9-19-08 Letting, Item 018

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60D68		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESIGN DESIGNATION:
OTHER PRINCIPAL ARTERIAL
POSTED SPEED : 55 M.P.H.
2005 ADT = 8,100
2021 ADT = 7,695

MUNICIPALITY INVOLVED:
UNINCORPORATED WILL COUNTY

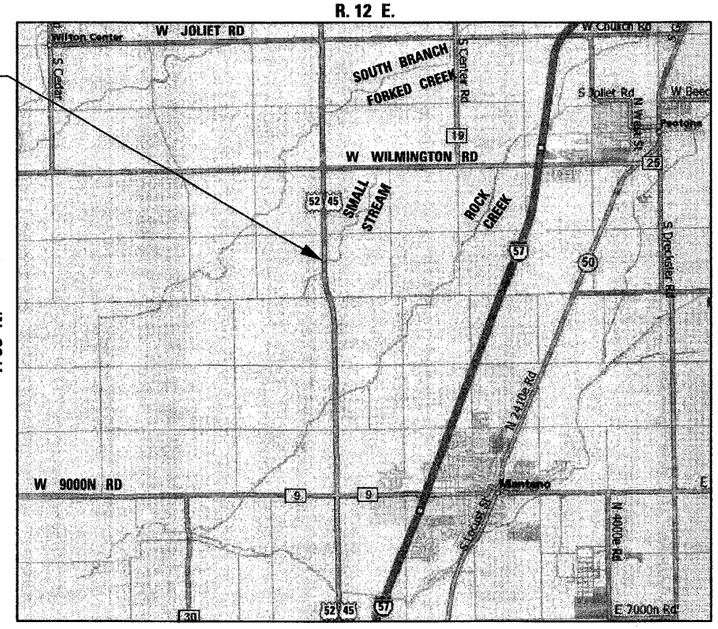
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

F.A.P. 330 / U.S. 45 / 52 (96TH AVE.)
SECTION: 17 B–1–I–1
OVER SMALL STREAM (3.4 MI. S. OF U.S. 52)
BRIDGE BEAM REPLACEMENT, NEW DECK
WILL COUNTY
C–91–087–08

LOCATION:
U.S. 45 / 52
OVER SMALL STREAM
S.N. 099–0122

PEOTONE TOWNSHIP
R. 12 E.



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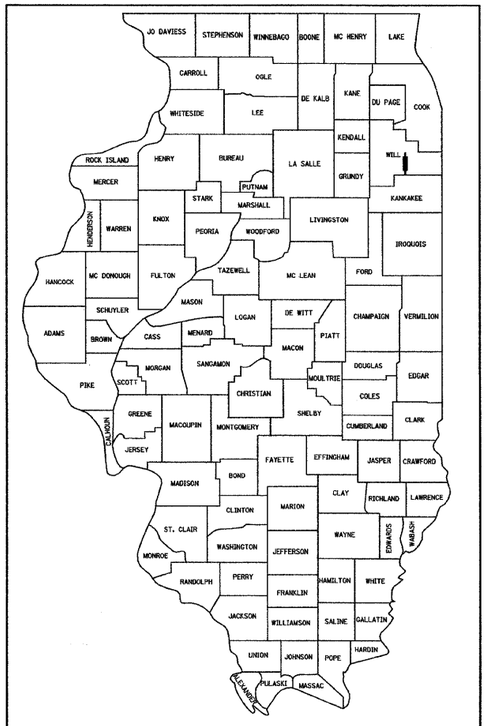
D–91–087–08



LOCATION OF SECTION INDICATED THUS: –

0	100'	200'	300'	— 1" = 100'
0	10'	20'	30'	— 1" = 10'
0	50'	100'		— 1" = 50'
0	50'	100'		— 1" = 40'
0	50'	100'		— 1" = 30'
0	50'	100'		— 1" = 20'

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

GROSS LENGTH OF PROJECT = 162.1 FEET = 0.031 MILES
NET LENGTH OF PROJECT = 162.1 FEET = 0.031 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 9, 20 08
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER
August 15, 20 08
Eric E. Harm
Interim ENGINEER OF DESIGN AND ENVIRONMENT
August 15, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

BIRINDER S. SACHDEVA
062-57259
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Birinder S. Sachdeva — 6-30-08
BIRINDER S. SACHDEVA, P.E. — DATE
EXPIRES: 11–30–2009

BHADRESH N. SHAH
081-004476
STATE OF ILLINOIS
LICENSED STRUCTURAL ENGINEER

Bhadresh N. Shah — 6-30-2008
BHADRESH N. SHAH, S.E., P.E. — DATE
EXPIRES: 11–30–2008

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

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DISTRICT ONE – DESIGN PROJECT MANAGER: ISAAC KWARTENG (847) 705–4230

CONTRACT NO. 60D68

INDEX OF SHEETS

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420401-06	BRIDGE APPROACH PAVEMENT
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
630001-07	STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR AND MARKER AND MOUNTING DETAILS
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701321-09	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, WITH BARRIER
701901	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

SCOPE OF WORK

THE SCOPE OF WORK FOR THIS PROJECT CONSISTS OF:
- INSTALLING TEMPORARY LIGHTING AND BRIDGE TRAFFIC SIGNALS.
- REMOVE EXISTING HMA BRIDGE DECK.
- REMOVE AND REPLACE BEAMS.
- PLACE CONCRETE WEARING SURFACE.
- REPLACE APPROACH SLABS.
- INSTALL NEW GUARDRAIL TERMINALS.

GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM IDOT FIELD MAINTENANCE ENGINEERS.
2. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED UPON THE UNIT PRICE.
3. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) OR 811 TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
5. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
6. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
7. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
9. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
10. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS IN THE CREEK. THE COST OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.
11. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
12. THE CONTRACTOR SHALL CONTACT CORA MATHIS, THE AREA TRAFFIC FIELD ENGINEER, AT (815) 485-6475 TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
13. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
14. ALL DISTURBED AREAS SHALL BE COVERED WITH SEEDING, CLASS 2A AND EROSION CONTROL BLANKET. THE COST OF THE NITROGEN, PHOSPHORUS AND POTASSIUM FERTILIZER SHALL BE INCLUDED IN THE BID PRICE FOR SEEDING, CLASS 2A.
15. ON HIGHWAY STANDARD 420401 "BRIDGE APPROACH PAVEMENT", SUBBASE GRANULAR MATERIAL TYPE B SHALL BE USED IN LIEU OF THE TYPE A SHOWN ON THE STANDARD.

NOTE: BOXED ITEMS ARE INCIDENTAL.

FILE NAME = 60D68 index.dgn
PLOT DATE = 7/7/2008

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

DESIGNED - S.J.P.	REVISED -	
DRAWN - A.Y.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JULY 7, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, LIST OF STATE STANDARDS, SCOPE OF WORK AND GENERAL NOTES U.S. 45 / 52

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-I-I-1	WILL	29	2
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE U.S. 45 / 52 BRIDGE SFTY-2A
	20200100	EARTH EXCAVATION	CU YD	176	176
	25000210	SEEDING, CLASS 2A	ACRE	0.2	0.2
	25100630	EROSION CONTROL BLANKET	SQ YD	660	660
	31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	314	314
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	26	26
	40600300	AGGREGATE (PRIME COAT)	TON	1	1
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	22	22
	40600990	TEMPORARY RAMP	SQ YD	13	13
	40603080	HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	26	26
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	26	26
	42001165	BRIDGE APPROACH PAVEMENT	SQ YD	294	294
	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	72	72
	44000086	HOT-MIX ASPHALT SURFACE REMOVAL COMPLETE	SQ YD	196	196
	44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	255	255
	44000700	APPROACH SLAB REMOVAL	SQ YD	192	192
	44004250	PAVED SHOULDER REMOVAL	SQ YD	164	164
	48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	95	95
	50102400	CONCRETE REMOVAL	CU YD	5.9	5.9
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.3	8.3
	50300260	BRIDGE DECK GROOVING	SQ YD	180	180
	50300300	PROTECTIVE COAT	SQ YD	217	217
	50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	348	348
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4,310	4,310
	50800515	BAR SPLICERS	EACH	39	39
	54200445	PIPE CULVERTS, TYPE 1 RCCP 30"	FOOT	30	30
	54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2	2
* *	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
	63200310	GUARDRAIL REMOVAL	FOOT	292	292
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4
	67100100	MOBILIZATION	L SUM	1	1
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	URBAN 100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE U.S. 45 / 52 BRIDGE SFTY-2A
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	665	665
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	313	313
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	313	313
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	760	760
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	4	4
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	12	12
*	78201000	TERMINAL MARKER-DIRECT APPLIED	EACH	4	4
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	230	230
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3	3
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1
*	81800300	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE	FOOT	1,350	1,350
*	82103400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	6	6
*	83057120	LIGHT POLE, WOOD, 25 FOOT, CLASS 4	EACH	2	2
*	83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	6	6
*	84100110	REMOVAL OF TEMPORARY LIGHTING UNITS	EACH	6	6
	X0320047	REMOVAL OF EXISTING PRECAST PRESTRESSED CONCRETE DECK BEAMS	SQ FT	348	348
	X0321468	PLUG EXISTING DECK DRAINS	EACH	6	6
	X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	48	48
*	X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4	4
	X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	272	272
	X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	1,780	1,780
	X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	203	203
*	X8900005	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1
*	XX006937	GROUND ROD, 5/8" DIA. x 10 FT.	EACH	2	2
*	X0325949	ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL	EACH	1	1
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
	Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2	2
	Z0030340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2
	Z0032700	KEYWAY REPAIR	FOOT	350	350

* SPECIALTY ITEM

FILE NAME = 60D68 summary.dgn
PLOT DATE = 7/10/2008

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

DESIGNED - S.J.P.	REVISED -		
DRAWN - A.Y.	REVISED -		
CHECKED - E.J.M.	REVISED -		
DATE - JULY 10, 2008	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
U.S. 45 / 52

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

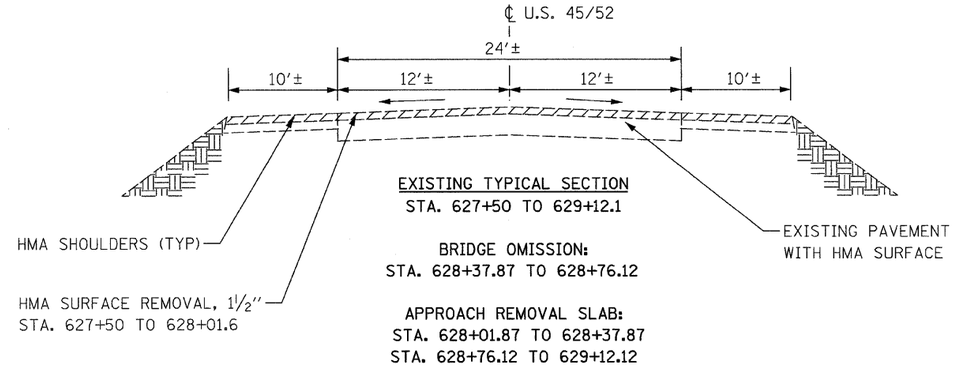
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	3
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm)	PG 64-22	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 1" - 3½"	*PG 64-22	4% @ 50 Gyr.
TEMPORARY RAMP		
LEVELING BINDER (MACHINE METHOD), N50 ¾" - 1½"	*PG 64-22	4% @ 50 Gyr.
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 1½"	PG 64-22	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 13½" **	PG 64-22	4% @ 50 Gyr.
HOT-MIX ASPHALT SHOULDER		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 1½"	PG 64-22	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 4½" ***	PG 64-22	4% @ 50 Gyr.

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

** PLACE IN 5 LIFTS.

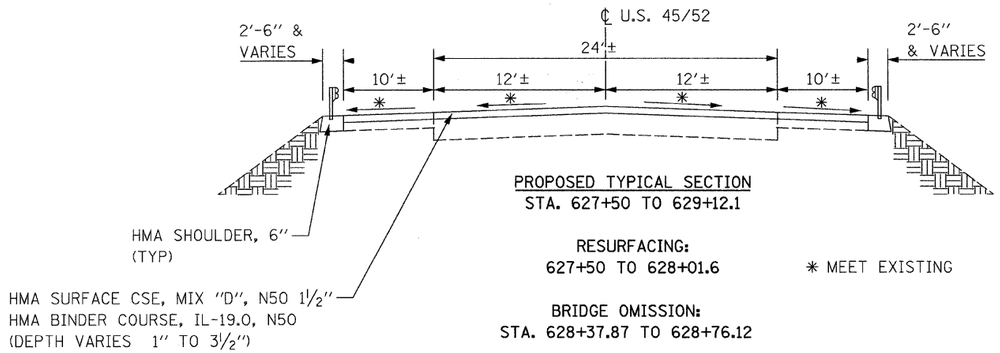
*** PLACE IN 2 LIFTS.



EXISTING TYPICAL SECTION
STA. 627+50 TO 629+12.1

BRIDGE OMISSION:
STA. 628+37.87 TO 628+76.12

APPROACH REMOVAL SLAB:
STA. 628+01.87 TO 628+37.87
STA. 628+76.12 TO 629+12.12



PROPOSED TYPICAL SECTION
STA. 627+50 TO 629+12.1

RESURFACING:
627+50 TO 628+01.6

* MEET EXISTING

BRIDGE OMISSION:
STA. 628+37.87 TO 628+76.12

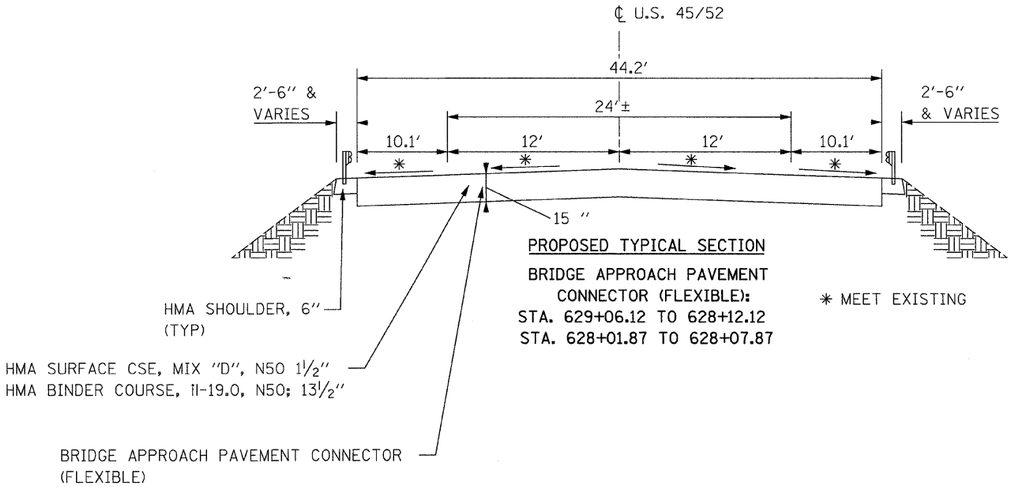
BRIDGE APPROACH PAVEMENT:
STA. 628+76.12 TO 629+06.12
STA. 628+07.87 TO 627+37.87

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

HOT-MIX ASPHALT MATERIALS (PRIME COAT)	0.100 GAL / SQ YD
HOT-MIX ASPHALT SURFACE / BINDER	0.056 TON / SQ YD PER 1"

NOTES:

1. EXISTING PAVEMENT TO BE OVERLAID WILL BE CLEANED AND PRIMED PER ARTICLE 407.06 OF THE 2007 STANDARD SPECIFICATIONS.



PROPOSED TYPICAL SECTION

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE):
STA. 629+06.12 TO 628+12.12
STA. 628+01.87 TO 628+07.87

* MEET EXISTING

FILE NAME = 60D68 typ.dgn
PLOT DATE = 7/7/2008

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

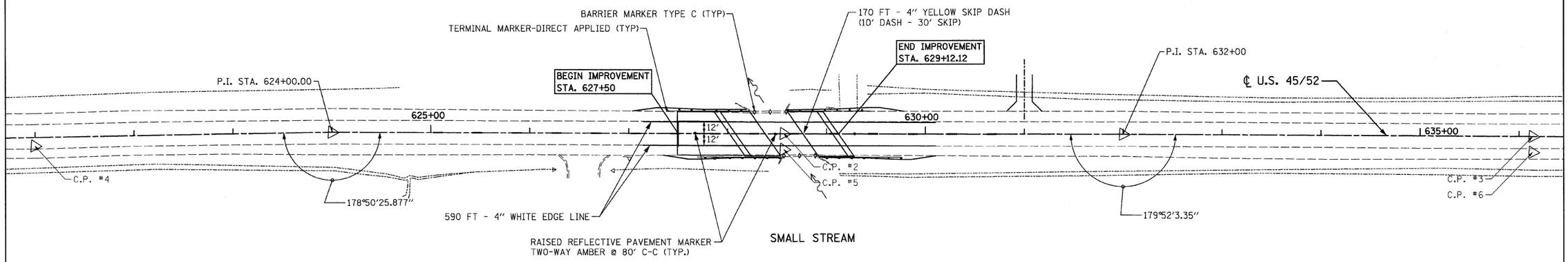
DESIGNED - S.J.P.		REVISED -
DRAWN - A.Y.		REVISED -
CHECKED - E.J.M.		REVISED -
DATE - JULY 7, 2008		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS & DETAILS
U.S. 45 / 52

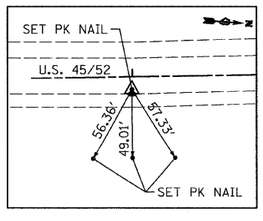
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	4
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

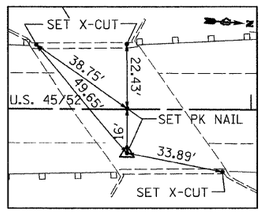


PAVEMENT MARKING NOTES:

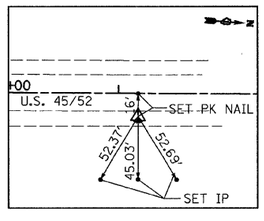
1. ALL PAVEMENT MARKINGS ON BRIDGE DECK AND PAVEMENT SHALL BE POLYUREA, TYPE I.



C.P. #4
SET PK NAIL
STA. 620+99.49, 8.62'RT.
N 1,687,648.760
E 1,108,536.130



C.P. #5
SET PK NAIL
STA. 628+56.73, 15.75'RT.
N 1,688,404.570
E 1,108,493.600
ELEV. 674.80



C.P. #6
SET PK NAIL
STA. 636+13.75, 16.14'RT.
N 1,689,160.37
E 1,108,451.07

CENTERLINE ALIGNMENT			
	NORTHING	EASTING	STATION
P.I. 4006	1,687,622.99	1,108,529.49	620+74.31
P.I. 4001	1,687,947.70	1,108,504.16	624+00.00
P.T. 4002	1,688,403.94	1,108,477.86	628+57.00
P.I. 4003	1,688,746.36	1,108,457.98	632+00.00
P.I. 4005	1,689,170.71	1,108,434.33	636+25.00

FILE NAME = 60D68 align pm.dgn
PLOT DATE = 7/7/2008

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2823 FAX: (312)372-5274

DESIGNED - S.J.P.	REVISED -	
DRAWN - A.Y.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JULY 7, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES, AND PAVEMENT MARKINGS
U.S. 45 /52

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	5
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

AGRI FIELD

WILL COUNTY

AGRI FIELD

80' - GUARDRAIL REM.
41 SY - PAVED SHLR. REM.
255 SY - HMA SUR. REM. 1½"
22 SY - HMA SUR. REM. BT. JT.
SMALL STREAM
R.O.W.
HMA SHLRS 10'± 625+00
HMA SURFACE 12'±
HMA SHLRS 10'±
R.O.W.
BEGIN IMPROVEMENT STA. 627+50
COMM. ENT.
SAWCUT 1½"
SAWCUT (FULL-DEPTH)
96 SY - APPR. SLAB REM.
41 SY - PAVED SHLR. REM.
78' - GUARDRAIL REMOVAL
+01.9
+37.9
+76.1
STRUCTURE NO. 099-0122
41 SY - PAVED SHLR. REM.
54' - GUARDRAIL REM.
96 SY - APPR. SLAB REM.
60" CMP•
SAWCUT (FULL DEPTH)
F.E.
630+00 10'± 12'± 12'± 10'±
SMALL STREAM
80' - GUARDRAIL REM.
41 SY - PAVED SHLR REM.
END IMPROVEMENT STA. 629+12.1
℄ U.S. 45/52
EXISTING DITCH
R.O.W.
HMA SHLRS
HMA SURFACE
HMA SHLRS
635+00
EXISTING DITCH R.O.W.

AGRI FIELD

EXISTING CONDITIONS

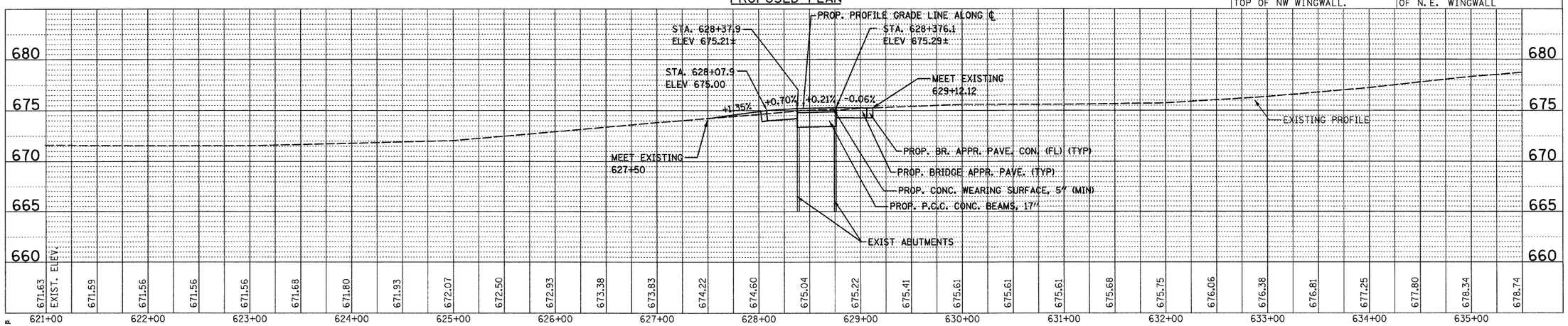
EARTH EXCAVATION TABLE	
LOCATION	C.Y.
EX FIELD ENT	77
PROP APPROACH SLABS	
NORTH	49
SOUTH	49
TOTAL	176

• REMOVE CULVERT AND RE-ESTABLICH DITCH 20 C.Y.-EARTH EXCAVATION (THE COST OF REMOVING AND DISPOSING OF THE EXISTING 60 IN. CMP SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION.

•• USE EXCAVATED MATERIAL AND TOPSOIL TO CONSTRUCT FIELD ENTRANCE. COST INCLUDED IN EARTH EXCAVATION.

1-EA TRAF. BAR. TERM TY 6 & TY 1, SPL, (TANGENT)
147 SY - BRIDGE APPROACH PAVEMENT
36 SY - BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
41 SY- HMA SHLD, 6" (TYP.)
R.O.W.
BEGIN IMPROVEMENT STA. 627+50
625+00
22.1'
MEET EXISTING R.O.W.
26 TONS HMA SURFACE COURSE, MIX D, N50
26 TONS HMA BINDER COURSE, IL-19, N50
1-EA TRAF. BAR. TERM TY 6 & TY 1, SPL, (TANGENT)
CONC. WEARING SURFACE, 5"
1-EA TRAF. BAR. TERM TY 6 & TY 1, SPL, (TANGENT)
147 SY - BRIDGE APPROACH PAVEMENT
36 SY - BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
+6.1
+00 RELOCATED FIELD ENTRANCE••
30" RCP FES
30' P CUL 1 RCCP 30"
30" RCP FES
16'
10'
630+00
+7.9
SMALL STREAM
END IMPROVEMENT STA. 629+12.1
MEET EXISTING
1-EA TRAF. BAR. TERM TY 6 & TY 1, SPL, (TANGENT)
℄ U.S. 45/52
R.O.W.
635+00
R.O.W.

PROPOSED PLAN



BENCHMARK, ELEV=675.14	TBM, ELEV=674.99
FOUND CHISLED 'L' ON TOP OF NW WINGWALL.	FOUND BRIDGE SPIKE TOP OF N.E. WINGWALL

FILE NAME = 60D68 pp.dgn
PLOT DATE = 7/7/2008

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

DESIGNED - S.J.P.	REVISED -	
DRAWN - A.Y.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JULY 7, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS AND PROPOSED PLAN AND PROFILE
U.S. 45/52

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 | TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	6
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC

CONSTRUCTION STAGING

PRE-STAGE

- INSTALL TEMPORARY LIGHTING, TEMPORARY BRIDGE TRAFFIC SIGNAL AND TRAFFIC CONTROL DEVICES FOR STAGE I.
- RELOCATE FIELD ENTRANCE

STAGE I - EAST HALF OF BRIDGE

- REMOVE HMA WEARING SURFACE, REPLACE BEAMS, PLACE CONC. WEARING SURFACE AND RECONSTRUCT PARAPET WALL.
- RECONSTRUCT APPROACH SLAB, PLACE CONNECTOR PAVEMENT, RESURFACE PAVEMENT, PLACE HMA SHOULDER AND INSTALL GUARDRAIL.
- PLACE TEMPORARY HMA RAMP TO MEET NEW APPROACH PAVEMENT.
- PLACE TEMPORARY HMA RAMPS AS NEEDED.

STAGE II - WEST HALF OF BRIDGE

- REMOVE HMA WEARING SURFACE, REPLACE BEAMS, PLACE CONC. WEARING SURFACE AND RECONSTRUCT PARAPET WALL.
- RECONSTRUCT APPROACH SLAB, PLACE CONNECTOR PAVEMENT, RESURFACE PAVEMENT, PLACE HMA SHOULDER AND INSTALL GUARDRAIL.

MAINTENANCE OF TRAFFIC

PRE-STAGE

- USE DAILY LANE CLOSURES TO INSTALL TEMP. LIGHTING AND SIGNALS AND PLACE TRAFFIC CONTROL DEVICES FOR STAGE I. USE IDOT STANDARD 701201 - LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH.

STAGE I

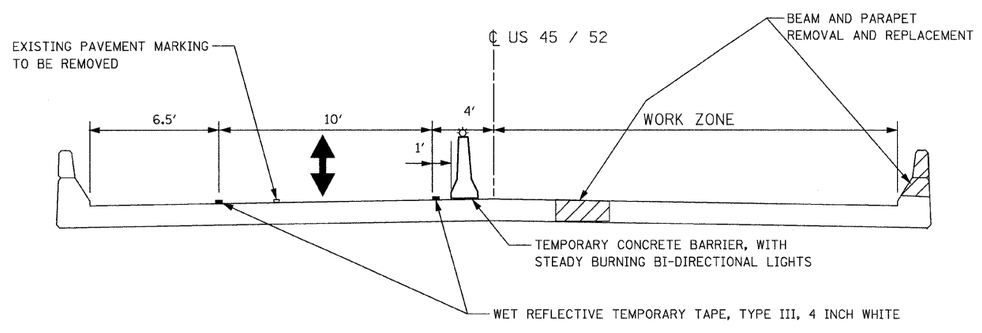
- CLOSE NORTHBOUND LANE AS SHOWN ON THE SUGGESTED TRAFFIC CONTROL AND STAGING ALONG WITH THE NOTES AND DETAILS ON IDOT STANDARD 701321.
- MAINTAIN ONE-LANE TWO-WAY TRAFFIC ON SOUTHBOUND PAVEMENT ACROSS BRIDGE.

STAGE II

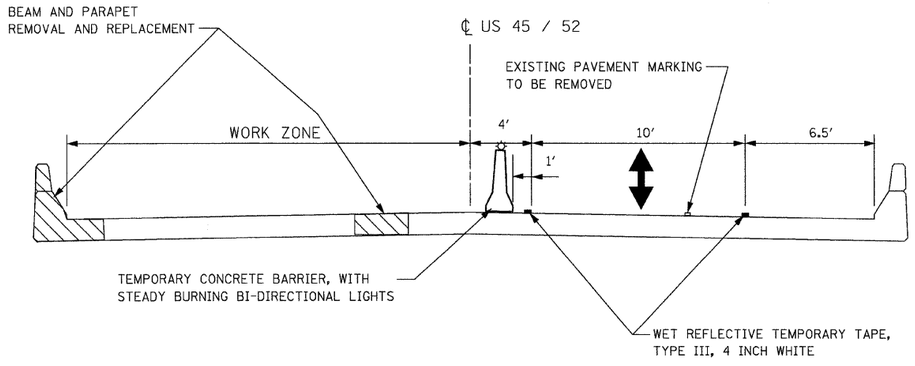
- CLOSE SOUTHBOUND LANE AS SHOWN ON THE SUGGESTED TRAFFIC CONTROL AND STAGING ALONG WITH THE NOTES AND DETAILS ON IDOT STANDARD 701321.
- SHIFT ONE-LANE TWO-WAY TRAFFIC TO NORTHBOUND PAVEMENT ACROSS BRIDGE.
- REMOVE TEMPORARY BRIDGE TRAFFIC SIGNALS, LIGHTING AND TRAFFIC CONTROL DEVICES USING DAILY LANE CLOSURES. SEE IDOT STANDARD 701201 - LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH.

TRAFFIC CONTROL GENERAL NOTES

1. USE SUGGESTED TRAFFIC CONTROL AND STAGING PLAN IN CONJUNCTION WITH STANDARD 701321.
2. FLUORESCENT VESTS: ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT VESTS AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
4. INSTALL TEMPORARY SIGN PANEL ASSEMBLY AS SHOWN IN PLANS AND AS DIRECTED BY THE ENGINEER. TO BE PAID FOR BY ITEM "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE".
5. EACH DETECTOR LOOP SHALL BE CONNECTED TO A SEPARATE DETECTOR AMPLIFIER.
6. ALL TEMPORARY PAVEMENT MARKING SHALL BE WET REFLECTIVE TEMPORARY TAPE, TYPE III.
7. THE FIRST TWO SIGNS ENTERING THE WORK ZONE SHALL HAVE MONO-DIRECTIONAL FLASHING BEACONS.
8. THE COST OF THE ADDITIONAL TRAFFIC SIGNAL EQUIPMENT FOR THE SIGNALS AT THE COMMERCIAL ENTRANCE, INCLUDING VIDEO DETECTION FOR THE DRIVEWAY, SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "TEMPORARY BRIDGE TRAFFIC SIGNALS".



MAINTENANCE OF TRAFFIC - STAGE I
SECTION A-A



MAINTENANCE OF TRAFFIC - STAGE II
SECTION B-B

FILE NAME = 60D68 stagingI.dgn
PLOT DATE = 7/7/2008

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

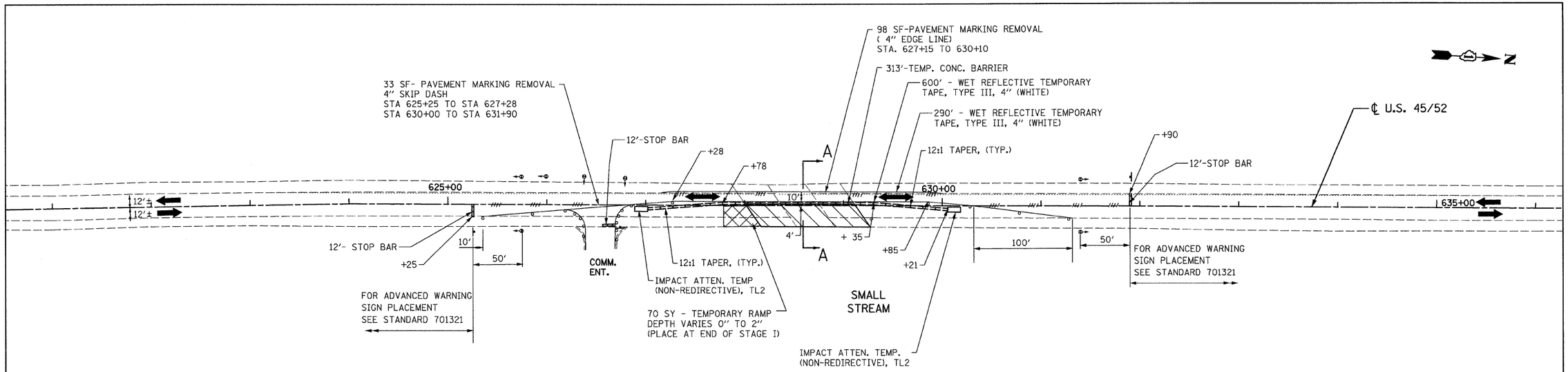
DESIGNED - S.J.P.	REVISED -	
DRAWN - A.Y.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JULY 7, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING AND MAINTENANCE OF TRAFFIC NOTES AND DETAILS U.S. 45 / 52

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. 621+00 TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	7
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

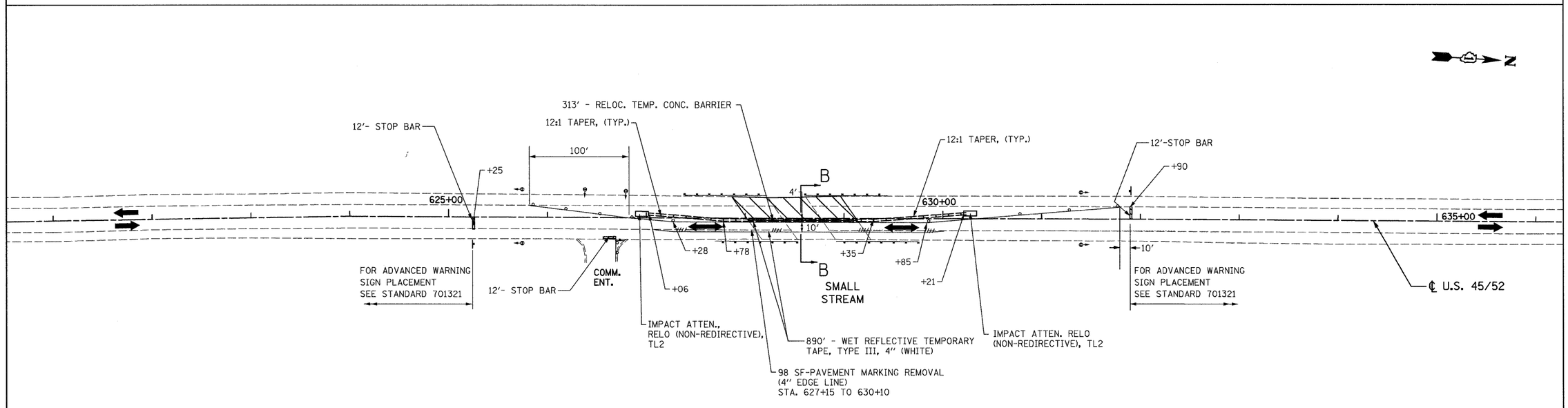


STAGE I TRAFFIC

TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- SIGN
- TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC

NOTES:
1. SEE STANDARD 701321 FOR ALL NOTES, DETAILS, SIGNS, REFLECTORS, AND BARRICADE PLACEMENT.
2. TEMPORARY RUMBLE STRIPS ARE NOT REQUIRED.



STAGE II TRAFFIC

FILE NAME = 60D68 stagng2.dgn
PLOT DATE = 7/7/2008

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

DESIGNED - S.J.P.	REVISED -	
DRAWN - A.Y.	REVISED -	
CHECKED - E.J.M.	REVISED -	
DATE - JULY 7, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED TRAFFIC CONTROL AND STAGING PLAN
U.S. 45 / 52

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 621+00 | TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	8
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

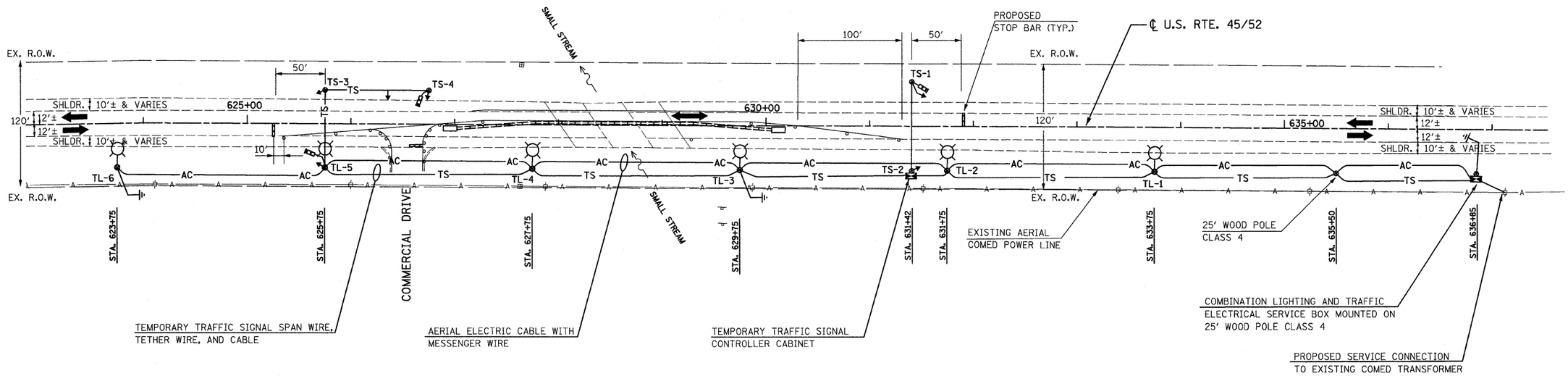
TEMPORARY LIGHTING LEGEND

EXISTING	PROPOSED	
		400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50 MH ON WOOD POLE,
——A——		AERIAL LINE (COMED/TELEPHONE)
TL-1 ⊗		WOODEN POLE (60' WOODEN CLASS 4) WITH TEMPORARY LIGHTING UNIT
⊗		WOOD POLE (25' CLASS 4) FOR TEMPORARY LIGHTING
—AC—		AERIAL ELECTRIC CABLE WITH MESSENGER WIRE
		5/8 " x 10' GROUND ROD
		COMBINATION LIGHTING AND TRAFFIC, POLE MOUNTED ELECTRICAL SERVICE BOX
		COMED POWER POLE
		TELEPHONE SPLICE BOX

TEMPORARY TRAFFIC SIGNAL LEGEND

PROPOSED	
←	TEMPORARY TRAFFIC SIGNAL HEAD
	TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET
—TS—	TEMPORARY TRAFFIC SIGNAL SPAN WIRE, TETHER WIRE, AND CABLE
	VIDEO DETECTOR SENSOR
TS-1 ⊗	WOOD POLE (CLASS 5 OR BETTER, 45 FOOT (13.7m) MINIMUM) FOR TEMPORARY TRAFFIC SIGNAL (TO BE INSTALLED 30' FROM EDGE OF TRAVELED WAY)
⟷	DIRECTION OF TRAFFIC FLOW

N



(STAGE I CONSTRUCTION SHOWN)

FILE NAME = 60D68 signal l.dgn
PLOT DATE = 7/7/2008

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

DESIGNED - M.A.		REVISED -
DRAWN - M.A.		REVISED -
CHECKED - S.J.P. / M.A.		REVISED -
DATE - 07-07-08		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL PLAN
U.S. 45 / 52

SCALE: 1"= 50' | SHEET NO. 1 OF 2 SHEETS | STA. 621+00 TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	9
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SEQUENCE OF OPERATION

MOVEMENT	U.S. RTE. 45/52 COMMERCIAL	U.S. RTE. 45/52 DRIVE	U.S. RTE. 45/52 COMMERCIAL	U.S. RTE. 45/52 DRIVE	U.S. RTE. 45/52 COMMERCIAL	U.S. RTE. 45/52 DRIVE	FLASH
PHASE	1		2		3		
INTERVAL	1	2A 2B	3	4A 4B	5	6A 6B	
CHANGE TO		2 , 3		1 , 3		1 , 2	
U.S. RTE.45/52 SIGNAL (NORTH BOUND)	G	Y R	R	R R	R	R R	R
U.S. RTE.45/52 SIGNAL (SOUTH BOUND)	R	R R	G	Y R	R	R R	R
COMMERCIAL DRIVE SIGNAL (NORTH BOUND & SOUTH BOUND)	R	R R	R	R R	G	Y R	R

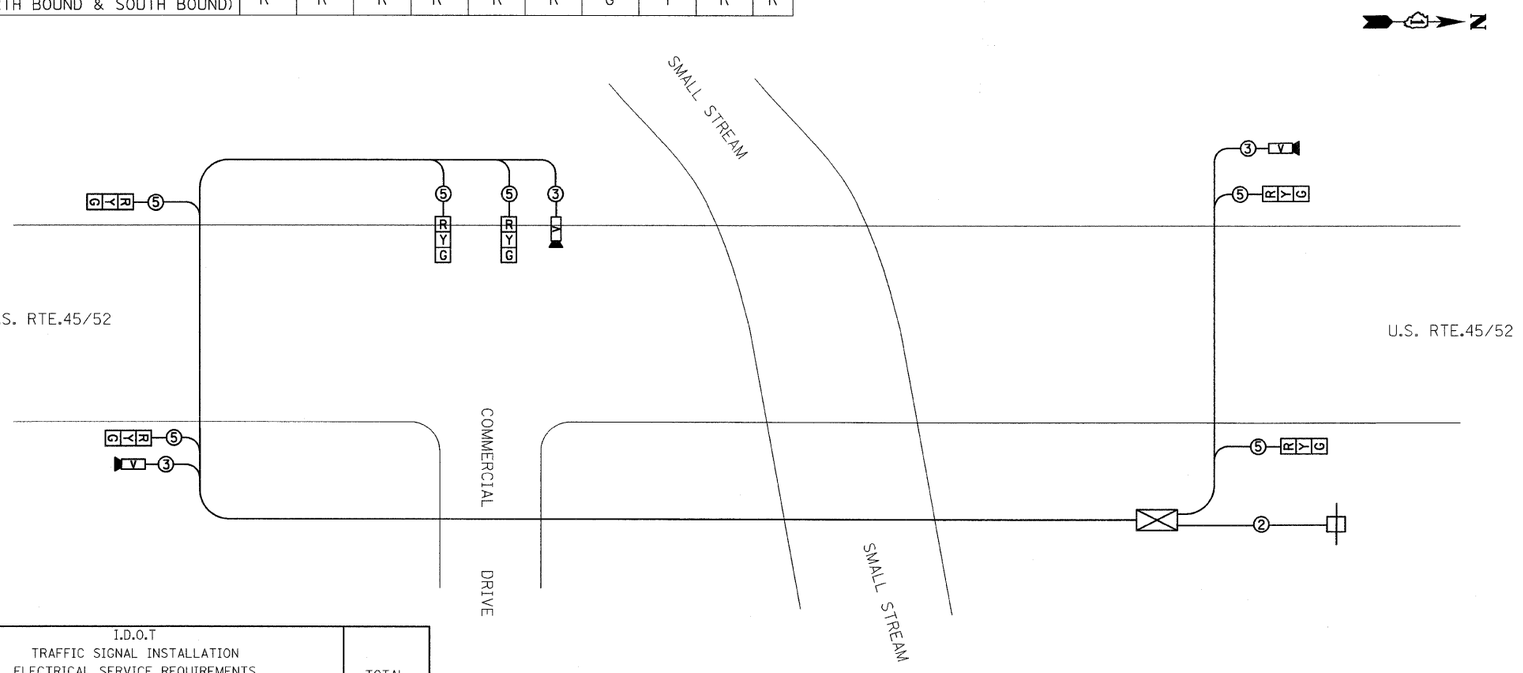
TEMPORARY TRAFFIC SIGNAL BILL OF MATERIALS

DESCRIPTION	UNIT	QUANTITY
TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1

TEMPORARY CABLE DIAGRAM LEGEND

PROPOSED

- R — TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- (5) — INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- V — VIDEO DETECTOR SENSOR



NOTES:

1. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING.

2. THE PROPOSED TEMPORARY BRIDGE TRAFFIC SIGNAL SHALL BE ACTIVATED, TESTED OPERATIONAL AND APPROVED BY THE ENGINEER BEFORE ANY ANY PERMENANT LANE CLOSURES.

3. ALL LABOR AND MATERIALS TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE BID PRICE OF TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLTION.

4. REMOVAL OF TEMPORARY SIGNALS SHOULD BE DONE AS DIRECTED BY THE ENGINEER AND MUST BE DONE IN COORDINATION WITH THE REMOVAL OF TEMPORARY LIGHTING.

I.D.O.T
TRAFFIC SIGNAL INSTALLATION
ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	6	135	17	0.50	51.0
(YELLOW)	6	135	25	0.25	37.5
(GREEN)	6	135	15	0.25	22.5
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
V.D.S.	1		25	1.00	25
FLASHER				0.50	--
				TOTAL =	236

ENERGY COSTS TO BE BILLED TO ADDRESS: _____

ENERGY SUPPLY CONTACT: LUCILLE JONES
PHONE: (815) 724-5607
COMPANY: COM. ED.

FILE NAME = 60D68 signal 2.dgn
PLOT DATE = 7/7/2008

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

DESIGNED - M.A.		REVISED -
DRAWN - M.A.		REVISED -
CHECKED - S.J.P. / M.A.		REVISED -
DATE - 07-07-08		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE DESIGNATION DIAGRAM
U.S. 45 / 52

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. 621+00 TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	10
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

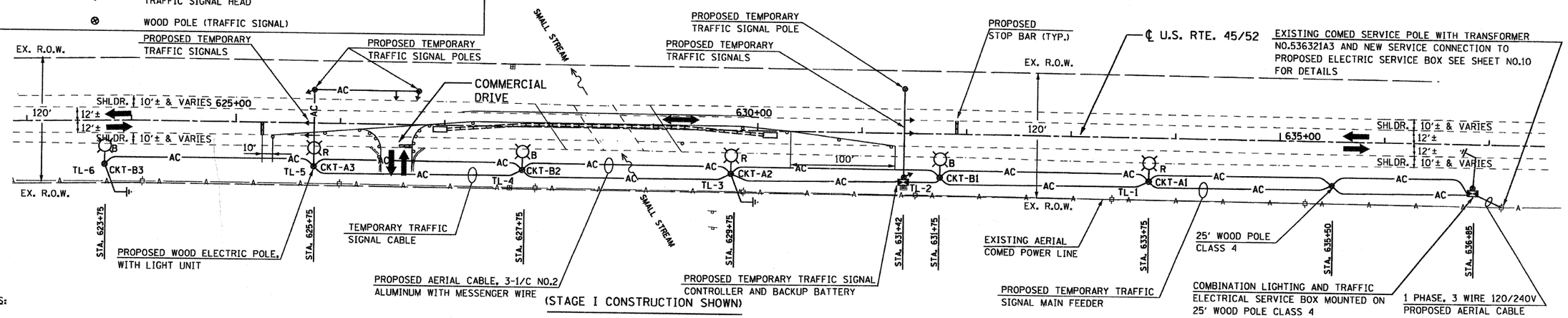
LEGEND — DESCRIPTION

EXISTING	PROPOSED	
	R	400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50 MH ON WOOD POLE, R REPRESENTS RED AND B BLACK PHASE
A		AERIAL LINE (COMED/TELEPHONE)
	AC	AERIAL ELECTRIC CABLE (OF SIZE NOTED) WITH MESSENGER WIRE
	⊗	WOOD POLE 60' WOOD CLASS 4 (UNLESS OTHERWISE NOTED)
	TL-1	TEMPORARY LIGHTING UNIT NUMBER - ONE
	CKT-A1	CIRCUIT A1
		5/8 " x 10' GROUND ROD
	M	COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
		COMED POWER POLE
		TELEPHONE SPLICE BOX
		TRAFFIC SIGNAL HEAD
		WOOD POLE (TRAFFIC SIGNAL)

ROBERT A. SWANSON
062-058800
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
7-7-2008
EXPIRES 11-30-2009

BILL OF MATERIALS-TEMPORARY LIGHTING

ITEM DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
AERIAL CABLE, 3-1/C NO.2 WITH MESSENGER WIRE	FOOT	1,350
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	6
LIGHT POLE, WOOD, 25 FOOT, CLASS 4	EACH	2
LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	6
REMOVAL OF TEMPORARY LIGHTING UNITS	EACH	6
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4
GROUND ROD, 5/8" DIA. X 10 FT.	EACH	2
ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL	EACH	1



(STAGE I CONSTRUCTION SHOWN)

NOTES:

1. THE MATERIALS AND INSTALLATION METHODS SHALL COMPLY WITH THE LATEST CODES, STANDARDS AND ORDINANCES OF FEDERAL, STATE AND LOCAL GOVERNING BODIES HAVING JURISDICTION. ALL WORKS SHOWN ON THE PLANS AND DESCRIBED ELSEWHERE SHALL ALSO CONFORM TO THE LATEST NATIONAL ELECTRICAL CODE.
2. ALL MATERIAL PARTS OF THE LIGHT POLES SHALL BE GROUNDED AND BONDED CONFORMING TO NEC ARTICLE 250. THE EQUIPMENT GROUND SHALL BE CONTINUOUS AND CONNECTED UP TO THE ELECTRICAL SYSTEM GROUND. THIS WORK SHALL BE PART OF THE LIGHT POLE PAY ITEM.
3. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 30' TO AVOID CLEARZONE, CONFLICT WITH COMED POWER POLES, AND DRAINAGE DITCH. WHEN LIGHT POLES ARE BEHIND GUARDRAIL THEY SHALL BE AT LEAST EIGHT FOOT FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
4. THE TEMPORARY LIGHT POLES SHALL HAVE IDENTIFICATION NUMBERS AS SHOWN ON THE PLANS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE LIGHTING AND TRAFFIC SIGNAL INSTALLATION. THE CONTRACTOR SHALL NOT INSTALL DAMAGED EQUIPMENT OR DEFECTIVE DEVICES, INSTEAD THE CONTRACTOR SHALL REPLACE IT WITH NEW ONES AT NO COST TO IDOT AND/OR AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT. THE INSTALLATION AND REQUIRED MATERIAL SHALL BE PART OF THE LIGHT POLE PAY ITEM.
7. THE CONTRACTOR SHALL FOLLOW THE CONSTRUCTION AND STAGING AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. FURTHERMORE, THE CONTRACTOR SHALL COORDINATE ALL SUCH ACTIVITIES BEING DONE IN THE SAME AREA BY THE UTILITY COMPANIES OR OTHER CONTRACTORS AND SETUP COORDINATION MEETINGS IF NECESSARY WITHOUT ANY ADDITIONAL FINANCIAL COMPENSATION.
8. THE PROPOSED TEMPORARY LIGHTING SHALL BE COMPLETED, TESTED, OPERATIONAL AND VERIFIED BY IDOT BEFORE STAGE I TRAFFIC CONTROL IS IN PLACE. THE CONTRACTOR SHALL SUBMIT STAGING SCHEDULE IDENTIFYING STARTING AND COMPLETION DATES PRIOR TO THE COMMENCEMENT OF WORK FOR PROCUREMENT, INSTALLATION AND OR REMOVAL OF EXISTING MATERIAL/EQUIPMENT.
9. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE ENGINEER.
10. LIGHTING SHALL BE KEPT OPERATIONAL AND ACTIVE FROM ONE HOUR BEFORE SUNSET TO ONE HOUR AFTER SUNRISE. AS PER "NATIONAL ELECTRIC CODE", OVERHEAD SPANS OF AERIAL CABLE AND MESSENGER WIRE MUST HAVE A VERTICAL CLEARANCE OF 18' MINIMUM ABOVE THE GROUND AT ALL TIMES AND AT ALL LOCATIONS ON THE PROJECT.
11. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT SO AS TO COMPLY WITH REQUIRED ELECTRICAL CLEARANCES PER NATIONAL ELECTRICAL CODE (NEC) SECTION 225-18, NATIONAL ELECTRICAL SAFETY CODE AND COMED REQUIREMENTS.
12. GROUND RODS SHALL BE INSTALLED AT EVERY THIRD TEMPORARY LIGHT POLE, AND SHALL BE PAID FOR AS "GROUND ROD, 5/8 " DIA. x 10 FT.". GROUND WIRES AND CONNECTION OF GROUND RODS AT LIGHT POLES ARE INCLUDED IN THE COST OF GROUND RODS. THE GROUND ROD AT SERVICE DISCONNECT BOX IS INCLUDED IN THE COST OF THE ITEM "ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL".
12. THE QUANTITIES AS SHOWN IN THE BILL OF MATERIALS FOR THE TEMPORARY LIGHTING ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL QUANTITIES PRIOR TO ORDERING ANY MATERIALS OR EQUIPMENT.
13. THE TEMPORARY LIGHTING SHALL USE AERIAL CABLES AS SHOWN ON THE PLANS. HOWEVER, THE UNDER GROUND NEW ELECTRICAL INSTALLATION IF ANY SHALL BE AT A MINIMUM 30 INCHES BELOW GRADE AND SHALL HAVE ELECTRICAL WARNING TAPE CONFORMING TO THE IDOT STANDARDS.
14. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANY AS SOON AS POSSIBLE CONCERNING PENDING ELECTRICAL SERVICE INSTALLATION AND CONNECTION TO ENSURE AVAILABILITY OF ELECTRICAL POWER SUPPLY IN A TIMELY MANNER.
15. THE CONTRACTOR MAY MODIFY ELECTRICAL IDOT STANDARD DETAILS AS NECESSARY TO SUIT SPECIFIC SITE CONDITIONS. HOWEVER, THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL PRIOR TO THE INSTALLATION.
16. THE REMOVAL OF TEMPORARY LIGHTING UNITS SHALL INCLUDE AND NOT BE LIMITED TO: ALL POLES, LUMINAIRES WITH MAST ARMS, MESSENGER WIRES / CABLES, COM ED SERVICE CABLES, CONDUITS, ETC., AND HAULING AWAY OF THESE ITEMS FROM THE PROJECT SITE.
17. THE CONTRACTOR SHALL PROVIDE, INSTALL AND REMOVE ALL WOOD POLES REQUIRED FOR TEMPORARY LIGHTING. THE PROPOSED TRAFFIC SIGNAL POLES WILL NOT BE PAID FOR AS LIGHT POLES. REFER TO THE TEMPORARY TRAFFIC SIGNAL PLAN FOR PAY ITEMS ASSOCIATED WITH THE PROVISION, INSTALLATION, AND REMOVAL OF THE TEMPORARY TRAFFIC SIGNAL POLES.
18. EXACT LOCATION OF EXISTING POWER POLE WITH COMED TRANSFORMER TO BE DETERMINED IN THE FIELD. COMED CONTACT INFORMATION FOR THIS PROJECT IS AS FOLLOWS: FIELD REPRESENTATIVE: LUCILLE JONES (815)724-5607, ACCOUNT NO. 2896102062. TRANSFORMER NO. 536321A3

FILE NAME = 60D68 lightl.dgn
PLOT DATE = 7/7/2008

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

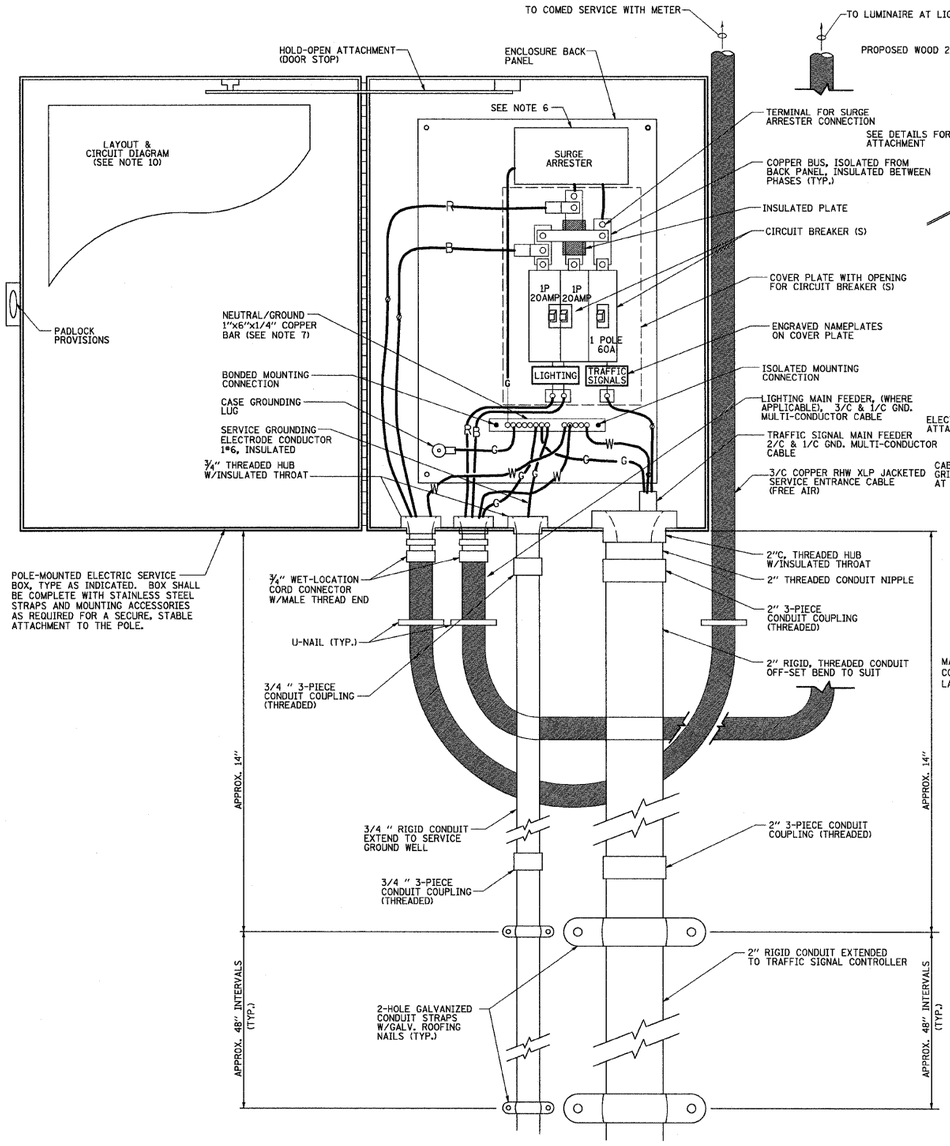
DESIGNED - M.A.	REVISED -	
DRAWN - M.A./A.Y	REVISED -	
CHECKED - R.S.	REVISED -	
DATE - JULY 3, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

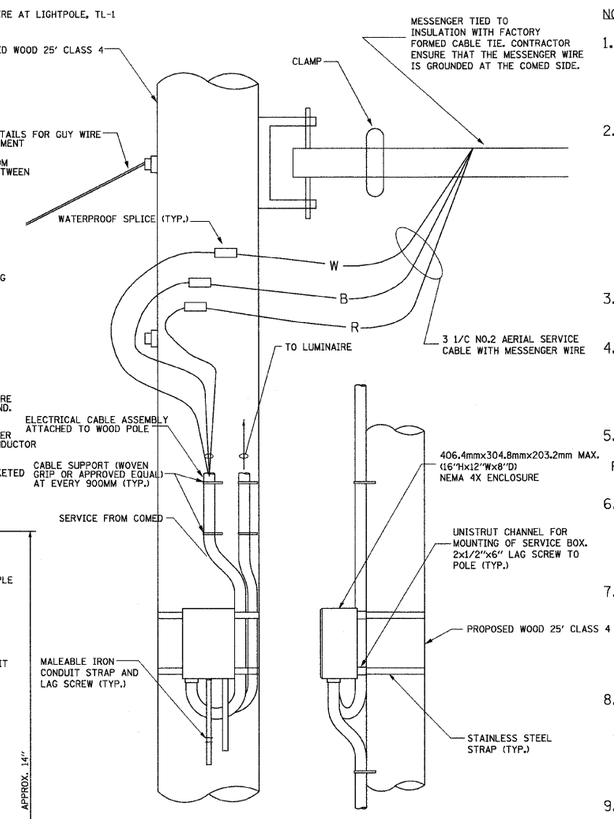
TEMPORARY LIGHTING PLAN
U.S. 45 / 52

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. 621+00 TO STA. 636+00

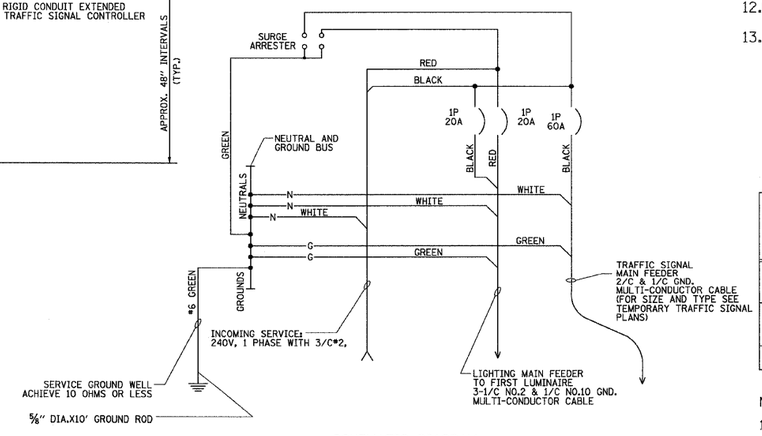
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-I-I-1	WILL	29	11
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



POLE-MOUNTED ELECTRIC SERVICE ENTRANCE
GENERAL LAYOUT DIAGRAM



DISCONNECT MOUNTING DETAIL
N.T.S.



SCHEMATIC DIAGRAM

6" DECAL ON FRONT COVER

NOTES

1. ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
2. THE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL DEPICTS THE BASIC CONSTRUCTION OF THE EQUIPMENT. SLIGHT MODIFICATIONS APPLY FOR DIFFERING SERVICES AND APPLICATIONS AS FOLLOWS:

   FULLY EQUIPPED FOR 240/120V. 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER

   FULLY EQUIPPED FOR 240/120V. 3W SERVICE, BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER

   EQUIPPED FOR 120V. SERVICE, COMPLETE WITH 1P, 60A. TRAFFIC SIGNALS MAIN BREAKER

   EQUIPPED FOR 120V. SERVICE, COMPLETE WITH 1P, 40A. TRAFFIC SURVEILLANCE MAIN BREAKER
3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16, P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
5. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 120 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO- SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
9. THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
11. A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
12. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.

CIRCUIT NO.	CIRCUIT BREAKER / POLES	UTILITY DESCRIPTION	LOAD[1] (WATTS)	CURRENT[2] (AMPERES)
A	20A / 1P	(3) 400W HPS POLE NOS.TL-1, TL-3, & TL-5	1,440	12.63
B	20A / 1P	(3) 400W HPS POLE NOS.TL-2, TL-4, & TL-6	1,440	12.63
TOTAL			2,880	25.26

NOTE:
1. LOAD INCLUDES 20% BALLAST LOSSES FOR LUMINAIRES
2. CURRENT CALCULATIONS INCLUDE A POWER FACTOR OF 0.95.

FILE NAME = 60D68 light2.dgn
PLOT DATE = 7/7/2008

CHRISTIAN-ROGE & ASSOCIATES, INC.
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211 WEST WACKER DRIVE
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DESIGNED - M.A.	REVISED -	
DRAWN - M.A.	REVISED -	
CHECKED - R.S.	REVISED -	
DATE - JULY 2, 2008	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING NOTES AND DETAILS
U.S. 45 / 52

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	12
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

BENCH MARK:

Chisled "L" on top of Northwest Wingwall, Elev. 675.14

EXISTING STRUCTURE:

S.N. 099-0122, was originally built in 1968 as F.A. Route 45, Section 17B-1. In 2002 the Structure was repaired, at that time the Bituminous Concrete Surface and 12 of 15 P.P.C. Deck Beams were removed and replaced. The Existing single span structure consists of Precast Prestressed Concrete Deck Beams supported by closed abutments. Dimensions are 38'-3" bk. to bk. Abutments and 46'-0" out to out with a 35° Skew.

PROPOSED IMPROVEMENT:

During Stage I Construction, the existing Hot-Mix Asphalt Surface on the West half of the Bridge shall be removed. The existing West Concrete Parapet shall be removed. Precast Prestressed Concrete Deck Beam No's. 1 & 6 shall be removed and replaced with new Beams. A new 5" (Min.) Reinforced Concrete Overlay shall be placed utilizing the existing Alignment and Profile. A new Reinforced Concrete Parapet on the West end of the Deck shall be Constructed.

During Stage II Construction, the existing Hot-Mix Asphalt Surface on the East half of the Bridge shall be removed. Portions of the existing East Concrete Parapet shall be removed. Precast Prestressed Concrete Deck Beam No. 10 shall be removed and replaced with a new Beam. A new 5" (Min.) Reinforced Concrete Overlay shall be placed utilizing the existing Alignment and Profile. The East Parapet shall be Reconstructed.

Perform Substructure Repairs

Salvage: None

LOADING HS20-44

No Future Wearing Surface will be allowed

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

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

EXISTING CONDITIONS

(SERVICE DESIGN)
f'c = 1,400 psi
fy = 20,000 psi (Reinforcement)

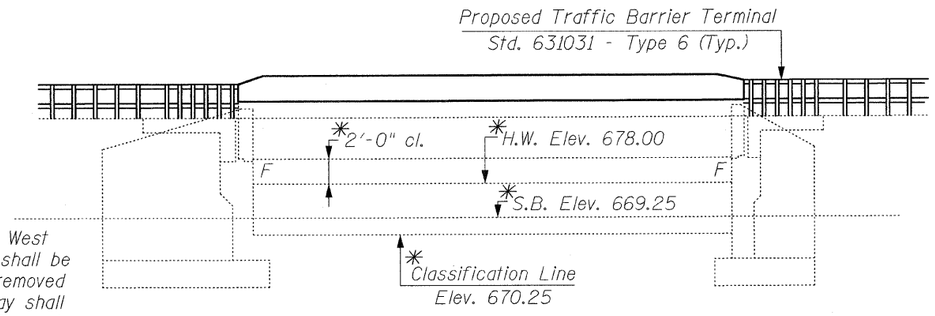
PRECAST PRESTRESSED UNITS

BEAM NO'S. 1, 6 & 10 (PROPOSED)
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi ($\frac{1}{2}$"ϕ Low Relax Strands)
fsi = 201,960 psi ($\frac{1}{2}$"ϕ Low Relax Strands)

WATERWAY INFORMATION

(AS SHOWN IN 1967 PLANS)

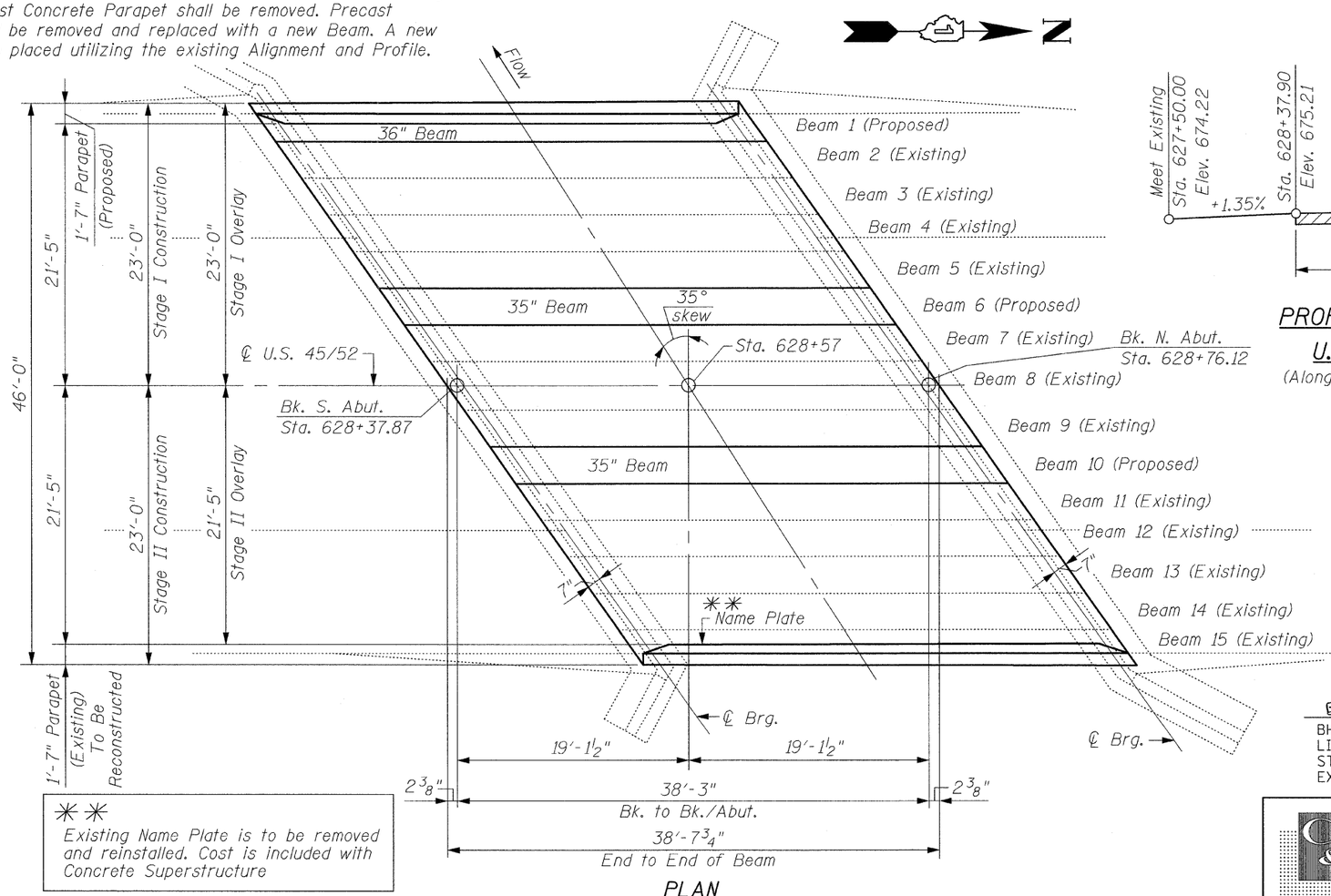
Drainage Area	1,100 acres
Character	Level & Rolling, Sand, Loam = 110 Sq. Ft.
Required Opening	50 yr flood
Present Opening	60 Sq. Ft.
Proposed Opening	10 Sq. Ft.



ELEVATION

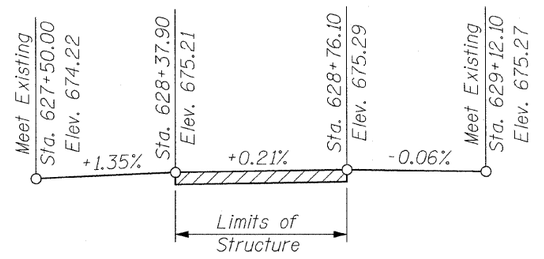
✳ As shown in 1967 Plans

INDEX OF SHEETS



PLAN

✳✳ Existing Name Plate is to be removed and reinstalled. Cost is included with Concrete Superstructure



PROFILE GRADE

U.S. 45/52

(Along ℄ of Roadway)

STATE OF ILLINOIS
BHADRESH N. SHAH
081-004476
LICENSED STRUCTURAL ENGINEER
CHICAGO

Bhadresh N. Shah 07/07/08

BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-08

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
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FILE NAME = plan_elev.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S1 OF S11 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	13
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER.	SUB.	TOTAL	
Hot-Mix Asphalt Surface Removal Complete	Sq. Yd.	196	-	196	
Removal of Existing Precast Prestressed Concrete Deck Beams	Sq. Ft.	348	-	348	
Concrete Superstructure	Cu. Yd.	8.3	-	8.3	
Concrete Removal	Cu. Yd.	5.9	-	5.9	
Bridge Deck Grooving	Sq. Yd.	180	-	180	
Protective Coat	Sq. Yd.	217	-	217	
Concrete Wearing Surface, 5"	Sq. Yd.	203	-	203	
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	348	-	348	
Reinforcement Bars, Epoxy Coated	Pound	4,310	-	4,310	
Bar Splicers	Each	39	-	39	
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	-	272	272	*
Plug Existing Deck Drains	Each	6	-	6	
Keyway Repair	Foot	350	-	350	

* Based on the Field Notes from I.D.O.T. Maintenance Engineers, dated November 7, 2007

GENERAL NOTES:

1. Plan dimensions and details relative to existing plans are subject to routine 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 the scope of work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

2. The minimum thickness of the Concrete Overlay shall be 5 inches and varies as required to adjust for the new Profile Grade and Beam Camber.

3. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the Beams when developing Construction Procedures.

4. If the Contractor's procedure for Existing Beam Removal or Placement of new Beams involves placement of Cranes or other heavy equipment on the Bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the Equipment and Procedure used will not overstress the New or Existing Beams. To distribute Load to multiple Beams and protect the existing surface, in all cases a Double Layer Mat of heavy Timber shall be used at all times under Crane Tracks or Wheels and any Outriggers in the down position. If Necessary, Shims shall be used under the Crane Mat to ensure uniform contact with the underlying Beams. If Heavy Equipment will be placed on new PPC Deck Beams, the following shall be done prior to placement of the Timber Mats: placement and tightening of Transverse Tie Assemblies, Grouting and Curing the Dowel Rods 24 Hours minimum and Grouting and Curing the Shear Keys.

5. Any damage done to the Bridge during Beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing PPC Deck Beams.

6 The Top Surface of the Beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

7. Temporary Concrete Barrier shall only be anchored into the Overlay and not the PPC Deck Beams.

8. No in-stream work will be allowed on this Project.

9. Slipforming of the Parapets is not allowed.

10. The Contractor must not use Milling Equipment for Hot-Mix Asphalt Surface Removal Complete.

11. The Contractor must not scarify any portion of the PPC Deck Beams.

12. The Contractor must remove the existing Wearing Surface, Waterproofing and any Foreign Materials using Hand Methods or Shotblasting. Cost is included with Hot-Mix Asphalt Surface Removal Complete.

13. Existing Reinforcement Bars extending into the Removal Area shall be cleaned, straightened and incorporated into the New Construction. Any Reinforcement Bars that are damaged during Concrete Removal shall be replaced with an approved Bar Splicer or Anchorage System. Cost included with Concrete Removal.

14. Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 60. See Special Provisions.

15. Reinforcement Bars designated (E) shall be Epoxy Coated.

16. A Protective Coat shall be applied to the entire top surface of the Bridge Deck and to the top and the inside vertical faces of the Parapets.

CHRISTIAN-ROGE & ASSOCIATES, INC.
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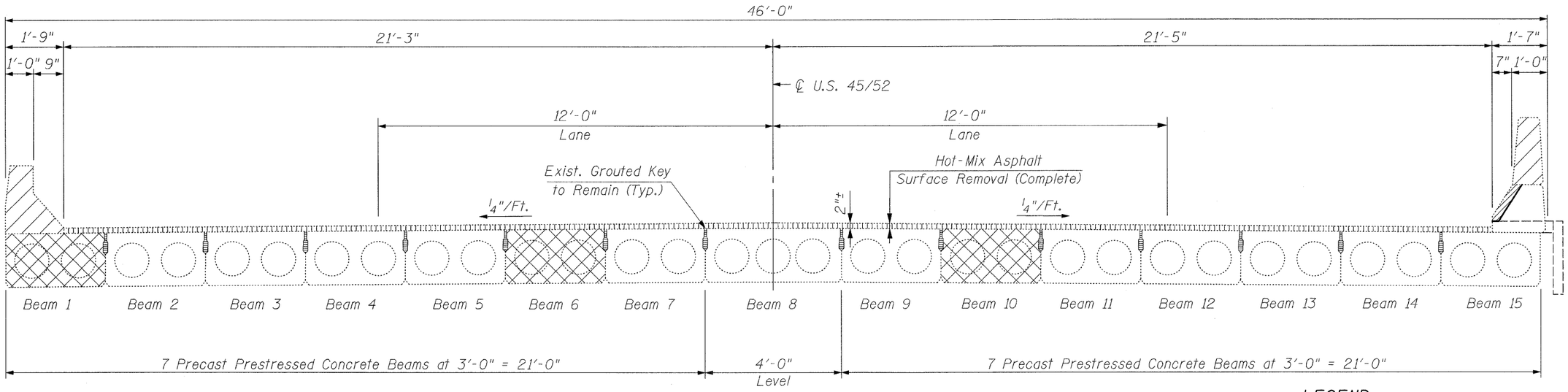
FILE NAME = general_notes.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & TOTAL BILL OF MATERIAL U.S. 45 / 52 OVER SMALL STREAM S.N. 099-0122
		DRAWN - D.L./R.E.S./F.M.	REVISED -		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -		
	PLOT DATE = 7/10/2008	DATE - JULY 10, 2008	REVISED -		SCALE: SHEET NO. S2 OF S11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	14
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

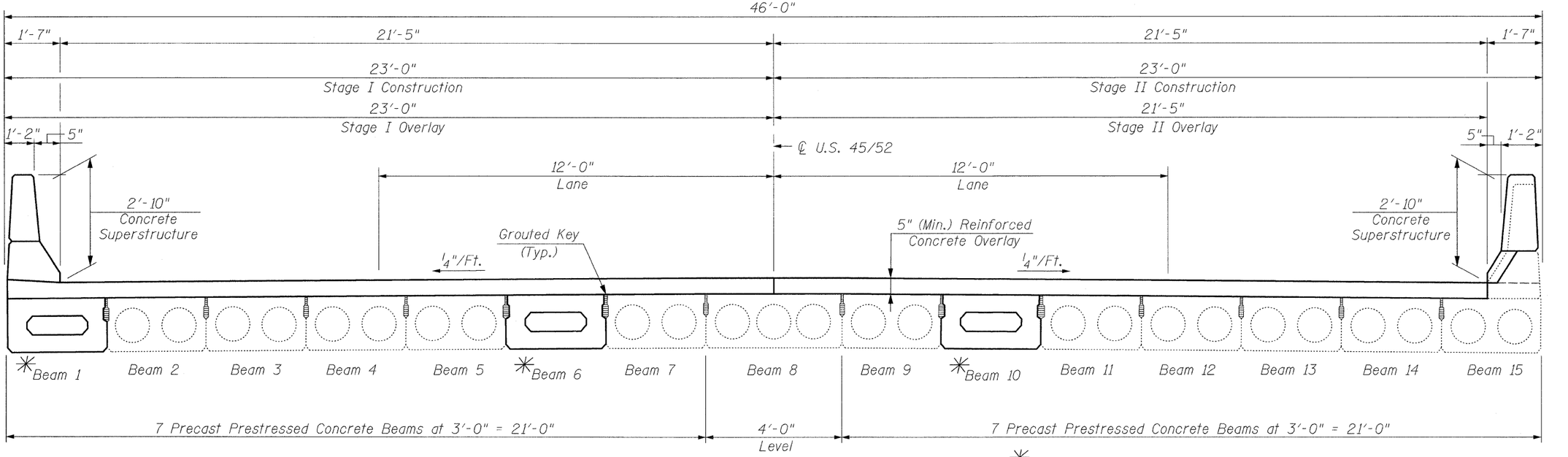


EXISTING DECK CROSS SECTION
(Looking North)

LEGEND:

Concrete Removal

P.P.C. Deck Beam Removal



PROPOSED DECK CROSS SECTION
(Looking North)

✳ Proposed Precast Prestressed Concrete Deck Beams (17" Depth)

NOTE:
For Construction Staging See Roadway Plans

CHRISTIAN-ROGE & ASSOCIATES, INC.
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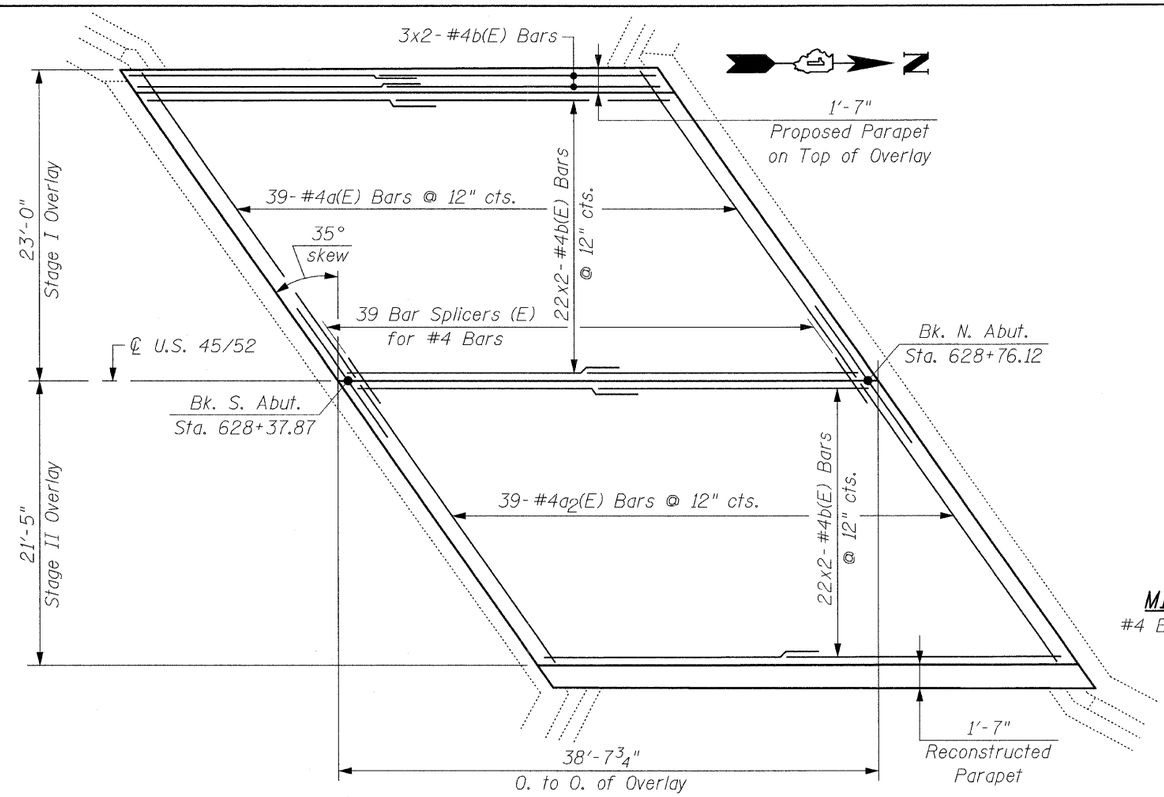
FILE NAME = deck_cross_section.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTIONS
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. 53 OF 511 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	15
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



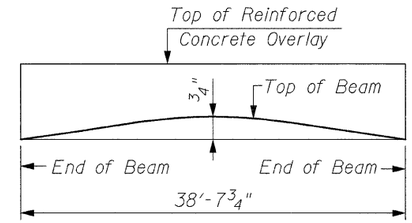
REINFORCEMENT PLAN

MIN. LAP:
#4 Bars = 1'-8"

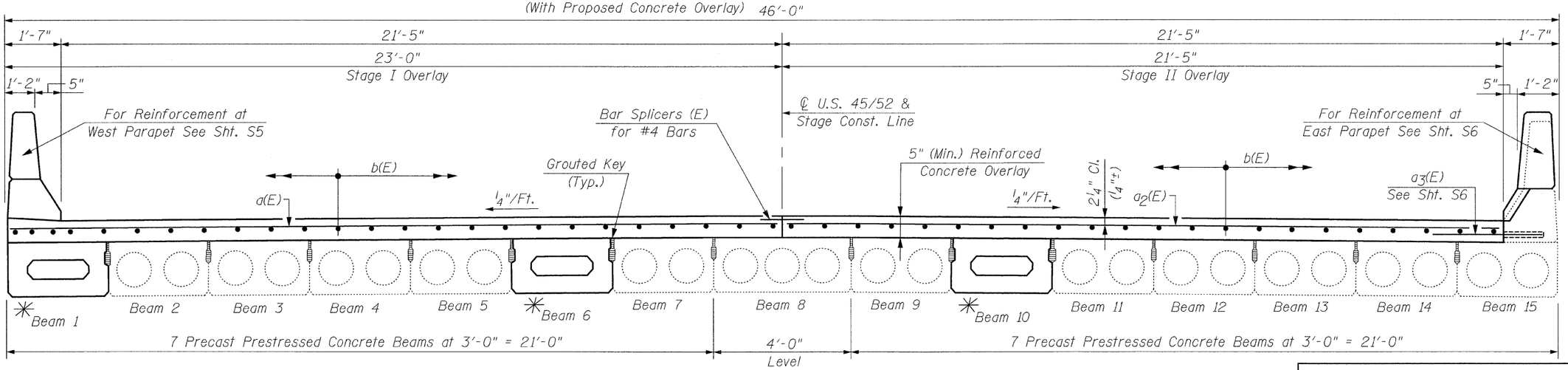
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	39	#4	27'-10"	——
a_2(E)	39	#4	25'-9"	——
b(E)	94	#4	20'-0"	——
Reinforcement Bars, Epoxy Coated			Pound	2,650
Bar Splicers			Each	39
Concrete Wearing Surface, 5"			Sq. Yd.	203
Bridge Deck Grooving			Sq. Yd.	180
Protective Coat			Sq. Yd.	217

Bars Indicated Thus 22x2-#4 etc., Indicates
22 Lines of Bars With 2 Lengths Per Line



REINFORCED CONCRETE WEARING SURFACE PROFILE



PROPOSED DECK CROSS SECTION
(Looking North)

✳ Proposed Precast Prestressed Concrete Deck Beams (17" Depth)

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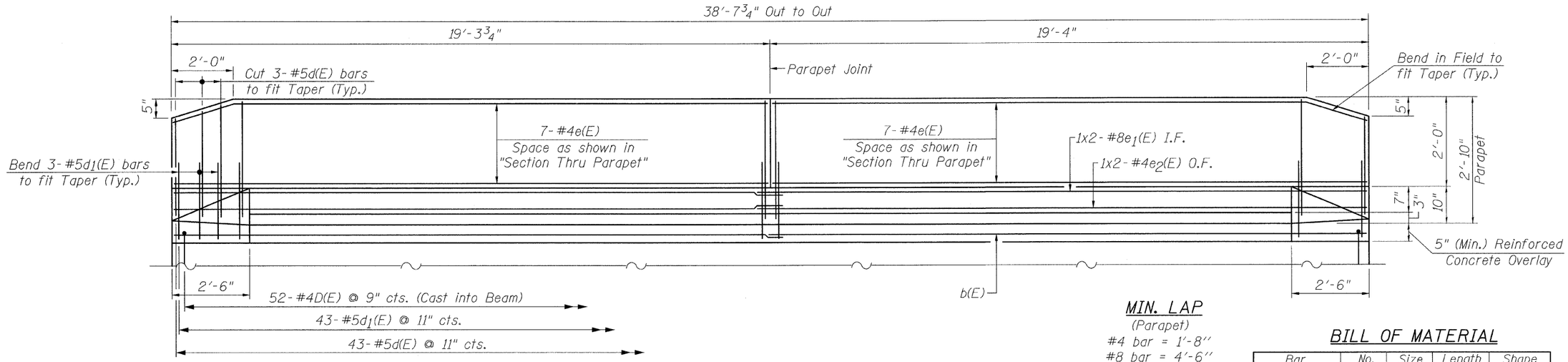
FILE NAME = reinforcement_plan.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REINFORCEMENT PLAN
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S4 OF S11 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	16
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF WEST PARAPET

(Looking West)

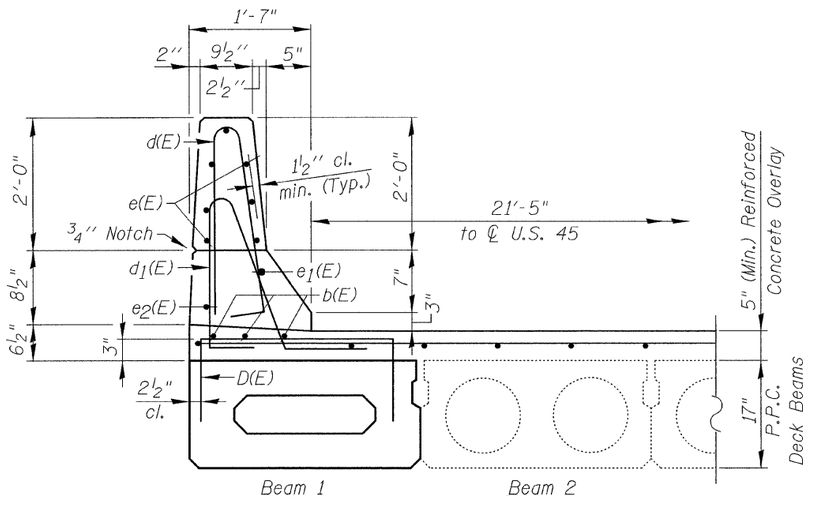
MIN. LAP
(Parapet)
#4 bar = 1'-8"
#8 bar = 4'-6"

LEGEND:
I.F. = Inside Face
O.F. = Outside Face

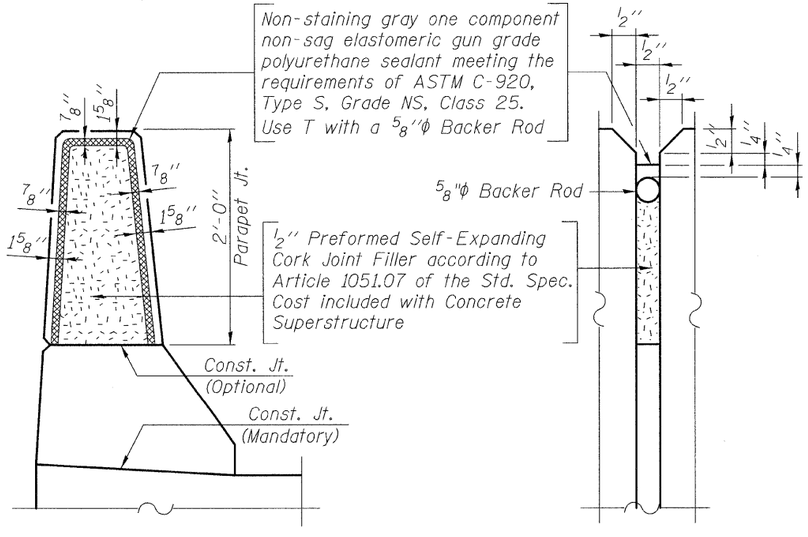
NOTE:
Bars indicated thus 1x2-#8 etc., indicates 1 Line of Bars with 2 Lengths per Line

BILL OF MATERIAL

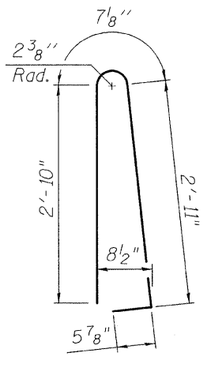
Bar	No.	Size	Length	Shape
d(E)	43	#5	6'-10"	
d_1(E)	43	#5	5'-11"	
e(E)	14	#4	19'-0"	
e_1(E)	2	#8	21'-5"	
e_2(E)	2	#4	20'-0"	
Concrete Superstructure		Cu. Yd.		5.3
Reinforcement Bars, Epoxy Coated		Pound		890
Concrete Removal		Cu. Yd.		3.7



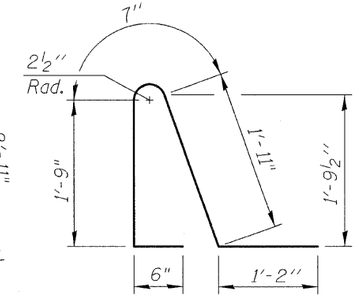
SECTION THRU PARAPET



PARAPET JOINT DETAILS



BAR d(E)



BAR d_1(E)

CHRISTIAN-ROGE & ASSOCIATES, INC.
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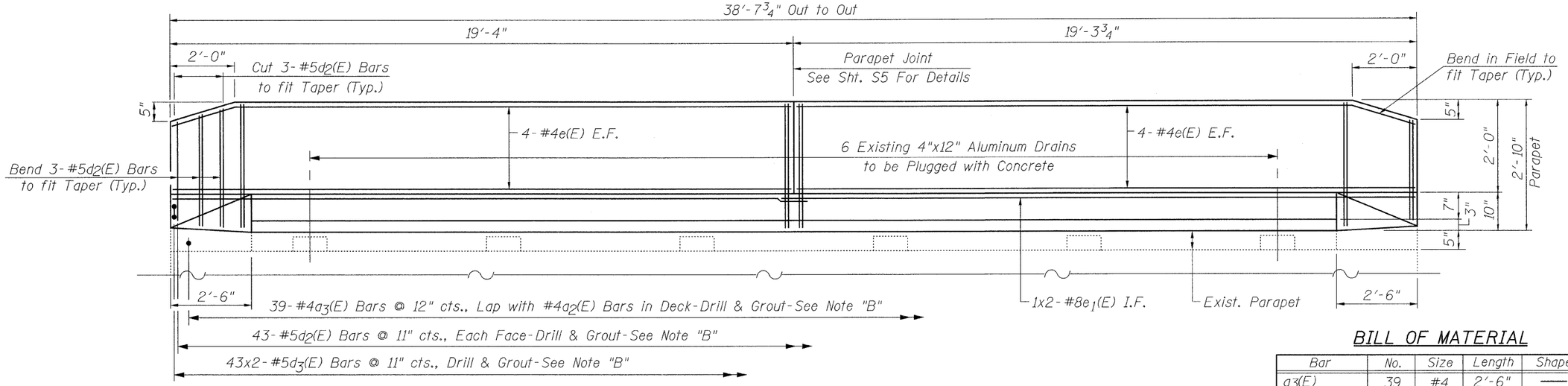
FILE NAME = parapet_west_details.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST PARAPET ELEVATION & DETAILS
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. 55 OF 511 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	17
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF EAST PARAPET
(Looking East)

NOTE "A"
Existing Reinforcement Bars are to be cleaned and incorporated into the new Construction.

NOTE "B"
Cost for Drill & Grout is included with Reinforcement Bars, Epoxy Coated. See Section 584 of The Standard Specifications for Epoxy Grouted Bars.

NOTE "C"
Roughen Existing Surface (Cost included With Concrete Superstructure).

NOTE "D"
Remove Hatched Portion of Existing 4"x12" Aluminum Drains (Cost included With Plug Existing Deck Drains).

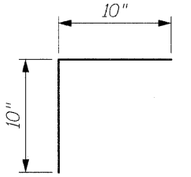
MIN. LAP
(Parapet)
#8 bar = 4'-6"

LEGEND:
I.F. = Inside Face
E.F. = Each Face

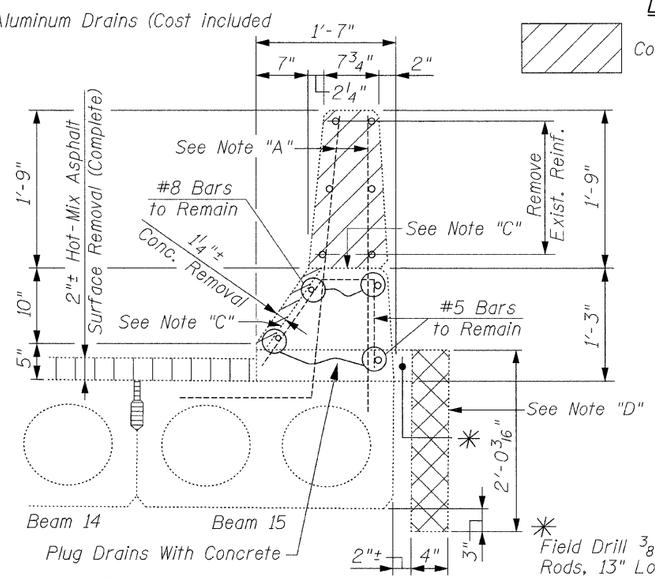
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d3(E)	39	#4	2'-6"	——
d2(E)	86	#5	2'-7"	——
d3(E)	86	#5	1'-8"	⌐
e(E)	16	#4	19'-0"	——
e1(E)	2	#8	21'-5"	——
Concrete Removal			Cu. Yd.	2.2
Concrete Superstructure			Cu. Yd.	3.0
Reinforcement Bars, Epoxy Coated			Pound	770
Plug Existing Deck Drains			Each	6

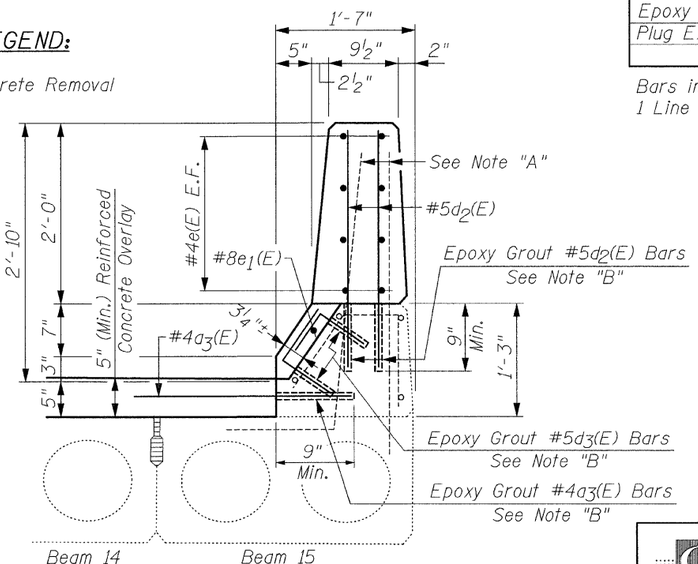
Bars indicated thus 1x2-#8 etc., indicates 1 Line of Bars with 2 Lengths per Line



BAR $d_3(E)$



EXISTING-EAST PARAPET



Field Drill 3/8"ϕ Holes for 1/4"ϕ Threaded Rods, 13" Long With Nuts & Washers

PROPOSED-EAST PARAPET

CHRISTIAN-ROGE & ASSOCIATES, INC.
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211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

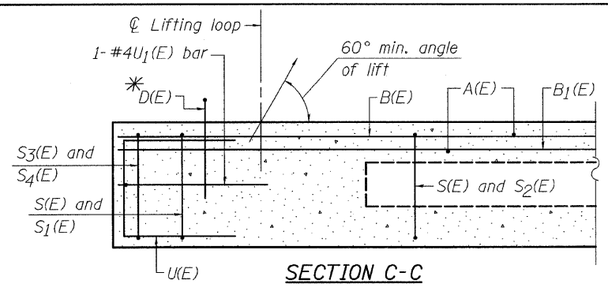
FILE NAME = parapet_east_details.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

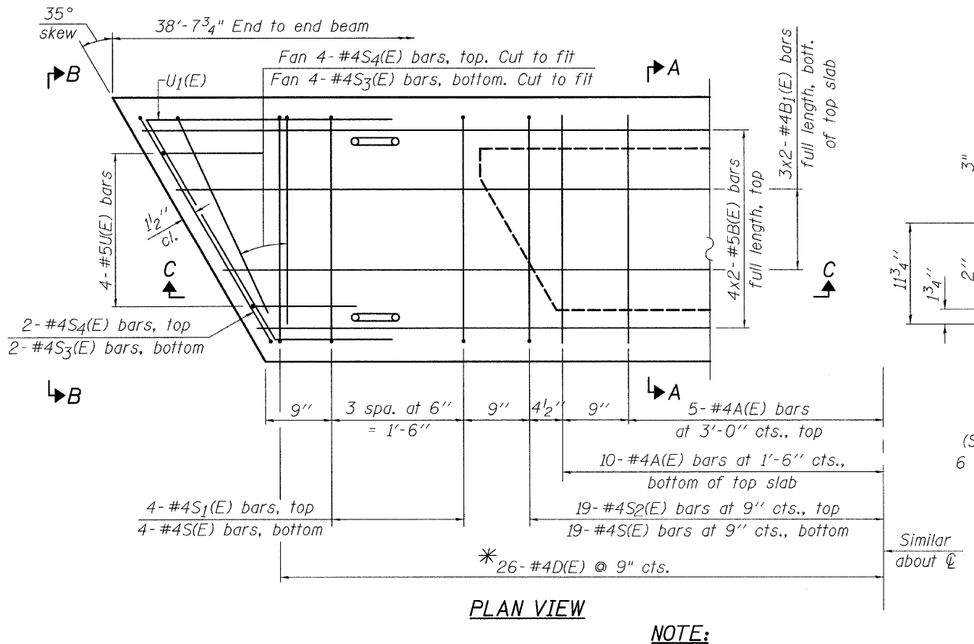
EAST PARAPET ELEVATION & DETAILS
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S6 OF S11 SHEETS | STA. | TO STA.

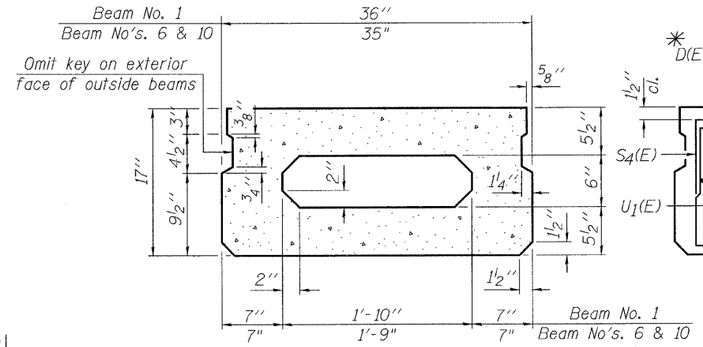
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	18
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



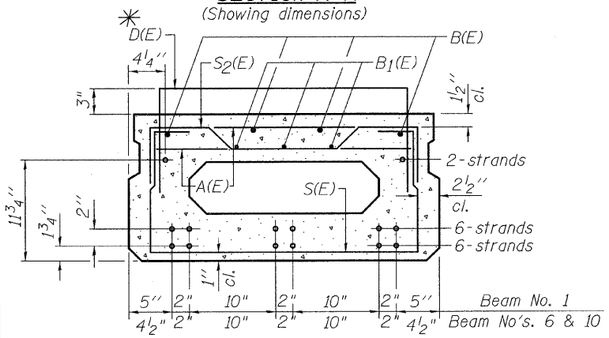
SECTION C-C



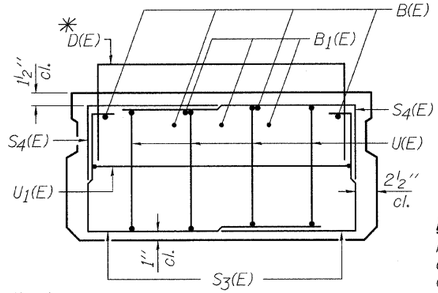
PLAN VIEW



SECTION A-A
(Showing dimensions)



SECTION A-A
(Showing reinforcement and permissible strand locations)
6 Strands 1 3/4" Up, 6 Strands 3 3/4" Up, 2 Strands 11 3/4" Up



VIEW B-B

NOTE:
Place the number of strands specified in each row symmetrically about the centerline of beam in the permissable strand locations shown.

BAR LIST-35" BEAM ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	30	#4	2'-7"	—
B(E)	8	#5	20'-4"	—
B1(E)	6	#4	20'-1"	—
D(E)	52	#4	5'-6"	⌐
S(E)	46	#4	5'-8"	⌐
S1(E)	8	#4	4'-10"	⌐
S2(E)	38	#4	5'-1"	⌐
S3(E)	12	#4	3'-9"	⌐
S4(E)	12	#4	3'-4"	⌐
U(E)	8	#5	3'-8"	⊏
U1(E)	2	#4	7'-3"	⊏

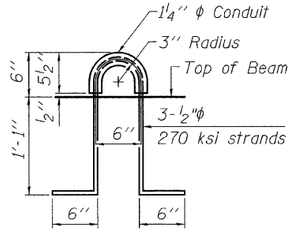
BAR LIST-36" BEAM ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	30	#4	2'-7"	—
B(E)	8	#5	20'-4"	—
B1(E)	6	#4	20'-1"	—
D(E)	52	#4	5'-6"	⌐
S(E)	46	#4	5'-9"	⌐
S1(E)	8	#4	4'-11"	⌐
S2(E)	38	#4	5'-2"	⌐
S3(E)	12	#4	3'-9"	⌐
S4(E)	12	#4	3'-4"	⌐
U(E)	8	#5	3'-8"	⊏
U1(E)	2	#4	7'-4"	⊏

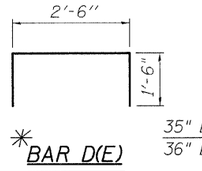
Note: See Sht. S8 for additional Details

MIN. LAP:
#4 Bars = 1'-8"
#5 Bars = 2'-2"

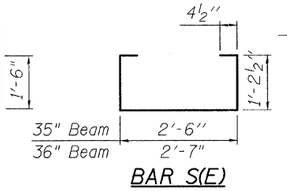
NOTE:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties



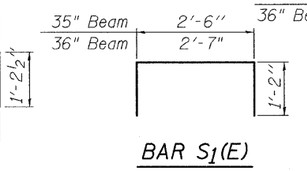
LIFTING LOOP DETAIL



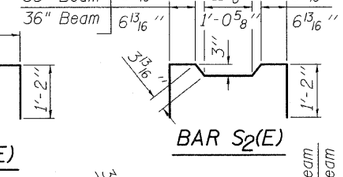
BAR D(E)



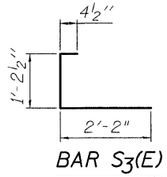
BAR S(E)



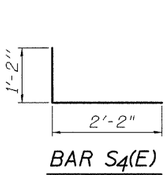
BAR S1(E)



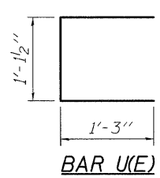
BAR S2(E)



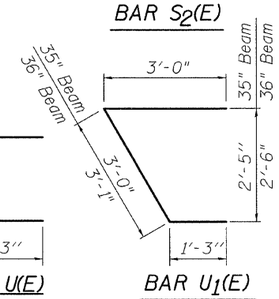
BAR S3(E)



BAR S4(E)



BAR U(E)



BAR U1(E)

NOTES:

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1"ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions)

Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2"ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Bars indicated thus 4x2-#5 etc., indicates 4 lines of Bars with 2 lengths per line.

✳ For Beam No. 1 Only
For Location & Spacing, See Sht. S5

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	348

CHRISTIAN-ROGE & ASSOCIATES, INC.
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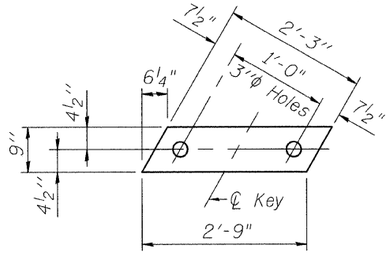
FILE NAME = deck_beam_detail-1.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

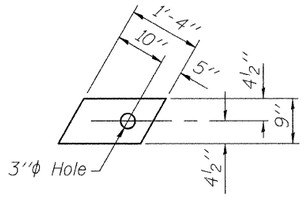
P.P.C. DECK BEAM DETAILS-I
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S7 OF S11 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	19
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

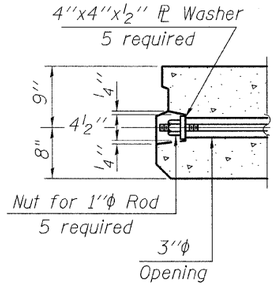


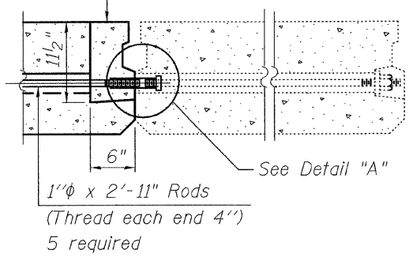
FABRIC BEARING PAD



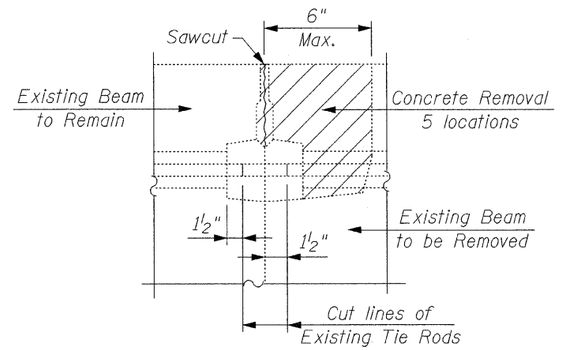
FABRIC ADJUSTING SHIM

FIXED

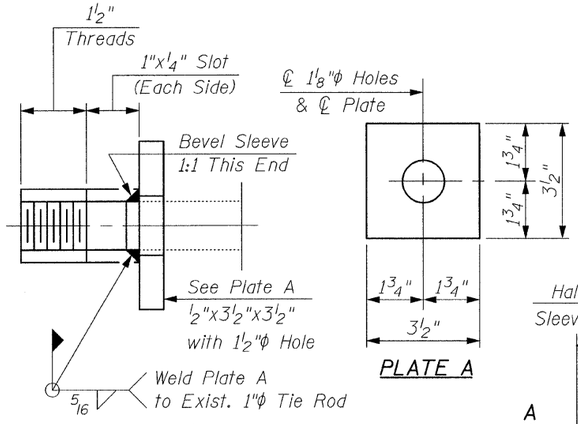




TYPICAL TRANSVERSE TIE ASSEMBLY



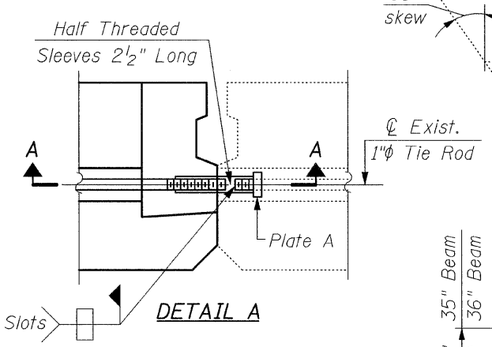
BEAM REMOVAL DETAIL
AT TRANSVERSE TIES



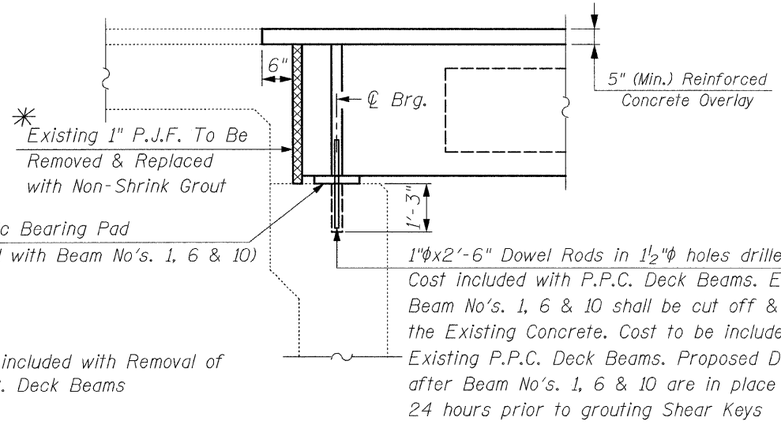
SECTION A-A

PLATE A

MODIFIED TIE COUPLER FOR
TRANSVERSE TIE ASSEMBLY



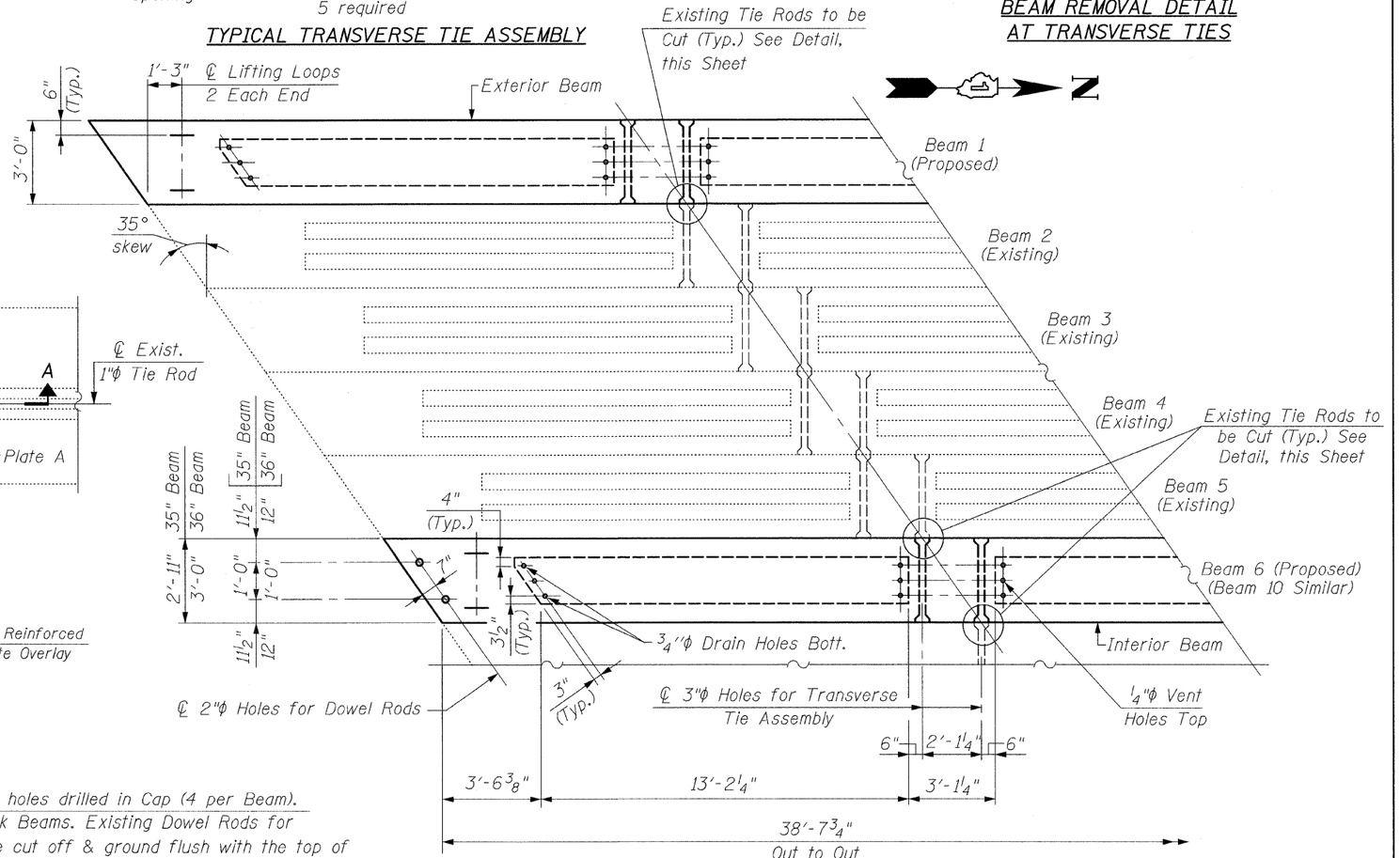
DETAIL A



✳ Cost included with Removal of P.P.C. Deck Beams

1"ϕx2'-6" Dowel Rods in 1½"ϕ holes drilled in Cap (4 per Beam). Cost included with P.P.C. Deck Beams. Existing Dowel Rods for Beam No's. 1, 6 & 10 shall be cut off & ground flush with the top of the Existing Concrete. Cost to be included in the cost of Removal of Existing P.P.C. Deck Beams. Proposed Dowel Rods shall be grouted after Beam No's. 1, 6 & 10 are in place and allowed to cure a min. of 24 hours prior to grouting Shear Keys

SECTION AT ABUTMENTS



PLAN VIEW

CHRISTIAN-ROGE & ASSOCIATES, INC.
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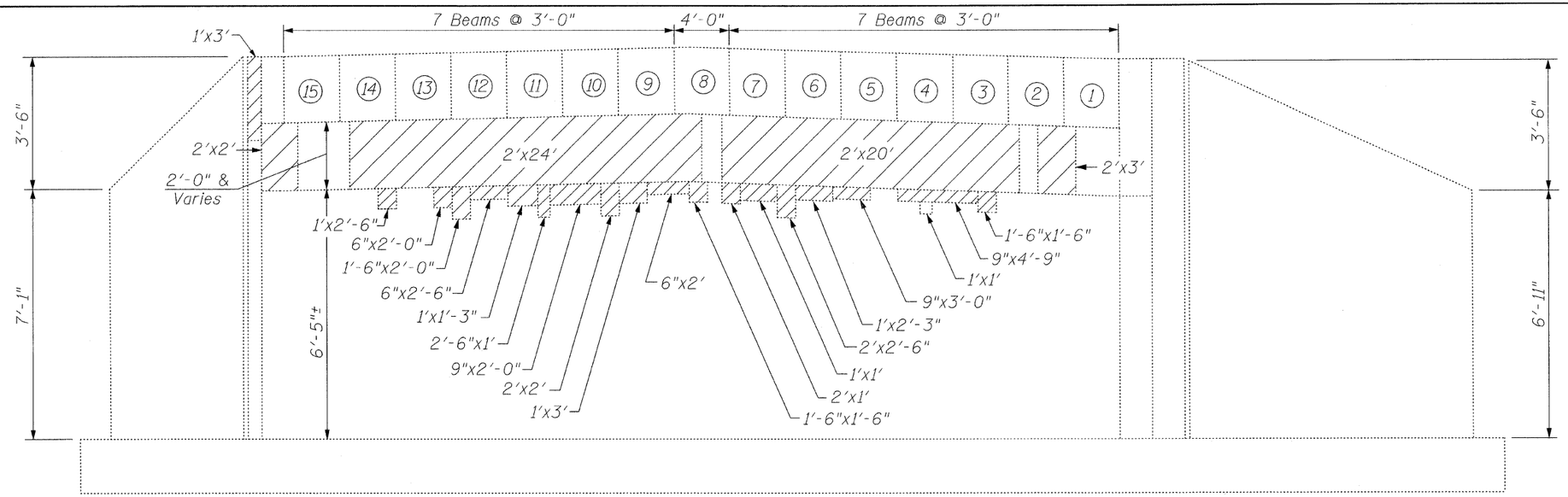
FILE NAME = deck_beam_detail-II.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

P.P.C. DECK BEAM DETAILS-II
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

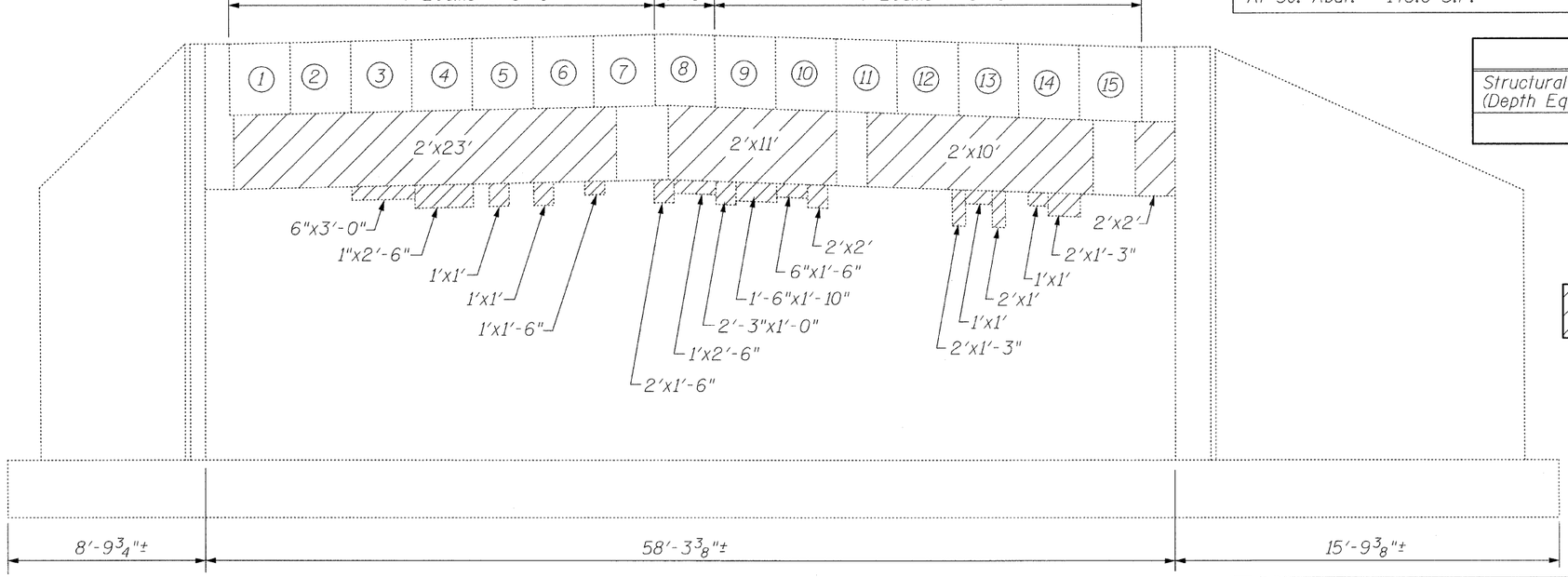
SCALE: | SHEET NO. 58 OF 511 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	20
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SOUTH ABUTMENT
(Looking South)

NOTE:
Structural Repair of Concrete
(Depth Equal to or Less than 5 In.)
At So. Abut. = 146.0 S.F.



NORTH ABUTMENT
(Looking North)

NOTE:
Structural Repair of Concrete
(Depth Equal to or Less than 5 In.)
At No. Abut. = 126.0 S.F.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal To or Less Than 5 In.)	Sq. Ft.	272

LEGEND:

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

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
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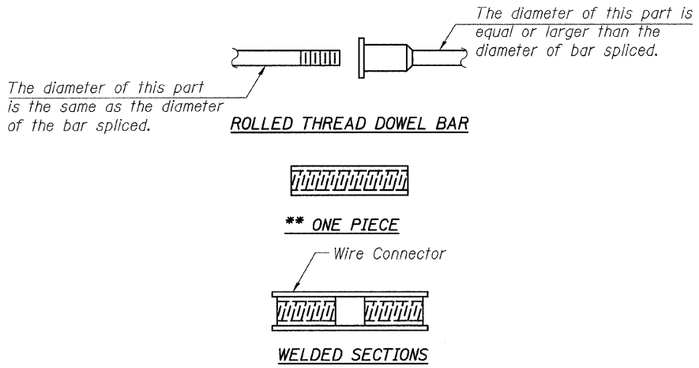
FILE NAME = abutment repairs.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REPAIRS
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

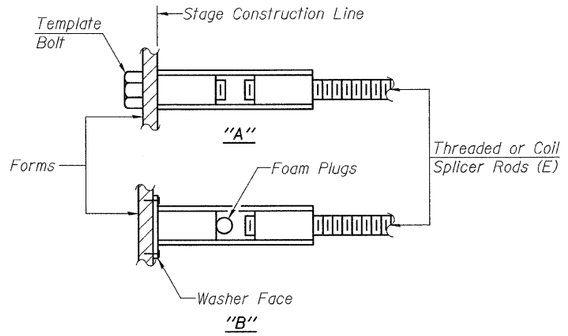
SCALE: | SHEET NO. 59 OF 511 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	21
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



BAR SPLICER ASSEMBLY ALTERNATIVES

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



INSTALLATION AND SETTING METHODS

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

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

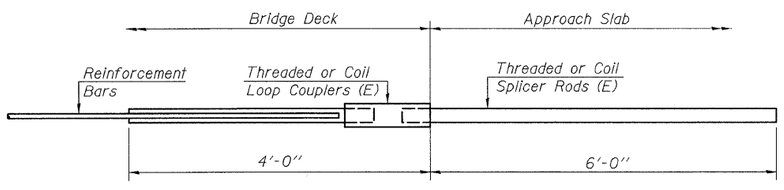
① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

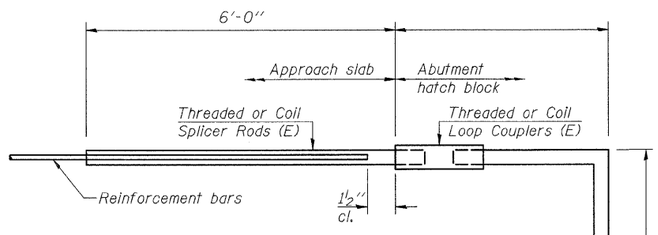
BAR SPLICER ASSEMBLIES

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



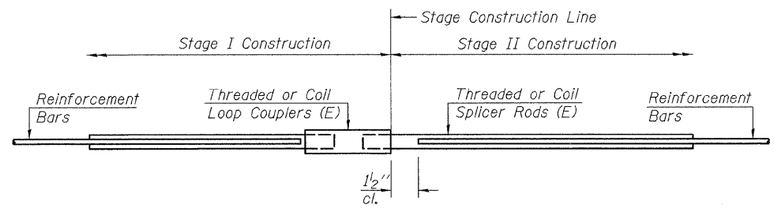
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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



FOR STUB ABUTMENTS

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



STANDARD

Bar Size	No. Assemblies Required	Location
#4	39	Deck Overlay

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

BSD-1 5-16-08

FILE NAME = bar_splicer_assembly.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

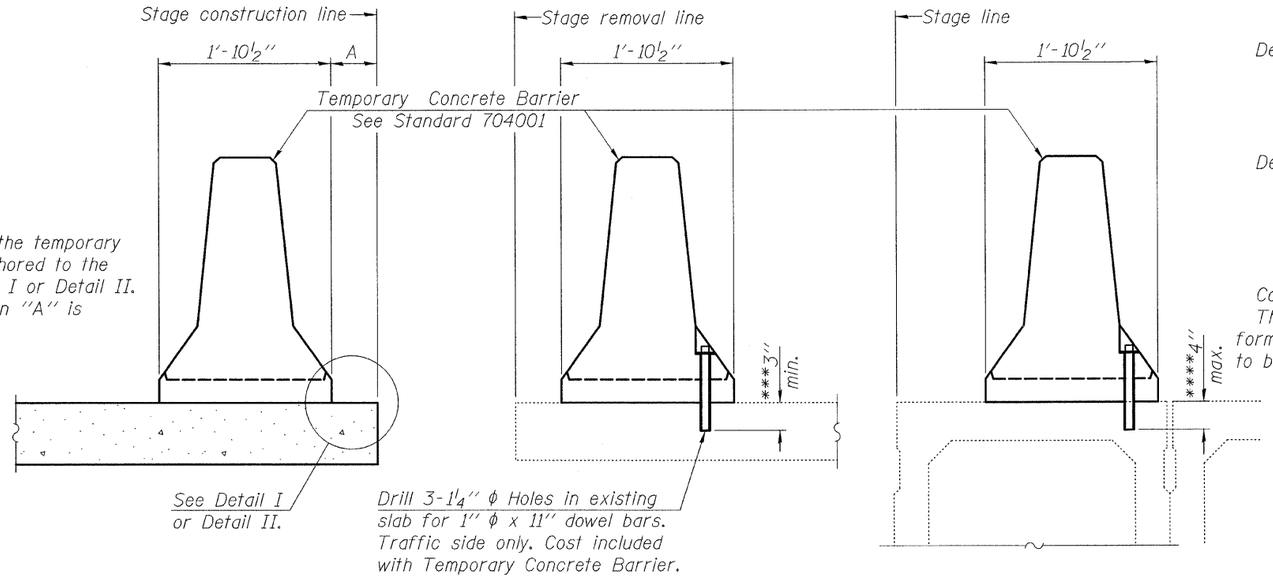
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S10 OF S11 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-I-1	WILL	29	22
		CONTRACT NO. 60D68		
FED. ROAD DIST. NO.	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".



NEW SLAB | EXISTING SLAB | EXISTING DECK BEAM

NOTES

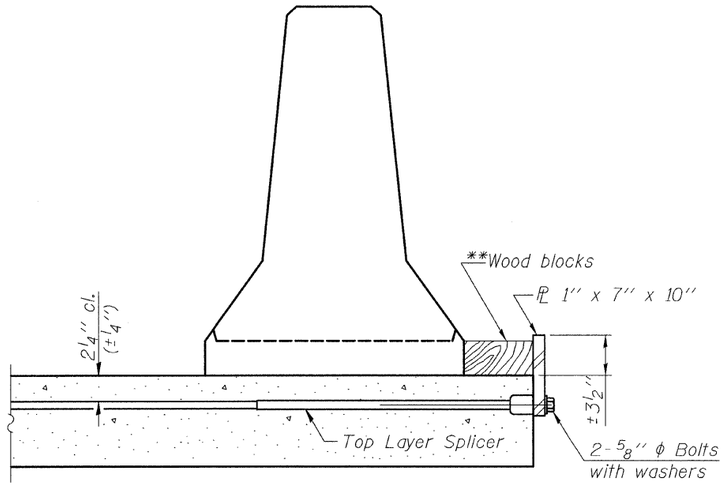
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" 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.

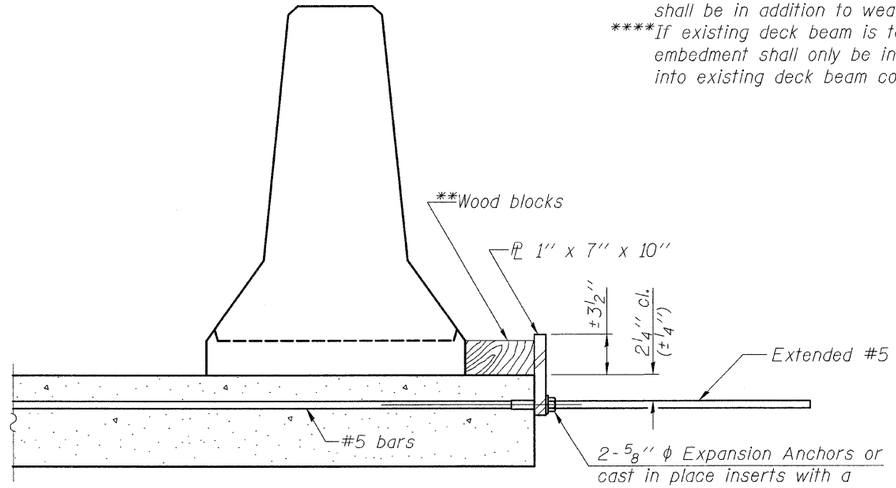
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM



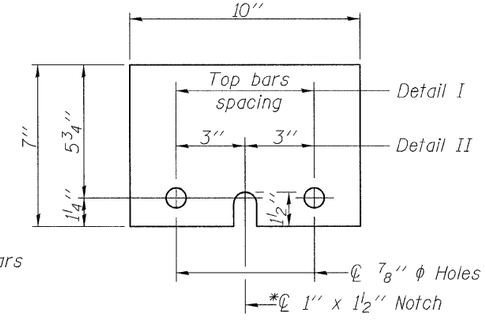
DETAIL I



DETAIL II

***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.



STEEL RETAINER ℙ 1" x 7" x 10"

*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.

R-27 5-16-08

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211 W. WACKER DRIVE CHICAGO, IL. 60606
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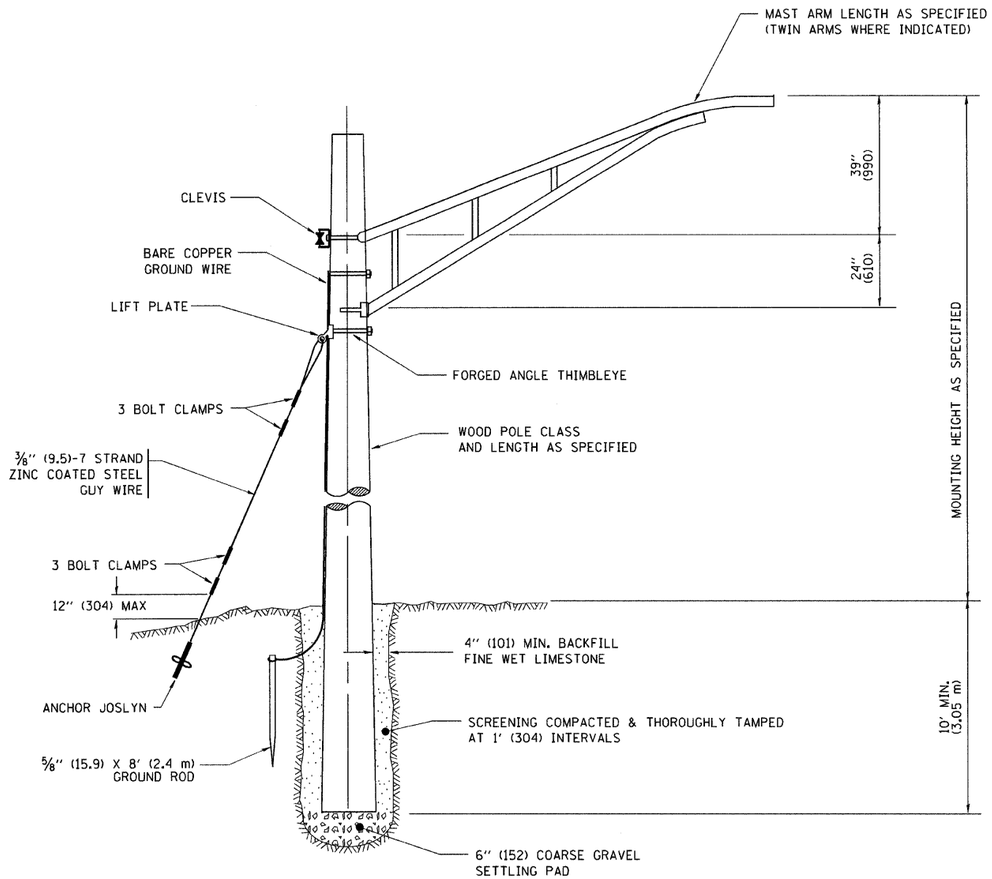
FILE NAME = temp_conc_barrier.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L./R.E.S./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 7/7/2008	DATE - JULY 7, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

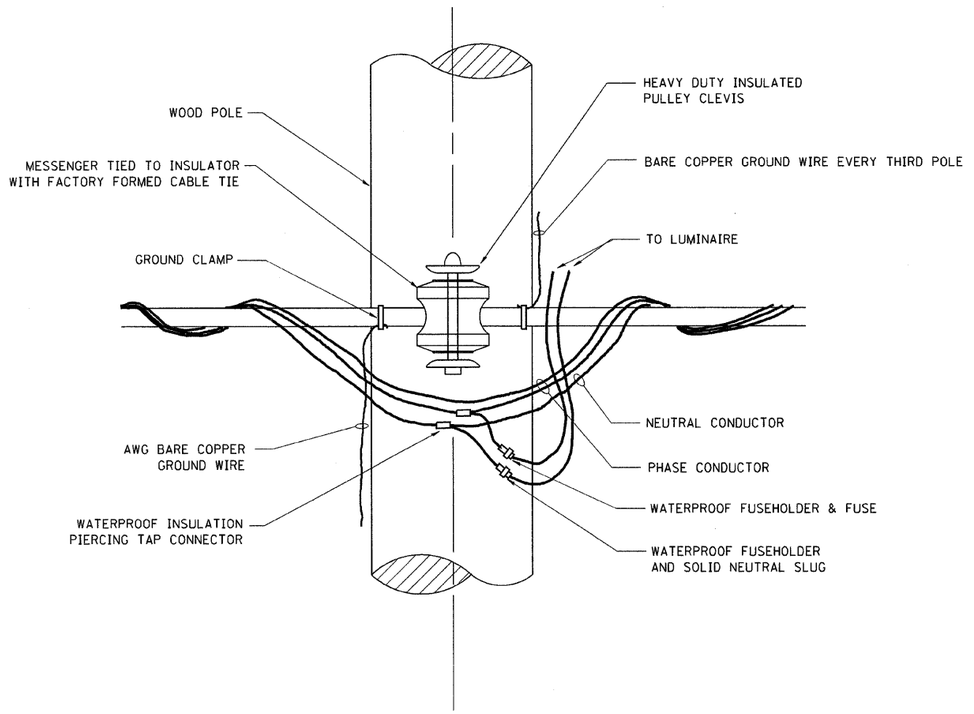
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
U.S. 45 / 52 OVER SMALL STREAM **S.N. 099-0122**

SCALE: | SHEET NO. S11 OF S11 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	23
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60D68	



TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME = W:\diststd\22x34\be800.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED - 08-08-03
		DRAWN -	REVISED -
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 | TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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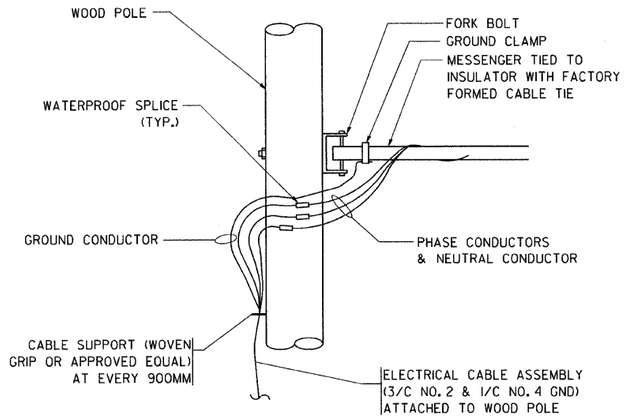
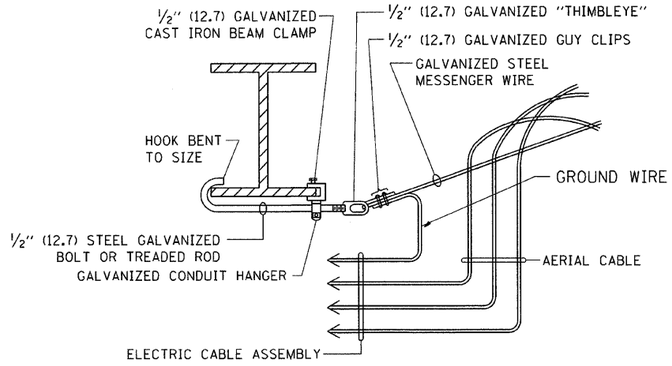
	BE-800	CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



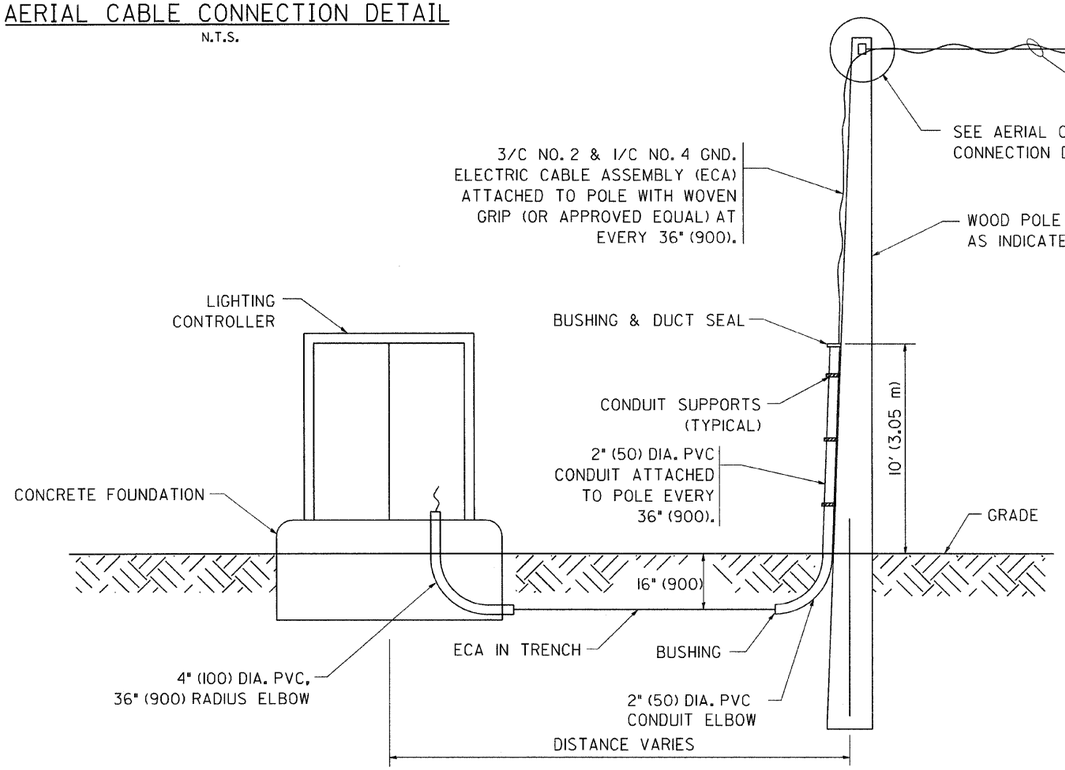
AERIAL CABLE CONNECTION DETAIL

N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

N.T.S.

NOTES:

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

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AERIAL CABLE INSTALLATION	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			330	17 B-1-I-1	WILL	29	25
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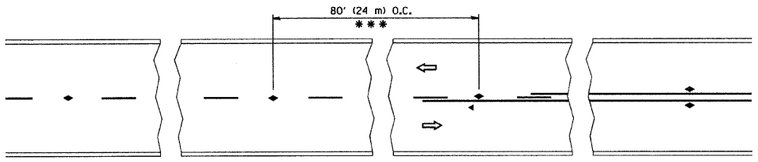
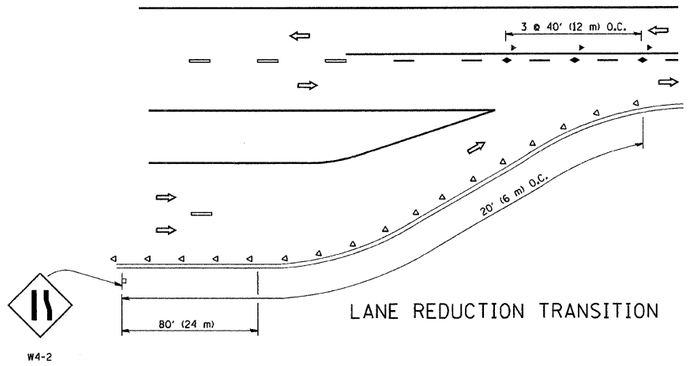
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 621+00 TO STA. 636+00	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

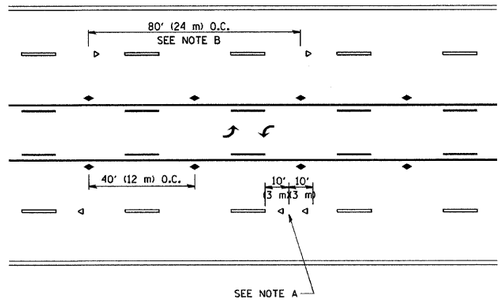


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

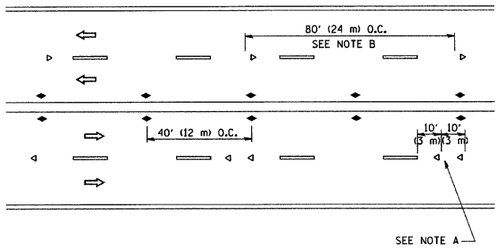
TWO-LANE/TWO-WAY



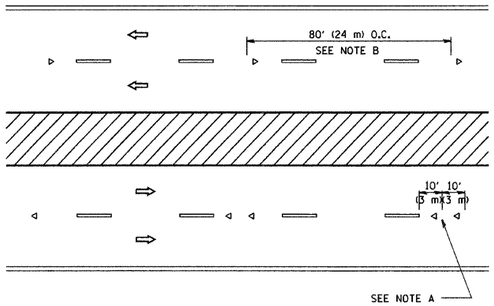
LANE REDUCTION TRANSITION



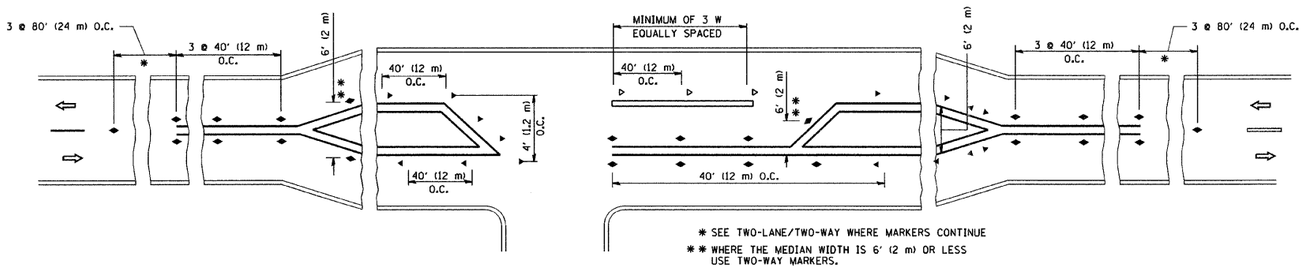
TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

LEFT TURN

GENERAL NOTES

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

LANE MARKER NOTES

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

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

DESIGN NOTES

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

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

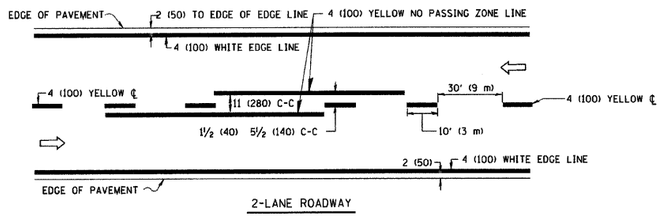
FILE NAME = W:\diststd\22x34\tc11.dgn	USER NAME = gaglionobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

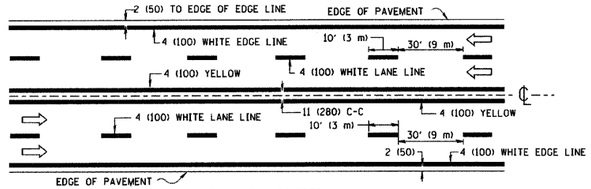
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 | TO STA. 636+00

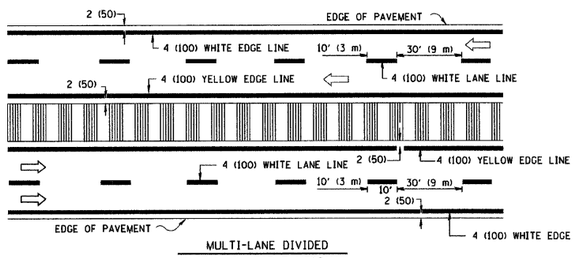
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	26
	TC-11	CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



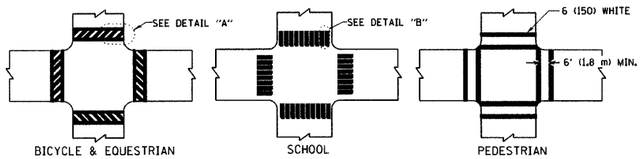
MULTI-LANE UNDIVIDED

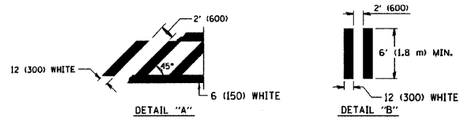


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

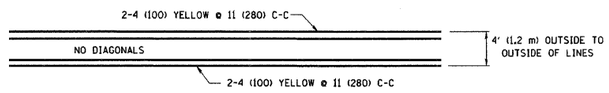
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

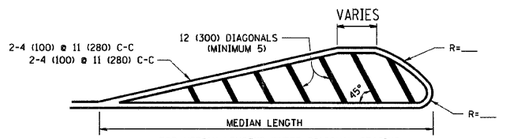




TYPICAL CROSSWALK MARKING



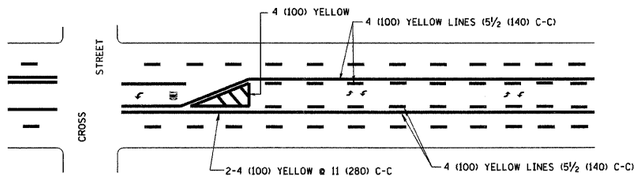
4' (1.2 m) WIDE MEDIANS ONLY



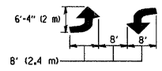
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

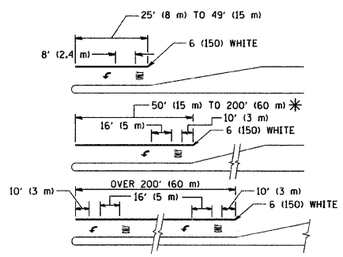


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

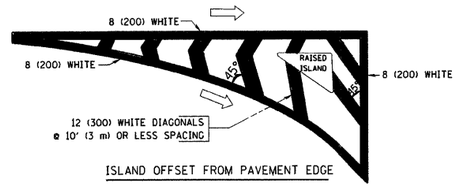


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

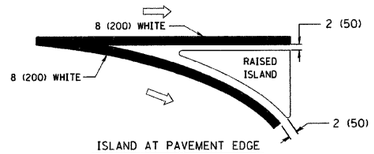
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

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

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

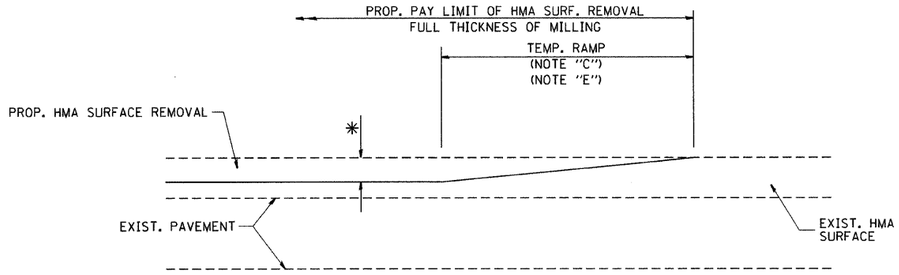
FILE NAME = W:\diststd\22x34\tc13.dgn	USER NAME = gaglienobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2000	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 | TO STA. 636+00

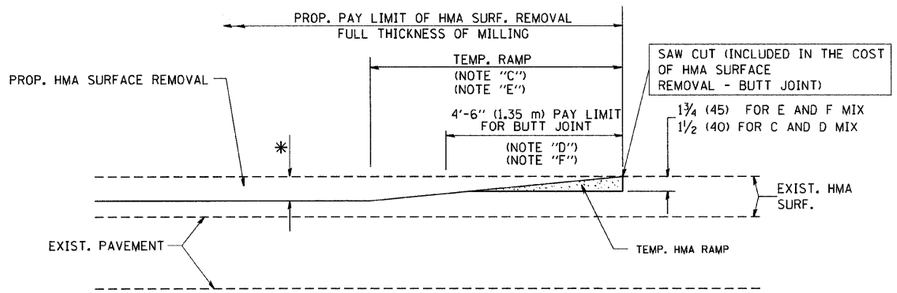
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	27
	TC-13	CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

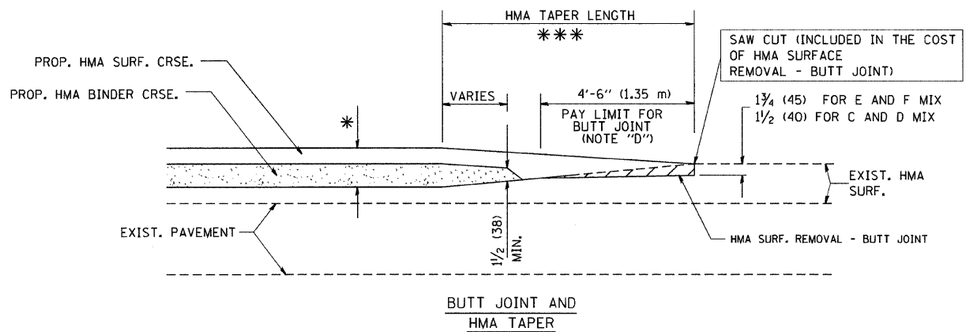


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

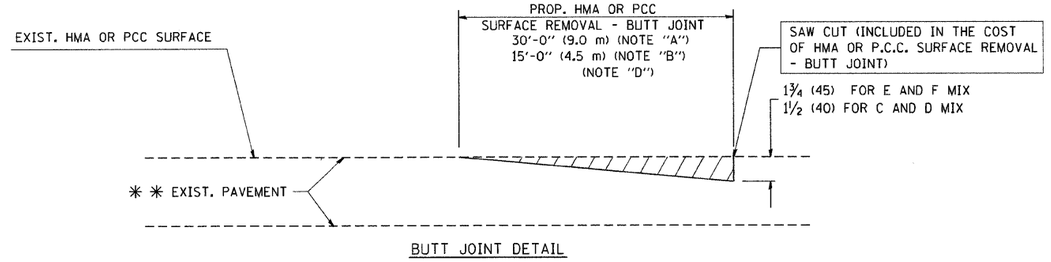
OPTION 2

TYPICAL TEMPORARY RAMP

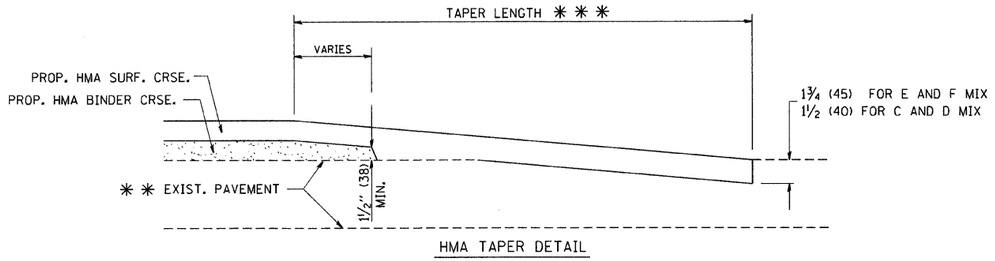


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

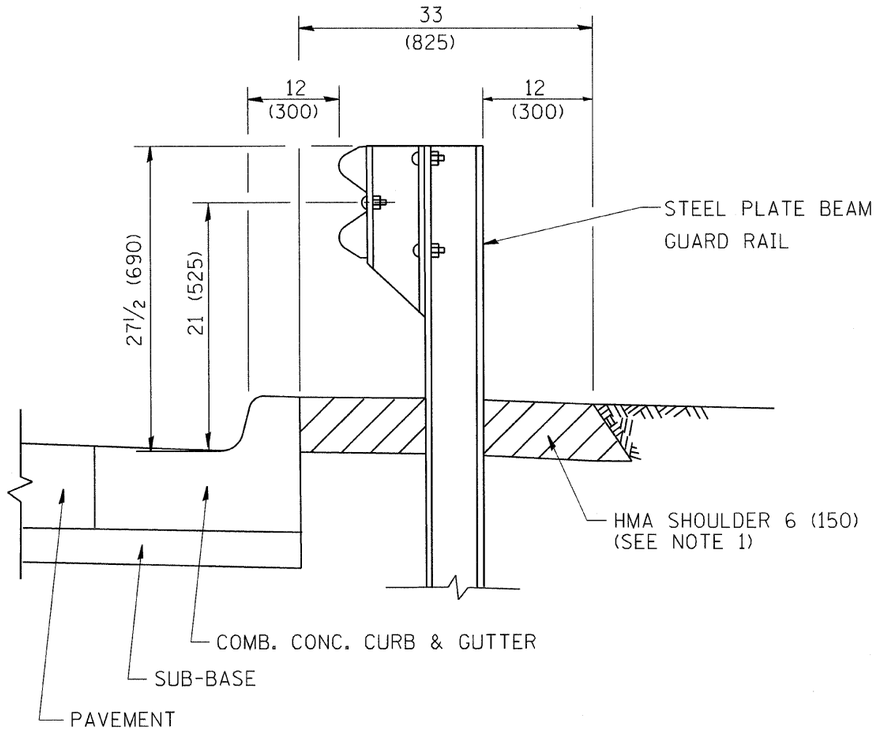
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 | TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	28
	BD400-05 BD32	CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES: 1. THE HMA SHOULDER SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL

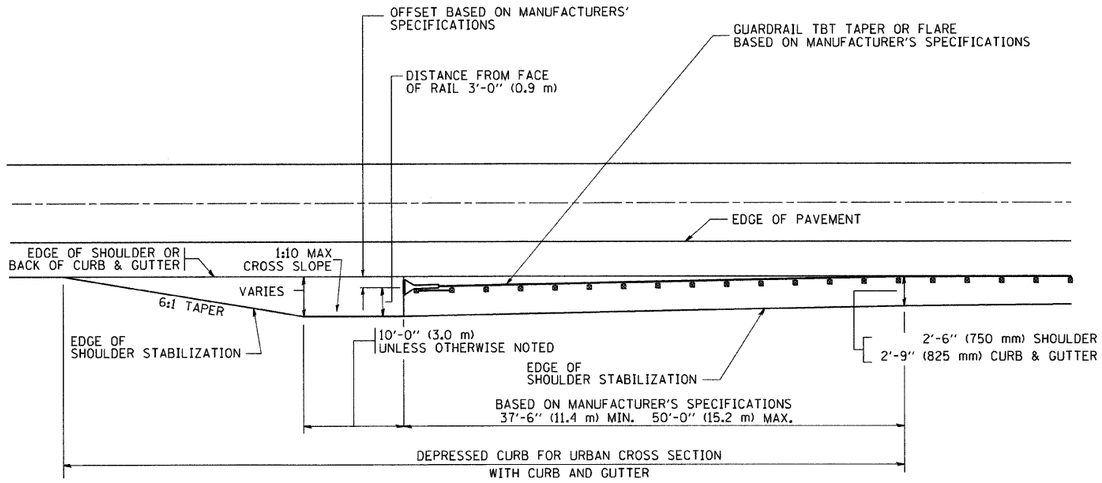
2. GUARD RAIL MAY BE PLACED AT THE BACK OF CURB WHEN DIRECTED BY THE ENGINEER.

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

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

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



STABILIZATION AT TBT TY. 1 SPL.

TBT = TRAFFIC BARRIER TERMINAL

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

FILE NAME = Ws\diststd\22x34\bd34.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 02-23-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER STABILIZATION AT TBT TY 1 SPL.
		DRAWN -	REVISED - A. ABBAS 03-21-97		
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - E. GOMEZ 08-28-00		
	PLOT DATE = 1/4/2008	DATE - 09-22-90	REVISED - R. BORO 01-01-07		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. 621+00 TO STA. 636+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	17 B-1-1-1	WILL	29	29
	BD600-10 (BD 34)	CONTRACT NO. 60D68		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		