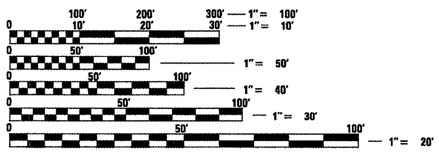
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	1
IL 9 over Little Creek ILLINOIS		CONTRACT NO. 68662		

INDEX OF SHEETS 03-11-11 LETTING ITEM 043

HIGHWAY STANDARDS

000001-06 701306-03
001001-02 701311-03
280001-05 701321-11
666001-01 701326-04
701001-02 701901-01
701006-03 704001-06
701011-02 780001-02
701301-04

DESIGN DESIGNATION
CLASSIFICATION:
ADT = 2100
MU = 125
SU = 100



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

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

PROJECT ENGINEER: RICH DOTSON
PROJECT DESIGNER: GEORGE ELIAS

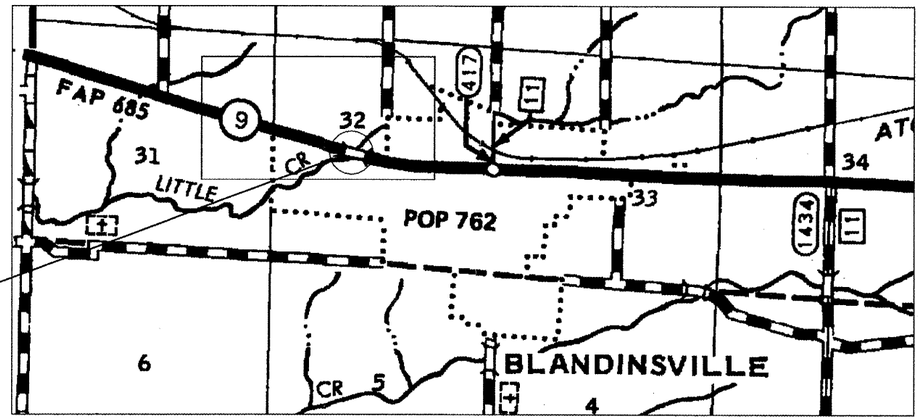
CONTRACT NO. 68662

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 685 (IL 9)
SECTION (118B)BR-1
PROJECT ACF-0685(032)
TYPE of IMPROVEMENT: BRIDGE REPLACEMENT
MCDONOUGH COUNTY

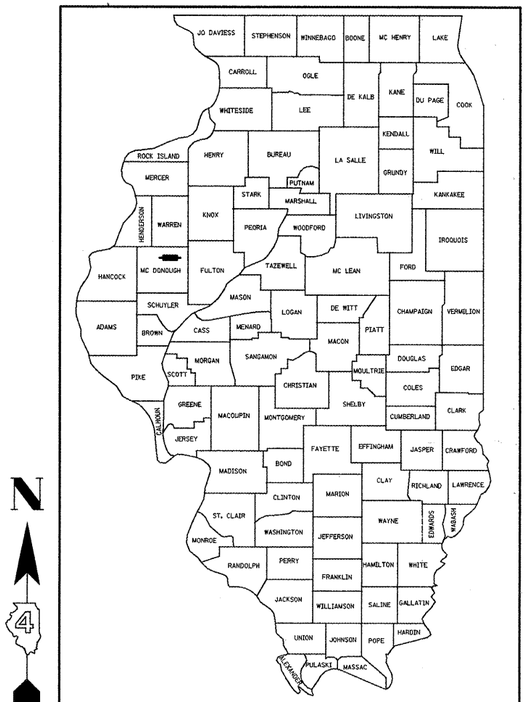
C-94-199-06



Proposed S.N. 055-2008
Sta. 79 + 84

GROSS LENGTH = 505 FT. = 0.096 MILE
NET LENGTH = 505 FT. = 0.096 MILE

D-94-131-06



LOCATION OF SECTION INDICATED THUS: –

DESCRIPTION OF WORK

REPLACEMENT OF EXISTING STRUCTURE (055-0012) CARRYING IL 9 OVER LITTLE CREEK BY PROPOSED STRUCTURE (S.N. 055-2008) AT WCL BLANDINVILLE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Dec 30 20 10
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

February 4 20 11
Scott E. Stitt P.E. /s/
acting ENGINEER OF DESIGN AND ENVIRONMENT

February 4 20 11
Christine M. Reed /s/
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

UTILITIES – LOCATIONS /INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. Unless elevations are shown —— all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

TREE REMOVAL – UTILITY RELOCATION

Tree removal may be necessary prior to utility companies being able to relocate their facilities outside the construction limits. The Contractor should coordinate any contract tree removal activities with the utility companies to eliminate conflicts and potential delays caused by utility tree removal activities or incomplete utility relocations.

PLAN ELEVATIONS – U. S. G. S. MEAN SEA LEVEL DATUM

Use one of the following two options.

1. All elevations shown on the plans are established from U. S. G. S. mean sea level datum.

2. All elevations shown refer to U. S. G. S. datum at mean sea level unless otherwise noted.

COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made.

PROPERTY OWNER ACCESS REQUIREMENTS

Access must be maintained to all existing properties during construction per Article 107.09 unless arrangements are made in writing by the Contractor with the property owners with a copy to the Engineer for short–term closures.

TREE REMOVAL

The District Four Tree Committee should be contacted and prior approval obtained for any tree removal beyond the limits/locations included in the plans.

UTILITY COMPANY	FACILITY	CONFLICT
COMCAST	CABLE	CULVERT, PAVEMENT,DITCH
McDOUNOUGH TELEPHONE	UNDERGROUND TELEPHONE	DITCH, RIPRAP
AMEREN IP /ELECTRIC	AERIAL LINES	EMBANKMENT

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run–arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

* BDE Form 2289 (Environmental Survey Request)
* A location map showing the size limits and location of the use area
* Signed property owner agreement form–D4 PI0100
* Color photographs depicting the use area
* Borrow Area Entry Agreement form–D4 PI0101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

PAVEMENT STATIONING NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval – 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers – 6 inches (150 mm) from the inside edge of the pavement marking

Location:

* 2,3, & 5 Lane Pavements – right edge of pavement in direction of increasing stations
* Multi–Lane Divided Roadways – outside edge of pavement in both directions
* Ramps – along baseline edge of pavement

Position – stations shall be placed so they can be read from the adjacent shoulder

Format – English (Metric) pavement stations shall use this format "XXX (XX + X00)" where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

GENERAL NOTES

BUTT JOINT CUTTING TIME RESTRICTION
Butt joints shall not be milled more than Tree (3) days prior to placement of the HMA surface course.

PAVING SURFACE COURSE
Continuous paving operations on the main roadway shall be maintained at all time during the construction of the HMA surface. No interruption for side roads, entrances, turn lanes, etc... will be allowed.

ORDERING LENTH CONFIRMATION- DRAINAGE ITEMS
The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culvert, storm sewer, and/or pipe drains required prior to ordering these items.

EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCRURES
In Accordance with Section 602 of the Standard Specifications, the Cutting of the existing drains, tiles pipe culverts, or storm sewer to the proposed drainage system structures will not be paid for separately but shall be considered as included in the pay items provided.

ENGINEERS FIELD OFFICE
Add the following sentance to the end of paragraph 670.02 (i) and 670.04 (e):
all of the telephone lines provided shall have unpublished numbers.

HOT - MIX ASPHALT REQUIREMENTS

Mixture Use(s)	HMA SURFACE COURSE	POLYMERIZED LEVELING BINDER (M M) IL 4.75 N 50	HA BASE COURSE AND BASE COURSE WIDENING
AC/PG	PG 64-22	SBS OR SBR 70-22	PG 64-22
RAP % (MAX)**	15 %	10 %	25 %
Design Air Voids	4 % @ N=50	4 % @ N=50	4 % @ N=50
Mixture Composition (Gradation Mixture)	IL 9.5 OR IL 12.5	IL 4.75	IL 19.0
Friction Aggregate	MIXTURE "D"	N/A	N/A

** If the RAP option is selected, the asphalt grade may need to be adjusted;
this will be determined by the Material Engineer
ESALS = 1.8

RATES:

FOR ALL HOT MIXES, 112 lbs/Sq.Yd.in.
FOR AGGREGATE SHOULDERS TYPE B 2.05 ton/cu.yd

FOR BIT MATLS (PRIME COAT): 0.004 ton/gal
-ON GRANULAR BASE: 0.5 GAL/SQ. YD.
-ON EXIST. PVT.: 0.05 GAL/SQ.YD.
-ON COLD MILLED AREA: 0.1 GAL/SQ.YD.
-ON NEW PAV'T: 0.03 GAL/SQ.YD.

FOR AGG (PRIME COAT):
-ON EXIST PVT: 4 LBS/SQ. YD.
-ON COLD MILLED SURF: 4 LBS/SQ.YD.
-ON NEW PVT: 2 LBS/SQ.YD.

GENERAL NOTES

FILE NAME = 68662.dgn	USER NAME = romzog	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 110.6839 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
688	(1168)BR-1	McDonough		3
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0004	CULVERT 0011 (055-2008)
				FEDERAL - STATE 80% - 20%		
	20100500	TREE REMOVAL, ACRES	ACRE	0.25	0.25	----
	20200100	EARTH EXCAVATION	CU YD	2263	2263	----
	20200500	EARTH EXCAVATION (WIDENING)	CU YD	356	356	----
	20400800	FURNISHED EXCAVATION	CU YD	510	510	----
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	95	---	95
	20800150	TRENCH BACKFILL	CU YD	762	762	----
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,030	---	1,030
	21101615	TOP SOIL FURNISH AND PLACE, 4"	SQ YD	3576	3576	----
*	25000300	SEEDING, CLASS 3	ACRE	0.74	0.74	----
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	67	67	----
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	67	67	----
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	67	67	----
*	25100115	MULCH, METHOD 2	ACRE	0.74	0.74	----
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	200	200	----
	28000305	TEMPORARY DITCH CHECKS	FOOT	300	300	----
	28000400	PERIMETER EROSION BARRIER	FOOT	400	400	---
	28100105	STONE RIPRAP, CLASS A3	SQ YD	237	237	---
	28100109	STONE RIPRAP, CLASS A5	SQ YD	263	---	263
	28200200	FILTER FABRIC	SQ YD	741	---	741
	31100910	SUB BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	1050	1050	---

CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0004	CULVERT 0011 (055-2008)
			FEDERAL - STATE 80% - 20%		
35501324	HOT-MIX ASPHALT BASE COURSE, 10"	SQ YD	879	879	---
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	203	203	---
40600215	POLYMERIZED BITUMINOUS MATERIALS(PRIME COAT)	TON	1	1	---
40600300	AGGREGATE (PRIME COAT)	TON	6	6	---
~~40600825~~	~~POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50~~	~~TON~~	~~70~~	~~70~~	---
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	240	240	---
40600990	TEMPORARY RAMP	SQ YD	27	27	----
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	160	160	----
44000100	PAVEMENT REMOVAL	SQ YD	140	140	----
44000152	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	SQ YD	1668	1668	----
48101200	AGGREGATE SHOULDERS, TYPE B	TON	30	30	----
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	----	1
~~50200100~~	~~STRUCTURE EXCAVATION~~	~~CU YD~~	~~432~~	~~---~~	~~432~~
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	605	---	605
50800105	REINFORCEMENT BARS	POUND	83,790	----	83,790
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	960	---	960
50800515	BAR SPLICERS	EACH	120	---	120
51500100	NAME PLATES	EACH	1	----	1
54003000	CONCRETE BOX CULVERTS	CU YD	393.2	----	393.2
63200310	GUARDRAIL REMOVAL	FOOT	444	444	----

*SPECIALTY ITEM

FILE NAME = 68662 schedule.dgn	USER NAME = eichhornbr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/20/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	(118B)BR-1	McDONOUGH	43	4
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0004	CULVERT 0011 (055-2008)
				FEDERAL - STATE 80% - 20%		
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	12	12	----
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	----	1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	----
	67100100	MOBILIZATION	L SUM	1	1	----
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	----
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	----
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	----
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	15	15	----
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	50	50	----
	70300220	TEMPORARY PAVEMENT MARKING-LINE-4"	FOOT	2020	2020	----
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	20	20	----
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	937.5	937.5	----
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	337.5	337.5	----
*	78005110	EPOXY PAVEMENT MARKING-LINE 4"	FOOT	2020	2020	----
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	673	673	----
■*	X2503100	MOWING	UNIT	10	10	----
	X7016500	TEMPORARY BRIDGE TRAFFIC SIGNALS (SPECIAL)	EACH	1	1	----
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	22	----	22
	Z0004552	APPROACH SLAB REMOVAL	SQ YD	183	---	183
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	---	1

CODE NO.	ITEM	UNIT	TOTAL	ROADWAY 0004	CULVERT 0011 (055-2008)
			FEDERAL - STATE 80% - 20%		
Z0028462	GEOTEXTILE RETAINING WALL	SQ FT	282	----	282
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	---
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE NARROW), TEST LEVEL 3	EACH	2	2	---
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2	----
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	801	----	801
Z0054406	ROCK FILL - FOUNDATION	CU YD	920	----	920
X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4.75, N50	TON	70	70	

■ NON-PARTICIPATING 100% STATE

* SPECIALTY ITEM

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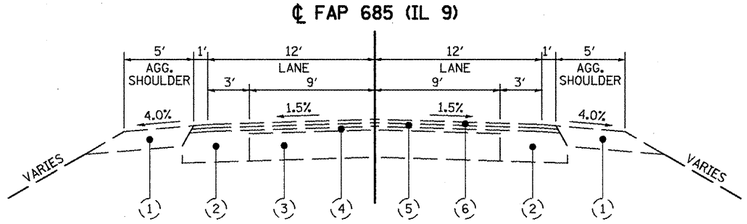
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/20/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
SCHEDULE OF QUANTITIES

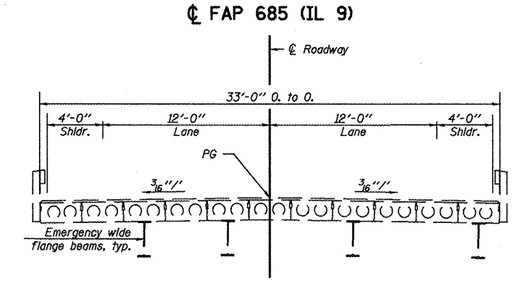
SCALE: | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+46

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
886	(118B)BR-1	MCDONOUGH	43	5
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			



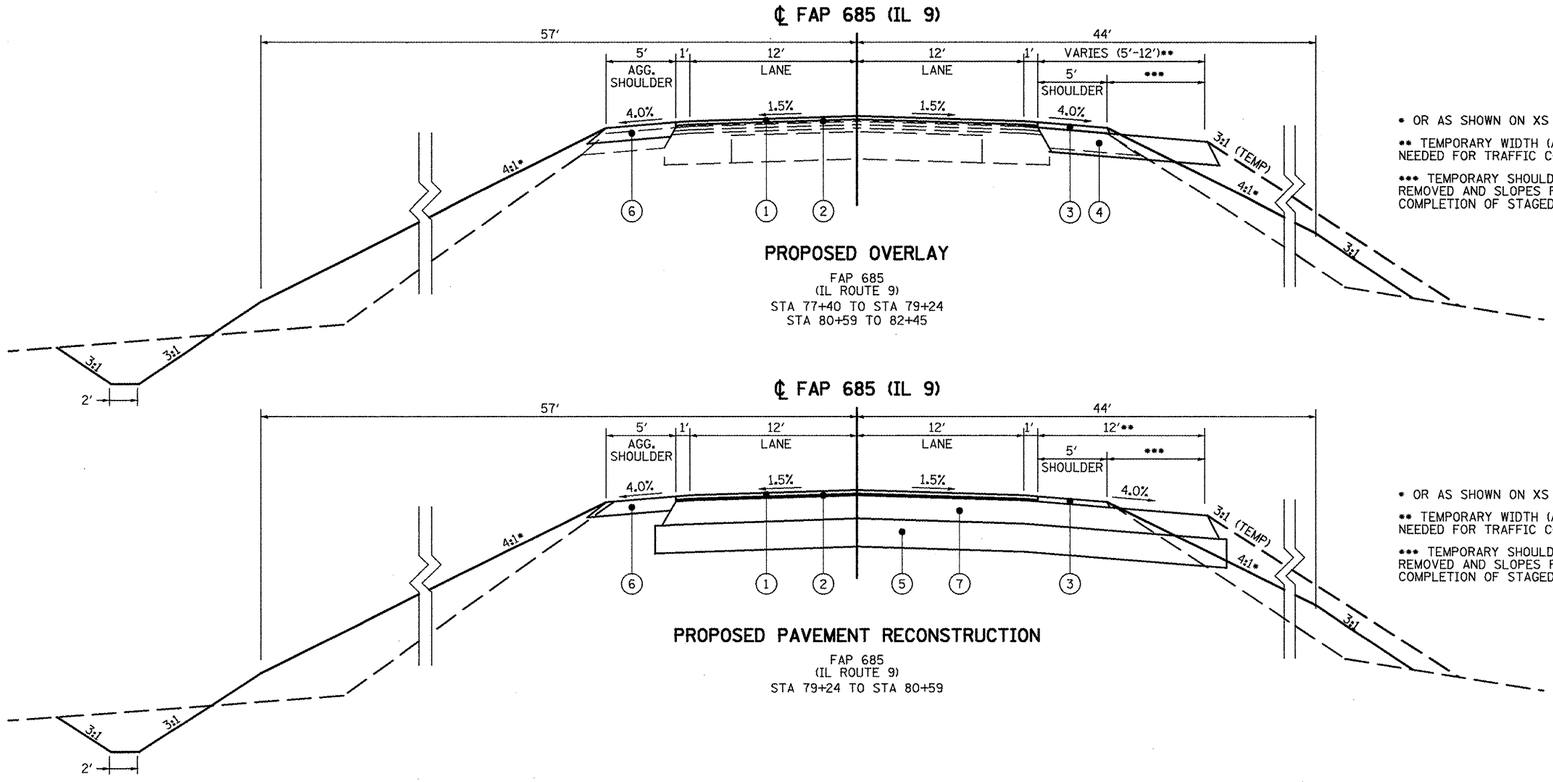
EXISTING

FAP 685
(IL ROUTE 9)



EXISTING BRIDGE

FAP 685
(IL ROUTE 9)



• OR AS SHOWN ON XS

•• TEMPORARY WIDTH (AS SHOWN ON XS) NEEDED FOR TRAFFIC CONTROL

••• TEMPORARY SHOULDER WIDTH SHALL BE REMOVED AND SLOPES REGRADED UPON COMPLETION OF STAGED CONSTRUCTION

PROPOSED OVERLAY

FAP 685
(IL ROUTE 9)
STA 77+40 TO STA 79+24
STA 80+59 TO 82+45

• OR AS SHOWN ON XS

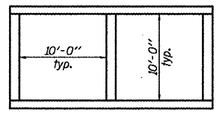
•• TEMPORARY WIDTH (AS SHOWN ON XS) NEEDED FOR TRAFFIC CONTROL

••• TEMPORARY SHOULDER WIDTH SHALL BE REMOVED AND SLOPES REGRADED UPON COMPLETION OF STAGED CONSTRUCTION

PROPOSED PAVEMENT RECONSTRUCTION

FAP 685
(IL ROUTE 9)
STA 79+24 TO STA 80+59

FAP 685 (IL 9)



PROPOSED STRUCTURE

FAP 685
(IL ROUTE 9)

(1) EXISTING AGG SHOULDERS, TYPE B, 6"
(2) EXISTING BASE COURSE WIDENING, 9"
(3) EXISTING PCC PAVEMENT
(4) EXISTING BIT OVERLAY
(5) EXISTING BIT CONC BINDER COURSE, 1½"
(6) EXISTING BIT CONC SURFACE COURSE CLASS I, 1½"

(1) HOT-MIX ASPHALT SURFACE COURSE, 1.50"
(2) HOT-MIX ASPHALT BINDER COURSE, 0.75"
(3) HOT-MIX ASPHALT SHOULDERS, 2.25"
(4) HOT-MIX ASPHALT BASE COURSE WIDENING, 10"
(5) SUB-BASE GRANULAR MATERIAL, TYPE A, 12"
(6) AGGREGATE SHOULDERS, TYPE B, 6"

(7) HOT-MIX ASPHALT BASE COURSE, 10"

FILE NAME = D468662-Sht-Typical.dgn	USER NAME = eichhornbr	DESIGNED SRD	REVISED -
		DRAWN NDB	REVISED -
	PLOT SCALE = 10.0000 ' / IN.	CHECKED SRD	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION
IL 9

SCALE: 1" = 5' | SHEET NO. 1 OF 1 SHEETS | **Sta. 77+40 to Sta. 82+45**

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	6
	IL 9 over Little Creek	CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOCATION	LENGTH	AVG WIDTH	AREA	POLYMER BIT MAT (PRIME COAT)	AGG (PRIME COAT)	POLYMERIZED LEV BINDER (MM), IL 4.75, N50	HOT-MIX ASPHALT SURF CSE MIX "D" N50	HOT-MIX ASPHALT SURFACE REMOVAL 3/4"
STA TO STA	FT	FT	SQ YD	TON	TON	TON	TON	SQ YD
77+40 TO 82+45	505	34	1,908	1	6	70	160	1668
TOTALS				1	6	70	160	1668

LOCATION	TOPSOIL FURN & PLACE 4"	SEEDING CLASS 3	NITROGEN FERTILIZER NUTRIENT	PHOSPHOROUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH METHOD 2	TREE REMOVAL ACRES
STA TO STA	SQ.YD	ACRE	POUND	POUND	POUND	ACRE	ACRE
77+40 TO 82+45	3,576	0.74	67	67	67	0.74	0.25
TOTALS	3,576	0.74	67	67	67	0.74	0.25

LOCATION	HOT-MIX ASPHALT BASE CSE 10"	HOT-MIX ASPHALT BASE CSE WIDENING 10"
STA TO STA	SQ.YD	SQ.YD
77+40 TO 82+45	879	203
TOTALS	879	203

LOCATION	HOT-MIX ASPHALT SURF REM (BUTT-JOINT)	TEMPORARY RAMP
STA TO STA	SQ.YD	SQ.YD
77+40 TO 77+85	120	13.5
82+00 TO 82+45	120	13.5
TOTALS	240	27

LOCATION	EARTH EXCAVATION	EARTH EXCAVATION (WIDENING)	FURNISHED EXCAVATION
STA TO STA	CU.YD	CU.YD	CU.YD
77+40 TO 82+45	2263	356	510
TOTALS	2263	356	510

LOCATION	TRENCH BACKFILL	SUB-BASE GRAN MATERIAL TYPE A 12"
STA TO STA	CU.YD	SQ.YD
79+25 TO 80+60	762	1050
TOTALS	762	1050

SCHEDULE OF QUANTITIES

FILE NAME = 68562.dgn	USER NAME = ramsag	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 184.2275 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
SCHEDULE OF QUNTITIES

SCALE= | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+48

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
650	(1188)BR-1	McDonough		7
		CONTRACT NO. 68562		
	ILLINOIS FED. AID PROJECT			

ENGINEER FIELD OFFICE TYPE A	CAL MO
77+40 TO 82+45	6
TOTAL	6

MOBILIZATION	L SUM
77+40 TO 82+45	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION STANDARD 701321	EACH
77+40 TO 82+45	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION STANDARD 701306	L SUM
77+40 TO 82+45	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION STANDARD 701326	L SUM
77+40 TO 82+45	1
TOTAL	1

CONSTRUCTION LAYOUT	L SUM
79+24 TO 80+59	1
TOTAL	1

TRAFFIC CONTROL SURVEILLANCE	CAL DA
77+40 TO 82+45	15
TOTAL	15

TEMPORARY BRIDGE TRAFFIC SIGNAL (SPECIAL)	EACH
77+40 TO 82+45	1
TOTAL	1

MOWING	UNIT
77+40 TO 82+45	10
TOTAL	10

LOCATION	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECK	PERIMETER EROSION BARRIER
STA TO STA	POUND	FOOT	FOOT
77+40 TO 82+45	200	300	400
TOTALS	200	300	400

SCHEDULE OF QUANTITIES

FILE NAME = 68862.dgn	USER NAME = ramag	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
Schedule of Quantities

SCALE: | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
568	(11BB)BR-1	McDonough		8
		CONTRACT NO. 68862		
	ILLINOIS FED. AID PROJECT			

LOCATION	STONE RIPRAP CLASS A3
STA TO STA	SQ YD
79+25 TO 80+60	237
TOTALS	237

APPROACH SLAB REMOVAL	SQ YD
79+24 TO 80+59	183
TOTAL	183

PAVEMENT REMOVAL	SQ YD
79+25 TO 80+60	140
TOTAL	140

PERMANENT SURVEY MARKERS, TYPE I	SQ YD
WINGWALL	1
TOTAL	1

LOCATION	SHORT-TERM PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING LINE-4"	WORK ZONE PAVEMENT MARKING REMOVAL	EPOXY PAVEMENT MARKING LINE-4"	PAVEMENT MARKING REMOVAL
STA TO STA	FOOT	FOOT	SQ FT	FOOT	SQ FT
77+40 TO 82+45	50	2020	20	2020	673
TOTALS	50	2020	20	2020	673

GUARDRAIL REMOVAL	FOOT
77+40 TO 82+45	444
TOTAL	444

LOCATION	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS TEMPORARY (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3	IMPACT ATTENUATORS TEMPORARY (FULLY REDIRECTIVE) TEST LEVEL 3
STA TO STA	FOOT	FOOT	EACH	EACH	EACH
77+40 TO 82+45	937.5	337.5	2	2	2
TOTALS	937.5	337.5	2	2	2

AGGREGATE SHOULDERS TYPE B	TON
77+40 TO 82+45	30
TOTAL	30

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH
77+40 TO 82+45	12
TOTAL	12

SCHEDULE OF QUANTITIES

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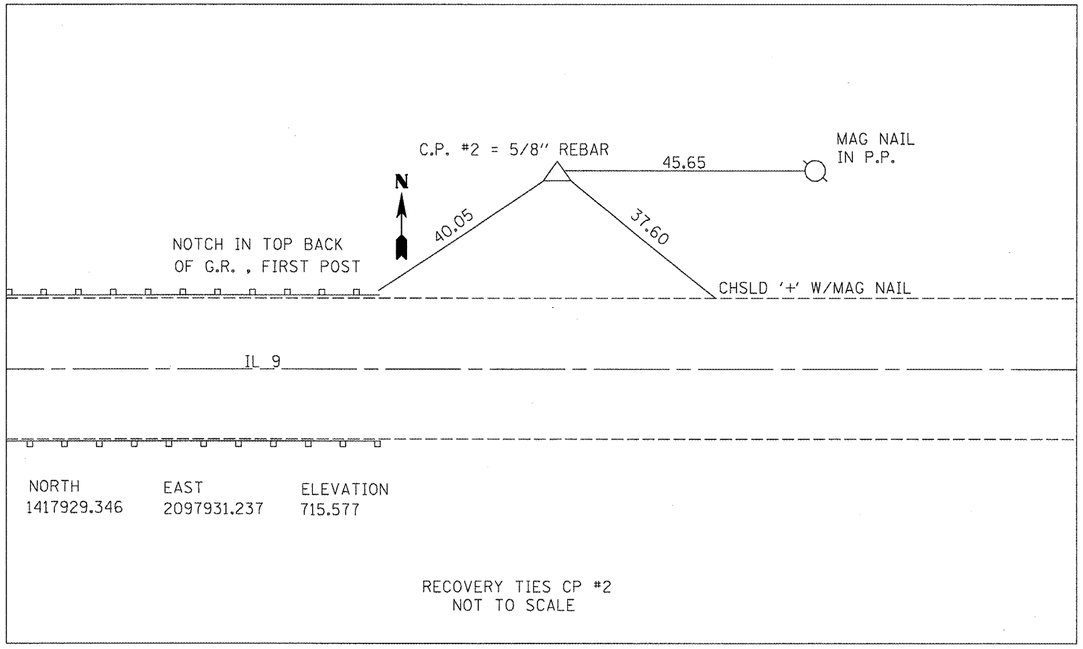
		DRAWN -	REVISED -
	PLOT SCALE = 166.3148 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
Schedule of Quantities

SCALE: | SHEET NO. OF SHEETS | STA. 77+40 TO STA. 82+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
555	(116B)BR-1	McDonough		9
		CONTRACT NO. 68682		
	ILLINOIS FED. AID PROJECT			



NORTH	EAST	DESCRIPTION
1417715.362	2098550.831	76+00
1417459.948	2099413.828	85+00

FILE NAME = D468662-sht-cover.dgn	USER NAME = jacknw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES & BENCHMARKS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			685	(118B)BR-1	MCDONOUGH	34	10
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -					CONTRACT NO. 68662		
	PLOT DATE = 12/21/2010	DATE -	REVISED -		SCALE: _____ SHEET NO. __ OF ___ SHEETS STA. _____ TO STA. _____			ILLINOIS FED. AID PROJECT		

RAYMOND E. FERGUSON &
LARRY J. FERGUSON

STA 79+84.00, 40° LT FWD
PR DOUBLE 10'X10' BOX CULVERT
PR SN 055-2008

80+00.00
100.00' LT

PR ROW

LITTLE CREEK

81+00.00
100.00' LT

81+50.00
80.00' LT

82+00.00
40.00' LT

6"

12" PLASTIC

78+20.00
50.00' LT

78+20.00
40.00' LT

GRASS

EX ROW

15" CMP

MP

PR STONE RIPRAP

PR STONE RIPRAP
CL-A5 FILTER FABRIC

PAVEMENT RECONSTRUCTION
STA 79+24 TO STA 80+59

REMOVE EX SN 055-0012

STA 82+45.00
END PROJECT

77 | 78 | ℄ FAP 685 (IL 9) | 79 | 80+00 | 81 | 82

26'

SN 055-0012

STA 77+40.00
BEGIN PROJECT

PR STONE RIPRAP
CL-A5 FILTER FABRIC

SPEED LIMIT 40

TEMPORARY WIDENING
TO BE REMOVED AFTER
STAGED CONSTRUCTION

82+40.00
40.00' RT

12" 15" 12" 15"

CURVE AHEAD

EX ROW

78+30.00
40.00' RT

FIBER OPTIC WARNING

20 10 0 20 40
SCALE IN FEET

WETLAND

PR ROW

82+00.00
60.00' RT

81+00.00
60.00' RT

PR STONE RIPRAP

BLANDINSVILLE GOLF &
COUNTRY CLUB

78+50.00
110.00' RT

79+25.00
110.00' RT

EX BILLBOARD
TO BE REMOVED

PR ROW

STA 82+45.00
END PROJECT
END BUTT JOINT

STA 82+00.00
BEGIN BUTT JOINT
END OVERLAY

+4.42%

+3.20%

+45.00
706.57

+00.00
704.58

+50.00
702.98

+4.20%

+00.00
700.88

37' 2"

PROPOSED HMA
OVERLAY

STA 77+85.00
END BUTT JOINT
BEGIN OVERLAY

STA 77+40.00
BEGIN PROJECT
BEGIN BUTT JOINT

+13.12%

RT DITCH PROFILE

+00.00
688.56

-2.80%

+63.72
683.00

+44.80
680.00

-15.94%

-8.62%

LT DITCH PROFILE

+36.25
681.00

+20.00
682.40

20'

5'

710 | 705 | 700 | 695 | 690 | 685 | 680 | 675

692.10	692.12 / 692.21	692.49 / 692.67	693.34 / 693.53	694.53 / 694.72	696.10 / 696.29	680.98 / 698.28	700.56 / 700.75	703.06 / 703.25	705.16 / 705.35	706.74 / 706.93	707.90
77+00	77+50	78+00	78+50	79+00	79+50	80+00	80+50	81+00	81+50	82+00	82+50

PLAN
NOTE BOOK
NO.
CORRECTED
PLOTTED
ALIGNMENT CHECKED
BY
DATE

PROFILE
NOTE BOOK
NO.
CORRECTED
PLOTTED
GRADES CHECKED
BY
DATE
ALL STRUCTURE NOTATNS CHKD

FILE NAME =	USER NAME = eschhornbr	DESIGNED -	REVISED -
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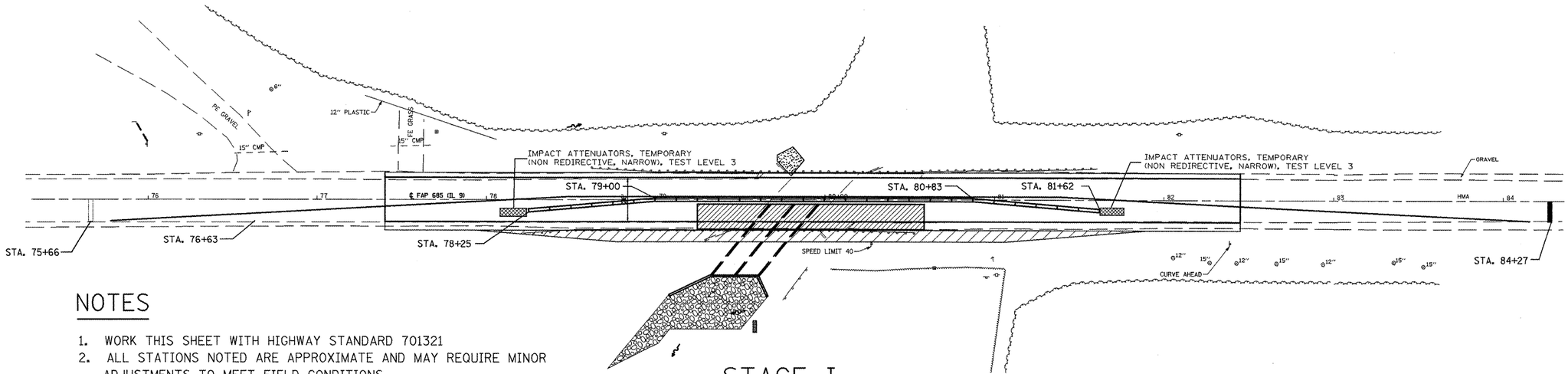
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE SHEET

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

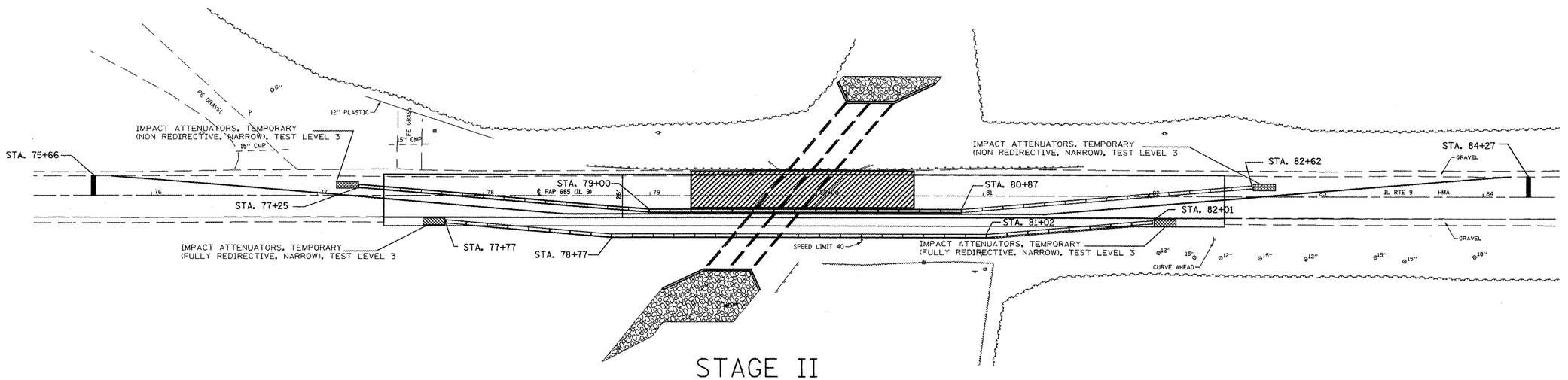
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	11
	IL 9 over Little Creek	CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES

1. WORK THIS SHEET WITH HIGHWAY STANDARD 701321
2. ALL STATIONS NOTED ARE APPROXIMATE AND MAY REQUIRE MINOR ADJUSTMENTS TO MEET FIELD CONDITIONS
3. A RESIDENTIAL DRIVEWAY AT STA. 76+66 LT WILL REQUIRE APPROPRIATE TRAFFIC CONTROL DEVICES. SEE SPECIAL PROVISIONS FOR DETAILS.

STAGE I



STAGE II

FILE NAME = STAGE CON DETAIL.dgn	USER NAME = eichhornbr	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			685	(118B)BR-1	MCDONOUGH	43	12
	PLOT SCALE = 63.0128 ' / IN.	CHECKED -	REVISED -					CONTRACT NO. 68662		
	PLOT DATE = 12/20/2010	DATE -	REVISED -	SCALE:	SHEET NO. OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

T TEMPORARY DITCH CHEK

NOT SHOWN MULCH METHOD 2

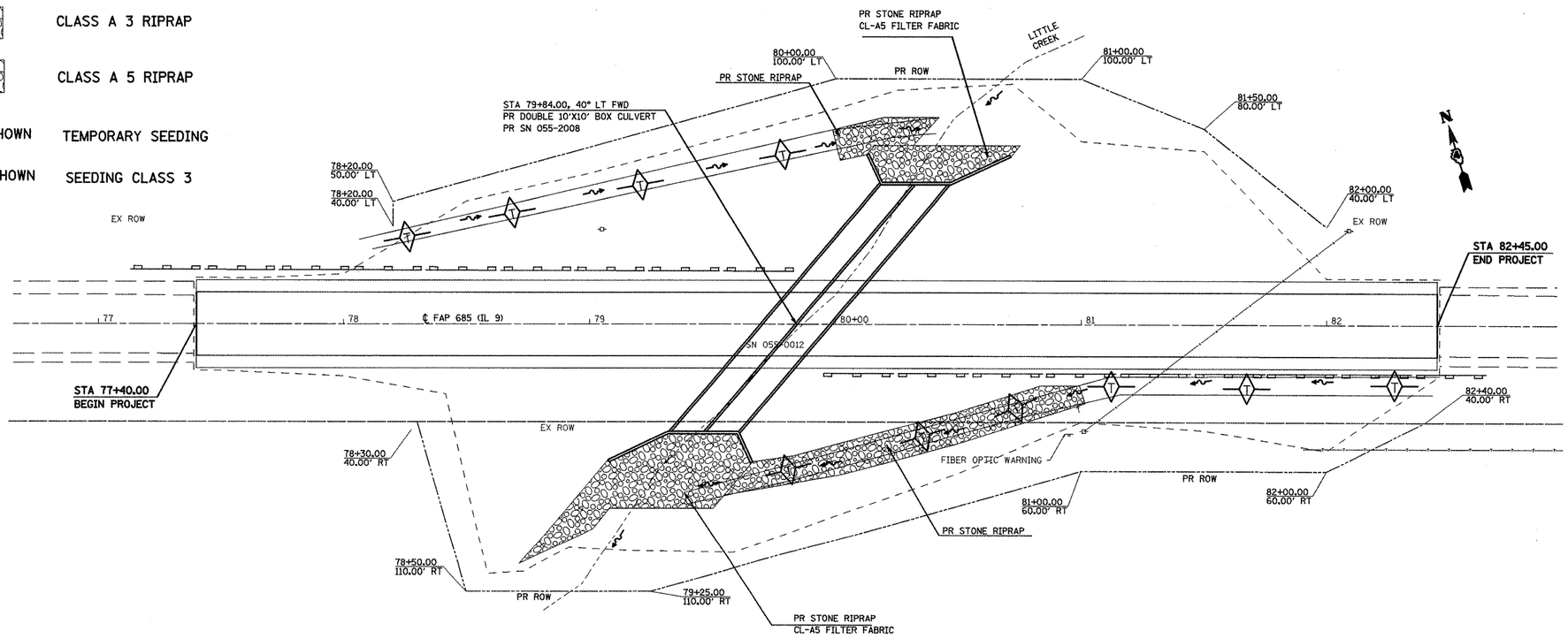
PERIMETER EROSION BARRIER

CLASS A 3 RIPRAP

CLASS A 5 RIPRAP

NOT SHOWN TEMPORARY SEEDING

NOT SHOWN SEEDING CLASS 3



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	PLOT DATE = 12/20/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9
TEMPORARY EROSION PLAN

SCALE: | SHEET NO. OF SHEETS | **STA. 77+40 TO STA. 82+45**

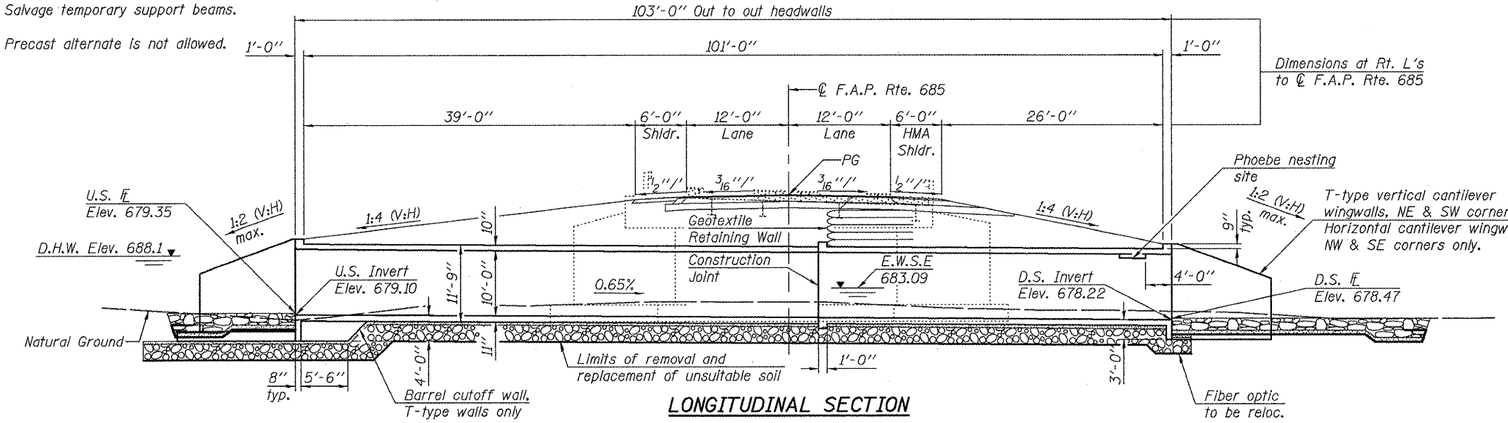
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	13
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			

Bench Mark: Chiseled "□" on the Northeast corner of the E. beamseat on S.N. 055-0012, Elev. = 698.72.

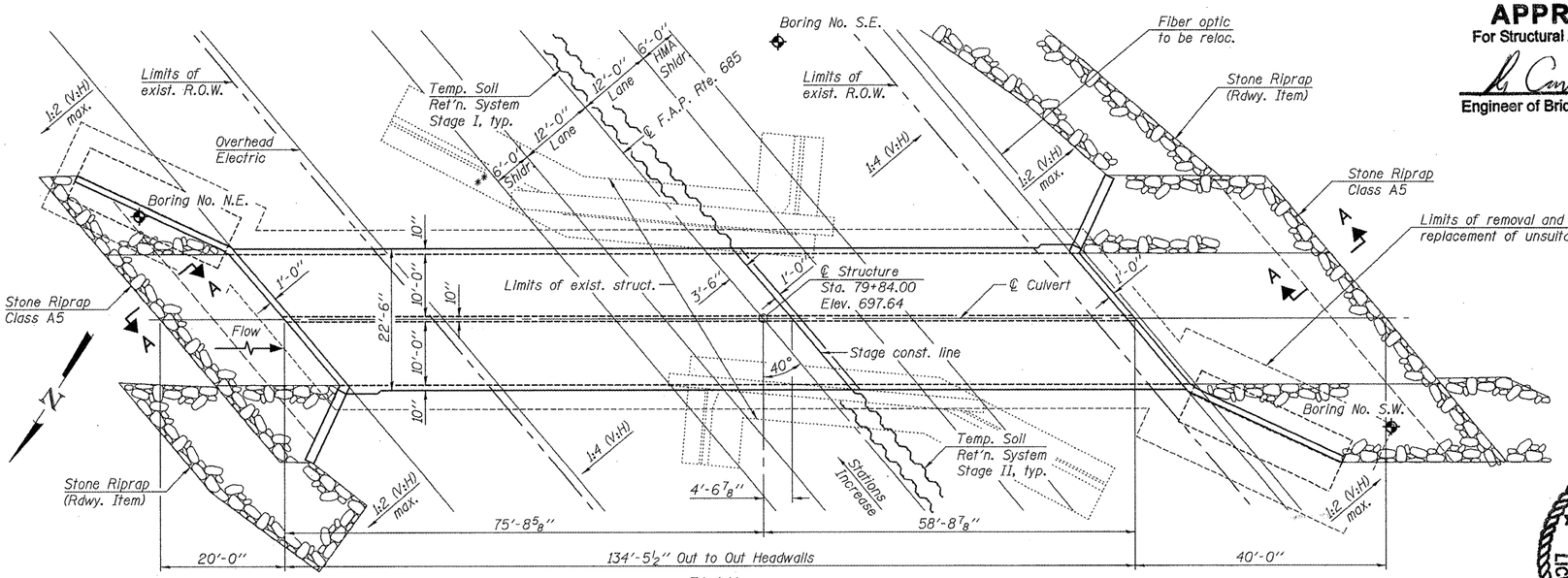
Existing Structure: S.N. 055-0012 was built in 1928 as S.B.I. Rt. 95, Section 118B, and reconstructed in 1977 under F.A. Route 82, Section 118BR-1. In 2008, temporary support beams were placed under Beams 3, 5, 8 & 11. The existing structure consists of one span, PPC-Deck Beams, 38'-2" long, 33'-0" wide out-to-out, and 45 degree skew. The substructure consists of closed reinforced concrete abutments founded on untreated timber piles with attached wingwalls. Structure carries IL 9 over Little Creek. The existing pavement is two 12' lanes with 5' shoulders. Stage construction shall be used during construction.

Salvage temporary support beams.

Precast alternate is not allowed.



LONGITUDINAL SECTION



PLAN

** 1'-0" HMA 5'-0" Agg.

WATERWAY INFORMATION

Drainage Area = 4.25 Sq. Mi. Low Grade Elev. 692.10 @ Sta. 77+00.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	959	121	166	687.4	0.7	0.1	687.9	687.5
Design	50	1,520	126	180	688.1	1.5	0.3	688.9	688.4
Base	100	1,770	145	192	688.7	2.0	0.7	690.2	689.4
Max. Calc.	500	2,390	154	200	689.4	2.7	2.2	691.3	691.6

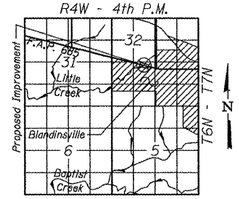
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	D.S Invert	U.S Invert
	674.22	675.10

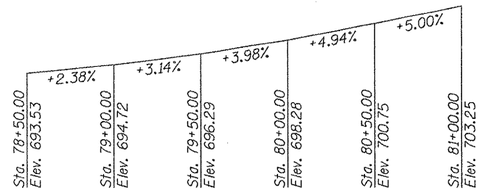
STATION 79+84.00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 685 SEC. (118B)BR-1
LOADING HS-20
STRUCTURE NO. 055-2008

NAME PLATE

See Std. 515001



LOCATION SKETCH



PROFILE GRADE

(Along ℄ F.A.P. Rte. 685)

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LOADING HS-20

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

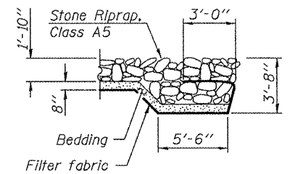
DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

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



SECTION A-A

STATE OF ILLINOIS
PETER R. DOMBROWSKI
6519
1-6-11
LICENSED STRUCTURAL ENGINEER
SCHAUMBURG

Peter R Dombrowski
Expires 11-30-2012

Notes:
Stage construction details shown on sheet 3 and sheets 5 & 6 of 14.
Replacement of unsuitable material shall consist of 6" Porous Granular Embankment (CA7 or CA11), with the remainder rockfill placed on top of Filter Fabric.

GENERAL PLAN

IL 9 OVER LITTLE CREEK

F.A.P. RTE. 685 - SECTION (118B)BR-1

MCDONOUGH COUNTY

STA. 79+84.00

STRUCTURE NO. 055-2008

FILE NAME = $FILE1$

rjngroup
Excellence through Ownership
200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SHEET NO. 1 OF 14 SHEETS

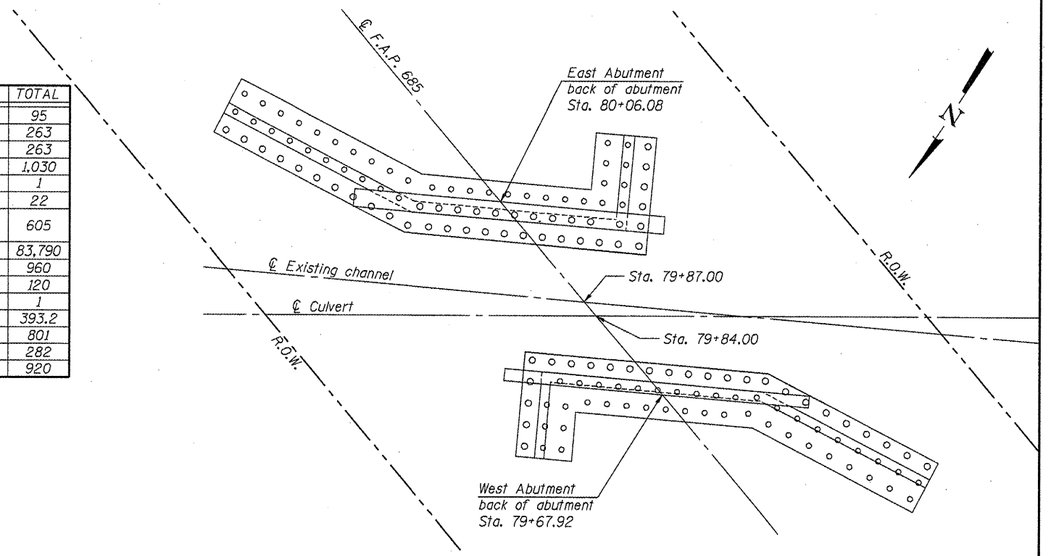
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	14
		CONTRACT NO. 68662		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

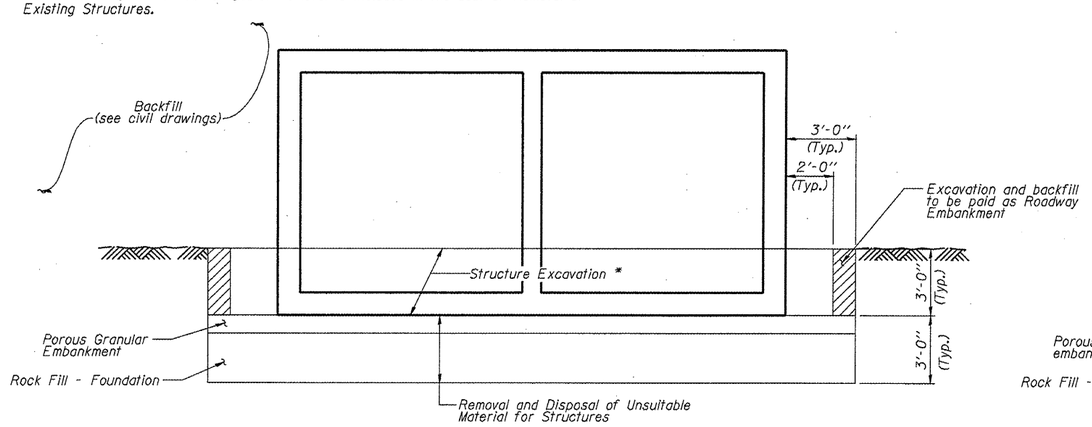
1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
4. Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
5. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
6. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
7. Removal of existing structures consists of removing the PPC - deck beams and portions of the existing abutments in stages as indicated. The temporary support beams and columns shall be removed and salvaged and their value considered when determining the unit bid price. The Contractor's work activities shall conform to all applicable safety requirements. Under no circumstances shall the structural integrity of any component be compromised during the various phases of construction. If necessary, the Contractor shall install temporary shoring, bracing or supports to maintain safe conditions throughout the entire construction period. Such measures, if required, shall not be paid for separately but shall be considered incidental to the item "Removal of Existing Structures".
8. Upon completion of removal and disposal of unsuitable material to the limits indicated on the plans, the adequacy of the subgrade shall be evaluated. If, in the opinion of the Engineer, the bearing capacity (3500 psf min.) of the subgrade is insufficient, the excavation should extend to a level of adequate strength. Any additional work, such as excavation disposal and backfilling will be paid for at the applicable unit bid price.
9. The final location and elevation of the relocated fiber optic line is not known. It is the Contractor's responsibility to make the necessary adjustments to the affected structural components or provide sleeves as required if the relocated fiber optic line interferes with any portions of the proposed culvert.
10. Precast concrete alternate will not be allowed.
11. The Contractor is warned of the existence of gabions which are to be removed in their entirety. The cost of gabion removal is included in the cost of Removal of Existing Structures.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	95
Stone RipRap, Class A5	Sq. Yd.	263
Filter Fabric	Sq. Yd.	263
Geotechnical Fabric for Ground Stabilization	Sq. Yd.	1,030
Removal of Existing Structures	Each	1
Asbestos Bearing Pad Removal	Each	22
Removal and Disposal of Unsuitable Material For Structures	Cu. Yd.	605
Reinforcement Bars	Pound	83,790
Reinforcement Bars, Epoxy Coated	Pound	960
Bar Splicers	Each	120
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	393.2
Temporary Soil Retention System	Sq. Ft.	801
Geotextile Retailing Wall	Sq. Ft.	282
Rock Fill - Foundation	Tons	920

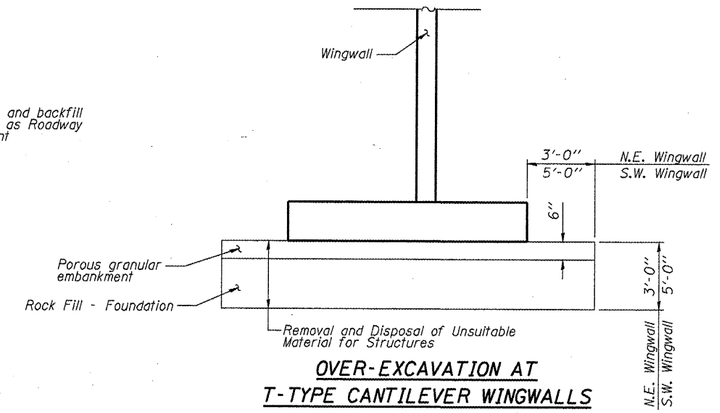


EXISTING FOOTING PLAN



METHOD OF MEASUREMENT FOR QUANTITY CALCULATIONS

* Cost included in Concrete Box Culverts



OVER-EXCAVATION AT
T-TYPE CANTILEVER WINGWALLS

INDEX OF SHEETS

FILE NAME = $FILE1$

rjngroup — Excellence through Ownership — 200 West Front Street, Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
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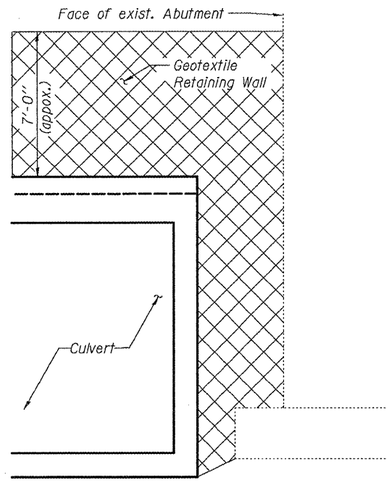
PLOT DATE = 1/25/2011	CHECKED - AWW	REVISED -	

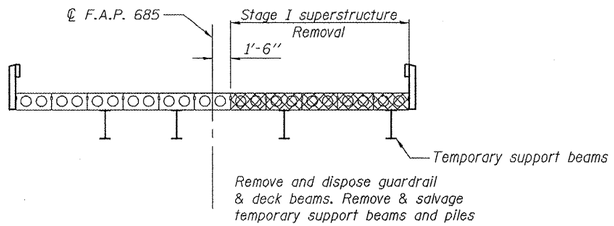
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 055-2008
SHEET NO. 2 OF 14 SHEETS

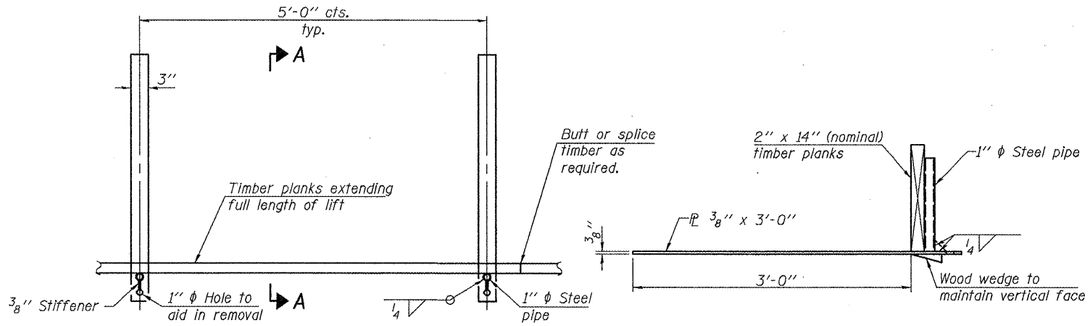
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	15
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			



SECTION B-B

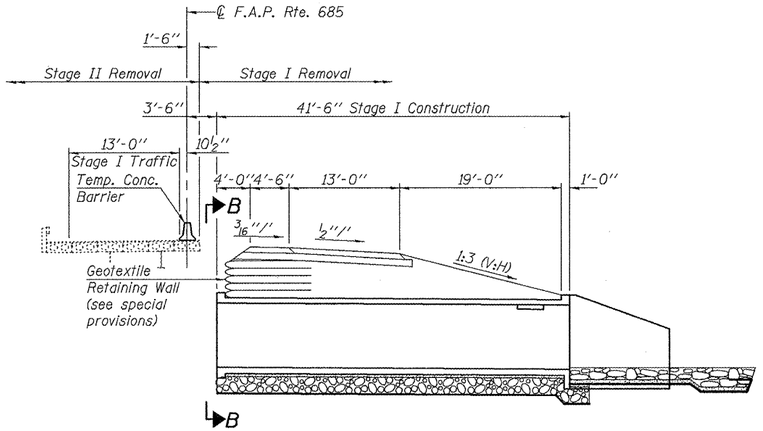


STAGE I SUPERSTRUCTURE REMOVAL



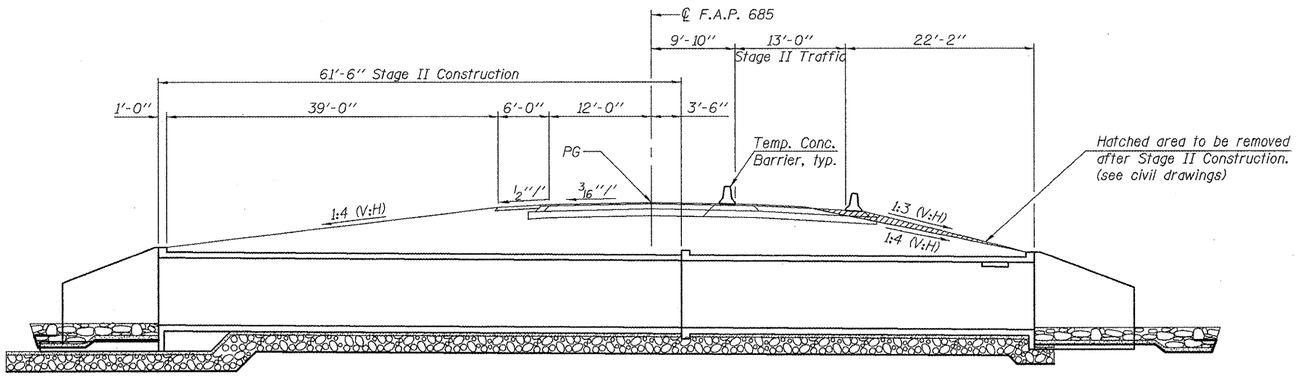
PLAN

SECTION A-A



LONGITUDINAL SECTION - STAGE I CONSTRUCTION

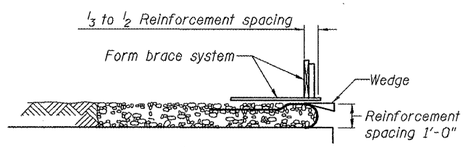
Note:
For quantity of Temporary Concrete Barrier, see roadway plans.



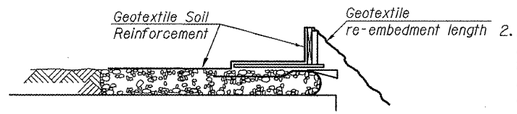
LONGITUDINAL SECTION - STAGE II CONSTRUCTION

TEMPORARY GEOTEXTILE FORM BRACE DETAIL

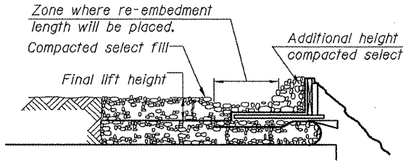
Note:
This is a suggested detail, the Contractor is responsible for the design of the form brace system to be used.



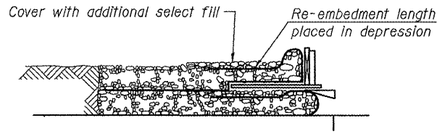
1. Place form brace system on completed reinforcement level; back from the finished fabric face a distance of 1/3 to 1/2 the geotextile reinforcement spacing.



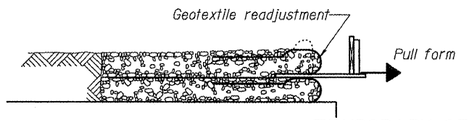
2. Position fabric so that the required geotextile re-embedment length extends over the top of the form brace and the design reinforcement width is placed with no slack against the previous level.



3. Compact select fill material in lifts to final lift height, create (±3") depression in zone where re-embedment length will be located and place additional height of compacted select fill against form brace.



4. Fold geotextile re-embedment length back over form brace into zone where depression was made in select fill and place additional select fill (±3") to embed geotextile and bring to final lift height.



5. Pull form brace outward allowing geotextile face to slightly readjust to form tight round face level with plan reinforcement spacing.

TEMPORARY GEOTEXTILE WALL CONSTRUCTION SEQUENCE

Note: The geotextile soil reinforcement shall have a minimum allowable tensile strength (T min.) of 40 lb./in. as determined by the procedure described in the Special Provision. The computations supporting the determination of (T min.) shall be submitted to the engineer for approval.

FILE NAME = $FILE$

rjngroup — Excellence through Ownership — 200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -
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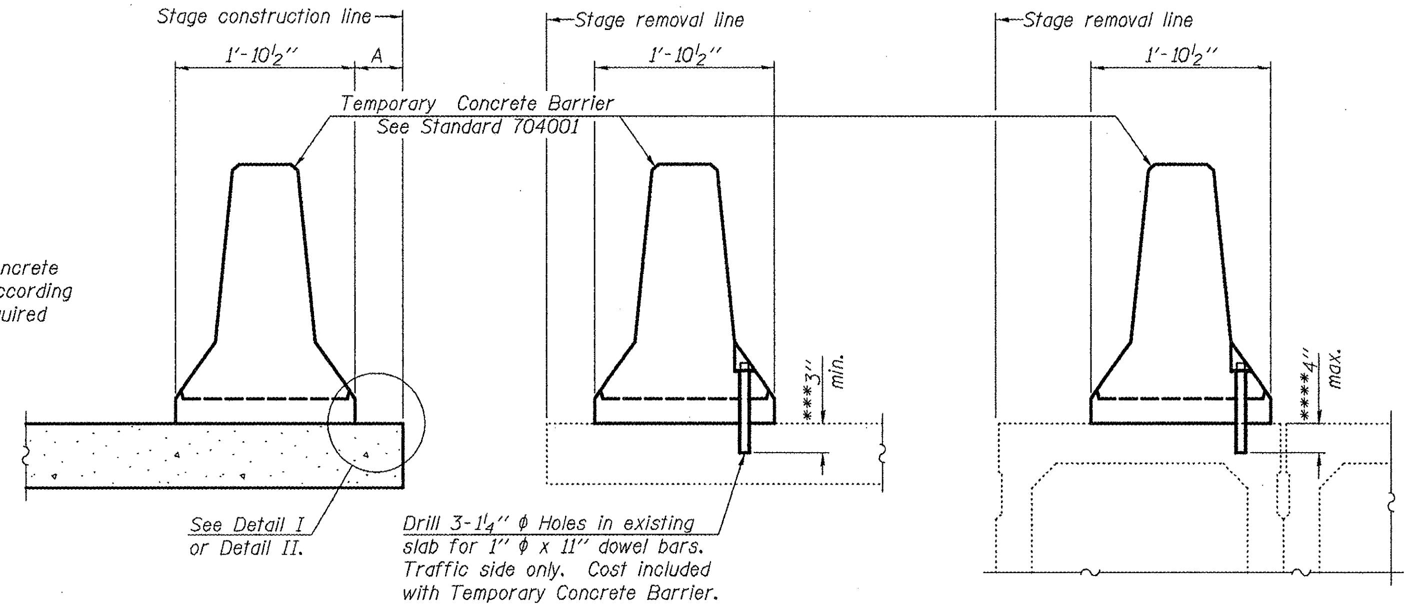
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING SUBSTRUCTURE STAGING
STRUCTURE NO. 055-2008
SHEET NO. 3 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	16
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		

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



SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7' 'x "W" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

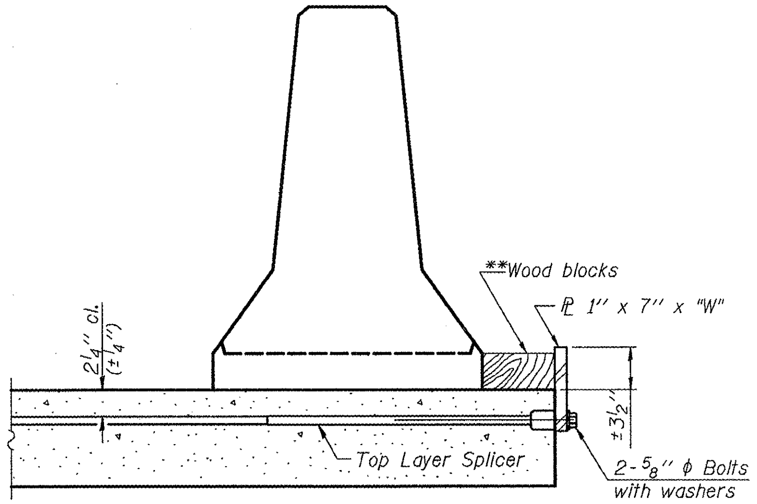
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

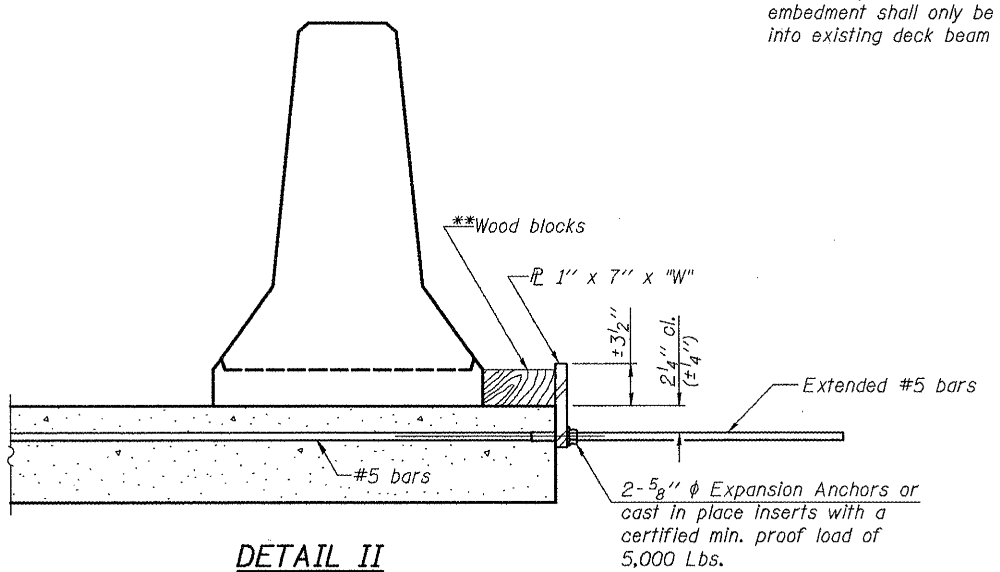
The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

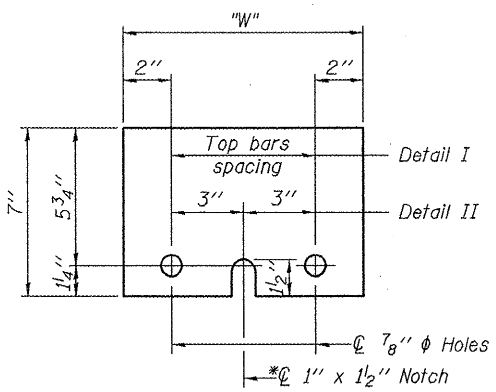
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

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

"W" = Top bars spacing + 4"

R-27 7-1-10

FILE NAME = $FILEL$

rjngroup — Excellence through Ownership — 200 West Front Street, Wheaton, Il 60187

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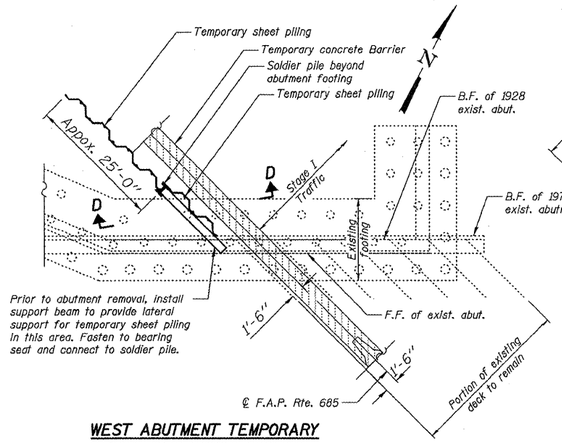
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -	

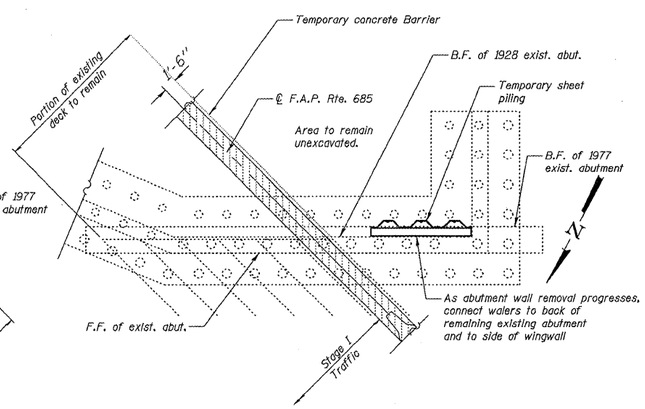
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 055-2008
SHEET NO. 4 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	17
		CONTRACT NO. 68662		
	ILLINOIS	FED. AID PROJECT		

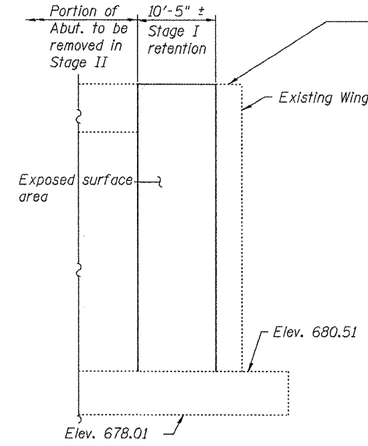


WEST ABUTMENT TEMPORARY SOIL RETENTION SYSTEM

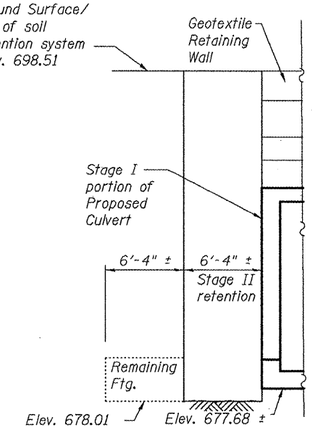


EAST ABUTMENT TEMPORARY SOIL RETENTION SYSTEM

STAGE I CONSTRUCTION

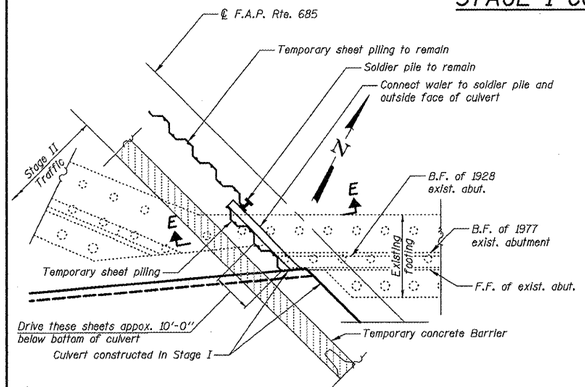


STAGE I EAST ABUT. TEMP. SOIL RETENTION SYSTEM

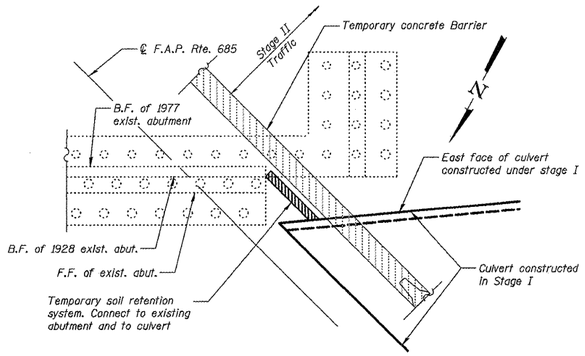


STAGE II EAST ABUT. TEMP. SOIL RETENTION SYSTEM

Dimension shown are along centerline of roadway.

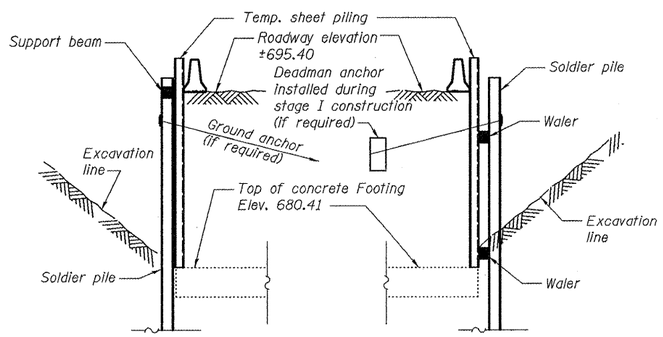


WEST ABUTMENT TEMPORARY SOIL RETENTION SYSTEM



EAST ABUTMENT TEMPORARY SOIL RETENTION SYSTEM

STAGE II CONSTRUCTION



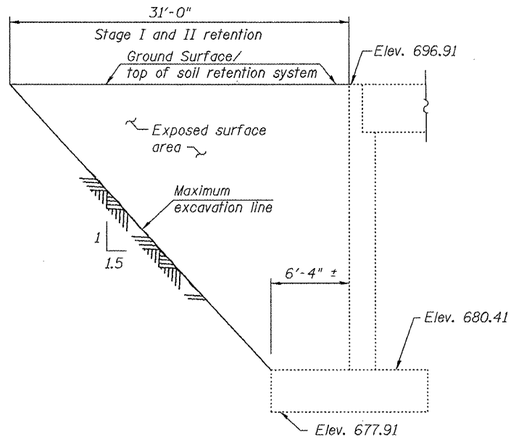
SECTION D-D SECTION E-E

NOTES

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

2. The design shown is a recommendation and does not relieve the contractor of responsiblity of preparing and submitting a Temporary Soil Retention System design sealed by a Qualified IL Licensed Structural Engineer. As shown; the cost of Temporary Sheet Piling, Soldier Pile, Support Beam, Ground Anchor, Waler, and Deadman Anchor would be included in the cost of Temporary Soil Retention System.

3. The design, installation, and maintenance of the temporary soil retention system during all phases of construction is the Contractor's responsibility. Quantity calculations for the project were based on the recommendation shown on the plans. If the Contractor's construction method uses a Temporary Soil Retention System which results in larger quantities, Contractor will not be compensated for the increase in quantity, but any adjustment in method shall be reflected in the Contractor's unit bid price.



WEST ABUT. TEMP. SOIL RETENTION SYSTEM

Dimension shown are along centerline of roadway.

USER NAME =	DESIGNED - PRD	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
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PLOT DATE =	CHECKED - AWW	REVISED -	

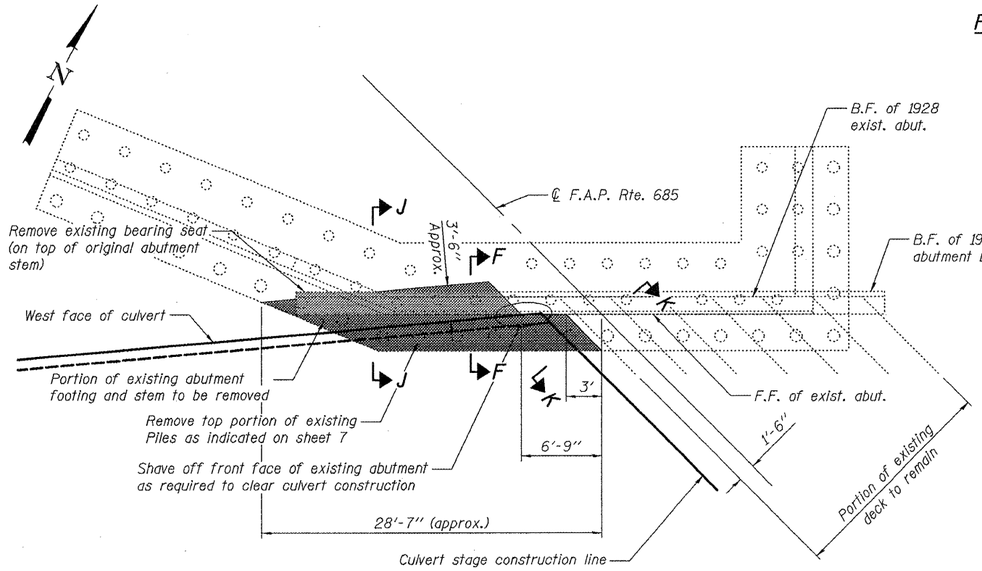
SOIL RETENTION DETAILS STRUCTURE NO. 055-2008

SHEET NO. 5 OF 14 SHEETS

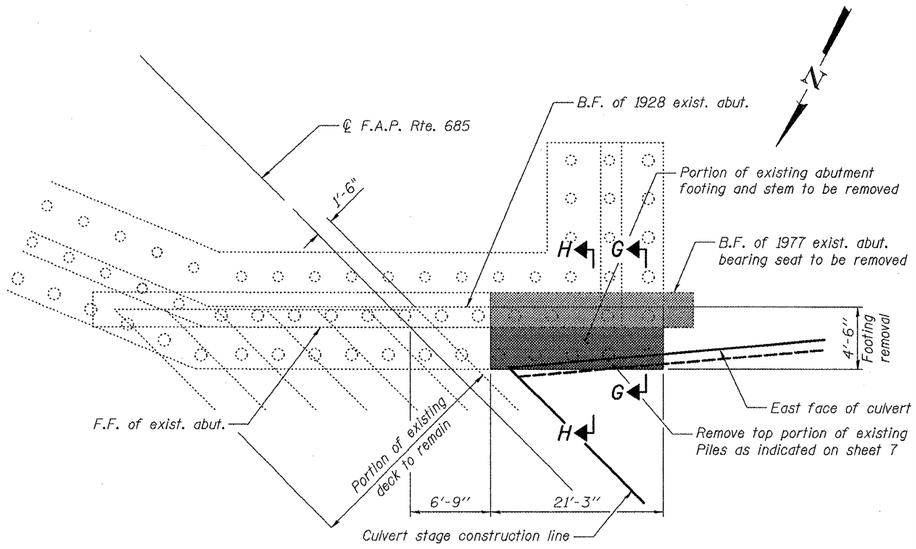
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(118B)BR-1	MCDONOUGH	43	18
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		

FILE NAME =

FOOTING REMOVAL



WEST ABUTMENT REMOVAL



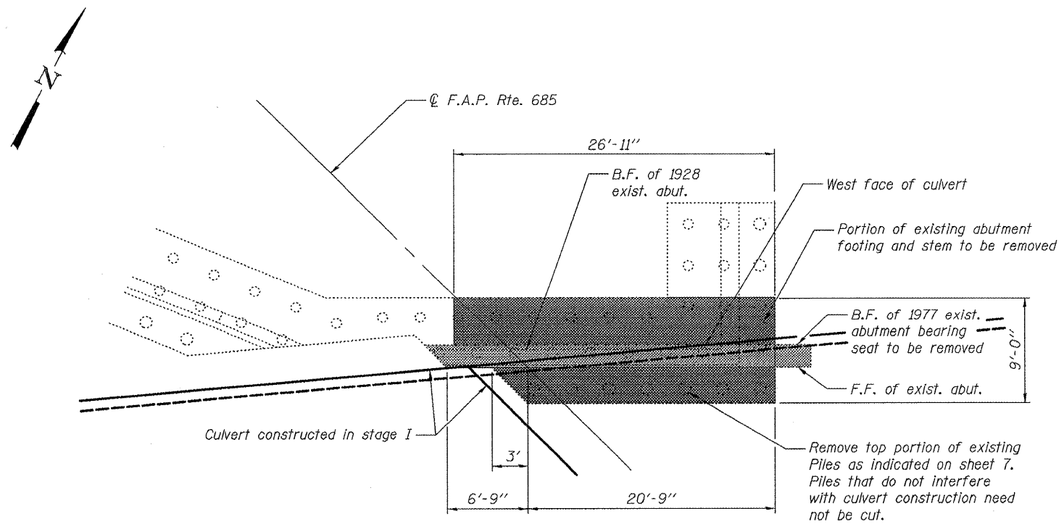
EAST ABUTMENT REMOVAL

STAGE I CONSTRUCTION

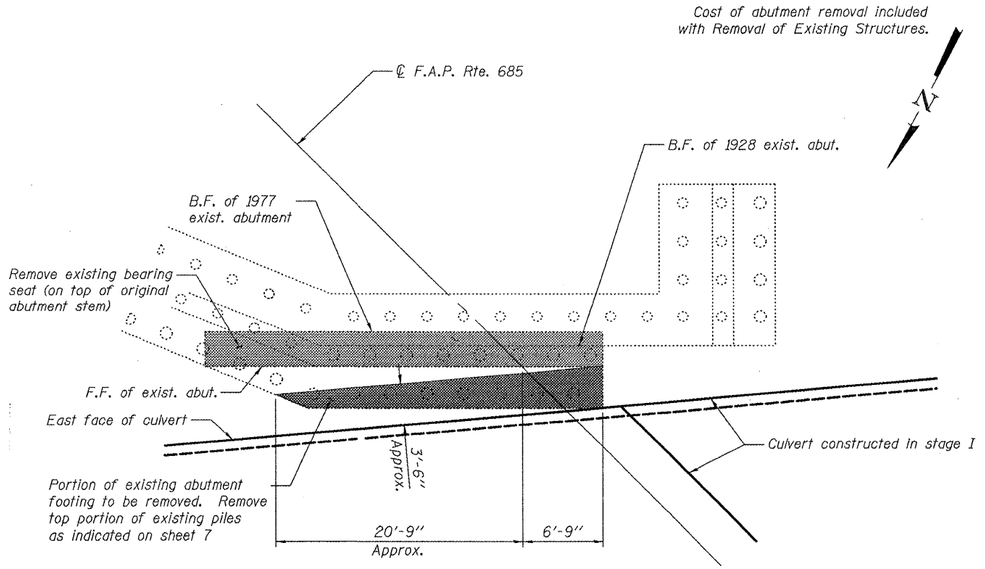
NOTE

For sections F-F, G-G, H-H, J-J and K-K see sheet 7 of 14.

Cost of abutment removal included with Removal of Existing Structures.



WEST ABUTMENT REMOVAL



EAST ABUTMENT REMOVAL

STAGE II CONSTRUCTION

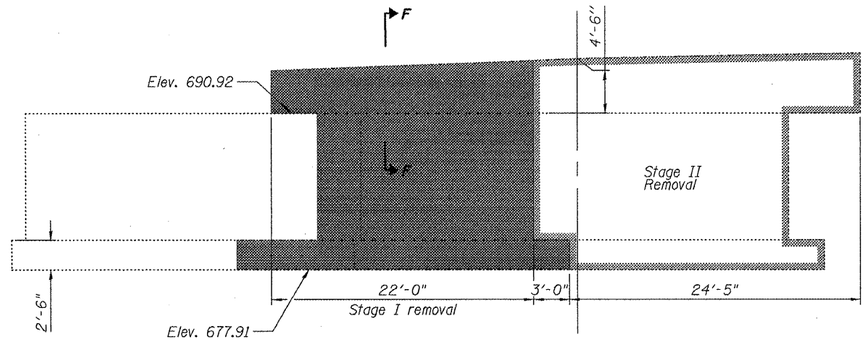
rjngroup — Excellence through Ownership — 200 West Front Street Wheaton, Il 60187	USER NAME = $USER$	DESIGNED - PRD	REVISED -
		CHECKED - AWW	REVISED -
	PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -
	PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING FOOTING REMOVAL LAYOUT
STRUCTURE NO. 055-2008
SHEET NO. 6 OF 14 SHEETS

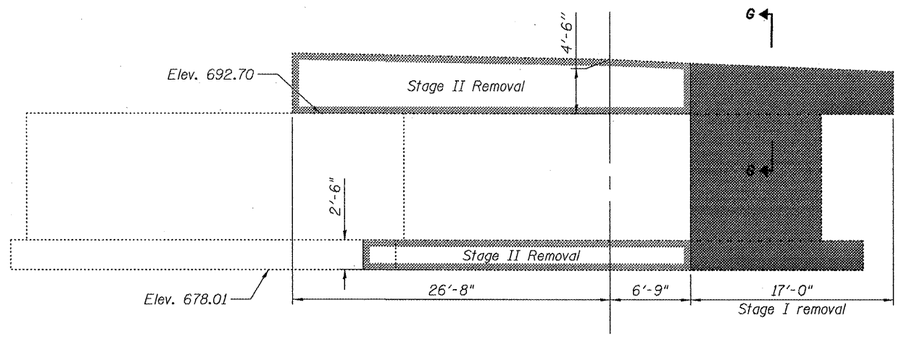
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	19
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		

FILE NAME = $FILEL$



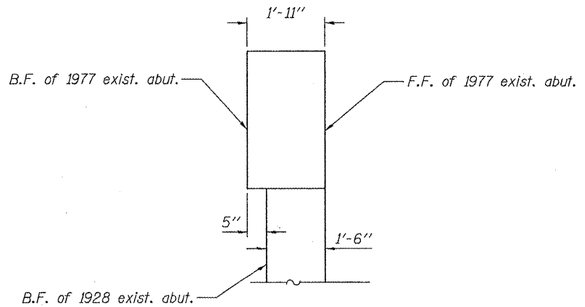
WEST ABUTMENT ELEVATION

(Looking West)

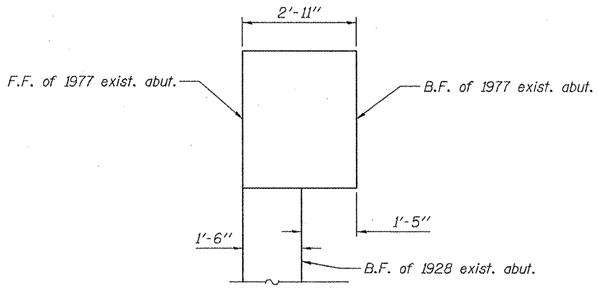


EAST ABUTMENT ELEVATION

(Looking East)



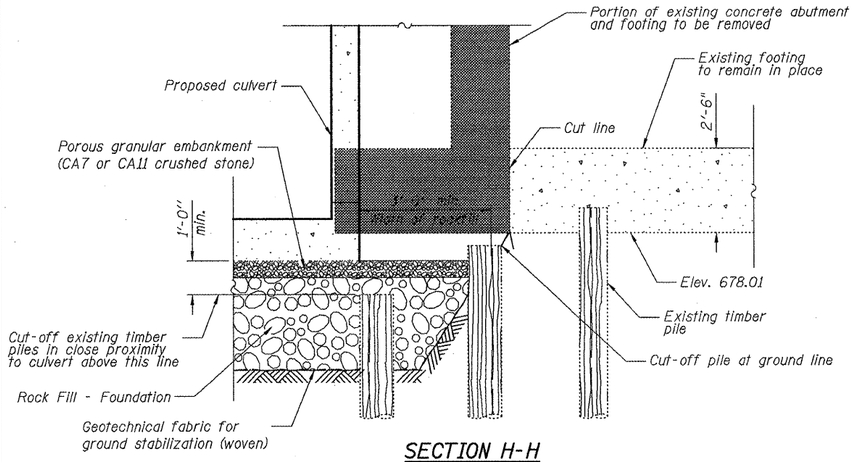
SECTION F-F



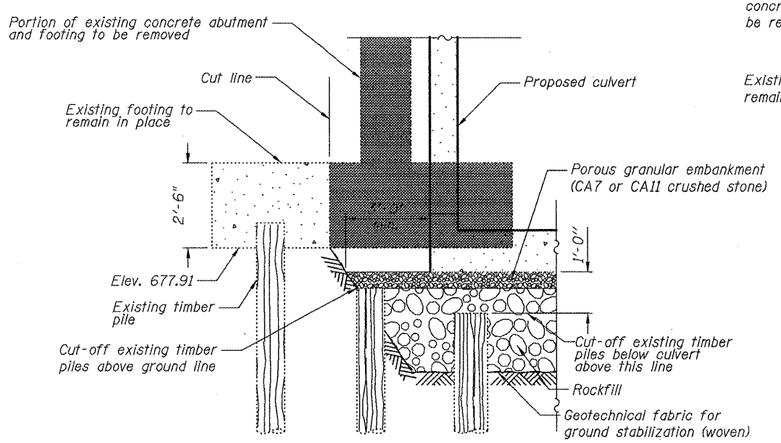
SECTION G-G

NOTE

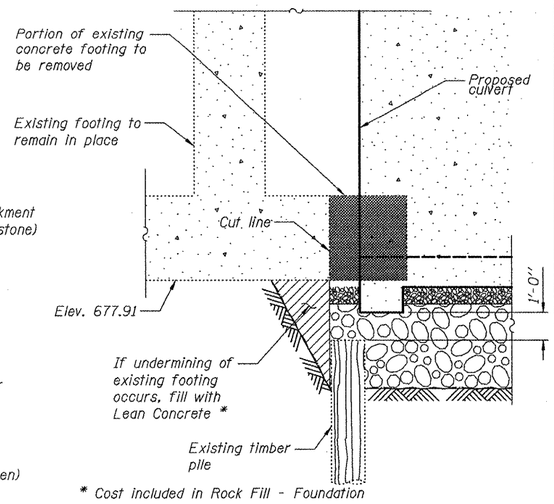
For locations of sections H-H, J-J & K-K see sheet 6 of 14.



SECTION H-H



SECTION J-J



SECTION K-K

FILE NAME = $FILE1$

rjngroup Excellence through Ownership — 200 West Front Street, Wheaton, Il 60187	USER NAME = $USER$	DESIGNED - PRD	REVISED -
		CHECKED - AWW	REVISED -
	PLOT SCALE = 1@.166667	DRAWN - DJW	REVISED -
	PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL DETAILS
STRUCTURE NO. 055-2008
SHEET NO. 7 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	20
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		

134'-5½" Out to Out Headwalls

1'-0" | 132'-5½" | 1'-0" (Dimension at Rt. L's to ℄ F.A.P. Rte. 685)

℄ F.A.P. Rte. 685

T-type vertical cantilever wingwalls, NE & SW corners

Horizontal cantilever wingwalls, NW & SE corners

10x3 #7 h_6 bars at 12" cts. (each wall)

10x2 #7 h_6 bars at 12" cts. (each wall)

15'-7"

10" | 11'-9" | 10'-0" | 11"

9" | 9" typ.

161-#5 v_1 bars at 6" cts. (each wall)

108-#5 v_1 bars at 6" cts. (each wall)

161-#5 d_1 dowels at 6" cts. (each wall)

3" ϕ Drains at ± 8'-0" cts.

0.65%

Construction joint

Construction Joint

Joint Invert Elev. 678.60

Phoebe nesting site

4'-0"

3'-6"

U.S. Invert Elev. 679.10

D.S. Invert Elev. 678.22

4'-0"

11"

9"

1'-0"

3'-0"

8" typ. | 5'-6"

Barrel cutoff wall, T-type walls only

108-#5 d_1 dowels at 6" cts. (each wall)

Fiber Optic Line to be relocated

Stage II const. | Stage I const.

h_5

s_1

Bar splicer (lap with longitudinal bars)

SECTION M-M

Note:
Place h_5 bars in addition to a_1, as second a_3 bars.

M

23 bar splicers for #6 bars (top of slab)

10" | 9"

2x11 bar splicers for #6 bars (Bot. of slab)

3x10 bar splicers for #7 bars (walls)

10"

M

SECTION L-L
(at stage construction line)

ELEVATION

8'-10" | 1'-0" | 2'-11" | 26'-3" | 9"

℄ F.A.P. Rte. 685

L

3'-6"

1'-0"

Stage const. line

This portion of barrel to be poured monolithically with the wingwall

6'-6"

1'-3"

13'-0"

(28 Headwall, 28 top & 28 bot. of stage construction line)

84-#4 s_3 stirrups at 12" cts.

N

10"

10'-0"

10"

22'-6"

10'-0"

10"

81-#7 a_3 bars at 12" cts. (bot. of top slab)*

81-#7 a_3 bars at 12" cts. (top of bot. slab)*

℄ Structure Sta. 79+84.00 Elev. 697.64

22x3-#6 h_3 bars at 11" cts. (11x3 bot. of top slab & 11x3 top of bot. slab)

46-#6 h_2 bars at 12" cts. (23 top of top slab & 23 bot. of bot. slab)

55-#7 a_3 bars at 12" cts. (bot. of top slab)*

55-#7 a_3 bars at 12" cts. (top of bot. slab)*

22x2-#6 h_3 bars at 11" cts. (11x2 bot. of top slab & 11x2 top of bot. slab)

46-h_1#6 bars at 12" cts. (23 top of top slab & 23 bot. of bot. slab)

Fiber Optic Line to be relocated

℄ Culvert

Flow

1'-0"

2-#6 h_5 bars (top of headwall)
2-#6 h_5 bars (bot. of headwall)
(Typ. both ends and at top & bot. of stage construction line)

6"x3" formed opening (Typ.) (see drain details on sheet 9 of 14)

65-#9 a_1 bars at 15" cts. alternate with 64-#6 a_2 bars at 15" cts. (top of top slab)*

65-#9 a_1 bars at 15" cts. alternate with 64-#6 a_2 bars at 15" cts. (bot. of bot. slab)*

44-#9 a_1 bars at 15" cts. alternate with 43-#6 a_2 bars at 15" cts. (top of top slab)*

44-#9 a_1 bars at 15" cts. alternate with 43-#6 a_2 bars at 15" cts. (bot. of bot. slab)*

9"

26'-3"

46x2 #6 h_4 bars at 12" cts. (23x2 top of top slab & 23x2 bot. of bot. slab)

46-#6 h_2 bars at 12" cts. (23 top of top slab & 23 bot. of bot. slab)

22x3-#6 h_3 bars at 11" cts. (11x3 bot. of top slab & 11x3 top of bot. slab)

4'-6⅞"

22x2-#6 h_3 bars at 11" cts. (11x2 bot. of top slab & 11x2 top of bot. slab)

28-#4 s_2 stirrups at 12" cts. (in headwall)
28-#4 d_2 bars at 12"cts. (in cut-off wall, each end)

13'-0"

6'-6"

1'-3"

40°

90-bar splicers for #6 bars (45 top slab & 45 bot. slab)
30-bar splicers for #7 bars (walls)

2'-11"

1'-0"

8'-10"

80'-3½" (Stage II construction)

54'-2" (Stage I construction)

75'-8⅝"

58'-8⅞"

9'-5¼"

134'-5½" Out to Out Headwalls

NOTES

U.N.O. - Unless Noted Otherwise
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
A distance of half the wingwall length, but not less than six feet, of the barrel shall be poured monolithically with the wingwalls.

PLAN

* Measured along centerline of culvert.

FILE NAME = $FILE1$

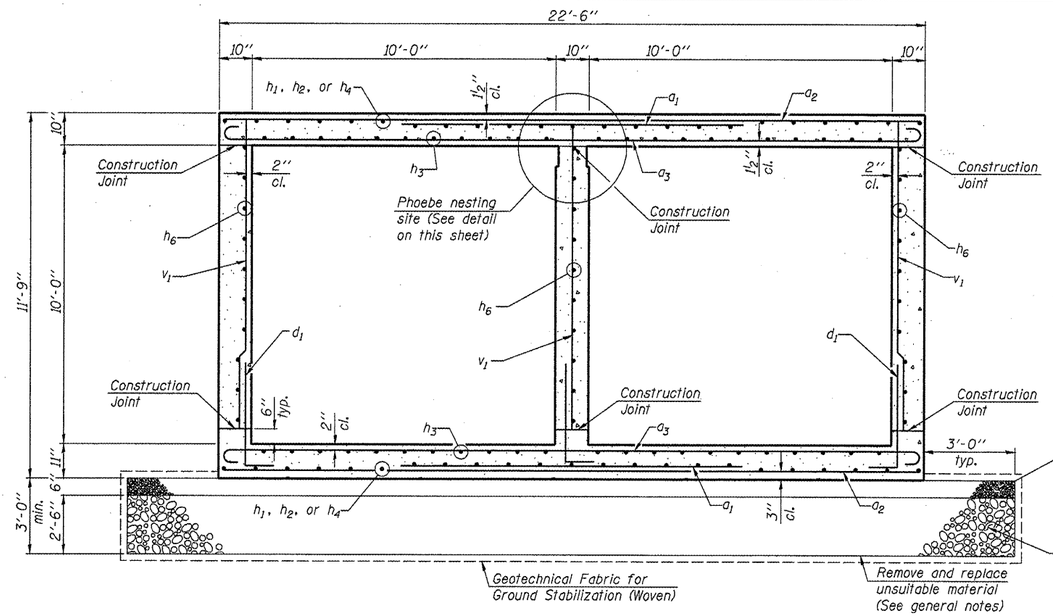
rjngroup
Excellence through Ownership
200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1ø0.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/25/2011	CHECKED - AWW	REVISED -	

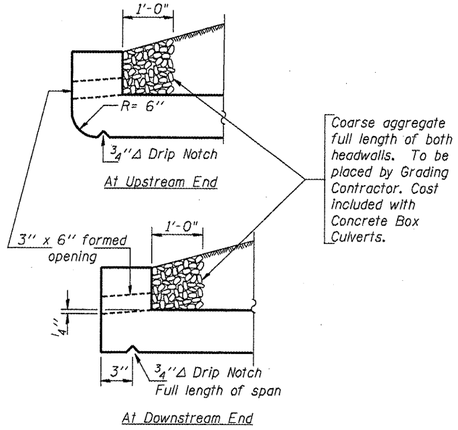
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT PLAN AND ELEVATION
STRUCTURE NO. 055-2008
SHEET NO. 8 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(11BB)BR-1	MCDONOUGH	43	21
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		



SECTION THRU BARREL



DRAIN DETAIL

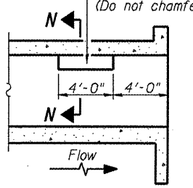
BILL OF MATERIAL

Bar	No. Stage I	No. Stage II	Size	Length	Shape
a_1	88	130	#9	14'-0"	
a_2	86	128	#6	29'-0"	
a_3	110	162	#7	30'-8"	
d_1	324	483	#5	3'-9"	
d_2	28	28	#4	4'-6"	
h_1	46		#6	31'-0"	
h_2	46	46	#6	25'-0"	
h_3	96	140	#6	28'-0"	
h_4		92	#6	30'-0"	
h_5	12	4	#6	28'-6"	
h_6	60	90	#7	28'-6"	
h_7	4	4	#9	15'-8"	
h_8	6	6	#9	16'-0"	
h_9	1	1	#8	14'-9"	
h_{10}	1	1	#8	13'-0"	
h_{11}	1	1	#7	11'-3"	
h_{12}	1	1	#7	8'-9"	
h_{13}	1	1	#6	6'-6"	
h_{14}	1	1	#6	13'-9"	
h_{15}	10	10	#6	8'-11"	
h_{16}	23	23	#4	26'-0"	
$n_1(E)$	35	35	#6	6'-6"	
$n_2(E)$	35	35	#5	3'-8"	
s_1	84		#4	4'-10"	
s_2		28	#4	4'-8"	
t_1	54	54	#6	8'-7"	
v_1	324	483	#5	10'-2"	
v_2	3	3	#5	22'-9"	*
v_3	2	2	#5	11'-6"	
v_4	35	35	#5	6'-9"	
v_5	35	35	#4	8'-5"	
v_6	8	8	#4	13'-10"	
w_1	12	12	#5	26'-0"	

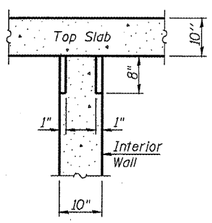
Bar Splicers	Each	120
Concrete Box Culverts	Cu. Yd.	393.2
Reinforcement Bars	Pound	83,790
Reinforcement Bars, Epoxy Coated	Pound	960

*See cutting diagram

Notch formed by rough finished board attached to and removed with form work, each interior wall. (Do not chamfer).



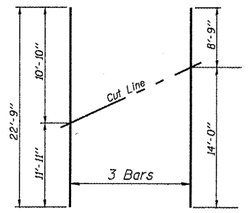
LONGITUDINAL SECTION



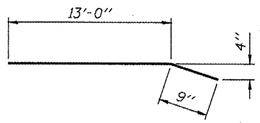
SECTION N-N

PHOEBE NESTING SITE DETAILS

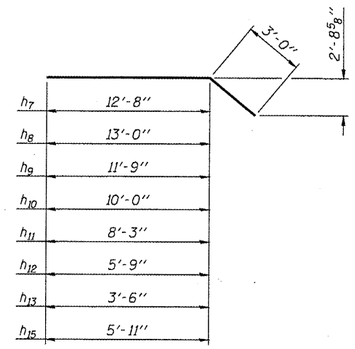
(Downstream End Only)



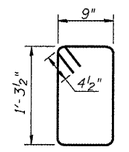
v_2 BAR CUTTING DIAGRAM



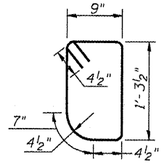
BAR h_{14}



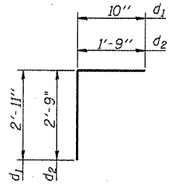
BARS h_7, h_8, h_9, h_{10}, h_{11}, h_{12}, h_{13} & h_{15}



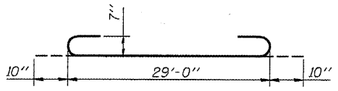
BAR s_1



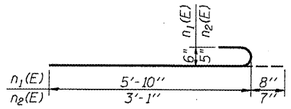
BAR s_2



BARS d_1 & d_2



BAR a_3



BAR $n_1(E)$ & BAR $n_2(E)$

BENDING DIAGRAMS

MIN. BAR LAPS (U.N.)

#4 bar - 1'-4"
#5 bar - 1'-8"
#6 bar - 2'-0"
#7 bar - 2'-9"
#9 bar - 4'-7"

FILE NAME = $FILE1$

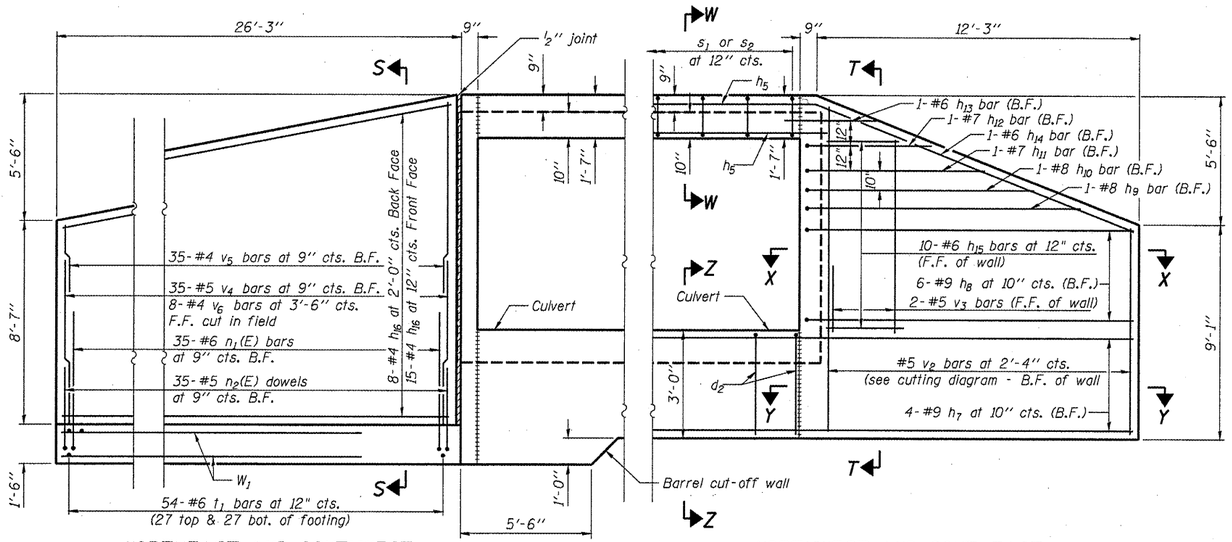
rjngroup — Excellence through Ownership — 200 West Front Street Wheaton, IL 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1i2.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/25/2011	CHECKED - AWW	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

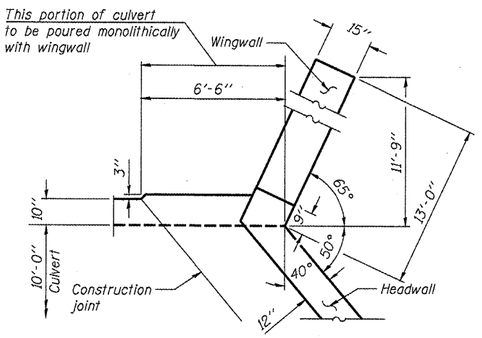
CULVERT DETAILS
STRUCTURE NO. 055-2008
SHEET NO. 9 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	22
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			



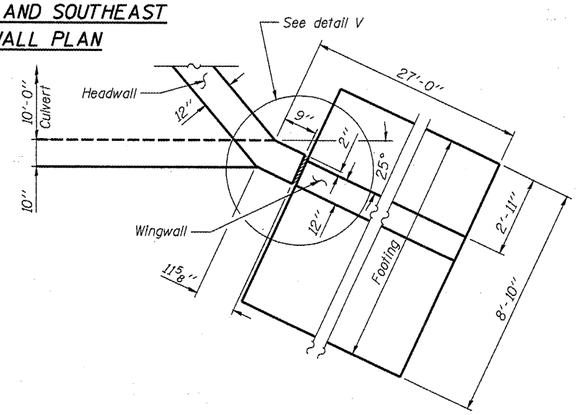
NORTHEAST AND SOUTHWEST
WINGWALL ELEVATION

NORTHWEST AND SOUTHEAST
WINGWALL ELEVATION



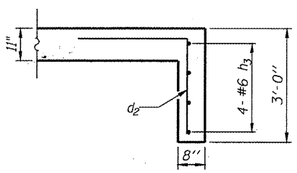
NORTHWEST AND SOUTHEAST
WINGWALL PLAN

LEGEND
B.F. = Back Face
F.F. = Front Face

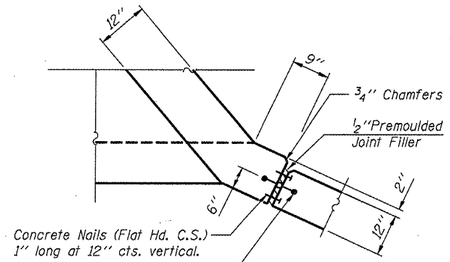


NORTHEAST AND SOUTHWEST
WINGWALL PLAN

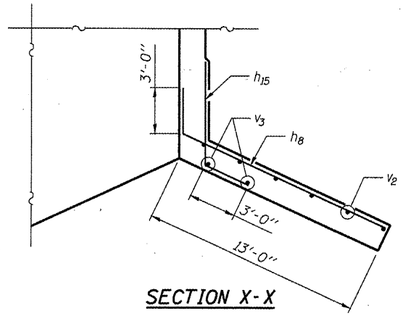
SECTION W-W



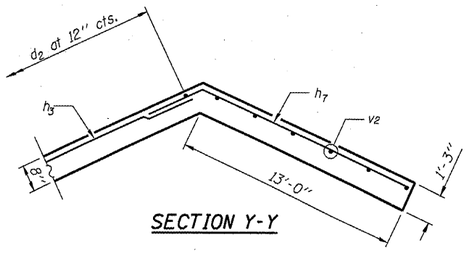
SECTION Z-Z



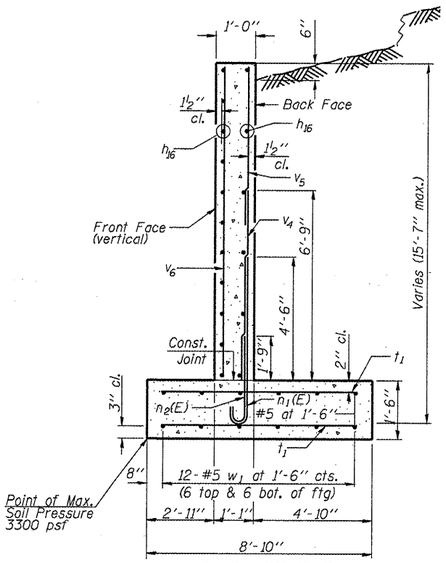
DETAIL V



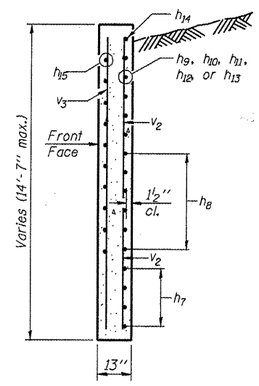
SECTION X-X



SECTION Y-Y



SECTION S-S



SECTION T-T

rjngroup
Excellence through Ownership
200 West Front Street
Wheaton, Il 60187

USER NAME = #USER#	DESIGNED - PRD	REVISED -
	CHECKED - AWW	REVISED -
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -
PLOT DATE = 1/25/2011	CHECKED - AWW	REVISED -

FILE NAME = #FILE1#

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINGWALL DETAILS
STRUCTURE NO. 055-2008
SHEET NO. 10 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	23
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/6/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 25.3", Longitude W90° 52' 40.8"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station
BORING NO. NE
Station 80+60
Offset 65 ft Lt
Ground Surface Elev. 686.53 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft
Groundwater Elev.:
First Encounter 666.5 ft ▼
Upon Completion - ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
685.5 GRASS COVER & TOPSOIL			
FILL: Dark brown, silty clay (A-6)	1		
	2 2	0.0 P	25
	WH		
	WH WH	<0.25 P	30
679.5	WH		
	2 1	-	18
CLAY: Gray and brown, some sand, trace coarse gravel (A-7)	2		
Becomes brown and gray and grades to trace fine gravel	4 4	2.0 P	16
Becomes gray	3		
	3 3	2.0 P	14
Becomes grayish brown	5		
	5 6	2.3 P	13
	3		
	4 6	1.8 B	13
	4		
▼	7 8	-	14
CLAY: Gray and brown, some sand, trace coarse gravel (A-7) (continued)	2		
	5 9	1.8 B	14
No recovery	7		
	9 13	-	
	2		
	4 7	0.7 B	14
	4		
	7 11	2.2 B	13
	3		
	6 7	1.8 B	14
	3		
647.3	12 24	-	15

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/6/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 25.3", Longitude W90° 52' 40.8"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station
BORING NO. NE
Station 80+60
Offset 65 ft Lt
Ground Surface Elev. 686.53 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft
Groundwater Elev.:
First Encounter 666.5 ft ▼
Upon Completion - ft
After - Hrs. - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILT: Gray (A-4) (continued)			
644.7 CLAY: Grayish brown, some sand, trace fine gravel (A-7)	6		
	9 14	3.6 B	18
641.5 Boring terminated at 45.0 ft.			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME = $FILE1$

rjngroup
Excellence through Ownership
200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 055-2008
SHEET NO. 11 OF 14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	24
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/5/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 24.6", Longitude W90° 52' 41.9"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station

BORING NO. SE
Station 80+16
Offset 30 ft Rt
Ground Surface Elev. 694.77 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft

Groundwater Elev.:
First Encounter 651.3 ft ▼
Upon Completion 651.3 ft ▽
After 24 Hrs. 683.5 ft ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
GRASS COVER & TOPSOIL 693.8			
FILL: Crushed rock & Brown, sandy clay (A-6)	9		
	6	-	4
	6		
	3		
Poor recovery - coarse, limestone rock	2	-	22
-5	2		
689.3			
CLAY: Brown (A-7)	2		
	3	0.9	21
	4	B	
	2		
	3	1.3	21
-10	5	B	
684.3			
SILTY CLAY: Brown and grayish brown ▽ (A-6)	1		
	3	0.7	19
	3	B	
681.8			
CLAY: Brown, some sand, trace fine gravel (A-7)	2		
	4	1.1	15
-15	6	B	
Becomes grayish brown	3		
	7	3.6	13
	8	B	
	4		
	5	2.2	12
-20	7	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Brown, some sand, trace fine gravel (A-7) (continued)			
	2		
	3	1.8	15
	5	B	
	2		
-25	5	1.8	13
	6	B	
	WH		
	2	0.3	18
	4	P	
	4		
	3	2.2	16
-30	5	B	
	4		
	7	2.2	14
-35	10	B	
	1		
	3	1.8	13
-40	6	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/5/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 24.6", Longitude W90° 52' 41.9"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station

BORING NO. SE
Station 80+16
Offset 30 ft Rt
Ground Surface Elev. 694.77 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft

Groundwater Elev.:
First Encounter 651.3 ft ▼
Upon Completion 651.3 ft ▽
After 24 Hrs. 683.5 ft ▽

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Brown, some sand, trace fine gravel (A-7) (continued)			
▽▼	4		
	3	-	21
-45	4		
	2		
	5	1.5	15
644.8 -50	7	B	
Boring Terminated at 50.0 ft.			
-55			
-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME = $FILEL$

rjngroup
Excellence through Ownership
200 West Front Street Wheaton, IL 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -
	CHECKED - AWW	REVISED -
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 055-2008
SHEET NO. 12 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	25
		CONTRACT NO. 68662		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/6/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 24.6", Longitude W90° 52' 43.5"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station

BORING NO. SW
Station 79+07
Offset 65 ft Rt
Ground Surface Elev. 687.47 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft

Groundwater Elev.:
First Encounter 677.5 ft
Upon Completion 679.5 ft
After 24 Hrs. 682.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				GRASS COVER & TOPSOIL
686.5				
	2			FILL: Brown, clay (A-7)
685.5	2	2.0	23	
	3	P		FILL: Dark brown, silty clay, trace organics (A-6)
	3			
	2	0.0	26	
-5	2	P		
681.0	WH			
	1	-	25	SAND: Dark brown, fine to medium, some silt, clay (A-2)
679.5 ▽	1			
	1			SANDY CLAY: Dark gray, trace fine gravel (A-6)
	2	-	23	
-10 ▼	1			
676.5	2			
	2	-	16	CLAY: Grayish brown, some sand, trace fine gravel, black shale (A-7)
	3			
	4			
	5	1.6	16	
-15	7	B		
	3			
	4	1.8	14	
	7	B		
	3			
	5	2.1	14	
-20	10	B		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	2			CLAY: Grayish brown, some sand, trace fine gravel, black shale (A-7) (continued)
	5	2.2	14	
	7	B		
	3			
-25	4	1.5	15	
	7	B		
	2			
	5	1.8	14	
	7	B		
	2			
	5	1.5	15	
-30	6	B		
	2			Becomes grayish brown and gray
	5	1.7	16	
-35	7	B		
	2			
	5	1.8	15	
-40	8	B		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering

SOIL BORING LOG

Date 10/6/09

ROUTE FAP 685 DESCRIPTION IL 9 over Little Creek Structure Replacement (055-2008 Proposed) LOGGED BY KEG - IK

SECTION (118B)BR-1 LOCATION West of Blandinsville; W 1/2, SEC. 32, TWP. 7N, RNG. 4W, Latitude N40° 33' 24.6", Longitude W90° 52' 43.5"

COUNTY McDonough DRILLING METHOD CME 55LC/HSA HAMMER TYPE Automatic

STRUCT. NO. 055-0012 (EX)
Station

BORING NO. SW
Station 79+07
Offset 65 ft Rt
Ground Surface Elev. 687.47 ft

Surface Water Elev. - ft
Stream Bed Elev. - ft

Groundwater Elev.:
First Encounter 677.5 ft
Upon Completion 679.5 ft
After 24 Hrs. 682.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				CLAY: Grayish brown, some sand, trace fine gravel, black shale (A-7) (continued)
645.7				
	3			SANDY CLAY: Grayish brown (A-6)
643.0	5	-	14	
-45	11			SAND: Grayish brown, some silt, clay (A-2)
640.5				
	-			SAND: Grayish brown, fine to medium (A-3)
	-	-	19	
637.5 -50	-			
				Boring Terminated at 50.0 ft.
-55				
-60				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

FILE NAME = $FILEL$

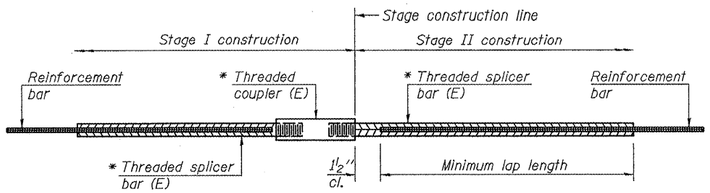
rjngroup
Excellence through Ownership
200 West Front Street Wheaton, Il 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -	
	CHECKED - AWW	REVISED -	
PLOT SCALE = 1@.166667	DRAWN - DJW	REVISED -	
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS
STRUCTURE NO. 055-2008
SHEET NO. 13 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	26
		CONTRACT NO. 68662		
		ILLINOIS FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

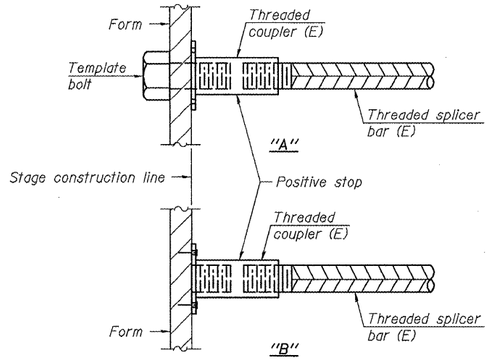
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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 + 1½" + thread length

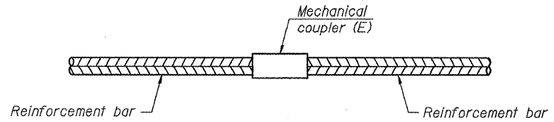
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Top Slab	#6	45	Table 1
Bot. Slab	#6	45	Table 1
Walls	#7	30	Table 1



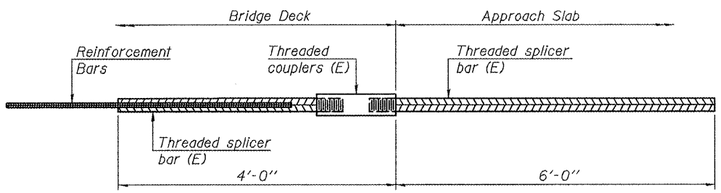
INSTALLATION AND SETTING METHODS

"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.



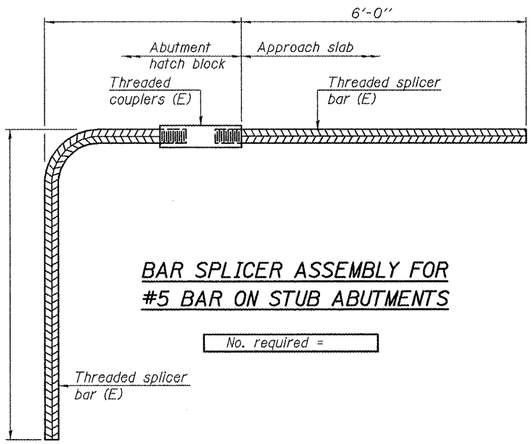
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required =



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.

BSD-1 7-1-10

FILE NAME = $FILEL$

rjngroup Excellence through Ownership 200 West Front Street Wheaton, IL 60187

USER NAME = $USER$	DESIGNED - PRD	REVISED -
	CHECKED - AWW	REVISED -
PLOT SCALE = 1:0.166667	DRAWN - DJW	REVISED -
PLOT DATE = 1/6/2011	CHECKED - AWW	REVISED -

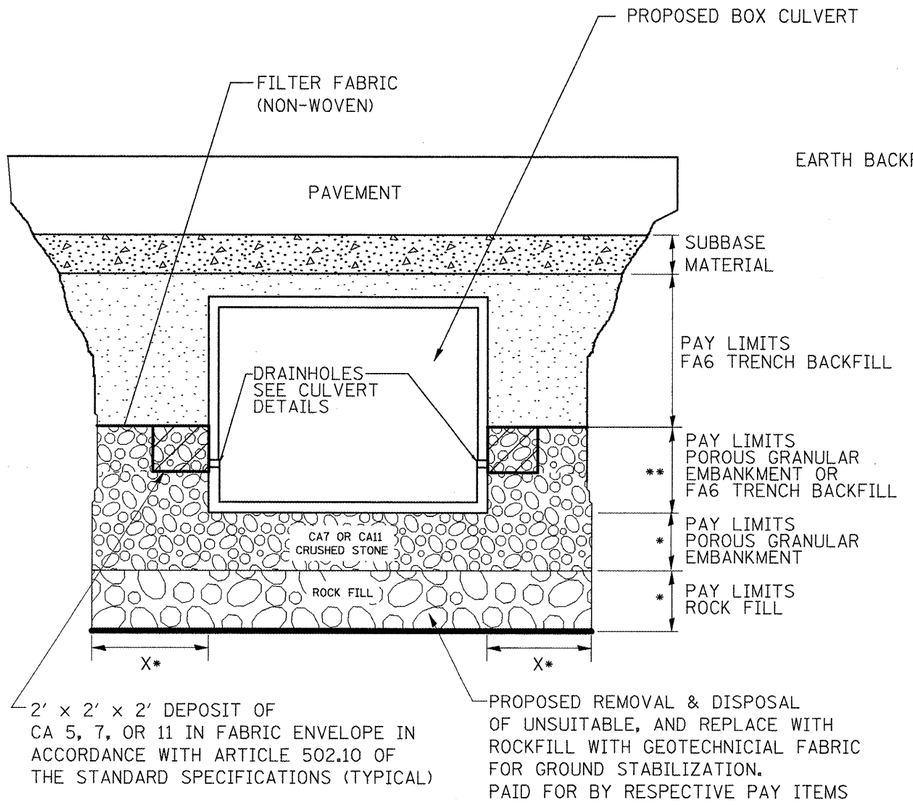
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 055-2008
SHEET NO. 14 OF 14 SHEETS

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	27
		CONTRACT NO. 68662		
	ILLINOIS FED. AID PROJECT			

2. THIS DETAIL IS MENT FOR CONSTRUCTING BOX CULVERTS THROUGH EXISTING EMBANKMENTS.
3. USE THE DISTRICT SPECIAL DETAIL FOR UNSUITABLE EXCAVATION TREATMENT FOR CULVERTS TO SHOW THE UNDERCUT DIMENSIONS.

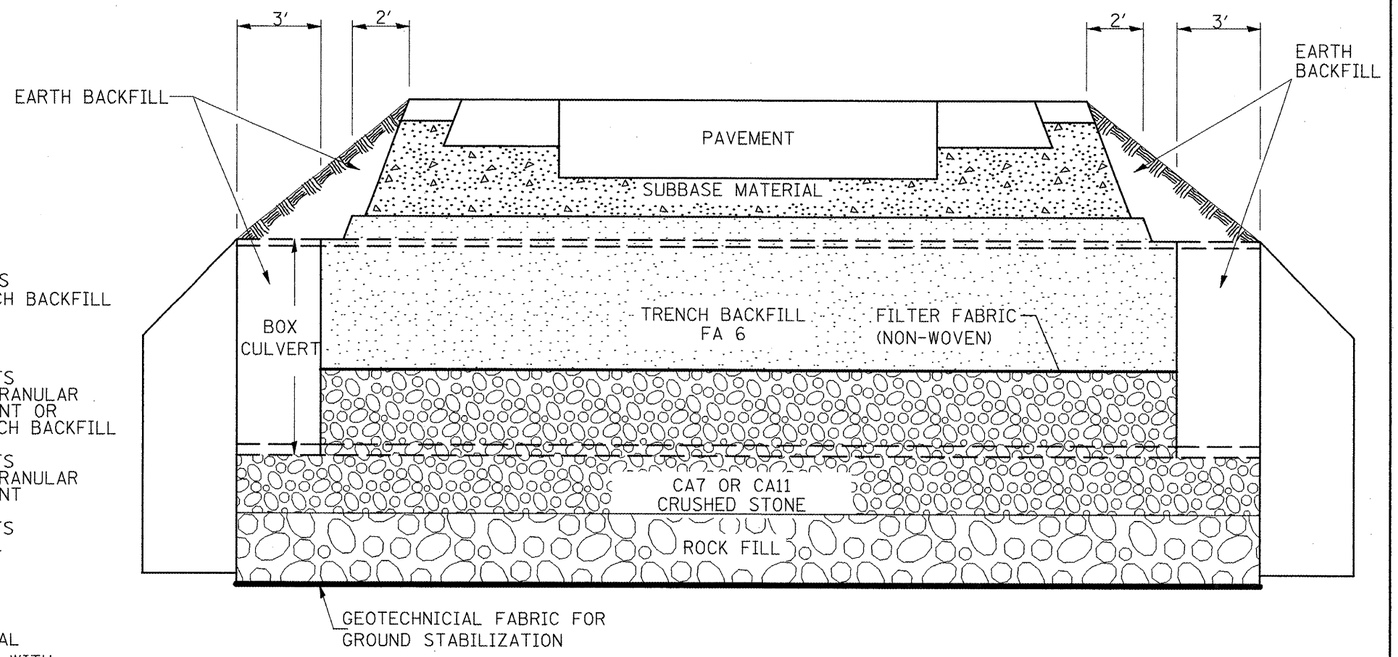
ROADWAY PROFILE VIEW



* SEE UNDERCUT DETAIL FOR DEPTHS AND WIDTHS. IF THERE IS NO UNERCUT, X = 2 FEET AND SEE NOTE 3 THIS SHEET.

** EXTEND THE POROUS GRANULAR EMBANKMENT TO THE TOP OF THE DRAINHOLE FILTER FABRIC ENVELOPES. IF THE BOX CULVERT DOES NOT HAVE DRAINHOLES, THEN BEGIN PLACING TRENCH BACKFILL AT THE BOTTOM OF THE CULVERT.

ROADWAY CROSS SECTION VIEW



NOTES:

1. EXCEPT AS SPECIFIED IN THIS DETAIL, THE PLACEMENT AND COMPACTION OF BACKFILL SHALL BE IN ACCORDANCE WITH ARTICLE 502.10 OF THE STANDARD SPECIFICATIONS.

2. TRENCH BACKFILL SHALL BE COMPACTED BY EITHER METHOD 2 OR METHOD 3 SPECIFIED IN ARTICLE 550.07, OR IN ACCORDANCE WITH METHOD 1 SPECIFIED IN ARTICLE 550.07, EXCEPT THAT THE COMPACTED LIFTS SHALL NOT EXCEED 8" IN THICKNESS. TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD LAB DENSITY.

3. IF NO UNDERCUT IS REQUIRED, A 6" MINIMUM LAYER OF POROUS GRANULAR EMBANKMENT SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF PRECAST BOX CULVERTS AS SPECIFIED IN ARTICLE 540.06 OF THE STANDARD SPECIFICATIONS.

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

FILE NAME = backfill detail.dgn	USER NAME = eichhornbr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/20/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF EXCAVATION AND BACKFILL FOR BOX CULVERTS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	28
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

695
690
685

EX ROW

TELEPHONE

4% 1.5% 692.21 1.5% 4%

C = 0.0 SF
F = 0.0 SF
EARTH EX WID = 19.8 SF

EX ROW

695
690
685

77 + 50.00

695
690
685

EX ROW

TELEPHONE

4% 1.5% 1.5% 4%

C = 0.7 SF
EARTH EX WID = 20.1 SF

EX ROW

695
690
685

77 + 40.00

695
690
685

EX ROW

692.10

EX ROW

695
690
685

77 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.

FILE NAME = D468662-Sht-XSSht.dgn	USER NAME = eichhornbr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9 – CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 77+00.00 | TO STA. 77+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	29
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

695 690 685 680

PR ROW

EX ROW

4% 1.5% 694.12 1.5% 4% 1:3 TEMP

C = 172.3 SF
F = 25.3 SF
EARTH EX WID = 17.5 SF

1:3 1:4 1:3

685.76

TELEPHONE

79 + 00.00

695 690 685 680

PR ROW

EX ROW

4% 1.5% 693.5 1.5% 4% 1:3 TEMP

C = 14.2 SF
F = 4.4 SF
EARTH EX WID = 26.0 SF

1:4 1:3 1:3

687.16

TELEPHONE

78 + 50.00

695 690 685

EX ROW

PR ROW

4% 1.5% 692.67 1.5% 4% 1:3

C = 0.2 SF
F = 0.8 SF
EARTH EX WID = 19.3 SF

1:4

TELEPHONE

78 + 00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.

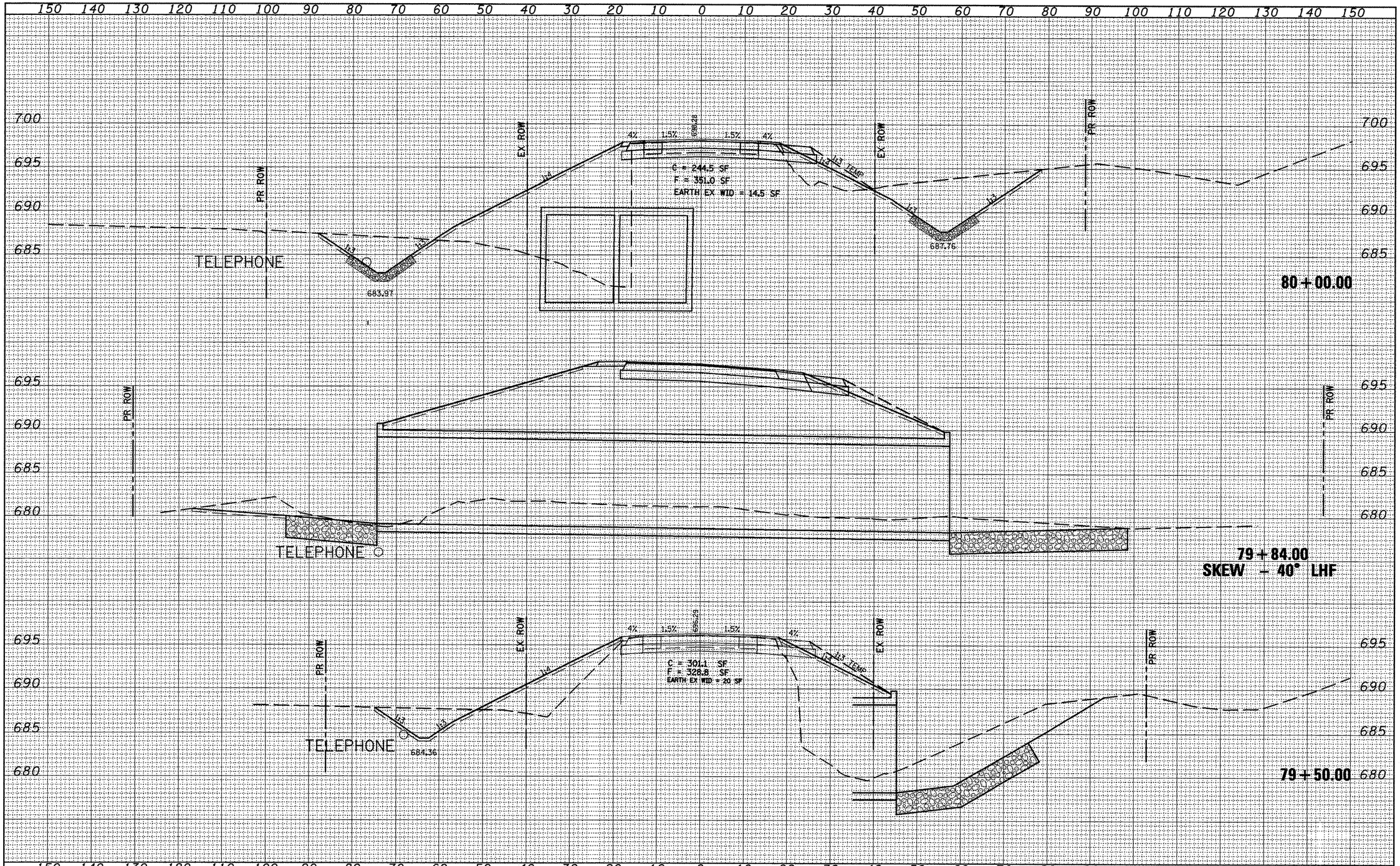
FILE NAME = 0468662-Sht-XSSht.dgn	USER NAME = eichhornbr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9 – CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 78+00.00 TO STA. 79+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	30
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE BOOK | PLOTTED | PLATE | AREAS | AREAS CHECKED | NO.

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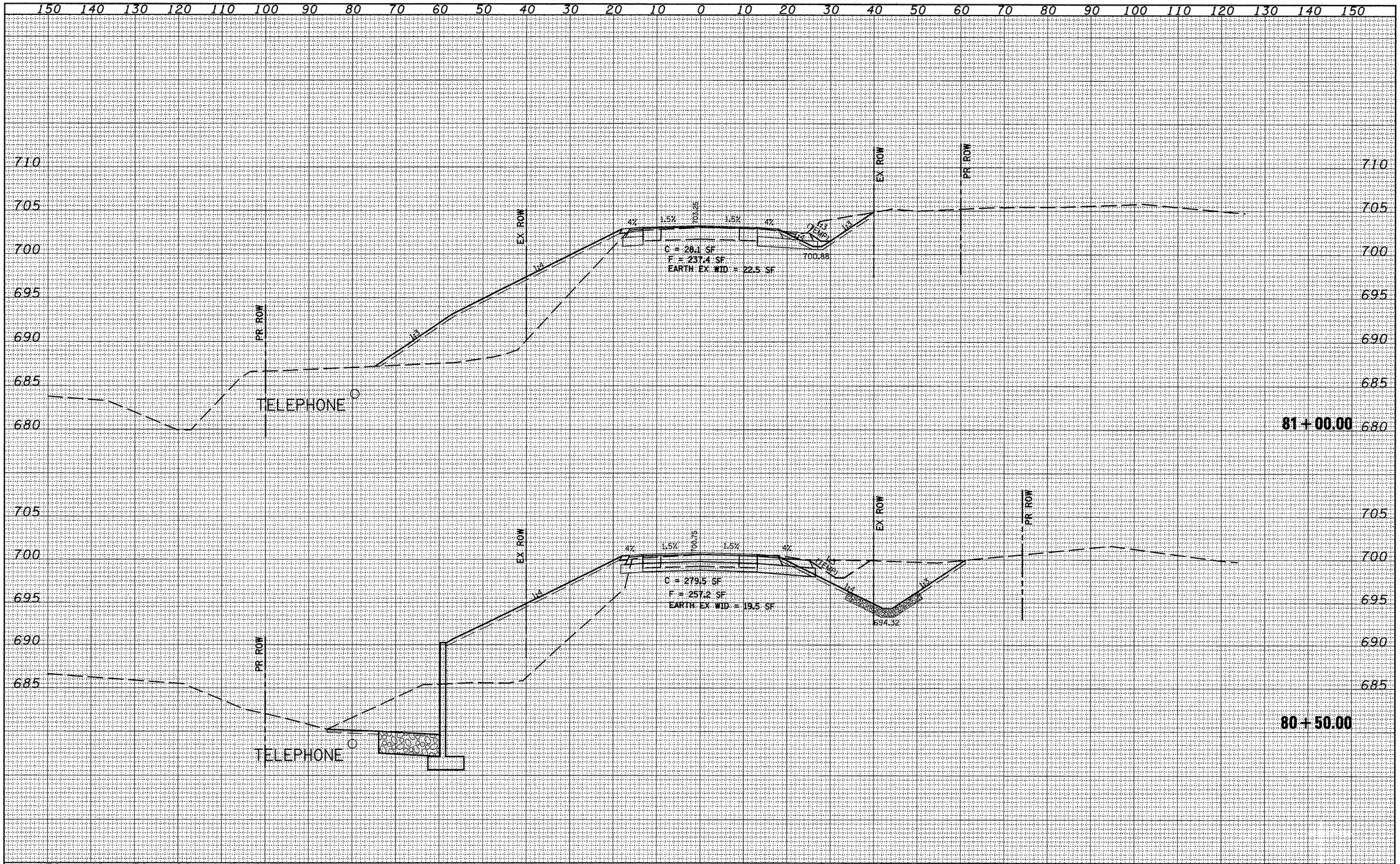
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9 - CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 79+50.00 | TO STA.80+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	31
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTE BOOK | TEMPLATE
NO. | AREAS CHECKED

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	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9 – CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 80+50.00 TO STA. 81+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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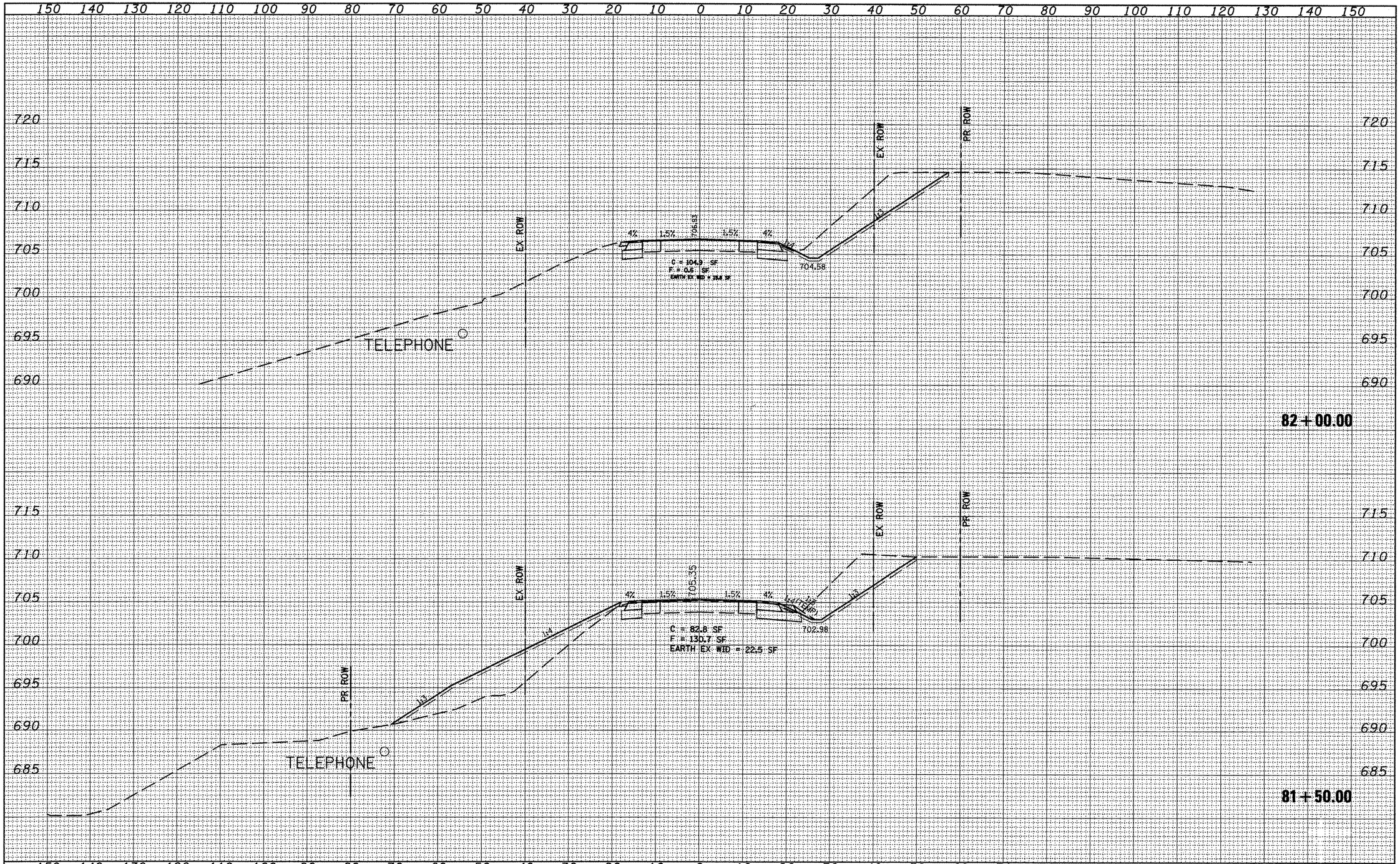
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

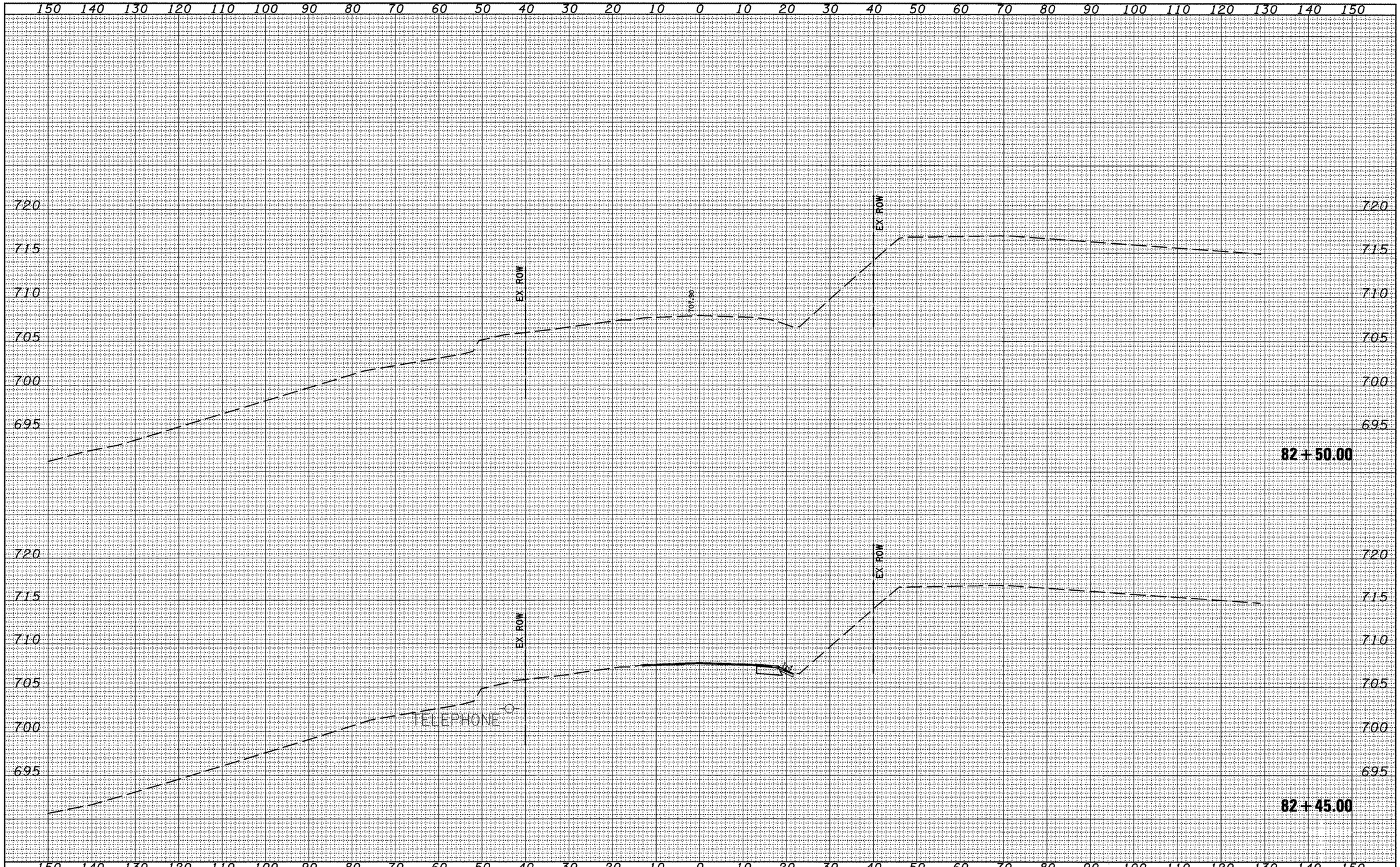
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 9 – CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 81+50.00 | TO STA.82+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(11BB)BR-1	McDONOUGH	43	33
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SURVEY | NOTE BOOK | NO. | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED



SURVEY NOTE BOOK | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NO.

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		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/21/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

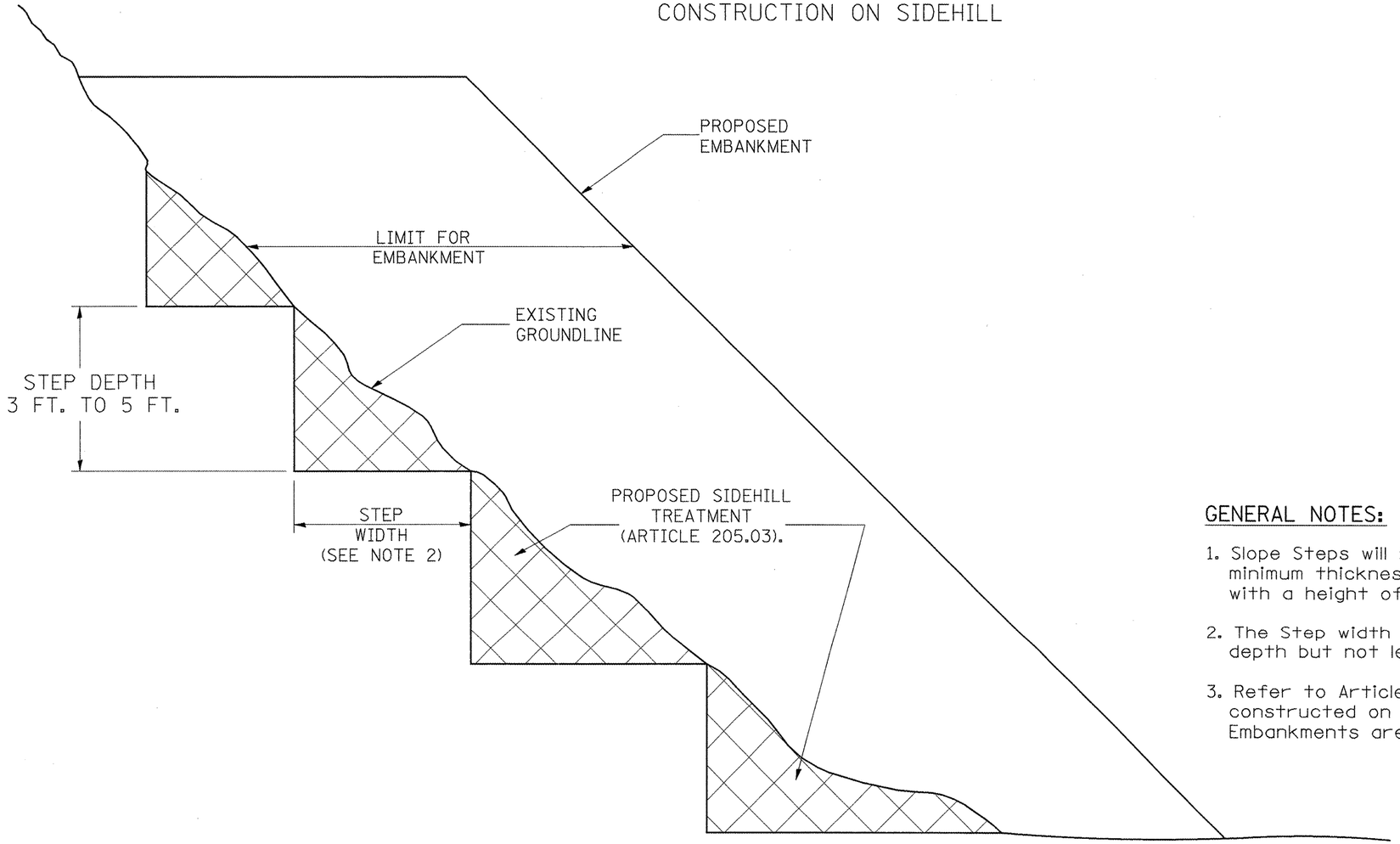
IL 9 – CROSS SECTIONS

SCALE: | SHEET NO. OF SHEETS | STA. 82+45.00 | TO STA.82+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	McDONOUGH	43	34
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT
(IN ACCORDANCE WITH
205 OF THE STANDARD SPECIFACATION).

DESIGNER NOTE:

1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.
	BOX, REVISED GENERAL NOTES.	
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

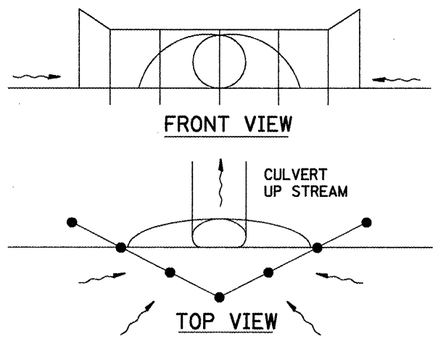
SLOPE STEPS DETAIL

NOT TO SCALE

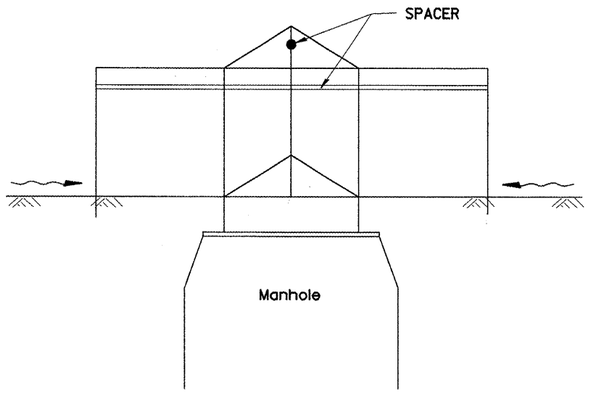
CADD STD. 205001-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
865	(118B)BR-1	MCDONOUGH	43	35
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

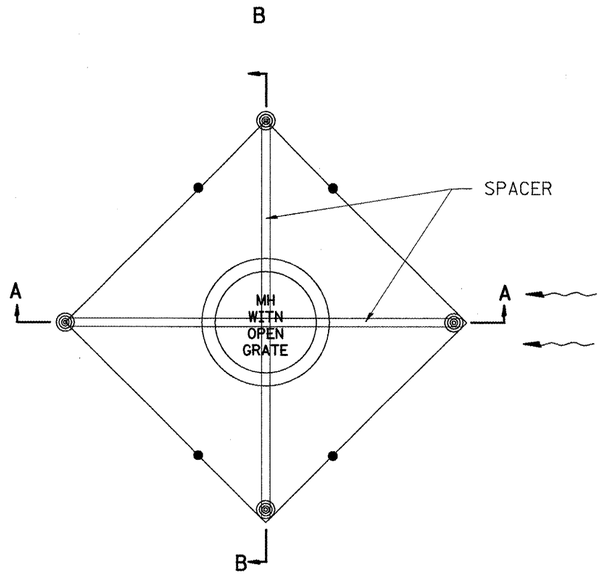
Designer NOTEs:
1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
2. Include Highway Standard 280001 "TEMPORARY EROSION CONTROL SYSTEM."



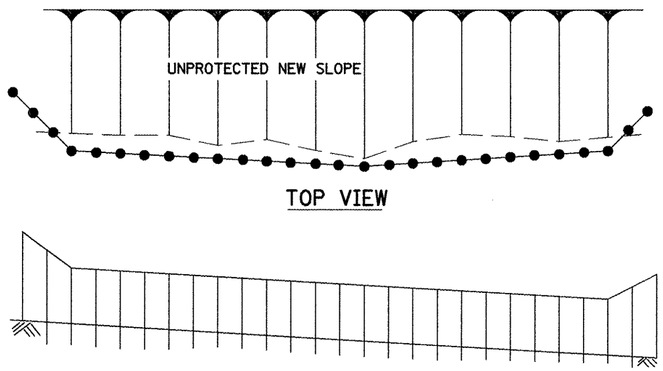
UPSTREAM PIPE CULVERT EROSION CONTROL



SIDE VIEW
A-A

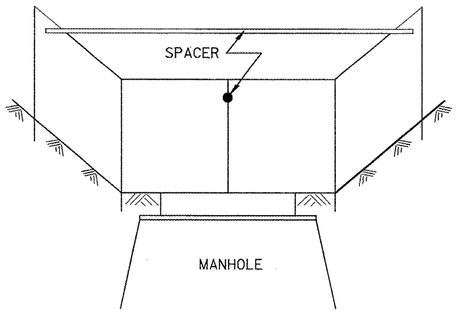


TOP VIEW



TOP VIEW

FRONT VIEW



Front View
B-B

EROSION CONTROL
AT
OPEN GRATE MAN HOLE

GENERAL NOTES:

1. This work shall be performed in accordance with Sections 280 & 1081, of the Standard Specifications.
2. Additional Timber or Metal Post shall be installed, as needed.

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

1-1-97		T.P.
3-11-03	ELIMINATED SILT FENCE DITCH CHECK	M.A.

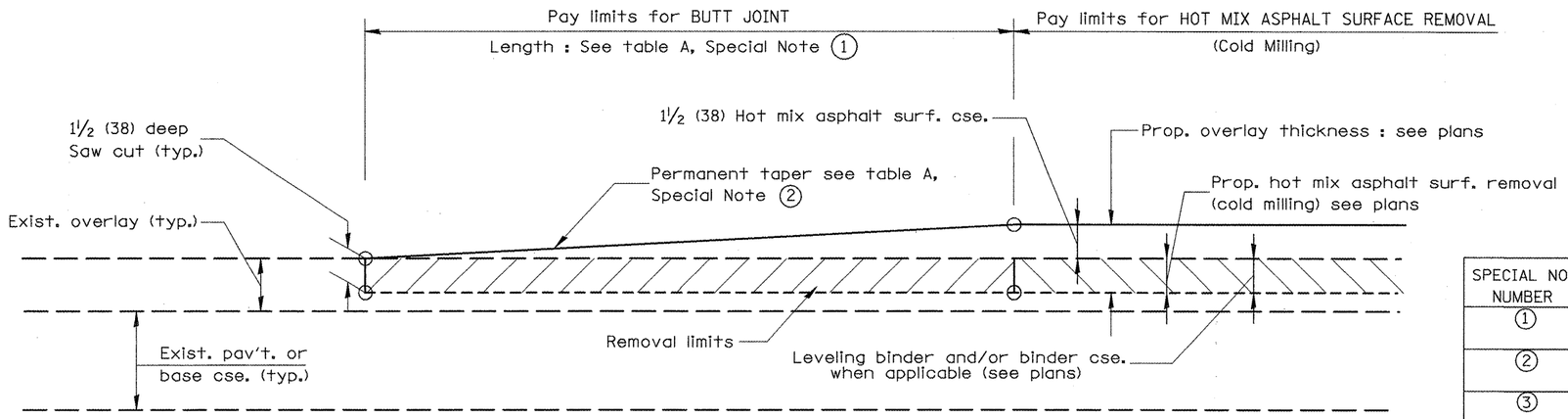
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATION OF SILT FILTER FENCE

NOT TO SCALE

CADD STD. 280001-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	36
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



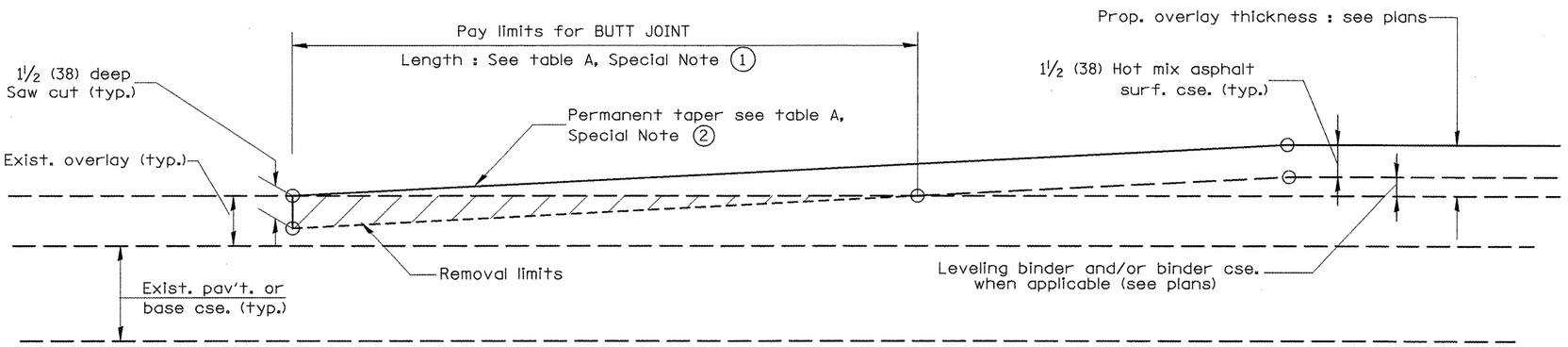
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).

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

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
04-01-97	CORRECTION TO DEPTH	J.A.
09-15-05	REVISED DESIGNER NOTE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

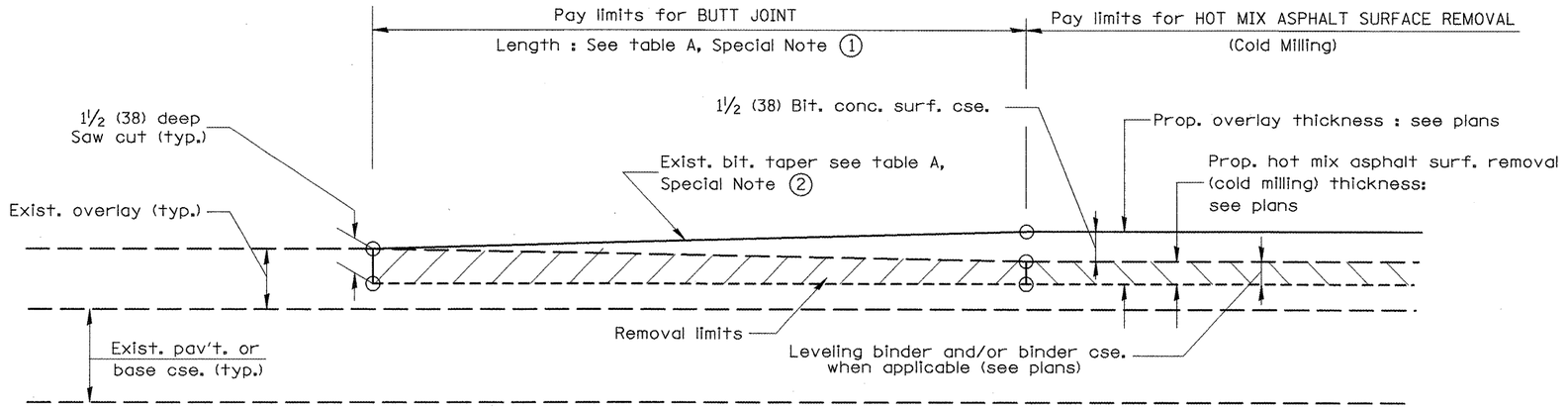
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

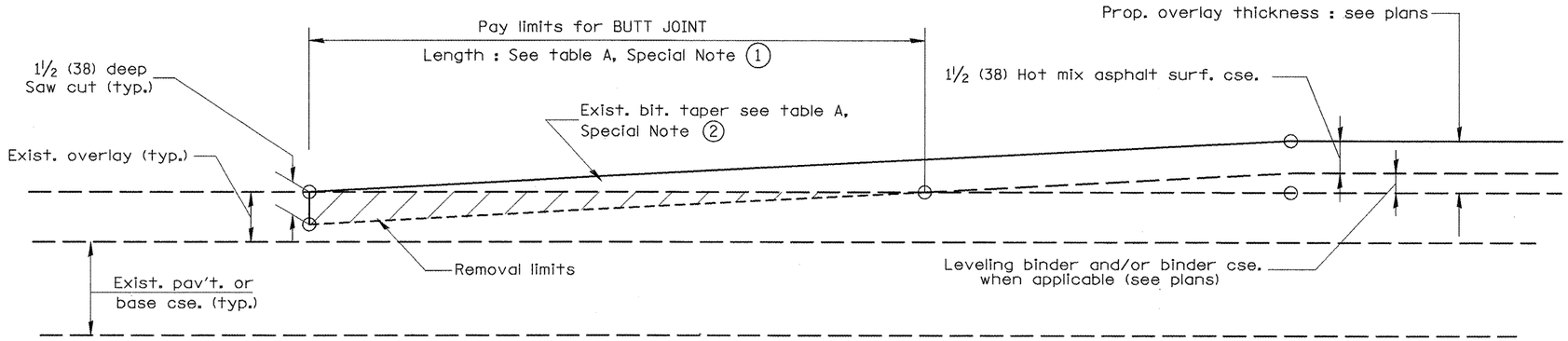
BUTT JOINTS

SHT. 1 OF 3
CADD STD. 406101-D4

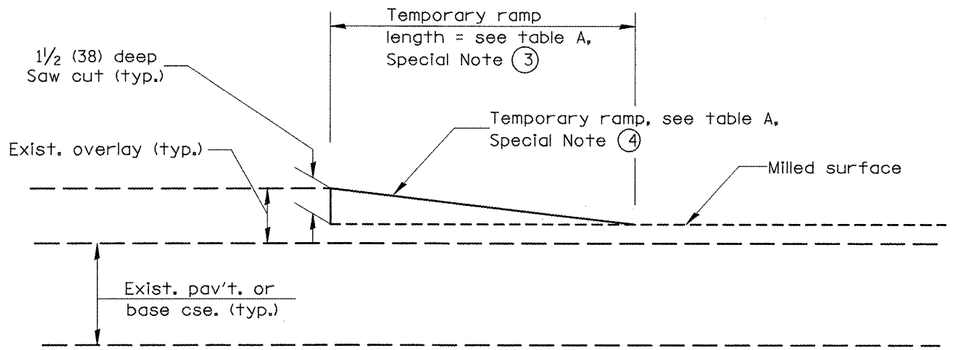
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
865	(118B)BR-1	MCDONOUGH	43	37
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

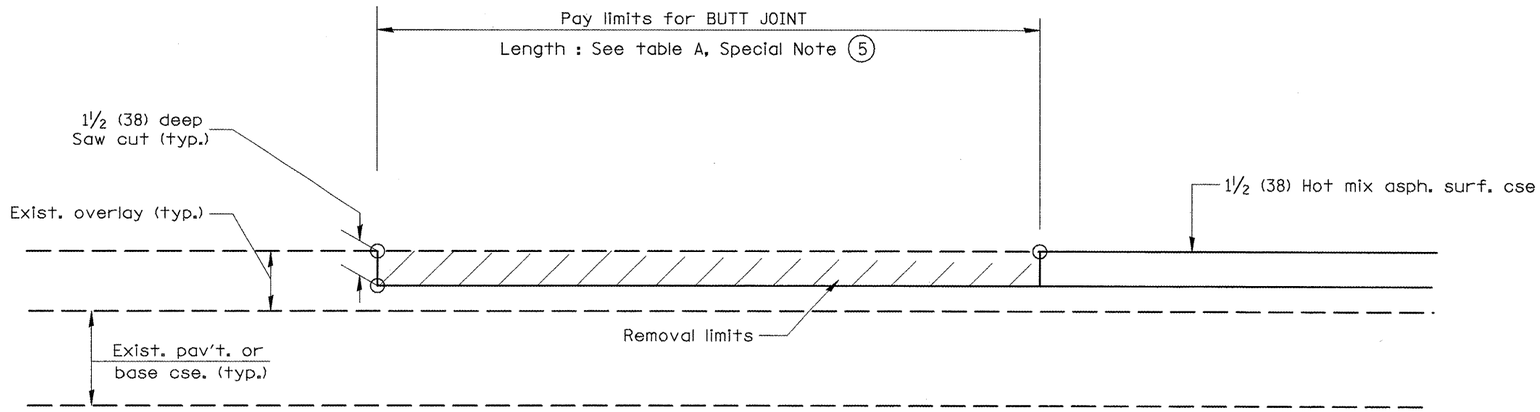


DETAIL TEMPORARY RAMP

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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINTS NOT TO SCALE	SHT. 2 OF 3 CADD STD. 406101-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
865	(118B)BR-1	MCDONOUGH	43	38
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

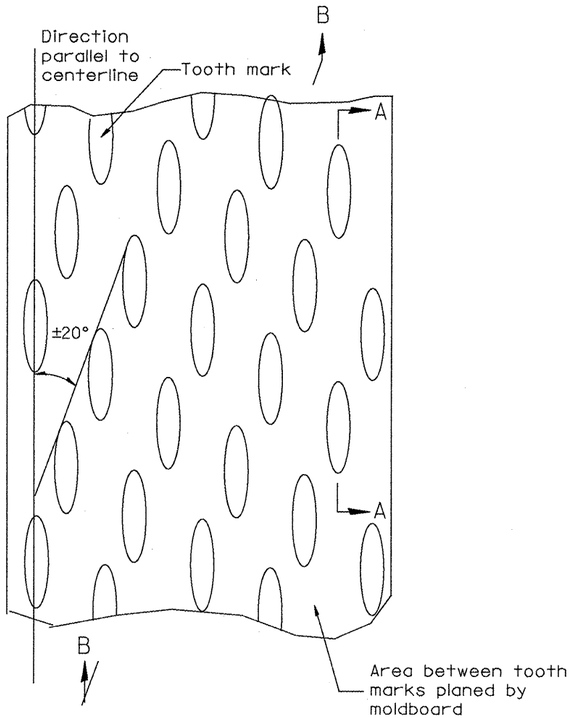
BUTT JOINTS

NOT TO SCALE

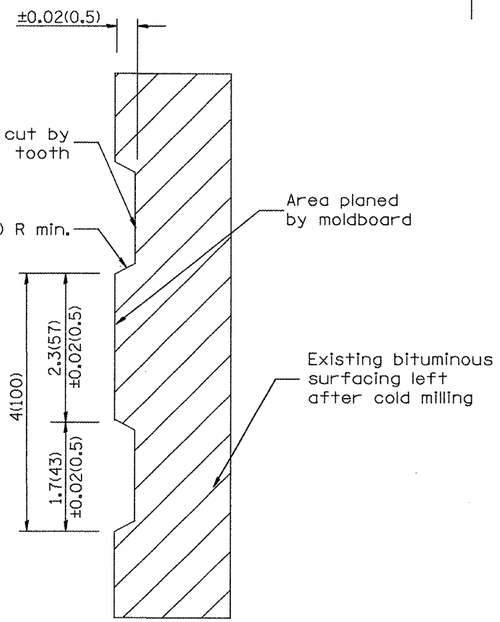
SHT. 3 OF 3
CADD STD. 406101-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
865	(118B)BR-1	MCDONOUGH	43	39
		CONTRACT NO. 68662		

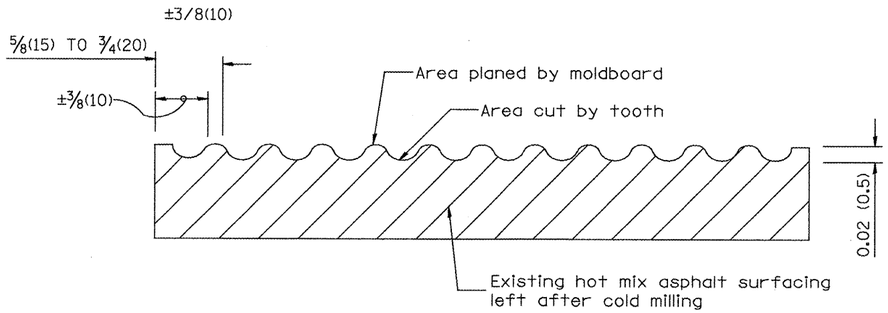
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

DESIGNER NOTES:
1. INCLUDE DISTRICT SPECIAL PROVISION, IF APPLICABLE.

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

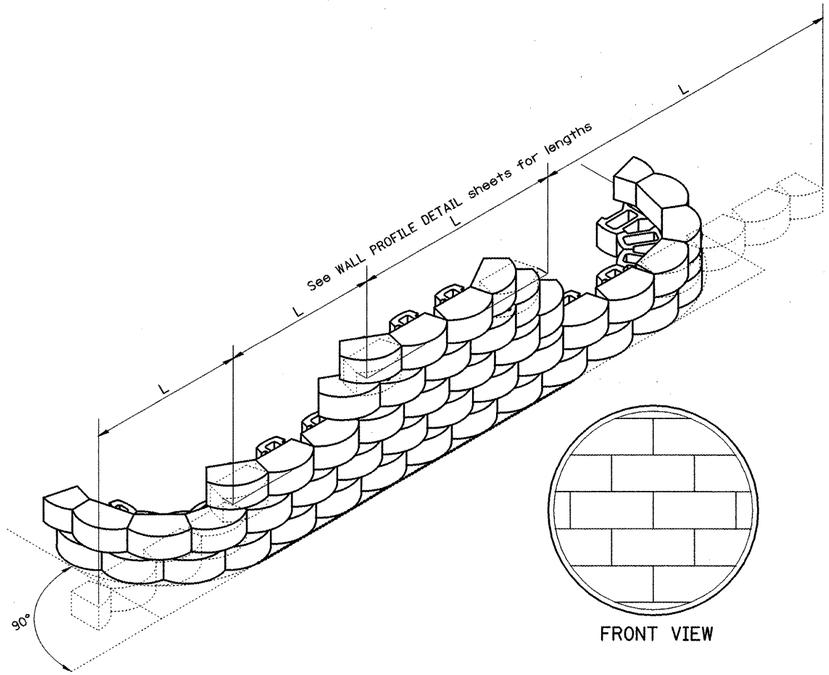
01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

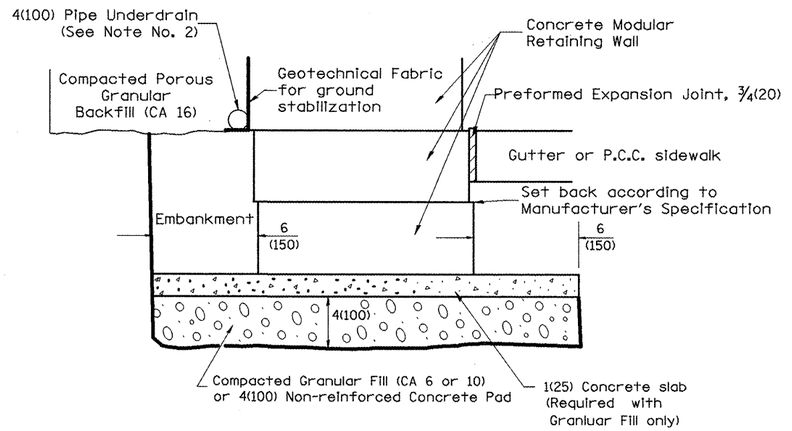
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE — CADD STD. 440001-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	40
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



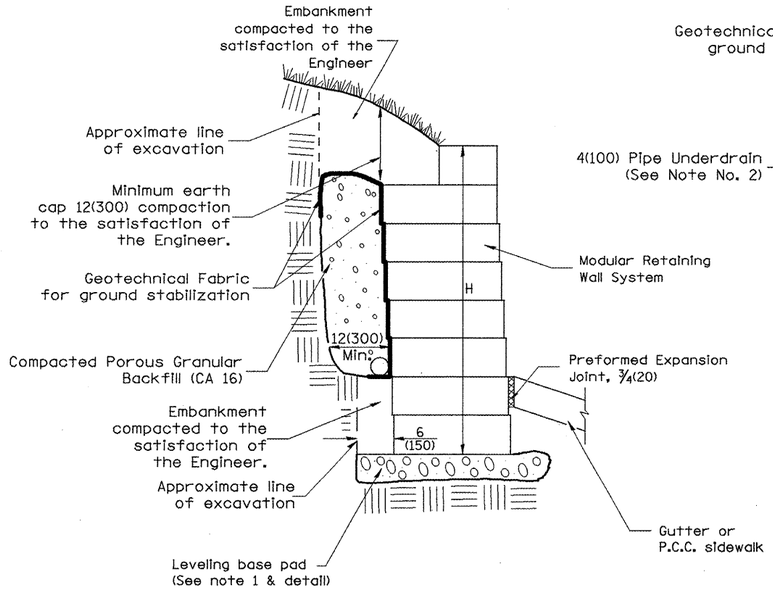
INSTALLATION OF COURSES IN RUNNING BOND

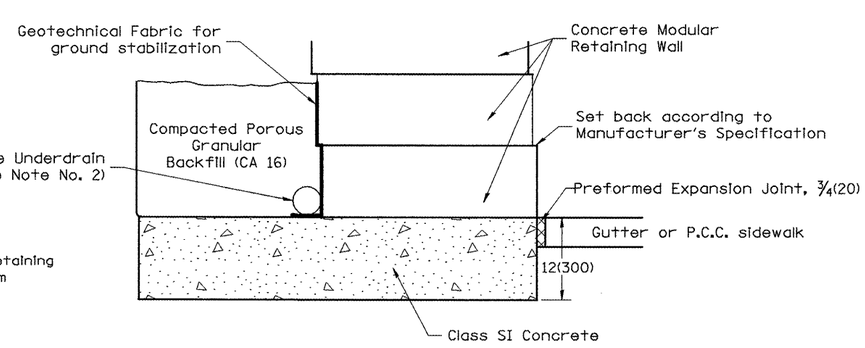


LEVELING BASE PAD DETAIL

NOTES:

1. At the Contractor's option the portion of the stone wall below top of sidewalk elevation may be constructed with class SI concrete.The width shall match the width of the modular block plus the 12(300) maximum trench.
2. 4(100) Pipe Underdrains shall outlet into inlets or storm sewer.
3. Pipe drains and pipe underdrains shall meet the requirements of the applicable portions of section 601 of the Standard Specifications.
4. Preformed expansion joint filler shall be placed between the gutter or sidewalk and the wall.
5. The geotechnical fabric shall meet the requirements of the applicable portions of Sections 210 and 1080 of the Standard Specifications.





LEVELING BASE PAD
CONCRETE ALTERNATE
(See Note 1)

DESIGNER NOTES:

1. Use in conjunction with Special Provisions for Modular Retaining Wall System, with name of three systems specified.
2. Use in conjunction with Special Provisions for Pipe Underdrains, CA 16, without Fabric Envelope.

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

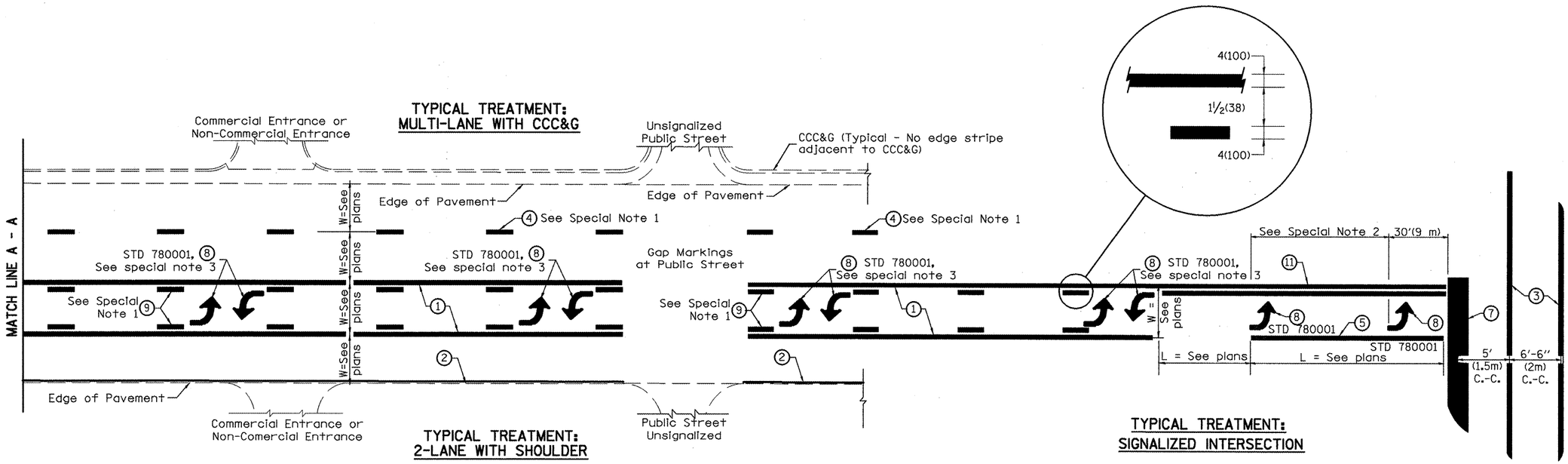
01-01-97	RENUM. L-5.05, NEW REVISION BOX, REVISED	T.P.
	TITLE BOX	
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR RETAINING WALL SYSTEM DETAIL

NOT TO SCALE — CADD STD. 660101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	41
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend.
Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows — 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) — 10' (3.05m) / 30' (9.14m) / 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A) — 45°
11. 4(100) Double Solid (Yellow) — 11(280) C.-C. — See Table A

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

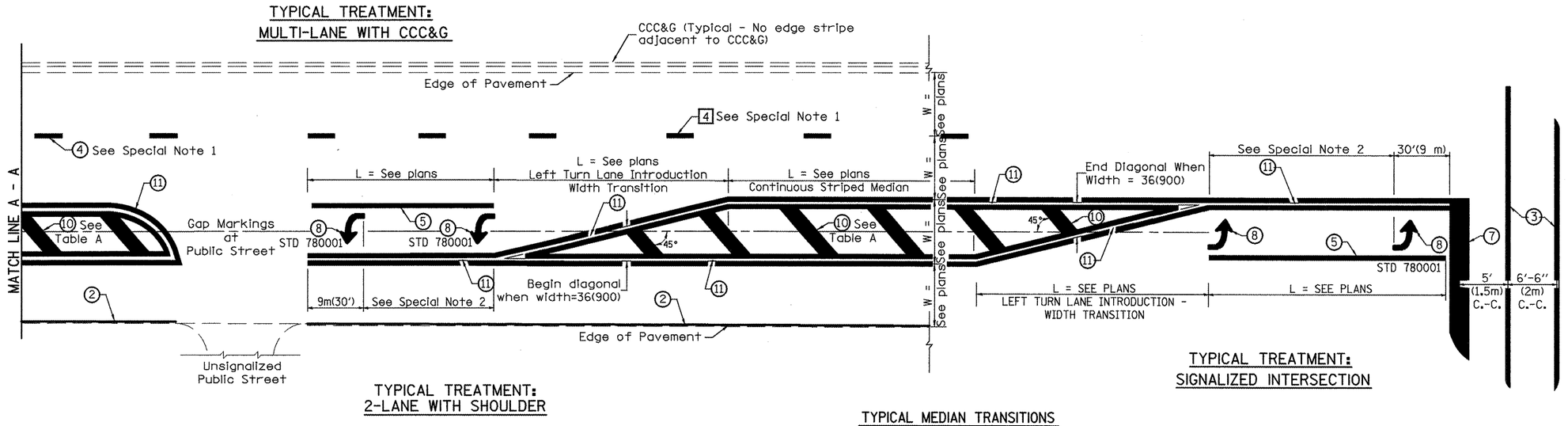
DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.
10-16-06	REVISED TO 2007 SPEC.	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

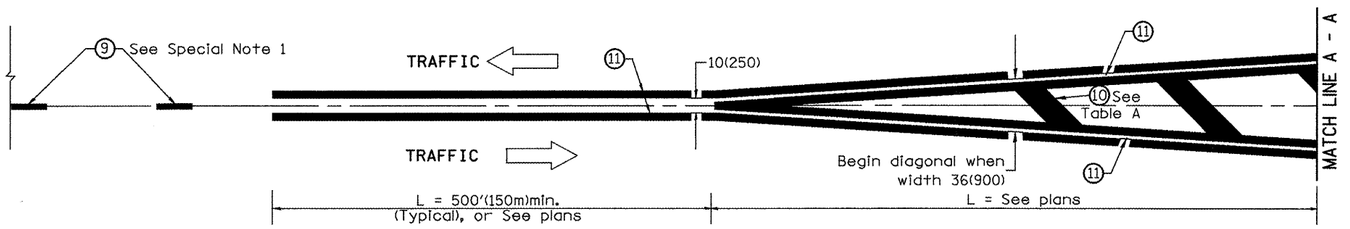
TYPICAL PAVEMENT MARKINGS
NOT TO SCALE
SHT. 1 OF 2
CADD STD. 780001-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	42
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL MEDIAN TRANSITIONS

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 780001-D4

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	(118B)BR-1	MCDONOUGH	43	43
		CONTRACT NO. 68662		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		