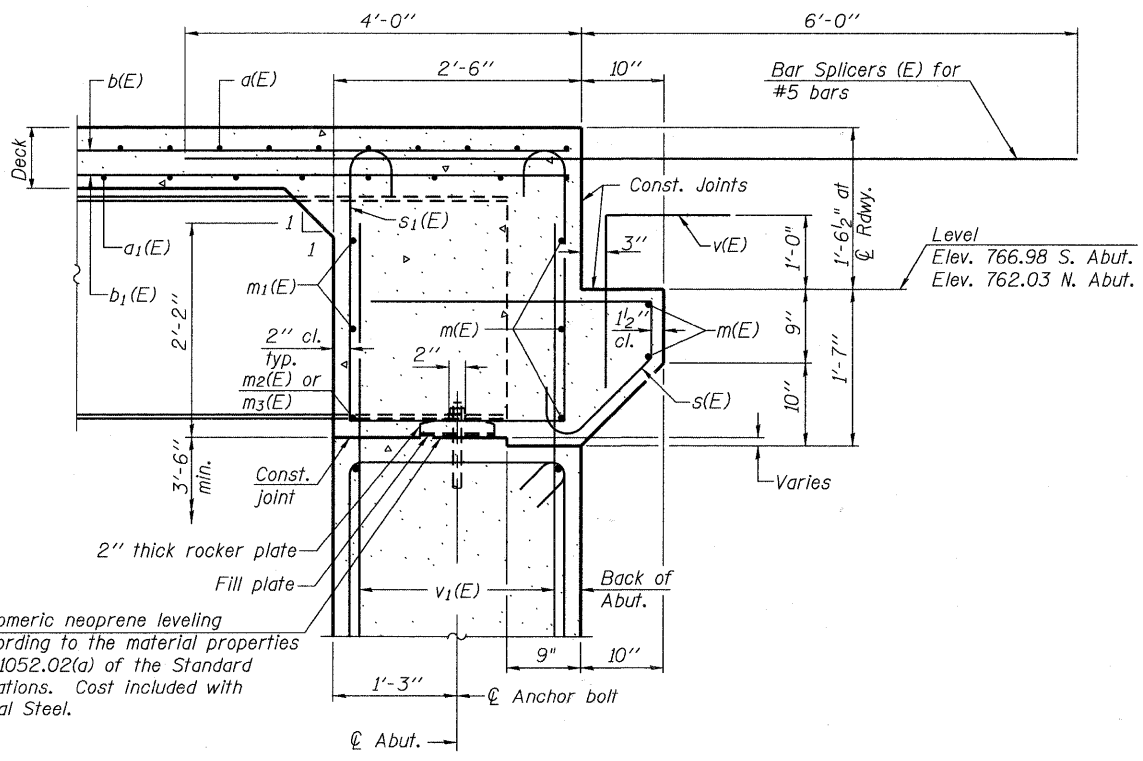
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	32
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	



**SECTION B-B**



**DIAPHRAGM ELEVATION AT ABUTMENT**



**SECTION A-A**

Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 28.  
 Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 28.  
 For details of bars s(E) & s1(E) see sheet 9 of 28.  
 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.

Minimum Bar Lap  
 #6 bar = 3'-4"

FILE NAME = M:\755-010 Blvin Phase II\CADD\Sheets\Structural\755-010\_SHT-08\_S-INTEGRAL ABUTMENT DIA DETAILS.dgn

SI-DS2

7-1-10

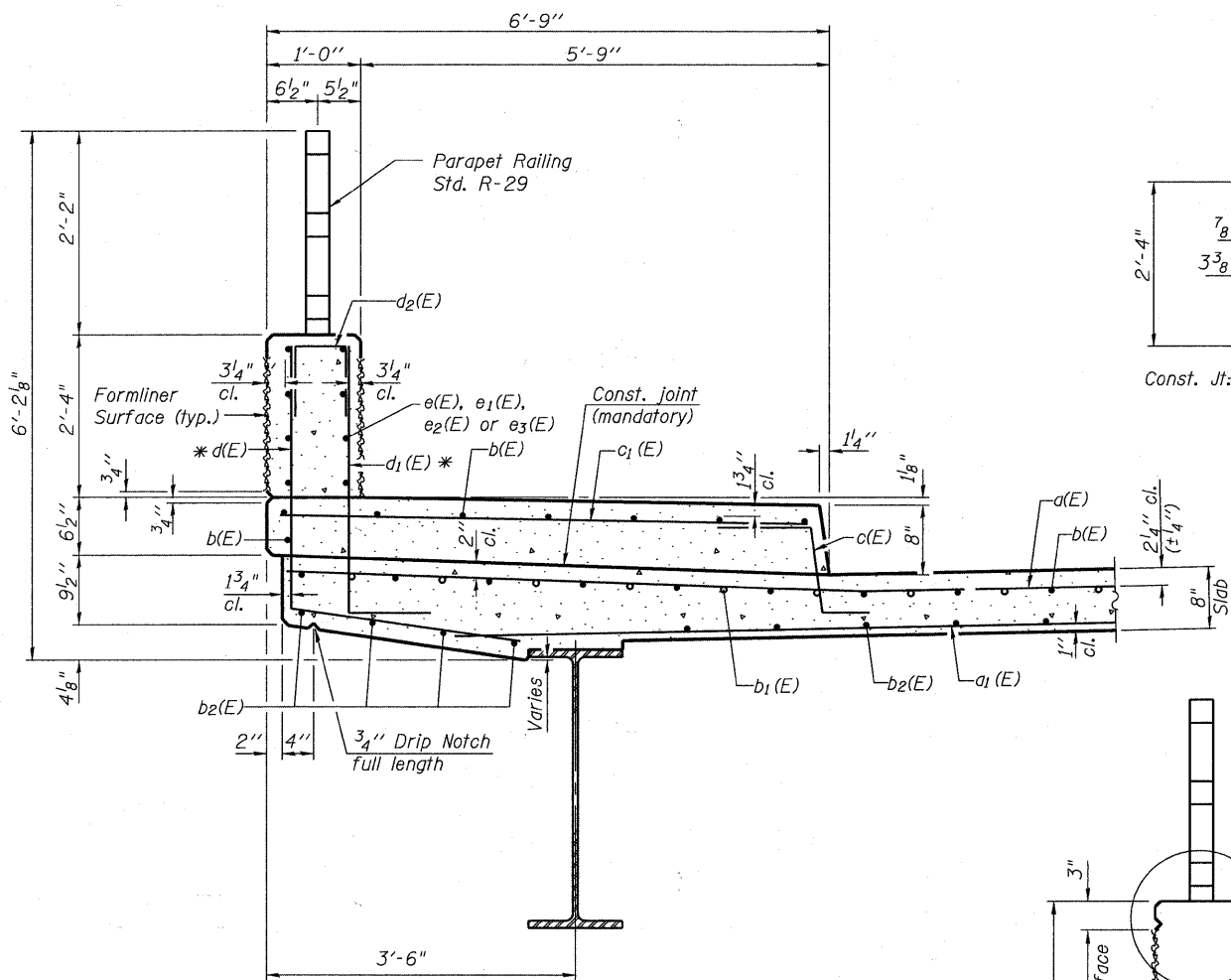
**Bollinger, Lach & Associates, Inc.**  
 ITASCA, ILLINOIS

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PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
	CHECKED - JJI	REVISED -

**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLVIN STREET OVER NIPPERSINK CREEK**

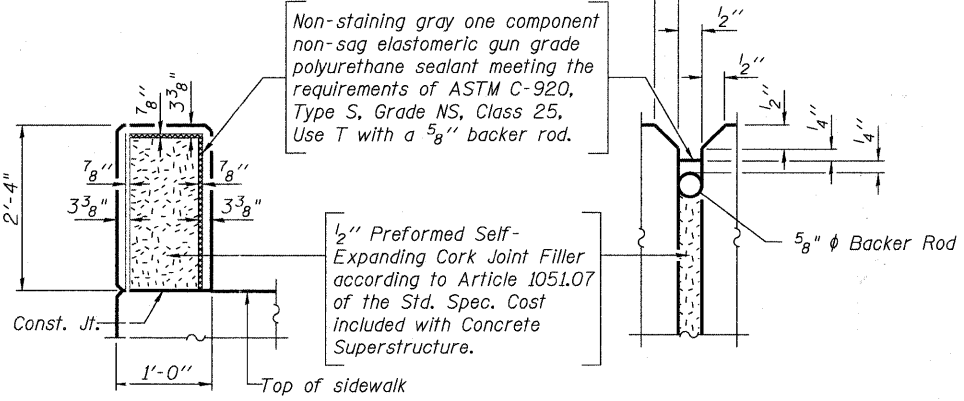
**INTEGRAL ABUTMENT DIAPHRAGM DETAILS**  
**STRUCTURE NO. 056-3191**  
 SCALE: SHEET NO. 8 OF 28 SHEETS STA. TO STA.

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			CONTRACT NO. 63583	
ILLINOIS FED. AID PROJECT				

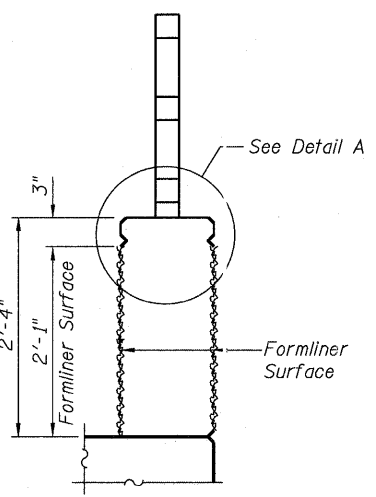


**SECTION THRU SIDEWALK**

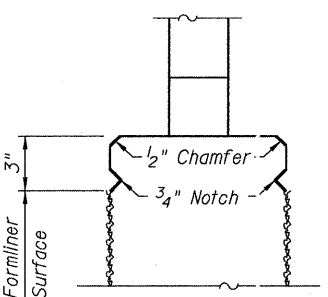
\* Bend d(E) and d1(E) as required longitudinally to clear rail post anchor, maintain minimum reinforcement clearance.



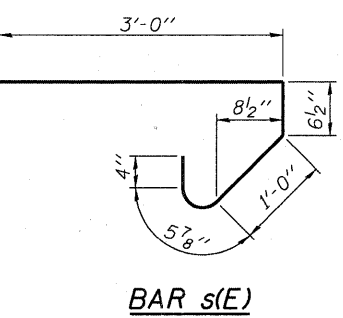
**PARAPET JOINT DETAILS**



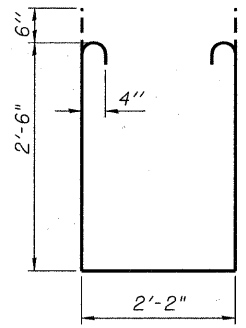
**PARAPET FORMLINER**



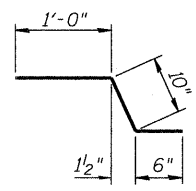
**DETAIL A**



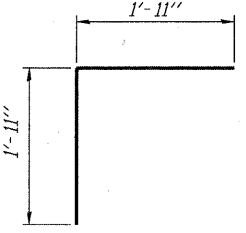
**BAR s(E)**



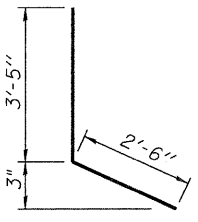
**BAR s1(E)**



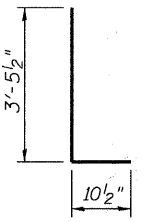
**BAR c(E)**



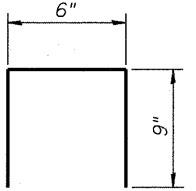
**BAR v(E)**



**BAR d(E)**



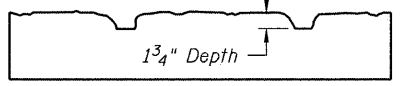
**BAR d1(E)**



**BAR d2(E)**

**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	294	#5	38'-10"	—
a1(E)	192	#5	35'-6"	—
b(E)	342	#5	28'-8"	—
b1(E)	80	#6	30'-6"	—
b2(E)	231	#5	24'-11"	—
c(E)	320	#5	2'-4"	—
c1(E)	320	#5	6'-4"	—
d(E)	320	#4	5'-11"	—
d1(E)	320	#6	4'-4"	—
d2(E)	68	#4	2'-0"	—
e(E)	32	#4	13'-8"	—
e1(E)	64	#4	13'-10"	—
e2(E)	64	#4	6'-8"	—
e3(E)	48	#4	15'-0"	—
m(E)	10	#6	39'-2"	—
m1(E)	24	#6	9'-10"	—
m2(E)	10	#6	6'-1"	—
m3(E)	4	#6	3'-1"	—
s(E)	82	#5	5'-5"	—
s1(E)	72	#4	8'-2"	—
v(E)	80	#5	3'-10"	—
Protective Coat		Sq. Yd.	802	
Reinforcement Bars, Epoxy Coated		Pound	49,130	
Concrete Superstructure		Cu. Yds.	268.3	
Bridge Deck Grooving		Sq. Yd.	424	
Form Liner Textured Surface, Special		Sq. Ft.	1481	



**FORM LINER TEXTURE DETAIL**

See Special Provisions

Note:  
 Custom Rock Form Liner Textured Surface to be used on inside and outside faces of Parapet Utilize formliner pattern #1218 or equivalent, no dye is to be used.  
 The depth of relief of the Form Liner Textured Surface is limited to 1 3/4". The relief should not compromise the reinforcement clearance in the Parapet.

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PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
	CHECKED - JJI	REVISED -

**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

**SUPERSTRUCTURE DETAILS**  
**STRUCTURE NO. 056-3191**

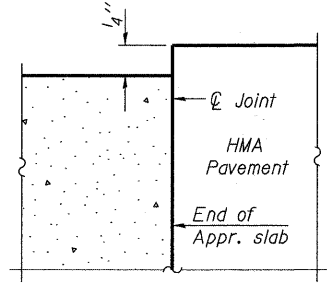
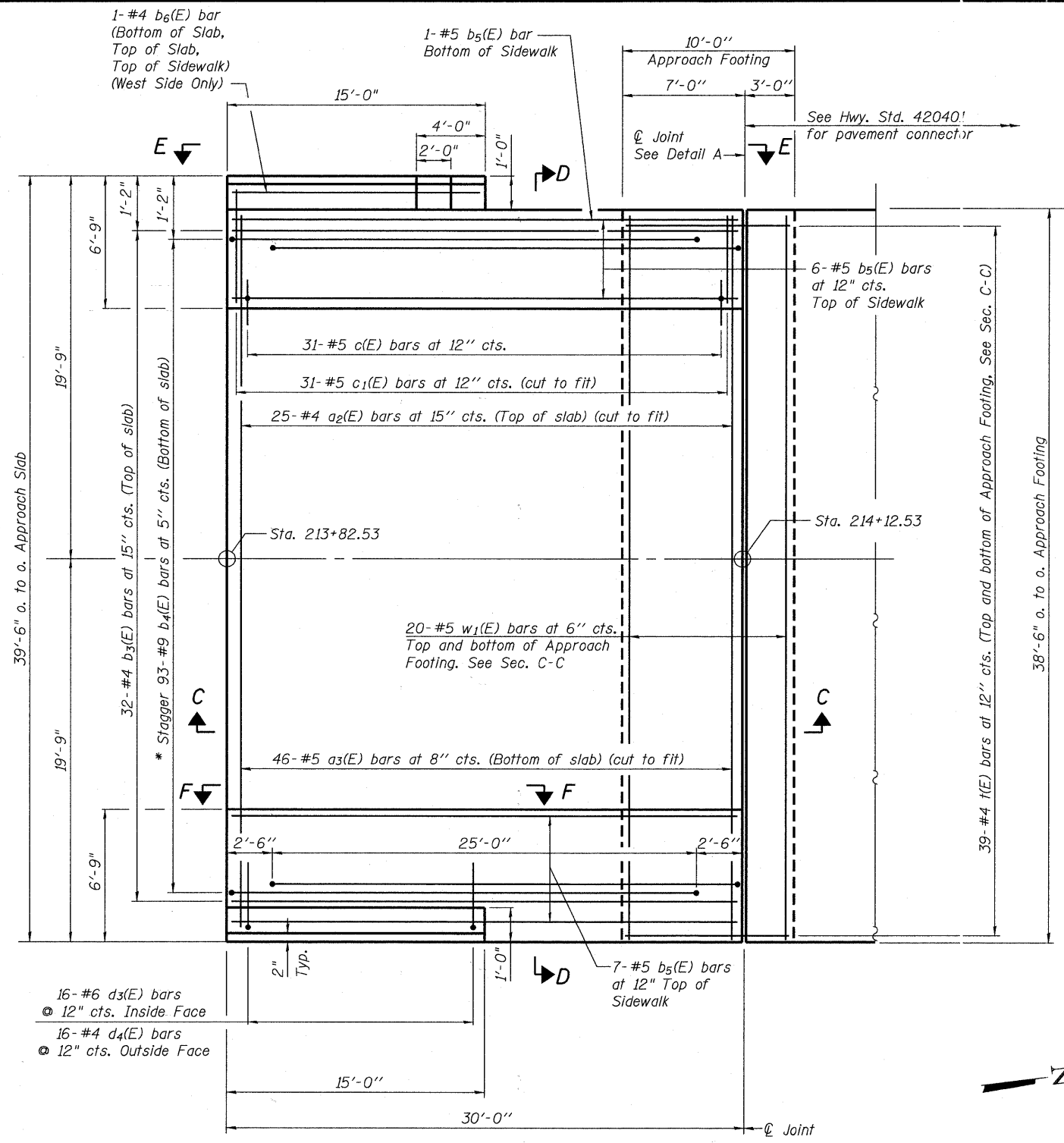
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHEMRY	69	34
			CONTRACT NO. 63583	
ILLINOIS FED. AID PROJECT				





Notes:  
See sheet 12 of 28 for additional details.



FLEXIBLE PAVEMENT  
DETAIL A

PLAN

\* Tilt #9 b<sub>4</sub>(E) bars as required to maintain clearance.

FILE NAME = M:\755-010 BLVIN Phase II\CADD\_Sheets\Structure\755-010\_SHT-11\_S-N\_APPR\_PAV\_DETAILS.dgn

**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

USER NAME = gonzalo	DESIGNED - SRT	REVISD -
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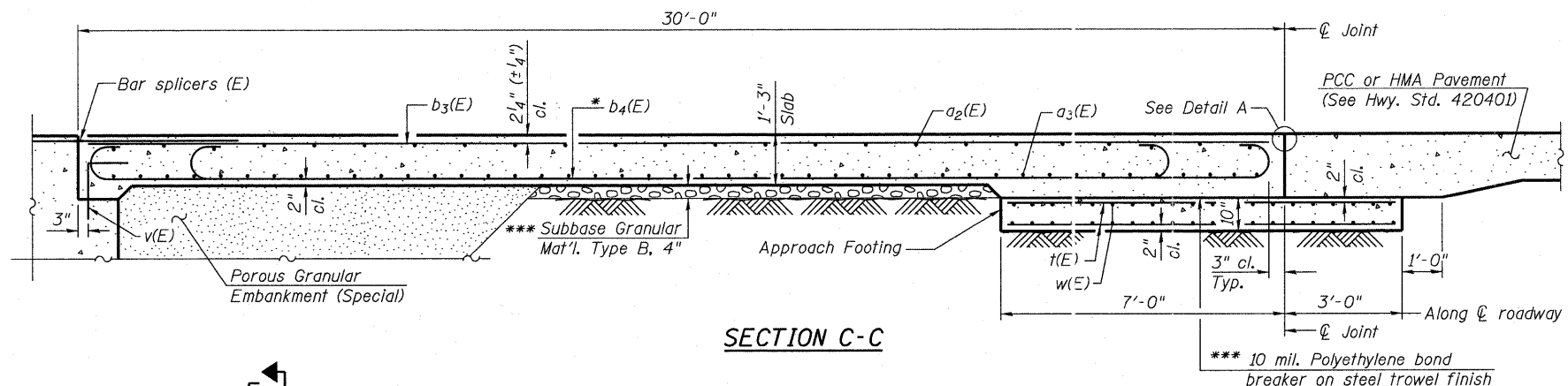
**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLVIN STREET OVER NIPPERSINK CREEK**

**NORTH BRIDGE APPROACH SLAB PLAN**  
**STRUCTURE NO. 056-3191**

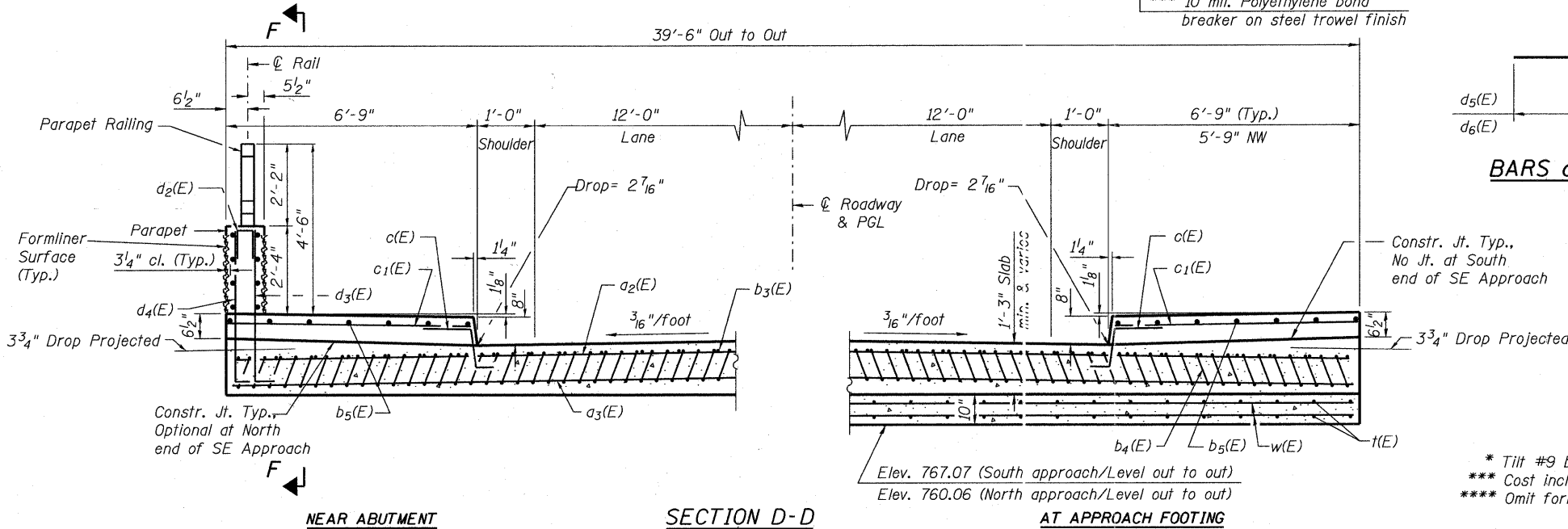
SCALE: SHEET NO. 11 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	36
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	

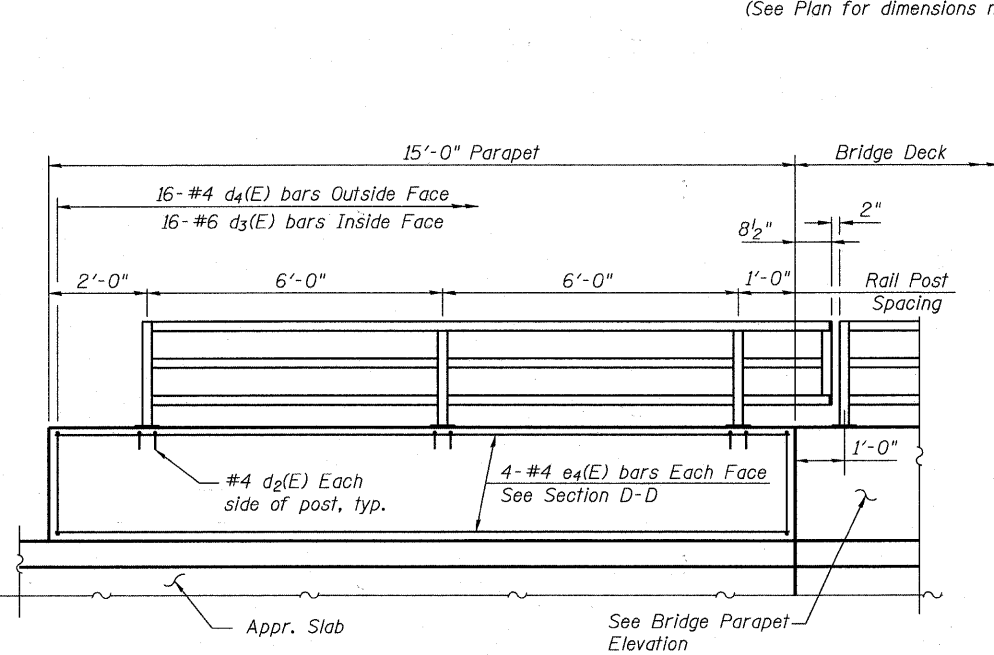
(Sheet 2 of 3)



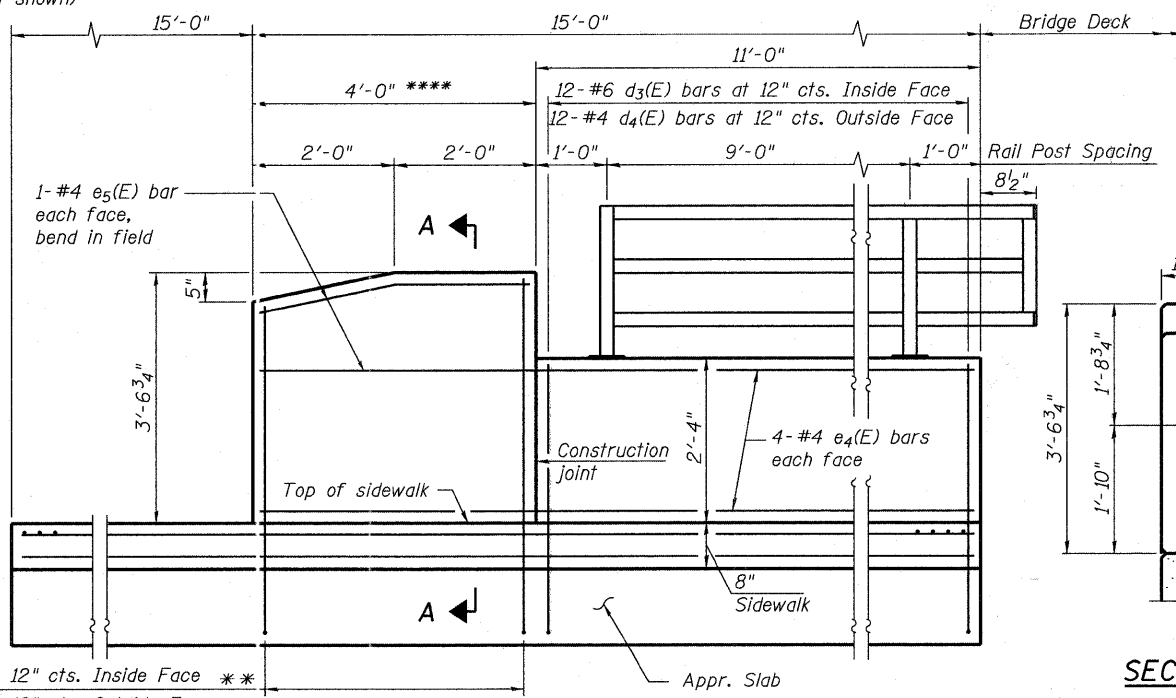
SECTION C-C



SECTION D-D

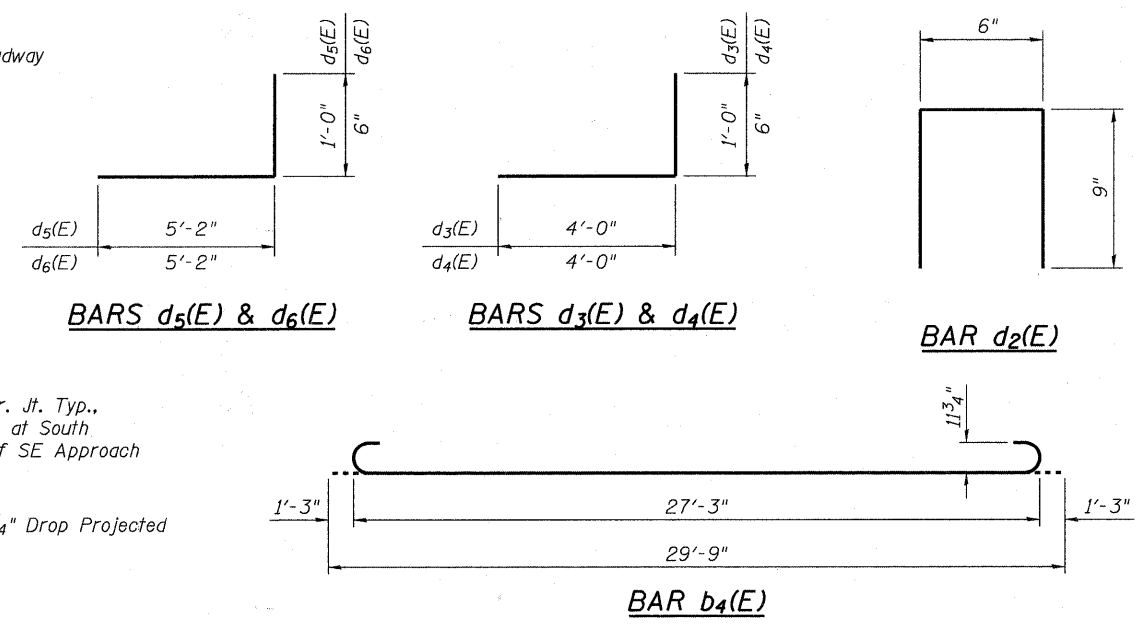


VIEW F-F  
(SW & NE)



VIEW E-E  
(Outside Face NW)

Notes:  
 See sheet 11 of 28 for Detail A and View B-B.  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see sheet 8 of 28.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet 21 of 28.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 28.  
 For additional parapet details, see sheet 9 of 28.



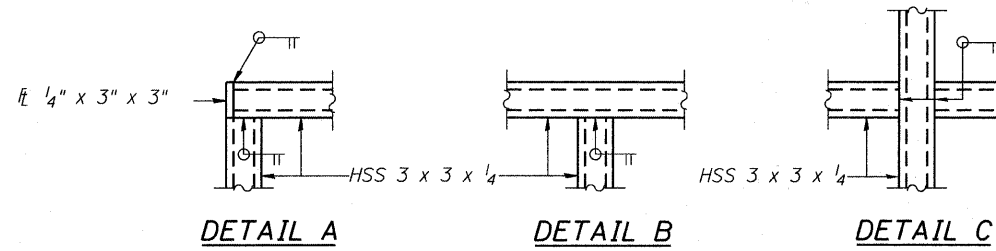
TWO APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	50	#4	39'-2"	—
a3(E)	92	#5	39'-2"	—
b3(E)	64	#4	29'-8"	—
b4(E)	189	#9	29'-9"	U
b5(E)	27	#4	29'-8"	—
c(E)	108	#5	2'-4"	—
c1(E)	93	#5	6'-4"	—
c2(E)	1	#5	8'-4"	—
d2(E)	16	#4	2'-0"	□
d3(E)	44	#6	5'-0"	—
d4(E)	44	#4	4'-6"	—
d5(E)	5	#6	6'-2"	—
d6(E)	5	#4	5'-8"	—
e4(E)	24	#4	14'-8"	—
e5(E)	4	#4	3'-8"	—
t(E)	158	#4	9'-8"	—
w(E)	40	#5	39'-2"	—
w1(E)	40	#5	38'-2"	—
Protective Coat		Sq. Yd.	293	
Concrete Superstructure		Cu. Yd.	118.1	
Concrete Structures		Cu. Yd.	24.1	
Bridge Deck Grooving		Sq. Yd.	160	
Form Liner Textured Surface, Special		Sq. ft.	210	
Reinforcement Bars, Epoxy Coated		Pound	32,220	

BA-0

7-1-10

(Sheet 3 of 3)

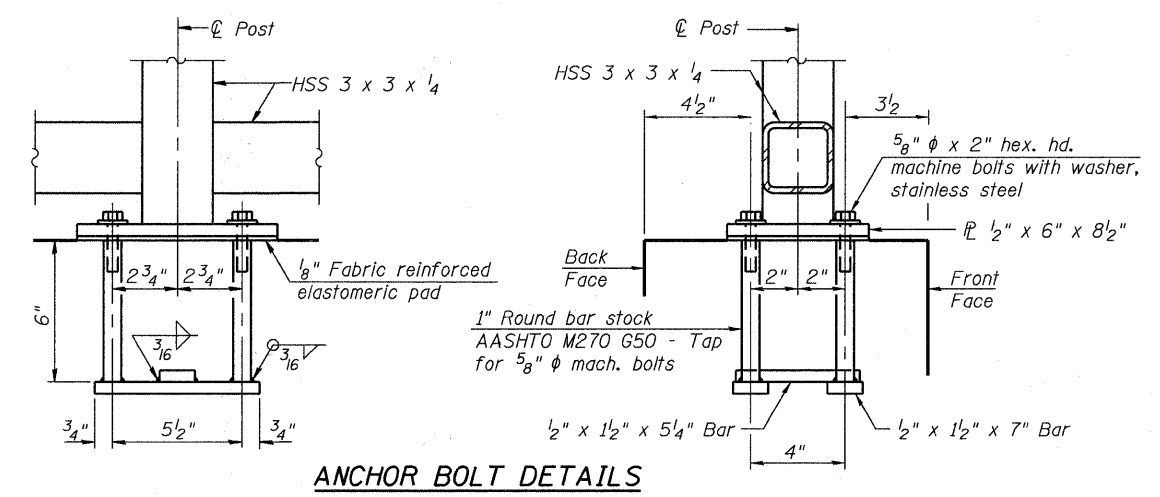
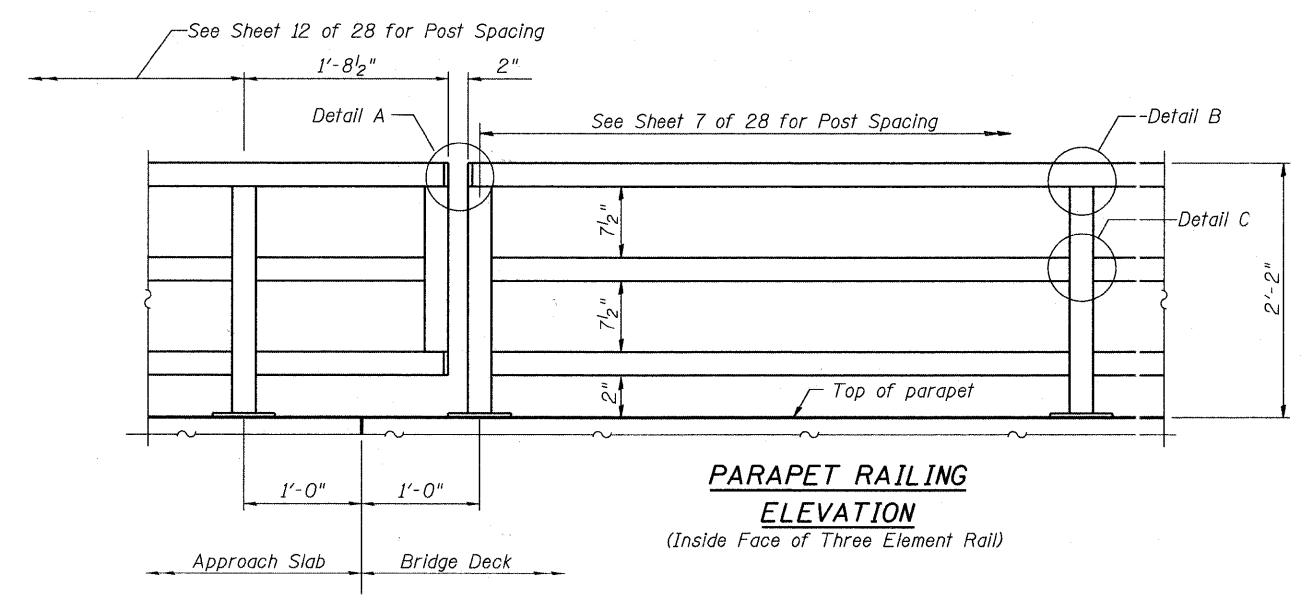
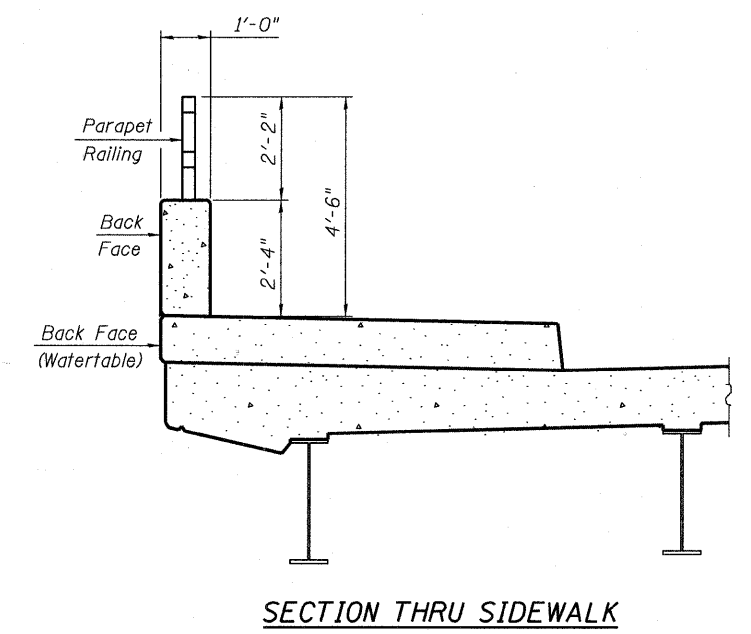
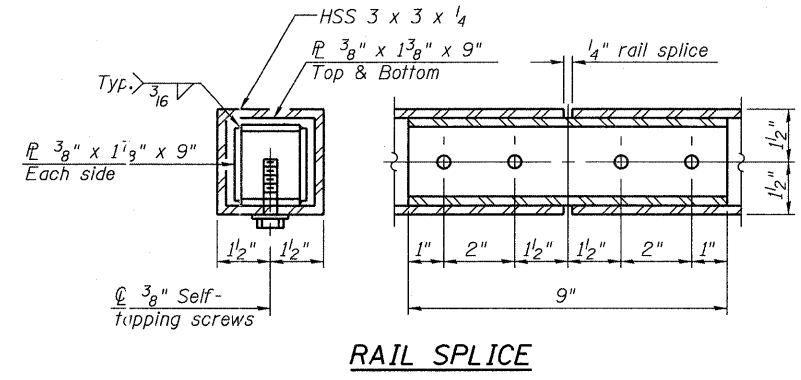
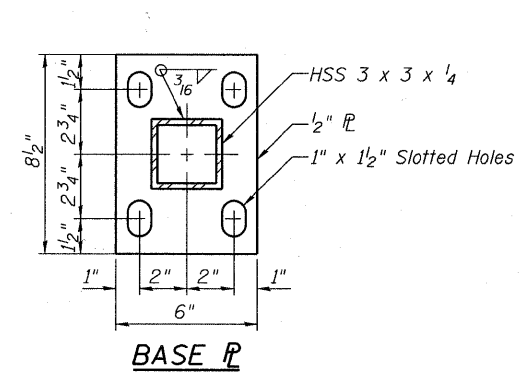


Notes:  
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

**BILL OF MATERIAL \***

Item	Unit	Quantity
Parapet Railing	Foot	354

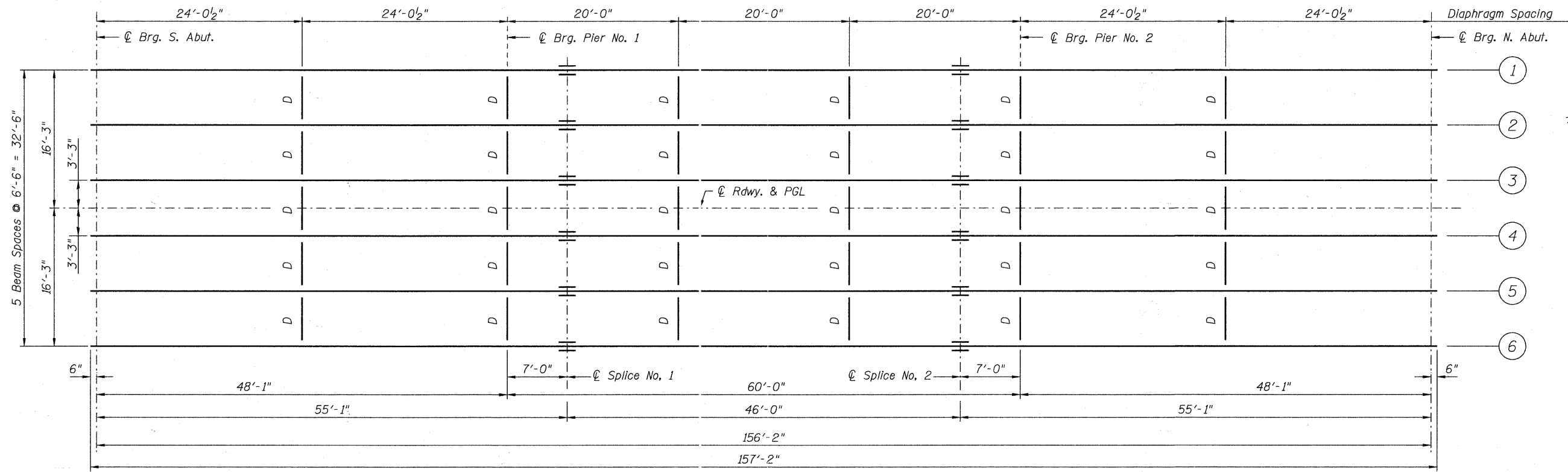
\* Rail on bridge and appr. slab.



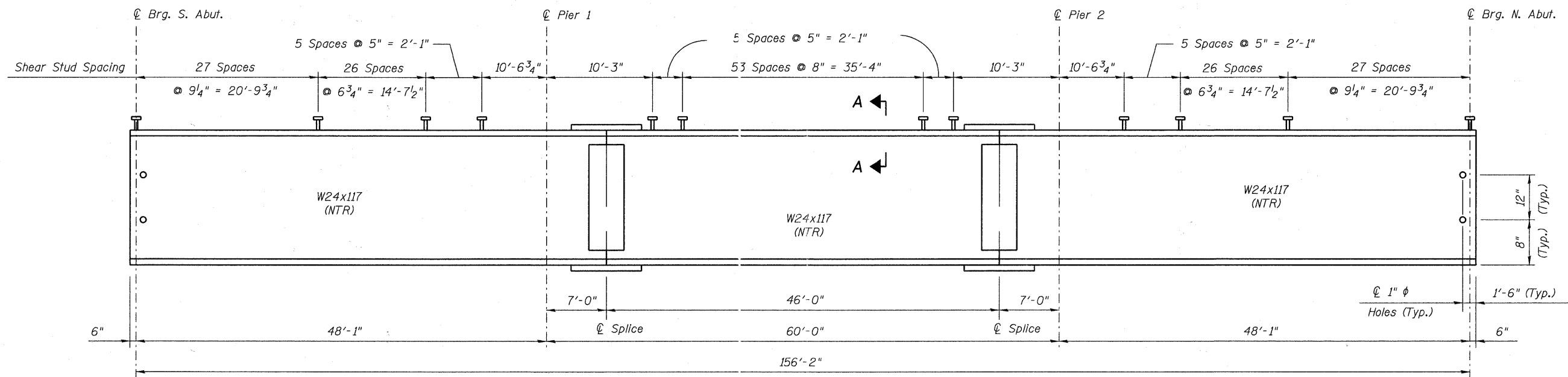
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" phi anchor rods according to Article 509.06 of the Standard Specifications, except anchor rod assemblies shall be stainless steel. Embedment shall be according to the manufacturer's specifications.

FILE NAME = M:\755-010 B11011 Phase II\CADD\_Sheets\Structure\1755-010B\_SHT-13 S - PARAPET RAILING DETAIL.dwg

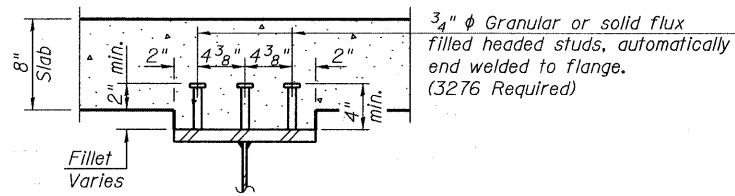
<p><b>Bollinger, Lach &amp; Associates, Inc.</b> ITASCA, ILLINOIS</p>	USER NAME = gonzo1o PLOT SCALE = PLOT DATE = 3/25/2011	DESIGNED - SRT CHECKED - JJI DRAWN - GM CHECKED - JJI	REVISED - REVISED - REVISED - REVISED -	<p align="center"><b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b></p>	<p align="center"><b>PARAPET RAILING DETAILS</b> <b>STRUCTURE NO. 056-3191</b></p>	SCALE:	SHEET NO. 13 OF 28 SHEETS	STA. TO STA.	F.A. RTE.	SECTION 08-00355-00-BR	COUNTY McHENRY	TOTAL SHEETS 69	SHEET NO. 38	CONTRACT NO. 63583
	ILLINOIS FED. AID PROJECT													



**FRAMING PLAN**



**BEAM ELEVATION**



**SECTION A-A**

**Notes:**  
 See Sheet 15 of 28 for Splice Details and Diaphragm Details.  
 All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.  
 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

FABRICATED TOP OF BEAM ELEVATION TABLE *						
Location	Beam No. 1	Beam No. 2	Beam No. 3	Beam No. 4	Beam No. 5	Beam No. 6
☉ Brg. S. Abut.	767.52	767.63	767.73	767.73	767.63	767.52
☉ Brg. Pier No. 1	765.98	766.08	766.18	766.18	766.08	765.98
☉ Splice No. 1	765.75	765.85	765.96	765.96	765.85	765.75
☉ Splice No. 2	764.32	764.42	764.52	764.52	764.42	764.32
☉ Brg. Pier No. 2	764.11	764.21	764.31	764.31	764.21	764.11
☉ Brg. N. Abut.	762.65	762.75	762.86	762.86	762.75	762.65

\* For fabrication use only

FILE NAME = W:\755-010 Blvin Phase I\CAD\_Sheets\Structure\755-010\_SHT-14\_S-FRAMING PLAN.dgn

**Bollinger, Lach & Associates, Inc.**  
 ITASCA, ILLINOIS

USER NAME = gonzo1o  
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 PLOT DATE = 3/25/2011

DESIGNED - SRT  
 CHECKED - JJI  
 DRAWN - GM  
 CHECKED - JJI

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLVIN STREET OVER NIPPERSINK CREEK**

**FRAMING PLAN**  
**STRUCTURE NO. 056-3191**

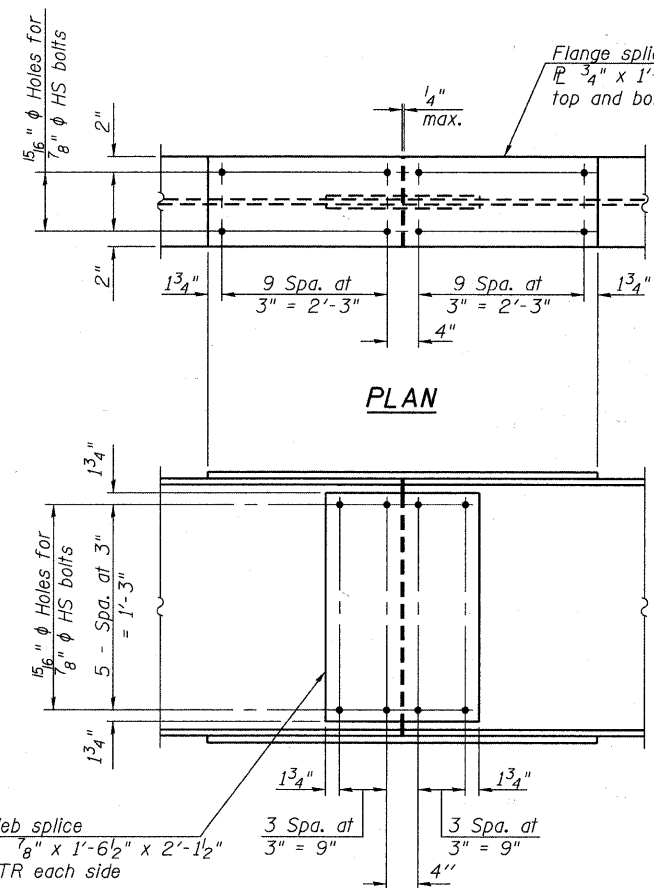
SCALE: SHEET NO. 14 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	McHENRY	69	39
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	

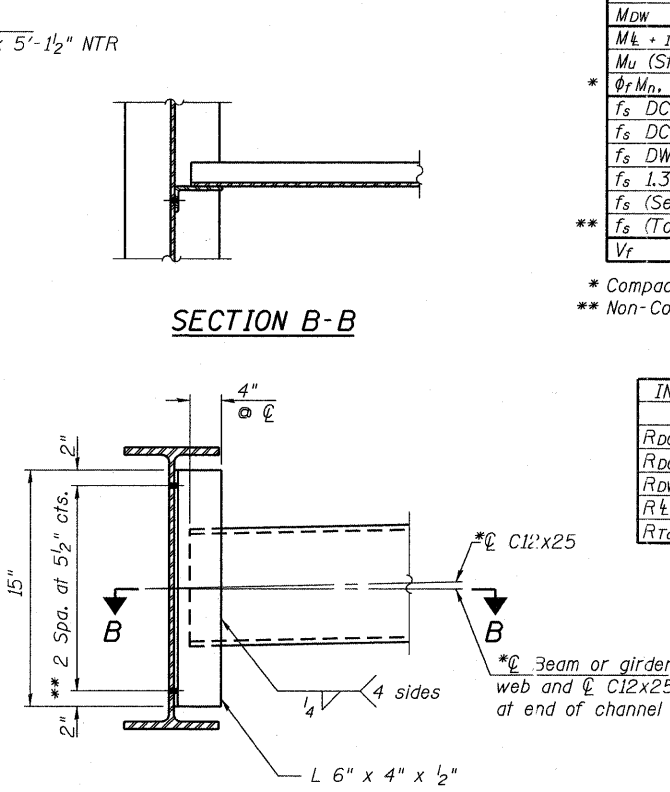
INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Piers	0.5 Sp. 2
$I_s$	(in <sup>4</sup> )	3540	3540	3540
$I_c(n)$	(in <sup>4</sup> )	10594	-	10594
$I_c(3n)$	(in <sup>4</sup> )	7677	-	7677
$S_s$	(in <sup>3</sup> )	291	291	291
$S_c(n)$	(in <sup>3</sup> )	448	-	448
$S_c(3n)$	(in <sup>3</sup> )	403	-	403
$Z$	(in <sup>3</sup> )	327	327	327
DC1	(k/')	0.796	0.796	0.820
M <sub>DC1</sub>	(k)	157	297	163
DC2	(k/')	0.320	0.320	0.320
M <sub>DC2</sub>	(k)	58	74	69
DW	(k/')	0.213	0.213	0.213
M <sub>DW</sub>	(k)	39	49	46
M <sub>ℓ + IM</sub>	(k)	922	571	942
M <sub>u</sub> (Strength I)	(k)	1212	1037	1263
$\phi_r M_n, \phi_r M_{nc}$	(k)	2187	1205	2187
$f_s$ DC1	(ksi)	5.2	9.8	5.4
$f_s$ DC2	(ksi)	1.7	3.0	2.0
$f_s$ DW	(ksi)	1.1	2.0	1.3
$f_s$ 1.3(ℓ + IM)	(ksi)	18.3	17.6	18.7
$f_s$ (Service II)	(ksi)	26.4	32.6	27.6
$f_s$ (Total)(Strength I)	(ksi)	35.1	43.0	36.6
V <sub>r</sub>	(k)	15.0	-	14.0

\* Compact sections  
 \*\* Non-Compact and slender sections

INTERIOR GIRDER REACTION TABLE			
	Abut.	Pier	
R <sub>DC1</sub>	(k)	14.1	48.6
R <sub>DC2</sub>	(k)	6.1	18.8
R <sub>DW</sub>	(k)	4.2	12.8
R <sub>ℓ + IM</sub>	(k)	66.7	11.6
R <sub>Total</sub>	(k)	91.2	195.9



**PLAN**  
**ELEVATION**  
**SPLICE DETAIL**  
 (12 Required)



**SECTION B-B**  
**INTERIOR DIAPHRAGM D**  
 (30 Required)

Note:  
 Two hardened washers required for each set of oversized holes.  
 \* Alternate channels (C12x30) are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.  
 \*\* 3/4" φ HS bolts, 15/16" φ holes

Note:  
 All splice bolts shall be AASHTO M164/ASTM 325 Type 3.  
 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
 All Structural Steel shall be AASHTO M270 Grade 50W.  
 All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).  
 $I_c(3n), S_c(3n)$ : 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
 Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in<sup>3</sup>).  
 DC1: Un-factored non-composite dead load (kips/ft.).  
 M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).  
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).  
 M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).  
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).  
 M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).  
 M<sub>ℓ + IM</sub>: Un-factored live load moment plus dynamic load allowance (Impact) (kip-ft.).  
 M<sub>u</sub> (Strength I): Factored design moment (kip-ft.).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}$   
 $\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).  
 $\phi_r M_{nc}$ : Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).  
 $f_s$  (Service II): Sum of stresses as computed from the moments below (ksi).  
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{ℓ + IM}$   
 $f_s$  (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).  
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}$   
 V<sub>r</sub>: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

FILE NAME = \\N755-010 Blivin Phase II\CADD\Sheets\Structural\N755-010\_S- STRUCTURAL STEEL DETAILS.dgn

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 ITASCA, ILLINOIS

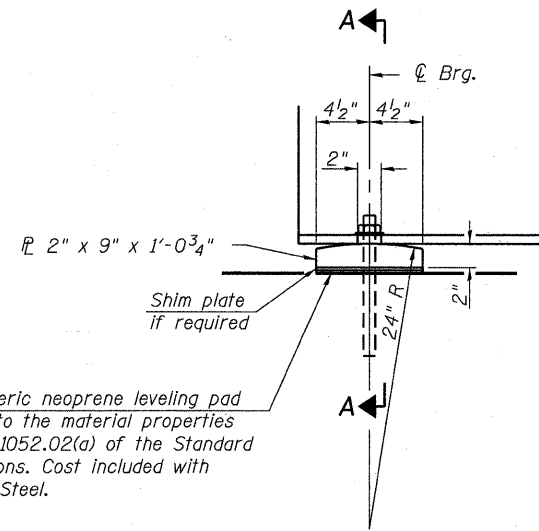
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	CHECKED - JJI	REVISED -

**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

<b>STRUCTURAL STEEL DETAILS</b>		
<b>STRUCTURE NO. 056-3191</b>		
SCALE:	SHEET NO. 15 OF 28 SHEETS	STA. TO STA.

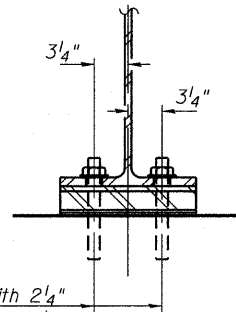
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	40
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	





1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

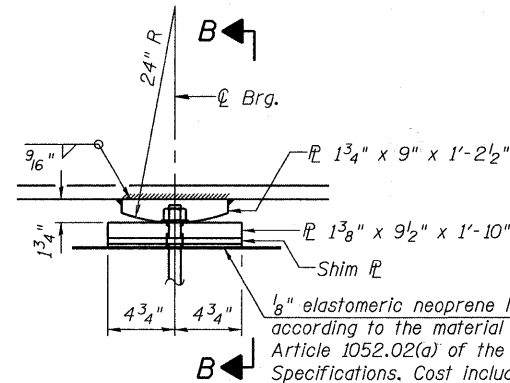
**ELEVATION AT ABUTMENT**



1"  $\phi$  x 12" anchor bolts with 2 1/4" x 2 1/4" x 5/16" PL washer under nut.  
1 3/8" x 2" slotted hole in flange.  
1 1/2"  $\phi$  holes in bearing plate.

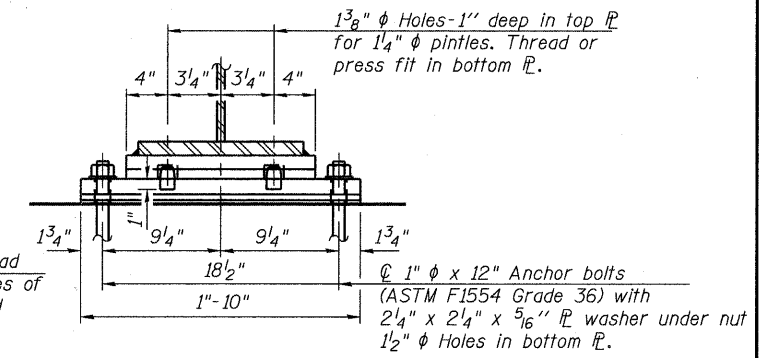
**SECTION A-A**

**FIXED BEARING AT ABUTMENTS**

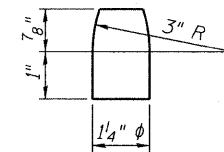


**ELEVATION AT PIER**

**FIXED BEARING AT PIERS**



**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 M 270 Grade 50W.

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.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

All anchor bolt nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.

**BILL OF MATERIAL**

Item	Unit	Total
Anchor Bolts, 1"	Each	48

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**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLVIN STREET OVER NIPPERSINK CREEK**

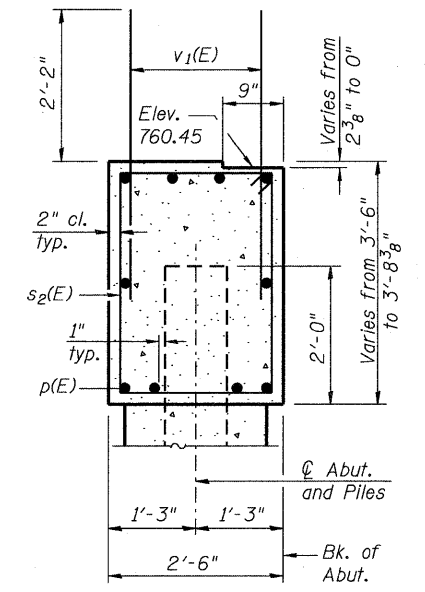
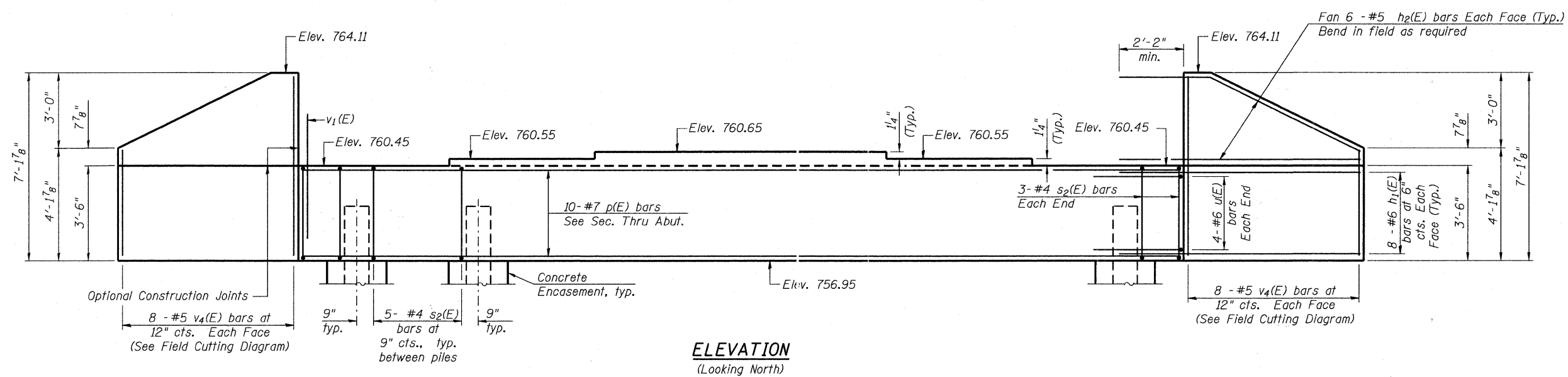
**BEARING DETAILS**  
**STRUCTURE NO. 056-3191**

SCALE: SHEET NO. 16 OF 28 SHEETS STA. TO STA.

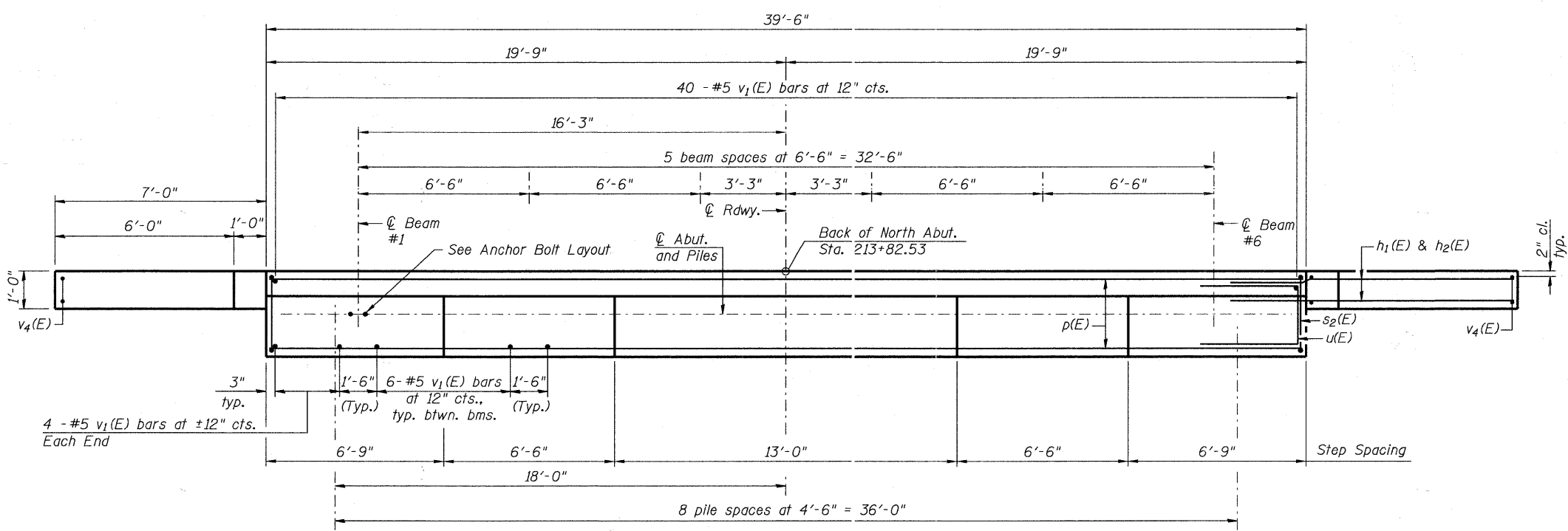
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	08-00355-00-BR	McHENRY	69	41
			CONTRACT NO. 63583	
ILLINOIS FED. AID PROJECT				



Notes:  
Pour steps monolithically with cap.

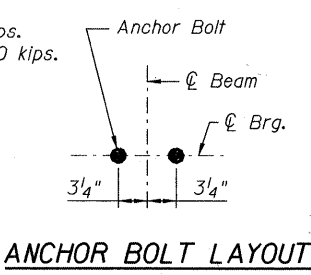


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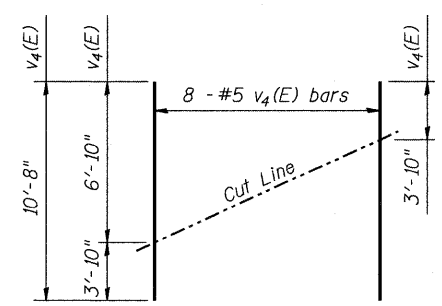


PLAN

**PILE DATA**  
Type: Steel HP 14x73  
Nominal Required Bearing: 250 kips.  
Factored Resistance Available: 140 kips.  
Est. Length: 48 feet  
No. Production Piles: 8  
No. Test Piles: 1

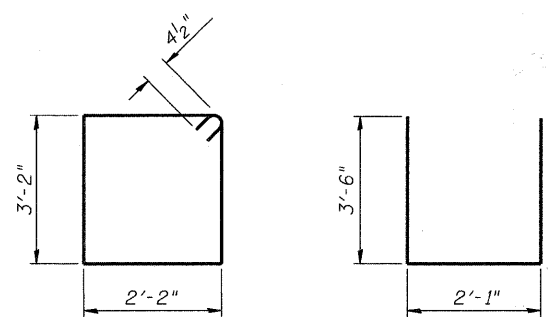


ANCHOR BOLT LAYOUT



FIELD CUTTING DIAGRAM

Order v4(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)

BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	32	#6	13'-6"	—
h2(E)	24	#5	9'-10"	—
p(E)	10	#7	39'-2"	—
s2(E)	46	#4	11'-5"	□
u(E)	8	#6	9'-1"	U
v1(E)	78	#5	4'-4"	—
v4(E)	16	#5	10'-8"	—
Structure Excavation		Cu. Yd.	121	
Concrete Structures		Cu. Yd.	16.2	
Reinforcement Bars, Epoxy Coated		Pound	2700	
Furnishing Steel Piles, HP14x73		Foot	384	
Driving Piles		Foot	384	
Test Pile, Steel HP14x73		Each	1	
Concrete Encasement		Cu. Yd.	5.0	
Geocomposite Wall Drain		Sq. Yd.	26	
Porous Granular Embankment (Special)		Cu. Yd.	54	
Pipe Underdrains For Structures, 4"		Foot	58	

For details of piles and Concrete Encasement, see sheet 20 of 28.

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AI-0  
7-1-10  
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ITASCA, ILLINOIS

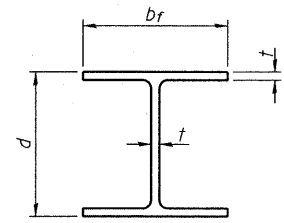
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PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -
	CHECKED - SRT	REVISED -

McHENRY COUNTY  
DIVISION OF TRANSPORTATION  
BLIVIN STREET OVER NIPPERSINK CREEK

NORTH ABUTMENT  
STRUCTURE NO. 056-3191  
SCALE: SHEET NO. 18 OF 28 SHEETS STA. TO STA.

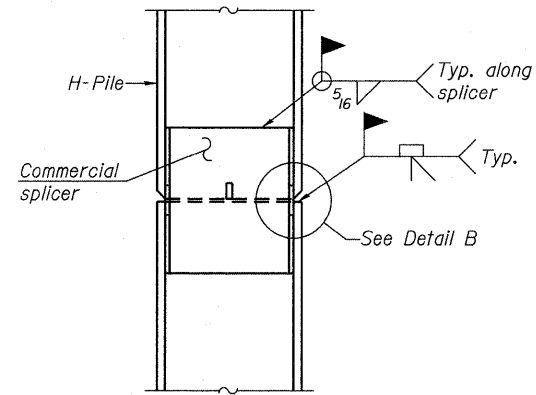
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CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	



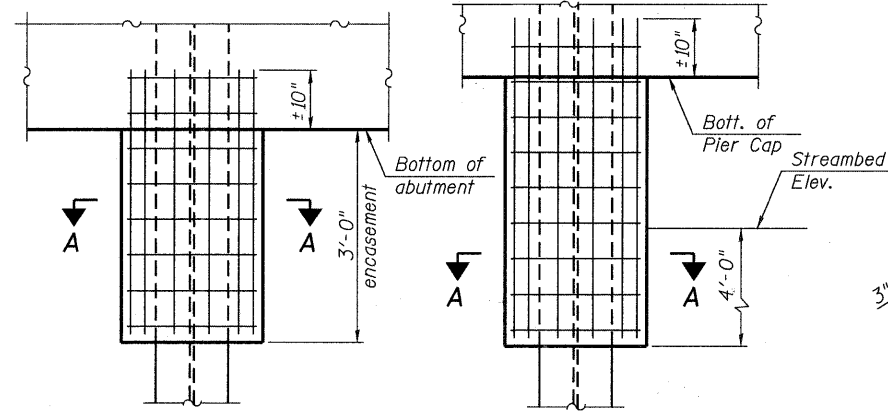


**STEEL PILE TABLE**

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	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"



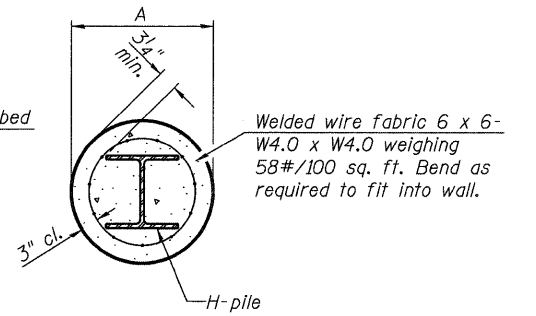
**ELEVATION**



**ELEVATION AT ABUTMENT**

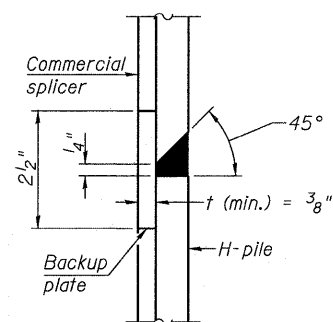
**ELEVATION AT PIER**

**PILE ENCASEMENT**



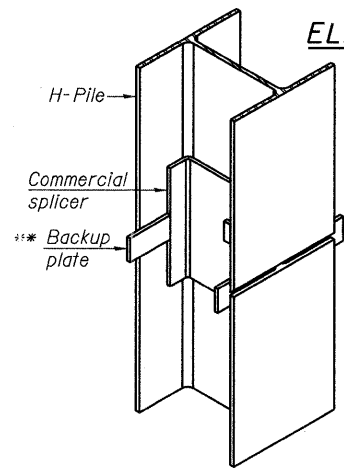
**SECTION A-A**

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

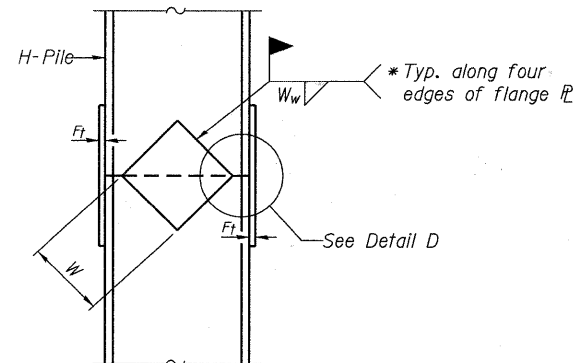


**DETAIL "B"**

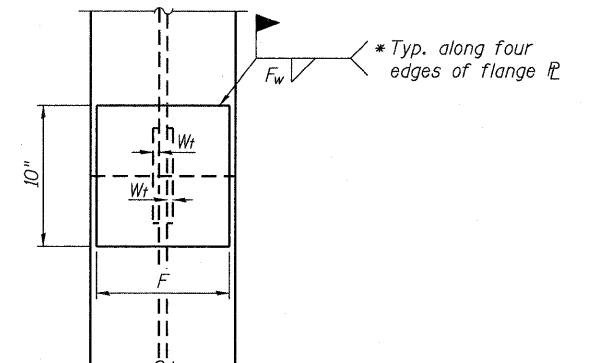
**WELDED COMMERCIAL SPLICE**



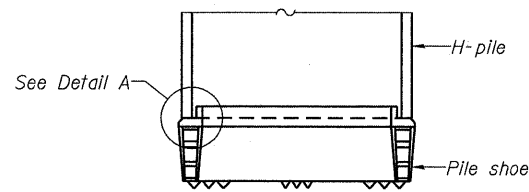
**ISOMETRIC VIEW**



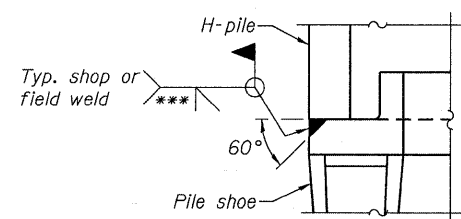
**ELEVATION**



**END VIEW**

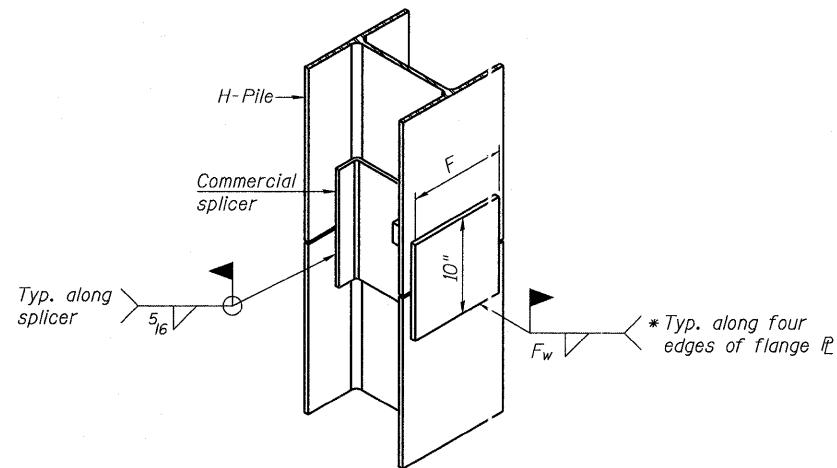


**ELEVATION**



**DETAIL A**

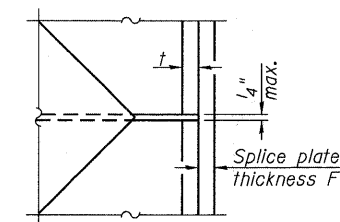
**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

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



**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	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"

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

FILE NAME = H:\755-010 Blivin Phase II\CADD\Sheets\Structure\1755-010\_SHT-20\_S\_H-PILE.dgn



USER NAME = gonzalo  
DESIGNED - SRT  
CHECKED - JJI  
DRAWN - GM  
PLOT DATE = 3/25/2011

REVISOR -  
REVISION -  
REVISION -  
REVISION -  
REVISION -

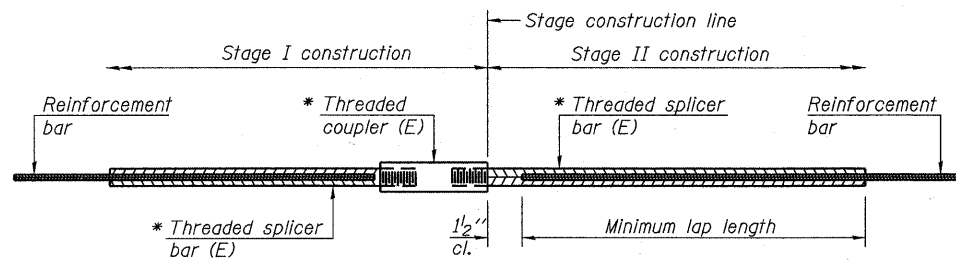
**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

**HP PILE DETAILS**  
**STRUCTURE NO. 056-3191**

SCALE: SHEET NO. 20 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	McHENRY	69	45
CONTRACT NO. 63583			ILLINOIS FED. AID PROJECT	





**STANDARD BAR SPLICER ASSEMBLY**

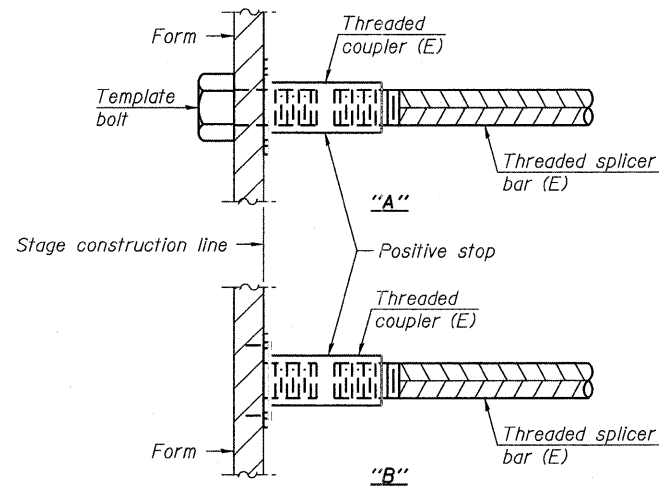
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1/2" + thread length

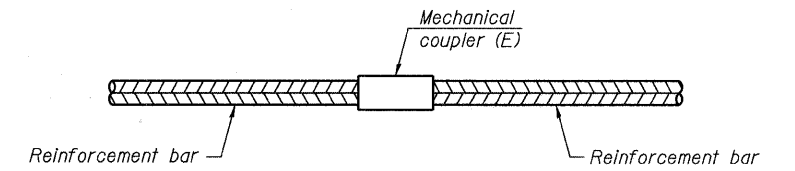
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



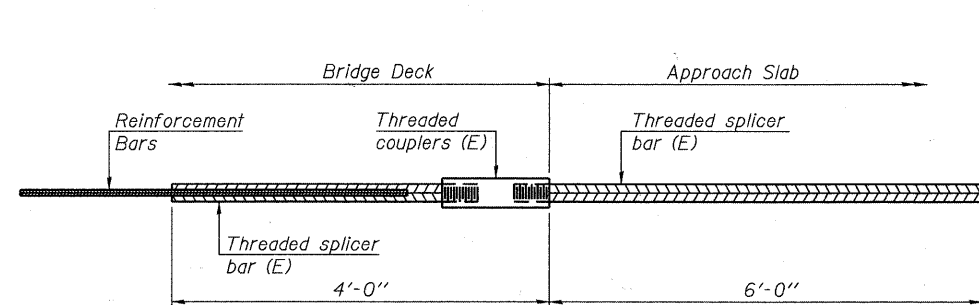
**INSTALLATION AND SETTING METHODS**

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



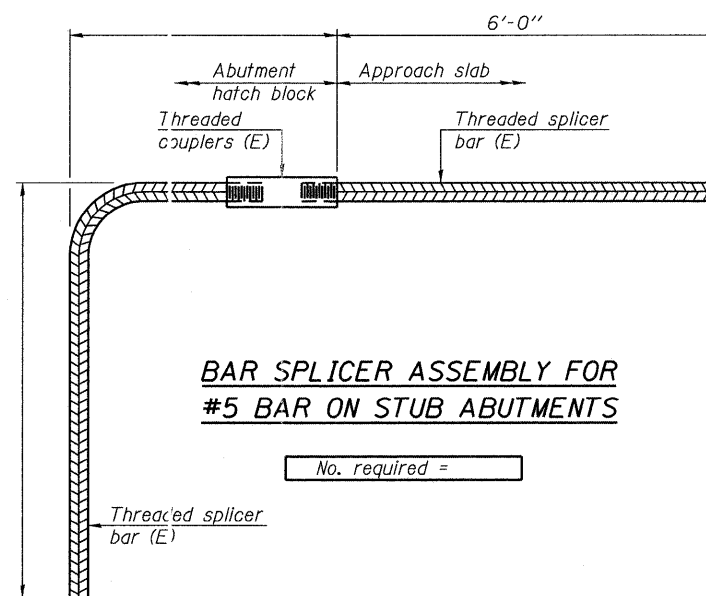
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



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

No. required = 82



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See special provision for Mechanical Splicers.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILE NAME = \\N755-010\Blivin Phase II\CADD\Sheets\Structure\755-010\_SHT-21-S-BAR SPLICER DETAILS.dgn

BSD-1

7-1-10



USER NAME = gonzalo  
 PLOT SCALE =  
 PLOT DATE = 3/25/2011

DESIGNED - SRT  
 CHECKED - JJI  
 DRAWN - CM  
 CHECKED - JJI

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

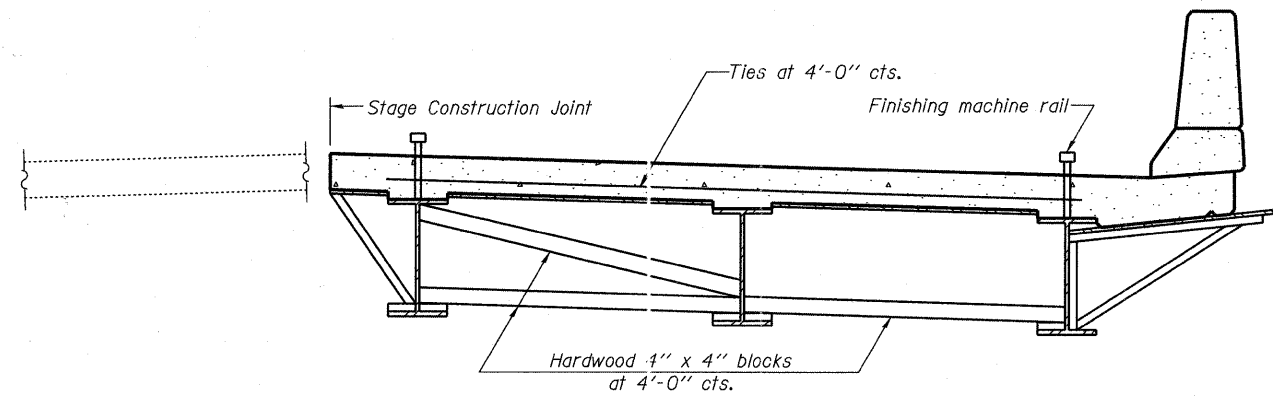
**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVIN STREET OVER NIPPERSINK CREEK**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS**  
**STRUCTURE NO. 056-3191**

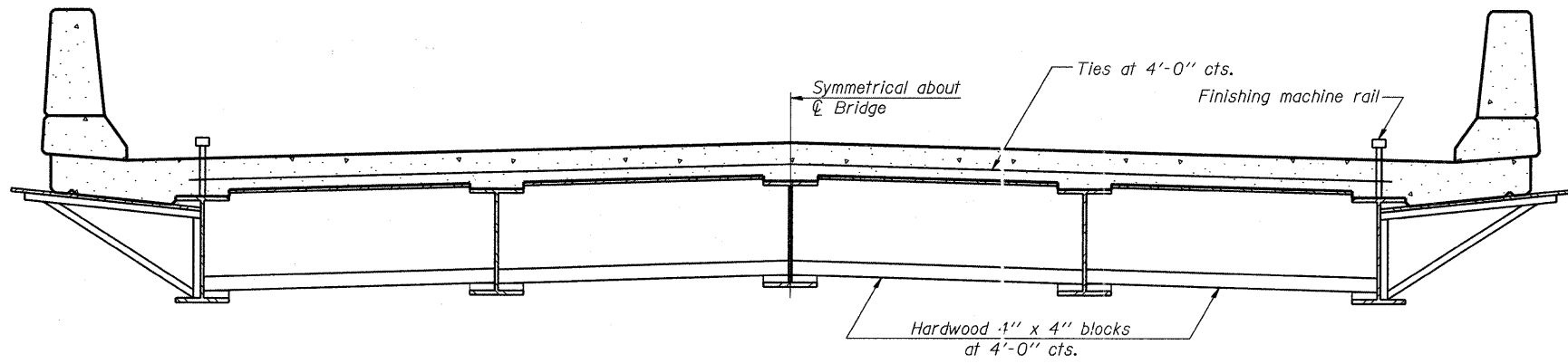
SCALE: SHEET NO. 21 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	46
			CONTRACT NO. 63583	
ILLINOIS FED. AID PROJECT				

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  
STAGE CONSTRUCTION**



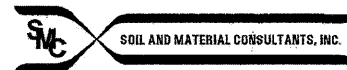
**FORM BRACES FOR  
STANDARD CONSTRUCTION**

FILE NAME = M:\755-010 B11111r Phase II\CADD Sheets\Structural\755-010\_SHT-22\_S\_CANTILEVER FORMING.dgn

SB-1

7-1-10

<b>Bollinger, Lach &amp; Associates, Inc.</b> <small>ITASCA, ILLINOIS</small>	USER NAME = gonzalo	DESIGNED - SRT	REVISED -	<b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b>	<b>CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES WITH W27 BEAMS AND SMALLER</b> <b>STRUCTURE NO. 056-3191</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -			08-00355-00-BR	MCHENRY	69	47	
	PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -			CONTRACT NO. 63583		ILLINOIS FED. AID PROJECT		
		CHECKED - JJI	REVISED -			SCALE:	SHEET NO. 22 OF 28 SHEETS	STA.	TO STA.	



File No. 19664 BORING LOG 1

Client Bollinger, Lach & Assoc., Inc. Sheet 1 of 4

Comments \_\_\_\_\_ Project Blivin St. bridge over Nipper- Date 6/11/09  
sink Creek - Structural #056-3024

Station 212+23 - 10' L. CL. Location McHenry Co., IL Drilled By AC

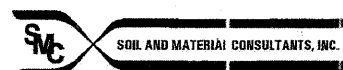
Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu
768.4'	Bituminous concrete - 3.75"											
	Base - crushed gravel & fines - 18.25"											
	Brown fine-medium sand & gravel, some coarse sand, damp, loose - Fill	1	SS	10"				9	4.2			
764.4'	Dark gray-brown silt, some sand & gravel, trace clay, very damp, very loose - Fill	5	SS	13"				3	19.9			
762.4'	Brown fine sand, trace medium-coarse sand & gravel, very damp-saturated, very loose	3	SS	10"				3	13.9			
760.4'	Brown to gray fine-medium sand & gravel, some coarse sand, very damp-saturated, medium dense	10	SS	12"				18	5.9			
756.9'	Gray silt, some clay, trace sand & gravel, damp, medium dense	5	SS	12"				18	11.4			
755.4'	Gray clay, some silt, trace sand & gravel, damp, hard	15	SS	18"				40	4.5+	7.1	132.9	5.5
752.4'	Gray clay, some silt, trace sand & gravel, damp, very tough to very hard	7	SS	18"				51	4.5+	8.1	138.1	3.4
748.4'		20	SS	18"				72	4.5+	10.2	140.0	10.0+

Water Level — depth, ft. elev. ft.  
 - while drilling: 6.0  
 - after drilling: 6.0  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen. - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs/cu ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b



File No. 19664 BORING LOG 1

Client Bollinger, Lach & Assoc., Inc. Sheet 2 of 4

Comments \_\_\_\_\_ Project Blivin St. bridge over Nipper- Date 6/11/09  
sink Creek - Structural #056-3024

Location McHenry Co., IL Drilled By AC

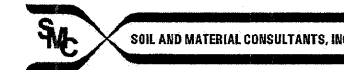
Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	20	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray clay, some silt, trace sand & gravel, damp, very hard											
		9	SS	18"				86	4.5+	9.6	141.8	10.0+
		25	SS	18"				46	4.5+	10.6	140.8	9.8
		11	SS	18"				54	4.5	9.1	138.8	10.0+
		30	SS	18"				63	4.5+	8.7	142.3	10.0+
		35	SS	18"				59	4.5+	10.2	138.6	10.0+
		40	SS	18"				45	4.5+	8.7	140.7	10.0+

Water Level — depth, ft. elev. ft.  
 - while drilling: 6.0  
 - after drilling: 6.0  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen. - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs/cu ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b



File No. 19664 BORING LOG 1

Client Bollinger, Lach & Assoc., Inc. Sheet 3 of 4

Comments \_\_\_\_\_ Project Blivin St. bridge over Nipper- Date 6/11/09  
sink Creek - Structural #056-3024

Location McHenry Co., IL Drilled By AC

Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	40	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray clay, some silt, trace sand & gravel, damp, very hard											
	Gray fine-medium sand, some coarse sand & gravel, very damp, very dense to dense											
		45	SS	18"				52				
		50	SS	18"				35				
		55	SS	18"				34				
		60	SS	18"				29				

Water Level — depth, ft. elev. ft.  
 - while drilling: 6.0  
 - after drilling: 6.0  
 - hrs. after drilling: \_\_\_\_\_

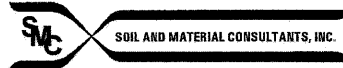
S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen. - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs/cu ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b

FILE NAME = \\V755-010\Blivin Phase I\CAD\Drawings\Structural\755-010\_SHT-23\_S\_BORING LOGS.dgn

	USER NAME = gonzalo	DESIGNED - SRT	REVISED -	McHENRY COUNTY DIVISION OF TRANSPORTATION BLIVIN STREET OVER NIPPERSINK CREEK	SOIL BORING LOGS STRUCTURE NO. 056-3191	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -			08-00355-00-BR	MCHENRY	69	48	
	PLOT DATE = 3/25/2011	CHECKED - JJI	REVISED -	SCALE:	SHEET NO. 23 OF 28 SHEETS	STA.	TO STA.	CONTRACT NO. 63583		
						ILLINOIS FED. AID PROJECT				





File No. 19664 BORING LOG 2

Client Bollinger, Lach & Assoc., Inc. Sheet 3 of 4

Project Blivin St. bridge over Nipper- Date 7/6/09  
sink Creek - Structural #056-3024

Location McHenry Co., IL Drilled By AC

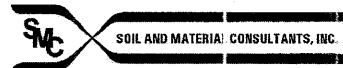
Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	40	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray fine-medium sand, some coarse sand & gravel, very damp-saturated, dense											
							12					
							18					
		45	17	SS	18"	23	41		13.3			
							13					
							15					
		50	18	SS	18"	18	31		9.0			
699.3'												
	Gray fine-medium sand, some coarse sand & gravel, very damp-saturated, medium dense											
							11					
							13					
		55	19	SS	18"	15	28		8.4			
							9					
							12					
		60	20	SS	18"	13	25		7.2			

Water Level — depth, ft. elev., ft.  
 - while drilling: 3.0  
 - after drilling: 2.0  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(split-spoon), ST(shealy tube) R - recovery length in  
 B - Standard Penetration Test (SPT), blows/6" interval W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq ft. Uw - dry unit weight of soil, lbs/cu ft  
 Qu - unconfined compressive strength, tons/sq ft.

F-111b



File No. 19664 BORING LOG 2

Client Bollinger, Lach & Assoc., Inc. Sheet 4 of 4

Project Blivin St. bridge over Nipper- Date 7/6/09  
sink Creek - Structural #056-3024

Location McHenry Co., IL Drilled By AC

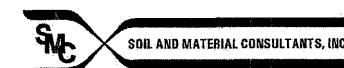
Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	60	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray fine-medium sand, some coarse sand & gravel, very damp-saturated, medium dense to dense											
							9					
							11					
		65	21	SS	18"	15	26		11.8			
							12					
							14					
		70	22	SS	18"	21	35		8.2			
							15					
							20					
		75	23	SS	18"	27	47		12.0			
675.8'												
	Gray clay & silt, trace sand & gravel, damp, hard											
							17					
							20					
		80	24	SS	18"	31	51	4.5+	11.3	133.9	7.7	

Water Level — depth, ft. elev., ft.  
 - while drilling: 3.0  
 - after drilling: 2.0  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(split-spoon), ST(shealy tube) R - recovery length in  
 B - Standard Penetration Test (SPT), blows/6" interval W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq ft. Uw - dry unit weight of soil, lbs/cu ft  
 Qu - unconfined compressive strength, tons/sq ft.

F-111b



File No. 19664 BORING LOG 3

Client Bollinger, Lach & Assoc., Inc. Sheet 1 of 4

Project Blivin St. bridge over Nipper- Date 6/11/09  
sink Creek - Structural #056-3024

Station 213+89 - 19' R. CL Location McHenry Co., IL Drilled By AC

Equipment  CME 45B  H.A.  Other Logged By DA

Elev. ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu
	Dark brown silt & sand, some gravel, trace clay, damp, medium dense - Fill											
							4					
							6					
		759.8'	1	SS	7"	6	12		7.8			
							2					
							1					
							2	3			12.4	
							1					
							1					
		754.8'	3	SS	18"	1	2		11.3			
							2					
							4	10			12.2	
751.3'												
							5					
							4					
		749.8'	5	SS	18"	3	7		12.5			
							5					
							24					
		748.8'	6	SS	18"				37.6			
							24					
							26	50			7.5	
							11					
							17					
		745.8'	8	SS	15"	22	39	4.5+	10.3	134.8	7.3	
							15					
							22					
							24	46	4.5+	9.9	135.4	10.0+

Water Level — depth, ft. elev., ft.  
 - while drilling: 11.0  
 - after drilling: 8.5  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(split-spoon), ST(shealy tube) R - recovery length in  
 B - Standard Penetration Test (SPT), blows/6" interval W - water content, %  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq ft. Uw - dry unit weight of soil, lbs/cu ft  
 Qu - unconfined compressive strength, tons/sq ft.

F-111b

FILE NAME = \\N:\755-010\Blivin Phase I\CGDD\_Sheets\Structural\755-010\_SHT-25\_S-BORING\_LOGS.dgn

	USER NAME = gonzalo	DESIGNED - SRT	REVISED -	<b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b>	<b>SOIL BORING LOGS</b> <b>STRUCTURE NO. 056-3191</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -			08-00355-00-BR	MCHENRY	69	50	
	PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -			CONTRACT NO. 63583				
		CHECKED - JJI	REVISED -			ILLINOIS FED. AID PROJECT				





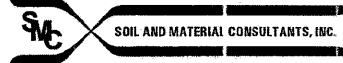
File No. 19664 **BORING LOG** 3  
 Client Bollinger, Lach & Assoc., Inc. Sheet 2 of 4  
 Project Bliven St. bridge over Nipper- Date 6/11/09  
 sink Creek - Structural #056-3024  
 Location McHenry Co., IL Drilled By AC  
 Equipment CME 45B H.A. Other Logged By DA

Elev., ft.	Description	Depth, ft.	20	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray clay, some silt, trace sand & gravel, damp, very hard to hard											
							12					
							18					
		10	SS	18"	21	39			4.5+	9.5	133.9	8.3
							9					
							17					
		25	SS	18"	18	35			4.5+	9.2	138.0	7.5
							14					
							20					
		12	SS	18"	26	46			4.5+	9.2	130.0	5.4
							11					
							13					
		30	SS	18"	14	27			4.5+	9.8	140.9	4.3
							11					
							18					
	sand seam at 34.5'	35	SS	18"	22	40			4.5+	10.5	136.6	5.7
725.3'												
	Gray fine-medium sand, some coarse sand & gravel, very damp, dense											
							10					
							13					
		40	SS	18"	19	32				8.1		

Water Level — depth, ft. elev. ft.  
 - while drilling: 11.0  
 - after drilling: 8.5  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar) SS(split-spoon) ST(shelby tube) R - recovery length in  
 B - Standard Penetration Test (SPT) blows/6" interval W - water content, %  
 N - SPT blows/foot to drive 2" O.D. split-spoon sampler with 140 lb hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs./cu.ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b



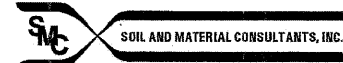
File No. 19664 **BORING LOG** 3  
 Client Bollinger, Lach & Assoc., Inc. Sheet 3 of 4  
 Project Bliven St. bridge over Nipper- Date 6/11/09  
 sink Creek - Structural #056-3024  
 Location McHenry Co., IL Drilled By AC  
 Equipment CME 45B H.A. Other Logged By DA

Elev., ft.	Description	Depth, ft.	40	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray fine-medium sand, some coarse sand & gravel, very damp, medium dense											
							7					
							10					
		45	SS	18"	17	27				6.1		
							6					
							10					
		50	SS	18"	16	26				6.6		
							6					
							10					
		55	SS	18"	12	21				6.8		
							6					
							9					
		60	SS	18"	14	25				8.8		
							7					
							11					
		65	SS	18"	14	20				10.9		

Water Level — depth, ft. elev. ft.  
 - while drilling: 11.0  
 - after drilling: 8.5  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar) SS(split-spoon) ST(shelby tube) R - recovery length in  
 B - Standard Penetration Test (SPT) blows/6" interval W - water content, %  
 N - SPT blows/foot to drive 2" O.D. split-spoon sampler with 140 lb hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs./cu.ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b



File No. 19664 **BORING LOG** 3  
 Client Bollinger, Lach & Assoc., Inc. Sheet 4 of 4  
 Project Bliven St. bridge over Nipper- Date 6/11/09  
 sink Creek - Structural #056-3024  
 Location McHenry Co., IL Drilled By AC  
 Equipment CME 45B H.A. Other Logged By DA

Elev., ft.	Description	Depth, ft.	60	S	T	R	B	N	Pen.	W	Uw	Qu
	Gray fine-medium sand, some coarse sand & gravel, very damp, medium dense											
							7					
							8					
		65	SS	14"	11	19				13.2		
							5					
							9					
		70	SS	12"	14	23				13.1		
							7					
							8					
		75	SS	18"	9	17				11.0		
							6					
							10					
		80	SS	18"	10	20				10.9		

Water Level — depth, ft. elev. ft.  
 - while drilling: 11.0  
 - after drilling: 8.5  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar) SS(split-spoon) ST(shelby tube) R - recovery length in  
 B - Standard Penetration Test (SPT) blows/6" interval W - water content, %  
 N - SPT blows/foot to drive 2" O.D. split-spoon sampler with 140 lb hammer falling 30"  
 Pen - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs./cu.ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b

FILE NAME = M:\755-010 Bliven Phase I\CAD\Drawings\Structural\755-010 SHT-26 S - BORING LOGS.dgn



USER NAME = gonzalo  
 PLOT SCALE =  
 PLOT DATE = 3/25/2011

DESIGNED - SRT  
 CHECKED - JJI  
 DRAWN - GM  
 CHECKED - JJI

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**McHENRY COUNTY**  
**DIVISION OF TRANSPORTATION**  
**BLIVEN STREET OVER NIPPERSINK CREEK**

**SOIL BORING LOGS**  
**STRUCTURE NO. 056-3191**  
 SCALE: SHEET NO. 26 OF 28 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	McHENRY	69	51
CONTRACT NO. 63583				
ILLINOIS FED. AID PROJECT				





File No. 19664 **BORING LOG** 7

Client Bollinger, Lach & Assoc., Inc. Sheet 1 of 1

Project Blivin St. Bridge over Nipper- Date 12/9/10  
sink Creek - Structural #056-3024

Location McHenry Co., IL Drilled By AC

Equipment  CME 45B  H.A.  Other Logged By DA

Elev., ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu
762.5'	Dark brown-black fine sand, some gravel, trace medium-coarse sand, damp - Fill	1	J						12.5			
760.5'		2	J						10.3			
	Black fine sand, trace medium-coarse sand & roots, damp (topsoil)	3	J						23.9			
758.5'		4	J						57.3			
	Gray-brown silt, some clay, trace fine sand & roots, damp	5	J						26.1			
757.5'		6	J						20.2			
	Gray silt & sand, very damp-saturated	7	J						17.9			
756.0'		8	J						8.8			
755.5'	(a) see below											
	Gray clay & silt, trace sand & gravel, damp, hard to very tough	9	SS					4.0	8.0	138.5	4.0	
		10	SS					4.5+	8.5	139.9	3.3	
752.5'		11	SS					4.5+	8.5	135.7	3.6	
	End of Boring											
	(a) Gray silt, some clay, trace sand & gravel, damp, medium dense											
		15										
		20										

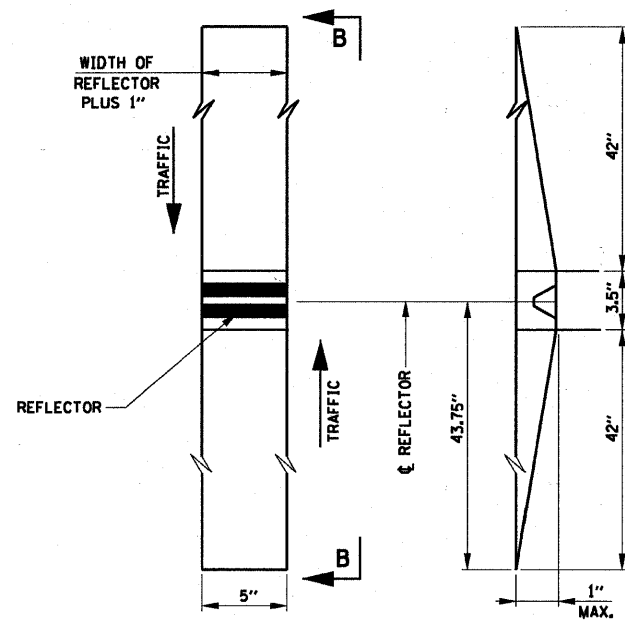
Water Level — depth, ft. elev., ft.  
 - while drilling: 5.5  
 - after drilling: 5.5  
 - hrs. after drilling: \_\_\_\_\_

S - sample T - type: J(Jar), SS(splir- spoon), ST(splir by tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/ 6" interval. W - water content, %  
 N - SPT, blows/ foot to drive 2" O.D. splir- spoon sampler with 140 lb. hammer falling 30".  
 Pen. - pocket penetrometer reading, tons/ sq. ft. Uw - dry unit weight of soil, lbs./ cu. ft.  
 Qu - unconfined compressive strength, tons/ sq. ft.

F-111b

FILE NAME = \\X:\755-010\Blivin Phase, IL\CAD\Draws\Structural\755-010 SH1-28 S- BORING LOGS.dgn

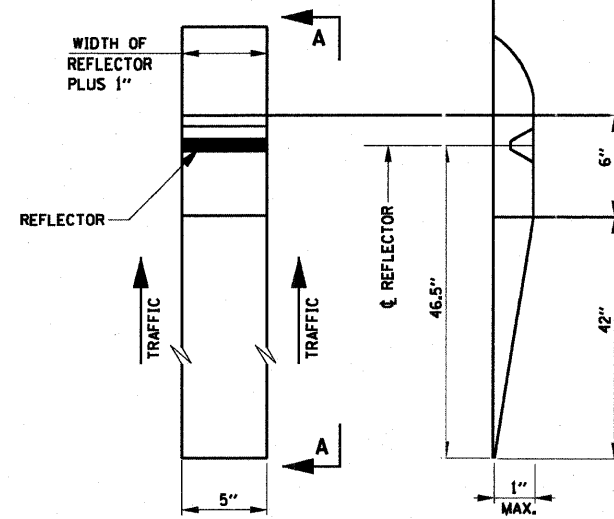
	USER NAME = gonzo	DESIGNED - SRT	REVISED -	<b>McHENRY COUNTY</b> <b>DIVISION OF TRANSPORTATION</b> <b>BLIVIN STREET OVER NIPPERSINK CREEK</b>	<b>SOIL BORING LOGS</b> <b>STRUCTURE NO. 056-3191</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - JJI	REVISED -			08-00355-00-BR	MCHENRY	69	53	
	PLOT DATE = 3/25/2011	DRAWN - GM	REVISED -	SCALE:	SHEET NO. 28 OF 28 SHEETS	STA.	TO STA.	CONTRACT NO. 63583		
		CHECKED - JJI	REVISED -	ILLINOIS FED. AID PROJECT						



PLAN VIEW

SECTION B-B

TWO WAY



PLAN VIEW

SECTION A-A

ONE WAY

RECESSED REFLECTIVE MARKERS

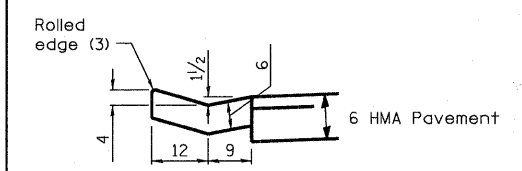
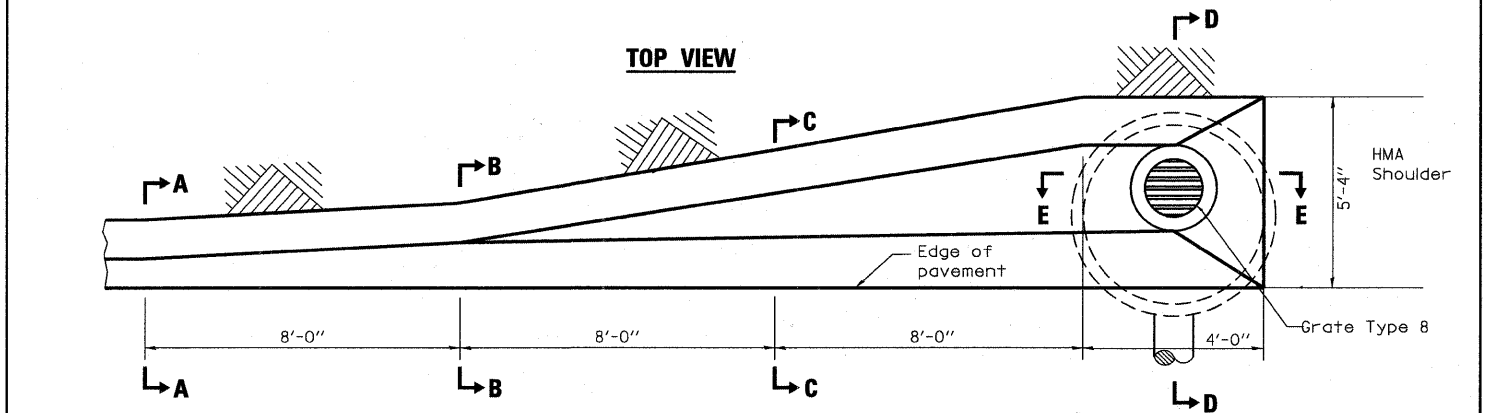
INSTALLATION NOTES:

1. SAWCUT IN DIMENSIONS SHOWN.
2. SAWCUT AREAS TO BE DRY AND FREE OF MATERIAL THAT ADVERSELY AFFECTS THE ADHESIVE BAND.
3. INSTALL THE REFLECTOR WITH AN APPROVED TWO-COMPONENT EPOXY ADHESIVE. EPOXY SHOULD NOT OBSCURE OR BLOCK THE LENS.
4. INSTALL TOP OF REFLECTOR 1/2 TO 3/4 INCH BELOW THE PAVEMENT SURFACE.
5. REFLECTOR SHALL BE 3M SERIES 290.

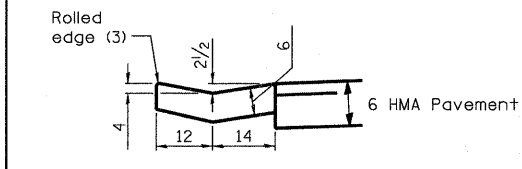
GENERAL NOTES:

1. INSTALLATION SHALL CONFORM TO IDOT HIGHWAY STANDARD 781001-02 (OR LATEST) FOR MARKER PLACEMENT.
2. IDOT STANDARD 781001-02 SHALL BE MODIFIED TO REFLECT IN RECESSED PAVEMENT MARKERS INSTEAD OF RAISED PAVEMENT MARKERS.

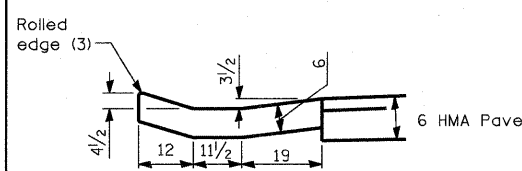
RECESSED REFLECTIVE PAVEMENT MARKINGS DETAIL



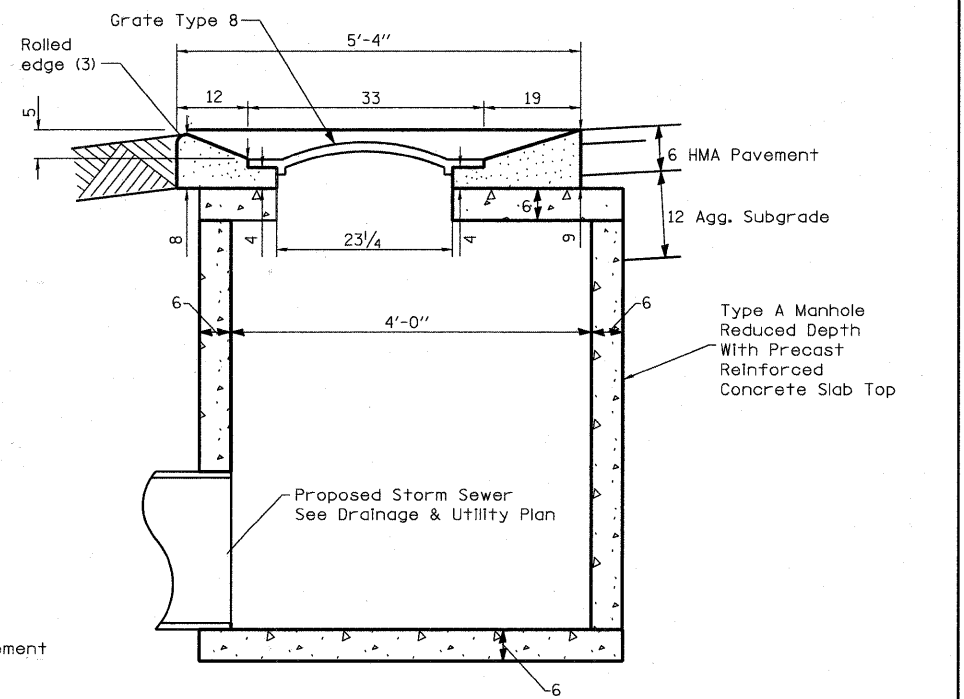
SECTION A-A



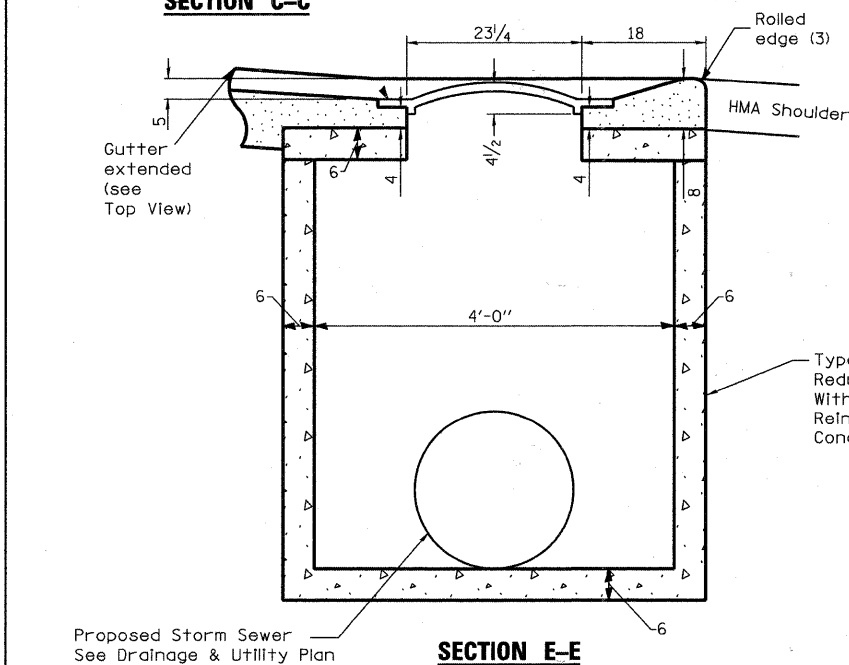
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

GENERAL NOTES

GUTTER OUTLET, SPECIAL is a modified detail of Standard 606206 to allow for storm sewer structures. Contractor shall use Precast Reinforced Concrete Flat Top Slab, Manhole Type A and Grate Type 8 per appropriate Highway Standards as referenced on the Cover Sheet for these plans.

All dimensions are in inches unless otherwise shown.

Gutter Outlet, Special shall be paid for as GUTTER OUTLET, SPL as described in the project specifications and shall include all concrete and formwork.

QUANTITIES

Material	Single
Concrete - cu. yd.	2.1

GUTTER OUTLET, SPL DETAIL

FILE NAME = H:\755-00 Blvin Phase II\CADD\_Sheets\755-00-01-01.dgn

**B** Bollinger, Lach & Associates, Inc.  
ITASCA, ILLINOIS

USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -
PLOT SCALE = 20.0000' / IN.	DRAWN - DBB	REVISED -
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -
	DATE - 03-28-11	REVISED -

BLVIN STREET OVER NIPPERSINK CREEK

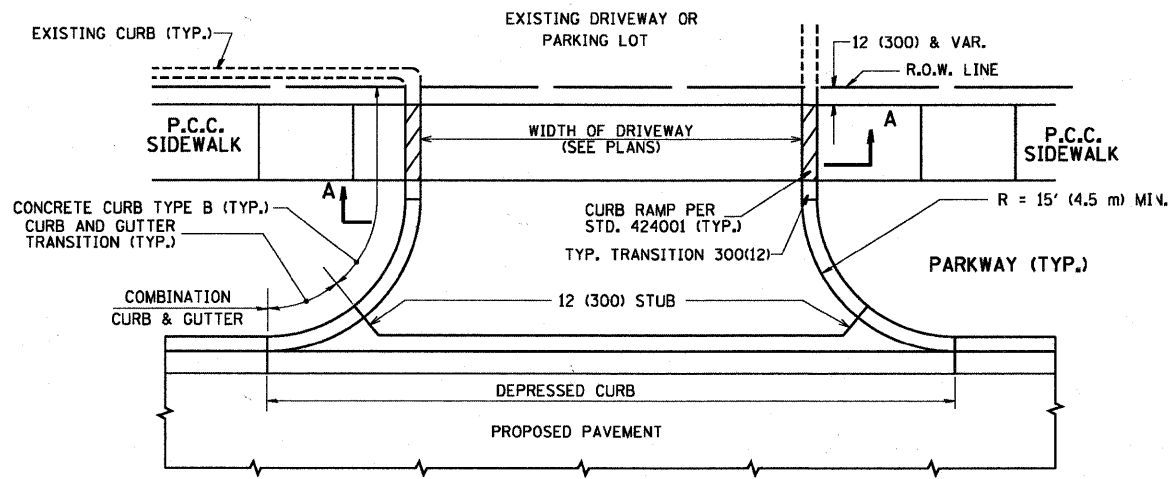
CONSTRUCTION DETAILS

SCALE: N.T.S. SHEET NO. 54 OF 69 SHEETS STA. TO STA.

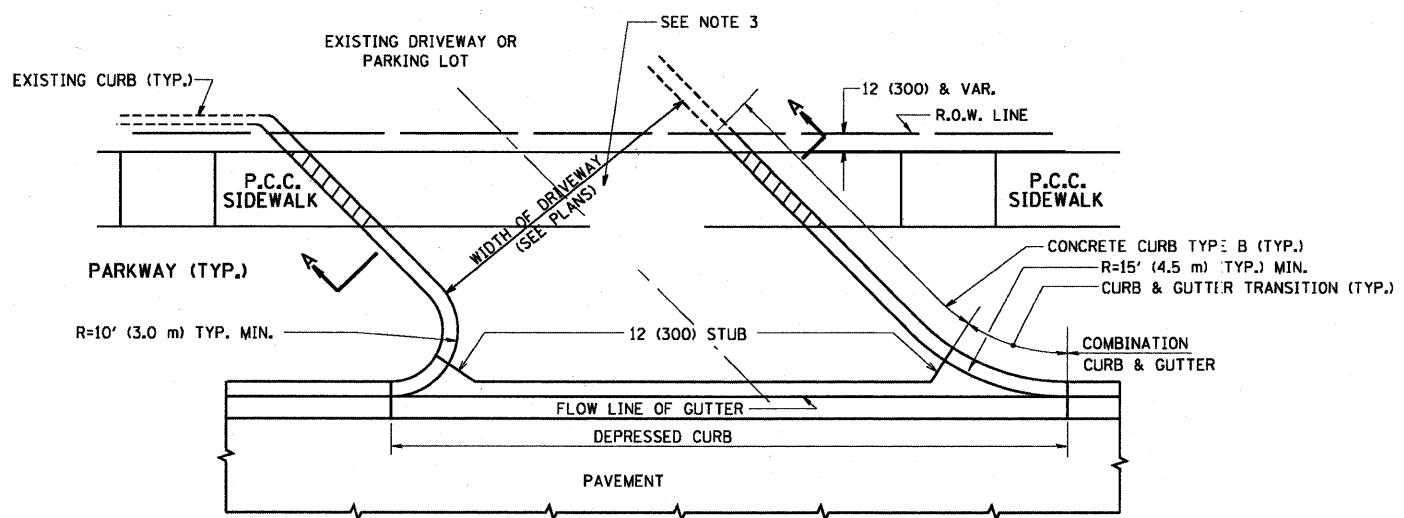
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	54
CONTRACT NO. 63583				
FED ROAD DIST NO. 1 ILLINOIS FED AID PROJECT				



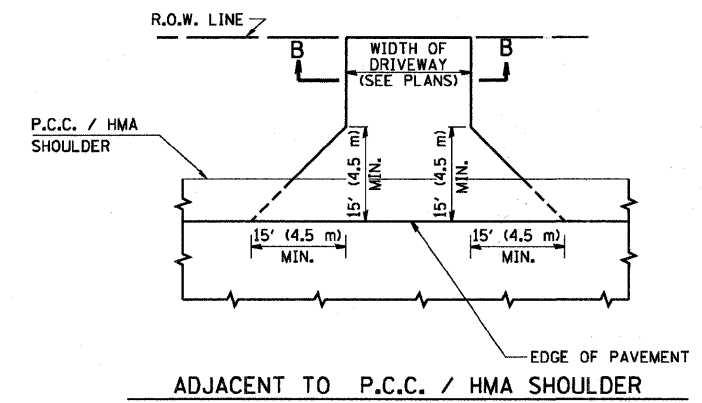




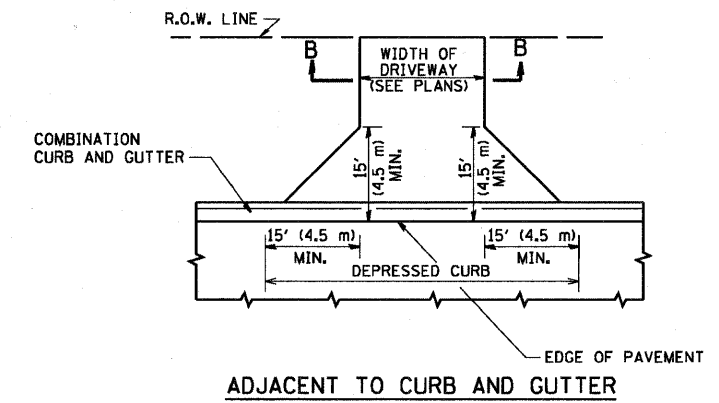
WITH CONCRETE CURB, TYPE B



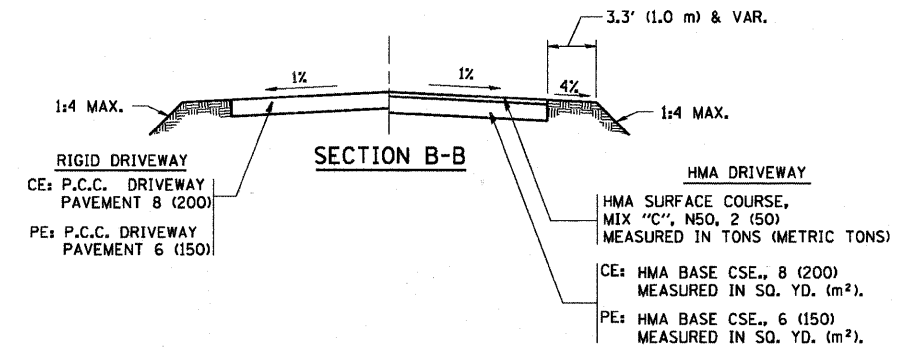
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



SECTION B-B

**RIGID DRIVEWAY**  
 CE: P.C.C. DRIVEWAY PAVEMENT 8 (200)  
 PE: P.C.C. DRIVEWAY PAVEMENT 6 (150)

**HMA DRIVEWAY**  
 HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)  
 CE: HMA BASE CSE., 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>)  
 PE: HMA BASE CSE., 6 (150) MEASURED IN SQ. YD. (m<sup>2</sup>)

**RURAL FIELD ENTRANCE (FE)**  
 HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)  
 AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>)

**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.

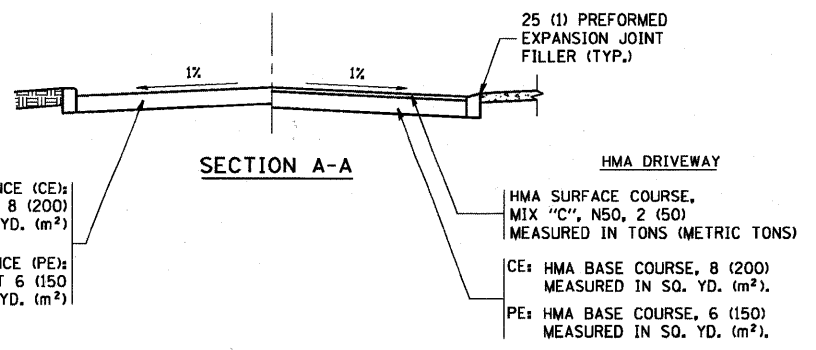
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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.

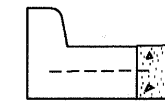
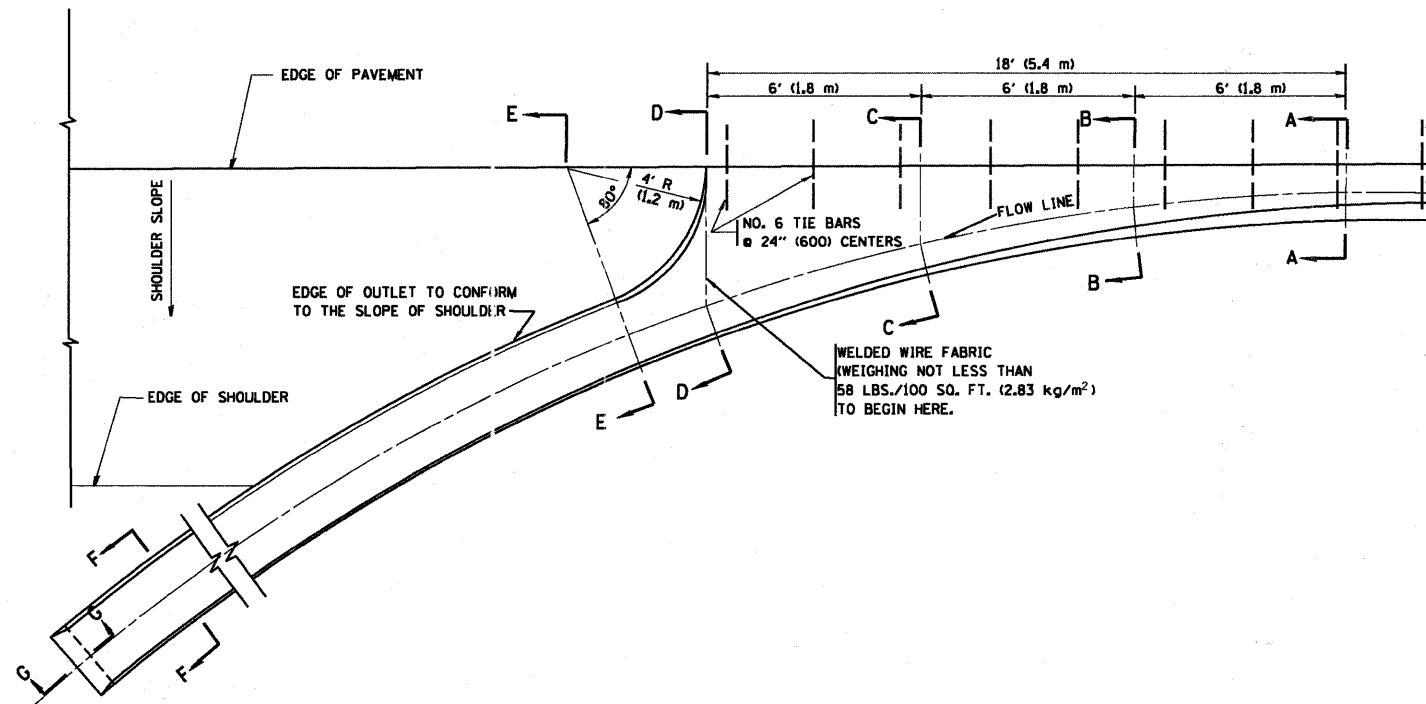


SECTION A-A

**RIGID DRIVEWAY**  
 COMMERCIAL ENTRANCE (CE): P.C.C. DRIVEWAY PAVEMENT 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>)  
 NON-COMMERCIAL ENTRANCE (PE): P.C.C. DRIVEWAY PAVEMENT 6 (150) MEASURED IN SQ. YD. (m<sup>2</sup>)

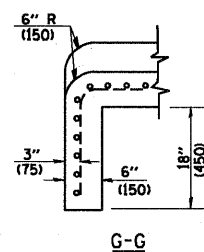
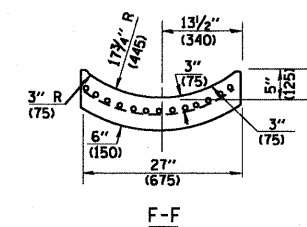
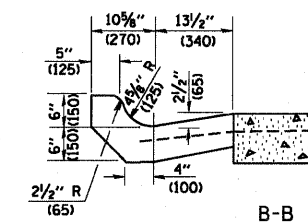
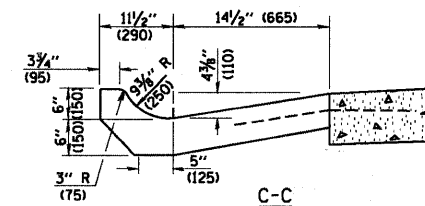
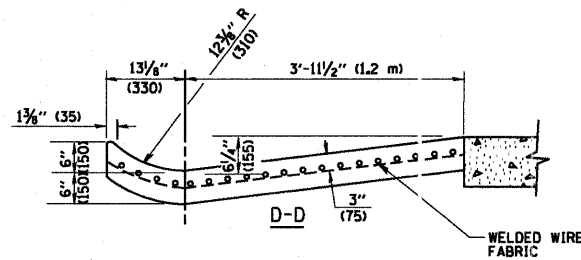
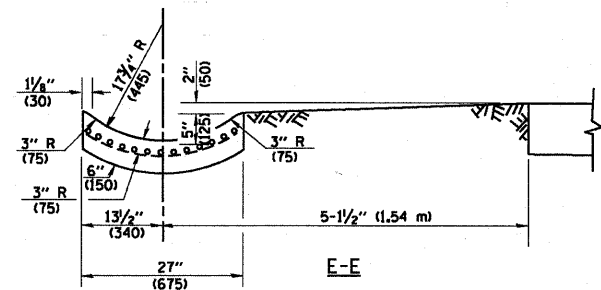
**HMA DRIVEWAY**  
 HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)  
 CE: HMA BASE COURSE, 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>)  
 PE: HMA BASE COURSE, 6 (150) MEASURED IN SQ. YD. (m<sup>2</sup>)

FILE NAME = c:\projects\diststd22x34\bd01.dgn	USER NAME = bouerd1	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB &amp; EDGE OF SHOULDER &gt;= 15' (4.5 m)</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 49.9999' / IN.	CHECKED -	DRAWN -	REVISED - P. LoFLUER 04-15-03		08-00355-00-BR	MCHENRY	69	56			
PLOT DATE = 6/12/2008	DATE - 11-04-95	CHECKED -	REVISED - R. BORO 01-01-07		BD0156-07 (BD-01)		CONTRACT NO. 63583				
		DATE -	REVISED - R. BORO 06-11-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



A-A \*

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



**GENERAL NOTES**

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

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\"/>

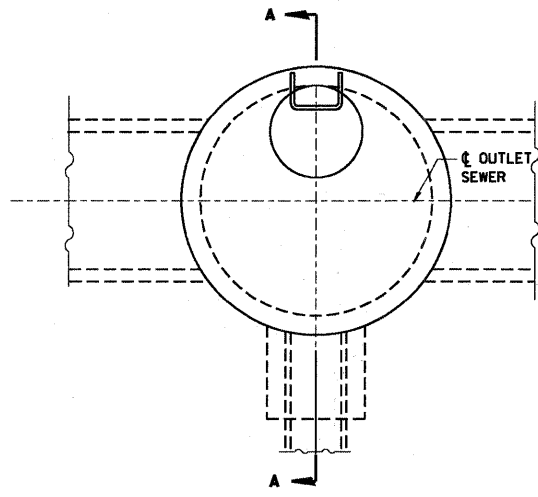
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6\"/>

**QUANTITIES**

FOR SECTION A-A TO E-E AND CURTAIN WALL =  
 1.25 CU. YDS. (0.96 m<sup>3</sup>) CLASS S1 CONCRETE (OUTLET) FOR 9\"/>

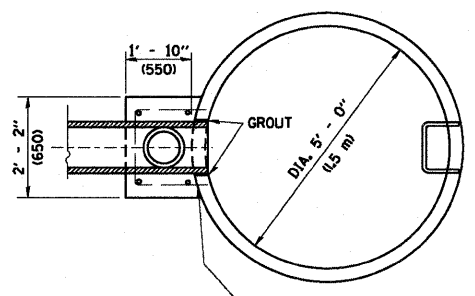
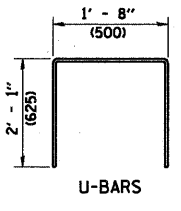
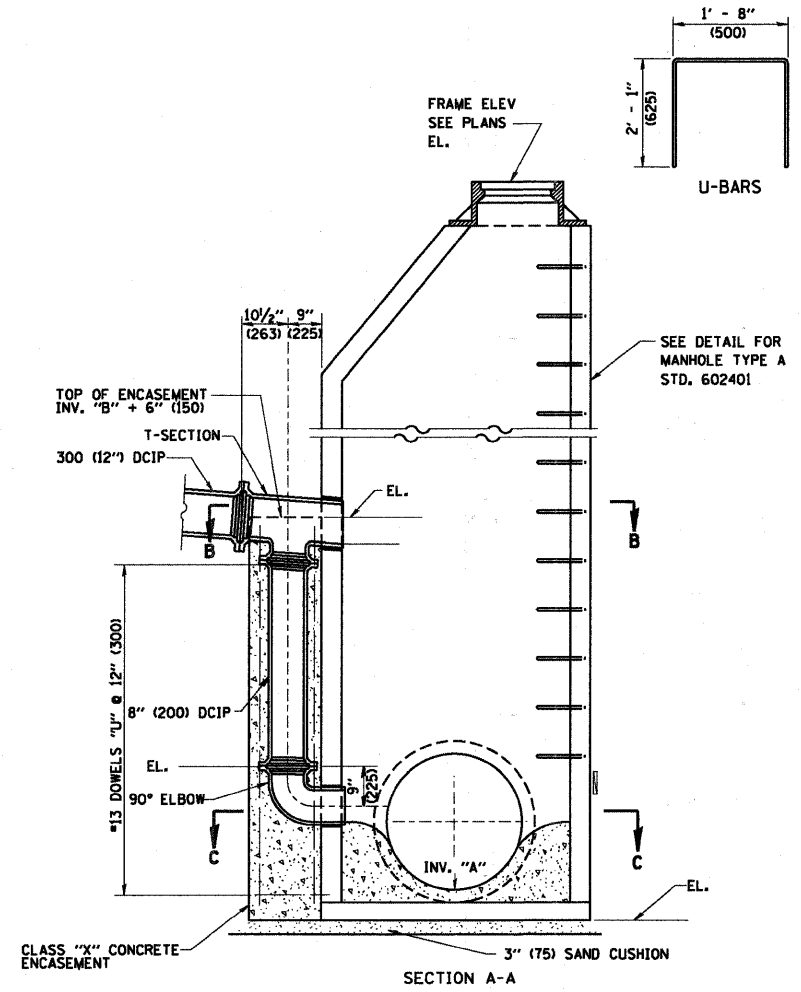
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\d\stsd\22x34\bd83.dgn	USER NAME = geglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>OUTLET FOR CONCRETE CURB AND GUTER</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. SHAH 10-25-94		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	08-00355-00-BR	MCHENRY	69	57
		CHECKED -	REVISED - E. GOMEZ 12-21-00					BD600-01 (BD-03)		CONTRACT NO. 63583		
		DATE - 08-04-86	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



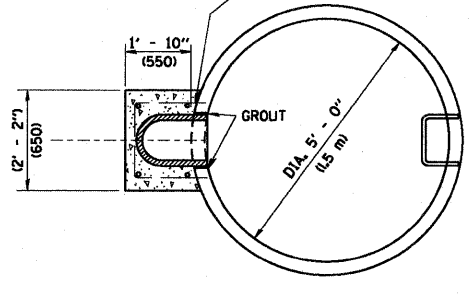
PLAN FOR LOCATION SEE DRAINAGE PLANS

ENCASEMENT DETAILS			
DROP M.H. LOCATION STA., OFFSET			
INV. "A"			
INLET PIPE			
INV. "B"			
INV. "C"			
A			
B			
"V" BAR LENGTH			
NO. OF "U" BARS			
REINF. BARS			
CLASS "SI" CONC. CUBIC YARD			



SECTION B-B

DRILL 1/4" (30) HOLE IN MANHOLE RISER WALLS, FILL WITH MORTAR AND INSERT DOWELS. (TYPICAL FOR ALL DOWELS)

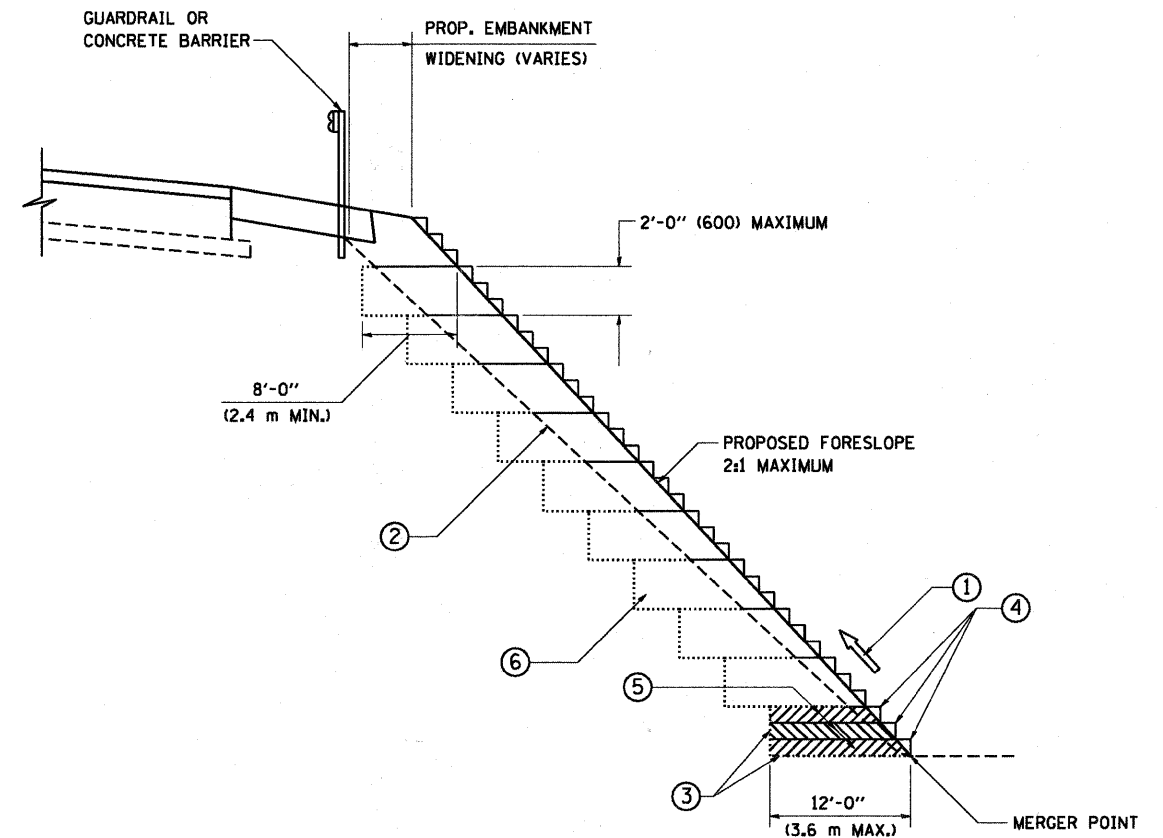


SECTION C-C

- TYPE A1-1 MANHOLE WITH 1 DROP AND DEPTH UP TO 10' (3 m)
- TYPE A1-2 " " " " " " FROM 10' TO 15' (3 m TO 1.5 m)
- TYPE A1-3 " " " " " " FROM 15' TO 20' (1.5 m TO 6 m)
- TYPE A1-4 " " " " " " OVER 20' (6 m)
  
- TYPE A2-1 MANHOLE WITH 2 DROPS AND DEPTH UP TO 10' (3 m)
- TYPE A2-2 " " " " " " FROM 10' TO 15' (3 m TO 1.5 m)
- TYPE A2-3 " " " " " " FROM 15' TO 20' (1.5 m TO 6 m)
- TYPE A2-4 " " " " " " OVER 20' (6 m)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = W:\distatd\22x34\bd16.dgn	USER NAME = gaglienabt	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DROP MANHOLE DETAILS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	08-00355-00-BR	McHENRY	69	58
		CHECKED -	REVISED -						<b>BD600-05</b>	<b>(BD-16)</b>	<b>CONTRACT NO. 63583</b>	
		DATE - 10-18-02	REVISED -						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



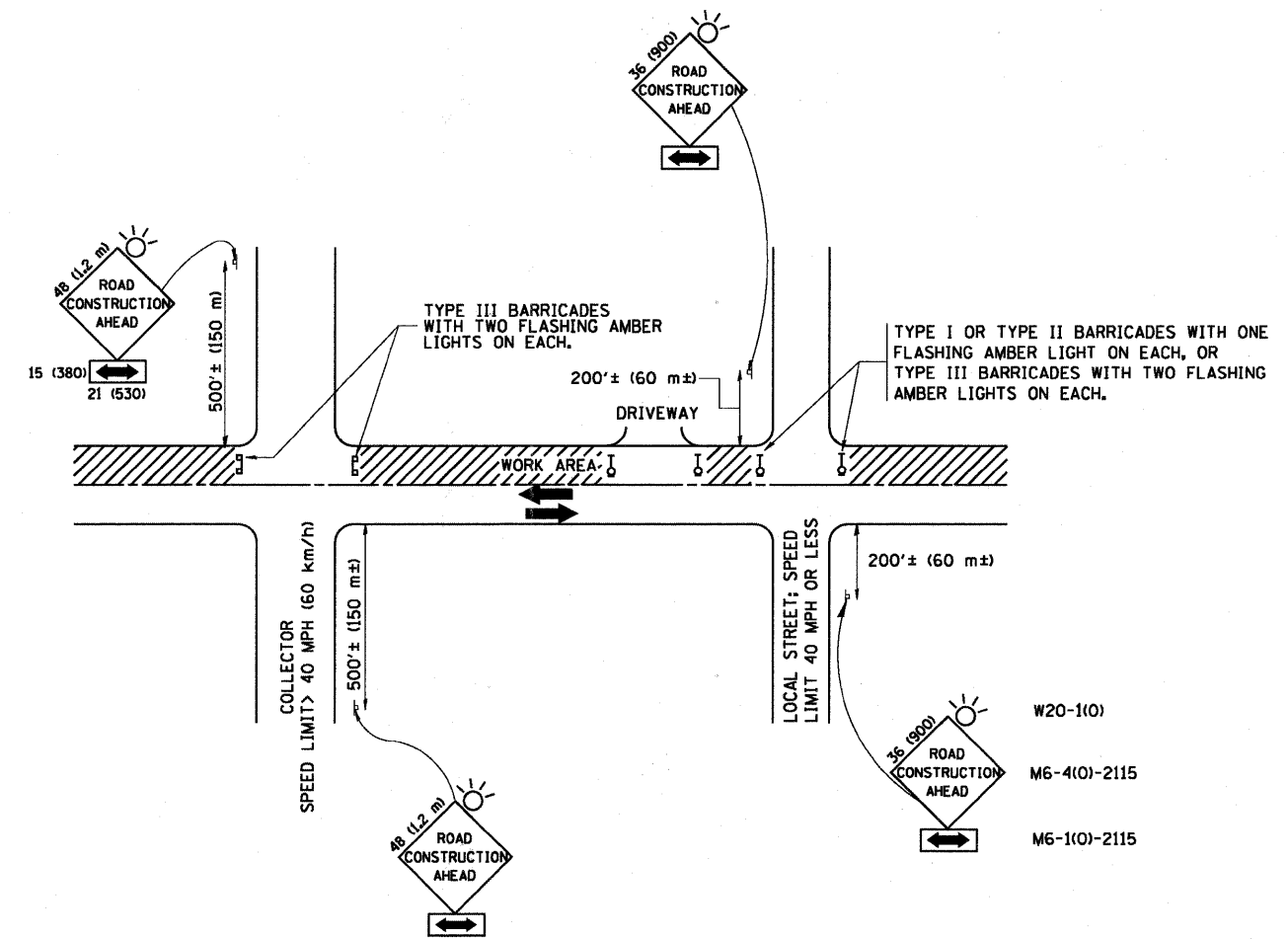
**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**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.

FILE NAME = W:\distatd\22x34\bd51.dgn	USER NAME = goglienobt	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BENCHING DETAIL FOR EMBANKMENT WIDENING</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	DRAWN - CADD	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	08-00355-00-BR	McHENRY	69	59	
	PLOT DATE = 1/4/2008	CHECKED - S.E.B.	REVISED -				TO STA.	BD-51			CONTRACT NO. 63583	
		DATE - 06-16-04	REVISED -					FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			



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

**NOTES:**

**A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

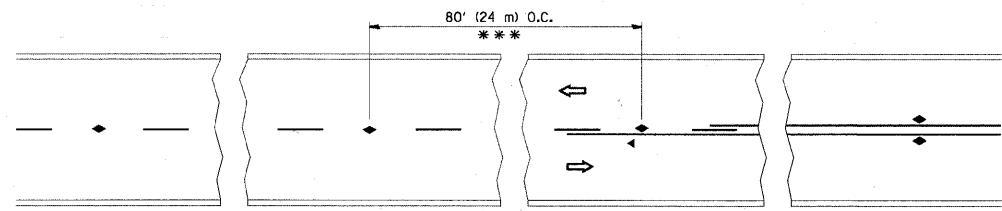
**B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**

- 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.

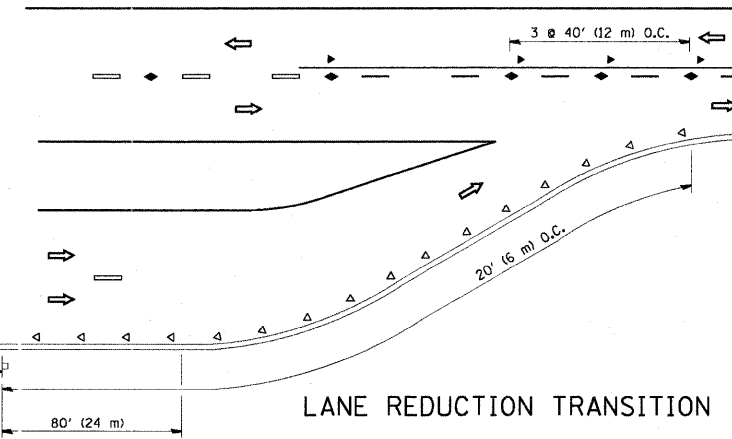
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	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED - A. HOUSEH 03-06-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	08-00355-00-BR	McHENRY	69	60	
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - A. HOUSEH 10-15-96				TO STA.	<b>TC-10</b>		<b>CONTRACT NO. 63583</b>		
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00					FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



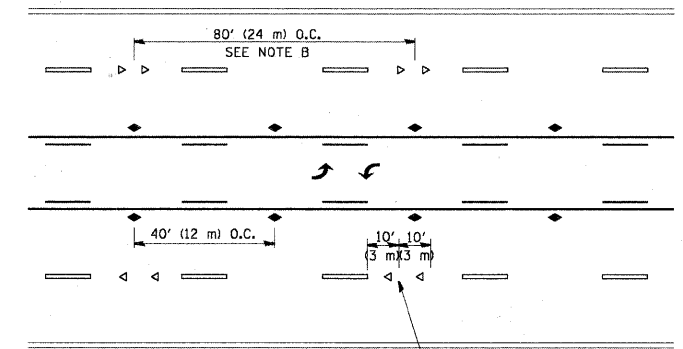


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

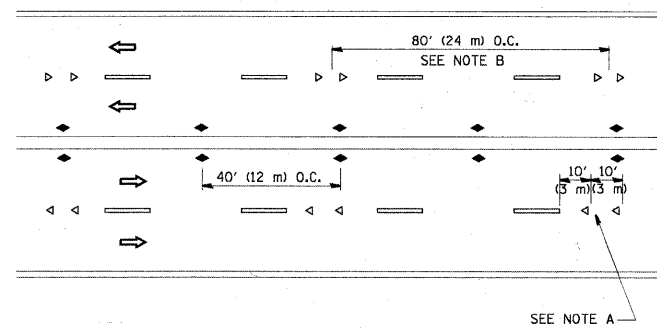
TWO-LANE/TWO-WAY



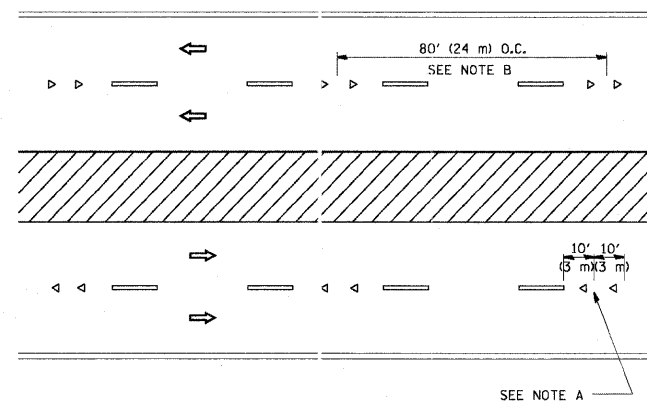
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

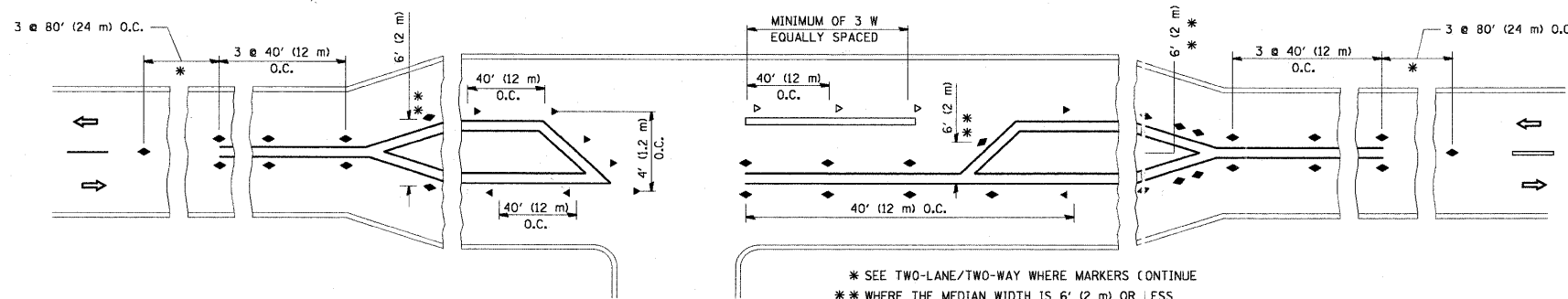
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- 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.

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 SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

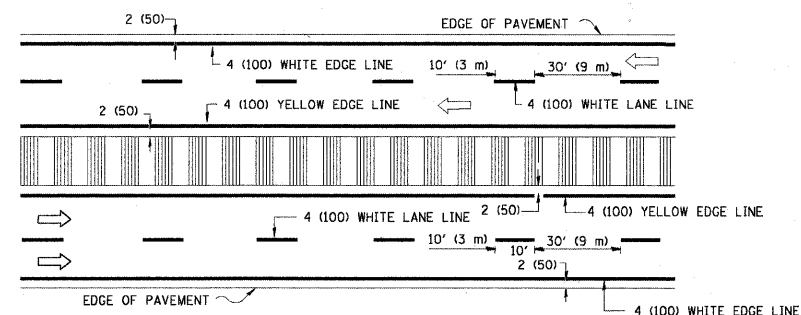
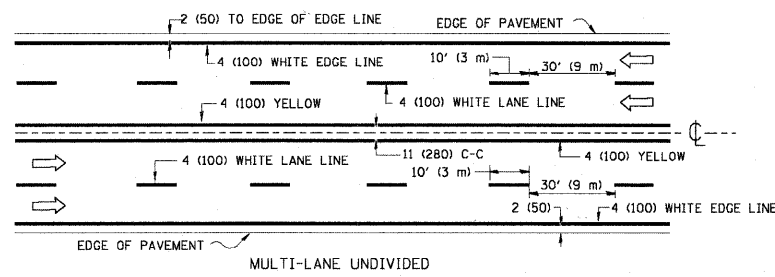
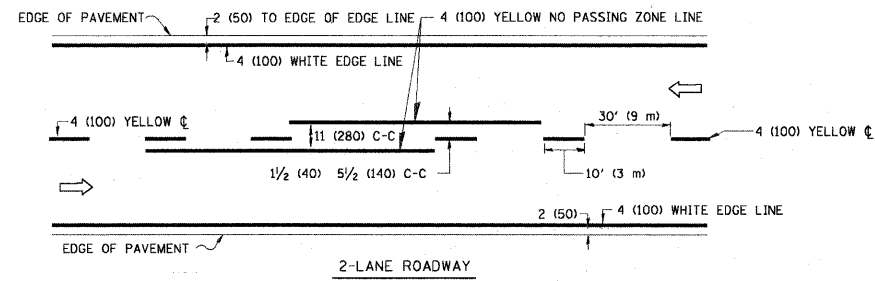


LEFT TURN

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

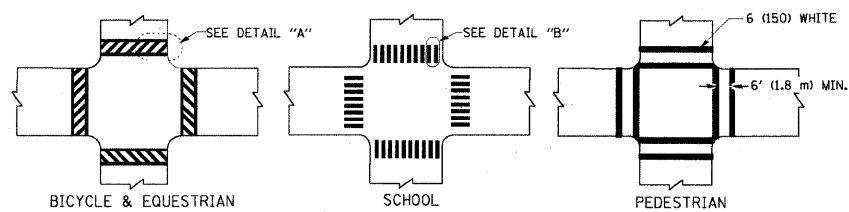
All dimensions are in Inches (millimeters) unless otherwise shown.

FILE NAME = c:\pwork\pw\dot\leyst\40128315\td11.dgn	USER NAME = leyst	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - T. RAMMACHER 03-12-99		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	08-00355-00-BR	McHENRY	69	60A
		CHECKED -	REVISED - T. RAMMACHER 01-06-00							TC-11			
		DATE -	REVISED - C. JUCIUS 09-09-09							FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT		CONTRACT NO. 63583

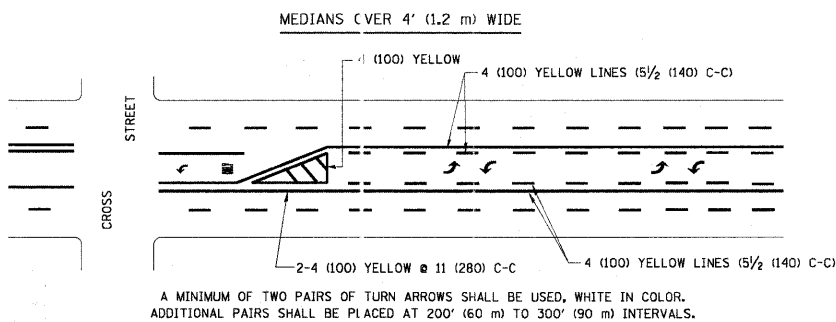
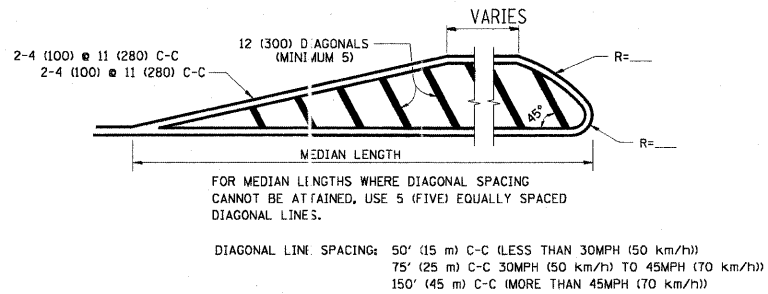
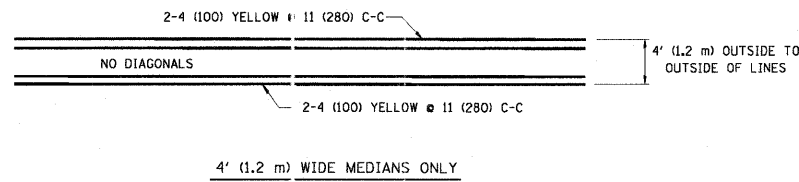


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

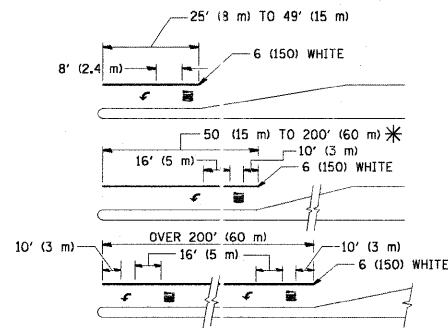
**TYPICAL LANE AND EDGE LINE MARKING**



**TYPICAL CROSSWALK MARKING**

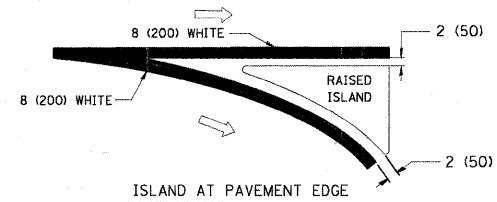
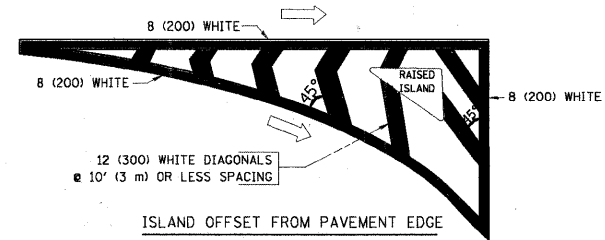


**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* 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 TURN LANE MARKING**



**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) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 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 SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

FILE NAME =	USER NAME = drvakosgn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
dr:\pw\work\pavdot\drvakosgn\d8188315\td3.dgn		DRAWN -	REVISED - C. JUCIUS 09-09-09
		CHECKED -	REVISED -
		DATE - 03-19-90	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	McHENRY	69	61
TC-13		CONTRACT NO. 63583		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**ROUTE MARKERS**

FOR U.S. ROUTES  
MI-40-2424

FOR ILLINOIS ROUTES  
MI-50-2424

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

**ARROWS SIGNS**

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

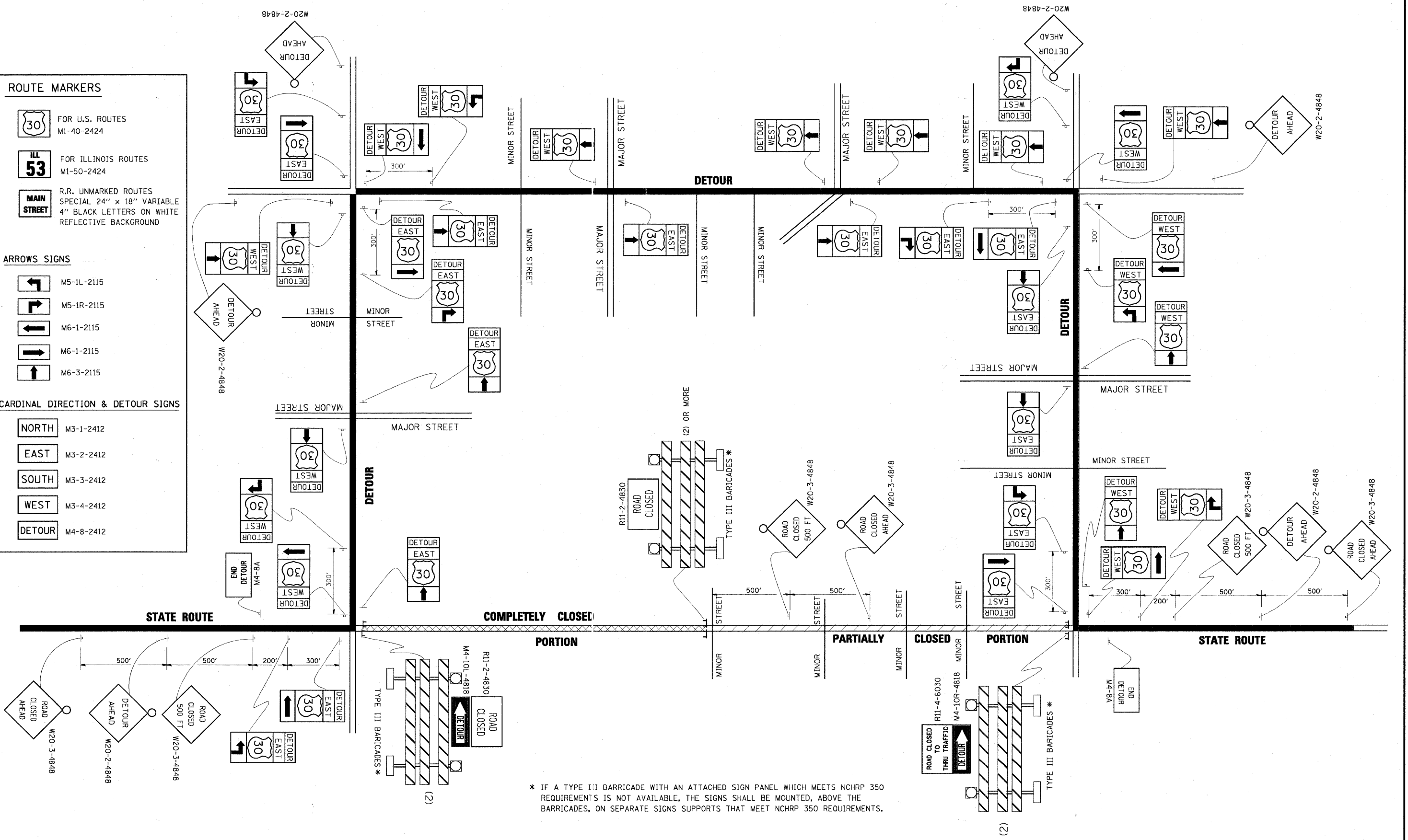
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

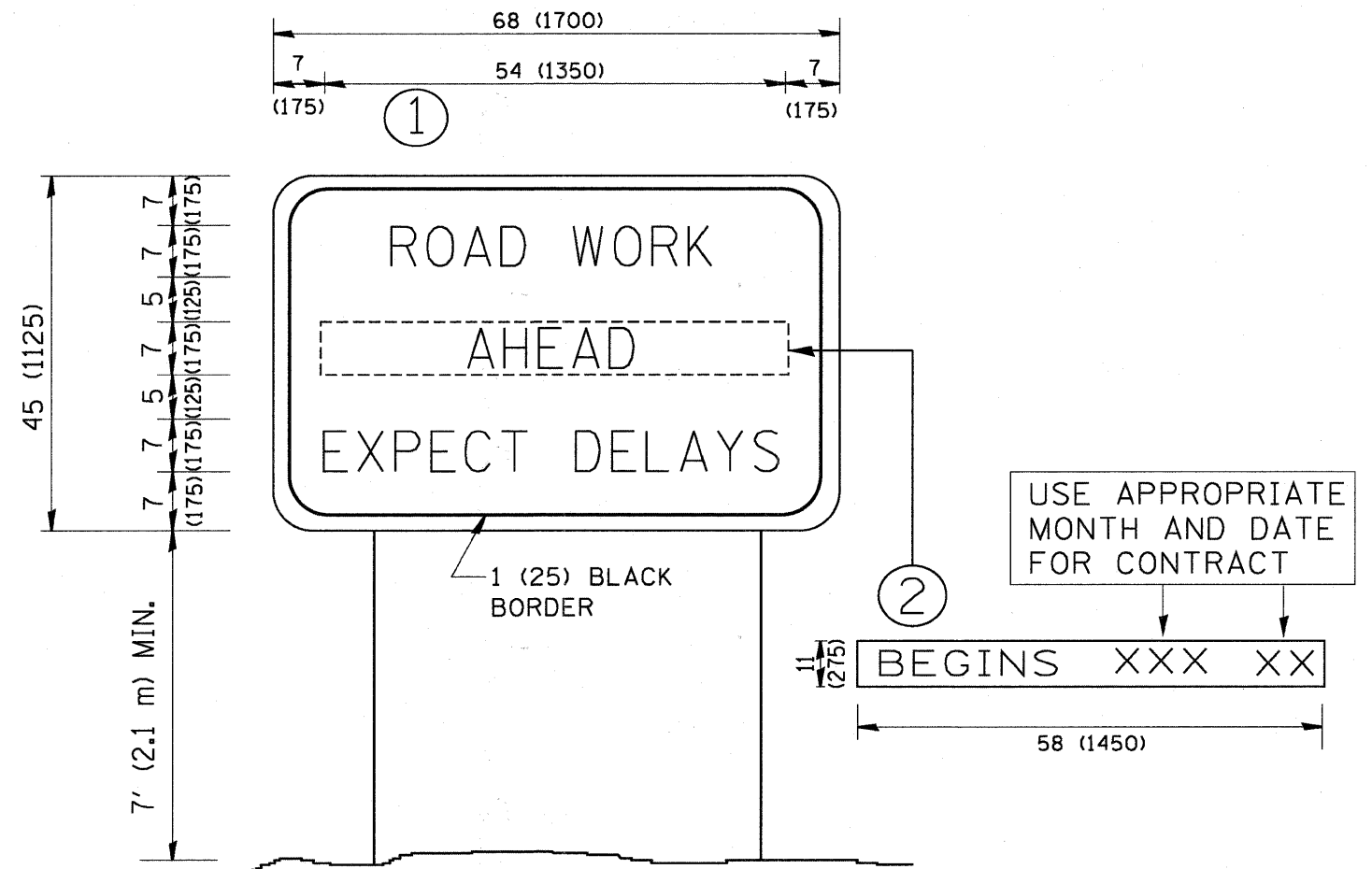
WEST M3-4-2412

DETOUR M4-8-2412



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

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - 10-18-02	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>		F.A. -	SECTION	COUNTY	TOTAL	SHEET
o:\p\work\p\w\1001\DRIVAKOSGN\0108315\21.dgn		DRAWN -	REVISED - R. BORO 09-14-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	08-00355-00-BR	MCHENRY	69	61A
		CHECKED -	REVISED -				TO STA.	<b>TC-21</b>		CONTRACT NO. 63583	
		DATE -	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



**NOTES:**

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

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

FILE NAME = W:\distatd\22x34\to22.dgn	USER NAME = gog1enobt	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	08-00355-00-BR	MCHENRY	69	62
		PLOT SCALE = 50.000' / IN.	REVISED - T. RAMMACHER 02-02-99						TC-22	CONTRACT NO. 63583		
		PLOT DATE = 1/4/2008	REVISED - C. JUCLIS 01-31-07		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							

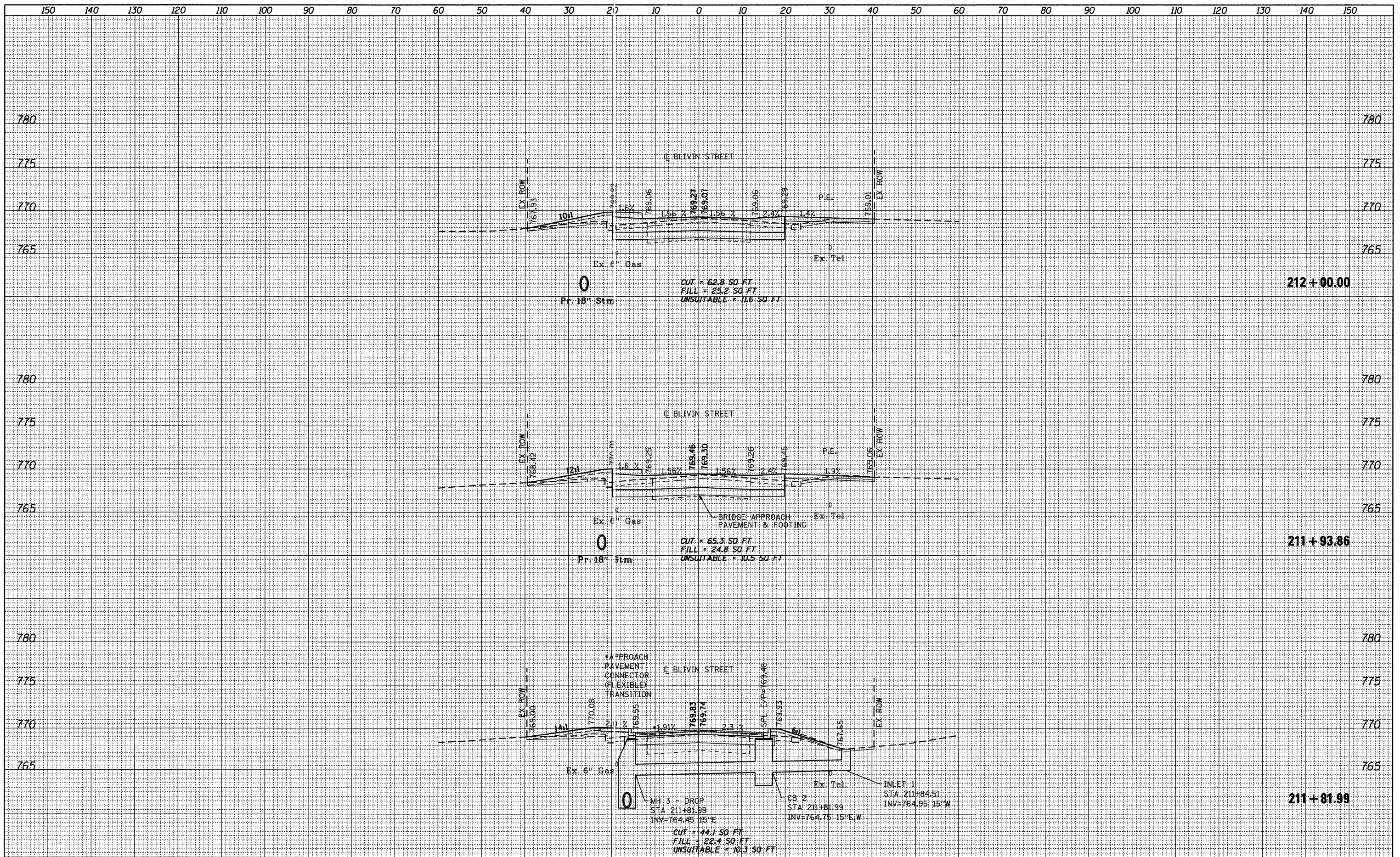






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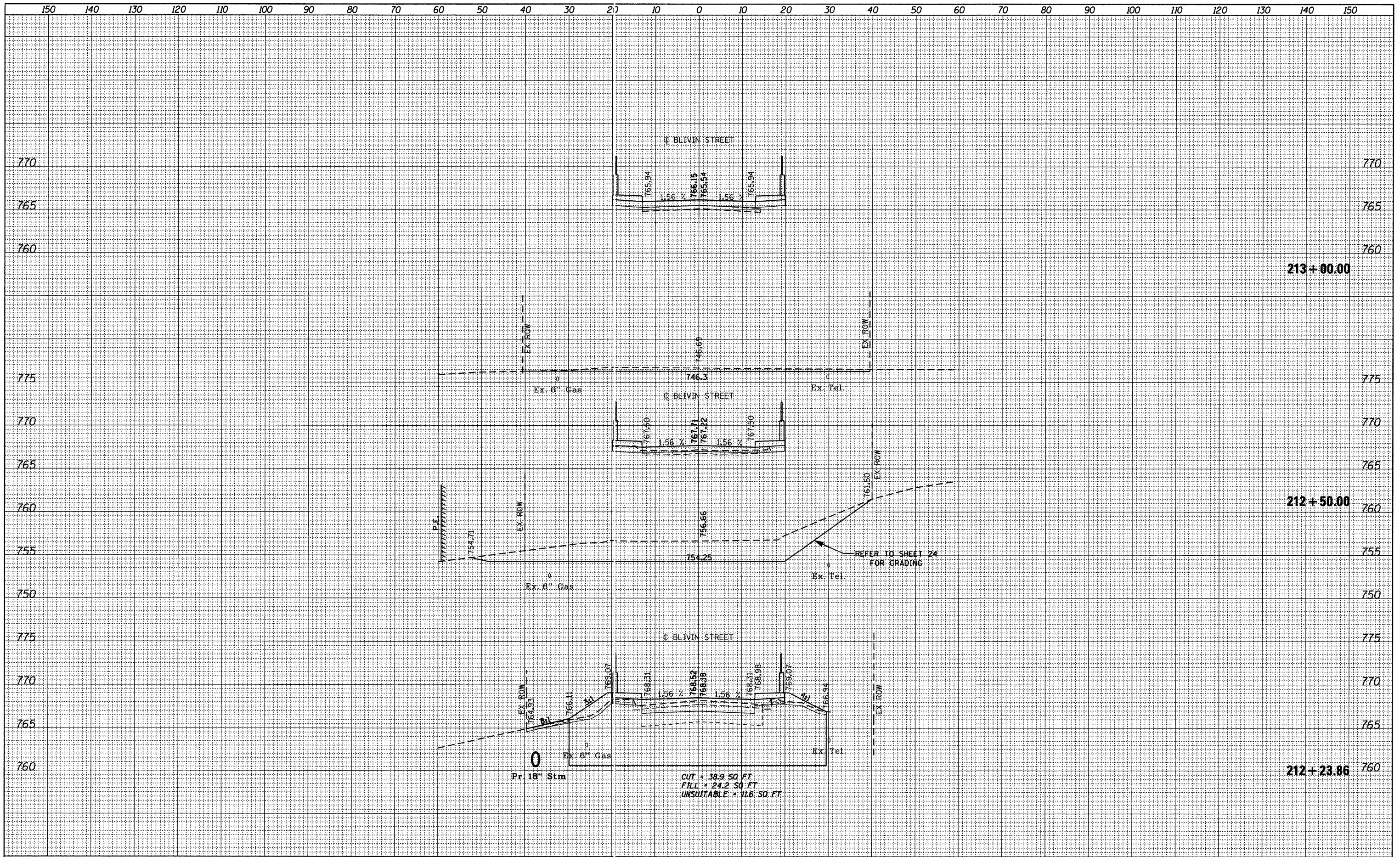


FILE NAME = W:\755-010 Blivin Phase II\CA00.Sheets\755010-011.dgn	USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -	<b>BLIVIN STREET OVER NIPPERSINK CREEK</b> VERT. 1"=5' SCALE: HORZ 1"=10' SHEET NO. 64 OF 69 SHEETS STA. 211+81.99 TO STA. 212+00.00	<b>BLIVIN STREET CROSS SECTION</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 10.0000' / IN.	DRAWN - DBB	REVISED -	08-00355-00-BR			MCHENRY	69	64		
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -	CONTRACT NO. 63583							
DATE = 03-28-11	DATE = 03-28-11	REVISED -	ILLINOIS FED. AID PROJECT							



DATE	
BY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
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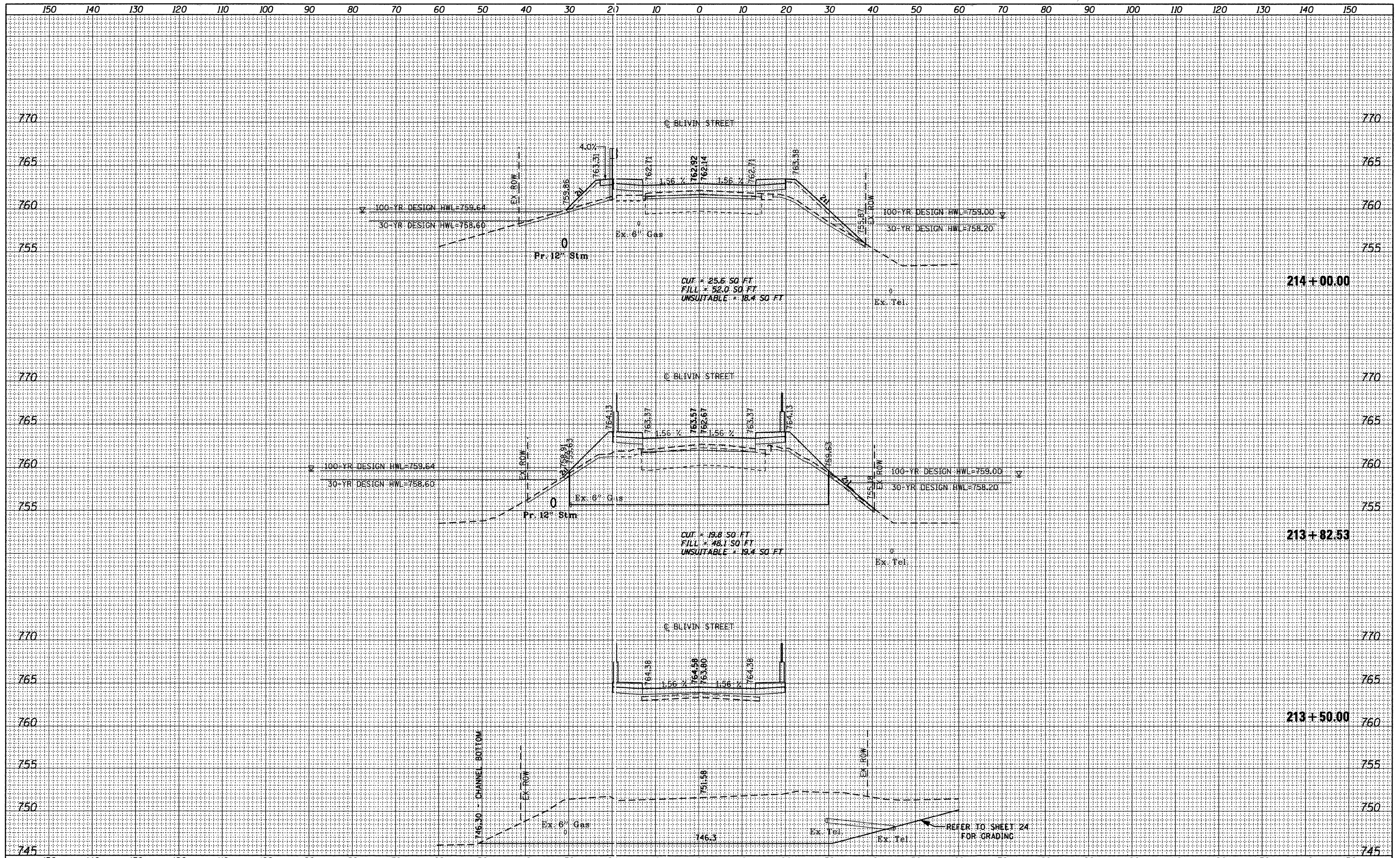
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PLOT SCALE = 10.0000' / IN.	DATE = 12-17-10	DRAWN - GJE	REVISED -
PLOT DATE = 3/25/2011	DATE = 12-17-10	CHECKED - CRF	REVISED -
		DATE = 12-17-10	REVISED -

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	65
				CONTRACT NO. 63583
ILLINOIS FED. AID PROJECT				



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

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



FILE NAME = W:\755-010 Blivin Phase II\CA00.Sheets\755010-01  
 USER NAME = dbruckelmeyer  
 DESIGNED - DBB  
 DRAWN - DBB  
 CHECKED - CRF  
 DATE - 03-28-11

DESIGNED - DBB  
 DRAWN - DBB  
 CHECKED - CRF  
 DATE - 03-28-11

REVISIONS  
 REVISION NO. DATE BY DESCRIPTION

REVISIONS  
 REVISION NO. DATE BY DESCRIPTION

**BLIVIN STREET OVER NIPPERSINK CREEK**

VERT. 1"=5'  
 SCALE: HORZ 1"=10'

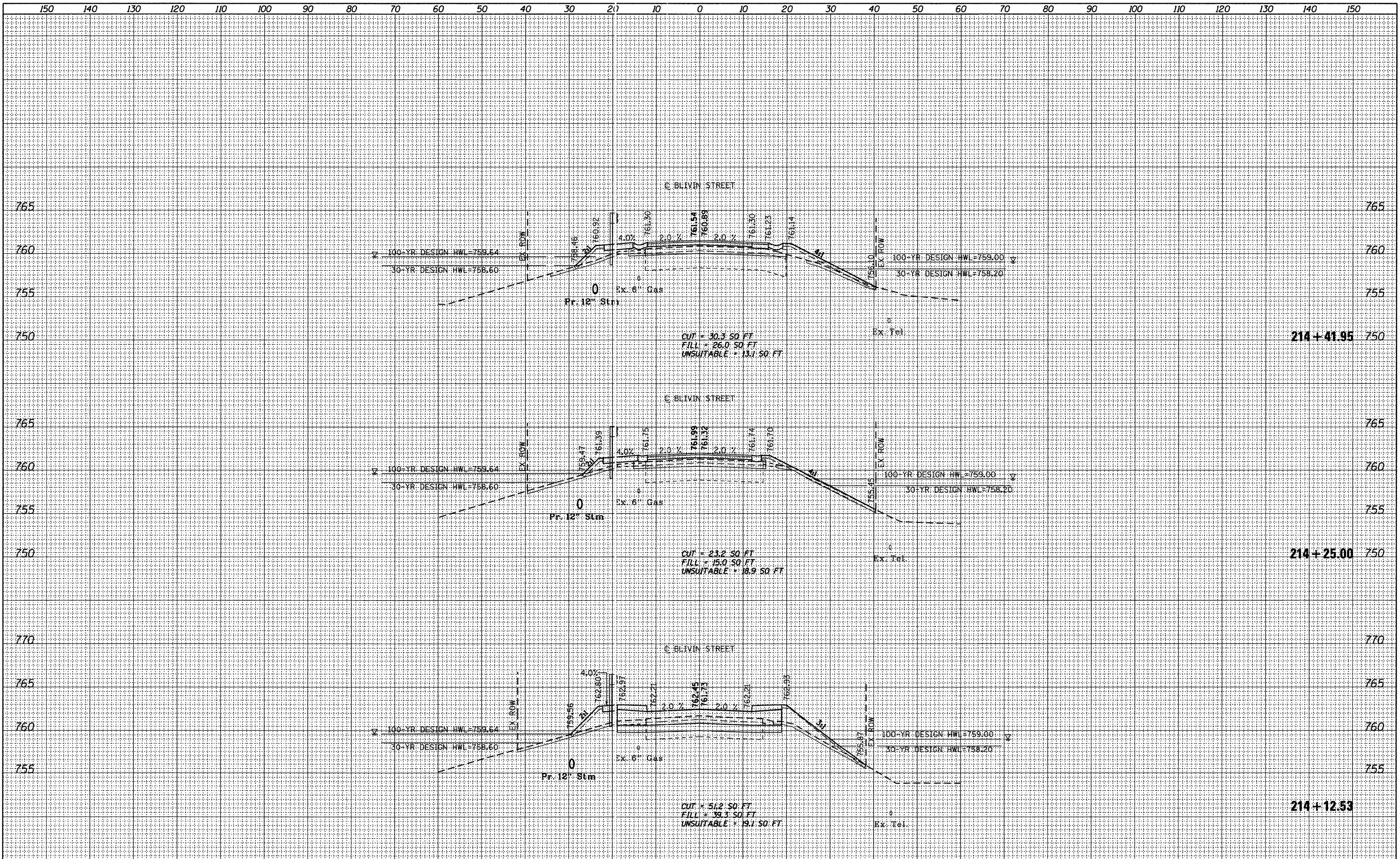
**BLIVIN STREET CROSS SECTION**  
 SHEET NO. 66 OF 69 SHEETS  
 STA. 213+50.00 TO STA. 214+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	08-00355-00-BR	MCHENRY	69	66
CONTRACT NO. 63583				
ILLINOIS FED. AID PROJECT				



DATE	
BY	
SURVEYED	
PLotted	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLotted	
NOTE BOOK	
AREAS CHECKED	
NO.	

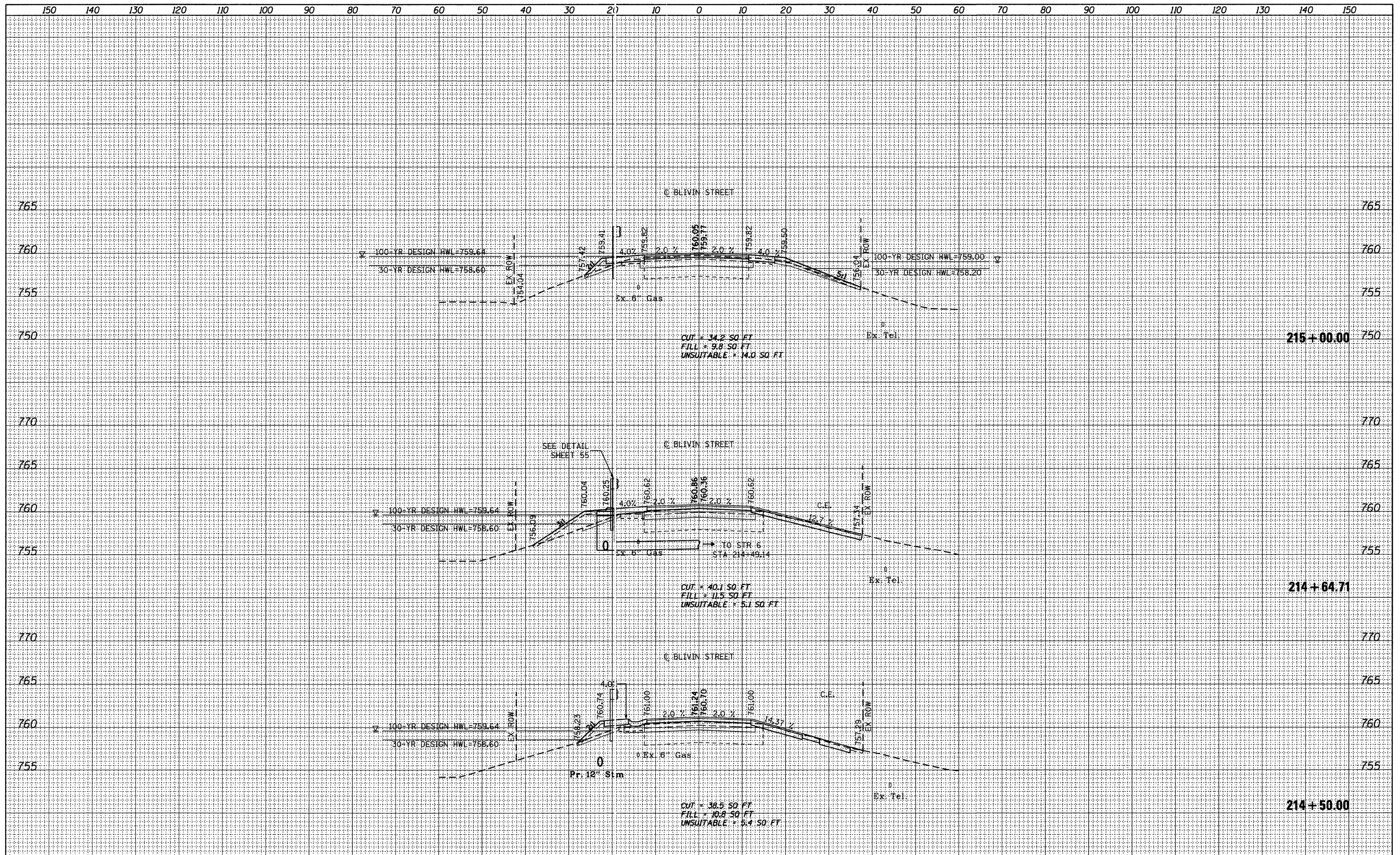


FILE NAME =	USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -	<b>BLIVIN STREET OVER NIPPERSINK CREEK</b> VERT. 1"=5' SCALE: HORZ 1"=10' SHEET NO. 67 OF 69 SHEETS STA. 214+12.53 TO STA. 214+41.95	<b>BLIVIN STREET CROSS SECTION</b> SECTION 08-00355-00-BR COUNTY MCHENRY TOTAL SHEETS 69 SHEET NO. 67 CONTRACT NO. 63583 ILLINOIS FED. AID PROJECT
W:\755-010 Blivin Phase II\CADD\Sheets\755010-01	t-xssht.dgn	DRAWN - DBB	REVISED -		
PLOT SCALE = 10.0000' / IN.	CHECKED - CRF	REVISED -	REVISED -		
PLOT DATE = 3/25/2011	DATE - 03-28-11	REVISED -	REVISED -		



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

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

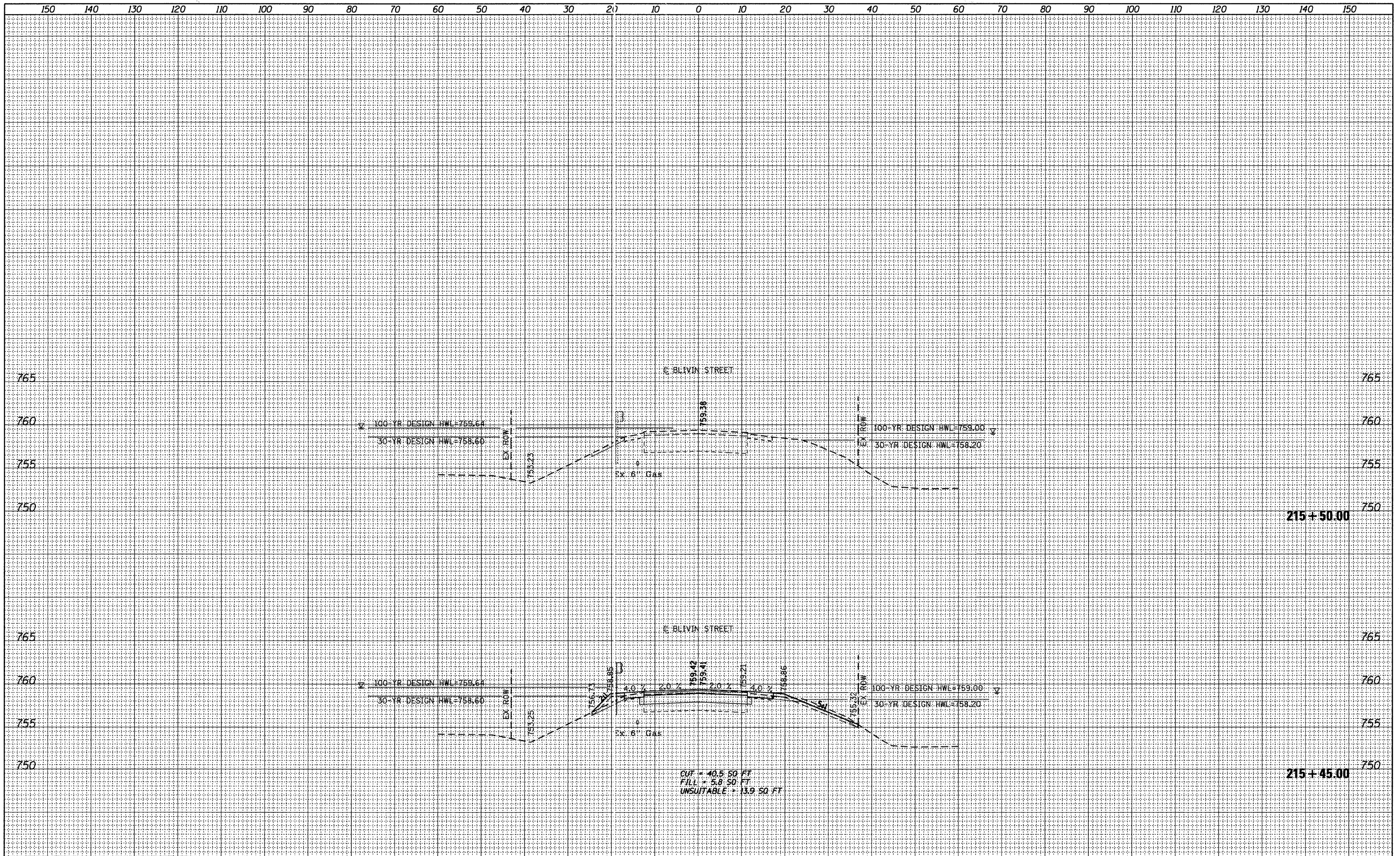


FILE NAME =	USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -	<b>BLIVIN STREET OVER NIPPERSINK CREEK</b> VERT. 1"=5' SCALE: HORZ 1"=10' SHEET NO. 68 OF 69 SHEETS STA. 214+50.00 TO STA. 215+00.00	<b>BLIVIN STREET CROSS SECTION</b> SECTION 08-00355-00-BR COUNTY MCHENRY TOTAL SHEETS 69 SHEET NO. 68 CONTRACT NO. 63583 ILLINOIS FED. AID PROJECT
W:\755-010 Blivin Phase II\CADD\Sheets\755010-01	PLLOT SCALE = 10.0000' / IN.	DRAWN - DBB	REVISED -		
	DATE = 3/25/2011	CHECKED - CRF	REVISED -		
		DATE - 03-28-11	REVISED -		



DATE	
BY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



CUT = 40.50 FT  
 FILL = 5.80 FT  
 UNSUITABLE = 13.90 FT

FILE NAME = W:\755-010 Blivin Phase II\CADD\Sheets\755010-01.dwg	USER NAME = dbruckelmeyer	DESIGNED - DBB	REVISED -	<b>BLIVIN STREET OVER NIPPERSINK CREEK</b> VERT. 1"=5' SCALE: HORZ 1"=10' SHEET NO. 69 OF 69 SHEETS STA. 215+43.00 TO STA. 215+50.00	<b>BLIVIN STREET CROSS SECTION</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 10.0000' / IN.	DRAWN - DBB	REVISED -	08-00355-00-BR			MCHENRY	69	69		
PLOT DATE = 3/25/2011	CHECKED - CRF	REVISED -	CONTRACT NO. 63583							
DATE = 03-28-11	DATE = 03-28-11	REVISED -	ILLINOIS FED. AID PROJECT							