01-15-2021 LETTING ITEM 152

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	1
FED. ROAD DIST. NO 2	ILLINOIS	CONTRACT NO. 85703		

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR LIST OF HIGHWAY STANDARDS SEE SHEET NO. 2

TRAFFIC DATA

ADT:
SEMINARY St 4,400 VPD (2020) 5% TRUCK

	SPEED POSTED	DESIGN SPEED
SEMINARY St	30 MPH	30 MPH

DESIGN DESIGNATION

SEMINARY ST - MINOR ARTERIAL (NON-URBAN)

PROFESSIONAL ENGINEER'S SIGN & SEAL
FOR STRUCTURAL SHEET(S): 12 - 32

STEVEN L. SCHWARZ, P.E., S.E.
EXPIRES: 11-30-22

STATE OF ILLINOIS · STEVEN L. SCHWARZ · 081-006011 · McHENRY, IL · LICENSED STRUCTURAL ENGINEER
SEAL

PROFESSIONAL ENGINEER'S SIGN & SEAL
EXCLUDING SHEET(S): 12 - 32

JACK R. MELHUISH, P.E.
EXPIRES: 11-30-21

JACK R. MELHUISH JR. · 062-056286 · REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
SEAL

LOCAL ROADS FIELD LIASON ENGINEER: SHAWN L. ORTGIESEN, P.E. DIXON, IL

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

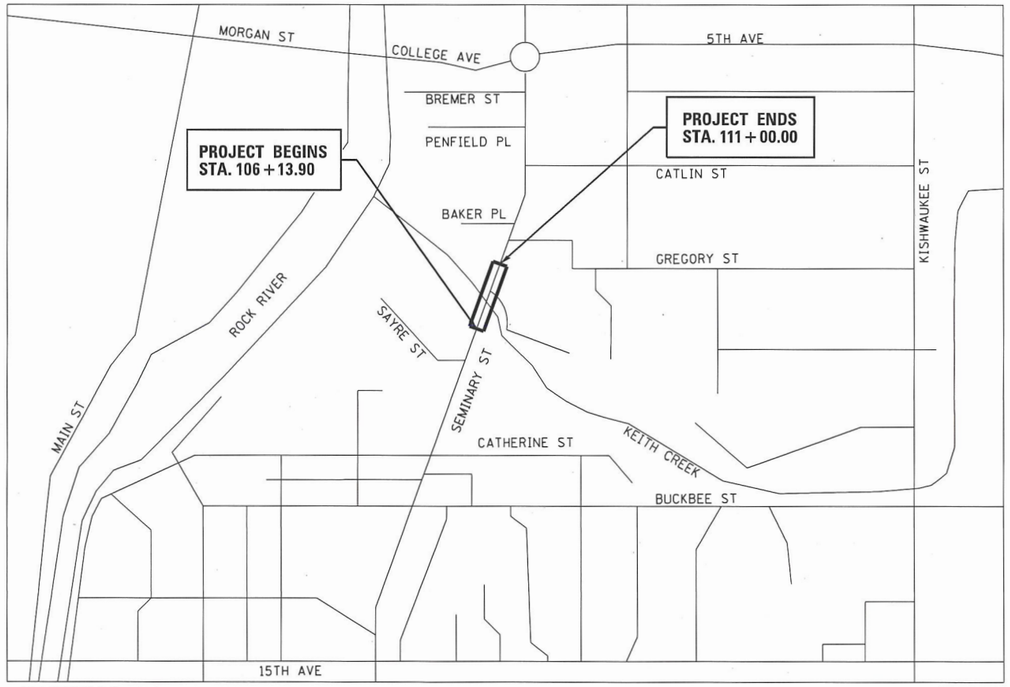
PROJECT ENGINEER: J. HORWITZ
PROJECT MANAGER: J. MELHUISH
CONTRACT NO. 85703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM – BRIDGE

FAU 5112 SEMINARY STREET
OVER KEITH CREEK
BRIDGE REPLACEMENT

SECTION: 19-00630-00-BR
PROJECT: V9SY(214)
CITY OF ROCKFORD
WINNEBAGO COUNTY
C-92-061-19

R 1 E



ROCKFORD TOWNSHIP

3 PM

LOCATION MAP
NOT TO SCALE

PROJECT LENGTH

NET AND GROSS LENGTH OF PROJECT= 410 FT. = 0.08 MILES

LOCATION OF SECTION INDICATED THUS: –

HRGreen
420 NORTH FRONT STREET, SUITE 100 | McHENRY, ILLINOIS 60050
Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com
ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED November 9, 20 20
CITY OF ROCKFORD

PASSED 11/13, 20 20
DISTRICT TWO ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW 11/13 20 20
REGIONAL ENGINEER

INDEX OF SHEETS

SHEET NUMBER	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5	ALIGNMENT, TIES AND BENCHMARKS
6	REMOVAL PLAN
7	PLAN AND PROFILE
8	GUARDRAIL DETAILS
9 - 10	DETOUR PLAN
11	PROPOSED GRADING PLAN
12 - 32	PROPOSED BRIDGE PLANS
33	CITY OF ROCKFORD INLET, SPECIAL DETAIL
34 -	INLETS, SPECIAL
35 - 38	WORK ZONE SIGN DETAILS
39 - 41	TYPICAL PAVEMENT MARKINGS

STATE STANDARDS

STANDARD NO	LIST OF DESCRIPTION
000001-08	STANDARD SYMOBLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
515001-04	NAME PLATE FOR BRIDGES
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5M) AWAY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS-DAY ONLY
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

DISTRICT TWO DETAILS

DISTRICT 2 STANDARDS

STANDARD NO	LIST OF DESCRIPTION
10.2	INLETS, SPECIAL
34.1	WORK ZONE SIGN DETAILS
41.1	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, APRIL 1, 2016. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
3. ALL ELEVATIONS SHOWN ON THE PLANS ARE ON THE NAVD 88 DATUM.
4. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE.
5. SAW CUTTING OF PAVEMENTS, CURB AND GUTTER, SIDEWALK, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING.
6. MATERIALS RESULTING FROM THE REMOVAL OF ASPHALT SURFACES, CONCRETE REMOVAL, UTILITY STRUCTURE ADJUSTMENTS, GRADING WORK, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGEMENT OF THE ENGINEER, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE ENGINEER WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR SHALL HAVE THE DOLLAR AMOUNT REDUCED FROM THE NEXT PAY ESTIMATE.
7. SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AS SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES TO BE DETERMINED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION.
8. ALL CLEARING, GRUBBING, AND FENCE REMOVAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
9. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THIS LOCATION.
10. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

STORM SEWERS, WATER MAINS, AND UTILITIES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
2. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.
5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS.
6. ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY AND BE DELIVERED TO THE ENGINEERING DEPARTMENT. THE PHONE NUMBER FOR DELIVERY ARRANGEMENT IS (779)348-7300.
7. ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THE CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, OR INLET, SHALL HAVE CAST INTO THE LID THE FOLLOWING WORD: "STORM."
8. THE INDISCRIMINATE USE OF FIRE HYDRANTS OR EXISTING STREAMS, CREEKS, WETLANDS OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE ENGINEER PRIOR TO USE OF THE WATER.

SIGNING AND STRIPING

1. SEE IDOT DISTRICT TWO DETAILS AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.

SEQUENCE OF CONSTRUCTION - ROADWAY

1. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS AND THE CITY WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CONCRETE CURB AND GUTTER INSTALLATION OR SIDEWALK CONSTRUCTION. AT LOCATIONS WHERE NEW GUTTER OR SIDEWALK IS TO BE INSTALLED ACROSS A DRIVEWAY, THE CONTRACTOR SHALL CONTACT THE PROPERTY OWNER 48 HOURS PRIOR TO REMOVING THE PAVEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES, PROVIDED BY THE CITY, TO RESIDENTS. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES (KNOCK ON DOORS WHEN A DRIVEWAY IS ABOUT TO BE CLOSED).
2. THE CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE A DRIVEWAY FOR MORE THAN 48 HOURS UNDER ANY CIRCUMSTANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING BARRICADES TO PREVENT TRAFFIC FROM USING DRIVEWAYS DURING THIS PERIOD.

HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - CL	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/30/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	2
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_recon_gen.Odgn
PLOT DRIVER: IL_pdf_bw.prtcfg
PEN TABLE: plotlabel.tbl

	PAYCODE	ITEM DESCRIPTION	UNIT	CONSTRUCTION TYPE CODE 0010	CONSTRUCTION TYPE CODE 0042
	20200100	EARTH EXCAVATION	CU YD	640	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	534	
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	105	
	25000210	SEEDING, CLASS 2A	ACRE	0.1	
	28000510	INLET FILTERS	EACH	4	
	28100107	STONE RIPRAP, CLASS A4	SQ YD	340	
	28200200	FILTER FABRIC	SQ YD	355	
*	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1,370	
	31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	2,185	
	35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	1,370	
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	4,380	
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	880	
	40701841	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"	SQ YD	1,370	
	42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	118	
	42001300	PROTECTIVE COAT	SQ YD	970	
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	738	
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	660	
	44000100	PAVEMENT REMOVAL	SQ YD	2,001	
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	533	
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	582	
	44000600	SIDEWALK REMOVAL	SQ FT	2,608	
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	
	50200100	STRUCTURE EXCAVATION	CU YD	370	
	50300225	CONCRETE STRUCTURES	CU YD	88.3	
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	218.5	
	50300260	BRIDGE DECK GROOVING	SQ YD	646	
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	115.8	
	50401325	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BEAMS, IL45N	FOOT	553.5	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	107,070	
Δ	50900105	ALUMINUM RAILING, TYPE L	FOOT	170	
	51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	562	
	51202305	DRIVING PILES	FOOT	562	
	51203200	TEST PILE METAL SHELLS	EACH	1	
	51204650	PILE SHOES	EACH	12	
	51500100	NAME PLATES	EACH	1	
	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	
	54213666	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 21"	EACH	1	
	54248510	CONCRETE COLLAR	CU YD	0.7	
	550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	151	
	550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	58	
	550A0400	STORM SEWERS, CLASS A, TYPE 2 21"	FOOT	34	

	PAYCODE	ITEM DESCRIPTION	UNIT	CONSTRUCTION TYPE CODE 0010	CONSTRUCTION TYPE CODE 0042
	55100500	STORM SEWER REMOVAL 12"	FOOT	85	
	55100700	STORM SEWER REMOVAL 15"	FOOT	33	
	55100900	STORM SEWER REMOVAL 18"	FOOT	16	
	55101100	STORM SEWER REMOVAL 21"	FOOT	15	
	56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	2	
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	145	
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	80	
	60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	42	
	X6024242	INLET, SPECIAL NO. 1	EACH	4	
	60200305	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	1	
	60265700	VALVE VAULTS TO BE ADJUSTED	EACH	5	
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	
Δ	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	53	
	60500040	REMOVING MANHOLES	EACH	4	
	60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	678	
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1,010	
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	2	
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	
	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	
	67100100	MOBILIZATION	L SUM	1	
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	200	
Δ	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	9,800	
	X0322463	CONNECTION TO EXISTING SEWER	EACH	1	
*	X0326806	WASHOUT BASIN	L SUM	1	
*	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	
*	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	5	
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	
*	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	
*	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	204	
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	
# *	Z0076600	TRAINEES	HOUR		1,000
# *	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR		1,000

* SPECIAL PROVISION
Δ SPECIALTY ITEM

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_sht_recon_sao.dgn
PLOT DRIVER: k_pdf_bw.pltcfg
PEN TABLE: pb100dx.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

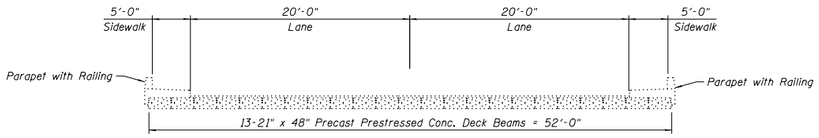
USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - CL	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

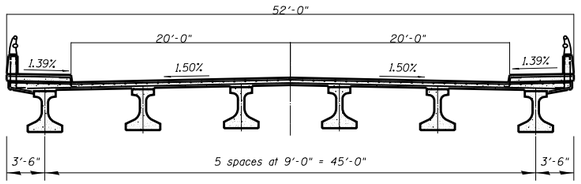
SEMINARY STREET
SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

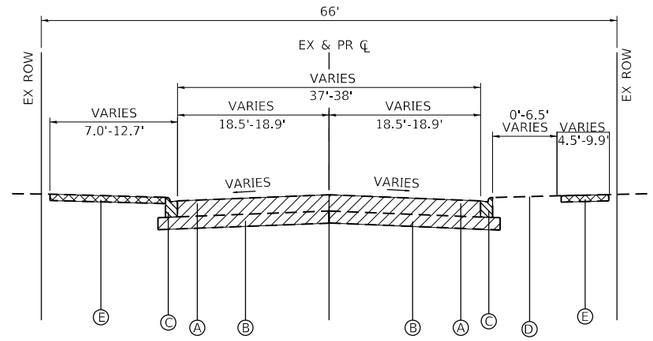
F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	3
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING BRIDGE CROSS SECTION



PROPOSED BRIDGE CROSS SECTION



DENOTES AREA OF PAVEMENT REMOVAL

DENOTES AREA OF SIDEWALK REMOVAL

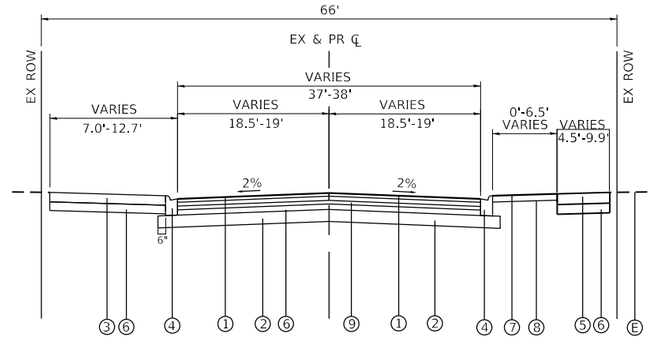
DENOTES AREA OF CURB AND GUTTER REMOVAL

EXISTING TYPICAL SECTION

SEMINARY STREET
STA 106+13.90 TO STA 107+70.99
STA 109+24.01 TO STA 111+00.00

EXISTING TYPICAL SECTION LEGEND

- (A) PAVEMENT REMOVAL, ±10"
- (B) SUBBASE GRANULAR MATERIAL, 3"-4" (PAID AS REMOVAL OF UNSUITABLE MATERIAL)
- (C) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- (D) EXISTING GROUND
- (E) PORTLAND CEMENT CONCRETE SIDEWALK



PROPOSED TYPICAL SECTION

SEMINARY STREET
STA 106+13.90 TO STA 107+70.99 (BRIDGE APPROACH)
STA 109+24.01 (BRIDGE APPROACH) TO STA 111+00.00

LOCATIONS (S): FULL DEPTH PAVEMENT/PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB			
MIXTURE USES (S):	SURFACE	TOP LIFT BINDER-3"	ALL LOWER LIFTS OF BINDER-3"
PG	SBS PG 70-28 OR GTR 70-28	SBS PG 70-28 OR GTR 70-28	PG 64-22
DESIGN AIR VOIDS:	4.0 @ N50	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION:	IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE:	D	N/A	N/A
MIXTURE WEIGHT:	0.6	0.6	0.6
QUALITY MANAGEMENT PROGRAM:	112 LBS/SQ/IN	N/A	N/A
SUBLOT SIZE:	QC/QA	QC/QA	QC/QA
NUMBER OF ROLLER PASSES:	N/A	N/A	N/A

PROPOSED TYPICAL SECTION LEGEND

- (1) HOT-MIX FULL DEPTH PAVEMENT 8"
- (2) AGG SUBGRADE IMP 12"
- (3) PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH
- (4) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.18
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 5"
- (6) SUBBASE GRANULAR MATERIAL, TYPE B 6"
- (7) SEEDING, CLASS 2A
- (8) TOPSOIL FURNISH AND PLACE, 4"
- (9) AGGREGATE BASE COURSE, IDOT TYPE B 6"

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_typ-bridge.dgn
PLOT DRIVER: IL_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm
184-001322

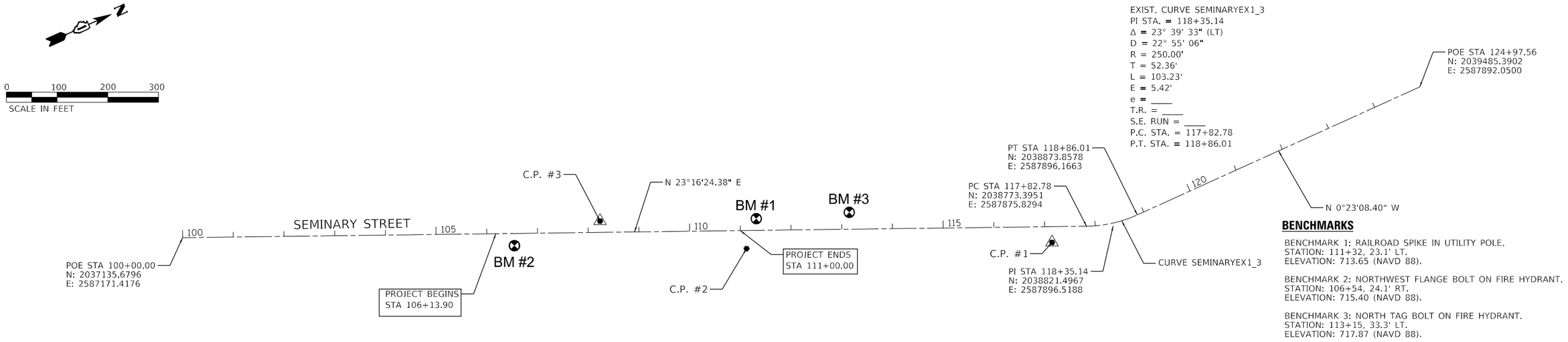
USER NAME = whood	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	4
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



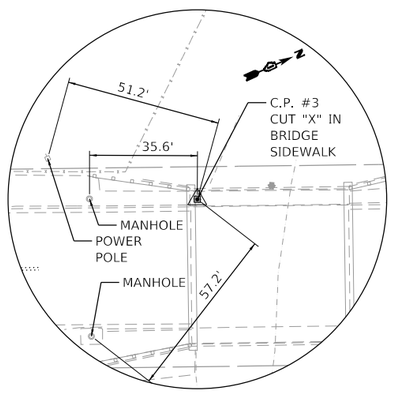
BENCHMARKS

BENCHMARK 1: RAILROAD SPIKE IN UTILITY POLE.
STATION: 111+32, 23.1' LT.
ELEVATION: 713.65 (NAVD 88).

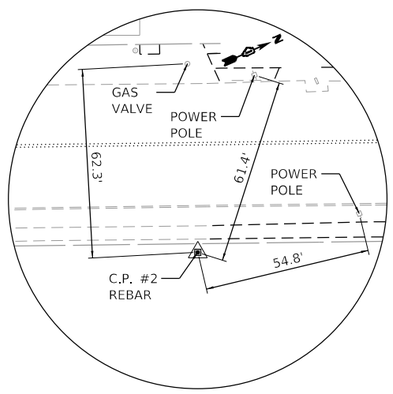
BENCHMARK 2: NORTHWEST FLANGE BOLT ON FIRE HYDRANT.
STATION: 106+54, 24.1' RT.
ELEVATION: 715.40 (NAVD 88).

BENCHMARK 3: NORTH TAG BOLT ON FIRE HYDRANT.
STATION: 113+15, 33.3' LT.
ELEVATION: 717.87 (NAVD 88).

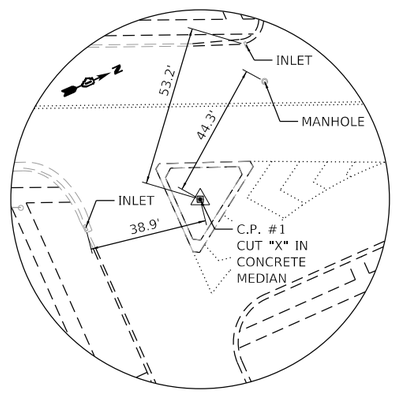
CONTROL POINT #3
N: 2037901.0900
E: 2587476.3880



CONTROL POINT #2
N: 2038142.7750
E: 2587643.6030



CONTROL POINT #1
N: 2038698.2190
E: 2587877.3080



HRG PROJECT NO.: 180909
HRG PROJ CONTACT:
FILE NAME: 180909_sht_recon_ATB.dgn
PLOT DRIVER: il_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

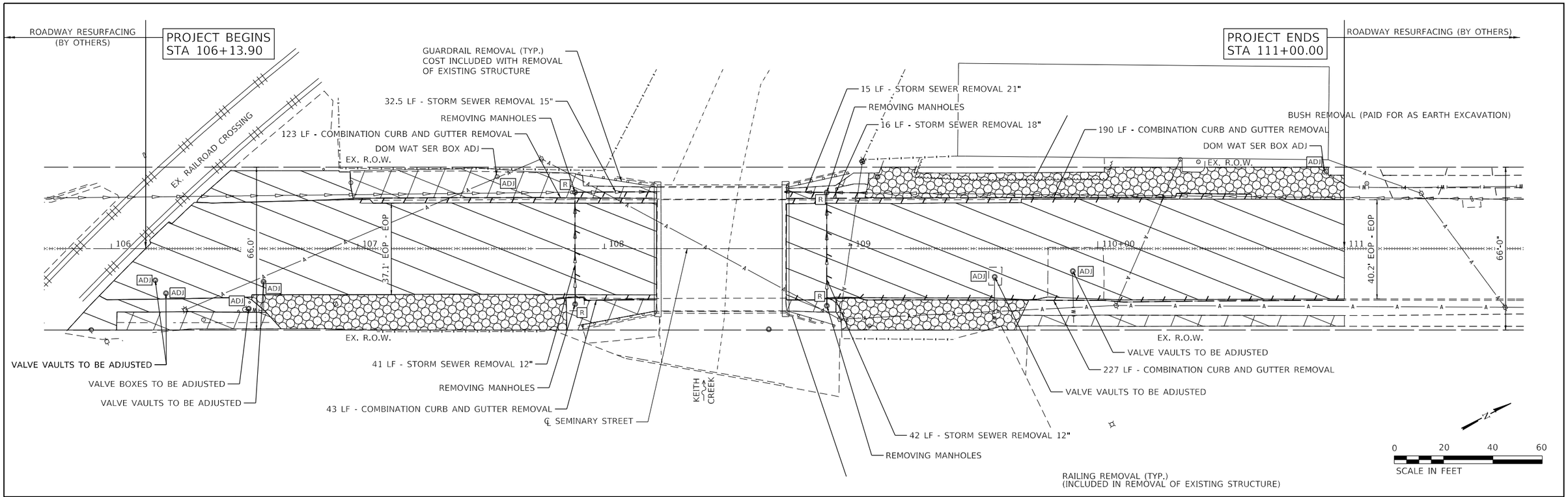
USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - CL	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
ALIGNMENT, TIES & BENCHMARKS

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. 107+00 TO STA. 109+80

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	5
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND:

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- COMB. CURB & GUTTER REMOVAL
- STORM SEWER REMOVAL

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: i180909_sht_recon_removal.dgn
PLOT DRIVER: il_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - CL	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
REMOVAL PLAN

SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. 107+00 TO STA. 109+80

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	6
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ROADWAY RESURFACING (BY OTHERS)

PROJECT BEGINS STA 106+13.90

SEE STRUCTURAL PLANS

PROJECT ENDS STA 111+00.00

ROADWAY RESURFACING (BY OTHERS)

EX. RAILROAD CROSSING

PR INLET SPECIAL NO. 1
STA 107+62.46, OFF 22.6' LT
RIM = 712.42
INV (E) = 708.40 (12")
INV (N) = 699.88 (15")
INV (S) = 706.72 (EX 15")

CURB TRANSITION

PR HMA PVT (FD) 10"

PCC DRIVEWAY PAVT 8
SUB GRAN MAT B 6

58' - STORM SEWERS, CL A,
TY 2 15" ; 1.52% SLOPE

34' - STORM SEWERS, CL A,
TY 2 21" ; 1.00% SLOPE

15" RCP F.E.S.
INV = 699.00

21" RCP F.E.S.
INV = 699.00

TRAF BAR TERM T5 SPL

PR INLET SPECIAL NO. 1
STA. 109+01.37
INV (N) = 705.18 (EX 18")
INV (NE) = 707.55 (12")
INV (SW) = 699.39 (21")

41' - STORM SEWERS, CL A
TY 2 12" @ 1.00%

PCC DRIVEWAY PAVT 8
SUB GRAN MAT B 6

4" DBL Y LINE (TYP)

PAVEMENT CONNECTOR (HMA)
FOR BRIDGE APPROACH SLAB
STD. 420406

EX. R.O.W.

5:1

10:1

66.0'

37.1' EOP - EOP

11.0'

20'

14'

2.5'

10.3'

12.4'

12.2'

5.0'

37.0'

66'-0"

69'

47'

106 | 107 | 108 | 109 | 110+00 | 111

CURB TRANSITION

COMB CC&G TB6.18 (TYP)

PCC DRIVEWAY PAVT 8
SUB GRAN MAT B 6

42' - STORM SEWERS, CL A,
TY 2 12" ; 1.00% SLOPE

PR INLET SPECIAL NO. 1
STA 107+62.46, OFF 20.0' RT
RIM = 712.42
INV = 708.82 (W)

℄ SEMINARY STREET

KEITH CREEK

EX SAN
RIM = 716.86
INV = 692.96 (48")

65' - STORM SEWERS, CL A,
TY 2 12" ; 1.00% SLOPE

CB, TYPE A, 4' DIA, TYPE 3 F&G
STA 109+06.81, OFF 20.0' RT
RIM = 711.49
INV (SW) = 707.96 (12")
INV (N) = 707.96 (12")

STEEL PLATE BEAM GUARDRAIL, TYPE A (TYP)
SEE GUARDRAIL DETAILS

PR INLET SPECIAL NO. 1
STA. 109+74.53
INV (S) = 708.61 (12")

PCC DRIVEWAY PAVT 8
SUB GRAN MAT B 6

PC CONC SIDEWALK 5 (TYP)

EX. R.O.W.

EX. R.O.W.

LEGEND

DEPRESSED CURB FOR DRIVEWAY

0 20 40 60
SCALE IN FEET

PROFILE

PROP. BRIDGE 95'-0"
BACK TO BACK OF ABUT.

EX BRIDGE 55'-0"
BACK TO BACK OF ABUT.

PROFILE GRADE AT ℄

-0.16% -1.16% -2.25% -2.25% -1.50% -1.14% -1.14% -0.54% -0.54% -0.54% -0.54% +1.43% +1.43% +0.52%

715.22

VPI STA. 106+65.00
ELEVATION 714.63

+15.00 EL. 715.21

K = 92
100.00' V.C.

+15.00 EL. 713.50

VPI STA. 107+25.00
ELEVATION 713.27

VPI STA. 107+50.00
ELEVATION 712.90

VPI STA. 108+00.00
ELEVATION 712.38

VPI STA. 108+50.00
ELEVATION 712.06

+90.00 EL. 711.84

VPI STA. 109+30.00
ELEVATION 711.63

K = 41
80.00' V.C.

+70.00 EL. 712.20

VPI STA. 110+10.00
ELEVATION 712.77

713.24

730 725 720 715 710 705 700 695 690

106+00	106+50	107+00	107+50	108+00	108+50	109+00	109+50	110+00	110+50	111+00	111+50
715.23	714.57 / 714.73	713.65 / 713.83	712.90 / 712.90	712.33 / 712.33	712.06 / 712.06	711.56 / 711.80	712.18 / 711.96	712.76 / 712.63	713.00 / 712.98	713.24 / 713.24	713.69

HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
PLAN AND PROFILE

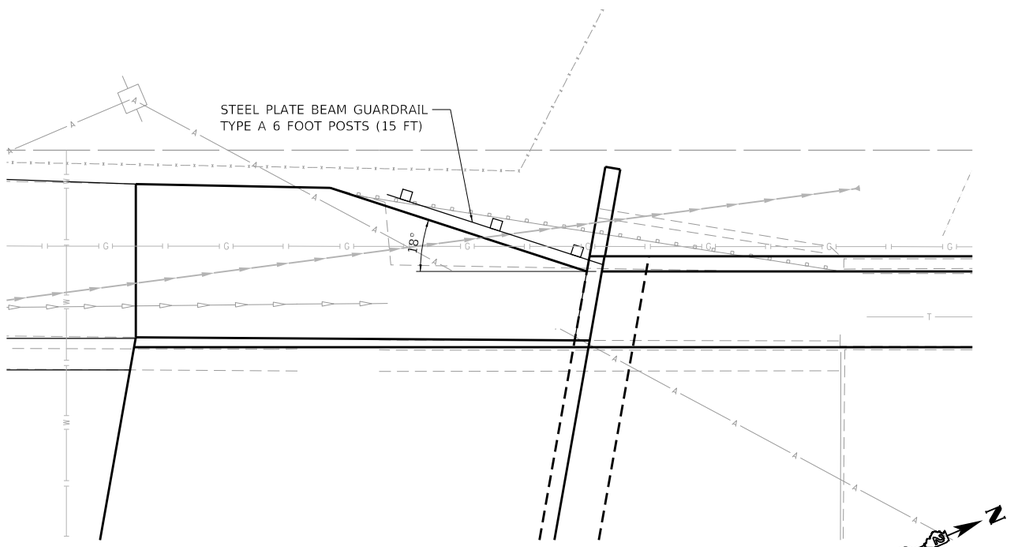
SCALE: 1"=20' | SHEET 1 OF 1 SHEETS | STA. 107+00 TO STA. 109+80

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	7
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

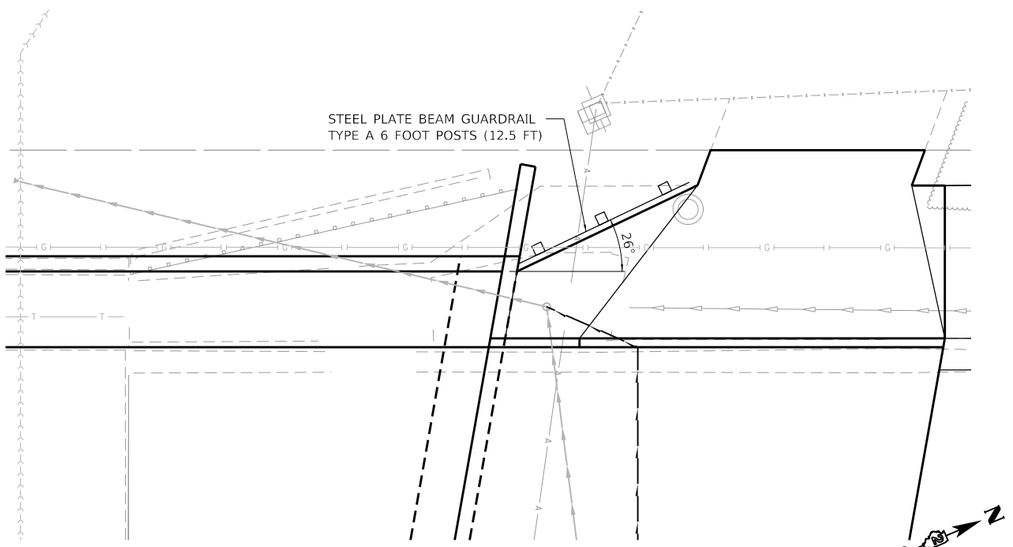
PLAN: SURVEYED | PLOTTED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | CADD FILE NAME | NOTE BOOK | NO. | BY | DATE

PROFILE: SURVEYED | PLOTTED | PLANS CHECKED | BAR. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

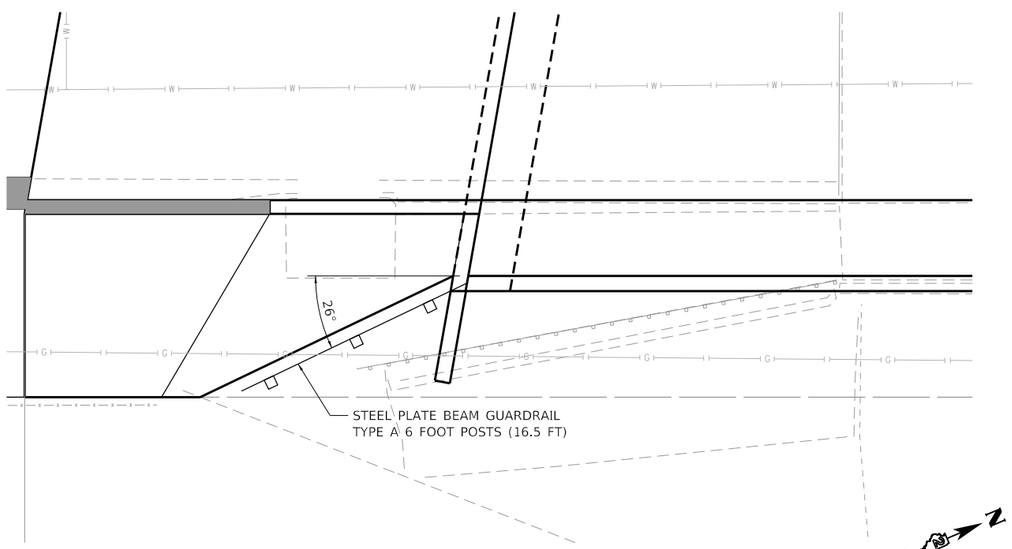
HRG PROJECT NO.: 180909
HRG PRO.: CONTACT:
FILE NAME: i:\80909_sht_recon_pro.dgn
PLOT DRIVER: i_pdf_bw.pltcfg
PEN TABLE: plotlabl.tbl



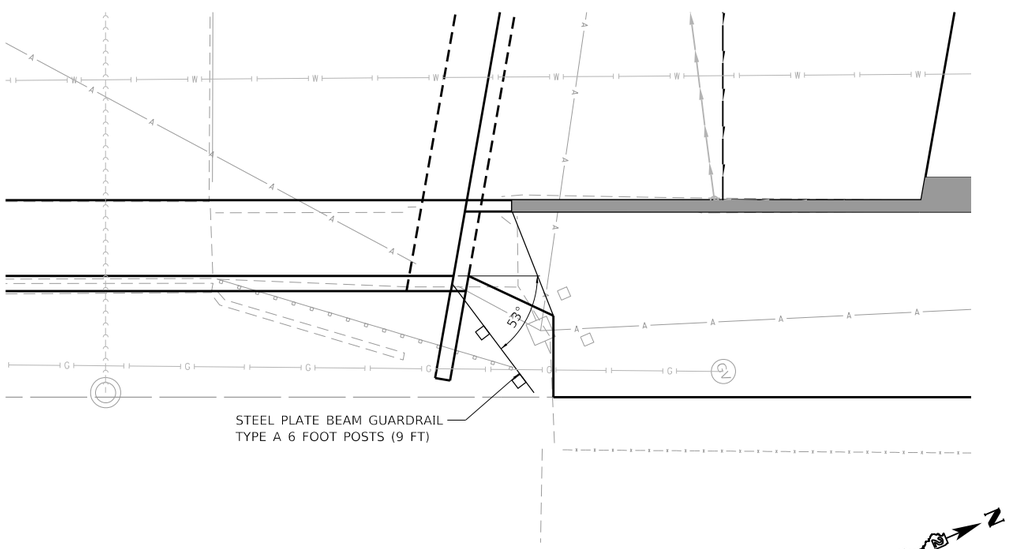
SOUTHWEST CORNER



NORTHWEST CORNER



SOUTHEAST CORNER



NORTHEAST CORNER

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_Guardrail_Details.dgn
PLOT DRIVER: c_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

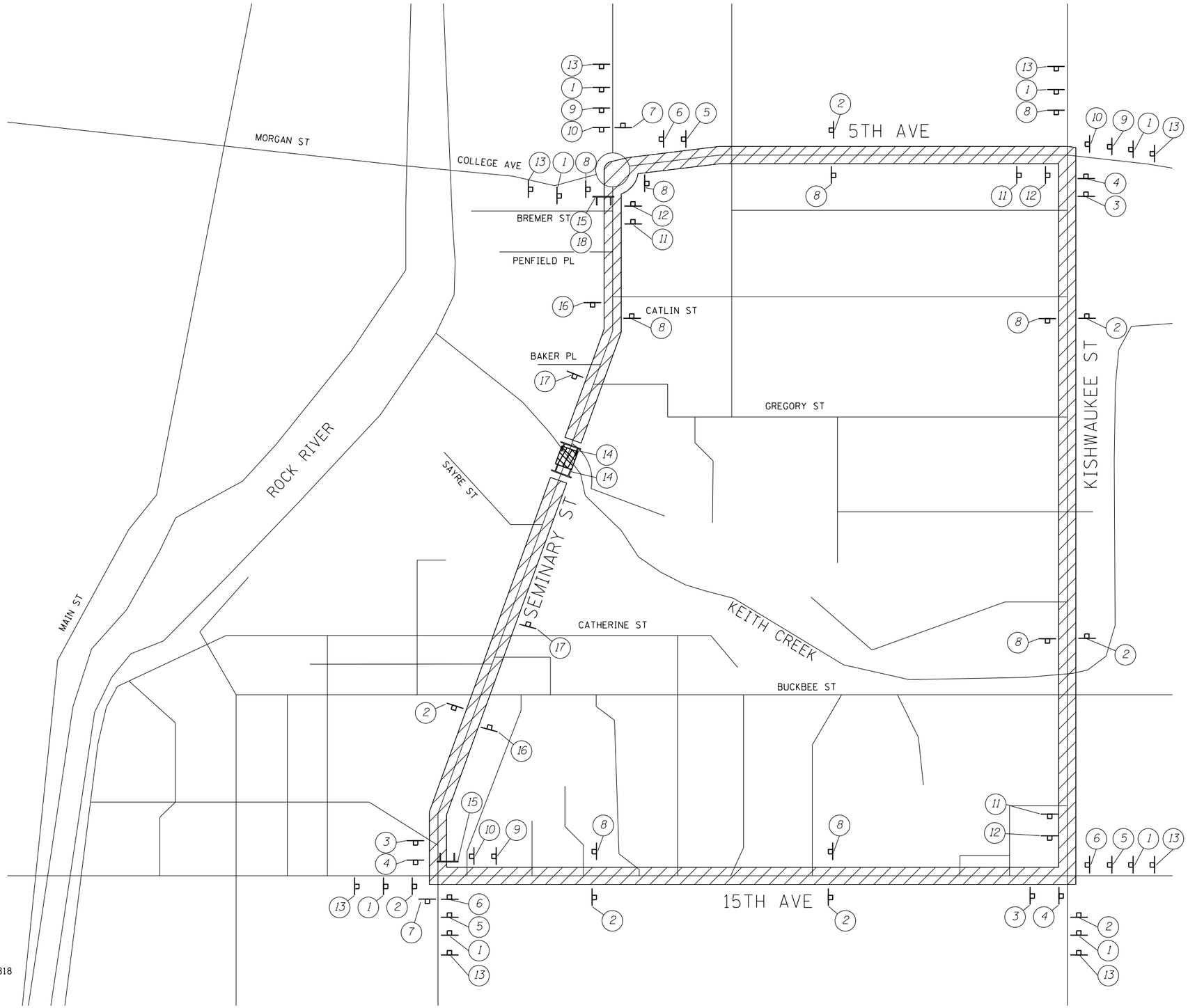
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SEMINARY STREET
GUARDRAIL DETAILS

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	8
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

1	W20-2-4848 DETOUR AHEAD Seminary Street	36"X18"	
2	NORTH / Seminary Street / DETOUR ↑	M3-1-2412 36"X18" M4-9(0)-3024	
3	NORTH / Seminary Street / DETOUR ←	M3-1-2412 36"X18" M4-9(0)-3024	
4	NORTH / Seminary Street / DETOUR ←	M3-1-2412 36"X18" M4-9(0)-3024	
5	NORTH / Seminary Street / DETOUR →	M3-1-2412 36"X18" M4-9(0)-3024	
6	NORTH / Seminary Street / DETOUR →	M3-1-2412 36"X18" M4-9(0)-3024	
7	END DETOUR	M4-8A(0) 24"X18"	
8	SOUTH / Seminary Street / DETOUR ↑	M3-3-2412 36"X18" M4-9(0)-3024	
9	SOUTH / Seminary Street / DETOUR ←	M3-3-2412 36"X18" M4-9(0)-3024	
10	SOUTH / Seminary Street / DETOUR ←	M3-3-2412 36"X18" M4-9(0)-3024	
11	SOUTH / Seminary Street / DETOUR →	M3-3-2412 36"X18" M4-9(0)-3024	
12	SOUTH / Seminary Street / DETOUR →	M3-3-2412 36"X18" M4-9(0)-3024	
13	EFFECTIVE XX/XX/XX Seminary Street CLOSED AT KEITH CREEK		
14	R11-2-4830 ROAD CLOSED		
15	R11-4-6030 ROAD CLOSED TO THRU TRAFFIC		
16	W20-3(0)-4848 ROAD CLOSED AHEAD		
17	W20-3(0)-4848 ROAD CLOSED 500 FT		
18	DETOUR ←	M4-10L-4818	
19	DETOUR →	M4-10R-4818	



HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_recon_detour.dgn
PLOT DRIVER: s_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

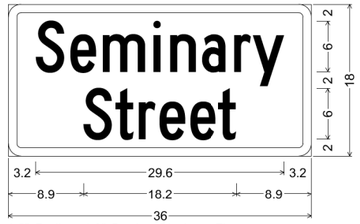
USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - JCH	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

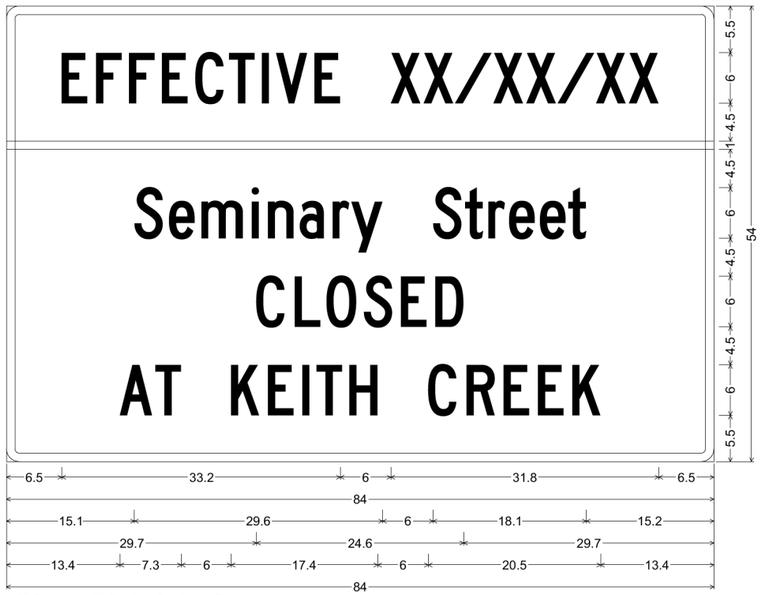
SEMINARY STREET
DETOUR PLAN

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	9
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



1.5" Radius, 1.0" Border, Black on Fluorescent orange;
"Seminary" C 2K; "Street" White C 2K;



1.5" Radius, 1.0" Border, Black on Fluorescent orange;
"EFFECTIVE XX/XX/XX" C 2K; "Seminary Street" C 2K; "CLOSED" C 2K; "AT KEITH CREEK" C 2K;

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_recon_detour.dgn
PLOT DRIVER: s_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm
184-001322

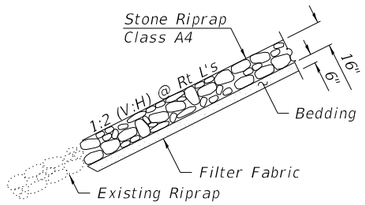
USER NAME = whood	DESIGNED - JCH	REVISED -
	DRAWN - TAY	REVISED -
PLOT SCALE =	CHECKED - JRM	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

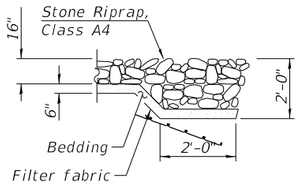
SEMINARY STREET
DETOUR PLAN

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. | TO STA.

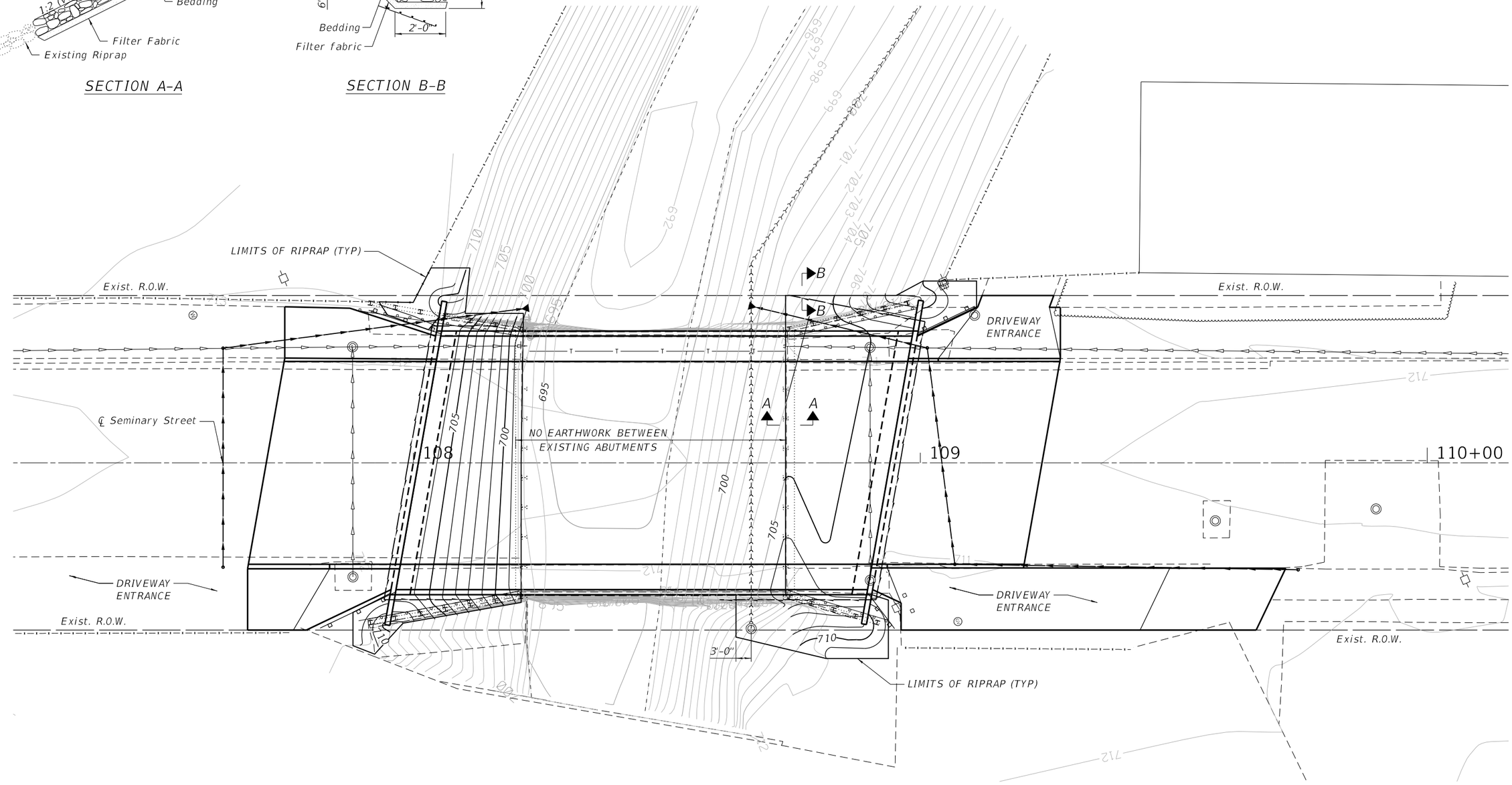
F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	10
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

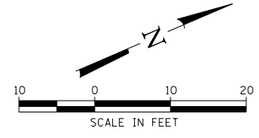


SECTION A-A



SECTION B-B





HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Grading01.dgn
PLOT DRIVER: i_pdf_bw.pltcfg
PEN TABLE: plotlabl.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED GRADING PLAN
STRUCTURE NO. 101-6074

SCALE: 1"=10' | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	11
		CONTRACT NO. 85703		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Benchmark:

BM1: Found railroad spike in utility pole on west side of Seminary Street, 285 feet north of the center of Keith Creek bridge.
Elevation: 713.65 (NAVD 88)

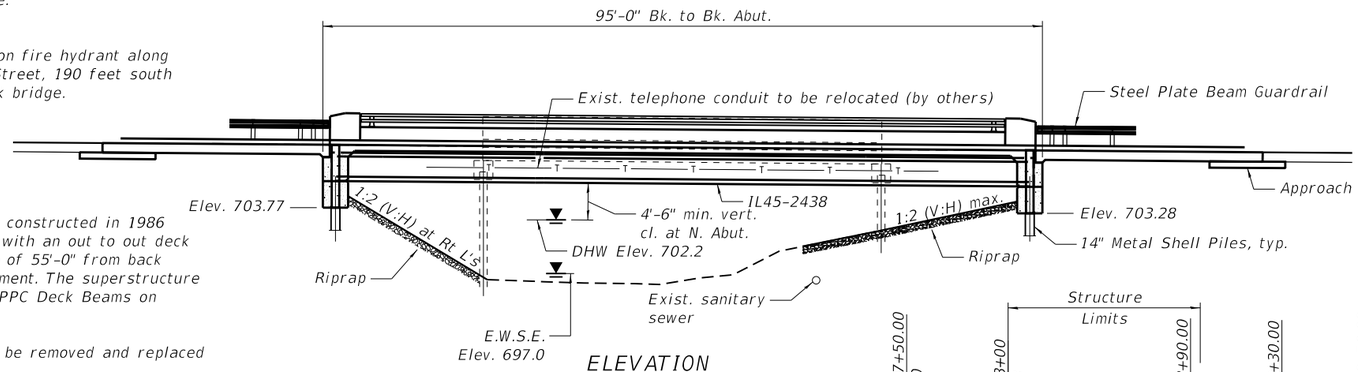
BM2: Northwest flange bolt on fire hydrant along the east side of Seminary Street, 190 feet south of the center of Keith Creek bridge.
Elevation: 715.40

Existing Structure:

Structure No. 101-6072 was constructed in 1986 and is a single span bridge with an out to out deck width of 52'-0" and a length of 55'-0" from back of abutment to back of abutment. The superstructure is constructed of 21" x 48" PPC Deck Beams on closed pile abutments.

The existing structure is to be removed and replaced using closure and detour.

Salvage: None



ELEVATION

KEITH CREEK
BUILT 202_ BY
CITY OF ROCKFORD
SEC. 19-00630-00-BR
STA. 108+47.50
STRUCTURE NO. 101-6074
LOADING HL-93

NAME PLATE
See Std. 515001

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure & Appr. Slab)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (ASTM A36)

PRECAST UNITS

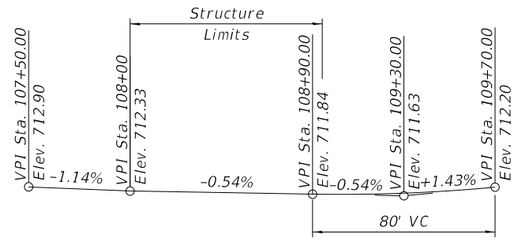
f'c = 8,500 psi
f'ci = 6,500 psi
fpu = 270,000 psi (0.6" Low Relaxation Strands)
fpbt = 202,300 psi (0.6" Low Relaxation Strands)

LOADING HL-93

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

SEISMIC DATA

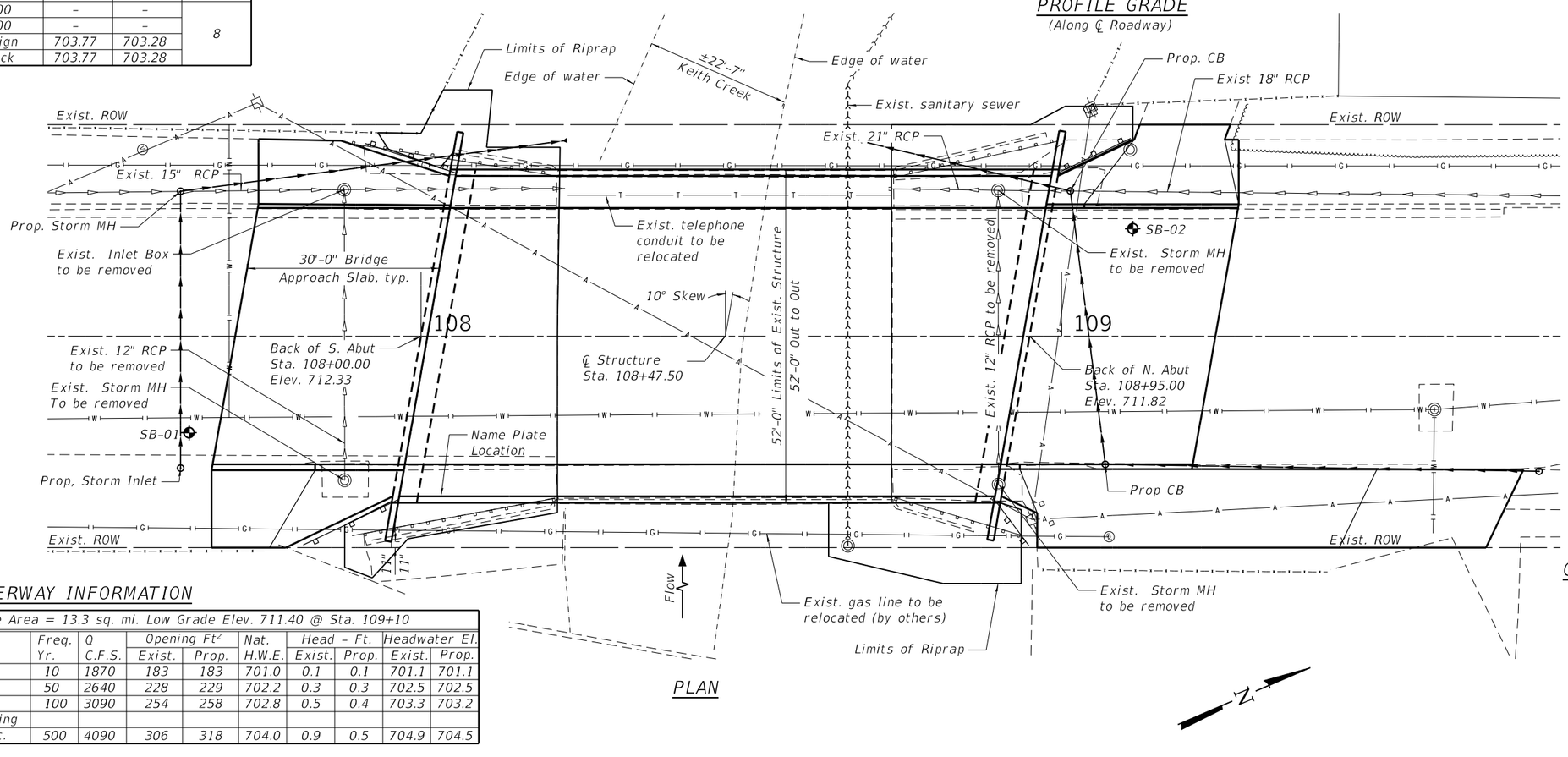
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.078
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.132
Soil Site Class = D



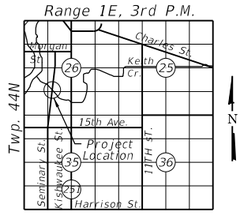
PROFILE GRADE
(Along ℄ Roadway)

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.) S. Abut.	N. Abut.	Item 113
Q100	-	-	8
Q200	-	-	
Design	703.77	703.28	
Check	703.77	703.28	



PLAN



LOCATION SKETCH

LICENSED STRUCTURAL ENGINEER
STEVEN L. SCHWARZ
081-6011
CARY, ILLINOIS
STATE OF ILLINOIS

To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO LRFD Bridge Design Specifications".

10/20/2020
Structural Engineer — Expires: 11/30/2022
HR Green, Inc.

WATERWAY INFORMATION

Drainage Area = 13.3 sq. mi. Low Grade Elev. 711.40 @ Sta. 109+10

Flood	Freq. Yr.	Q C.F.S.	Opening Ft² Exist.	Opening Ft² Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1870	183	183	701.0	0.1	0.1	701.1	701.1
Design	50	2640	228	229	702.2	0.3	0.3	702.5	702.5
Base	100	3090	254	258	702.8	0.5	0.4	703.3	703.2
Overtopping									
Max. Calc.	500	4090	306	318	704.0	0.9	0.5	704.9	704.5

GENERAL PLAN AND ELEVATION
SEMINARY STREET
OVER KEITH CREEK
SECTION 19-00630-00-BR
WINNEBAGO COUNTY
STATION 108+47.50
STRUCTURE NO. 101-6074

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: i80909_Str_GPE.dgn
PLOT DRIVER: IL_pdf_bwptrfg
PEN TABLE: plotTable.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 101-6074
SHEET NO. S-1 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	12
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES:

Reinforcement bars designated (E) shall be epoxy coated.

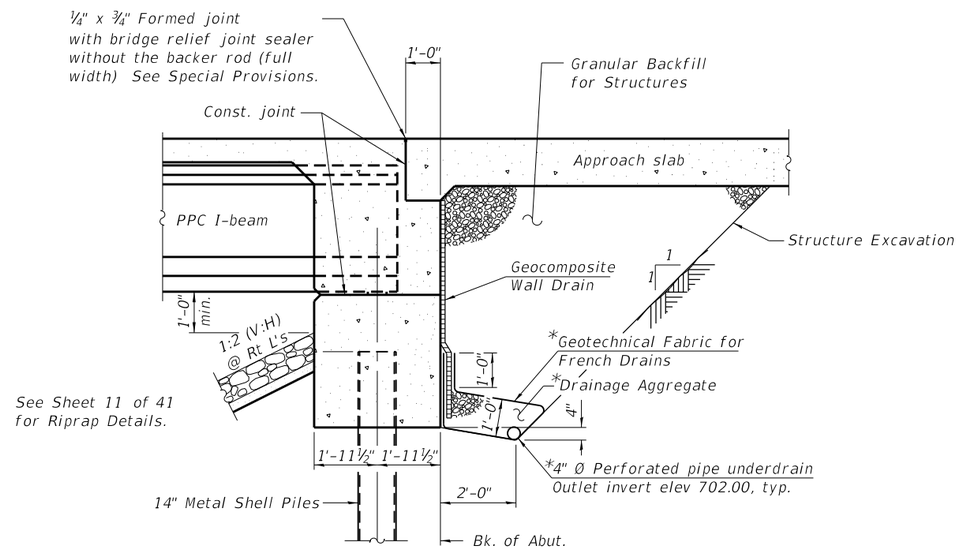
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yds.		145	145
Stone Riprap, Class A4	Sq. Yds.		340	340
Filter Fabric	Sq. Yds.		355	355
Earth Excavation	Cu. Yds.		640	640
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yds.		370	370
Concrete Structures	Cu. Yds.		88.3	88.3
Concrete Superstructures	Cu. Yds.	218.5		218.5
Concrete Superstructures (Approach Slab)	Cu. Yds.	115.8		115.8
Bridge Deck Grooving	Sq. Yds.	646		646
Protective Coat	Sq. Yds.	970		970
Furnishing and Erecting Precast Prestressed Concrete Beams, IL45-2438	Foot	553.5		553.5
Reinforcement Bars, Epoxy Coated	Pounds	80090	13490	93,580
Aluminum Railing, Type L	Foot	170		170
Furnishing Metal Shell Piles 14x0.312	Foot		562	562
Driving Piles	Foot		562	562
Test Pile Metal Shell	Each		1	1
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yds.		80	80
Pipe Underdrains for Structures, 4"	Foot		204	204
Pile Shoes	Each		12	12
Non-Special Waste Disposal	Cu. Yds.		1010	1010

INDEX OF SHEETS

S-1	General Plan and Elevation
S-2	General Data
S-3	Top of Deck Elevations
S-4	Top of Deck Elevations
S-5	Top of Approach Slab Elevations
S-6	Superstructure
S-7	Diaphragm Details
S-8	Superstructure Details
S-9	Superstructure Details
S-10	Bridge Approach Slab Details
S-11	Bridge Approach Slab Details
S-12	Bridge Railing Details
S-13	Beam Framing Plan
S-14	Beam Framing Plan
S-15	IL45N Beam
S-16	IL45N Beam Details
S-17	North Abutment
S-18	South Abutment
S-19	HP Pile Details
S-20	Soil Boring Logs
S-21	Soil Boring Logs



SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. ℄'s)

* Included in the cost of Pipe Underdrains for Structure, 4" (See Special Provisions)

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Gen0.dgn
PLOT DRIVER: IL_pdf_bw.pltcfg
PEN TABLE: plotlabels.tbl

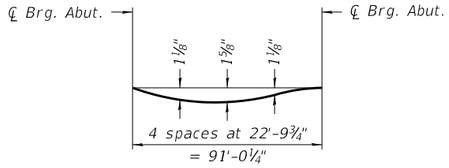
HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 101-6074
SHEET NO. S-2 OF S-21 SHEETS

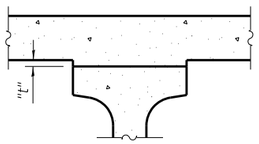
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	13
		CONTRACT NO. 85703		
	ILLINOIS	FED. AID PROJECT		



DEAD LOAD DEFLECTION DIAGRAM

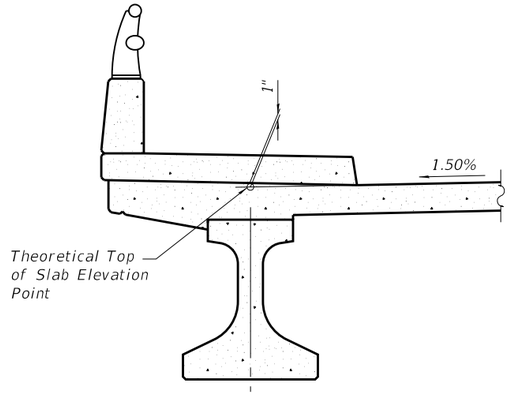
(Includes weight of concrete only.)

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

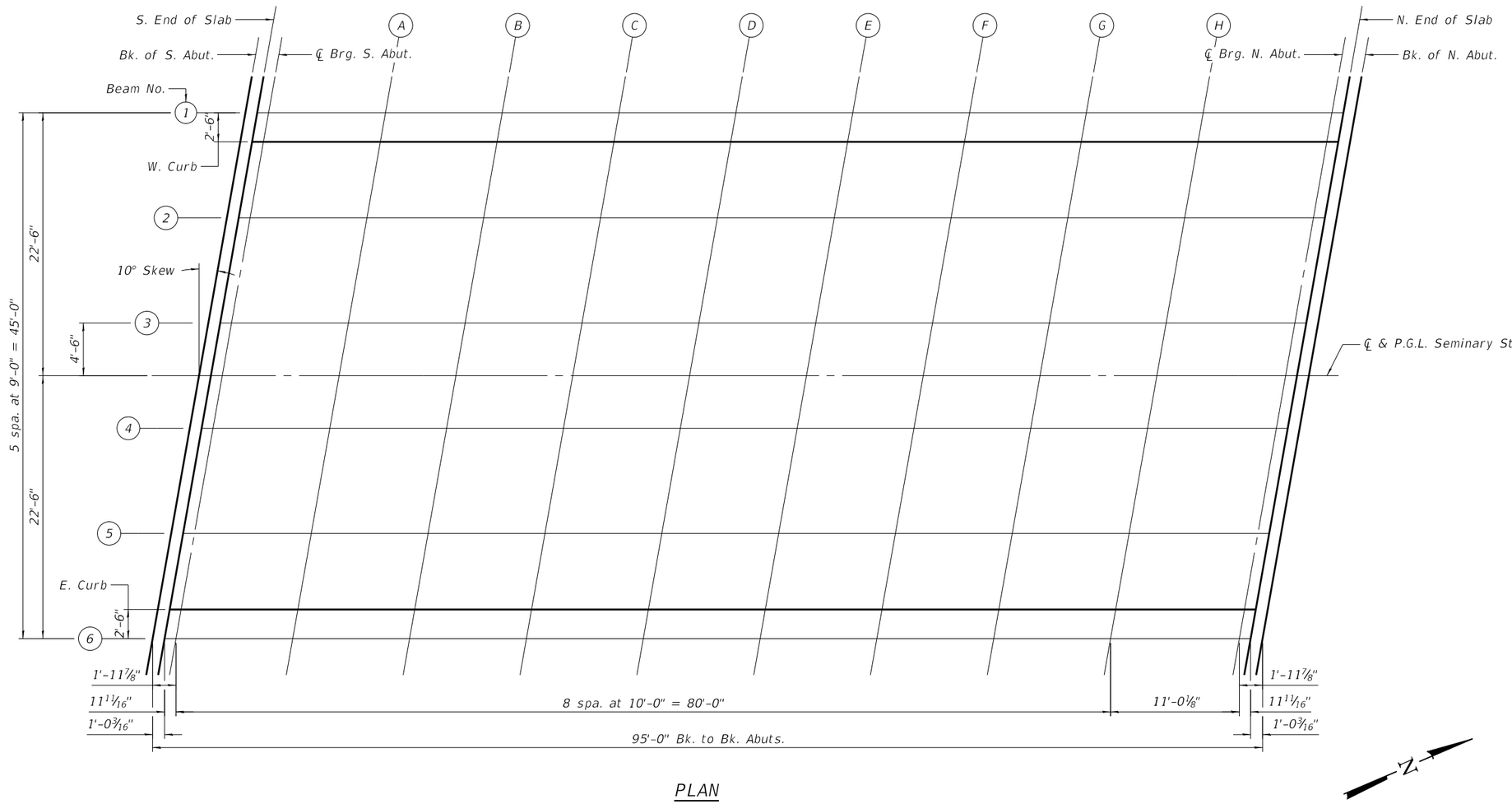


To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



SECTION THRU SIDEWALK



PLAN

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Top of Slab0.dgn
PLOT DRIVER: IL_pdf_bwplt.cfg
PEN TABLE: parkable.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS
STRUCTURE NO. 101-6074
SHEET NO. S-3 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	14
		CONTRACT NO. 85703		
	ILLINOIS	FED. AID PROJECT		

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+04.99	-22.50	711.96	711.96
℄ S. Bearing	108+05.96	-22.50	711.96	711.96
A	108+15.96	-22.50	711.90	711.96
B	108+25.96	-22.50	711.85	711.94
C	108+35.96	-22.50	711.79	711.90
D	108+45.96	-22.50	711.74	711.85
E	108+55.96	-22.50	711.69	711.80
F	108+65.96	-22.50	711.63	711.74
G	108+75.96	-22.50	711.58	711.67
H	108+85.96	-22.50	711.52	711.58
℄ N. Bearing	108+96.98	-22.50	711.47	711.47
N. End of Slab	108+97.96	-22.50	711.47	711.47

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+03.40	-13.50	712.11	712.11
℄ S. Bearing	108+04.37	-13.50	712.10	712.10
A	108+14.37	-13.50	712.05	712.10
B	108+24.37	-13.50	711.99	712.08
C	108+34.37	-13.50	711.94	712.04
D	108+44.37	-13.50	711.88	711.99
E	108+54.37	-13.50	711.83	711.94
F	108+64.37	-13.50	711.78	711.88
G	108+74.37	-13.50	711.72	711.81
H	108+84.37	-13.50	711.67	711.73
℄ N. Bearing	108+95.40	-13.50	711.61	711.61
N. End of Slab	108+96.37	-13.50	711.60	711.60

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+01.81	-4.50	712.25	712.25
℄ S. Bearing	108+02.79	-4.50	712.24	712.24
A	108+12.79	-4.50	712.19	712.24
B	108+22.79	-4.50	712.14	712.22
C	108+32.79	-4.50	712.08	712.18
D	108+42.79	-4.50	712.03	712.14
E	108+52.79	-4.50	711.97	712.08
F	108+62.79	-4.50	711.92	712.02
G	108+72.79	-4.50	711.87	711.95
H	108+82.79	-4.50	711.81	711.87
℄ N. Bearing	108+93.81	-4.50	711.75	711.75
N. End of Slab	108+94.78	-4.50	711.75	711.75

℄ ROADWAY (PG)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+01.02	0.00	712.32	712.32
℄ S. Bearing	108+01.99	0.00	712.32	712.32
A	108+11.99	0.00	712.26	712.31
B	108+21.99	0.00	712.21	712.29
C	108+31.99	0.00	712.15	712.26
D	108+41.99	0.00	712.10	712.21
E	108+51.99	0.00	712.05	712.16
F	108+61.99	0.00	711.99	712.10
G	108+71.99	0.00	711.94	712.03
H	108+81.99	0.00	711.88	711.94
℄ N. Bearing	108+93.01	0.00	711.82	711.82
N. End of Slab	108+93.98	0.00	711.82	711.82

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+00.23	4.50	712.26	712.26
℄ S. Bearing	108+01.20	4.50	712.25	712.25
A	108+11.20	4.50	712.20	712.25
B	108+21.20	4.50	712.14	712.23
C	108+31.20	4.50	712.09	712.19
D	108+41.20	4.50	712.04	712.15
E	108+51.20	4.50	711.98	712.09
F	108+61.20	4.50	711.93	712.03
G	108+71.20	4.50	711.87	711.96
H	108+81.20	4.50	711.82	711.88
℄ N. Bearing	108+92.22	4.50	711.76	711.76
N. End of Slab	108+93.19	4.50	711.76	711.76

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	107+98.64	13.50	712.14	712.14
℄ S. Bearing	107+99.61	13.50	712.13	712.13
A	108+09.61	13.50	712.07	712.13
B	108+19.61	13.50	712.02	712.10
C	108+29.61	13.50	711.96	712.07
D	108+39.61	13.50	711.91	712.02
E	108+49.61	13.50	711.86	711.97
F	108+59.61	13.50	711.80	711.91
G	108+69.61	13.50	711.75	711.84
H	108+79.61	13.50	711.69	711.75
℄ N. Bearing	108+90.63	13.50	711.63	711.63
N. End of Slab	108+91.61	13.50	711.63	711.63

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	107+97.05	22.50	712.03	712.03
℄ S. Bearing	107+98.03	22.50	712.02	712.02
A	108+08.03	22.50	711.95	712.00
B	108+18.03	22.50	711.89	711.98
C	108+28.03	22.50	711.84	711.94
D	108+38.03	22.50	711.78	711.89
E	108+48.03	22.50	711.73	711.84
F	108+58.03	22.50	711.68	711.78
G	108+68.03	22.50	711.62	711.71
H	108+78.03	22.50	711.57	711.62
℄ N. Bearing	108+89.05	22.50	711.51	711.51
N. End of Slab	108+90.02	22.50	711.50	711.50

WEST CURB

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	108+04.55	-20.00	712.00	712.00
℄ S. Bearing	108+05.52	-20.00	712.00	712.00
A	108+15.52	-20.00	711.94	712.00
B	108+25.52	-20.00	711.89	711.98
C	108+35.52	-20.00	711.83	711.94
D	108+45.52	-20.00	711.78	711.89
E	108+55.52	-20.00	711.73	711.84
F	108+65.52	-20.00	711.67	711.78
G	108+75.52	-20.00	711.62	711.71
H	108+85.52	-20.00	711.56	711.62
℄ N. Bearing	108+96.54	-20.00	711.51	711.51
N. End of Slab	108+97.51	-20.00	711.51	711.51

EAST CURB

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
S. End of Slab	107+98.90	20.00	712.06	712.06
℄ S. Bearing	107+99.88	20.00	712.05	712.05
A	108+09.88	20.00	711.98	712.03
B	108+19.88	20.00	711.93	712.01
C	108+29.88	20.00	711.87	711.98
D	108+39.88	20.00	711.82	711.93
E	108+49.88	20.00	711.76	711.88
F	108+59.88	20.00	711.71	711.81
G	108+69.88	20.00	711.66	711.75
H	108+79.88	20.00	711.60	711.66
℄ N. Bearing	108+90.90	20.00	711.54	711.54
N. End of Slab	108+91.87	20.00	711.54	711.54

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Top of Slab02.dgn
PLOT DRIVER: IL_pdf_bw.ptcfg
PEN TABLE: plotbw4.tbl

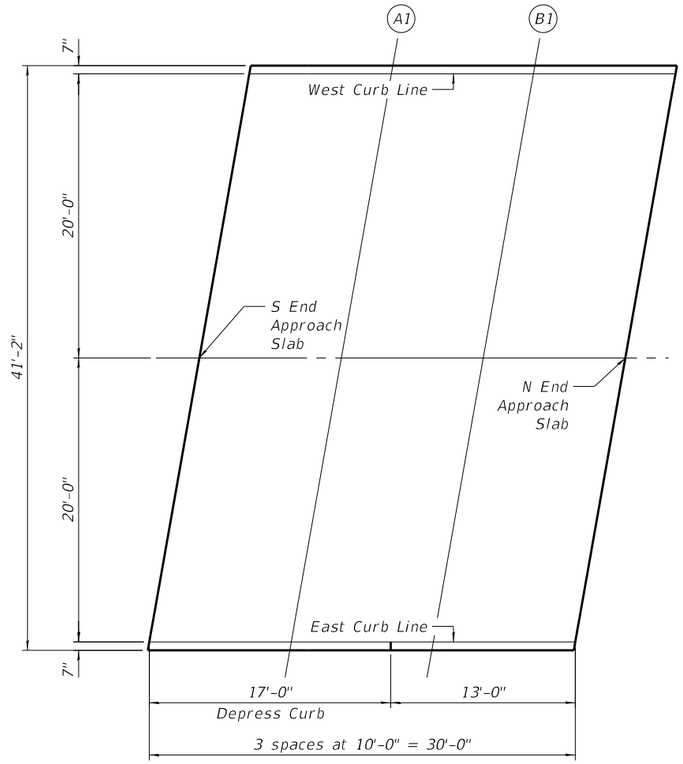
HRGreen
HRGreen.com
Illinois Professional Design Firm
184-001322

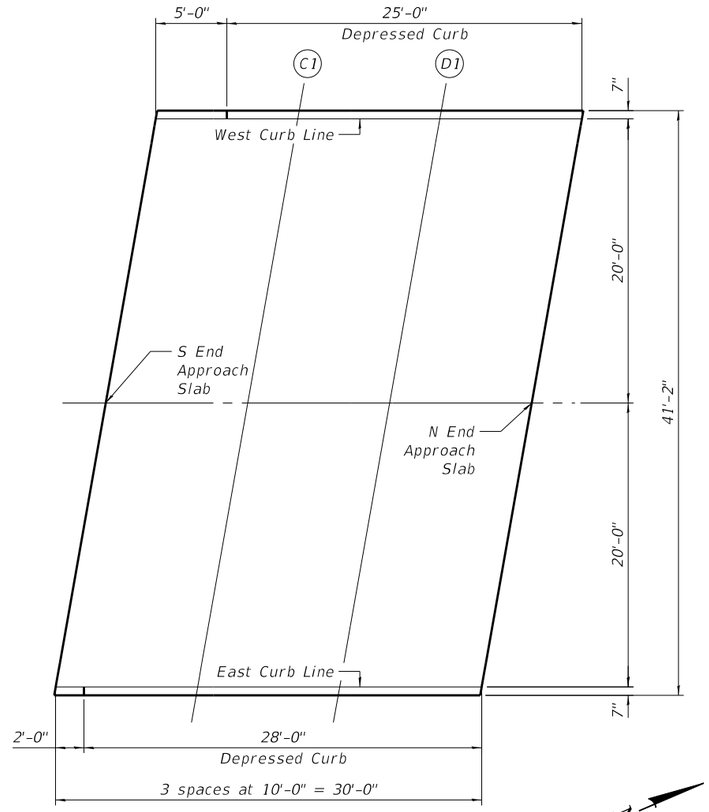
USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS
STRUCTURE NO. 101-6074
SHEET NO. S-4 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	15
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			





PLAN

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
South End of South Approach	107+74.55	-20.00	712.32
A1	107+84.55	-20.00	712.21
B1	107+94.55	-20.00	712.09
North End of South Approach	108+04.55	-20.00	712.00
South End of North Approach	108+97.51	-20.00	711.50
C1	109+07.51	-20.00	711.49
D1	109+17.51	-20.00	711.49
North End of North Approach	109+17.51	-20.00	711.49

℄ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations
South End of South Approach	107+71.02	0.00	712.66
A1	107+81.02	0.00	712.55
B1	107+91.02	0.00	712.43
North End of South Approach	108+01.02	0.00	712.31
South End of North Approach	108+93.98	0.00	711.82
C1	109+03.98	0.00	711.79
D1	109+13.98	0.00	711.78
North End of North Approach	109+23.98	0.00	711.80

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
South End of South Approach	107+67.49	20.00	712.40
A1	107+77.49	20.00	712.29
B1	107+87.49	20.00	712.17
North End of South Approach	107+97.49	20.00	712.06
South End of North Approach	108+90.45	20.00	711.54
C1	109+00.45	20.00	711.50
D1	109+10.45	20.00	711.48
North End of North Approach	109+20.45	20.00	711.49

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Top of Approach0.dgn
PLOT DRIVER: IL_pdf_Dwg.pltcfg
PEN TABLES: plotTable.tbl

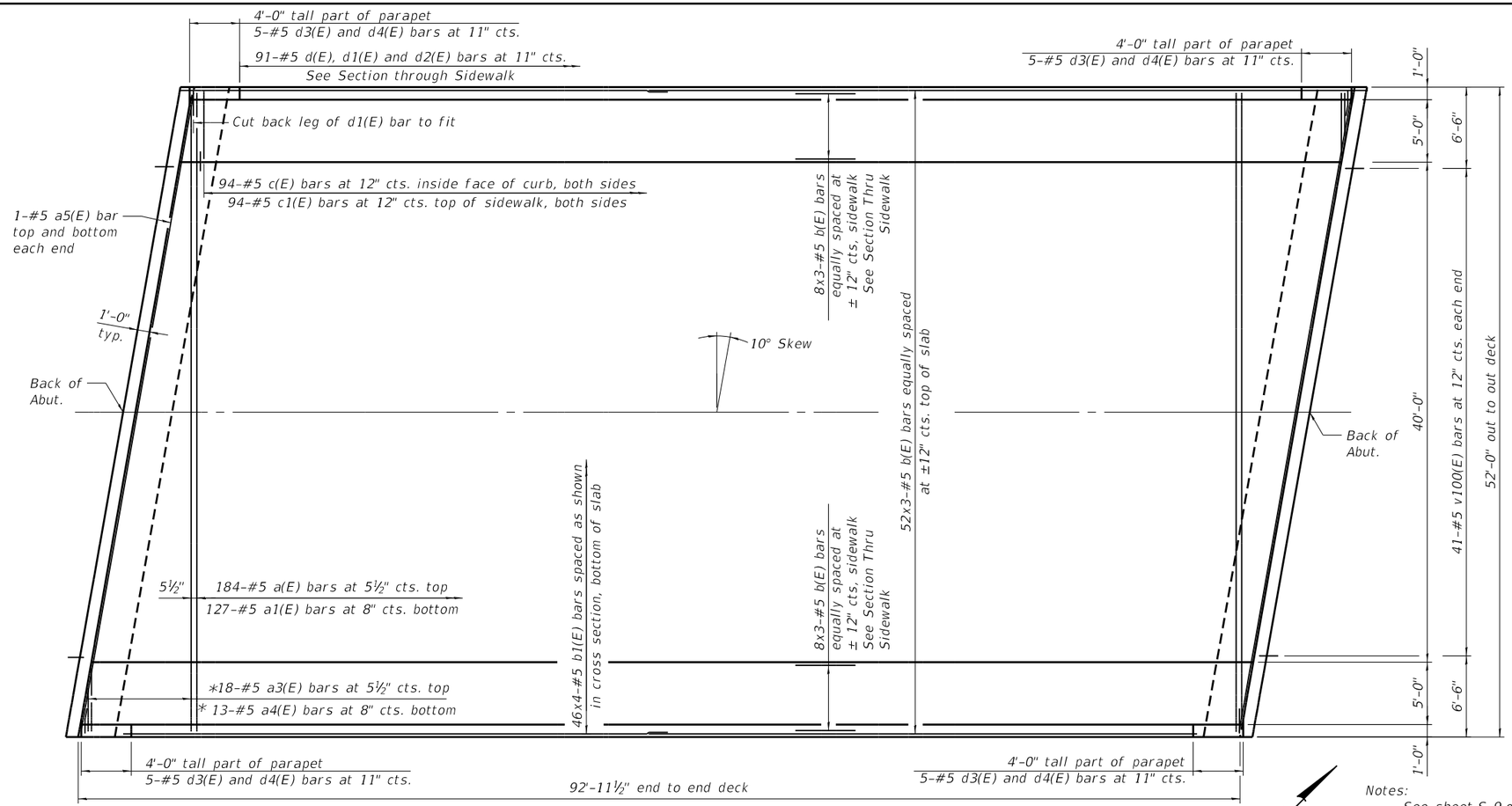
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 101-6074
SHEET NO. S-5 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	16
		CONTRACT NO. 85703		
		ILLINOIS	FED. AID PROJECT	



PLAN

MINIMUM BAR LAP

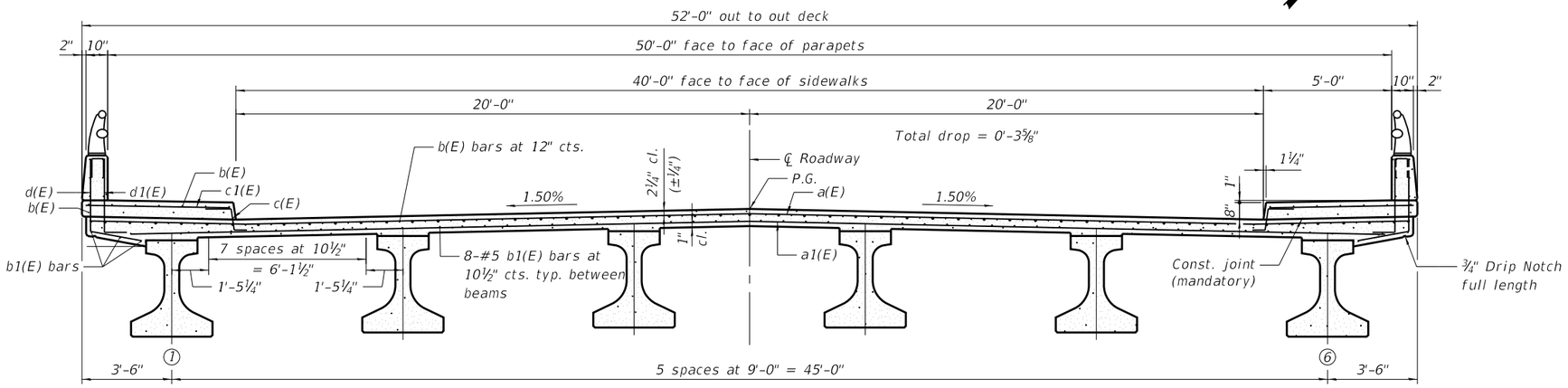
#5 bar = 3'-6"

* See Field Cutting Diagram on sheet S-9 of S-21.

Notes:

See sheet S-9 of S-21 for superstructure details and Bill of Material.

Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION

(Looking North)

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Superstructure.dgn
PLOT DRIVER: IL_pdf_bwptcfg
PEN TABLE: plotlabel.tbl

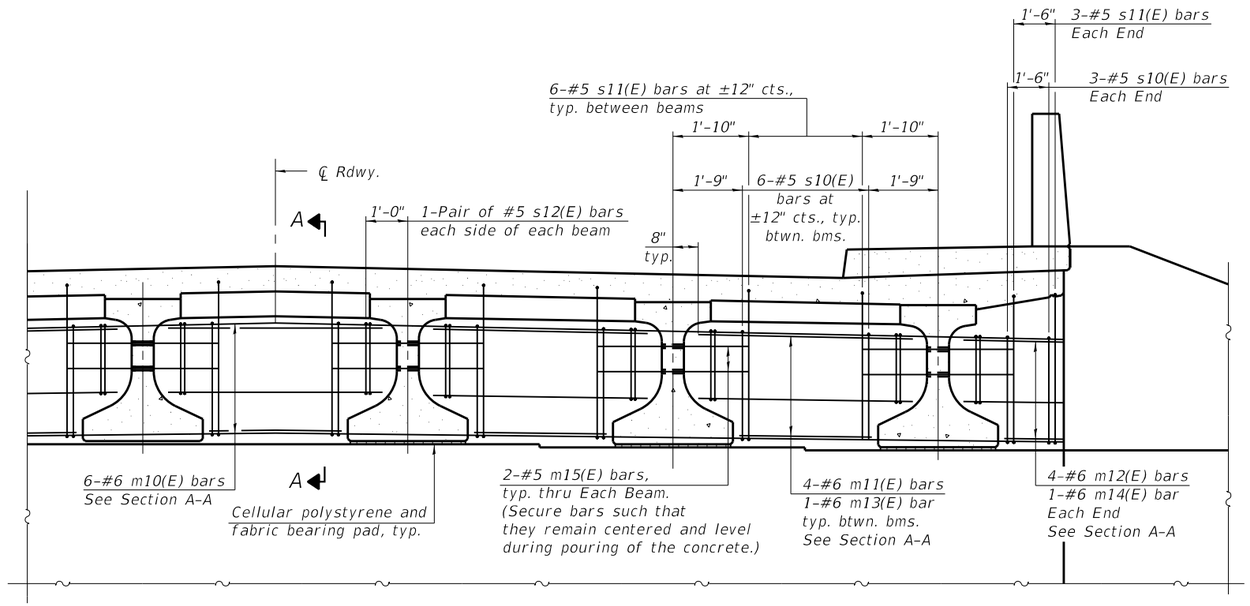
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 101-6074
SHEET NO. S-6 OF S-21 SHEETS

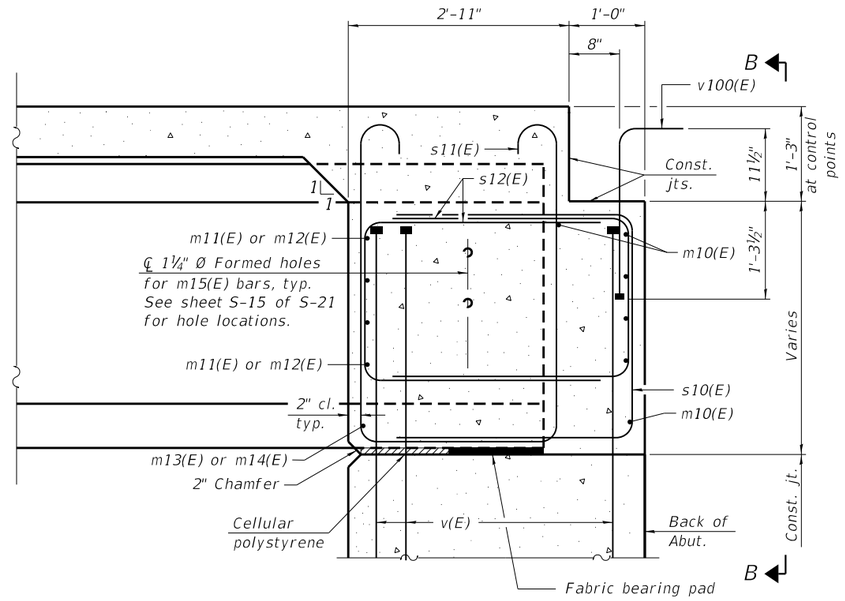
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	17
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			



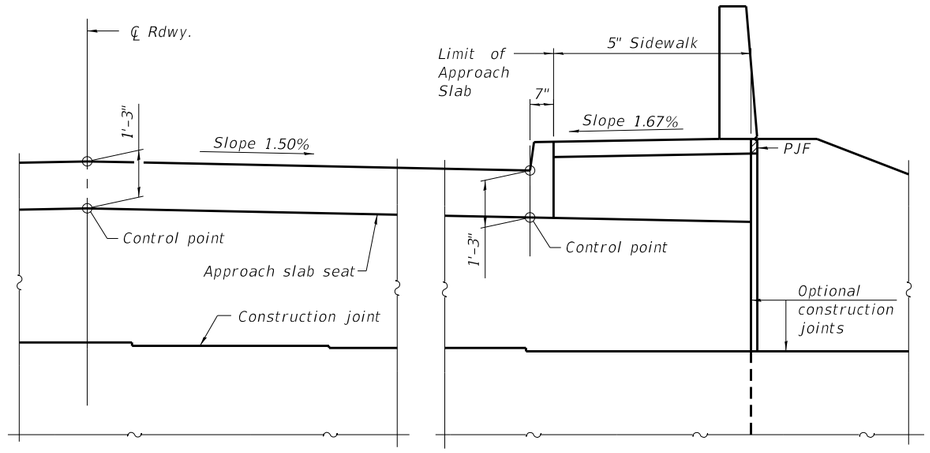
DIAPHRAGM AT FRONT OF ABUTMENT

MINIMUM BAR LAP

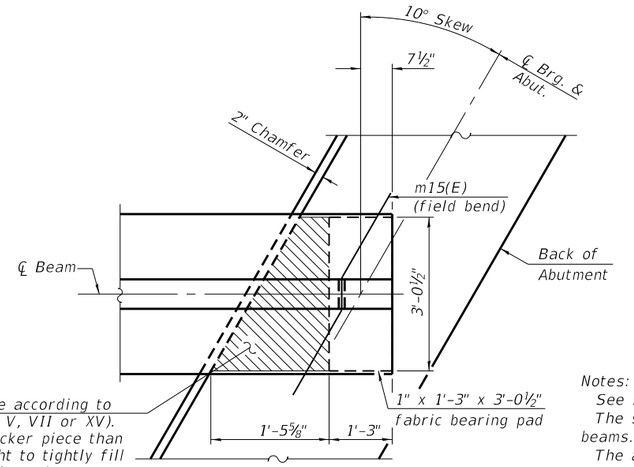
#5 bar = 3'-6"
#6 bar = 4'-0"



SECTION A-A
(at Rt. L's)



VIEW B-B
(Back of Abutment)



Cellular polystyrene according to ASTM C 578 (Types V, VII or XV). Provide slightly thicker piece than measured gap height to tightly fill the hatched area shown between abutment cap and bottom of beam.

PLAN AT ABUTMENT
(Showing bottom flange of beam)

Notes:
See sheet S-8 and S-9 of S-21 for superstructure details and Bill of Material.
The s10(E), s11(E) and s12(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
The approach slab seat shall have a constant slope determined from the control points shown.
Cost of cellular polystyrene is included with Concrete Superstructure.

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Diaphragm.dgn
PLOT DRIVER: IL_pdf_bw_ptb.cfg
PEN TABLE: ptb_label.tbl

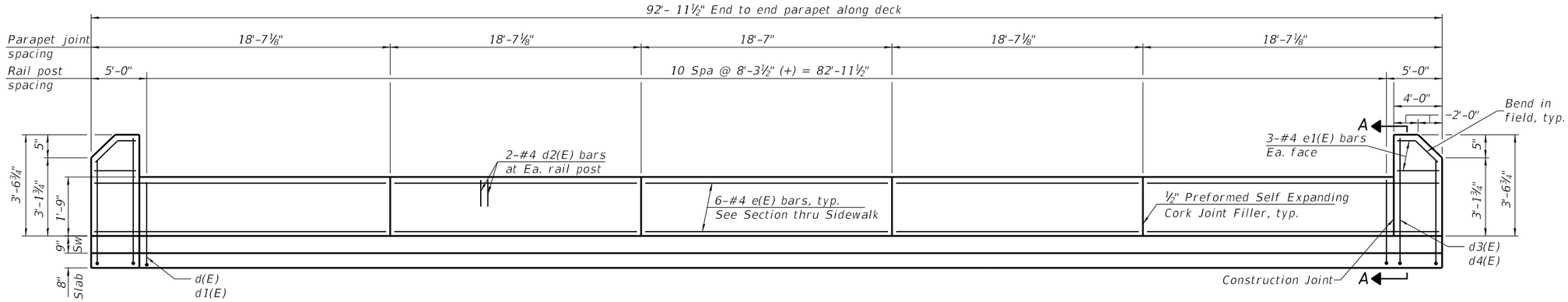
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-7 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	18
		CONTRACT NO. 85703		
	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF PARAPET

* Trim bars to fit

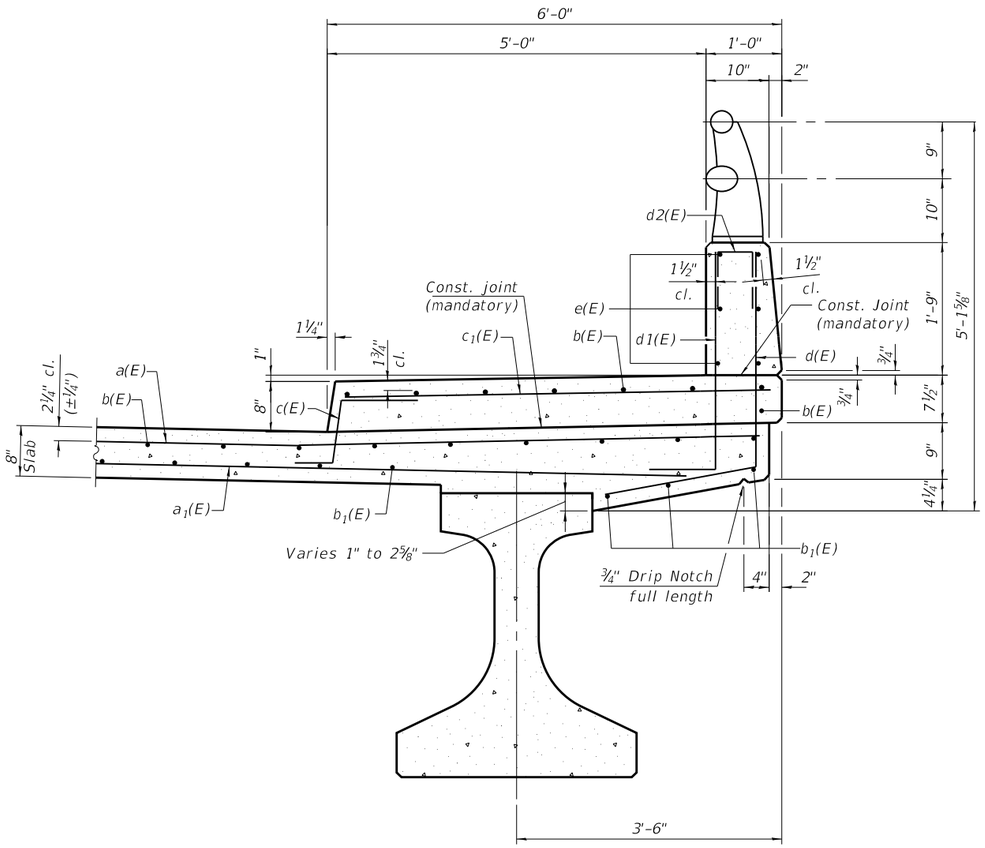
See sheet S-9 of S-21 for Parapet Joint Details

MINIMUM BAR LAP

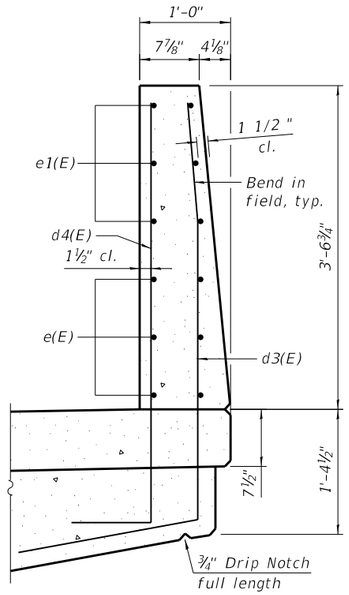
(Parapet)

#4 bar = 2'-0"

#8 bar = 5'-2"

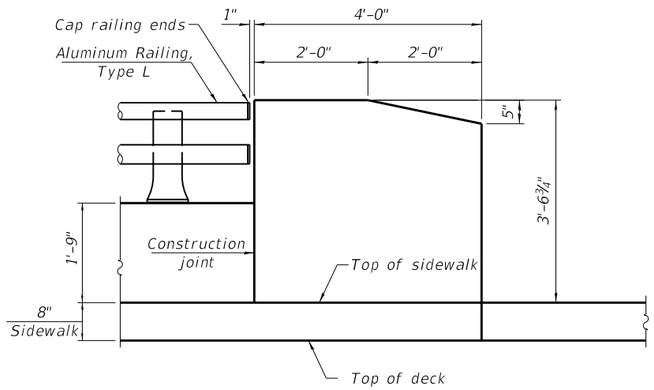


SECTION THRU SIDEWALK



SECTION A-A

See Section Thru Sidewalk for additional details



INSIDE ELEVATION OF PARAPET AND CURB

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Superstructure Details0.dgn
PLOT DRIVER: L_pdf_bw.pltcfg
PEN TABLE: plotbw.tbl

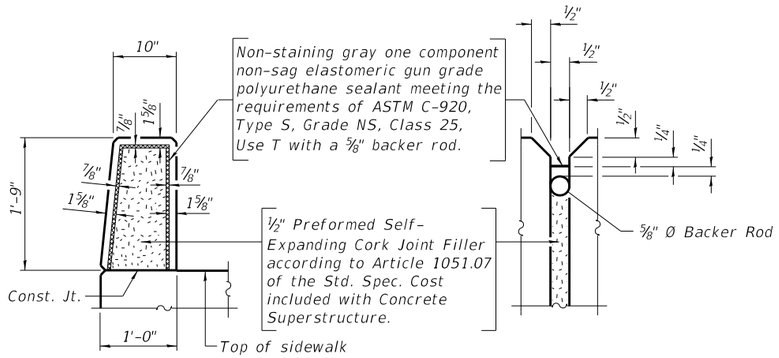
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-8 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	19
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			



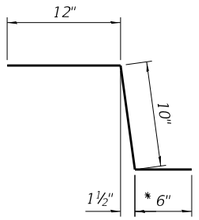
PARAPET JOINT DETAILS

Notes:
The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

SUPERSTRUCTURE BILL OF MATERIAL

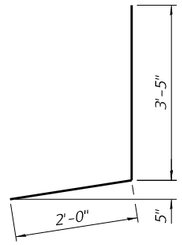
Bar	No.	Size	Length	Shape
a(E)	184	#5	51'- 4"	
a1(E)	127	#5	51'- 4"	
a3(E)	18	#5	50'- 2"	
a4(E)	13	#5	51'- 4"	
a5(E)	4	#5	52'- 1"	
b(E)	204	#5	33'- 4"	
b1(E)	184	#5	25'- 11"	
c(E)	188	#5	2'- 4"	
c1(E)	188	#5	5'- 9"	
d(E)	182	#5	5'- 5"	
d1(E)	182	#5	4'- 4"	
d2(E)	226	#5	2'- 0"	
d3(E)	20	#5	7'- 6"	
d4(E)	20	#5	6'- 1"	
e(E)	60	#4	8'- 3"	
e1(E)	24	#4	3'- 8"	
m10(E)	12	#6	28'- 1"	
m11(E)	40	#6	7'- 9"	
m12(E)	16	#6	2'- 6"	
m13(E)	10	#6	5'- 7"	
m14(E)	4	#6	1'- 5"	
m15(E)	24	#5	4'- 0"	
s10(E)	72	#5	9'- 8"	
s11(E)	72	#5	12'- 1"	
s12(E)	48	#5	8'- 2"	
v100(E)	82	#5	3'- 1"	
Concrete Superstructures		Cu Yd	218.5	
Reinforcement Bars, Epoxy Coated		Pound	38,690	

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

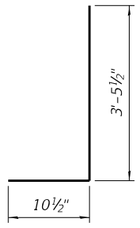


BAR c(E)

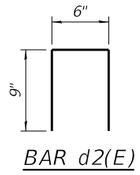
* In lieu of bottom leg, c(E) bars may be cored and set according to Article 509.06 of the Standard Specifications. Cored holes shall be roughned or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 6".



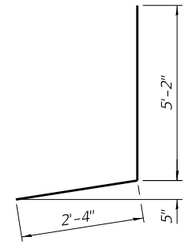
BAR d(E)



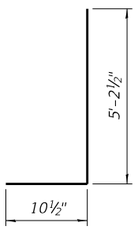
BAR d1(E)



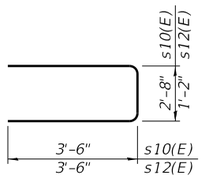
BAR d2(E)



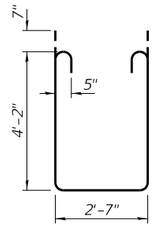
BAR d3(E)



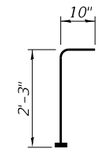
BAR d4(E)



BARS s10(E) & s12(E)

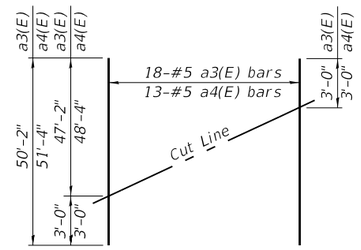


BAR s11(E)



BAR v100(E)

(Headed)



FIELD CUTTING DIAGRAM

Order a3(E) and a4(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_51r_Superstructure Details02.dgn
PLOT DRIVER: IL.pdf_bw.pltcfg
PEN TABLE: plotbw.tbl

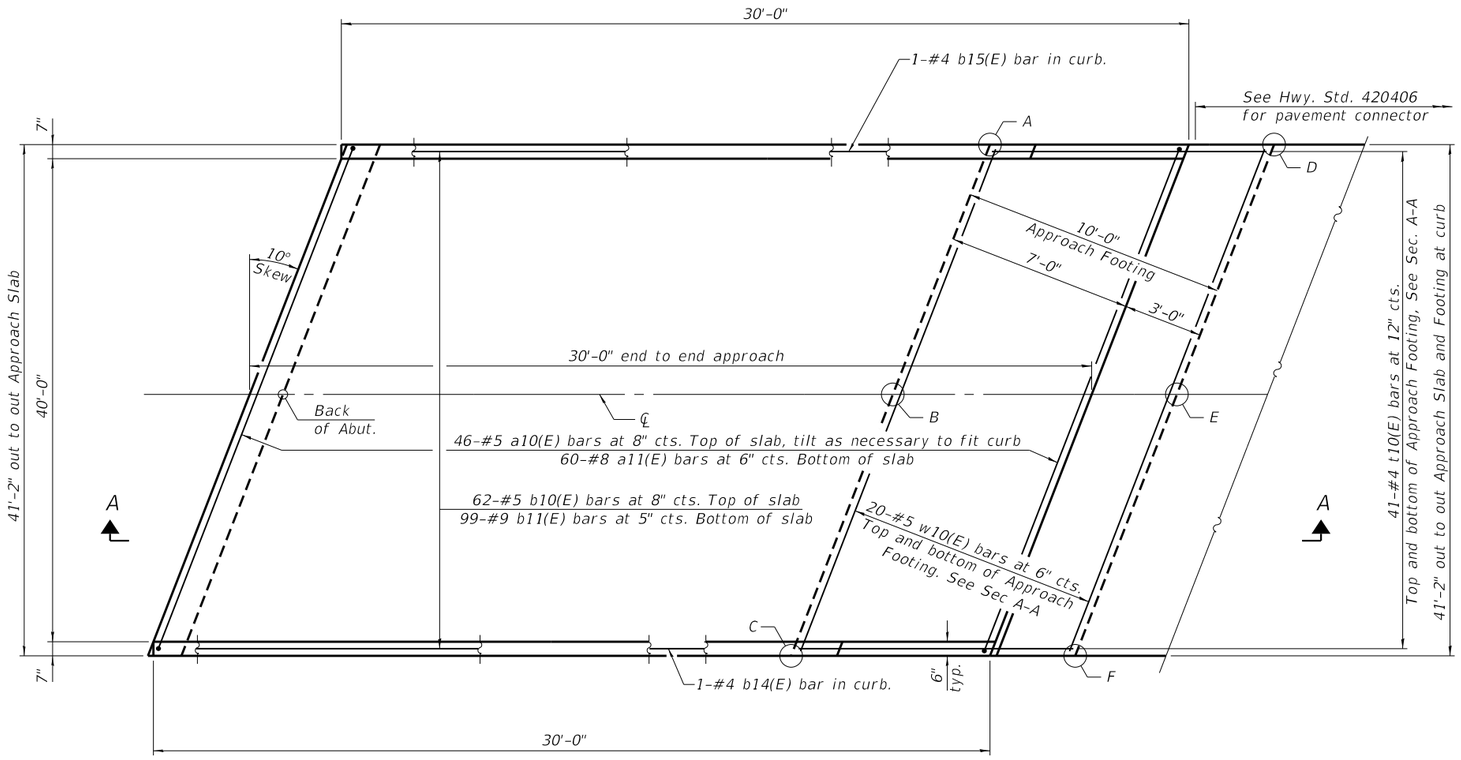
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-9 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	20
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			



PLAN

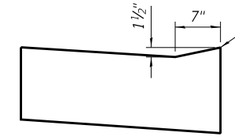
North side shown,
South side similar

N

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

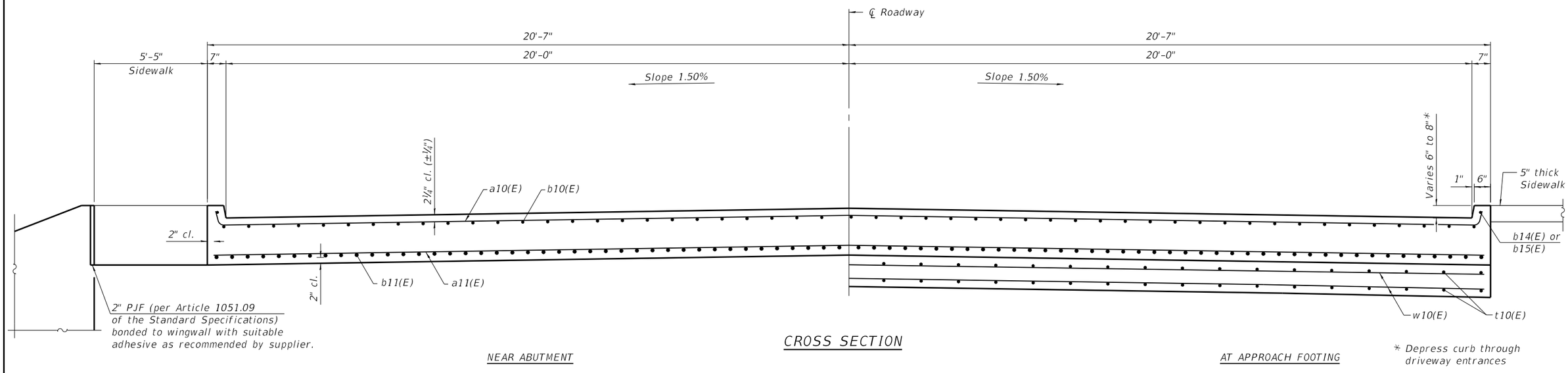
	South Approach		North Approach	
Point	Top	Bottom	Top	Bottom
A	711.03	710.20	710.26	709.43
B	711.30	710.47	710.56	709.73
C	710.94	710.11	710.24	709.41
D	711.18	710.35	710.32	709.49
E	711.45	710.62	710.60	709.77
F	710.09	710.26	710.27	709.44

Note: Cut b10(E), b14(E), or b15(E) bar to fit for depressed curb



Note: See sheet S-5 of S-21 for location of depressed curb

DETAIL AT DEPRESSED CURB



NEAR ABUTMENT

CROSS SECTION

AT APPROACH FOOTING

* Depress curb through driveway entrances

(Sheet 1 of 2)

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Approach Slab01.dgn
PLOT DRIVER: I:\pdf.bxl\tcfg
PEN TABLE: pltables.tbl

HRGreen.com
Ills Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

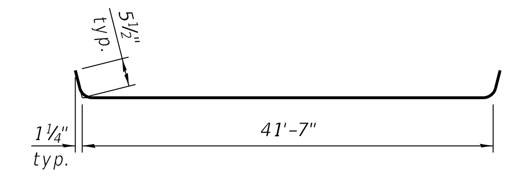
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-10 OF S-21 SHEETS

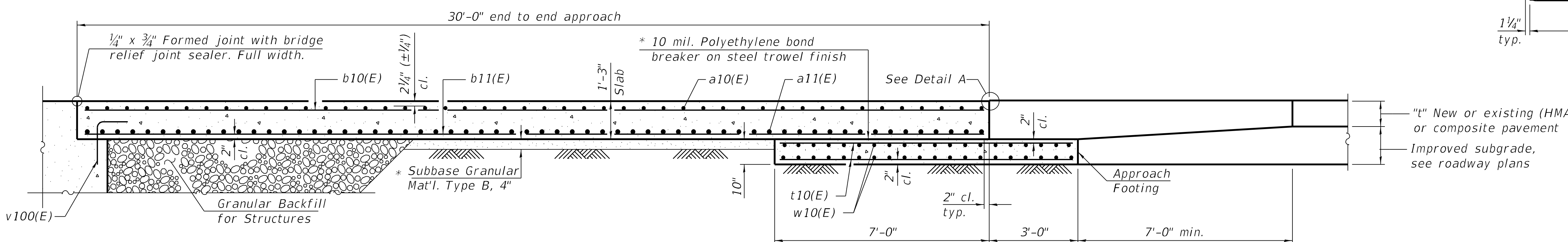
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	21
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

Notes:
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet S-2 of S-21.
Cut bar at depressed curb. See sheet S-5 of S-21 for location.

INSIDE ELEVATION OF CURB

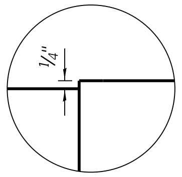


BAR a10(E)



SECTION A-A

NOTE
"t" = Thickness of Pavement



DETAIL A

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	92	#5	42'- 6"	
a11(E)	120	#8	41'- 11"	
b10(E)	124	#5	29'- 8"	
b11 (E)	198	#9	29'- 8"	
b14 (E)	2	#4	29'- 8"	
b15 (E)	2	#4	29'- 8"	
t10 (E)	164	#4	10'- 0"	
w10 (E)	80	#5	22'- 2"	
Reinforcement Bars, Epoxy Coated			Pound	44,350
Concrete Structures			Cu Yd	25.4
Concrete Superstructures (Approach Slab)			Cu Yd	115.8

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Approach Slab02.dgn
PLOT DRIVER: IL_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

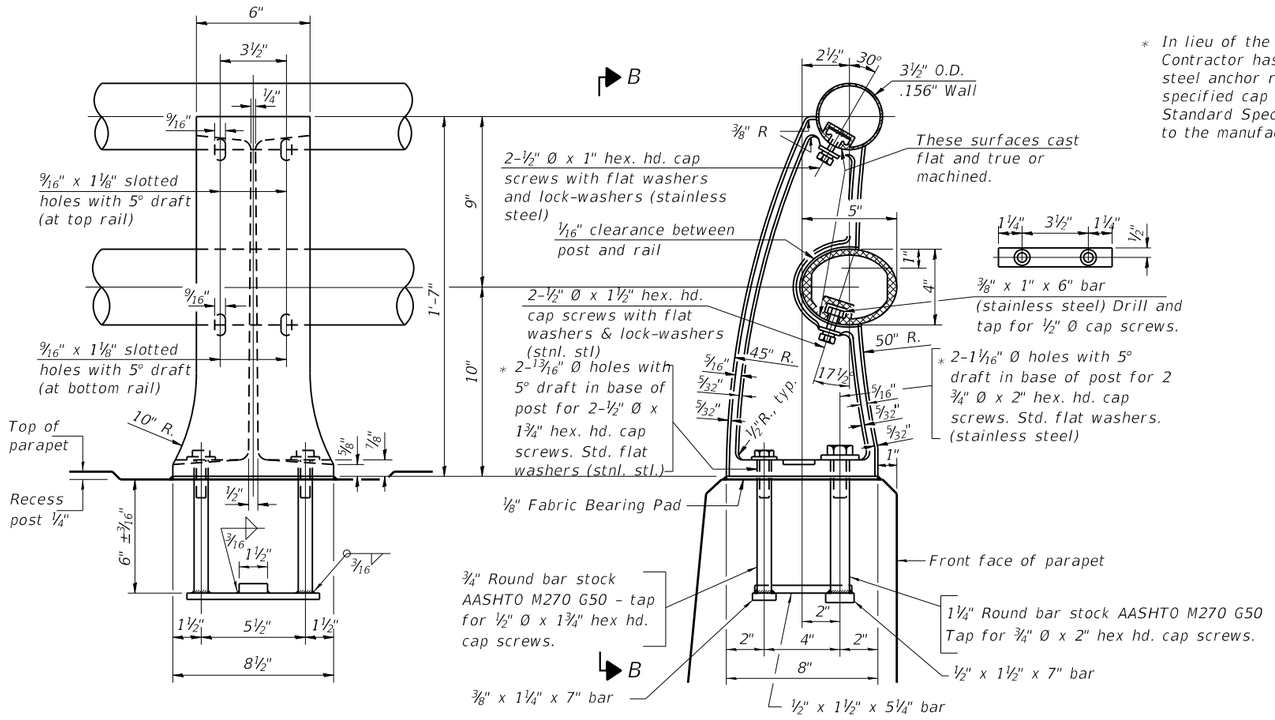
HRGreen.com
Illinois Professional Design Firm # 184-001322
HRGreen.

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-11 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	22
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		

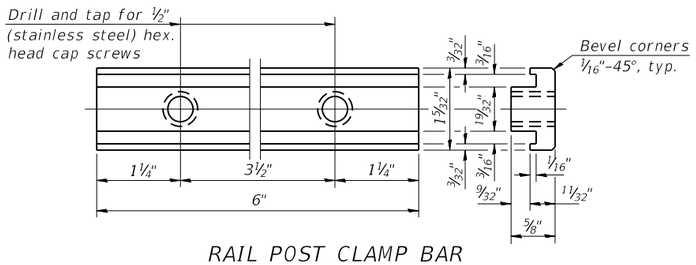


* *In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.*

VIEW B-B

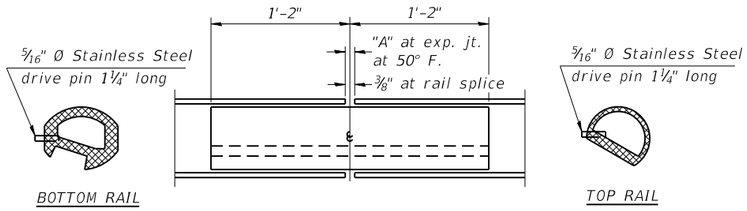
SECTION A-A

RAIL POST DETAILS



RAIL POST CLAMP BAR

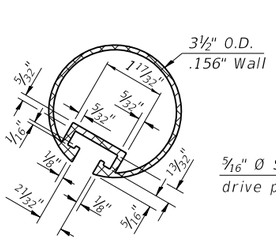
For Top Rail



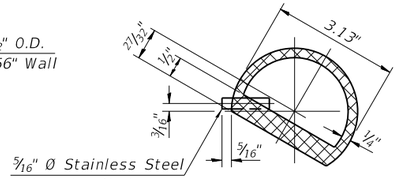
RAIL SPLICE

T	"A"
≤ 4"	2½"
> 4" ≤ 6½"	3¾"
> 6½" ≤ 9"	5"
> 9" ≤ 13"	7"

T = Total movement at expansion joint as shown on the design plans.

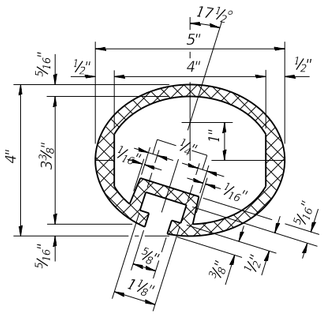


SECTION THRU TOP RAIL

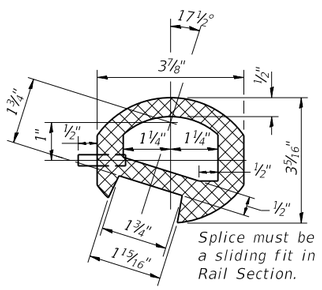


SECTION THRU SPLICE

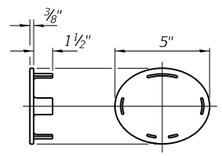
For Top Rail



SEC. THRU ELLIPTICAL RAIL SECTION

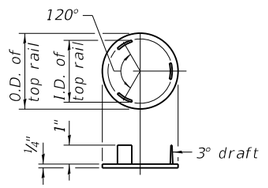


SEC. THRU SPLICE



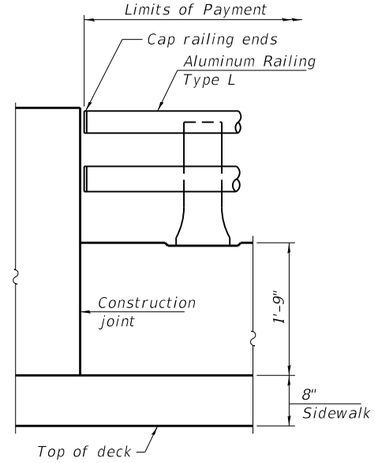
CAST END CAP

For bottom rail
DRIVE FIT TYPE



CAST END CAP

For top rail



RAIL END TREATMENT FOR TYPE 5

Notes:

All Posts shall be normal to parapet.

All joints in rail shall be spliced per detail.

All exposed rail ends shall be capped per detail.

Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.

See sheet S-8 of S-21 for rail post spacing.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	170

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Railing.dgn
PLOT DRIVER: IL_pdf_bwplotfg
PEN TABLE: plotmodel.tbl

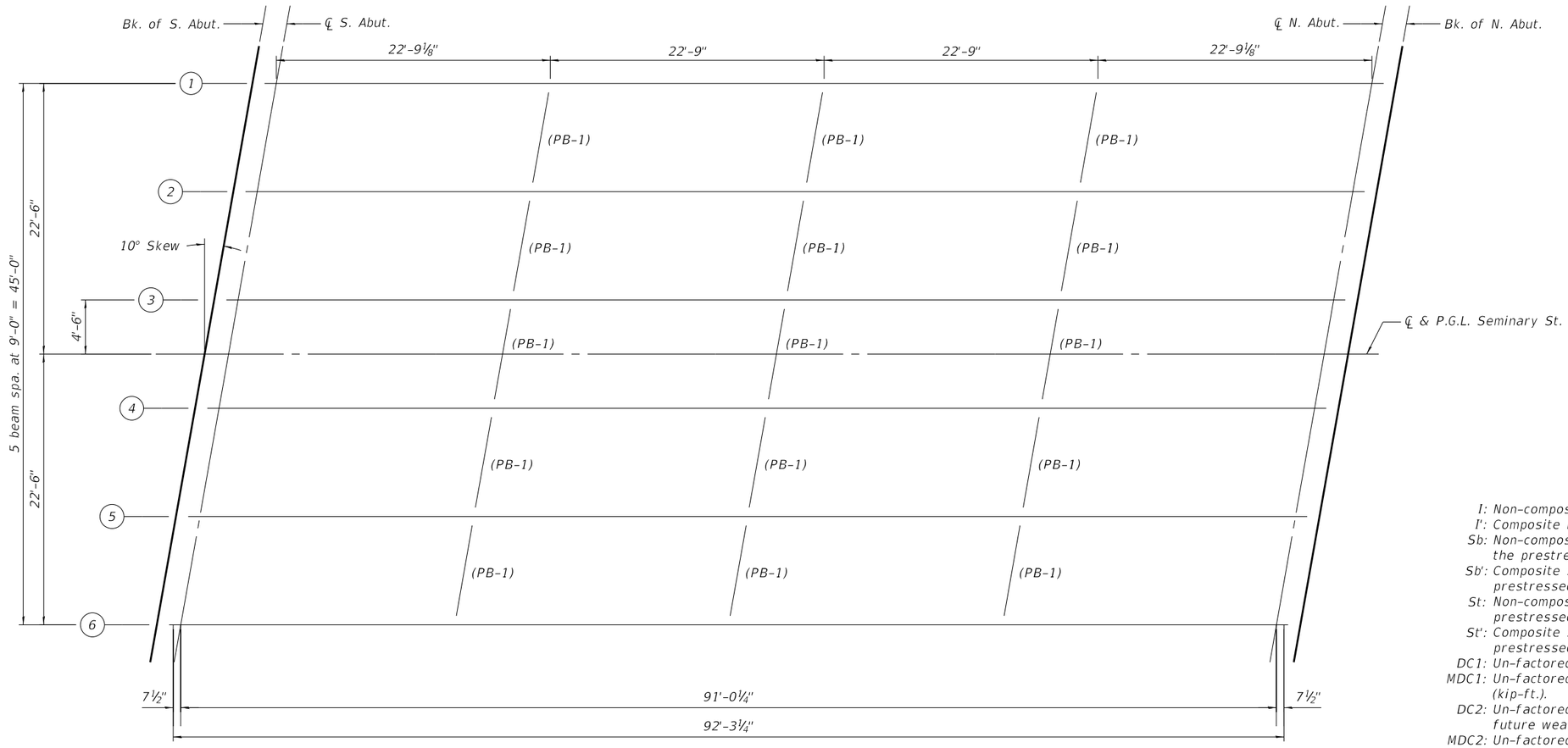
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE RAILING DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-12 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	23
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		



FRAMING PLAN

All beams are IL45-2438

N

INTERIOR BEAM MOMENT TABLE		0.5 Sp. 1
I	(in^4)	182,623
I'	(in^4)	531,813
Sb	(in^3)	10,045.2
Sb'	(in^3)	16,434.3
St	(in^3)	6,809.2
St'	(in^3)	25,766.1
DC1	(k/')	1.761
MDC1	('k)	1,823.4
DC2	(k/')	0.327
MDC2	('k)	338.3
DW	(k/')	.0333
MDW	('k)	345.2
$M^{\frac{1}{2}}_{L+IM}$	('k)	1,807.8
PED	('k)	0.125
M PED	('k)	129.5

INTERIOR BEAM REACTION TABLE		Abut.
RDC1	(k)	80.0
RDC2	(k)	14.9
RDW	(k)	15.2
$R^{\frac{1}{2}}_{L+IM}$	(k)	46.85
RPED	(k)	5.68
RTotal	(k)	162.63

I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
Sb: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
Sb': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
St: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
St': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft).
$M^{\frac{1}{2}}_{L+IM}$: Un-factored live load moment plus dynamic load allowance
PED: (impact) (kip-ft.).
MPED: Un-factored pedestrian load (kips-ft).
Un-factored pedestrian load moment (kip-ft).

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_Str_Frame0.dgn
PLOT DRIVER: IL_pdf_bw_ptcfg
PEN TABLES: ptotable.tbl

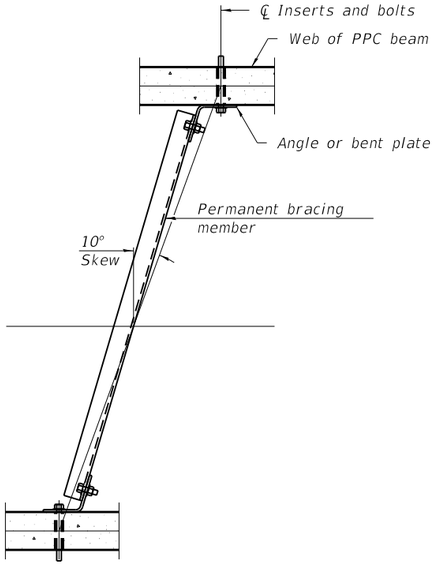
HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

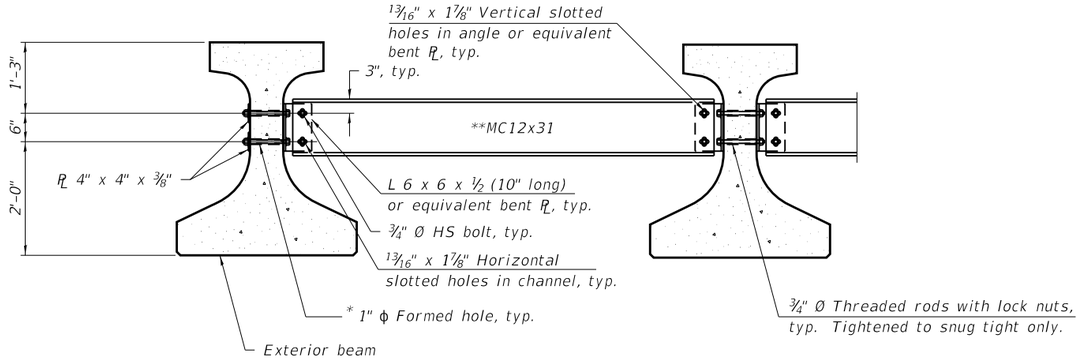
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM FRAMING PLAN
STRUCTURE NO. 101-6074
SHEET NO. S-13 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	24
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			



PLAN



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

Two hardened washers are required for each set of oversized holes.

All holes shall be 15/16" Ø unless otherwise noted.

5/16" x 3" x 3" plate washers are required over all slotted holes.

All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.

* Fabricator shall locate to miss strands within permissible tolerances.

** Alternate MC12x35 channels are permitted to facilitate material acquisition.

PERMANENT BRACING DETAILS (PB-1)

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Frame02.dgn
PLOT DRIVER: IL_pdf_bw.pltcfg
PEN TABLE: plotmodel.tbl

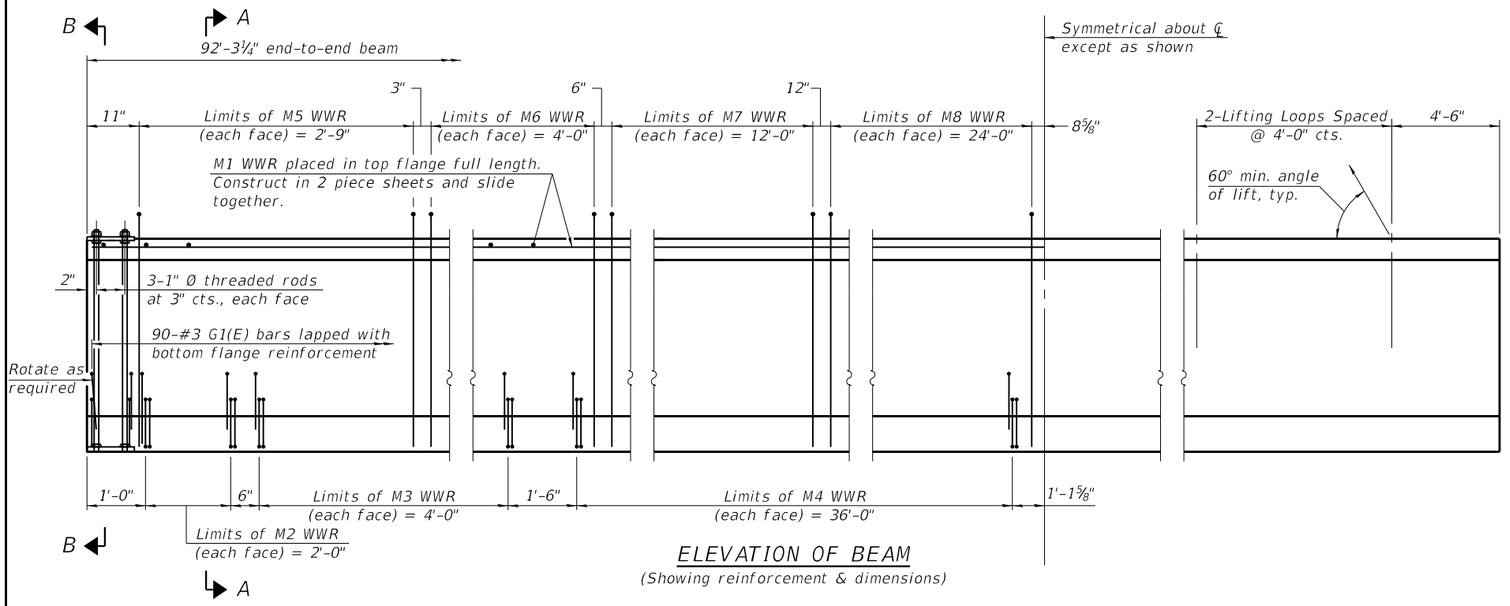
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

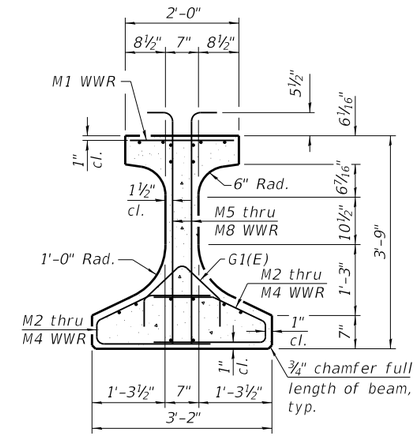
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM FRAMING PLAN
STRUCTURE NO. 101-6074
SHEET NO. S-14 OF S-21 SHEETS

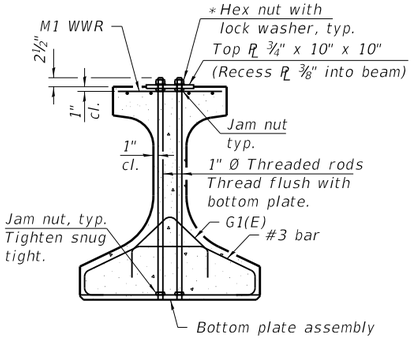
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	25
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			



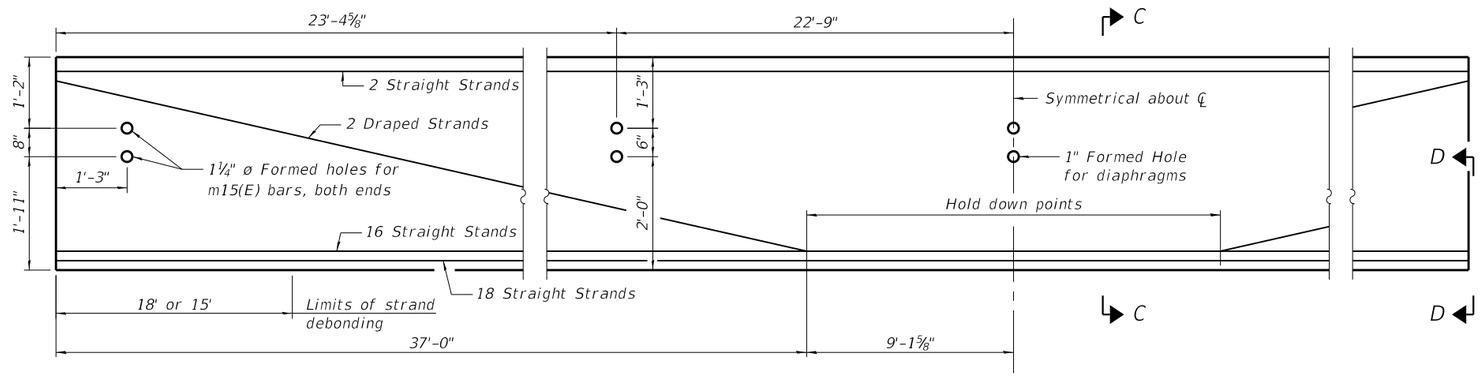
ELEVATION OF BEAM
(Showing reinforcement & dimensions)



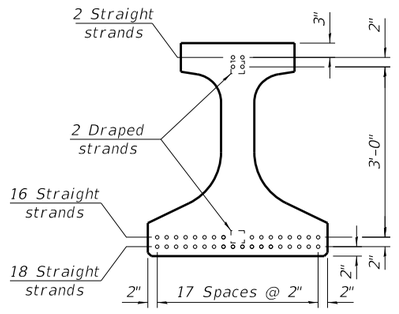
SECTION A-A



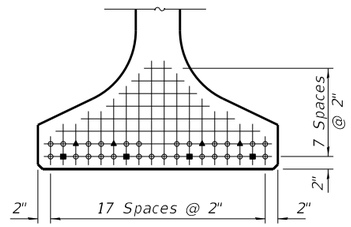
SECTION B-B
*Only tighten sufficiently to compress lock washers



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C
(38-0.6" Ø 270 ksi strands)



VIEW D-D

- ○ Fully bonded strand
- ▲ Partially debonded strand (18')
- ■ Partially debonded strand (15')

Strand Pattern: 36B-2T-8db-2d

Note:
See sheet S-16 of S-21 for additional details and Bill of Material.

IL45-2438 2-25-2019

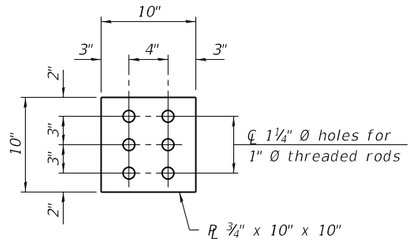
HRGreen.com ■Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED - SLS	REVISED -
		DRAWN - WJH	REVISED -
	PLOT SCALE =	CHECKED - SLS	REVISED -
	PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

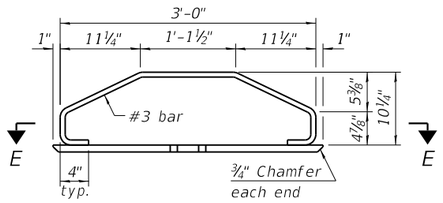
IL45N BEAM
STRUCTURE NO. 101-6074
SHEET NO. S-15 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	26
		CONTRACT NO. 85703		
	ILLINOIS	FED. AID PROJECT		

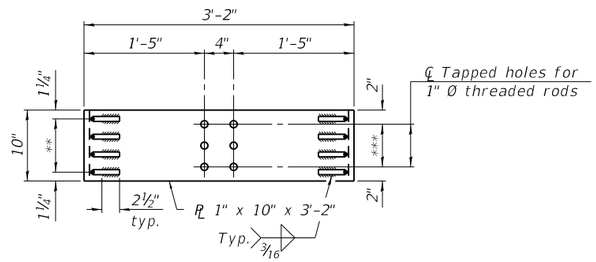
HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_Str_Beam Details01.dgn
PLOT DRIVER: IL_pdf.tbl.pltcfg
PEN TABLE: plotlabel.tbl



PLAN – TOP PLATE



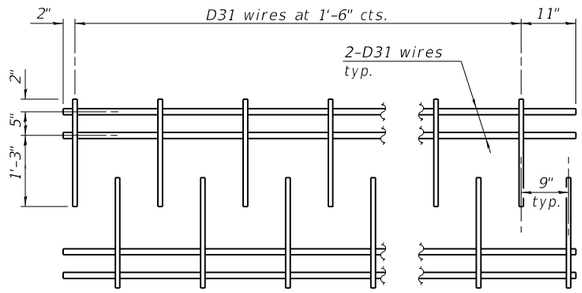
ELEVATION – BOTTOM PLATE ASSEMBLY



SECTION E-E

** 3 Spaces at 2½" = 7½"

*** 2 Spaces at 3" = 6"



M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").

NOTES

Inserts for ¾" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be ½" and the nominal cross sectional area shall be 0.153 sq. in.

The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.

A minimum 2½" Ø lifting pin shall be used to engage the lifting loops during handling.

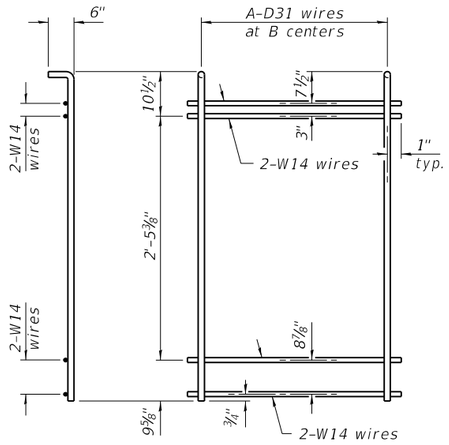
Bend the extended strands inward on the fascia beams to maintain 1½" clearance inside the pier diaphragm.

The top and bottom plates shall be AASHTO M270 Grade 50.

The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



M5 THRU M8 WWR DETAIL

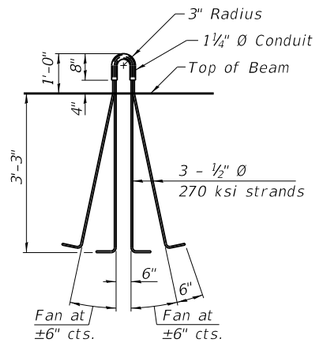
(See Table of Dimensions)

TABLE OF DIMENSIONS

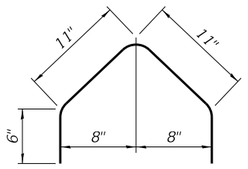
(WWR tables are based on Grade 60.)

SPAN 1

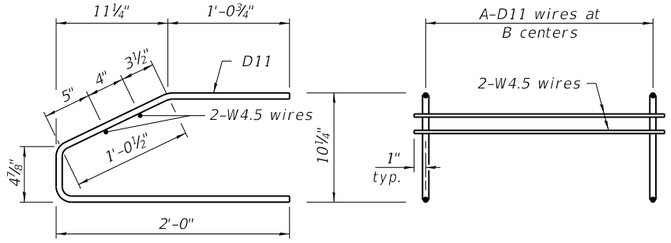
WWR	A	B
M2	9	3"
M3	9	6"
M4	25	1'-6"
M5	12	3"
M6	9	6"
M7	13	1'-0"
M8	13	2'-0"



LIFTING LOOP DETAIL



BAR G1(E)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL45N	Ft.	553.5

IL45-2438D 2-25-2019

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Beam_Details02.dgn
PLOT DRIVER: ILCAD_bw.pltcfg
PEN TABLE: plotTable.tbl

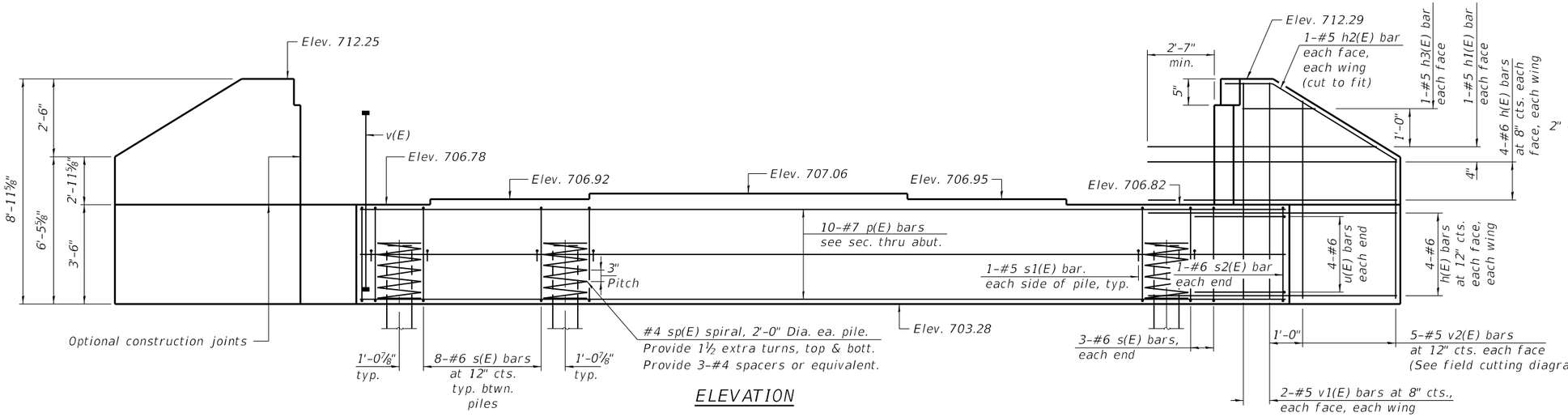
HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

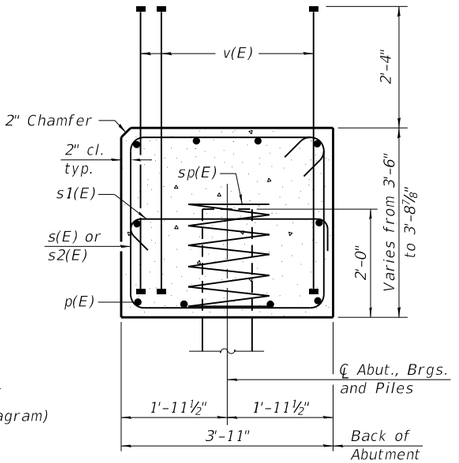
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL45N BEAM
STRUCTURE NO. 101-6074
SHEET NO. S-16 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	27
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

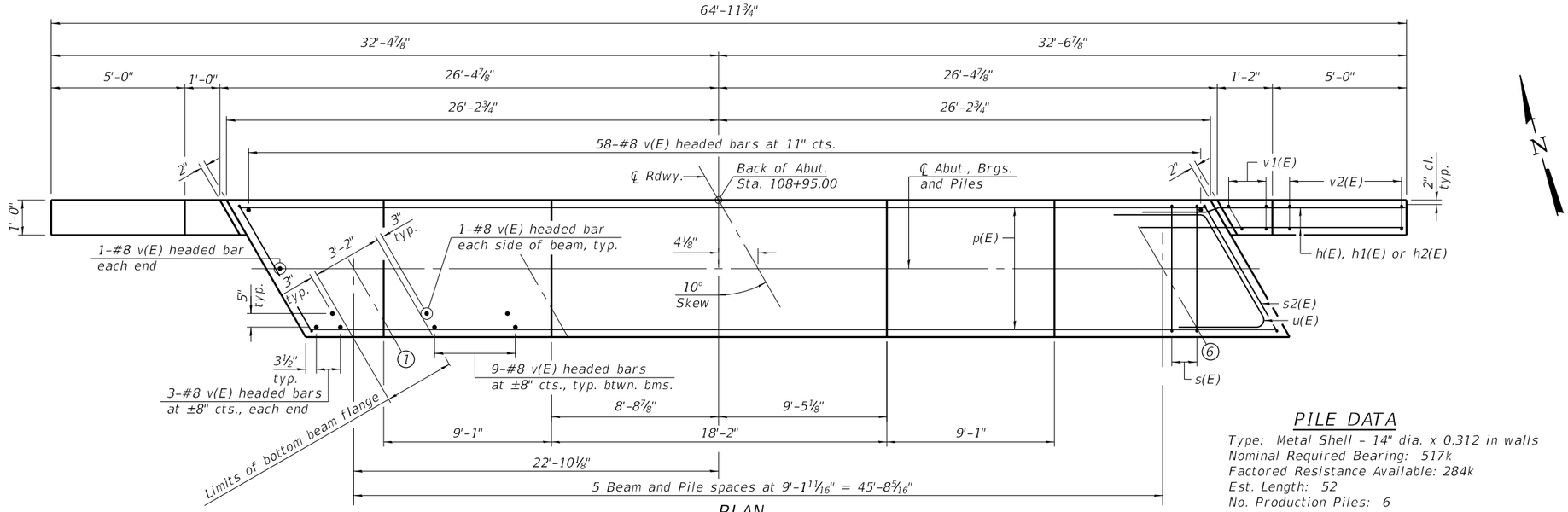


ELEVATION



SEC. THRU ABUT.

Dimensions at right angles to abutment.



PLAN

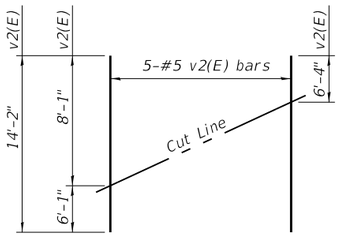
PILE DATA

Type: Metal Shell - 14" dia. x 0.312 in walls
Nominal Required Bearing: 517k
Factored Resistance Available: 284k
Est. Length: 52
No. Production Piles: 6
No. Test Piles: 0

BILL OF MATERIAL

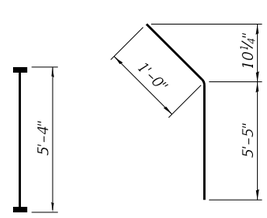
Bar	No.	Size	Length	Shape
h(E)	32	#6	8'- 9"	
h1(E)	4	#5	8'- 2"	
h2(E)	4	#5	6'- 5"	
h3(E)	4	#5	6'- 2"	
p(E)	10	#7	52'- 1"	
s(E)	46	#6	14'- 10"	
s1(E)	48	#5	4'- 7"	
s2(E)	2	#6	14'- 11"	
sp(E)	6	#4	69'- 1"	
u(E)	8	#6	12'- 2"	
v(E)	123	#8	5'- 4"	
v1(E)	8	#5	8'- 6"	
v2(E)	10	#5	14'- 2"	
Structure Excavation		Cu Yd	185	
Concrete Structures		Cu Yd	31.4	
Reinforcement Bars, Epoxy Coated		Pound	5,270	
Furnish Metal Shell Piles 14" x 0.312"		Foot	312	
Driving Piles		Foot	312	
Pile Shoes		Each	6	

* Length is height of spiral.



FIELD CUTTING DIAGRAM

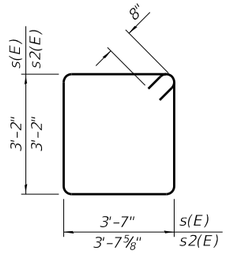
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite wing.



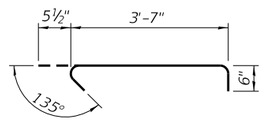
BAR v(E)

(Headed)

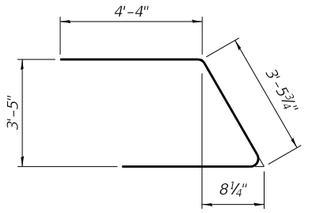
BAR h2(E)



BAR s(E) & s2(E)



BAR s1(E)



BAR u(E)

Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see sheet S-19 of S-21.

AI-CBS-L 6-15-2019

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_North Abutment.dgn
PLOT DRIVER: IL_pdf_Dwpltcfg
PEN TABLE: plotTable.tbl

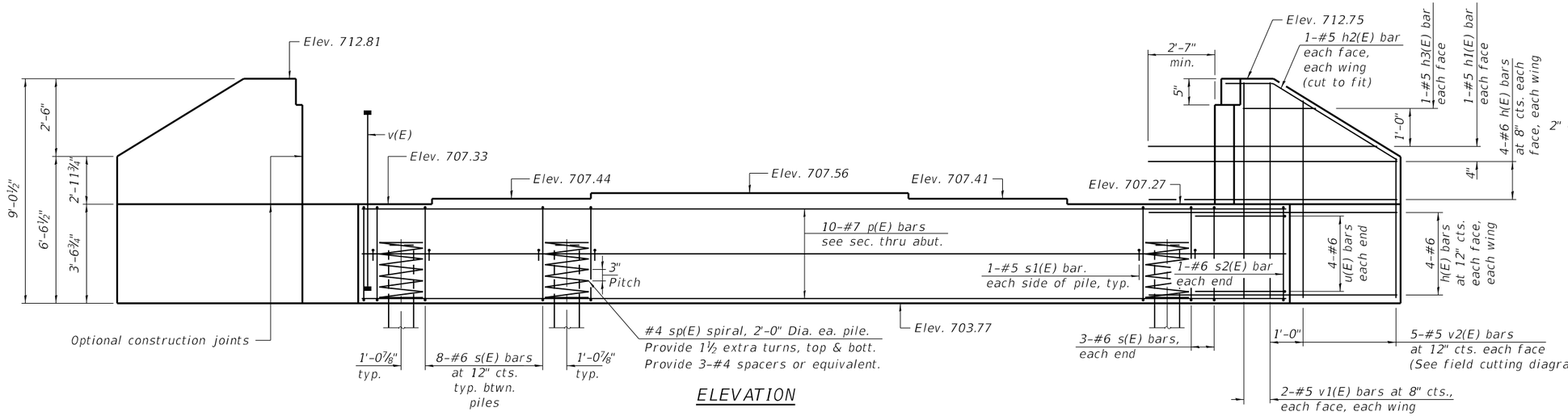
HRGreen.com
Inols Professional Design Firm #184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

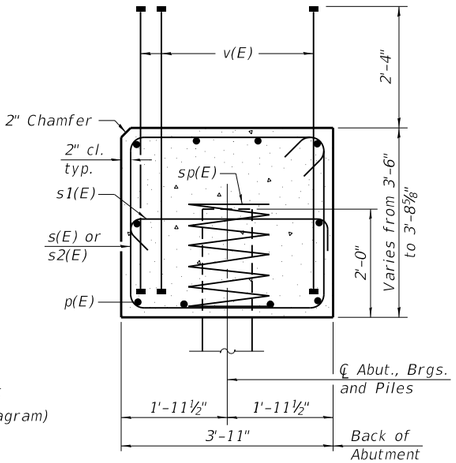
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 101-6074
SHEET NO. S-17 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	28
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		

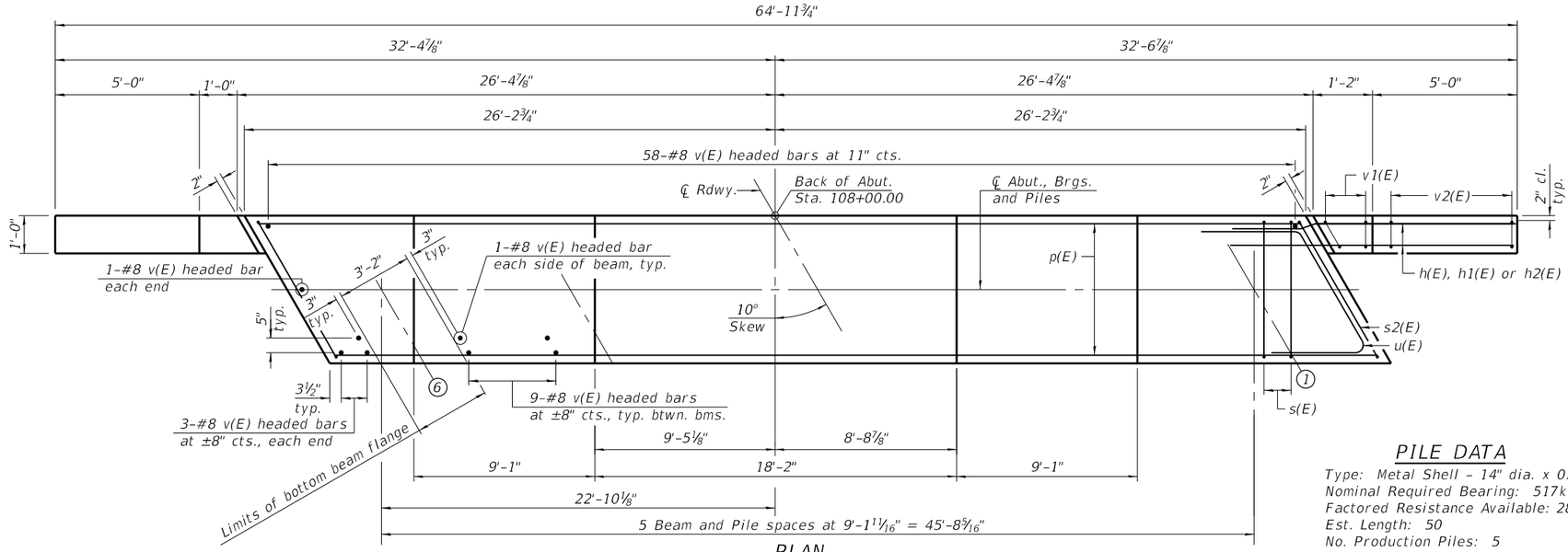


ELEVATION



SEC. THRU ABUT.

Dimensions at right angles to abutment.



PLAN

PILE DATA

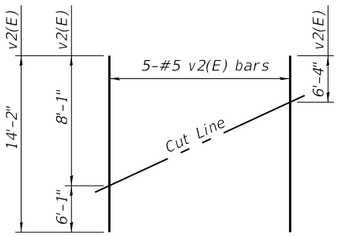
Type: Metal Shell – 14" dia. x 0.312 in walls
Nominal Required Bearing: 517k
Factored Resistance Available: 284k
Est. Length: 50
No. Production Piles: 5
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#6	8'- 9"	
h1(E)	4	#5	8'- 2"	
h2(E)	4	#5	6'- 5"	
h3(E)	4	#5	6'- 2"	
p(E)	10	#7	52'- 1"	
s(E)	46	#6	14'- 10"	
s1(E)	48	#5	4'- 7"	
s2(E)	2	#6	14'- 11"	
sp(E)	6	#4	69'- 1" *	
u(E)	8	#6	12'- 1"	
v(E)	123	#8	5'- 4"	
v1(E)	8	#5	8'- 7"	
v2(E)	10	#5	14'- 2"	
Structure Excavation		Cu Yd	185	
Concrete Structures		Cu Yd	31.5	
Reinforcement Bars, Epoxy Coated		Pound	5,270	
Furnish Metal Shell Piles 14" x 0.312"		Foot	250	
Driving Piles		Foot	250	
Test Pile Metal Shell		Each	1	
Pile Shoes		Each	6	

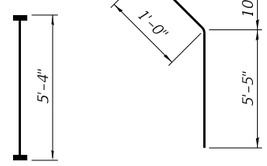
* Length is height of spiral.

Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see sheet S-19 of S-21.



FIELD CUTTING DIAGRAM

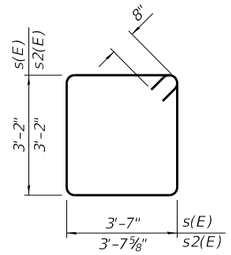
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite wing.



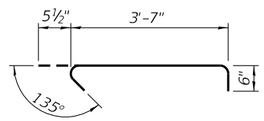
BAR v(E)

(Headed)

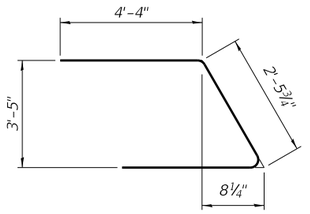
BAR h2(E)



BAR s(E) & s2(E)



BAR s1(E)



BAR u(E)

AI-CBS-L 6-15-2019

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_South Abutment.dgn
PLOT DRIVER: IL_pdf_Dwpltcfg
PEN TABLE: plotTable1.tbl

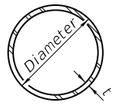
HRGreen.com
Ill.Lic.Professional Design Firm #184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

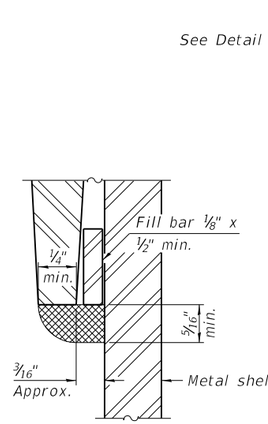
SOUTH ABUTMENT
STRUCTURE NO. 101-6074
SHEET NO. S-18 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	29
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		

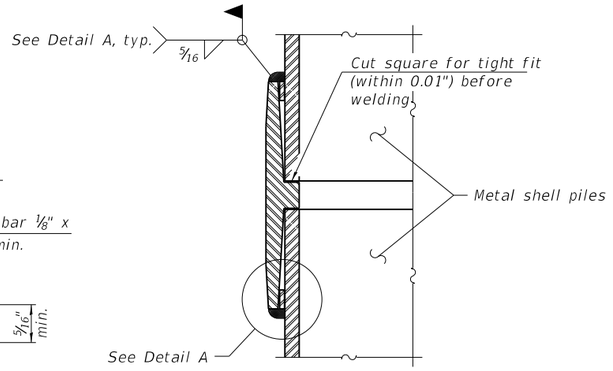


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³/ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470

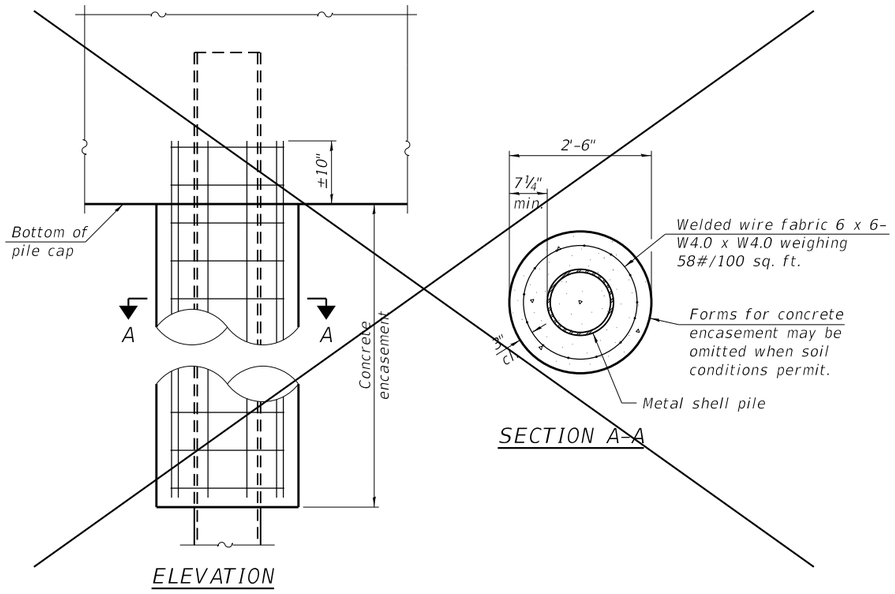


DETAIL A



WELDED COMMERCIAL SPLICE

Notes:
The ⅛" x ½" min. fill bar may be constructed of 2 bars with a ⅛" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

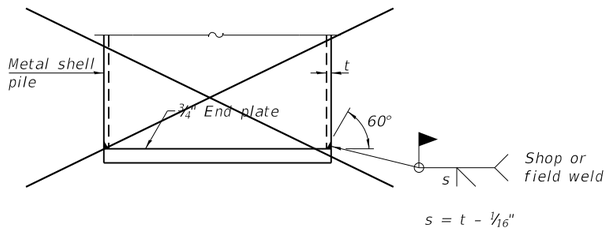


ELEVATION

SECTION A-A

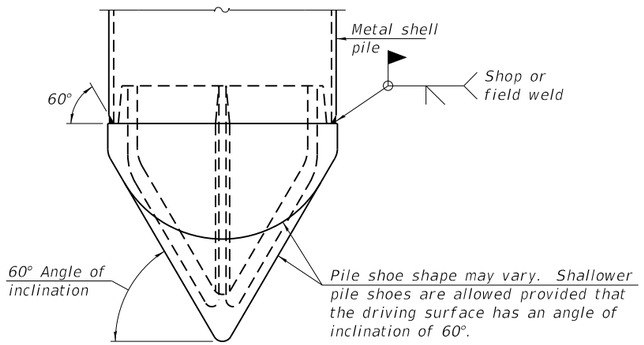
INDIVIDUAL PILE CONCRETE ENCASEMENT

(When specified)



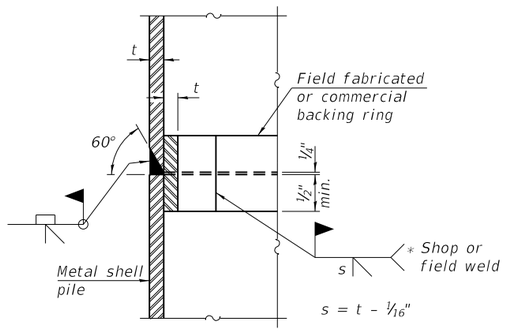
$s = t - \frac{1}{16}"$

END PLATE ATTACHMENT



PILE SHOE ATTACHMENT

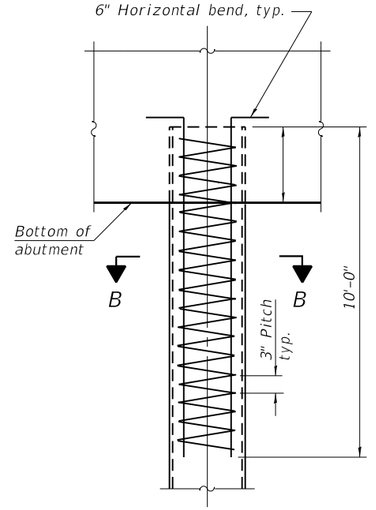
(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).



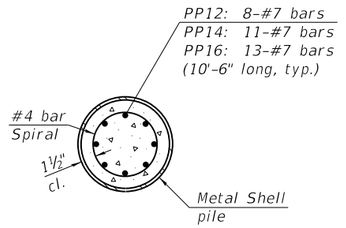
$s = t - \frac{1}{16}"$

COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS

(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

F-MS 1-1-2020

HRG PROJECT NO.: I80909
HRG PROJ. CONTACT:
FILE NAME: I80909_Str_Piles.dgn
PLOT DRIVER: fl_pdf_bw.pltcfg
PEN TABLE: pltables.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

METAL SHELL PILE DETAILS
STRUCTURE NO. 101-6074
SHEET NO. S-19 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	30
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

McCleary Engineering
3705 Progress Blvd., Suite 2
Peru, Illinois, 61354
815-780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 12/4/19

ROUTE Seminary Street **DESCRIPTION** South Abutment Seminary Street over Keith Creek **LOGGED BY** TMR

SECTION 83-00297-00-BR **LOCATION** SW 1/4, **SEC.** 26, **TWP.** 44N, **RNG.** 1E, 3rd **PM**, Latitude , Longitude

COUNTY Winnebago **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. 101-6074
Station 108+47.5

BORING NO. SB-01 NBL
Station 107+63.75
Offset 15.5 ft Rt.
Ground Surface Elev. 712.30 ft

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

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2" HMA & 8" Concrete 711.47			
Medium dense brown medium Sand & Gravel, some clay	12 10 8	-	9
707.80	5		
-5 Very loose black Cinders & Gravel	2 4	-	14
	1		
	2 2	-	20
704.30			
Very loose mix of black Cinders, gray Sand & Gravel	4		
-10	3 1	-	10
701.80			
Soft gray/brown Sandy Clay	2		
	2 2	0.5 P	16
698.30	3		
Loose to medium dense brown Sand, trace clay -15	1 1	-	9
	1		
	1 11	-	18
694.30			
Medium dense brown Sand & Gravel, trace clay	3		
-20	2 9	-	18
Medium dense gray Sand & Gravel	12		
	10 7	-	10
	7		
-25	4 6	-	12
686.80			
Medium dense to dense brown Sand & Gravel	8		
	11 17	-	10
	21		
-30	15 19	-	12
	20		
-35	18 18	-	10
675.30			
Stiff gray/brown Clay Loam	20		
-40	5 9	-	15

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

BBS, form 137 (Rev. 8-99)

McCleary Engineering
3705 Progress Blvd., Suite 2
Peru, Illinois, 61354
815-780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 12/4/19

ROUTE Seminary Street **DESCRIPTION** South Abutment Seminary Street over Keith Creek **LOGGED BY** TMR

SECTION 83-00297-00-BR **LOCATION** SW 1/4, **SEC.** 26, **TWP.** 44N, **RNG.** 1E, 3rd **PM**, Latitude , Longitude

COUNTY Winnebago **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. 101-6074
Station 108+47.5

BORING NO. SB-01 NBL
Station 107+63.75
Offset 15.5 ft Rt.
Ground Surface Elev. 712.30 ft

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

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff gray/brown Clay Loam *(continued)*			
670.30			
Hard gray Clay Loam	3		
-45	18 43	2.9 B	15
665.30			
Hard brown Silty Clay	16		
-50	22 23	1.8 B	12
660.30			
Dense brown medium Sanc, trace clay	13		
-55	13 20	0.3 B	15
655.30			
Medium dense orangeish-brown Medium Sand	11		
-60	11 15	-	20
Medium dense orangeish-brown Medium Sand *(continued)*			
650.30			
Stiff to very stiff brown Clay Loam Till	7		
-65	11 13	1.5 B	12
	24		
642.80	21 23	3.5 B	11
Very stiff gray Silty Clay -70			
	10		
637.30 -75	12 18	3.9 B	14
End of Boring			
-80			

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

BBS, form 137 (Rev. 8-99)

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_Str_SoilBoring01.dgn
PLOT DRIVER: L_pdf_bwpltcfg
PEN TABLE: plotbw.tbl

HRGreen.com
Illinois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 101-6074
SHEET NO. S-20 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	31
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

McCleary Engineering
3705 Progress Blvd., Suite 2
Peru, Illinois, 61354
815-780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 12/3/19

ROUTE Seminary Street **DESCRIPTION** North Abutment Seminary Street over Keith Creek **LOGGED BY** TMR

SECTION 83-00297-00-BR **LOCATION** SW 1/4, **SEC.** 26, **TWP.** 44N, **RNG.** 1E, 3rd **PM**,
Latitude , Longitude

COUNTY Winnebago **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. 101-6074
Station 108+47.5

BORING NO. SB-02 SBL
Station 109+13
Offset 15.0 ft Lt.
Ground Surface Elev. 711.70 ft

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

Groundwater Elev.:
First Encounter 697.2 ft ▼
Upon Completion 697.2 ft ▽
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2" HMA, 8" Concrete 710.87			
Medium dense dark brown to black Fine to Medium Sand, some Clay	5		
	11 11	1.7 B	8
707.70	5		
Loose black Cinders & Gravel	7	-	22
-5	4		
	4		
	2 2	-	27
702.70	3		
Loose brown Fine Sand, trace clay 702.20	2	0.5	13
-10	2	P	
Soft brown Sandy Clay 701.20			
Medium dense brown Sand & Gravel w/some cinders	5		
	5 6	-	10
	5		
697.20 ▼	2	-	16
Very loose brown Fine Sand & Gravel, wet -15	2		
	2		
	2 1	-	18
693.70			
Medium dense brown & dark gray Fine to Medium Sand & Gravel	9		
	7 9	-	21
691.70 -20			
Medium dense light brown Sand & Gravel	11		
	9 9	-	10
	7		
	5 5	-	14
-25			
	9		
	10 15	-	15
683.70			
Medium dense to dense light brown Fine to Medium Sand & Gravel	6		
	9 7	-	13
-30			
679.70			
Hard light brown Clay			
677.70	19		
Medium dense to dense light brown Fine to Medium Sand & Gravel	31 43	2.9 B	27
-35			
675.20			
Stiff light brown Sandy Clay	7		
	6 8	-	23
-40			

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

BBS, form 137 (Rev. 8-99)

McCleary Engineering
3705 Progress Blvd., Suite 2
Peru, Illinois, 61354
815-780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 12/3/19

ROUTE Seminary Street **DESCRIPTION** North Abutment Seminary Street over Keith Creek **LOGGED BY** TMR

SECTION 83-00297-00-BR **LOCATION** SW 1/4, **SEC.** 26, **TWP.** 44N, **RNG.** 1E, 3rd **PM**,
Latitude , Longitude

COUNTY Winnebago **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. 101-6074
Station 108+47.5

BORING NO. SB-02 SBL
Station 109+13
Offset 15.0 ft Lt.
Ground Surface Elev. 711.70 ft

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

Groundwater Elev.:
First Encounter 697.2 ft ▼
Upon Completion 697.2 ft ▽
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff light brown Sandy Clay *(continued)*			
	6		
	6 7	-	29
-45			
	12		
	13 15	1.5 P	17
-50			
659.70			
Medium stiff to stiff gray Silty Clay	13		
	9 12	0.5 P	15
-55			
654.70			
Dense brown Medium Sand	13		
	16 16	-	19
-60			
Dense brown Medium Sand *(continued)*			
649.70			
Very stiff to hard gray Silty Clay, trace sand			
	8		
	9 1	2.1 B	14
-65			
	14		
	24 20	3.5 B	13
-70			
	13		
	13 14	3.9 B	13
-75			
	11		
	14 18	5.0 B	15
-80			

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

BBS, form 137 (Rev. 8-99)

McCleary Engineering
3705 Progress Blvd., Suite 2
Peru, Illinois, 61354
815-780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 12/3/19

ROUTE Seminary Street **DESCRIPTION** North Abutment Seminary Street over Keith Creek **LOGGED BY** TMR

SECTION 83-00297-00-BR **LOCATION** SW 1/4, **SEC.** 26, **TWP.** 44N, **RNG.** 1E, 3rd **PM**,
Latitude , Longitude

COUNTY Winnebago **DRILLING METHOD** Hollow Stem Auger **HAMMER TYPE** CME Automatic

STRUCT. NO. 101-6074
Station 108+47.5

BORING NO. SB-02 SBL
Station 109+13
Offset 15.0 ft Lt.
Ground Surface Elev. 711.70 ft

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

Groundwater Elev.:
First Encounter 697.2 ft ▼
Upon Completion 697.2 ft ▽
After - **Hrs.** - ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff to hard gray Silty Clay, trace sand *(continued)*			
629.70			
Very dense light gray Fine Sand, some clay	37		
	37 47	0.1 B	19
-85			
622.70	60		
Hard light gray Clay Loam	24 33	4.5 B	14
-90			
	12		
	16 22	3.3 B	15
-95			
	10		
	15 20	4.1 B	16
611.70 -100			
End of Boring			
-105			
-110			
-115			
-120			

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

BBS, form 137 (Rev. 8-99)

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_Str_SoilBoring02.dgn
PLOT DRIVER: ilpdf_bw.pltcfg
PEN TABLES: plotlabels.tbl

HRGreen.com
■Inois Professional Design Firm
184-001322

USER NAME = whood	DESIGNED - SLS	REVISED -	
	DRAWN - WJH	REVISED -	
PLOT SCALE =	CHECKED - SLS	REVISED -	
PLOT DATE = 11/9/2020	DATE - 10/19/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 101-6074
SHEET NO. S-21 OF S-21 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	32
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

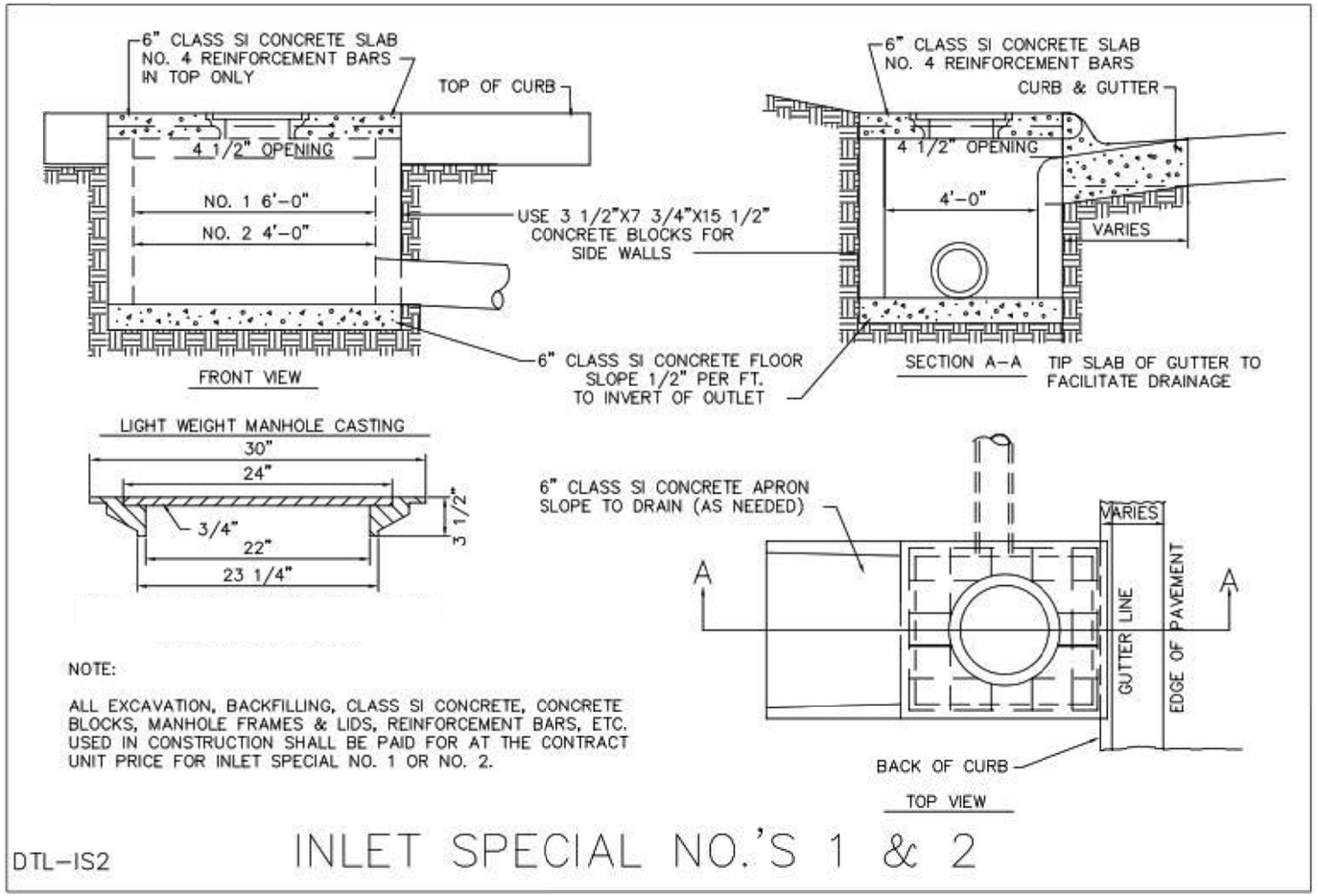
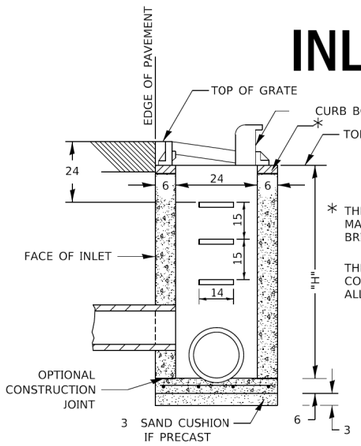

6" CLASS SI CONCRETE SLAB
NO. 4 REINFORCEMENT BARS
IN TOP ONLY
TOP OF CURB
4 1/2" OPENING
NO. 1 6'-0"
NO. 2 4'-0"
USE 3 1/2"X7 3/4"X15 1/2"
CONCRETE BLOCKS FOR
SIDE WALLS
6" CLASS SI CONCRETE FLOOR
SLOPE 1/2" PER FT.
TO INVERT OF OUTLET
FRONT VIEW
6" CLASS SI CONCRETE SLAB
NO. 4 REINFORCEMENT BARS
CURB & GUTTER
4 1/2" OPENING
4'-0"
VARIES
SECTION A-A
TIP SLAB OF GUTTER TO
FACILITATE DRAINAGE
LIGHT WEIGHT MANHOLE CASTING
30"
24"
3/4"
22"
23 1/4"
3 1/2"
6" CLASS SI CONCRETE APRON
SLOPE TO DRAIN (AS NEEDED)
A
A
VARIES
GUTTER LINE
EDGE OF PAVEMENT
BACK OF CURB
TOP VIEW
NOTE:
ALL EXCAVATION, BACKFILLING, CLASS SI CONCRETE, CONCRETE BLOCKS, MANHOLE FRAMES & LIDS, REINFORCEMENT BARS, ETC. USED IN CONSTRUCTION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR INLET SPECIAL NO. 1 OR NO. 2.
DTL-IS2
INLET SPECIAL NO.'S 1 & 2

Figure 9-01

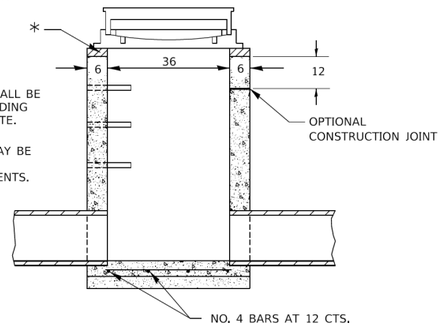
INLETS, SPECIAL



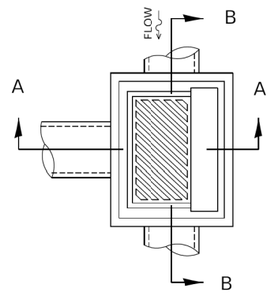
SEC. A-A

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.



SEC. B-B



NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

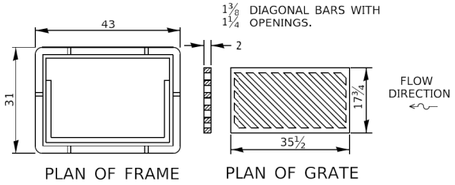
ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

WEIGHT OF CAST IRON FRAME & GRATE = 530 lbs. ± .
STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 ft.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

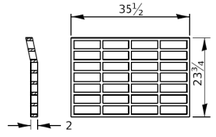
THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

DETAIL OF FRAME & GRATE

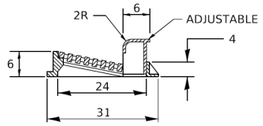


PLAN OF FRAME

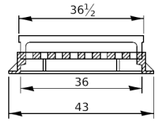
PLAN OF GRATE



PLAN OF GRATE *



SECTION A-A



SECTION B-B

* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 1-05-16	**REGION 2 / DISTRICT 2 STANDARD**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14						
REVISED - 10-13-11				CONTRACT NO.		
REVISED -	SCALE: 1.0000 ' / in. SHEET OF SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

FILE NAME: District 2 Standard
PLOT DATE = 5/14/2020

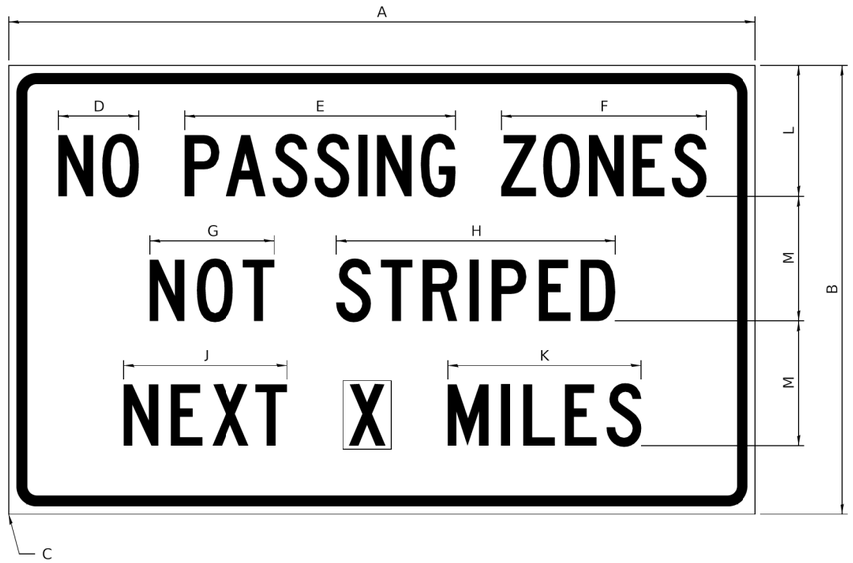
INLETS, SPECIAL 10.2

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_02_inlets_Special.dgn
PLOT DRIVER: IL_pdf_DwPltCfg
PEN TABLE: plotlabel.tbl

USER NAME = whood	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REGION 2 /DISTRICT 2 STANDARD**	F.A.U RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -			5112	19-00630-00-BR	WINNEBAGO	41	34
PLOT SCALE =	CHECKED -	REVISED -					CONTRACT NO. 85703		
PLOT DATE = 11/9/2020	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD G20-I100



COLOR LEGEND AND BORDER BLACK NON-REFLECTORIZED
BACKGROUND ORANGE REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

GENERAL NOTES

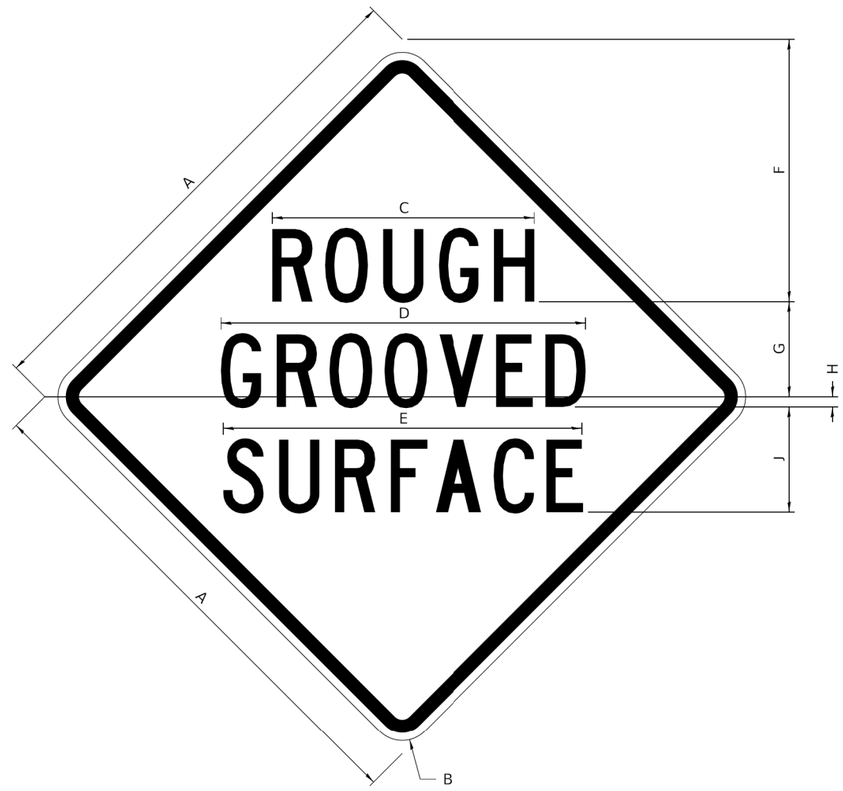
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

ILLINOIS STANDARD W8-I107



COLOR LEGEND AND BORDER BLACK NON-REFLECTORIZED
BACKGROUND ORANGE REFLECTORIZED

SIGN SIZE	DIMENSIONS								
	A	B	C	D	E	F	G	H	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

Sign not to scale

HRG PROJECT NO.: i80909
HRG PROJ. CONTACT:
FILE NAME: i80909_sht_02_Work_zone_Sign_details-Oudgn
PLOT DRIVER: IL_pdf_Dwg.ctb
PEN TABLE: plotdark.tbl

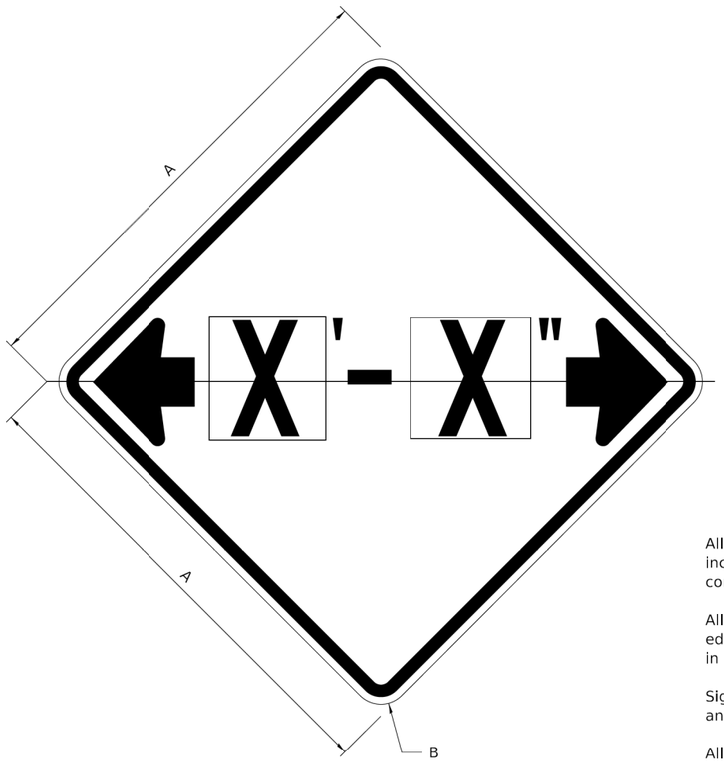
FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 3-02-16	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REGION 2 / DISTRICT 2 STANDARD**
		DRAWN -	REVISED -		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.
	PLOT DATE = 5/14/2020	DATE -	REVISED -		

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	35
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD W12-I102

(1)



GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	FL ORANGE	REFLECTORIZED

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

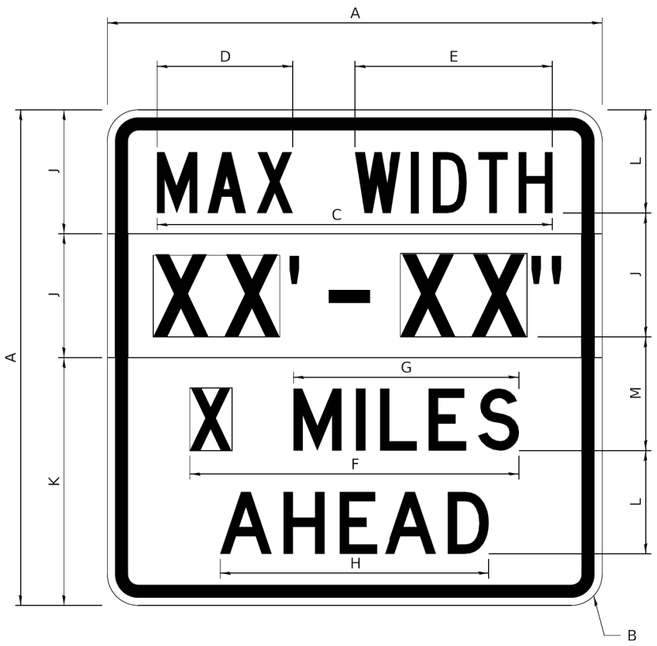
(1) Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

ILLINOIS STANDARD W12-I103

(1)



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	WHITE	REFLECTORIZED
	BACKGROUND (WIDTH)	FL ORANGE	REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE
TOP AND BOTTOM OF BACKGROUND WHITE

HRG PROJECT NO: 180909
HRG PROJ CONTACT:
FILE NAME: 180909_sht_02_Work_zone_Sign_details-02.dgn
PLOT DRIVER: i_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

FILE NAME: District 2 Standard

USER NAME = IDOT/District 2	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/14/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

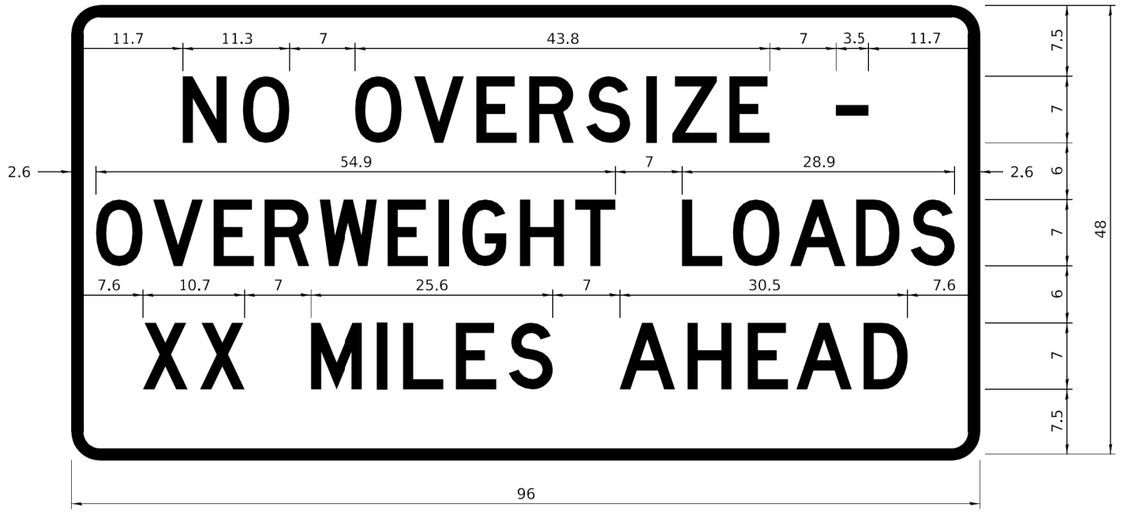
REGION 2 / DISTRICT 2 STANDARD

SCALE: | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	36
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS



COLOR LEGEND AND BORDER BLACK NON-REFLECTORIZED
BACKGROUND ORANGE REFLECTORIZED

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;
[NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;
Table of letter and object lefts.

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

STOP LINE SIGN FOR TEMPORARY SIGNALS

COLOR LEGEND AND BORDER BLACK NON-REFLECTORIZED
BACKGROUND WHITE REFLECTORIZED

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_02_Work_zone_Sign_details-03.dgn
PLOT DRIVER: e_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

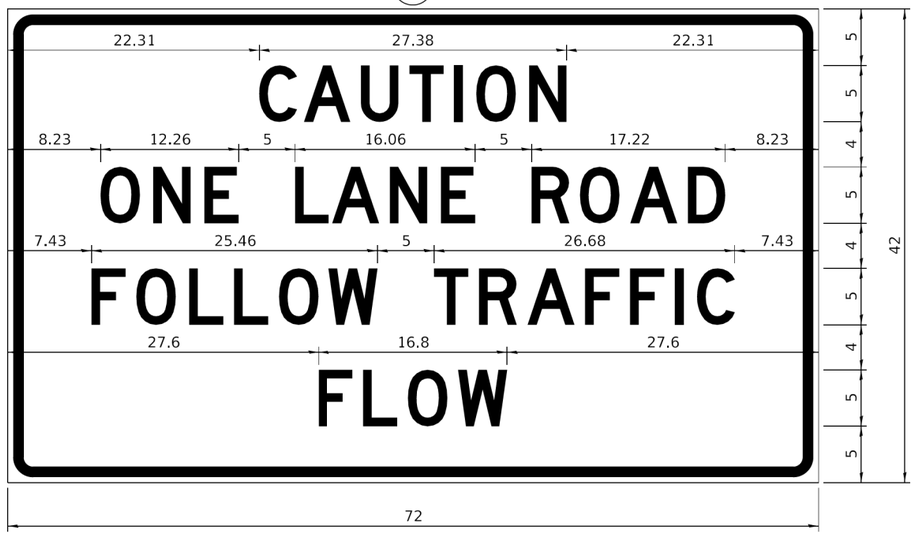
FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED -		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.
	PLOT DATE = 5/14/2020	DATE -	REVISED -		

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	37
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

WORK ZONE SIGN DETAILS

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS

(2)



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	ORANGE	REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" IndenT;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

(2) This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

22.31	C 3.36	0.62	A 4.18	0.94	U 3.36	0.94	T 3.04	0.94	I 0.78	1.17	O 3.52	1.17	N 3.36	22.31

8.23	O 3.51	1.17	N 3.36	1.18	E 3.04	

5.00	L 3.05	0.31	A 4.18	0.94	N 3.36	1.17	E 3.05

5.00	R 3.36	0.93	O 3.52	0.94	A 4.18	0.93	D 3.36	8.23

7.43	F 3.04	0.94	O 3.52	1.17	L 3.04	0.94	L 3.05	0.94	O 3.51	0.94	W 4.37

5.00	T 3.05	0.94	R 3.36	0.94	A 4.18	0.93	F 3.05	0.94	F 3.04	0.94	I 0.78	1.18	C 3.35	7.43

27.60	F 3.05	0.94	L 3.04	0.94	O 3.52	0.93	W 4.38	27.60

Sign not to scale

GENERAL NOTES

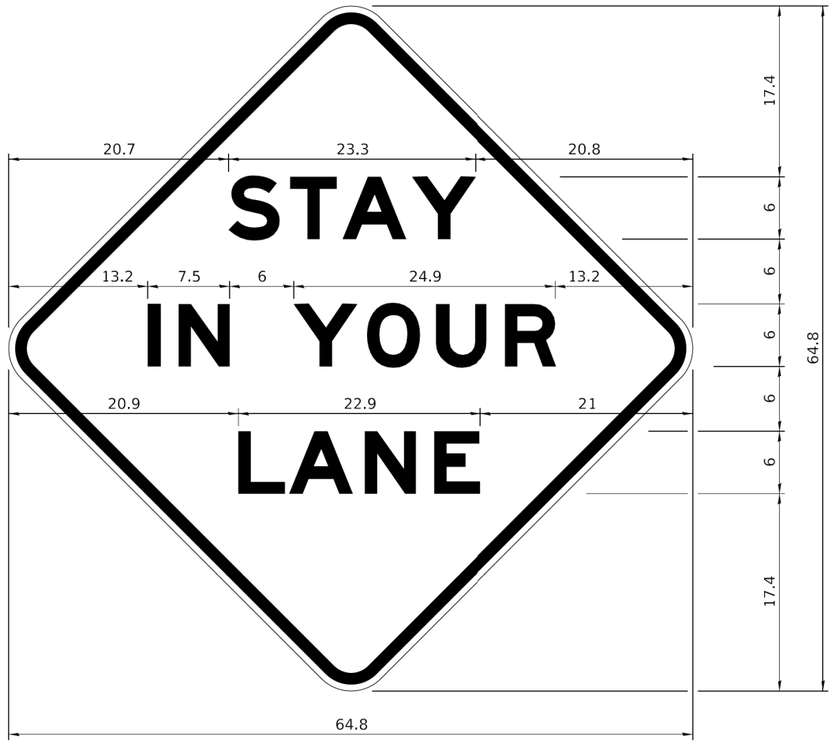
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

STAY IN YOUR LANE



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	ORANGE	REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

Table of Letter and Object Lefts

S 20.7	T 26.8	A 31.6	Y 38.0

I 13.2	N 15.9	Y 26.7	O 33.9	U 40.5	R 46.8

L 20.9	A 25.8	N 33.1	E 39.4

Sign not to scale

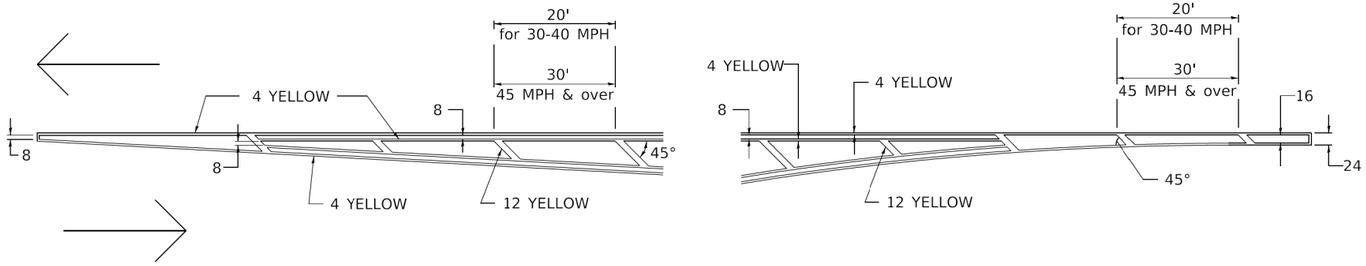
FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED -		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -		
	PLOT DATE = 5/14/2020	DATE -	REVISED -		SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	38
		CONTRACT NO. 85703		
	ILLINOIS FED. AID PROJECT			

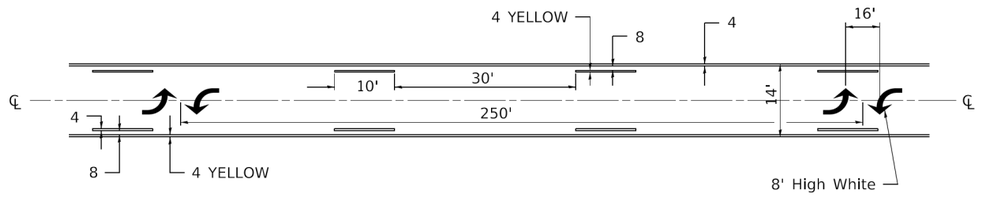
HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: i:\180909_sht_02_Work_zone_Sign_details-04.dgn
PLOT DRIVER: ilpdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

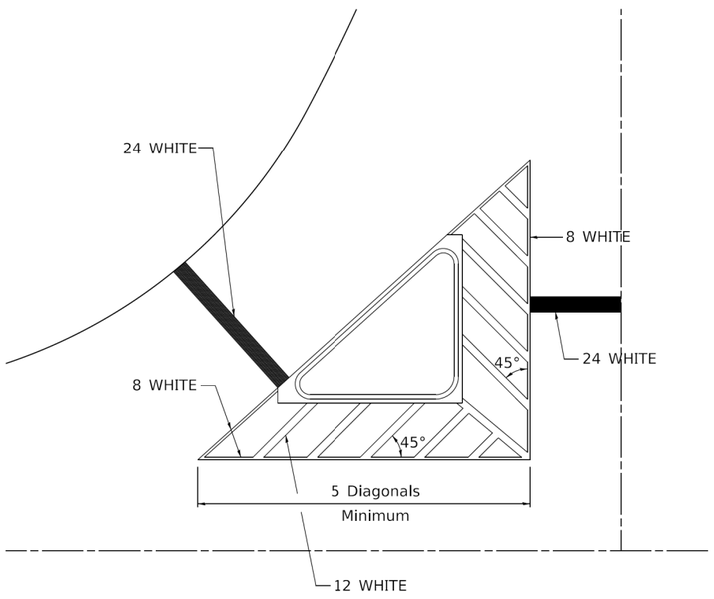


MEDIAN PAVEMENT MARKING



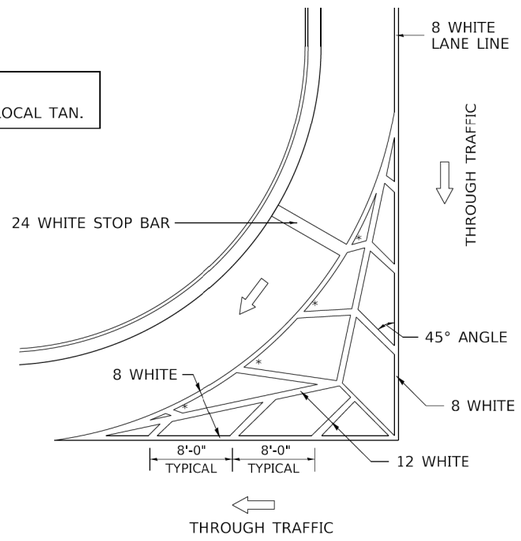
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



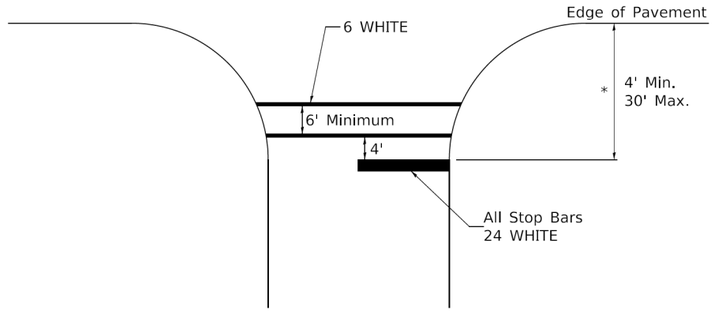
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

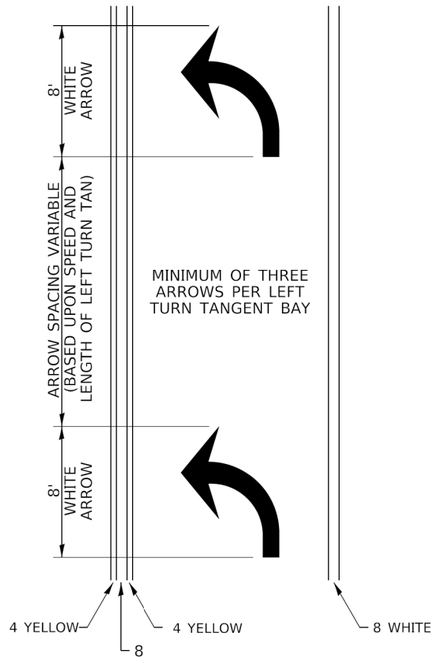
HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_02_Typical_Pvmt_Markings-01.dgn
PLOT DRIVER: IL_pdf_dw.pltcfg
PEN TABLE: plotlabel.tbl

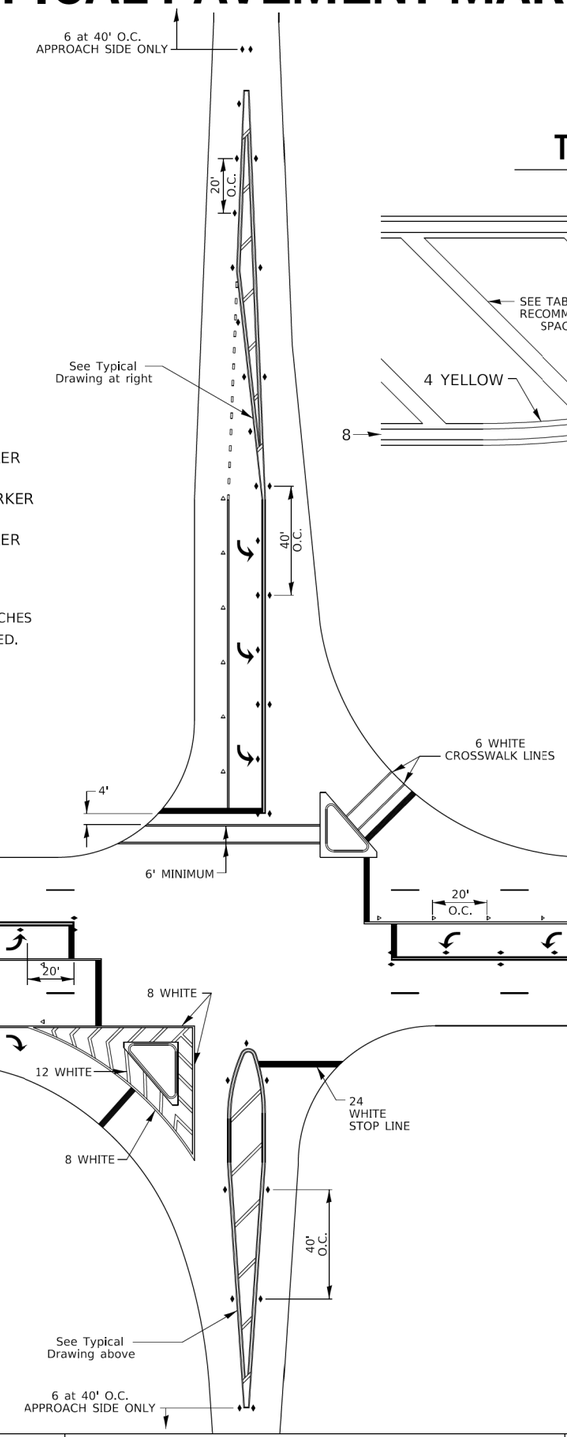
FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 6-27-14	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**REGION 2 / DISTRICT 2 STANDARD**
		DRAWN -	REVISED - 3-05-12		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -		SCALE:
	PLOT DATE = 5/14/2020	DATE -	REVISED -		SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	39
		CONTRACT NO. 85703		
	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT





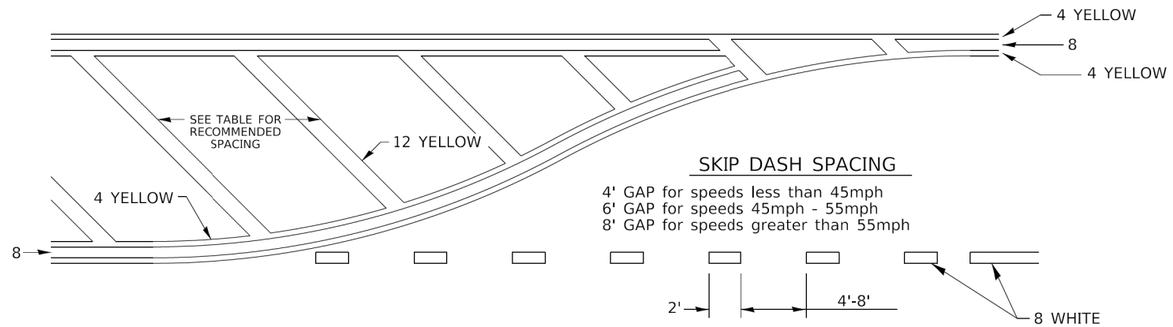
ONE-WAY AMBER MARKER

ONE-WAY CRYSTAL MARKER

TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



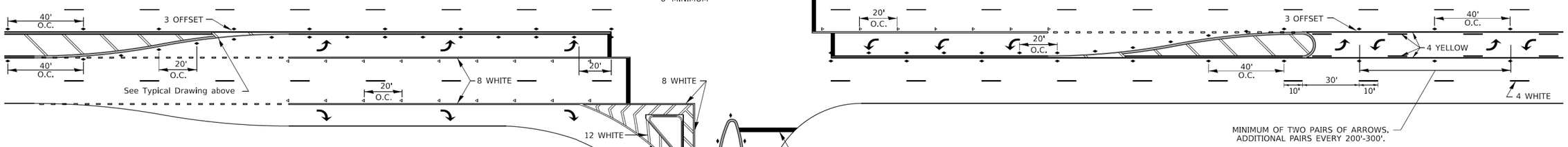
SKIP DASH SPACING

4' GAP for speeds less than 45mph
6' GAP for speeds 45mph - 55mph
8' GAP for speeds greater than 55mph

RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.

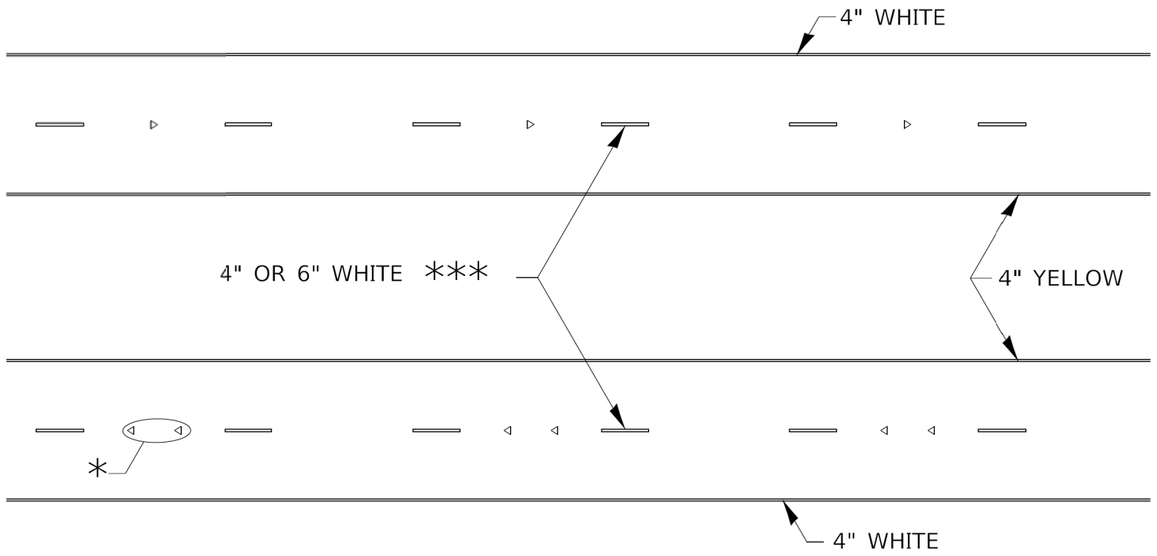


HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: I:\80909_sht_02_Typical_Pvmt_Markings-02.dgn
PLOT DRIVER: il_pdf_bw_plt.cfg
PEN TABLE: plotlabel.tbl

FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED - 3-05-12		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED -		SCALE:
	PLOT DATE = 5/14/2020	DATE -	REVISED -		SHEET 2 OF 3 SHEETS STA. TO STA.

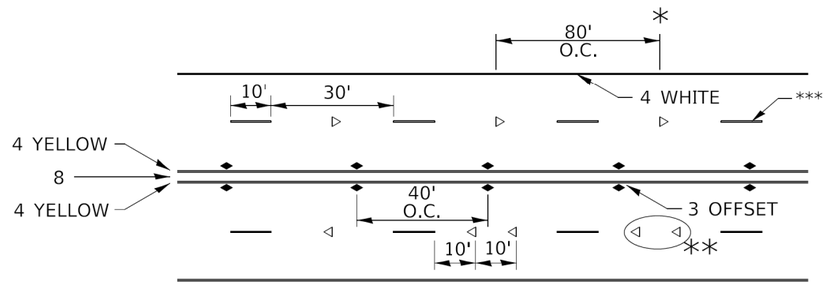
F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	40
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI-LANE / DIVIDED



* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

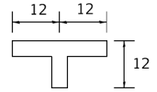
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

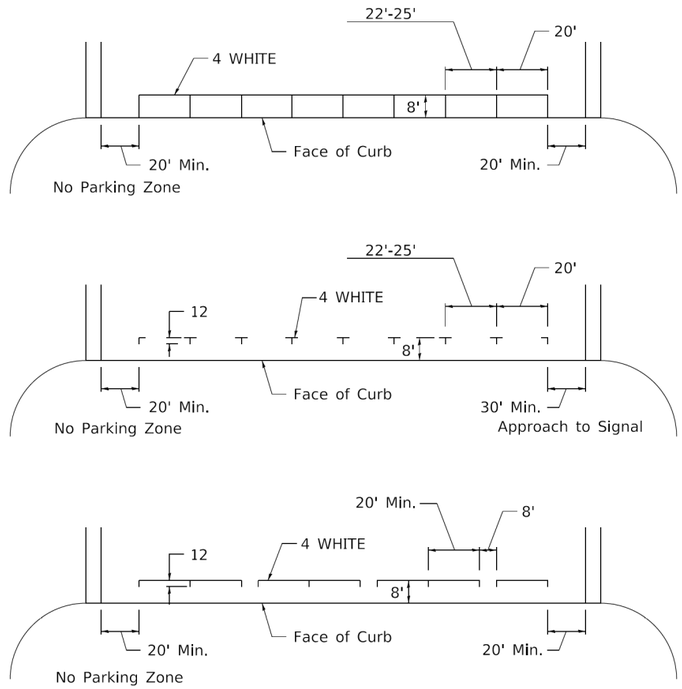
MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

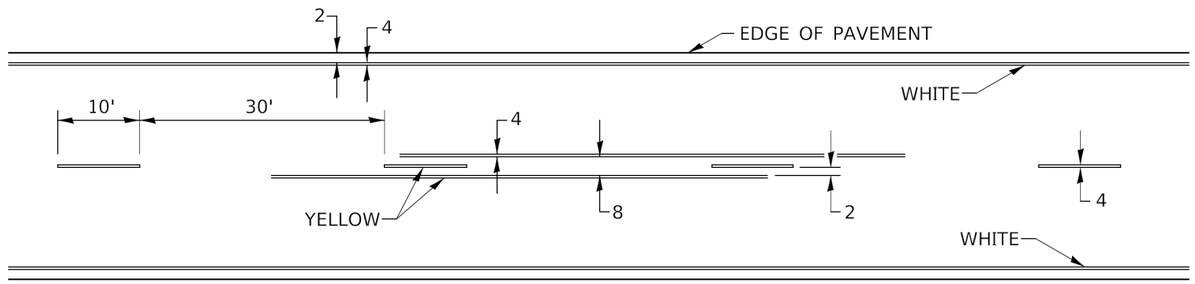
SYMBOLS



TYPICAL PARKING SPACING



TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



HRG PROJECT NO.: 180909
HRG PROJ. CONTACT:
FILE NAME: 180909_sht_02_Typical Pvmt Markings-03.dgn
PLOT DRIVER: e_pdf_bw.pltcfg
PEN TABLE: plotlabel.tbl

FILE NAME: District 2 Standard	USER NAME = IDOT/District 2	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD
		DRAWN -	REVISED - 8-27-13		
	PLOT SCALE = 1.0000 ' / in.	CHECKED -	REVISED - 11-28-12		
	PLOT DATE = 5/14/2020	DATE -	REVISED -		SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5112	19-00630-00-BR	WINNEBAGO	41	41
		CONTRACT NO. 85703		
		ILLINOIS FED. AID PROJECT		