

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	1
WHA# 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

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

FOR INDEX OF SHEETS
SEE SHEET NO. 2

FOR STANDARDS
SEE SHEET NO. 2

FOR LIST OF UTILITIES
SEE SHEET NO. 2

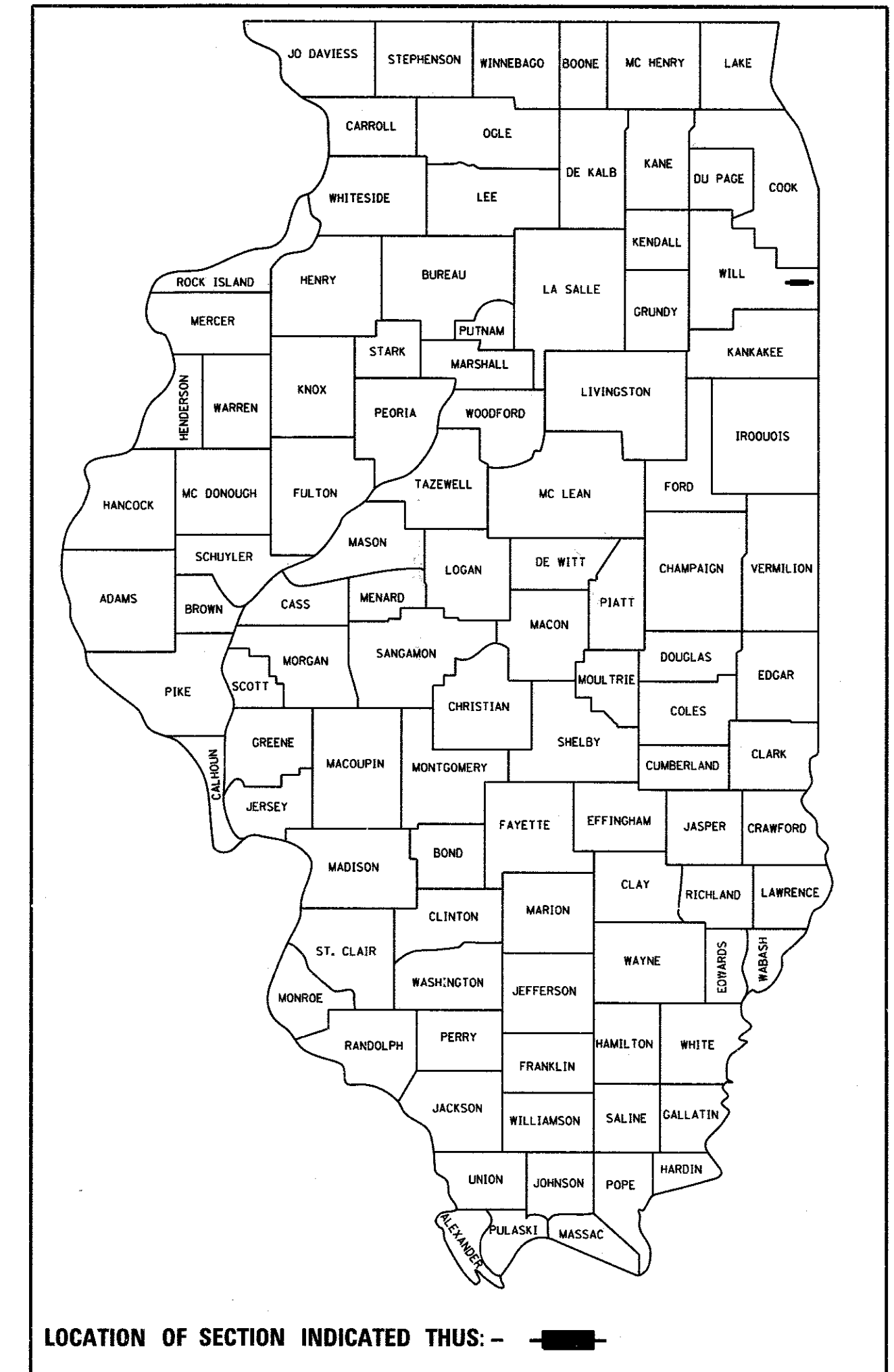
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

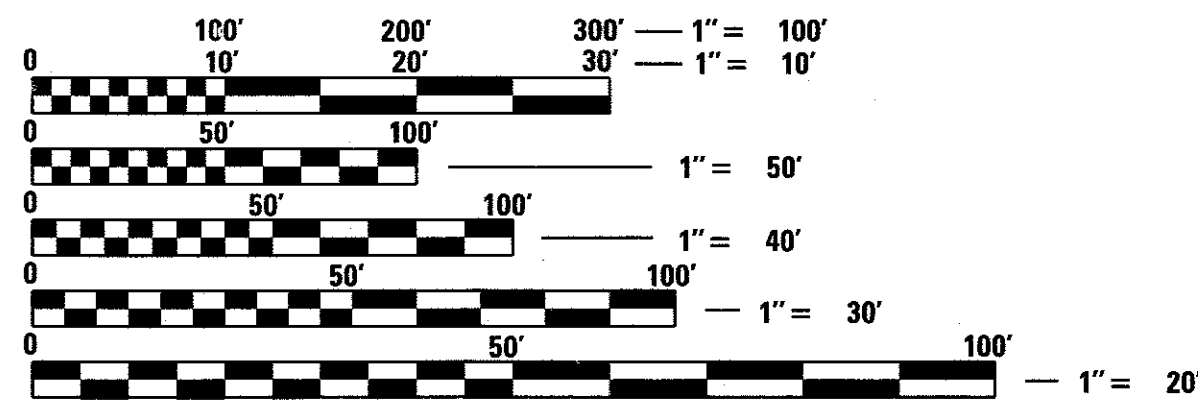
**C.H. 23 (GOODENOW ROAD)
OVER PLUM CREEK (6.84 TO 6.85)
BRIDGE REPLACEMENT
SECTION 01-00112-01-BR
PROJECT NO. Q2D2(695)
WILL COUNTY DIVISION OF TRANSPORTATION
WILL COUNTY**

C-91-145-01



TRAFFIC DATA

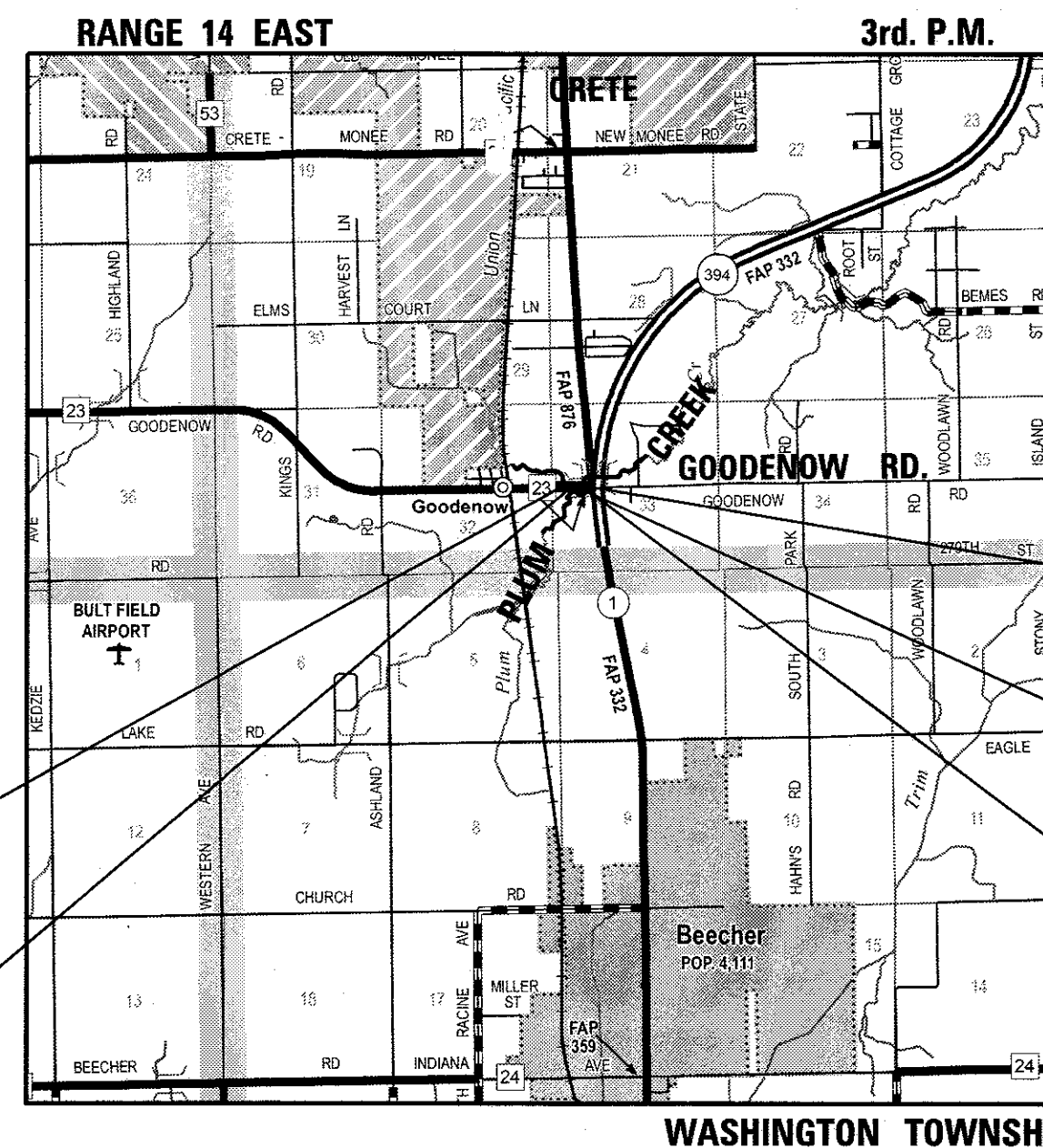
ROAD NAME: C.H. 23 (GOODENOW ROAD)
FUNCTIONAL CLASSIFICATION: LOCAL STREET, (URBAN)
POSTED SPEED LIMIT: 35 MPH
DESIGN SPEED: 50 MPH
ADT (2040): 8,000



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 - MAC
PROJECT MANAGER - BKC
CONTRACT NO. 63707



PROJECT BEGINS
STA. 13+50

PROPOSED STRUCTURE NO. 1
S.N. 099-3386
A DOUBLE BARREL (10'-0" x 8'-0")
REINFORCED CONCRETE BOX CULVERT
AT STATION 15+92. NO SKEW.

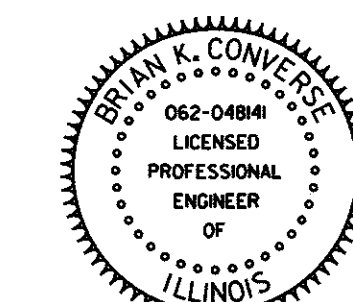
PROJECT ENDS
STA. 21+50

EXISTING STRUCTURE 099-3077
STA. 20+00

PROPOSED STRUCTURE NO. 2
S.N. 099-3377
A TRIPLE BARREL (11'-0" x 9'-0")
REINFORCED CONCRETE BOX CULVERT
AT STATION 20+00. NO SKEW.

GROSS LENGTH = 800 FT. = 0.152 MILE
NET LENGTH = 800 FT. = 0.152 MILE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	March 15 2017 <i>Jeff J. Rouds</i> WILL COUNTY ENGINEER
PASSED	APRIL 3 2017 <i>Christopher Holt</i> DISTRICT ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	April 3 2017 <i>Andrew J. Dwyer</i> REGIONAL ENGINEER



Brian K. Combs
DATE: 3/15/2017
EXPIRES 11/30/17

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OF THE STATE OF ILLINOIS**

**WILLETT HOFMANN
& ASSOCIATES INC**
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

INDEX OF SHEETS

- 1 = COVER SHEET
- 2 = INDEX OF SHEETS, STANDARDS, COMMITMENTS, GENERAL NOTES, & CONTROL
- 3 = SUMMARY OF QUANTITIES
- 4 = TYPICAL SECTIONS
- 5-7 = SCHEDULE OF QUANTITIES
- 8 = REMOVAL PLAN
- 9-10 = PLAN & PROFILE
- 11-12 = DETOUR PLAN
- 13-14 = STORM WATER POLLUTION PREVENTION PLAN
- 15 = ROADWAY DETAILS
- 16 = DOUBLE BARREL BOX CULVERT DETAILS
- 17 = DOUBLE BARREL BOX CULVERT BORING LOGS
- 18 = TRIPLE BARREL BOX CULVERT DETAILS
- 19 = TRIPLE BARREL BOX CULVERT BORING LOGS
- 20-23 = DISTRICT ONE DETAILS
- 24-29 = CROSS SECTIONS

STANDARDS

STANDARD NO.	LIST OF DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
515001-03	NAME PLATE FOR BRIDGES
542401-02	METAL END SECTION FOR PIPE CULVERTS
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE DRAIN
602401-03	MANHOLE TYPE A
666001-01	RIGHT OF WAY MARKERS
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701901-06	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
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 & MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
836001-02	LIGHT POLE FOUNDATION
821101-02	LUMINAIRE WIRING IN POLE
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-13	TYPICAL PAVEMENT MARKINGS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

DISTRICT 1 DETAILS

COMMITMENTS

THIS PROJECT SITE HAS BEEN DETERMINED TO CONTAIN SUITABLE HABITAT FOR THE NORTHERN LONG-EARED BAT WHICH IS A THREATENED SPECIES. TREE CLEARING SHALL NOT OCCUR FROM APRIL 1 THROUGH SEPTEMBER 30 PENDING A PRESENCE/ABSENCE SURVEY TO BE COMPLETED BY THE CONTRACTOR OR A SUBCONTRACTOR HIRED BY THE CONTRACTOR. PRESENCE/ABSENCE SURVEY SHALL MEET ALL REQUIREMENTS OF THE U.S. FISH & WILDLIFE SERVICE. COST OF COMPLETING THE PRESENCE/ABSENCE SURVEY IS TO BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

GENERAL NOTES

EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, WELLS, OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT OF WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 501.04 AND 501.05 OF THE STANDARD SPECIFICATIONS, WITHOUT ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

WHERE THE PROPOSED CONSTRUCTION MEETS AN EXISTING BITUMINOUS OR CONCRETE SURFACE, OR WHERE SAWING IS STATED ON THE PLANS, THE EXISTING SURFACE SHALL BE SAWED IN A NEAT, STRAIGHT LINE.

ALL PAVEMENT SHALL BE CLEANED AND "FRESH OIL" SIGNS SHALL BE PLACED AT ALL INTERSECTIONS OF THE STREETS PRIOR TO APPLYING BITUMINOUS MATERIALS (TACK COAT).

THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION.

ALL DISTURBED GROUND WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE RE-SEEDDED (CLASS 2A), FERTILIZED, AND EXCELSIOR BLANKET INSTALLED TO THE SATISFACTION OF THE ENGINEER.

VERTICAL HEADWALLS, DECORATIVE SIGNING, PLANTINGS, SHRUBBERY, AND TREES ARE PROHIBITED INSIDE THE COUNTY RIGHT-OF-WAY.

ALL CONSTRUCTION TO BE ACCORDING TO IDOT DESIGN AND STANDARD SPECIFICATIONS, MUST ADHERE TO THE WILL COUNTY DIVISION OF TRANSPORTATION PERMIT REGULATIONS AND ACCESS CONTROL REGULATIONS, AND SHALL FOLLOW THE LATEST WILL COUNTY STORM WATER MANAGEMENT ORDINANCE AND WILL COUNTY WATER RESOURCE ORDINANCE AT ALL TIMES.

A PROOF ROLL OF THE SUBGRADE IS REQUIRED PRIOR TO PLACING THE AGGREGATE SUB-BASE AND MUST BE OBSERVED BY THE ENGINEER.

RECORD DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH WCDOT REQUIREMENTS AND SHALL BE SUBMITTED IN ELECTRONIC FORMAT.

THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. THOSE SEEKING HISTORIC AS-BUILTS OR OTHER RECORD PLANS AND DOCUMENTS MUST CONTACT THE OWNER OF RECORD TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION.

GEOTECHNICAL SOILS REPORTS AND OTHER ADVANCED PLANNING DOCUMENTS WERE PREPARED FOR THIS PROJECT AND ARE AVAILABLE FOR BIDDERS' REVIEW BY CONTACTING THE LEAD LOCAL AGENCY AT TELEPHONE NUMBER 815-727-8476.

THE WILL COUNTY DIVISION OF TRANSPORTATION MUST BE NOTIFIED A MINIMUM OF TWO (2) WORKING DAYS IN ADVANCE OF ANY NON-EMERGENCY CONSTRUCTION WITHIN THE RIGHT-OF-WAY.

THE LOCATION AND ELEVATION OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE.

THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITIES TO MAKE THE NECESSARY ADJUSTMENTS PRIOR TO THIS CONSTRUCTION.

THE UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS INCLUDE:

COMED
25000 S. GOVERNORS HIGHWAY
UNIVERSITY PARK, IL 60466-4100
T: 708-235-2692
ATTN: HUGO SILVA

AT&T
LEGAL MANDATE GROUP
1000 COMMERCE DRIVE
OAK BROOK, IL 60523
T: 630-573-5715
ATTN: BRUCE BROWN
bb2439@att.com

NICOR GAS
ENGINEERING, GIS - 3W
1844 FERRY ROAD
NAPERVILLE, IL 60563
T: 630-388-3046
ATTN: BRUCE KOPPANG

COMCAST
688 INDUSTRIAL DRIVE
ELMHURST, IL 60126
T: 630-600-6352
ATTN: MARTHA GIERAS
MARTHA.GIERAS@CABLE.COMCAST.COM

GENERAL NOTES (CONT.)

A REGIONAL 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.

ALL COUNTY ROW MONUMENTATION (BOUNDARY CORNERS) SHALL BE ACCORDING TO ARTICLE 1.7.13 OF THE PERMIT REGULATIONS UTILIZING THE "WCDOT MONUMENTATION STANDARD".

ALL CONSTRUCTION MATERIALS WITHIN THE COUNTY ROW MUST BE IDOT CERTIFIED. DOCUMENTATION OF MATERIAL CERTIFICATION SHALL BE SUBMITTED PRIOR TO ENGINEER APPROVAL. ALL CONSTRUCTION MATERIAL NEEDING INSPECTION SHALL BE DONE ACCORDING TO THE LATEST IDOT PROJECT AND PROCEDURES GUIDE.

THE CONTRACTOR SHALL PROVIDE THE ENGINEER THE FOLLOWING:

- 1.) A LIST OF MATERIALS USED.
- 2.) COPIES OF ALL IDOT MATERIAL CERTIFICATION ASSOCIATED WITH EACH MATERIAL USED.
- 3.) A SIGNED COPY OF ALL MATERIAL TESTING COMPANY RESULTS ON A WEEKLY BASIS. WEEKLY FIELD REPORTS SHALL BE PROVIDED ON THE APPROPRIATE IDOT FORM.
- 4.) A CERTIFICATION LETTER THAT CERTIFIES COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

CONTROL

CH 23 (GOODENOW ROAD) - HORIZONTAL & VERTICAL CONTROL POINTS (NAD83-2007)						
PT #	STA.	N	E	EL.	DESCRIPTION	
CB10		1721661.11	1176709.12		SEC. CORNER - 5/8" I.P.	
103	16.0' RT. 13+81.1	1721655.17	1177162.04	718.70	P.K. NAIL	
104	22.9' RT. 16+46.9	1721654.10	1177427.95	709.17	5/8" I.P.	
50004	11.9' RT. 20+20.2	1721673.32	1177800.97		5/8" I.P.	
41701		1721719.86	1179368.88		1/4 SEC. CORNER - P.K. NAIL	
GPS 1534	15+34	1721782.73	1182272.55	746.76	WILL CNTY CONTROL MONUMENT	
BM	31.8' RT 17+13			711.41	RR SPIKE IN 3RD PP WEST	
BM	20.4' LT 20+17			714.65	CHIS. "T" ON NE WINGWALL	

FILE = SA_Struct\1100001\TRANS\1100001-GEN-NOTES-PAY-DESIGN-2011.dgn



DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STANDARDS, COMMITMENTS, GENERAL NOTES, & CONTROL

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	2
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				0004	0011
+ 20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	987	987	
+ 20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	540	540	
20200100	EARTH EXCAVATION	CU YD	1,414	1,414	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	141	141	
20300100	CHANNEL EXCAVATION	CU YD	52		52
20400800	FURNISHED EXCAVATION	CU YD	1,696	1,696	
25000210	SEEDING, CLASS 2A	ACRE	1.50	1.50	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	135	135	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	135	135	
25100630	EROSION CONTROL BLANKET	SO YD	6,272	6,272	
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SO YD	787	787	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	355	355	
• 28000305	TEMPORARY DITCH CHECKS	FOOT	90	90	
28000400	PERIMETER EROSION BARRIER	FOOT	1,465	1,465	
28000500	INLET AND PIPE PROTECTION	EACH	4	4	
• 30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	335		335
• 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SO YD	2,572	2,572	
35101700	AGGREGATE BASE COURSE, TYPE B 5"	SO YD	49	49	
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SO YD	566	566	
35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SO YD	94	94	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	82	82	
40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	272	272	
40701956	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"	SO YD	2,395	2,395	
• 44000100	PAVEMENT REMOVAL	SO YD	2,647	2,647	
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SO YD	952	952	
• 50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1		1
50105220	PIPE CULVERT REMOVAL	FOOT	83	83	
50800105	REINFORCEMENT BARS	POUND	101,500		101,500
51500100	NAME PLATES	EACH	2		2
54003000	CONCRETE BOX CULVERTS	CU YD	604.1		604.1
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	40	40	
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	45	45	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
				0004	0011
54213450	END SECTIONS 15"	EACH	2	2	
54213453	END SECTIONS 18"	EACH	2	2	
54248510	CONCRETE COLLAR	CU YD	1	1	
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	15	15	
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	33	33	
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4	4	
60108106	PIPE UNDERDRAINS, TYPE 1, 6"	FOOT	510	510	
60108200	PIPE UNDERDRAINS 6" (SPECIAL)	FOOT	106	106	
60218400	MANHOLES, TYPE A, 4"-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2	
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	11	11	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5	
67100100	MOBILIZATION	LSUM	1		1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	80	80	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	27	27	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2,860	2,860	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	26	26	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	50	50	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	50	50	
72000100	SIGN PANEL - TYPE 1	SO FT	25	25	
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	7	7	
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	42	42	
+ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2,860	2,860	
+ 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	26	26	
+ 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	8	
• X0322936	REMOVE EXISTING FLARED END SECTION	EACH	2	2	
• X0323265	REMOVE EXISTING RIPRAP	SO YD	51	51	
• X2110100	TOPSOIL FURNISH AND PLACE, SPECIAL	CU YD	385	385	
• X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	385		385
• X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1	
• X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	50	50	
• Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
△ Z0076600	TRAINEES	HOURL	500	500	
△ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOURL	500	500	
+ XB44010	RELOCATE EXISTING LIGHT POLE WITH LUMINAIRE	EACH	1	1	

• See Special Provisions
+ Specialty Item
△ Construction Code Type 0042

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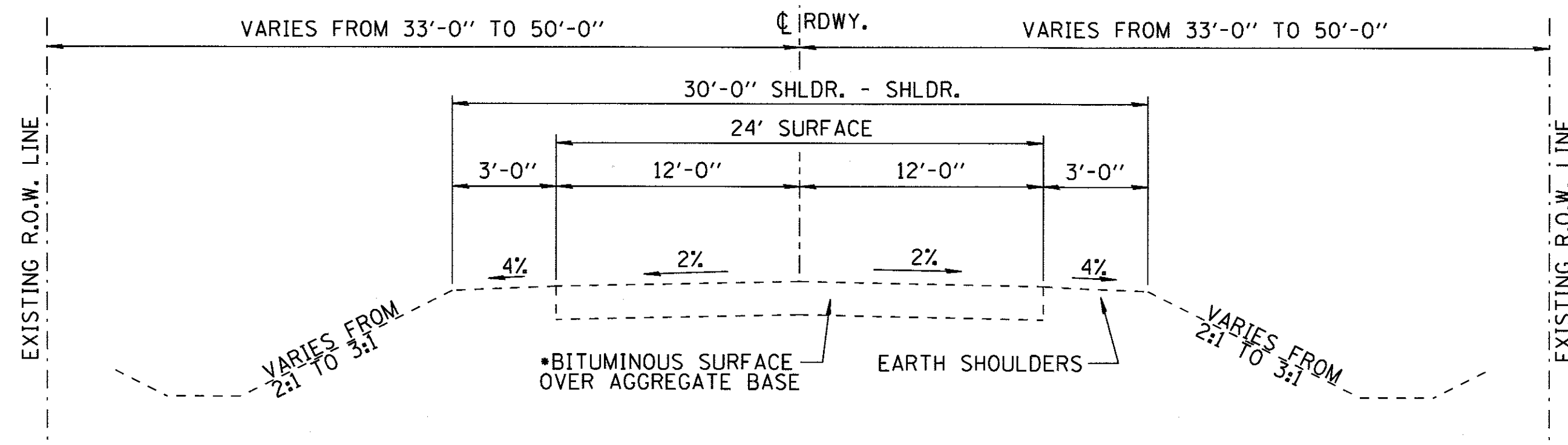


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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	3
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION
STA. 13+50 TO STA. 21+50, GOODENOW ROAD

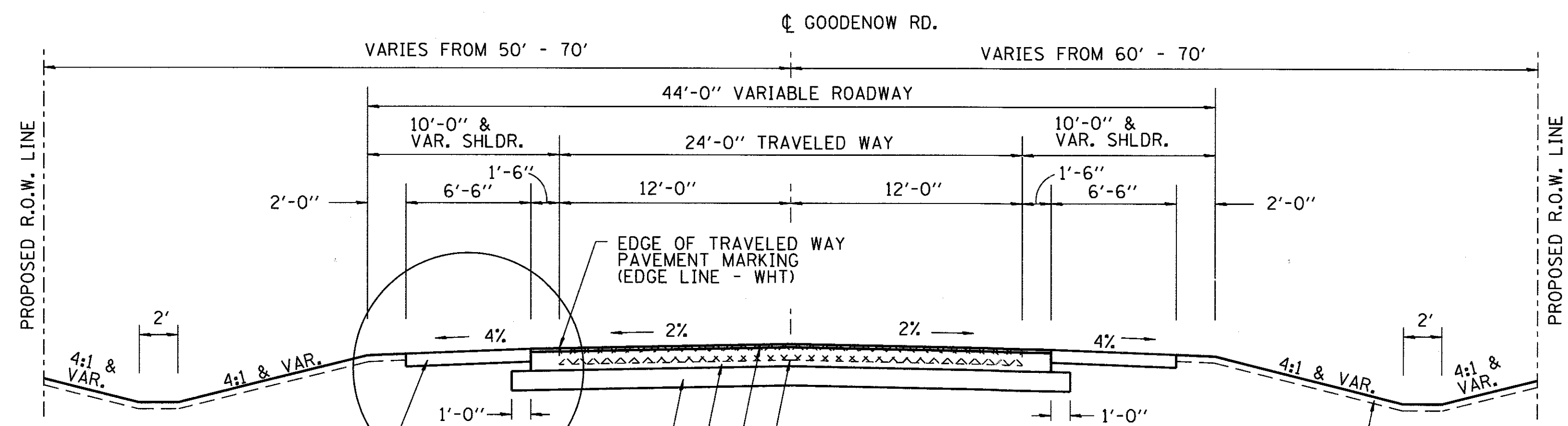
*EXISTING BITUMINOUS SURFACE COURSE ASSUMED TO BE 10" TO CALCULATE PAVEMENT REMOVAL. 10" DEPTH IS BASED ON AN AVERAGE DEPTH FROM BORINGS TAKEN.

PAVEMENT STRUCTURAL DESIGN
COUNTY HIGHWAY 23

LOCAL STREET, (URBAN)
DESIGN YEAR (2040) ADT: 8,000
% TRUCKS: 7.0

USE
2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50
1 3/4" HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50
12" AGGREGATE SUBGRADE IMPROVEMENT

*HMA PAVEMENT LAYERS TO BE PAID FOR AS
HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"



PROPOSED TYPICAL SECTION
STA. 13+50 TO STA. 21+50, GOODENOW ROAD

**HMA PAVEMENT LAYERS TO BE PAID FOR AS
HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 13 3/4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
FULL-DEPTH PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 1 3/4" (IN 4 LIFTS)	4% @ 50 Gyr.
SHOULDERS (MAILBOX TURNOUTS)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 3"	4% @ 50 Gyr.
DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19.0) 6" OR 8" (IN 2 LIFTS)	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD./IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

PIPE UNDERDRAINS,
TYPE 1, 6" (TYP. BOTH SIDES)
LT. & RT. STA. 15+00 - 15+80
LT. & RT. STA. 16+25 - 18+00

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WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	4
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION 20200100 (CY)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 15% (CY)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) FURNISHED EXCAVATION 20400800 (CY)
GOODENOW ROAD (CH 23)	1,414	1,202	2,898	-1,696
TOTALS	1,414	1,202	2,898	-1,696

SCHEDULE OF QUANTITIES

TREE REMOVAL (OVER 15 UNITS DIAMETER)		
STATION	UNIT	REMARKS
GOODENOW ROAD		
LT. STA. 13+88	31	
RT. STA. 14+30	28	
LT. STA. 14+50	23	
LT. STA. 14+70	25	
RT. STA. 14+99	17	
LT. STA. 15+61	20	
LT. STA. 16+20	20	
LT. STA. 16+45	20	
LT. STA. 16+69	35	
LT. STA. 16+98	25	
LT. STA. 17+12	31	
LT. STA. 17+52	51	
LT. STA. 18+15	20	
RT. STA. 18+48	20	
LT. STA. 18+55	22	
RT. STA. 18+65	17	
LT. STA. 18+97	20	
LT. STA. 19+02	17	
RT. STA. 19+07	38	
LT. STA. 20+11	20	
RT. STA. 20+24	40	2 @ 20"
PROJECT TOTAL	540	

POTASSIUM FERTILIZER NUTRIENT		
STATION	POUND	REMARKS
GOODENOW ROAD		
RT. STA. 13+29 - 13+66	3	
LT. STA. 13+50 - 16+56	23	
RT. STA. 13+74 - 21+09	68	
LT. STA. 16+63 - 17+25	5	
LT. STA. 17+39 - 20+55	29	
LT. STA. 20+73 - 21+05	2	
RT. STA. 21+23 - 21+50	4	
LT. STA. 21+29 - 21+50	1	
PROJECT TOTAL	135	1 APPL. @ 90 LB/ACRE

TEMPORARY DITCH CHECKS		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 14+00	9	
RT. STA. 14+70	9	
LT. STA. 14+85	9	
LT. STA. 15+70	9	
RT. STA. 15+70	9	
RT. STA. 16+15	9	
RT. STA. 18+10	9	
RT. STA. 18+90	9	
RT. STA. 19+60	9	
RT. STA. 20+40	9	
PROJECT TOTAL	90	

TREE REMOVAL (6 TO 15 UNITS DIAMETER)		
STATION	UNIT	REMARKS
GOODENOW ROAD		
RT. STA. 13+34	48	4 @ 12"
LT. STA. 13+65	8	
LT. STA. 13+65	10	
LT. STA. 13+80	12	
RT. STA. 13+86	12	
RT. STA. 13+88	16	2 @ 8"
RT. STA. 14+11	14	
RT. STA. 14+14	10	
RT. STA. 15+38	8	
RT. STA. 15+44	8	
LT. STA. 16+28	14	
LT. STA. 16+76	10	
LT. STA. 16+91	10	
LT. STA. 17+05	10	
LT. STA. 17+20	9	
RT. STA. 17+39	9	
LT. STA. 17+47	9	
LT. STA. 17+71	8	
RT. STA. 17+90	9	
LT. STA. 17+92	24	2 @ 12"
LT. STA. 17+93	9	
LT. STA. 17+95	12	
LT. STA. 18+12	9	
LT. STA. 18+18	28	2 @ 14"
LT. STA. 18+23	14	
LT. STA. 18+36	14	
LT. STA. 18+61	24	2 @ 12"
RT. STA. 18+75	15	
LT. STA. 18+84	15	
LT. STA. 19+01	12	
RT. STA. 19+08	8	
LT. STA. 19+11	10	
LT. STA. 19+17	10	
LT. STA. 19+18	10	
LT. STA. 19+22	14	
RT. STA. 19+23	14	
LT. STA. 19+25	10	
RT. STA. 19+34	9	
RT. STA. 19+43	9	
RT. STA. 19+44	20	2 @ 10"
RT. STA. 19+50	9	
RT. STA. 19+53	7	
RT. STA. 19+53	9	
RT. STA. 19+72	9	
RT. STA. 19+72	20	2 @ 10"
RT. STA. 19+72	9	
RT. STA. 19+79	12	
LT. STA. 19+81	14	
LT. STA. 19+84	14	
RT. STA. 19+89	18	2 @ 9"
LT. STA. 20+06	10	
LT. STA. 20+13	9	
RT. STA. 20+16	12	
LT. STA. 20+18	36	3 @ 12"
LT. STA. 20+21	18	2 @ 9"
LT. STA. 20+21	9	
LT. STA. 20+23	9	
LT. STA. 20+29	12	
RT. STA. 20+31	8	
RT. STA. 20+34	18	2 @ 9"
RT. STA. 20+35	14	
RT. STA. 20+37	20	2 @ 10"
RT. STA. 20+41	10	
RT. STA. 20+43	12	
RT. STA. 20+44	9	
RT. STA. 20+45	9	
RT. STA. 20+51	27	3 @ 9"
RT. STA. 20+53	12	
RT. STA. 20+58	12	
RT. STA. 20+61	10	
RT. STA. 20+66	12	
RT. STA. 20+68	12	
RT. STA. 20+73	28	2 @ 14"
RT. STA. 20+74	14	
PROJECT TOTAL	987	

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL		
STATION	CU YD	REMARKS
GOODENOW ROAD		
CONTINGENCY ITEM	141	AS DIRECTED BY THE ENGINEER
PROJECT TOTAL	141	

EROSION CONTROL BLANKET		
STATION	SO YD	REMARKS
GOODENOW ROAD		
RT. STA. 13+29 - 13+66	125	
LT. STA. 13+50 - 16+56	999	
RT. STA. 13+74 - 21+09	3,057	
LT. STA. 16+63 - 17+25	228	
LT. STA. 17+39 - 20+55	1,531	
LT. STA. 20+73 - 21+05	85	
RT. STA. 21+23 - 21+50	194	
LT. STA. 21+29 - 21+50	53	
PROJECT TOTAL	6,272	

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 13+50 - 15+95	279	
RT. STA. 13+80 - 15+99	246	
LT. STA. 15+95 - 16+39	71	
RT. STA. 16+01 - 20+04	454	
LT. STA. 17+38 - 19+85	270	
LT. STA. 19+99 - 20+48	65	
RT. STA. 20+13 - 20+80	80	
PROJECT TOTAL	1,465	

SEEDING, CLASS 2A		
STATION	ACRE	REMARKS
GOODENOW ROAD		
RT. STA. 13+29 - 13+66	0.03	
LT. STA. 13+50 - 16+56	0.25	
RT. STA. 13+74 - 21+09	0.75	
LT. STA. 16+63 - 17+25	0.05	
LT. STA. 17+39 - 20+55	0.32	
LT. STA. 20+73 - 21+05	0.02	
RT. STA. 21+23 - 21+50	0.04	
LT. STA. 21+29 - 21+50	0.01	
PROJECT TOTAL	1.50	

HEAVY DUTY EROSION CONTROL BLANKET		
STATION	SO YD	REMARKS
GOODENOW ROAD		
LT. STA. 13+50 - 15+77	207	
RT. STA. 13+99 - 15+70	156	
RT. STA. 16+06 - 19+66	332	
LT. STA. 16+77 - 17+08	29	
RT. STA. 20+35 - 20+97	63	
PROJECT TOTAL	787	

INLET AND PIPE PROTECTION		
STATION	EACH	REMARKS
GOODENOW ROAD		
RT. STA. 13+51	1	
LT. STA. 17+10	1	
LT. STA. 20+35	1	
RT. STA. 20+53	1	
PROJECT TOTAL	4	

NITROGEN FERTILIZER NUTRIENT		
STATION	POUND	REMARKS
GOODENOW ROAD		
RT. STA. 13+29 - 13+66	3	
LT. STA. 13+50 - 16+56	23	
RT. STA. 13+74 - 21+09	68	
LT. STA. 16+63 - 17+25	5	
LT. STA. 17+39 - 20+55	29	
LT. STA. 20+73 - 21+05	2	
RT. STA. 21+23 - 21+50	4	
LT. STA. 21+29 - 21+50	1	
PROJECT TOTAL	135	1 APPL. @ 90 LB/ACRE

TEMPORARY EROSION CONTROL SEEDING		
STATION	POUND	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	355	5 APPL. @ 100 LB/ACRE
PROJECT TOTAL	355	

AGGREGATE SUBGRADE IMPROVEMENT 12"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	2,572	
PROJECT TOTAL	2,572	

AGGREGATE BASE COURSE, TYPE B 5"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
RT. STA. 16+35 - 16+97	30	MAILBOX TURNOUT
RT. STA. 20+61 - 21+03	19	MAILBOX TURNOUT
PROJECT TOTAL	49	

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DESIGNED - M.A.H.	REVISED -
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DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	5
WHA# 1100D01		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

HOT-MIX ASPHALT BASE COURSE, 6"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
RT. STA. 13+75	110	PER
LT. STA. 16+57	87	PEL
LT. STA. 17+32	97	PEL
LT. STA. 20+64	137	PEL
RT. STA. 21+17	135	PER
PROJECT TOTAL	566	

HOT-MIX ASPHALT BASE COURSE, 8"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
LT. STA. 21+17	94	CEL
PROJECT TOTAL	94	

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50		
STATION	TON	REMARKS
GOODENOW ROAD		
RT. STA. 13+75	12	PER, 2"
RT. STA. 16+35 - 16+97	5	MAILBOX TURNOUT, 3"
LT. STA. 16+57	10	PEL, 2"
LT. STA. 17+32	11	PEL, 2"
RT. STA. 20+61 - 21+03	3	MAILBOX TURNOUT, 3"
LT. STA. 20+64	15	PEL, 2"
RT. STA. 21+17	15	PER, 2"
LT. STA. 21+17	11	CEL, 2"
PROJECT TOTAL	82	

BITUMINOUS MATERIALS (TACK COAT)		
STATION	POUND	REMARKS
GOODENOW ROAD - MAINLINE		
STA. 13+50 - 21+50	239	4 APPL. @ 0.025 LB/SY ON BIT.
ENTRANCES	33	2 APPL. @ 0.025 LB/SY ON BIT.
PROJECT TOTAL	272	

HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 13 3/4"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	2,395	
PROJECT TOTAL	2,395	

PAVEMENT REMOVAL		
STATION	SO YD	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	2,091	MAINLINE - 8"-12" (SEE BORINGS)
VARIOUS	556	ENTRANCES
PROJECT TOTAL	2,647	

AGGREGATE SHOULDERS, TYPE B 8"		
STATION	SO YD	REMARKS
GOODENOW ROAD		
RT. STA. 13+50 - 13+67	5	
LT. STA. 13+50 - 16+51	201	
RT. STA. 13+80 - 16+61	186	
LT. STA. 16+63 - 17+25	34	
RT. STA. 16+81 - 20+87	278	
LT. STA. 17+39 - 20+55	218	
LT. STA. 20+73 - 21+05	12	
RT. STA. 21+00 - 21+11	3	
RT. STA. 21+23 - 21+50	9	
LT. STA. 21+29 - 21+50	6	
PROJECT TOTAL	952	

PIPE CULVERT REMOVAL		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 13+74 - 14+04	30	18" CMP
LT. STA. 16+43 - 16+67	24	18" CMP
LT. STA. 17+15 - 17+44	29	18" CMP
PROJECT TOTAL	83	

PIPE CULVERTS, CLASS D, TYPE 1 15"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 17+10 - LT. 17+50	40	
PROJECT TOTAL	40	

PIPE CULVERTS, CLASS D, TYPE 1 18"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 13+52 - RT. 13+97	45	
PROJECT TOTAL	45	

END SECTIONS 15"		
STATION	EACH	REMARKS
GOODENOW ROAD		
LT. STA. 17+10	1	
LT. STA. 17+50	1	
PROJECT TOTAL	2	

END SECTIONS 18"		
STATION	EACH	REMARKS
GOODENOW ROAD		
RT. STA. 13+52	1	
RT. STA. 13+97	1	
PROJECT TOTAL	2	

CONCRETE COLLAR		
STATION	CU YD	REMARKS
GOODENOW ROAD		
LT. STA. 20+33	0.5	EXISTING 12" PIPE CULVERT
RT. STA. 20+51	0.5	EXISTING 15" PIPE CULVERT
PROJECT TOTAL	1	

STORM SEWERS, CLASS A, TYPE 2 12"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 20+18 - 20+33	15	
PROJECT TOTAL	15	

STORM SEWERS, CLASS A, TYPE 2 15"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 20+18 - 20+51	33	
PROJECT TOTAL	33	

CONCRETE HEADWALLS FOR PIPE DRAINS		
STATION	EACH	REMARKS
GOODENOW ROAD		
LT. STA. 15+50	1	
RT. STA. 15+50	1	
LT. STA. 16+25	1	
RT. STA. 16+25	1	
PROJECT TOTAL	4	

PIPE UNDERDRAINS, TYPE 1, 6"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 15+00 - 15+80	80	
RT. STA. 15+00 - 15+80	80	
LT. STA. 16+25 - 18+00	175	
RT. STA. 16+25 - 18+00	175	
PROJECT TOTAL	510	

PIPE UNDERDRAINS 6" (SPECIAL)		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 15+50	32	
RT. STA. 15+50	32	
LT. STA. 16+25	26	
RT. STA. 16+25	16	
PROJECT TOTAL	106	

MANHOLES, TYPE A, 4'-DIA, TYPE 1 FRAME, CL		
STATION	EACH	REMARKS
GOODENOW ROAD		
35.70' LT. STA. 20+24.62	1	
34.37' RT. STA. 20+53.01	1	
PROJECT TOTAL	2	

FURNISHING AND ERECTING RIGHT OF WAY MARKERS		
STATION	EACH	REMARKS
GOODENOW ROAD		
50.00' RT. STA. 13+29.12	1	METHOD B
60.00' RT. STA. 13+29.07	1	METHOD B
50.00' LT. STA. 15+00.00	1	METHOD A
60.00' LT. STA. 15+00.00	1	METHOD A
60.00' LT. STA. 19+29.43	1	METHOD A
70.00' LT. STA. 19+29.61	1	METHOD A
60.00' RT. STA. 19+50.00	1	METHOD A
70.00' RT. STA. 19+50.00	1	METHOD A
70.00' LT. STA. 20+74.61	1	METHOD B
62.19' RT. STA. 20+80.07	1	METHOD A
70.00' RT. STA. 20+80.04	1	METHOD A
PROJECT TOTAL	11	

SHORT TERM PAVEMENT MARKING		
STATION	FOOT	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	80	4" STRIPES 4' @ 40' CENTERS (YLW)
PROJECT TOTAL	80	

SHORT TERM PAVEMENT MARKING REMOVAL		
STATION	SO FT	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	27	
PROJECT TOTAL	27	

TEMPORARY PAVEMENT MARKING - LINE 4"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 13+50 - 21+50	800	EDGE LINE (WHT)
STA. 13+50 - 20+10	660	CENTERLINE (YLW)
STA. 13+50 - 20+10	170	CENTERLINE 10'-30' SKIP DASH (YLW)
RT. STA. 13+50 - 21+50	800	EDGE LINE (WHT)
LT. STA. 20+10 - 21+50	280	TURN LANE MEDIAN (YLW)
LT. STA. 20+75 - 21+50	150	TURN LANE MEDIAN (YLW)
PROJECT TOTAL	2,860	

TEMPORARY PAVEMENT MARKING - LINE 6"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 20+50 - 21+50	26	TURN LANE EXTENSION SKIP DASH (WHT)
PROJECT TOTAL	26	

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DESIGNED - M.A.H.	REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	6
WHA# 1100001		CONTRACT NO. 63707		

ILLINOIS FED. AID PROJECT

SCHEDULE OF QUANTITIES

TEMPORARY CONCRETE BARRIER		
STATION	FOOT	REMARKS
GOODENOW ROAD		
STA. 15+60	25	
STA. 16+20	25	
PROJECT TOTAL	50	

PAINT PAVEMENT MARKING - LINE 6"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 20+50 - 21+50	26	TURN LANE EXTENSION SKIP DASH (WHT)
PROJECT TOTAL	26	

RELOCATE EXISTING LIGHT POLE WITH LUMINAIRE		
STATION	EACH	REMARKS
GOODENOW ROAD		
30.0' RT. STA. 20+58	1	
PROJECT TOTAL	1	

RELOCATE TEMPORARY CONCRETE BARRIER		
STATION	FOOT	REMARKS
GOODENOW ROAD		
STA. 19+60	25	
STA. 20+40	25	
PROJECT TOTAL	50	

RAISED REFLECTIVE PAVEMENT MARKER		
STATION	EACH	REMARKS
GOODENOW ROAD		
STA. 20+10 - 21+20	8	TWO-WAY AMBER MARKER
PROJECT TOTAL	8	

SIGN PANEL - TYPE 1		
STATION	SO FT	REMARKS
GOODENOW ROAD		
RT. STA. 13+45	6	STOP AHEAD (W3-1)
LT. STA. 19+60	5	35 MPH SPEED LIMIT (R2-1)
LT. STA. 20+30	9	13'-9" LOW CLEARANCE (W12-2)
LT. STA. 20+30	5	1/2 MILE AHEAD (SUPPLEMENTAL WARNING PLAQUE)
PROJECT TOTAL	25	

PAVEMENT MARKING REMOVAL		
STATION	SO FT	REMARKS
GOODENOW ROAD		
STA. 13+50 - 21+50	966	TEMP. PVT. MARKINGS
PROJECT TOTAL	966	

REMOVE SIGN PANEL ASSEMBLY - TYPE A		
STATION	EACH	REMARKS
GOODENOW ROAD		
RT. STA. 13+70	1	STOP AHEAD SIGN
LT. STA. 19+60	1	SPEED LIMIT SIGN
LT. STA. 19+80	1	HAZARD MARKER
RT. STA. 19+80	1	HAZARD MARKER
LT. STA. 20+20	1	HAZARD MARKER
RT. STA. 20+20	1	HAZARD MARKER
LT. STA. 20+30	1	LOW CLEARANCE SIGN
PROJECT TOTAL	7	

REMOVE EXISTING FLARED END SECTION		
STATION	EACH	REMARKS
GOODENOW ROAD		
LT. STA. 20+35	1	12"
RT. STA. 20+53	1	15"
PROJECT TOTAL	2	

TELESCOPING STEEL SIGN SUPPORT		
STATION	FOOT	REMARKS
GOODENOW ROAD		
RT. STA. 13+45	14	STOP AHEAD SIGN
LT. STA. 19+60	14	SPEED LIMIT SIGN
LT. STA. 20+30	14	LOW CLEARANCE SIGN
PROJECT TOTAL	42	

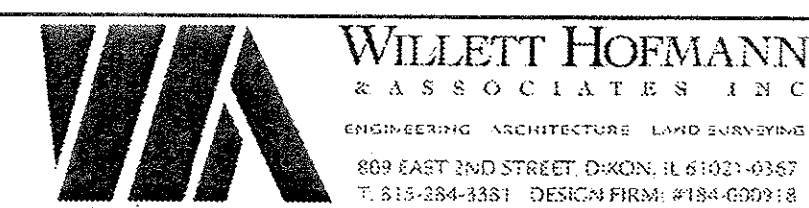
REMOVE EXISTING RIPRAP		
STATION	SO YD	REMARKS
GOODENOW ROAD		
RT. STA. 20+26 - 20+51	48	
LT. STA. 20+27 - 20+32	3	
PROJECT TOTAL	51	

PAINT PAVEMENT MARKING - LINE 4"		
STATION	FOOT	REMARKS
GOODENOW ROAD		
LT. STA. 13+50 - 21+50	800	EDGE LINE (WHT)
STA. 13+50 - 20+10	660	CENTERLINE (YLW)
STA. 13+50 - 20+10	170	CENTERLINE 10'-30' SKIP DASH (YLW)
RT. STA. 13+50 - 21+50	800	EDGE LINE (WHT)
LT. STA. 20+10 - 21+50	280	TURN LANE MEDIAN (YLW)
LT. STA. 20+75 - 21+50	150	TURN LANE MEDIAN (YLW)
PROJECT TOTAL	2,860	

TOPSOIL FURNISH AND PLACE, SPECIAL		
STATION	CU YD	REMARKS
GOODENOW ROAD		
LT. STA. 13+50 - 21+50	206	
RT. STA. 13+50 - 21+50	179	
PROJECT TOTAL	385	

CHANGEABLE MESSAGE SIGN		
STATION	CAL DA	REMARKS
GOODENOW ROAD		
GOODENOW ROAD AND ASHLAND AVE	25	EASTBOUND
GOODENOW ROAD AND IL RTE 394	25	WESTBOUND
PROJECT TOTAL	50	

FILE: S:\ST-001\180001\TRANS\180001\SUMMARY\SCHEDULES-2012.dgn



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CHECKED - B.S.K.	REVISED -

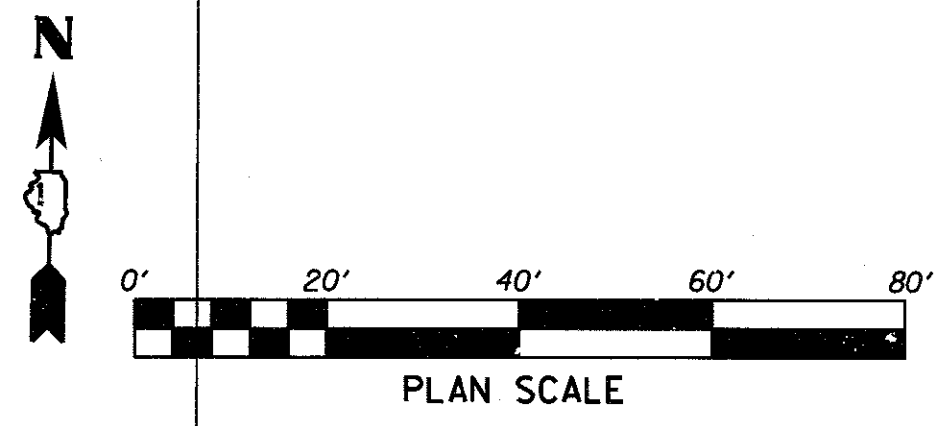
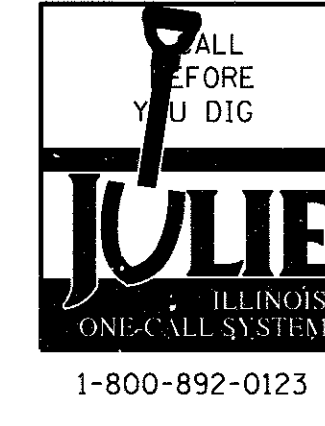
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	7
WHA# 1100D01			CONTRACT NO. 63707	
ILLINOIS FED. AID PROJECT				

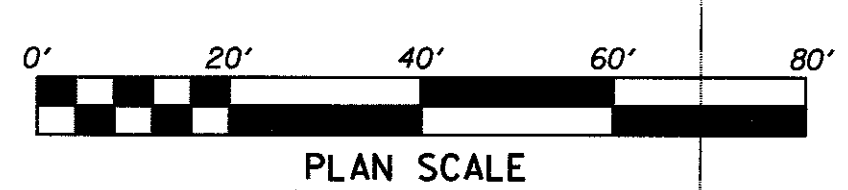
**PROJECT BEGINS
STA. 13+50**

**PROJECT ENDS
STA. 21+50**



KEY
 PAVEMENT REMOVAL

*EXISTING GUARDRAIL REMOVAL TO BE INCLUDED IN THE COST FOR REMOVAL OF EXISTING STRUCTURE NO. 1 (SEE SPECIAL PROVISION).



KEY
 PAVEMENT REMOVAL



DESIGNED	- M.A.H.	REVISED	-
CHECKED	- B.S.K.	REVISED	-
DRAWN	- M.A.H.	REVISED	-
CHECKED	- B.S.K.	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLAN

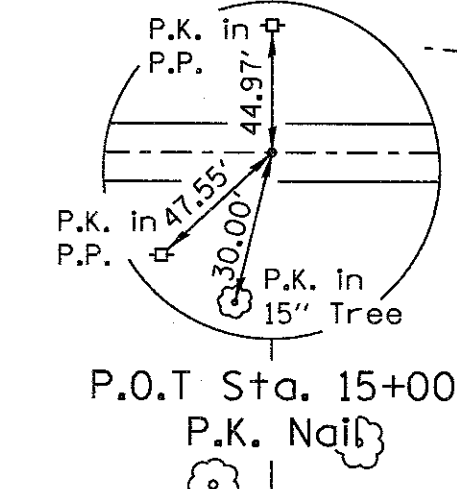
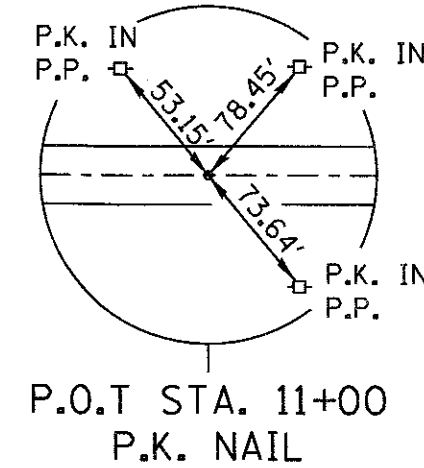
SCALE: 1" = 20'-0" SHEET NO. 1 OF 2 SHEETS STA. 11+00.00 TO STA. 23+00.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	8
WHA* 1100001			CONTRACT NO. 63707	

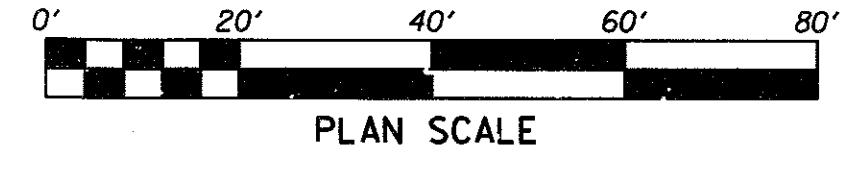
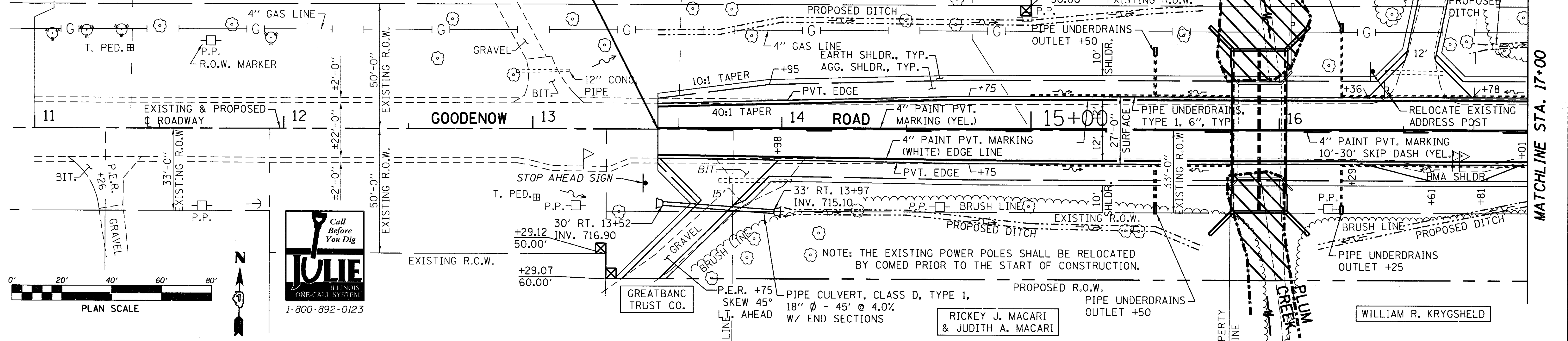
ILLINOIS FED. AID PROJECT

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BENCH MARK: RAIL ROAD SPIKE IN THE 3RD. PP WEST OF THE EXIST. BRIDGE OVER PLUM CREEK 31.8' RT. OF STA. 17+13, EL. 711.41 (NAVD 88)



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BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
NO.	
DESCRIPTION	



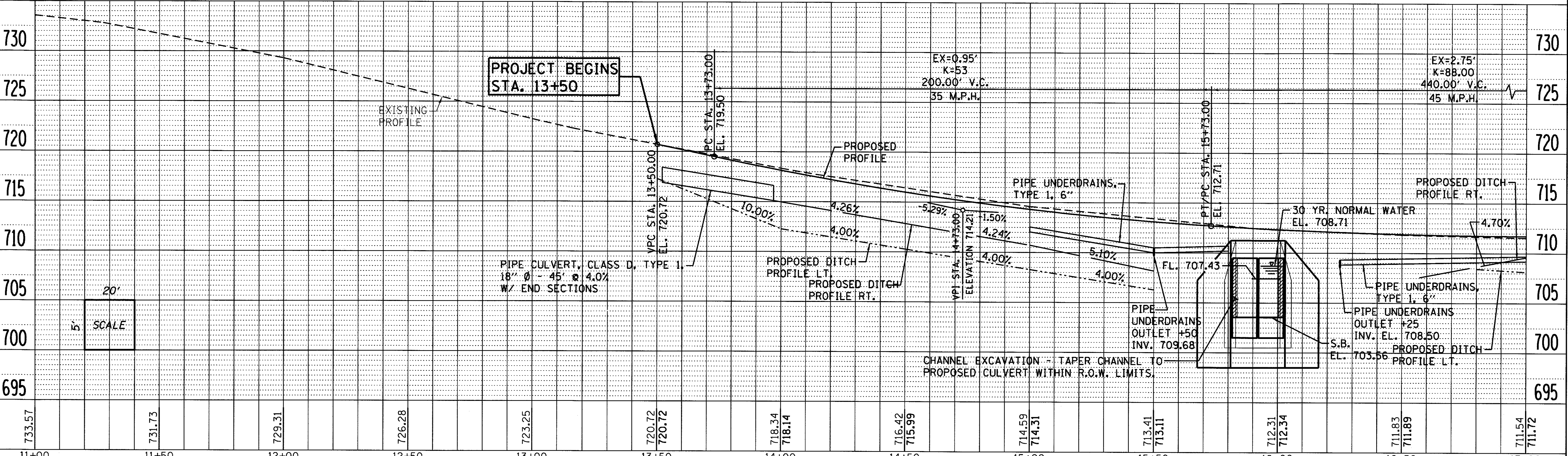
LEGEND:
 - - - - - WATERS OF US (STREAM ONLY) BOUNDARY
 // // // WATERS OF US (STREAM ONLY) TEMPORARILY IMPACTED

AREA OF TEMPORARY WOUS IMPACT (STREAM) = 0.175 ACRES
AREA OF TEMPORARY WOUS IMPACT (FRINGE WETLAND) = 0.048 ACRES
AREA OF PERMANENT WOUS IMPACT (FRINGE WETLAND) = 0.046 ACRES
TOTAL PERMANENT WOUS IMPACT = 0.046 ACRES

KEY
 [Symbol] PROPOSED RIGHT OF WAY MARKER

EXISTING STRUCTURE:
 A DOUBLE BARREL (8'X6') REINFORCED CONCRETE BOX CULVERT @ STA. 15+92. SKEWED 0°. TO BE REMOVED. NO SALVAGE.

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
NO.	
DESCRIPTION	



SCALE



DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
 SCALE: 1" = 20'-0"
 SHEET NO. 1 OF 2 SHEETS
 STA. 11+00.00 TO STA. 17+00.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-0012-01-BR	WILL	29	9
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

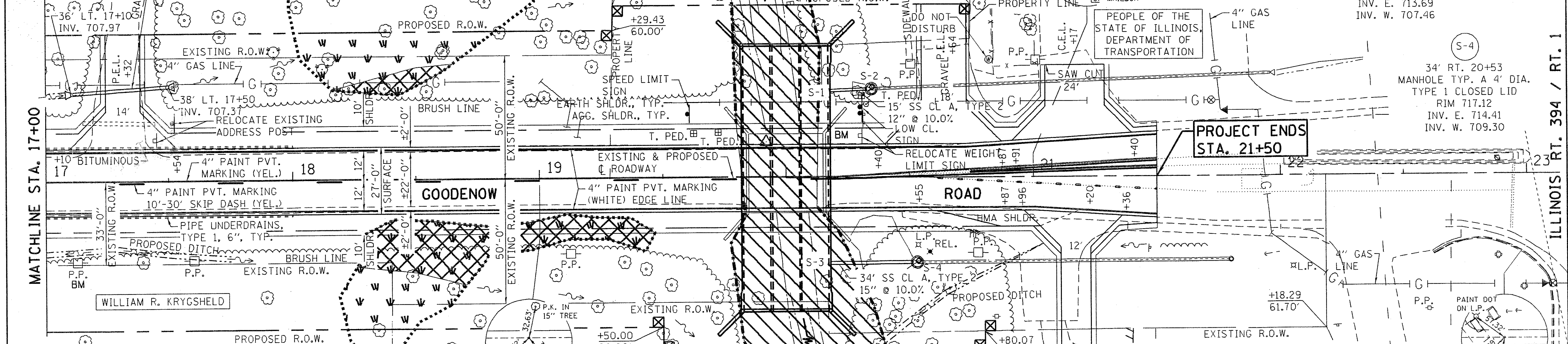
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BENCH MARK: RAIL ROAD SPIKE IN THE 3RD. PP WEST OF THE BENCH MARK: CHIS. "□" ON NE WINGWALL OF EXIST. BRIDGE 20.4' EXIST. BRIDGE OVER PLUM CREEK 31.8' RT. OF STA. 17+13, EL. 711.41 (NAVD 88) LT. OF STA. 20+17, EL. 714.65 (NAVD 88)

PIPE CULVERT, CLASS D, TYPE 1, 15" Ø - 40' @ 1.5% W/ END SECTIONS

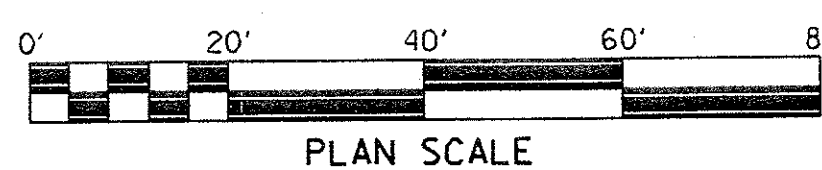
CHESTER L. DOMBROWSKI & VICTORIA J. DOMBROWSKI

ALLEN C. BOLDT & KATHLEEN BOLDT



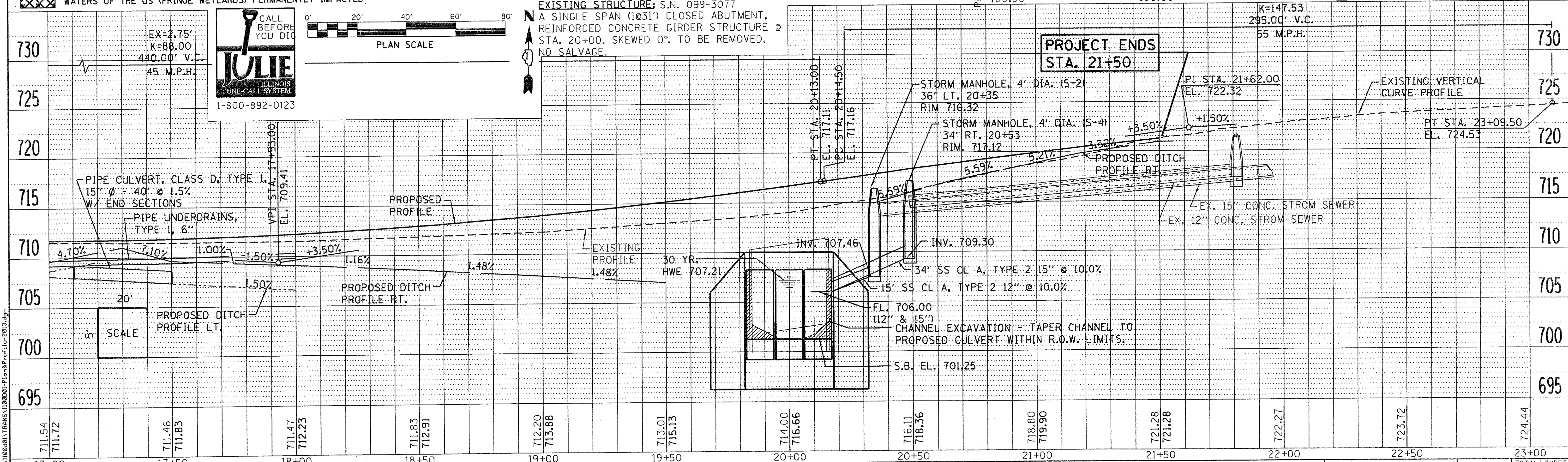
AREA OF TEMPORARY WOUS IMPACT (STREAM) = 0.175 ACRES
 AREA OF TEMPORARY WOUS IMPACT (FRINGE WETLAND) = 0.048 ACRES
 AREA OF PERMANENT WOUS IMPACT (FRINGE WETLAND) = 0.046 ACRES
 TOTAL PERMANENT WOUS IMPACT = 0.046 ACRES

- LEGEND:
- WATERS OF THE US (FRINGE WETLAND) BOUNDARY
 - WATERS OF THE US (FRINGE WETLANDS) TEMPORARILY IMPACTED
 - WATERS OF THE US (FRINGE WETLANDS) PERMANENTLY IMPACTED
 - WATERS OF THE US (STREAM ONLY) BOUNDARY
 - WATERS OF THE US (STREAM ONLY) TEMPORARILY IMPACTED



EXISTING STRUCTURE: S.N. 099-3077
 A SINGLE SPAN (1031') CLOSED ABUTMENT, REINFORCED CONCRETE GIRDER STRUCTURE @ STA. 20+00, SKEWED 0°. TO BE REMOVED. NO SALVAGE.

PROPOSED STRUCTURE: S.N. 099-3377
 A TRIPLE BARREL (11'x9') REINFORCED CONCRETE BOX CULVERT @ STA. 20+00, SKEWED 0°.



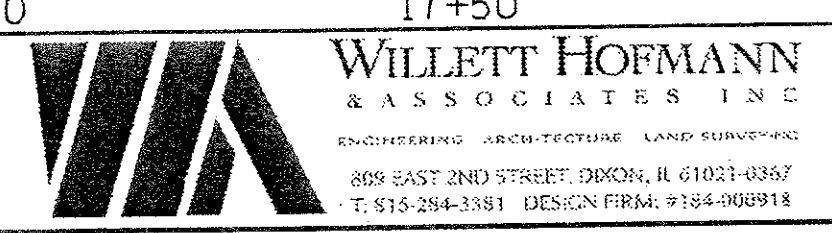
PROJECT ENDS STA. 21+50

EXISTING VERTICAL CURVE PROFILE
 PT. STA. 23+09.50
 EL. 724.53

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1" = 20'-0" SHEET NO. 2 OF 2 SHEETS STA. 17+00.00 TO STA. 23+09.50

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	10
WHA# 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

DETOUR GENERAL NOTES

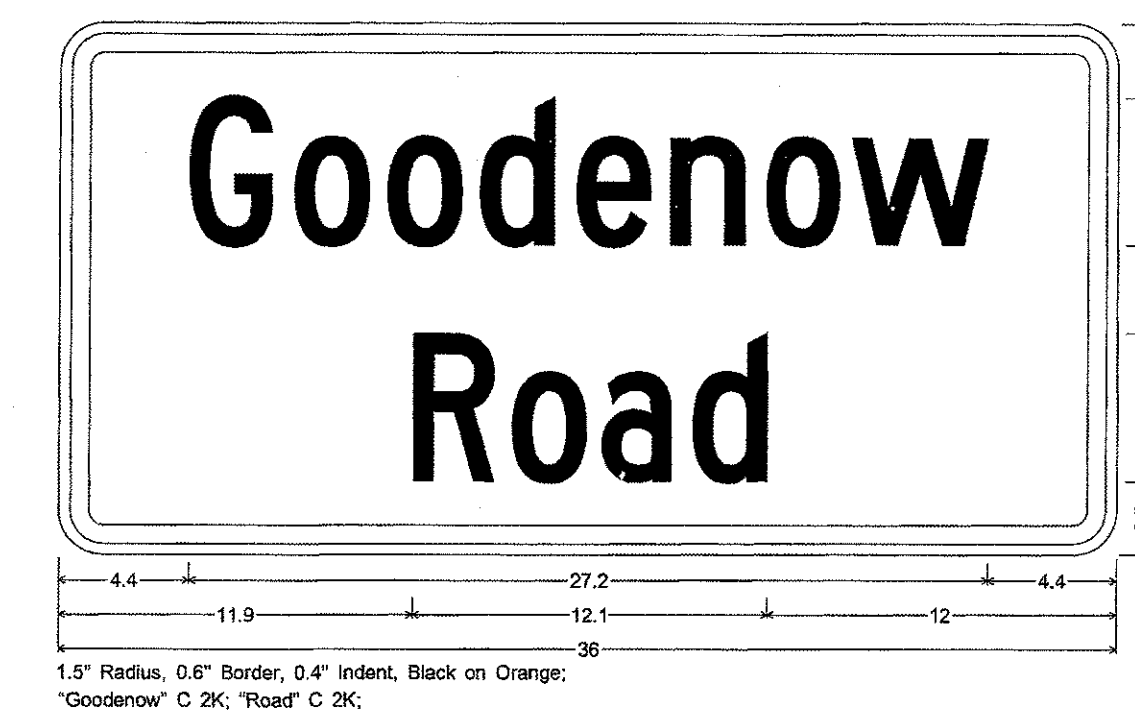
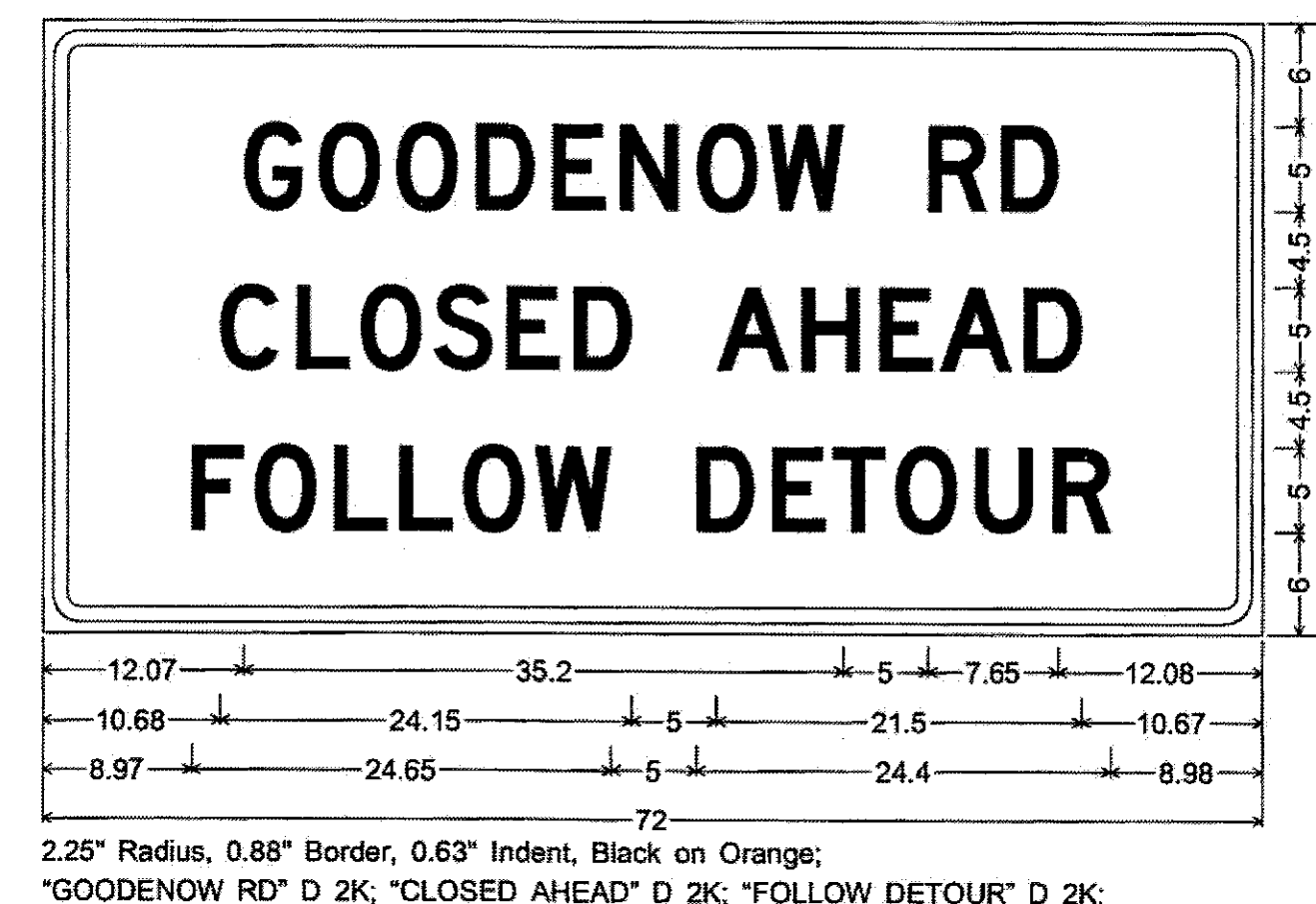
1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THE "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES" ADOPTED 2010, THE DETAILS IN THESE PLANS, AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".
2. THE CONTRACTOR SHALL SCHEDULE ALL WORK IN AN EXPEDIENT MANNER TO REDUCE THE LENGTH OF TIME THAT THE DETOUR NEEDS TO BE IN EFFECT.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES FOR APPROVAL OF SUCH DATE.
4. IF DEEMED NECESSARY BY THE ENGINEER A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.
5. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVES FOR THE DETOUR SIGNING PRIOR TO THE START OF WORK. THE WILL COUNTY DIVISION OF TRANSPORTATION REPRESENTATIVE FOR THE DETOUR IS:
 MR. BRUCE GOULD, P.E.
 WILL COUNTY DIVISION OF TRANSPORTATION
 16841 WEST LARAWAY ROAD
 (815) 727-8476
6. IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.
7. LONGITUDINAL DIMENSIONS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
8. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
10. THE CONTRACTOR SHALL MAKE ALL CHANGES IN SIGNING THAT ARE DEEMED NECESSARY BY THE ENGINEER.
11. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.
12. ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.
13. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1106.01 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION AND ACCEPTANCE OF THE SIGNS.
14. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
15. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1106.02 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.
16. THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THE PLANS ARE 18" X 18".
17. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 9'-0" IN WIDTH EACH, FOR A SINGLE APPROACH LANE.
18. THE "ROAD CLOSED" (R11-2), THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" (R11-3), AND THE "ROAD CLOSED TO THRU TRAFFIC" (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.
19. THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" BY VARIABLE OR A 12" BY VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.
20. DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
21. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING. BRUSHING BACK VEGETATION IF DEEMED BY THE ENGINEER.
23. THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS ARE APPLICABLE FOR THIS WORK: STANDARDS 701301, 701311, 701901, 704001, 720001, 720006, 720011, 728001, 729001, 731001
24. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
25. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
26. A REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING SHALL BE AVAILABLE TO RESPOND AND CORRECT DEFICIENCIES IN THE DETOUR SIGNING WITHIN 2 HOURS.
27. ACCESS TO THE PRIVATE DRIVES SHALL BE MAINTAINED AT ALL TIMES.
28. DETOUR SIGNAGE SHALL BE PAID FOR UNDER TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

CONSTRUCTION SEQUENCE

1. INSTALLATION OF CHANGEABLE MESSAGE SIGNS WITH DATE OF CLOSURE.
2. INSTALLATION OF ALL DETOUR SIGNAGE PRIOR TO ROAD CLOSURE. ALL SIGNS TO REMAIN COVERED PRIOR TO CLOSURE.
3. ROAD CLOSURE, REMOVAL OF CHANGEABLE MESSAGE SIGNS, AND INSTALLATION OF PERIMETER EROSION BARRIER. ONLY ONE CULVERT TO BE BLOCKED BY TEMPORARY CONCRETE BARRIER AT ANY ONE TIME.
4. REMOVAL OF EXISTING CULVERT AND ASSOCIATED CHANNEL EXCAVATION.
5. CONSTRUCTION OF PROPOSED DOUBLE BARREL BOX CULVERT AND PLACEMENT OF AGGREGATE BASE COURSE TO A LEVEL TO ALLOW ACCESS ACROSS THE CULVERT.
6. MOVE BARRICADES AND TEMPORARY CONCRETE BARRIER AS NECESSARY TO CLOSE TRAFFIC ACROSS THE CONCRETE GIRDER STRUCTURE.
7. REMOVAL OF CONCRETE GIRDER STRUCTURE AND ASSOCIATED CHANNEL EXCAVATION.
8. CONSTRUCTION OF PROPOSED TRIPLE BARREL BOX CULVERT.
9. REMOVAL OF EXISTING PAVEMENT, EARTH EXCAVATION, AND DITCH SHAPING.
10. PLACEMENT OF AGGREGATE AND BITUMINOUS BASE COURSES FOLLOWED BY BITUMINOUS BINDER AND SURFACE COURSES.
11. PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.
12. REOPENING OF THE ROADWAY TO THROUGH TRAFFIC & REMOVAL OF ALL DETOUR SIGNS.

SPECIAL SIGN DESIGNS



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DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
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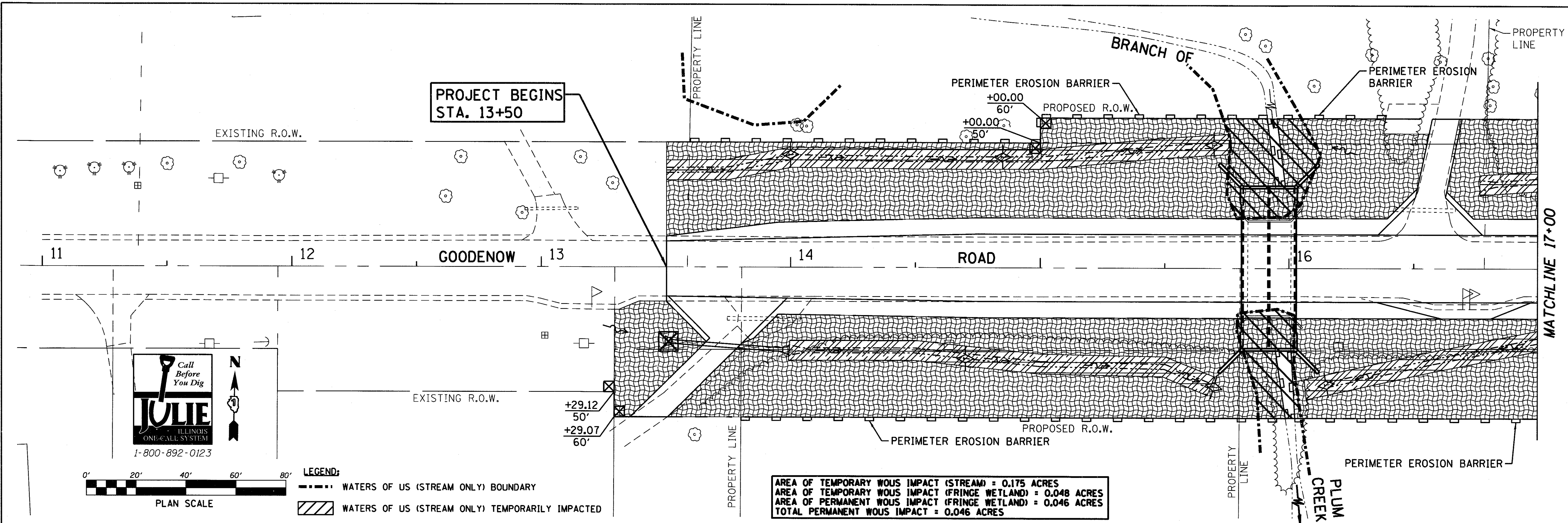
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR PLAN

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	12
WHA* 1100001		CONTRACT NO. 63707		

ILLINOIS FED. AID PROJECT

DATE	
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DATE	
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STORM WATER POLLUTION PREVENTION PLAN

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

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

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

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

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

SITE DESCRIPTION
DESCRIPTION OF CONSTRUCTION ACTIVITY:

- THE PROJECT CONSISTS OF BOX CULVERT REPLACEMENT ON GOODENOW ROAD (CH 23) OVER PLUM CREEK AND A BRANCH OF PLUM CREEK & APPROACH ROADWAY WORK THEREON.
- CONSTRUCTION INCLUDES PAVEMENT REMOVAL, EARTH EXCAVATION, ENTRANCES, CHANNEL EXCAVATION, VARIOUS PAVEMENT ITEMS, CULVERT ITEMS AND OTHER MISCELLANEOUS ITEMS OF CONSTRUCTION.

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

- INSTALL PERIMETER EROSION BARRIER AS DIRECTED BY THE ENGINEER.
- CULVERT REMOVAL AND CHANNEL EXCAVATION.
- CULVERT CONSTRUCTION.
- EARTH EXCAVATION, SHAPING OF DITCHES AND PLACEMENT OF TEMPORARY DITCH CHECKS.
- AGGREGATE BASE, BITUMINOUS SURFACE AND RELATED APPURTENANCES.
- PLACEMENT OF PERMANENT EROSION CONTROL IN DITCHES AND AROUND WINGWALLS, INCLUDING SEEDING, AND EROSION CONTROL BLANKET.

AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 2.40 ACRES OF WHICH 1.49 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

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

- INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
- PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

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

- THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, PERIMETER EROSION BARRIER, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.
 - DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH REQUIRED TREE REMOVAL.
 - AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.
 - BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.
 - AT LOCATIONS WHERE A SIGNIFICANT AMOUNT OF WATER DRAINS INTO THE CONSTRUCTION ZONE FROM OUTSIDE AREAS (ADJACENT LANDOWNERS), TEMPORARY DITCH CHECKS WILL BE UTILIZED TO LOCALLY DIVERT WATER, REDUCE FLOW RATES, AND COLLECT OUTSIDE SILTATION INSIDE THE RIGHT-OF-WAY LINE.
- ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVER SEEDING CAN BE COMPLETED.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

- DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
 - WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
 - EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.
 - AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - TEMPORARILY SEED ERODIBLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
 - EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.
 - CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
 - THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF INCH OR GREATER OR EQUIVALENT SNOWFALL DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

(G) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

(H) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

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

MAINTENANCE AFTER CONSTRUCTION

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

MISCELLANEOUS:

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

LEGEND

[Symbol]	PERIMETER EROSION BARRIER
[Symbol]	TEMPORARY DITCH CHECKS
[Symbol]	INLET & PIPE PROTECTION
[Symbol]	SEEDING, CLASS 2A & EROSION CONTROL BLANKET & FERTILIZER
[Symbol]	SEEDING, CLASS 2A & HEAVY DUTY EROSION CONTROL BLANKET & FERTILIZER

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
SEEDING, CLASS 2A	ACRE	1.47
NITROGEN FERTILIZER NUTRIENT	POUND	135
POTASSIUM FERTILIZER NUTRIENT	POUND	135
EROSION CONTROL BLANKET	SO. YD.	6,272
HEAVY DUTY EROSION CONTROL BLANKET	SO. YD.	787
TEMPORARY EROSION CONTROL SEEDING	POUND	355
TEMPORARY DITCH CHECKS	FOOT	90
PERIMETER EROSION BARRIER	FOOT	1,465
INLET & PIPE PROTECTION	EACH	4

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DESIGNED - M.A.H.	REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

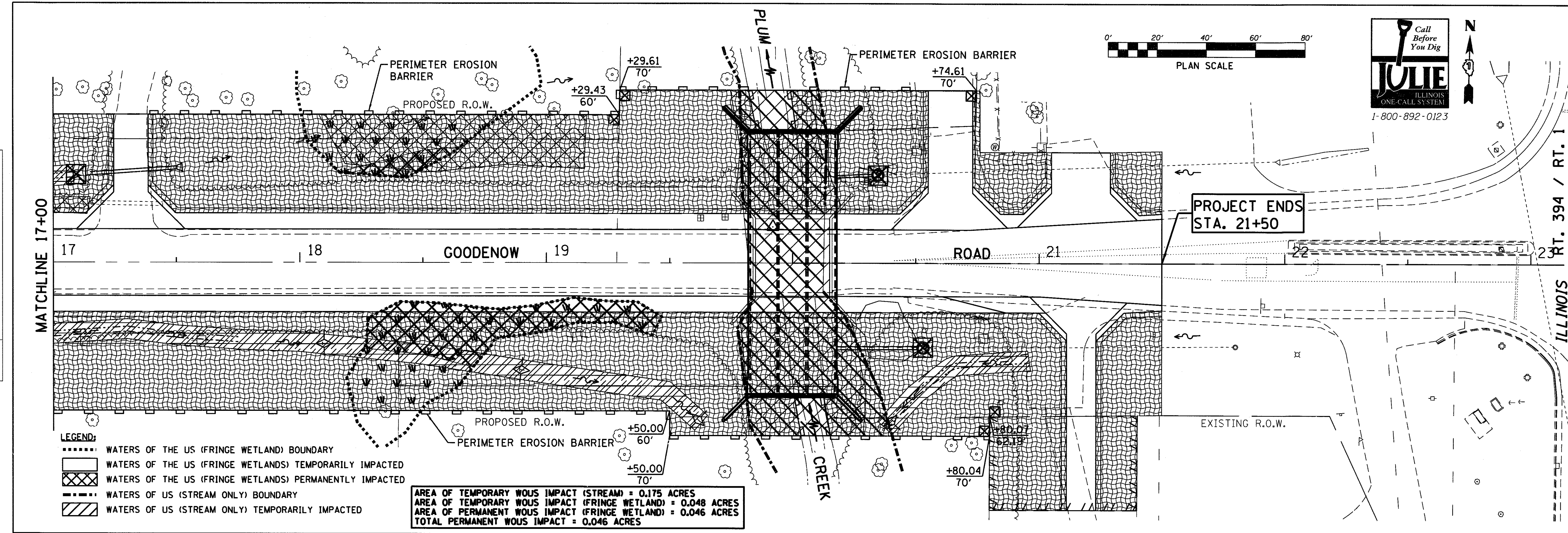
STORM WATER POLLUTION PREVENTION PLAN

SCALE: 1" = 20'-0" SHEET NO. 1 OF 2 SHEETS STA. 11+00.00 TO STA. 17+00.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	13
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNED	BY
NO.	CHECKED	
	RT. OF WAY	
	CHECKED	
	ADD. FILE	
	NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES	BY
NO.	CHECKED	
	BLM. NOTED	
	STRUCTURE	
	NOTATIONS	
	CHKD	



- LEGEND:**
- WATERS OF THE US (FRINGE WETLAND) BOUNDARY
 - ▨ WATERS OF THE US (FRINGE WETLANDS) TEMPORARILY IMPACTED
 - ▩ WATERS OF THE US (FRINGE WETLANDS) PERMANENTLY IMPACTED
 - WATERS OF US (STREAM ONLY) BOUNDARY
 - ▨ WATERS OF US (STREAM ONLY) TEMPORARILY IMPACTED

AREA OF TEMPORARY WOUS IMPACT (STREAM) = 0.175 ACRES
 AREA OF TEMPORARY WOUS IMPACT (FRINGE WETLAND) = 0.048 ACRES
 AREA OF PERMANENT WOUS IMPACT (FRINGE WETLAND) = 0.046 ACRES
 TOTAL PERMANENT WOUS IMPACT = 0.046 ACRES

EROSION CONTROL NOTES

- TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS. /ACRES.
- EROSION CONTROL BLANKET SHALL BE INSTALLED TO ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 1V:5H AND IN CRITICAL AREAS (I.E. DETENTION BASIN PERIMETERS, STREAMBANKS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.
- ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY.
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.
- TEMPORARY DITCH CHECKS SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 280001 LOCATED IN THE PLANS.
- TEMPORARY DITCH CHECKS SHALL BE PLACED AT STATIONS CALLED OUT IN THE SCHEDULE OF QUANTITIES OR AS DIRECTED BY THE ENGINEER.
- EROSION CONTROL BLANKET SHALL BE PLACED IN DITCHES AS SHOWN ON THIS SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.
- ALL ITEMS SHALL BE CONSTRUCTED AS SHOWN ON STANDARD 280001 AND AS DIRECTED BY THE ENGINEER. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.

IN-STREAM OR STREAM-SIDE NOTES

- THE CONTRACTOR SHALL CONTACT THE CORPS OF ENGINEERS WITH A PROPOSED COFFERDAM PLAN MEETING THE STANDARDS LISTED BELOW. MEANS AND METHODS FOR COMPLETING WORK WITHIN A WATERWAY MUST BE APPROVED BY THE CORPS PRIOR TO COMMENCEMENT OF WORK. THE CORPS WILL APPROVE THE COFFERDAM PLAN TO ENSURE IT MEETS THE EROSION AND SEDIMENT CONTROL STANDARDS. HOWEVER, IT IS INCUMBENT UPON THE CONTRACTOR TO ENSURE THAT ALL COFFERDAMS ARE CONSTRUCTED TO WITHSTAND EXPECTED FLOWS.
1. WORK IN THE WATERWAY SHALL BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS.
 2. WATER SHALL BE ISOLATED FROM THE IN-STREAM WORK AREA USING A NON-ERODIBLE COFFERDAM (STEEL SHEETS, AQUA BARRIERS, ETC.). EARTHEN COFFERDAMS ARE NOT PERMISSIBLE.
 3. WORK MAY NOT BE PERFORMED IN THE WATER, EXCEPT FOR THE PLACEMENT OF THE MATERIALS NECESSARY FOR THE CONSTRUCTION OF THE COFFERDAM. THE COFFERDAM MUST BE CONSTRUCTED FROM THE UPLAND AREA AND NO EQUIPMENT MAY ENTER THE WATER AT ANY TIME. ONCE THE COFFERDAM IS IN PLACE AND THE ISOLATED AREA IS DEWATERED, EQUIPMENT MAY ENTER THE COFFERED AREA TO PERFORM THE REQUIRED WORK.
 4. IF BYPASS PUMPING IS NECESSARY, THE PUMP SHALL BE PLACED ON A STABLE SURFACE OR FLOATED TO PREVENT SEDIMENT FROM BEING SUCKED INTO THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION OF DOWNSTREAM AREAS. CLEANING OR FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS OTHERWISE REQUIRED.
 5. DURING DEWATERING OF THE COFFERED AREA, ALL WATER MUST BE FILTERED TO REMOVE SEDIMENT. POSSIBLE OPTIONS FOR SEDIMENT REMOVAL INCLUDE BAFFLE SYSTEMS, ANIONIC POLYMERS, DEWATERING BAGS, OR OTHER APPROPRIATE METHODS. WATER SHALL HAVE SEDIMENT REMOVED PRIOR TO BEING RE-INTRODUCED TO THE DOWNSTREAM WATERWAY. DISCHARGE WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN A VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY.
 6. THE SIDE SLOPES SHALL BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE SUBSTRATE SHALL BE RESTORED TO PRECONSTRUCTION CONDITIONS AND STABLE ENOUGH TO ACCEPT FLOWS.
 7. ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITY WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITY.

LEGEND

- ▬ PERIMETER EROSION BARRIER
- ◇ TEMPORARY DITCH CHECKS
- ⊠ INLET & PIPE PROTECTION
- ▨ SEEDING, CLASS 2A & EROSION CONTROL BLANKET & FERTILIZER
- ▩ SEEDING, CLASS 2A & HEAVY DUTY EROSION CONTROL BLANKET & FERTILIZER

FILE = S:\S&P\us\11000\001\TRANS\11000\01-SWPPP-2013.dgn

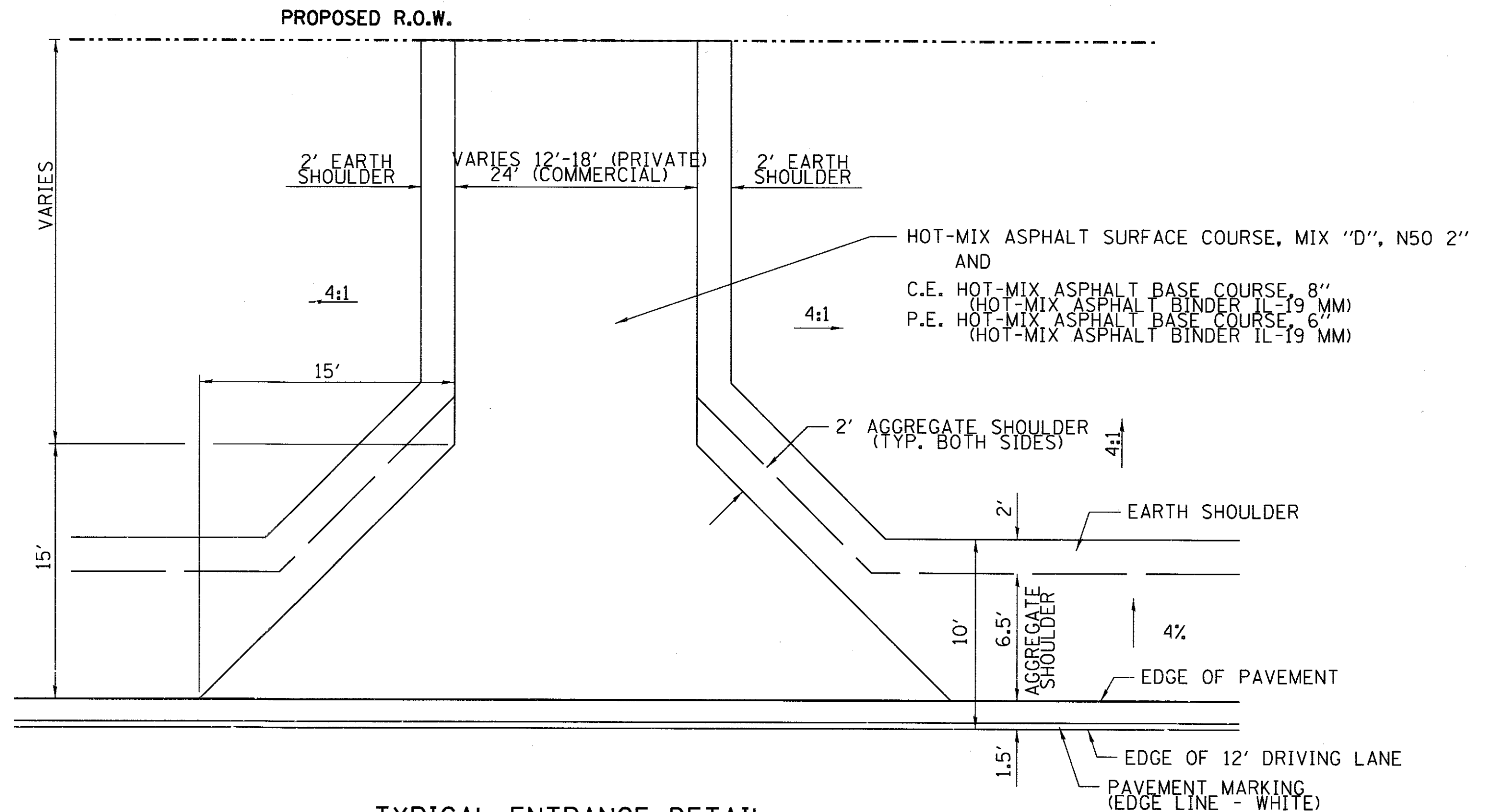


DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STORM WATER POLLUTION PREVENTION PLAN
SCALE: 1" = 20'-0" SHEET NO. 2 OF 2 SHEETS STA. 17+00.00 TO STA. 21+50.00

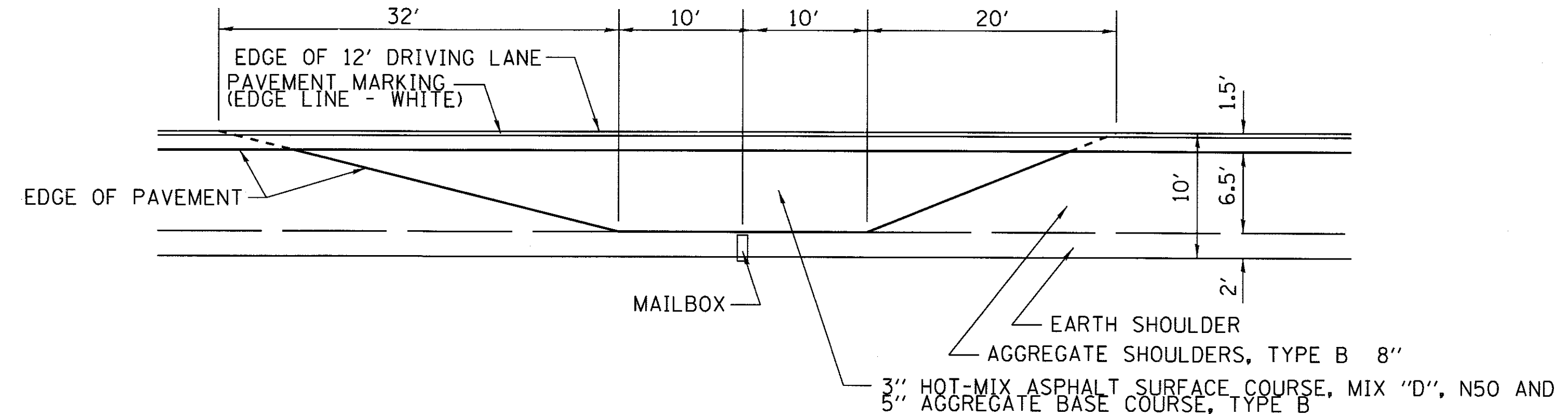
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	14
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS/FED. AID PROJECT				



TYPICAL ENTRANCE DETAIL

PRIVATE - RT. STA. 13+75
 LT. STA. 16+57
 RT. STA. 17+32
 LT. STA. 20+64
 RT. STA. 21+17

COMMERCIAL - LT. STA. 21+17



MAILBOX TURNOUT DETAIL

FILE = S:\Struct\1100001\TRANS\1100001-ROADWAY-DETAILS-2013.dgn



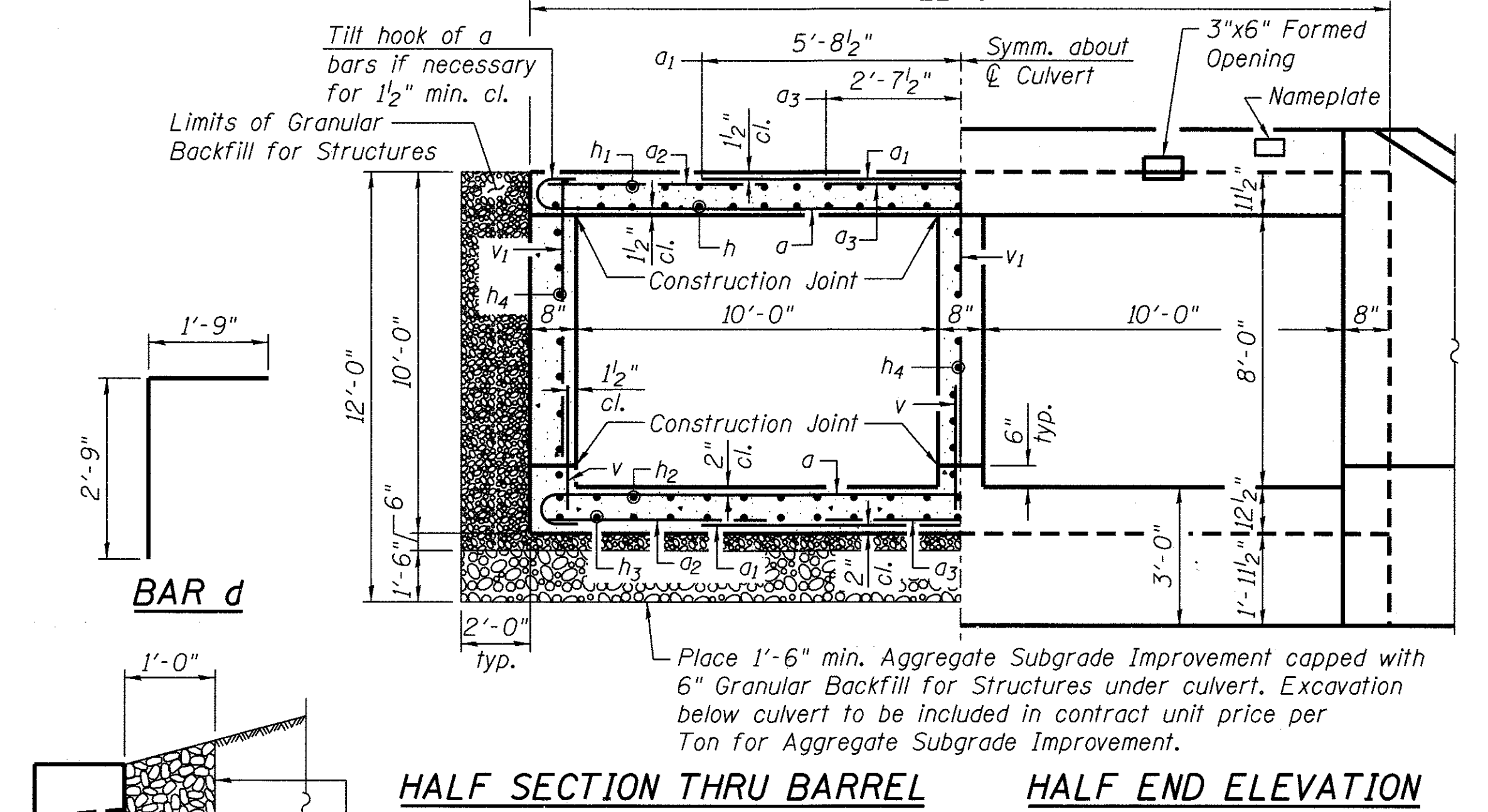
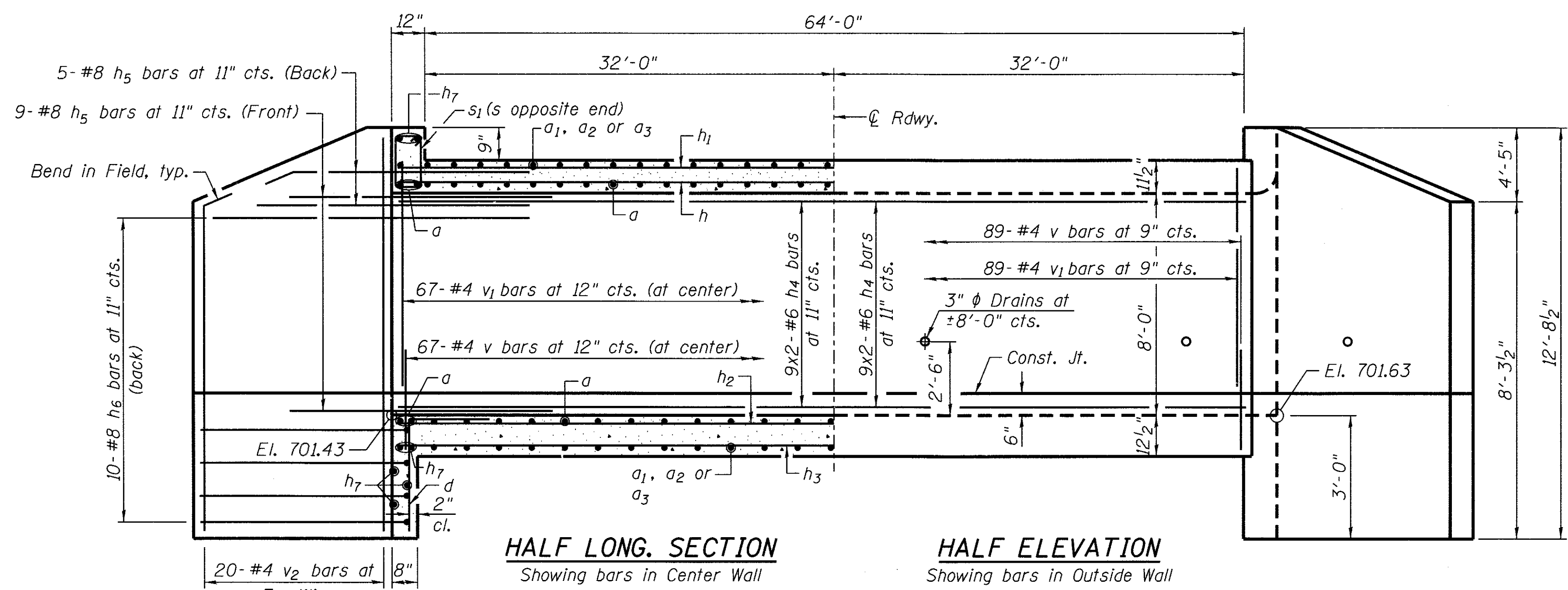
DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

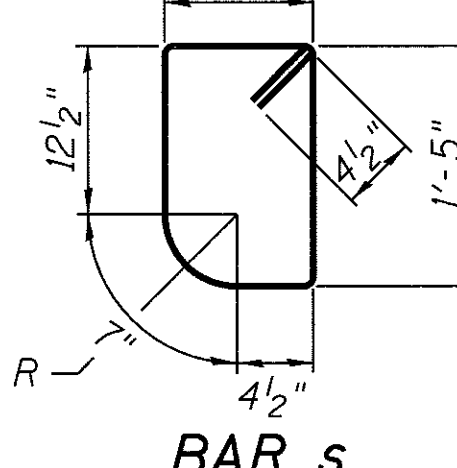
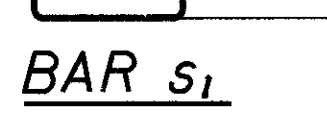
ROADWAY DETAILS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	15
WHA* 1100001			CONTRACT NO. 63707	

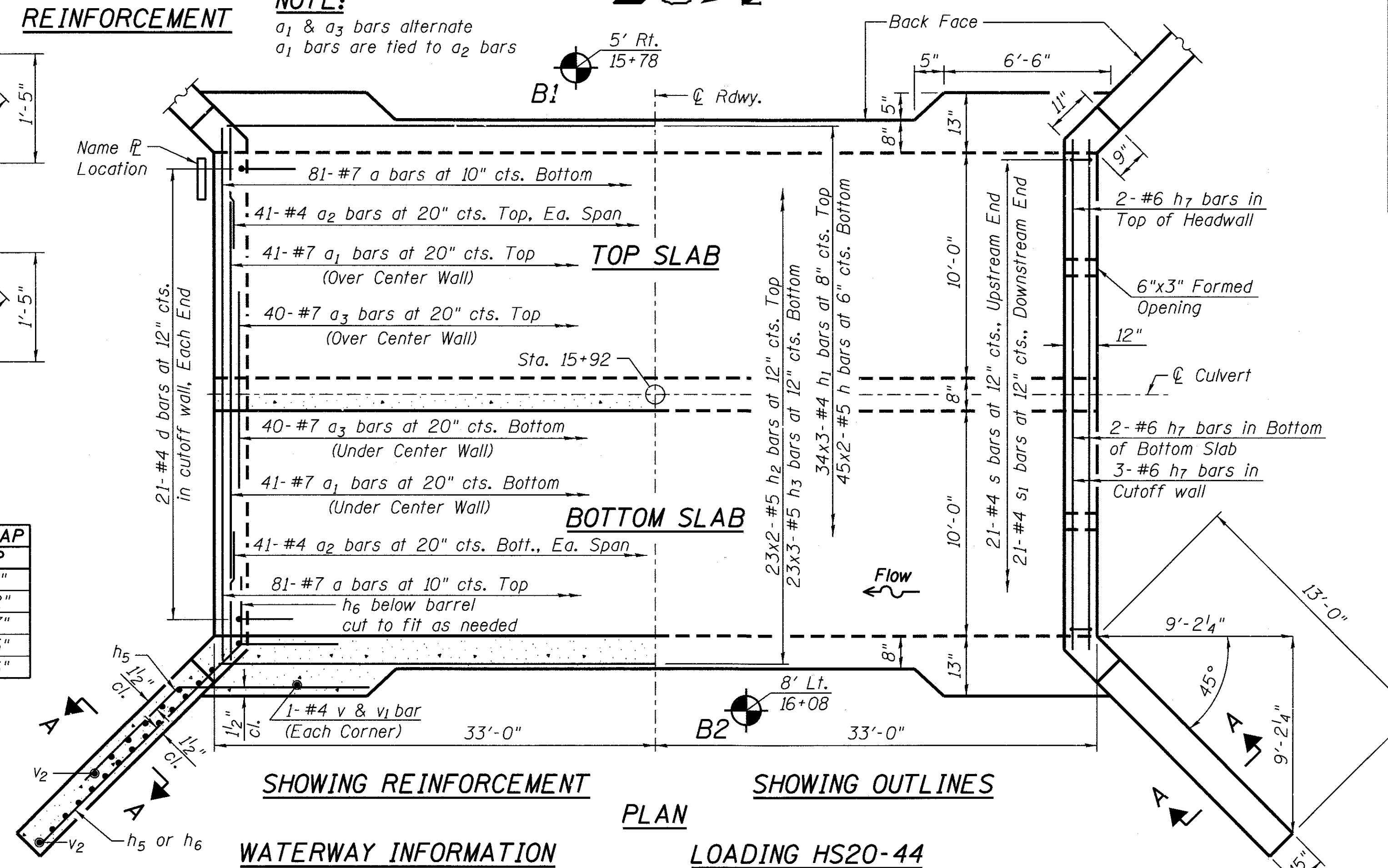
ILLINOIS FED. AID PROJECT



NOTE:
a₁ & a₃ bars alternate
a₁ bars are tied to a₂ bars



MINIMUM BAR LAP SIZE	LAP
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-5"
#8	4'-6"



NAME PLATE LETTERING
Refer To Std. 515001-03

BRANCH OF PLUM CREEK
BUILT 2017 BY
WILL COUNTY
SEC. 01-00112-01-BR
C.H. 23 STA. 15+92
STR. NO. 099-3386 LOADING HS20

WATERWAY INFORMATION

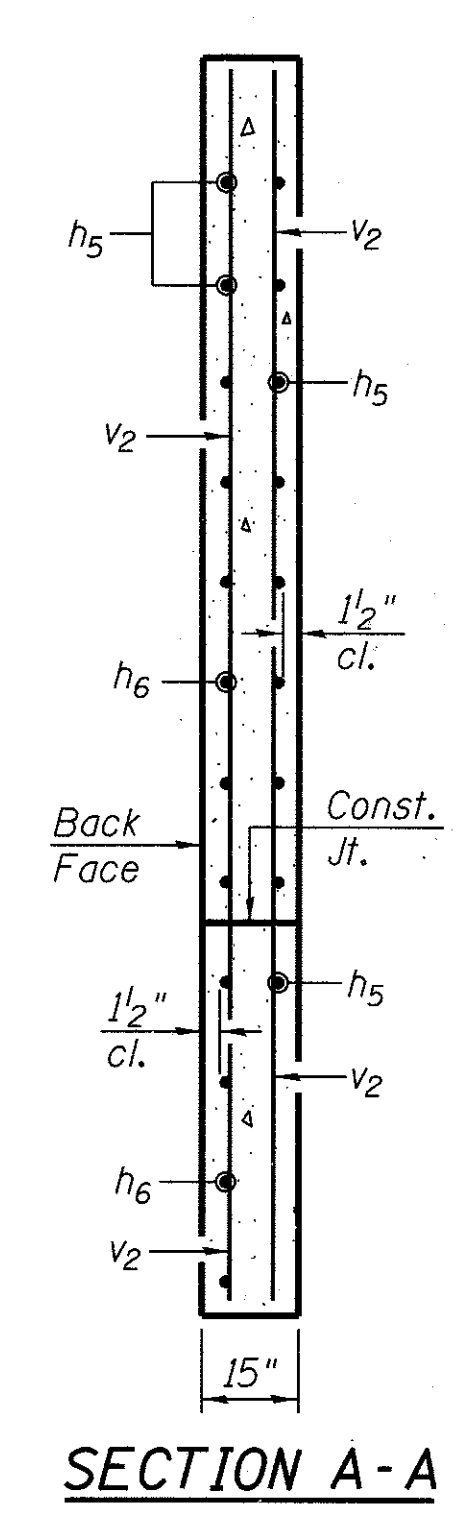
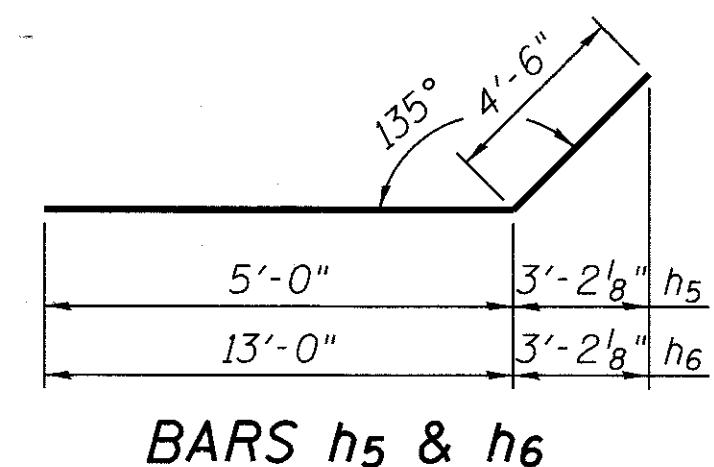
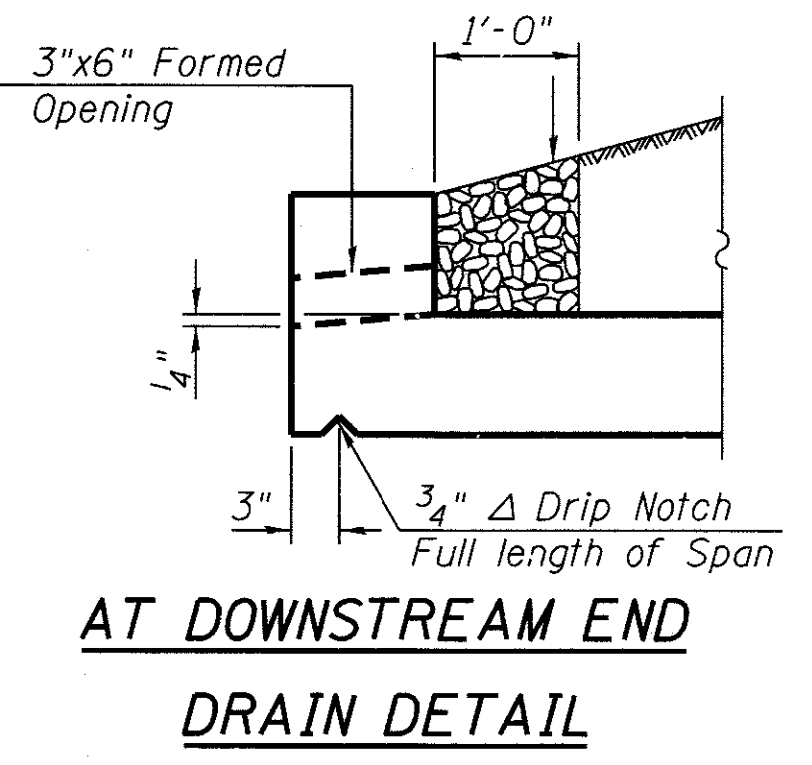
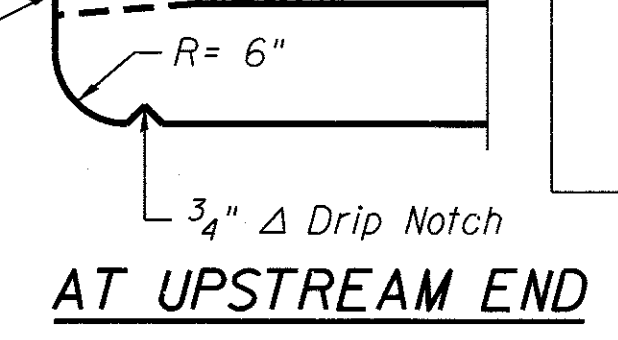
DRAINAGE AREA 1.54 SQ. MI.
DESIGN DISCHARGE (30 Yr.) 340 CFS
EXISTING OPENING 96 SQ. FT.
REQUIRED OPENING 120 SQ. FT.
PROPOSED OPENING 120 SQ. FT.
CREATED HEAD (30 Yr.) <0.3 FT.
100 YR. DISCHARGE 430 CFS
CREATED HEAD (100 Yr.) <0.5 FT.
HIGH WATER EL. (100 Yr.) 709.22 FT.

LOADING HS20-44
Allow for 50 #/sq. ft. future wearing surface

Design provides for a 120,000 lb permit vehicle at inventory rating capacity.

DESIGN STRESSES
f_y = 60,000 p.s.i.
f'c = 3,500 p.s.i.

DESIGN SPECIFICATIONS
Designed in Accordance with 2002 A.A.S.H.T.O. Standard Specifications - 17th Edition



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	162	#7	23'-5"	U
a ₁	82	#7	11'-5"	—
a ₂	164	#4	6'-11"	—
a ₃	80	#7	5'-3"	—
d	42	#4	4'-6"	L
h	90	#5	34'-0"	—
h ₁	102	#4	23'-1"	—
h ₂	46	#5	34'-0"	—
h ₃	69	#5	23'-5"	—
h ₄	54	#6	34'-2"	—
h ₅	56	#8	9'-6"	—
h ₆	40	#8	17'-6"	—
h ₇	14	#6	21'-5"	—
s	21	#4	4'-11"	□
s ₁	21	#4	5'-1"	□
v	249	#4	3'-1"	—
v ₁	249	#4	8'-2"	—
v ₂	80	#4	12'-5"	—
Channel Excavation			Cu. Yd.	24
Aggregate Subgrade Improvement			Cu. Yd.	95
Removal of Existing Structures No. 1			Each	1
Reinforcement Bars			Pound	28,680
Name Plates			Each	1
Concrete Box Culverts			Cu. Yd.	179.3
Granular Backfill for Structures			Cu. Yd.	130

NOTES:

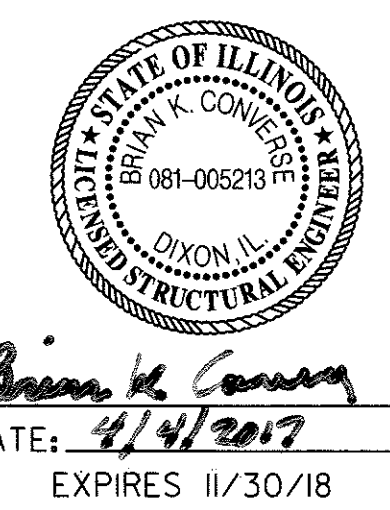
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60. See Special Provisions.

Precast concrete box culvert option not allowed.

A distance of 6'-6" shall be poured monolithically with the wingwalls.

All exposed edges shall be chamfered 3/4" unless otherwise noted.

Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.



Brian K. Conroy
DATE: 4/4/2017
EXPIRES 11/30/18

"I Certify That To The Best Of My Knowledge, Information And Belief, This Culvert Design Is Structurally Adequate For The Design Loading Shown On The Plans. The Design Is An Economical One, & Complies With Requirements Of The Current 'AASHTO Standard Specifications For Highway Bridges'."



DESIGNED - M.A.C.	REVISED -
CHECKED - B.K.C.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DOUBLE BARREL BOX CULVERT DETAILS
STRUCTURE NO. 099-3386
STRUCTURAL SHEET NO. 1 OF 4 SHEETS

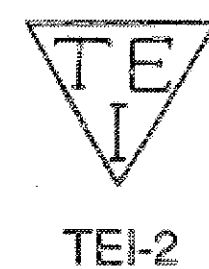
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	16
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT BROS-00016041				

LOG OF BORING NO. B1

PROJECT PROPOSED BOX CULVERT, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.05
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
BORING 5' RIGHT OF STATION 15+78; GOODENOW ROAD OVER PLUM CREEK
 DATUM B.M. = RR SPIKE IN POWER POLE 31.8' RIGHT OF STATION 17+13; ELEVATION = 711.4

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE		DIST.	REC.	N	Q _u	w%
			NO.	TYPE					
712.5	BITUMINOUS PAVEMENT = 12"	0.0							
711.2	CRUSHED STONE = 4"	1.3	1	SS	XX	XX	13	5.82	15.3
708.5	FILL - Hard grayish brown SILTY CLAY, trace sand, trace gravel	4.0	2	SS	XX	XX	6	2.0 P	19.6
	Very stiff to medium black ORGANIC SILTY CLAY, trace sand (TOPSOIL)	5	3	SS	XX	XX	6	1.3 P	22.2
		10	4	SS	XX	XX	7	0.5 P	20.3
701.5	Stiff to soft bluish gray SILTY CLAY, trace roots	11.0	5	SS	XX	XX	3	1.16	27.9
		15	6	SS	XX	XX	3	0.27	49.9
695.5	Very stiff gray SILTY CLAY, trace sand	17.0							
693.0		19.5	7	SS	XX	XX	8	3.69	17.2
	Loose gray fine to coarse SAND, trace to some clay, trace to some gravel	20							
688.0		24.5	8	SS	XX	XX	6	1.63	15.2
	Stiff to very stiff gray SILTY CLAY, trace sand, trace gravel	25							
682.5		30.0	9	SS	XX	XX	10	2.13	15.0
	END OF BORING								

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/20/01
 Boring Completed 12/20/01
 Sheet 1 of 1 Sheets



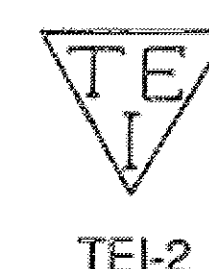
WATER LEVELS
 While Drilling -19.5' (693.0)
 On Completion -19.0' (693.5)
 After _____ Hours BACKFILLED
 After _____ Hours _____

LOG OF BORING NO. B2

PROJECT PROPOSED BOX CULVERT, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.05
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
BORING 8' LEFT OF STATION 16+08; GOODENOW ROAD OVER PLUM CREEK
 DATUM B.M. = RR SPIKE IN POWER POLE 31.8' RIGHT OF STATION 17+13; ELEVATION = 711.4

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE		DIST.	REC.	N	Q _u	w%
			NO.	TYPE					
712.2	BITUMINOUS PAVEMENT = 12"	0.0							
710.9	CRUSHED STONE = 4"	1.3	1	SS	XX	XX	9	4.65	15.7
	FILL - Hard to stiff brown SILTY CLAY, trace sand, trace gravel	5	2	SS	XX	XX	4	1.5 P	16.1
705.2		7.0	3	SS	XX	XX	6	1.73	15.8
	Stiff yellow and gray SILTY CLAY, trace fine sand	10	4	SS	XX	XX	4	1.0 P	24.0
699.7		12.5	5	SS	XX	XX	4	1.01	25.8
	Very stiff to hard gray SILTY CLAY, trace sand, trace gravel	15	6	SS	XX	XX	7	2.72	18.4
		20	7	SS	XX	XX	13	4.07	16.5
	10" seam of gray SAND, trace to some gravel starting at -24.0'	25	8	SS	XX	XX	12	2.0 P	16.6
682.2		30.0	9	SS	XX	XX	12	2.52	20.9
	END OF BORING								

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/19/01
 Boring Completed 12/19/01
 Sheet 1 of 1 Sheets



WATER LEVELS
 While Drilling -14.0' (698.2)
 On Completion -12.0' (700.2)
 After _____ Hours BACKFILLED
 After _____ Hours _____



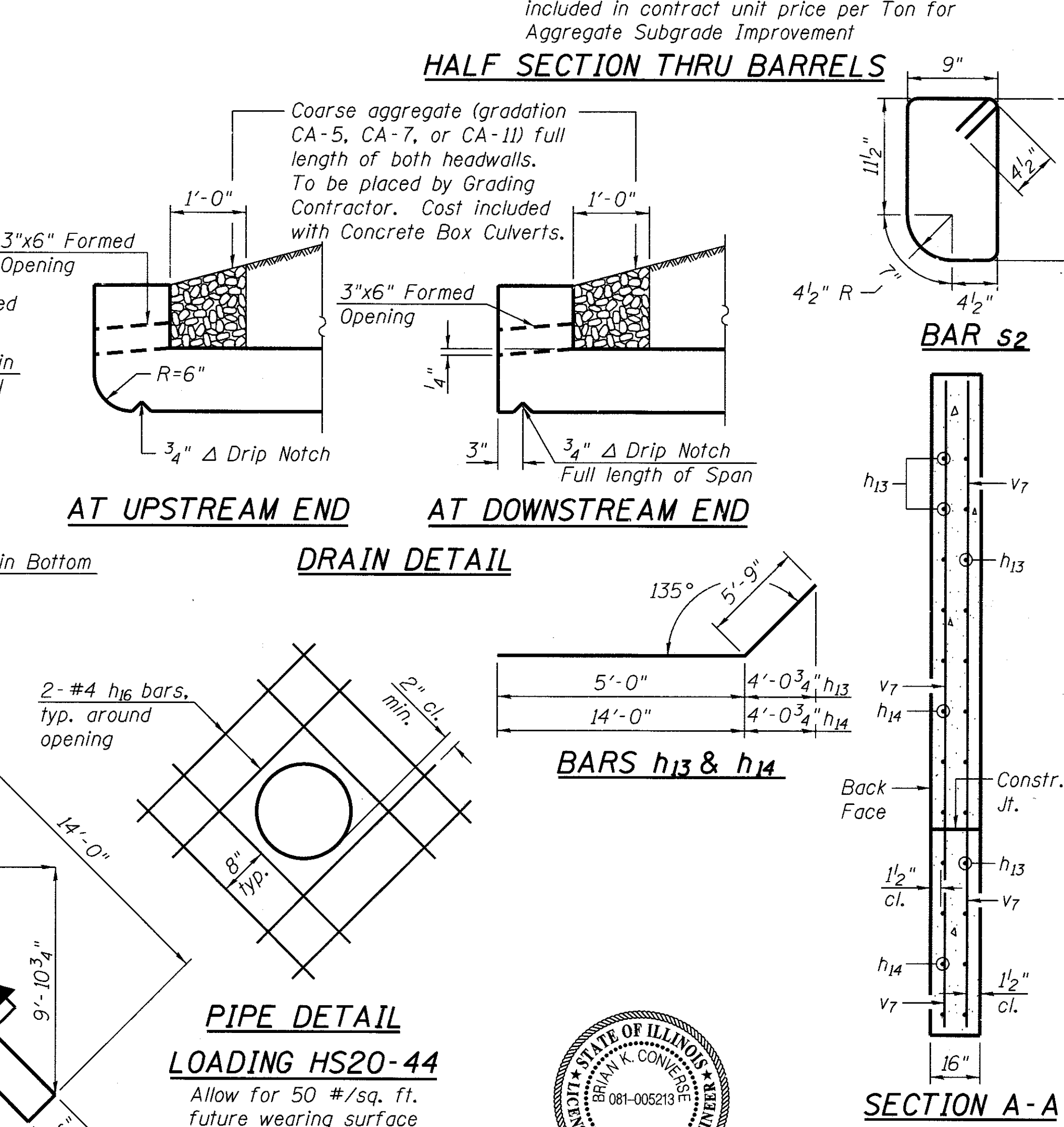
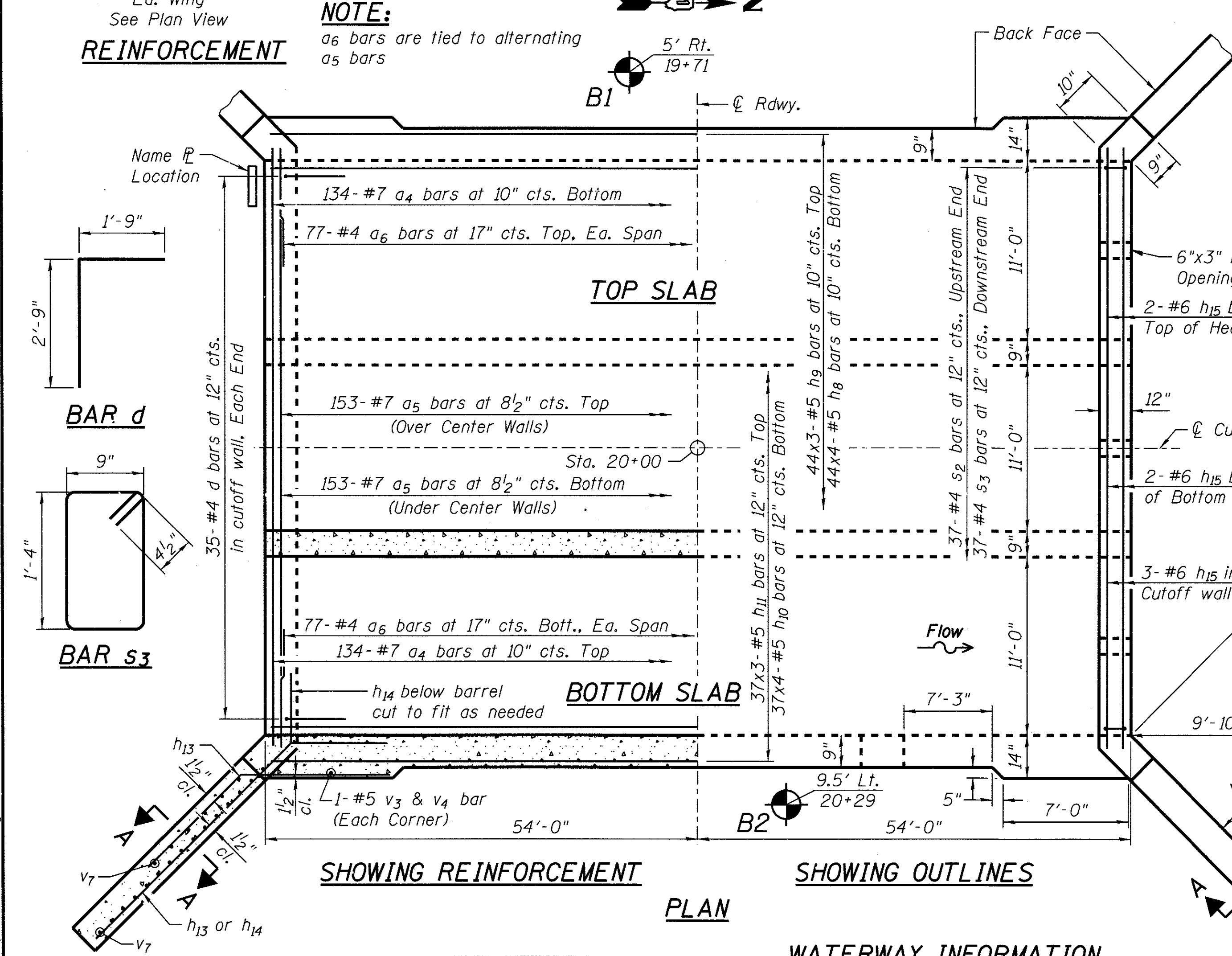
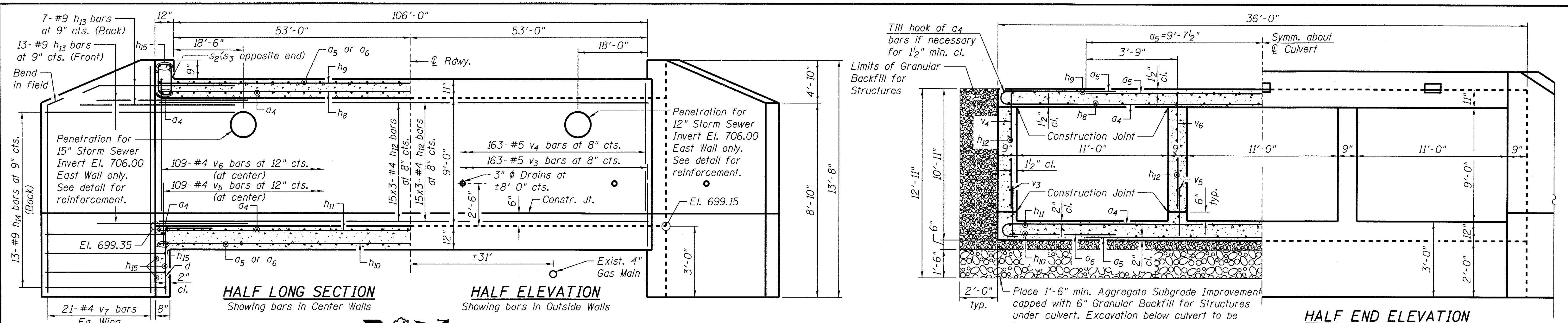
DESIGNED - M.A.C. REVISOR -
 CHECKED - B.K.C. REVISOR -
 DRAWN - R.D.A. REVISOR -
 CHECKED - M.A.C. REVISOR -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DOUBLE BARREL BOX CULVERT BORING LOGS
 STRUCTURE NO. 099-3386

STRUCTURAL SHEET NO. 2 OF 4 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	17
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT BR05-0001604				



BILL OF MATERIAL

Bar No.	Size	Length	Shape
a4	268 #7	37'-5"	U
a5	306 #7	19'-3"	—
a6	308 #4	10'-0"	—
d	70 #4	4'-6"	L
h8	176 #5	28'-7"	—
h9	132 #5	37'-5"	—
h10	148 #5	28'-7"	—
h11	111 #5	37'-5"	—
h12	180 #4	37'-1"	—
h13	80 #9	10'-9"	—
h14	52 #9	19'-9"	—
h15	14 #6	36'-0"	—
h16	8 #4	3'-4"	—
s2	37 #4	4'-9"	□
s3	37 #4	4'-11"	□
v3	330 #5	3'-8"	—
v4	330 #5	9'-2"	—
v5	218 #4	3'-3"	—
v6	218 #4	9'-2"	—
v7	84 #4	13'-5"	—
Channel Excavation			Cu. Yd. 28
Aggregate Subgrade Improvement			Cu. Yd. 240
Removal of Existing Structures No. 2			Each 1
Reinforcement Bars			Pound 72,820
Name Plates			Each 1
Concrete Box Culverts			Cu. Yd. 424.8
Granular Backfill for Structures			Cu. Yd. 255

NOTES:

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

Precast concrete box culvert option not allowed.

A distance of 7'-0" shall be poured monolithically with the wingwalls.

All exposed edges shall be chamfered 3/4" unless otherwise noted.

Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

MINIMUM BAR LAP

Size	Lap
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-5"
#9	5'-9"

NAME PLATE LETTERING
Refer to Std. 515001-03

PLUM CREEK
BUILT 2017 BY
WILL COUNTY
SECTION 01-0012-01-BR
C.H. 23 STATION 20+00
STR. NO. 099-3377 LOADING HS20

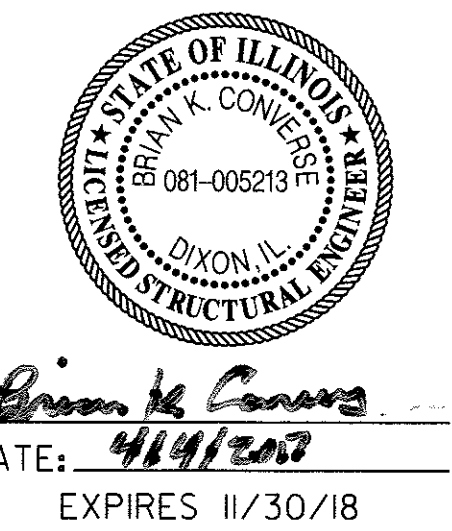
WATERWAY INFORMATION

DRAINAGE AREA	8.96 SQ. MI.
DESIGN DISCHARGE (30 Yr.)	690 CFS
EXISTING OPENING	165 SQ. FT.
REQUIRED OPENING	197 SQ. FT.
PROPOSED OPENING	197 SQ. FT.
CREATED HEAD (30 Yr.)	<0.3 FT.
100 YR. DISCHARGE	870 CFS
CREATED HEAD (100 Yr.)	<0.5 FT.
HIGH WATER EL. (100 Yr.)	707.80 FT.

DESIGN SPECIFICATIONS
Designed in Accordance with 2002 A.A.S.H.T.O. Standard Specifications - 17th Edition

DESIGN STRESSES
fy = 60,000 p.s.i.
f'c = 3,500 p.s.i.

PIPE DETAIL
LOADING HS20-44
Allow for 50 #/sq. ft. future wearing surface
Design provides for a 120,000 lb permit vehicle at inventory rating capacity.



DESIGNED -	M.A.C.	REVISED -	
CHECKED -	B.K.C.	REVISED -	
DRAWN -	R.D.A.	REVISED -	
CHECKED -	M.A.C.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRIPLE BARREL BOX CULVERT DETAILS
STRUCTURE NO. 099-3377
STRUCTURAL SHEET NO. 3 OF 4 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-0012-01-BR	WILL	29	18
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT BR05-00016041				

LOG OF BORING NO. B1
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 5' RIGHT OF STATION 19+71; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
713.4 712.4	See Note	0.0 1.0	1	SS	XX	17	3.0 P	20.8
	FILL - Very stiff to stiff brown SILTY CLAY, trace to some fine gravel	5	2	SS	XX	8	2.47	16.0
			3	SS	XX	6	1.24	20.2
704.9		8.5	4	SS	XX	5	1.0	32.0
	Stiff to medium black ORGANIC SILTY CLAY (TOPSOIL)	10	5	SS	XX	2	0.5	33.5
701.4		12.0	6	SS	XX	4	0.62	23.1
699.9	Very loose dark gray CLAYEY SAND	13.5						
	Medium gray CLAYEY SILT, thin sand seams	15						
695.4		18.0	7	SS	XX	14	3.10	14.4
		20						
	Very stiff to hard gray SILTY CLAY, trace sand, trace gravel	25	8	SS	XX	10	2.33	13.7
		30	9	SS	XX	13	4.85	15.6
		35	10	SS	XX	15	3.10	18.4
		40	11	SS	XX	14	2.52	20.4

Note: BITUMINOUS PAVEMENT = 9" CRUSHED STONE = 4"
 (Cont. on Sheet 2)

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/19/01
 Boring Completed 12/19/01
 Sheet 1 of 3 Sheets

WATER LEVELS
 While Drilling -14.0' (699.4)
 On Completion -12.0' (701.4)
 After Hours BACKFILLED
 After Hours

LOG OF BORING NO. B1
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 5' RIGHT OF STATION 19+71; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
	(Cont. from Sheet 1)	40						
669.4	Very stiff to hard gray SILTY CLAY, trace sand, trace gravel	44.0	12	SS	XX	20		
		45						
664.4	Medium dense gray SAND and fine to medium GRAVEL	49.0	13	SS	XX	9	1.24	23.1
		50						
		55	14	SS	XX	7	0.58	29.2
		60	15	SS	XX	7	0.7	26.4
		65	16	SS	XX	8	0.85	22.2
	Stiff to soft gray CLAYEY SILT	70	17	SS	XX	8	0.39	23.3
		75	18	SS	XX	6	0.78	29.6
		80	19	SS	XX	6	0.25	21.9

(Cont. on Sheet 3)

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/19/01
 Boring Completed 12/19/01
 Sheet 2 of 3 Sheets

WATER LEVELS
 While Drilling -14.0' (699.4)
 On Completion -12.0' (701.4)
 After Hours BACKFILLED
 After Hours

LOG OF BORING NO. B1
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 5' RIGHT OF STATION 19+71; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
	(Cont. from Sheet 2)	80						
629.9	Stiff to soft gray CLAYEY SILT	83.5	20	SS	XX	28		
		85						
624.6	Medium dense gray SILTY CLAY and FRACTURED DOLOMITE	88.8	21	SS	XX	100/4"		
	REFUSAL - END OF BORING							

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/19/01
 Boring Completed 12/19/01
 Sheet 3 of 3 Sheets

WATER LEVELS
 While Drilling -14.0' (699.4)
 On Completion -12.0' (701.4)
 After Hours BACKFILLED
 After Hours

LOG OF BORING NO. B2
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 9.5' LEFT OF STATION 20+29; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
715.1 714.1	See Note	0.0 1.0	1	SS	XX	9	1.24	17.3
	FILL - Stiff brown SILTY CLAY, trace sand, trace gravel	3.5	2	SS	XX	5	1.5	21.1
711.6		5						
709.1	Stiff brown mottled gray SILTY CLAY, trace sand, trace gravel	6.0	3	SS	XX	8	2.09	16.5
	Very stiff to hard grayish brown SILTY CLAY, trace sand, trace gravel	10	4	SS	XX	12	4.33	13.7
703.1		12.0	5	SS	XX	12	2.0	22.6
	Loose grayish brown fine SAND, trace silt	15	6	SS	XX	6		
698.1		17.0						
		20	7	SS	XX	12	1.98	14.8
	Stiff to very stiff gray SILTY CLAY, trace sand, trace gravel	25	8	SS	XX	9	1.63	15.2
		30	9	SS	XX	12	2.52	16.8
		35	10	SS	XX	13	3.30	17.9
675.6		39.5	11	SS	XX	20	3.10	19.5
	Medium dense gray SAND, some fine to medium gravel	40						

Note: BITUMINOUS SURFACE = 8" CRUSHED STONE = 4"
 (Cont. on Sheet 2)

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/20/01
 Boring Completed 12/20/01
 Sheet 1 of 3 Sheets

WATER LEVELS
 While Drilling -12.0' (703.1)
 On Completion -12.0' (703.1)
 After Hours BACKFILLED
 After Hours

LOG OF BORING NO. B2
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 9.5' LEFT OF STATION 20+29; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
	(Cont. from Sheet 1)	40						
670.1	Medium dense gray SAND, some fine to medium gravel	45.0	12	SS	XX	12		
		50	13	SS	XX	11	2.33	24.1
662.1	Very stiff gray SILTY CLAY, trace sand, trace gravel	53.0	14	SS	XX	8	0.89	27.7
		55						
		60	15	SS	XX	7	0.8	27.0
		65	16	SS	XX	7	0.7	26.9
	Medium to soft gray CLAYEY SILT	70	17	SS	XX	4	0.4	29.7
		75	18	SS	XX	4	0.5	26.6
		80	19	SS	XX	3	0.7	27.2

(Cont. on Sheet 3)

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/20/01
 Boring Completed 12/20/01
 Sheet 2 of 3 Sheets

WATER LEVELS
 While Drilling -12.0' (703.1)
 On Completion -12.0' (703.1)
 After Hours BACKFILLED
 After Hours

LOG OF BORING NO. B2
 PROJECT PROPOSED BRIDGE, SECTION 01-00112-01-BR, CRETE R.D. JOB NO. 4388.04
 OWNER WILL COUNTY HIGHWAY DEPARTMENT ORDER NO. _____
 ARCHITECT-ENGINEER WILLETT, HOPMANN & ASSOCIATES, INC.
 LOCATION NW 1/4 OF SEC. 33, T34N, R14E OF THE 3RD P.M.; WILL COUNTY, ILLINOIS
 BORING 9.5' LEFT OF STATION 20+29; GOODENOW ROAD OVER PLUM CREEK

DATUM B.M. = CHISELED SQUARE ON NW WINGWALL OF EXISTING BRIDGE; ELEVATION = 714.7

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	TYPE	REG	N	Qu	w%
	(Cont. from Sheet 2)	80						
629.1	Medium to soft gray CLAYEY SILT	85	20	SS	XX	4	0.5	28.2
		86.0						
626.6	Gray WEATHERED DOLOMITE	88.5	21	SS	XX	50/1"		
	REFUSAL - END OF BORING							

Drilled By GROFF Checked JAC
 Inspector _____
 Boring Started 12/20/01
 Boring Completed 12/20/01
 Sheet 3 of 3 Sheets

WATER LEVELS
 While Drilling -12.0' (703.1)
 On Completion -12.0' (703.1)
 After Hours BACKFILLED
 After Hours

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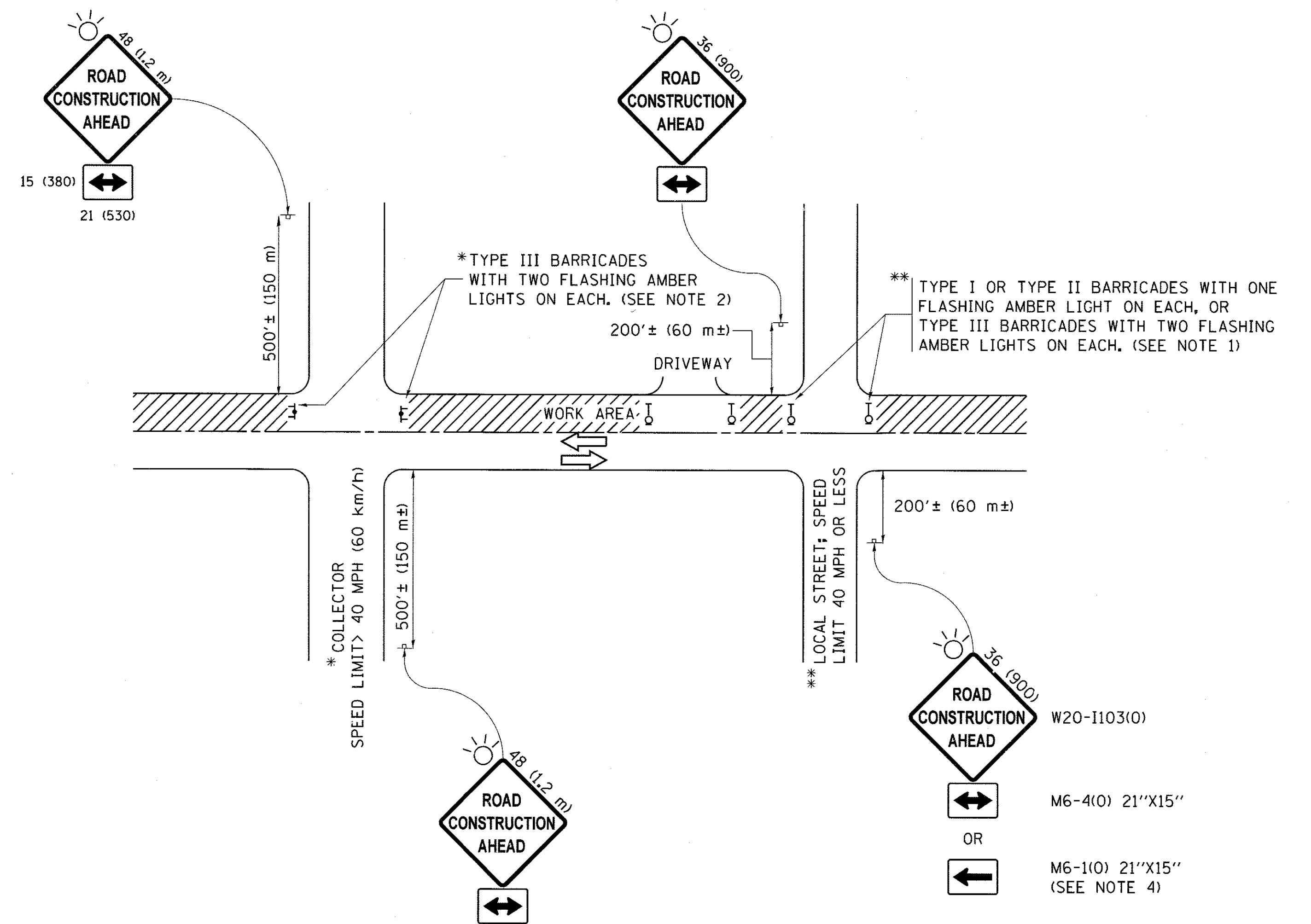
DESIGNED - M.A.C.	REVISED -
CHECKED - B.K.C.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TRIPLE BARREL BOX CULVERT BORING LOGS
 STRUCTURE NO. 099-3377

STRUCTURAL SHEET NO. 4 OF 4 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	19
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT BROS-0001604				



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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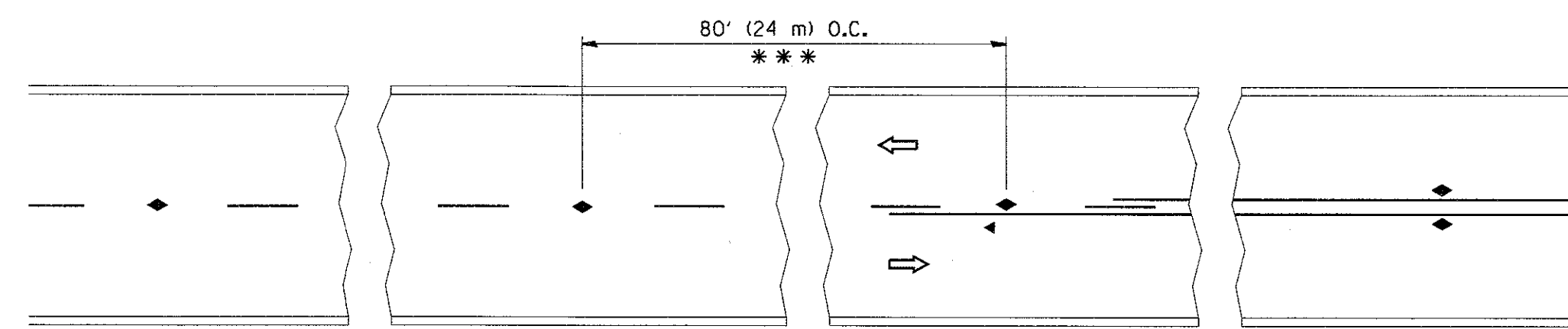
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	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE =	CHECKED -	REVISED - A. SCHUETZ 07-01-13
PLOT DATE =	DATE - 06-89	REVISED - A. SCHUETZ 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

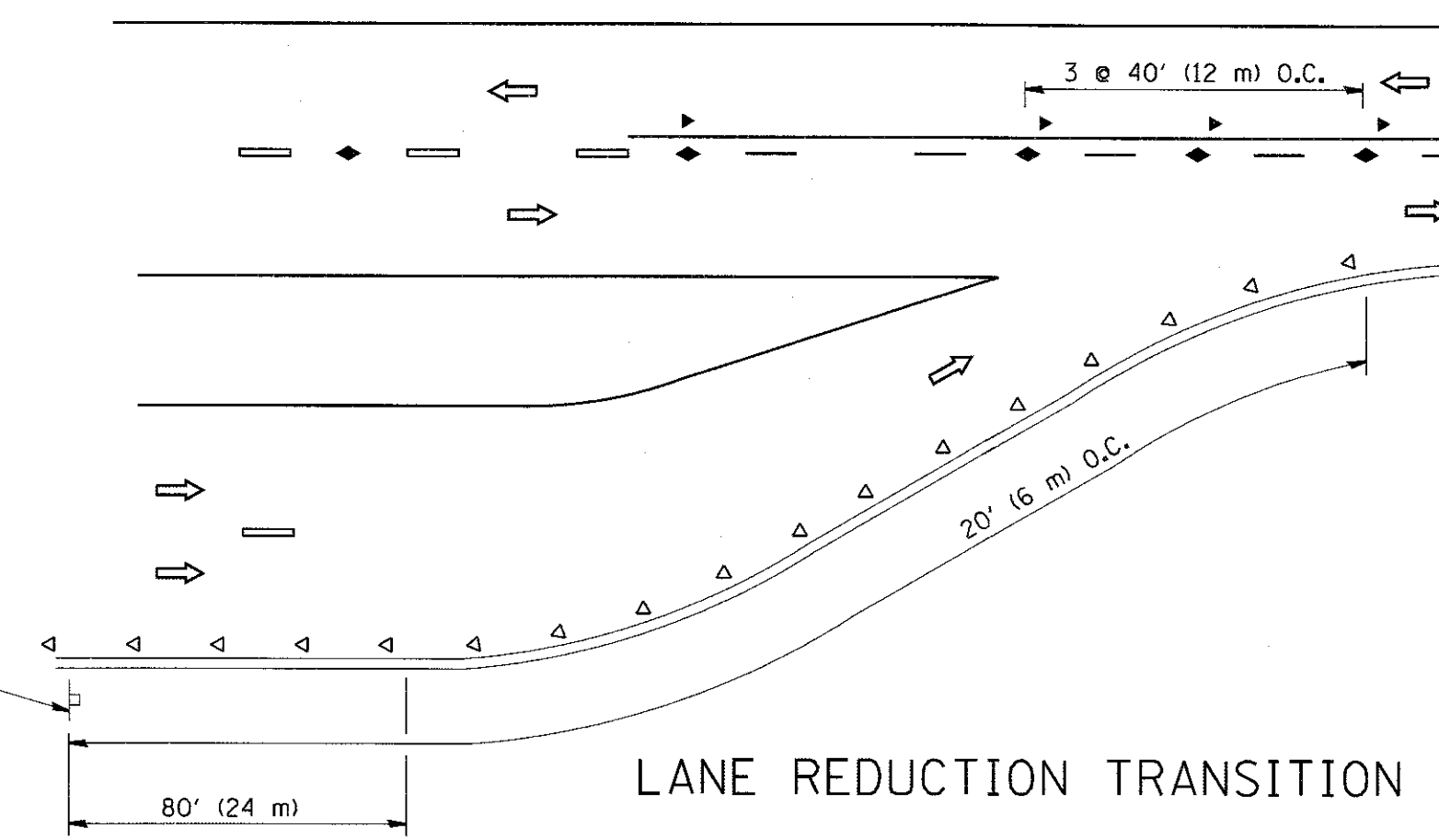
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C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	20
TC-10			CONTRACT NO. 63707	
ILLINOIS FED. AID PROJECT				

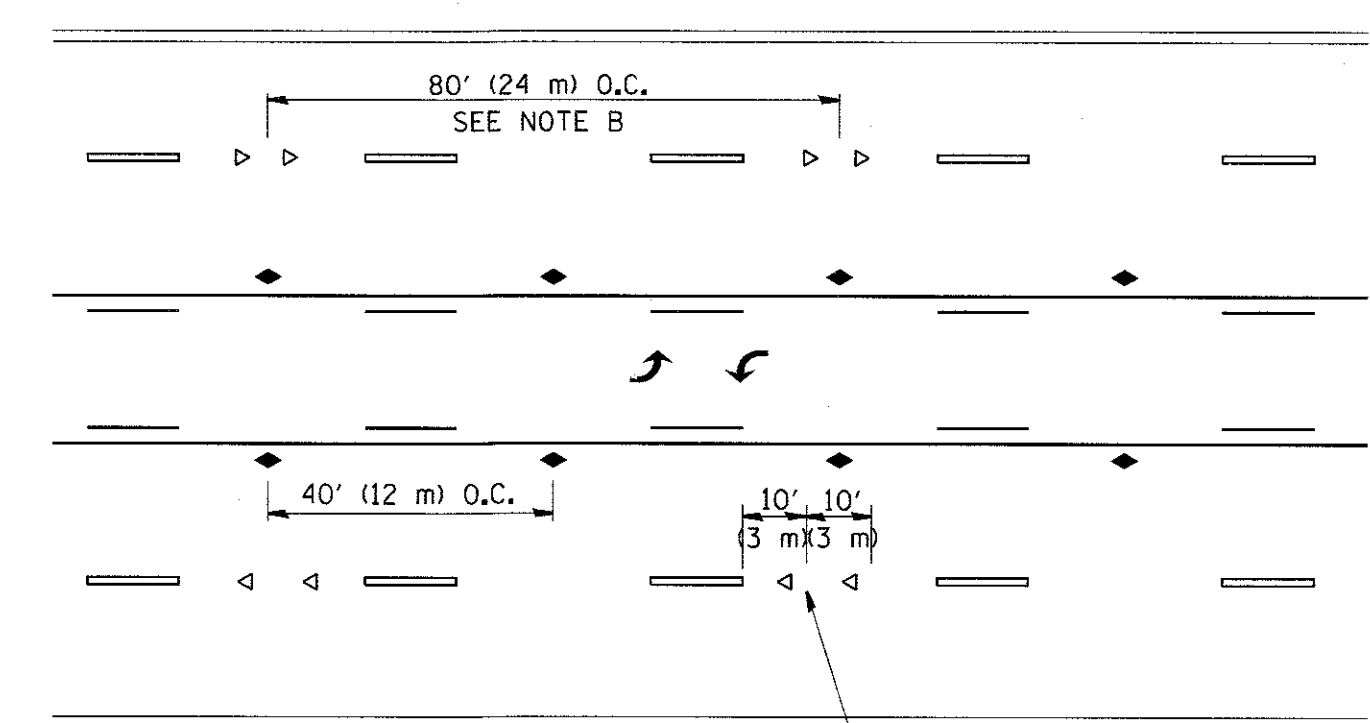


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

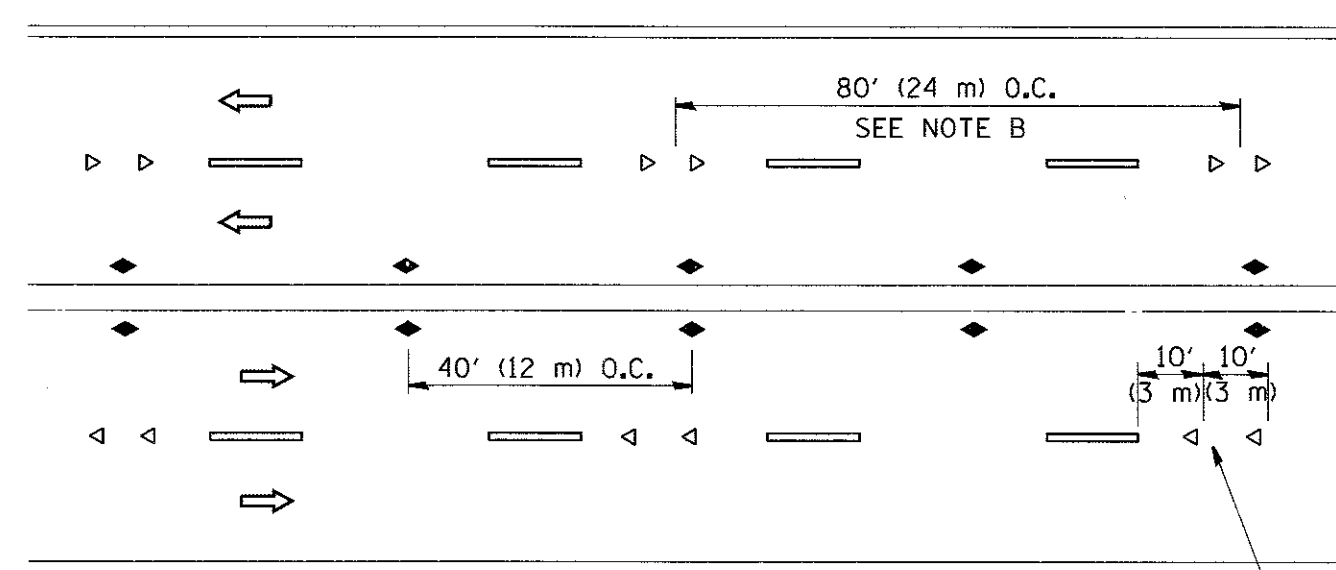
TWO-LANE/TWO-WAY



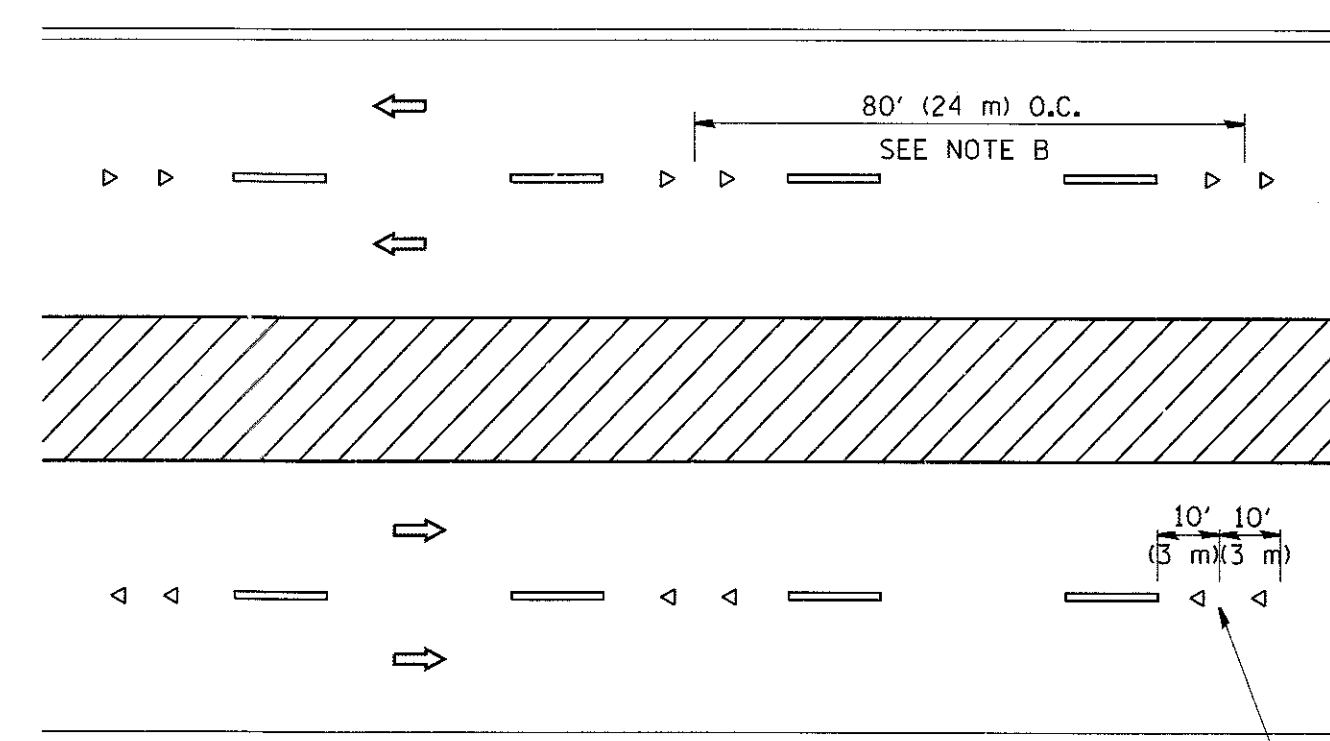
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

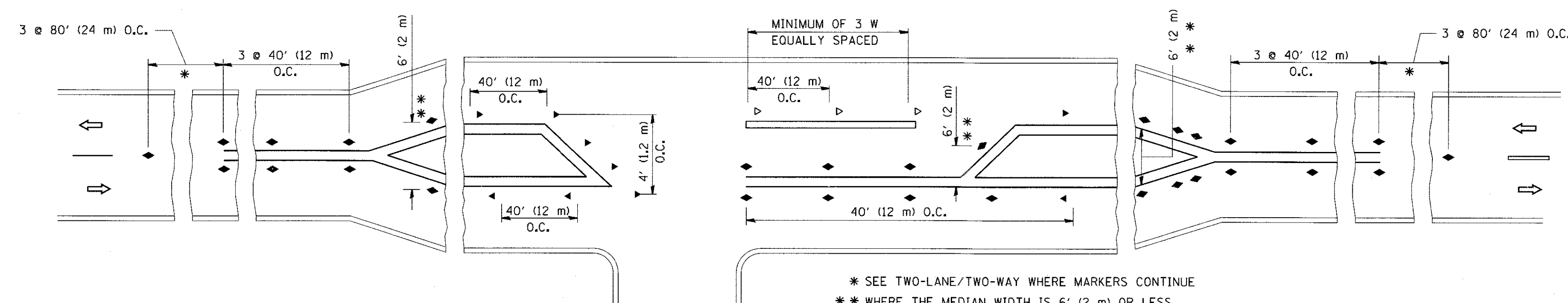
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

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



LEFT TURN

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

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

FILE NAME = S:\Struct\11000001\TRANS\11000001-Dist\Details.dgn

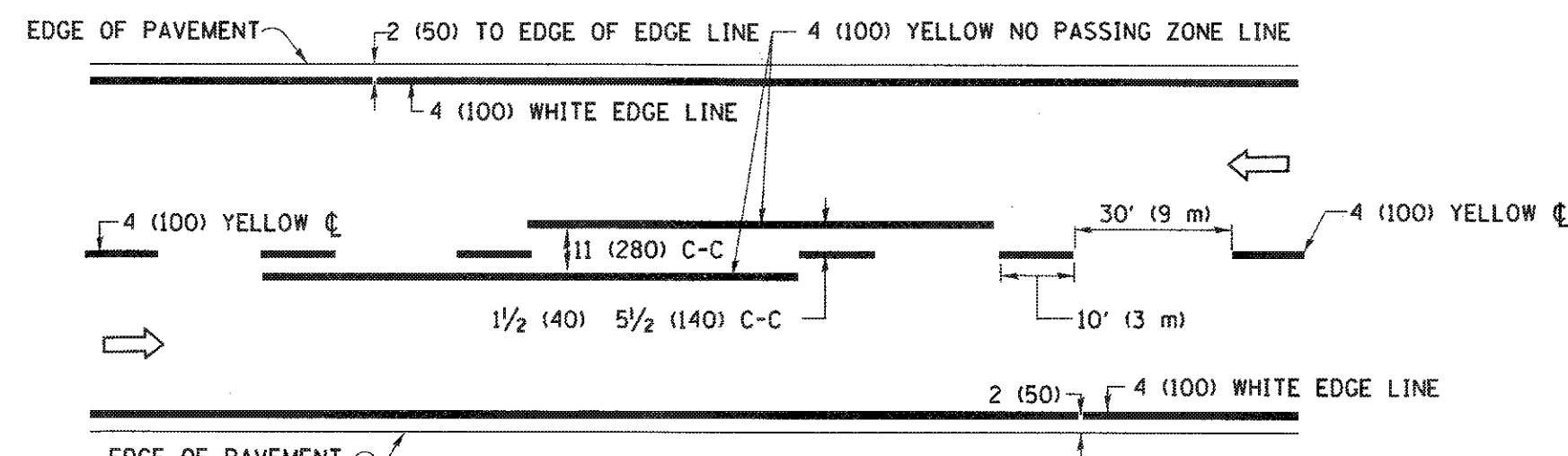
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	DRAWN -	REVISED - T. RAMMACHER 03-12-99
PLOT SCALE =	CHECKED -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE =	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

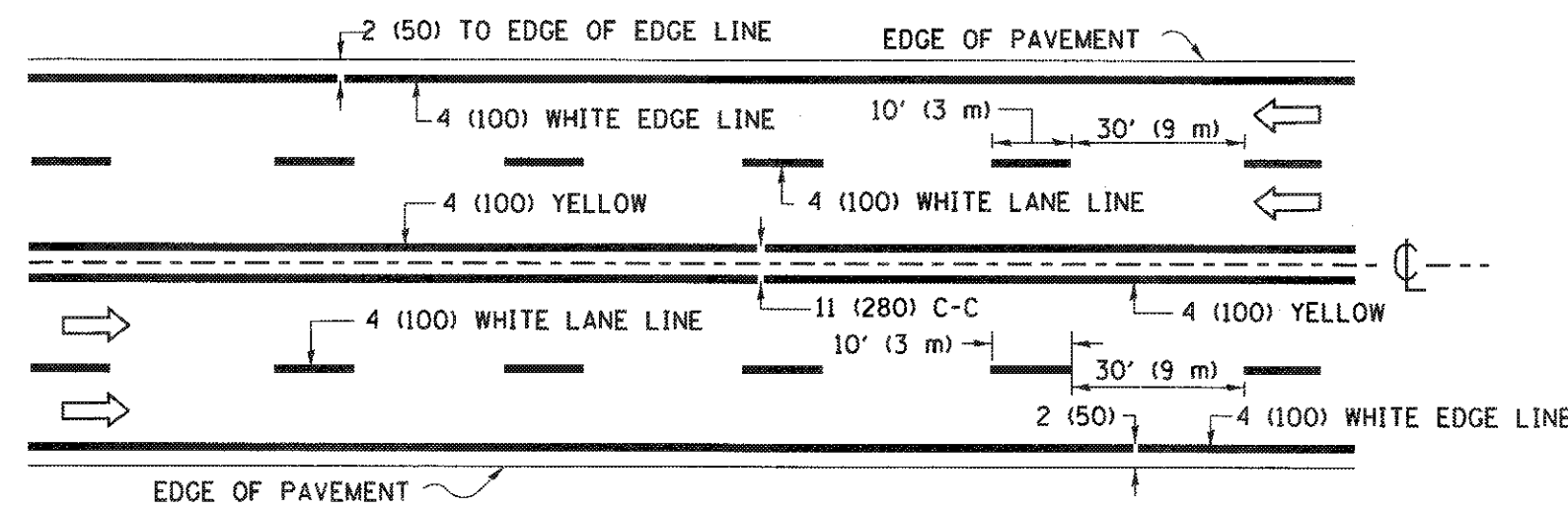
TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 13+50.00 TO STA. 21+50.00

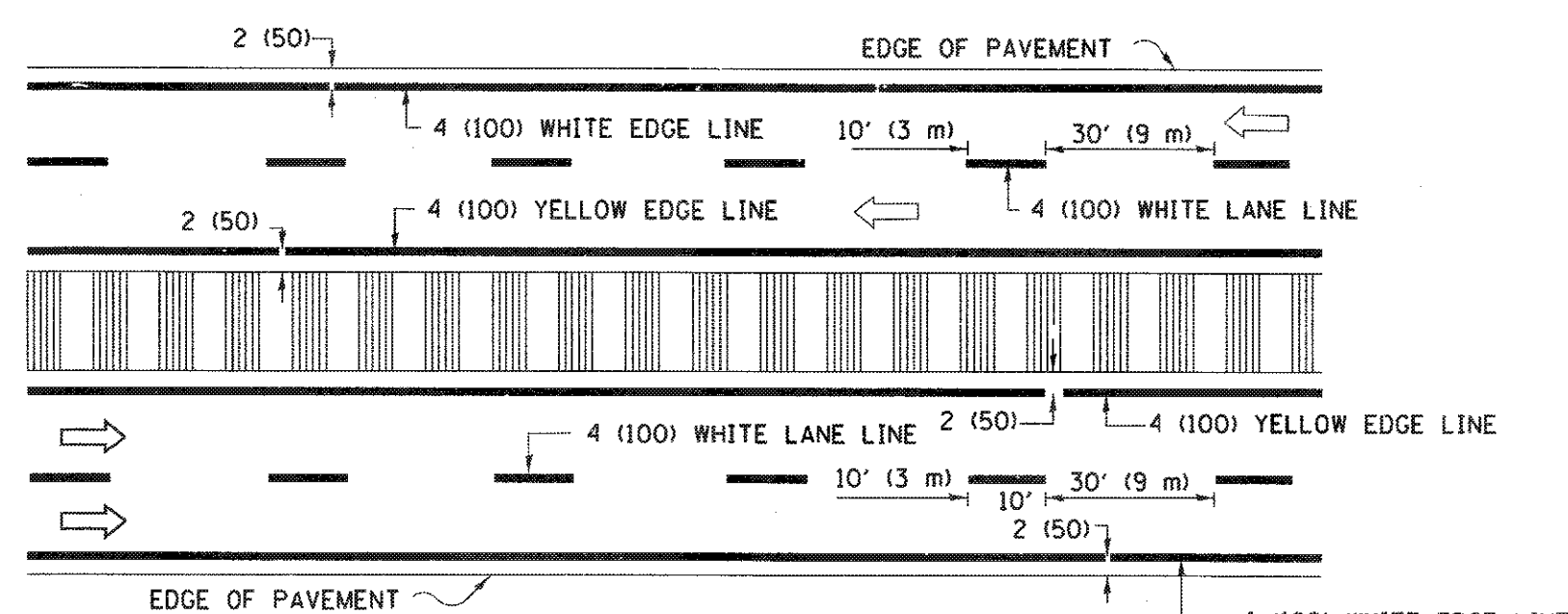
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	21
TC-11			CONTRACT NO. 63707	
ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

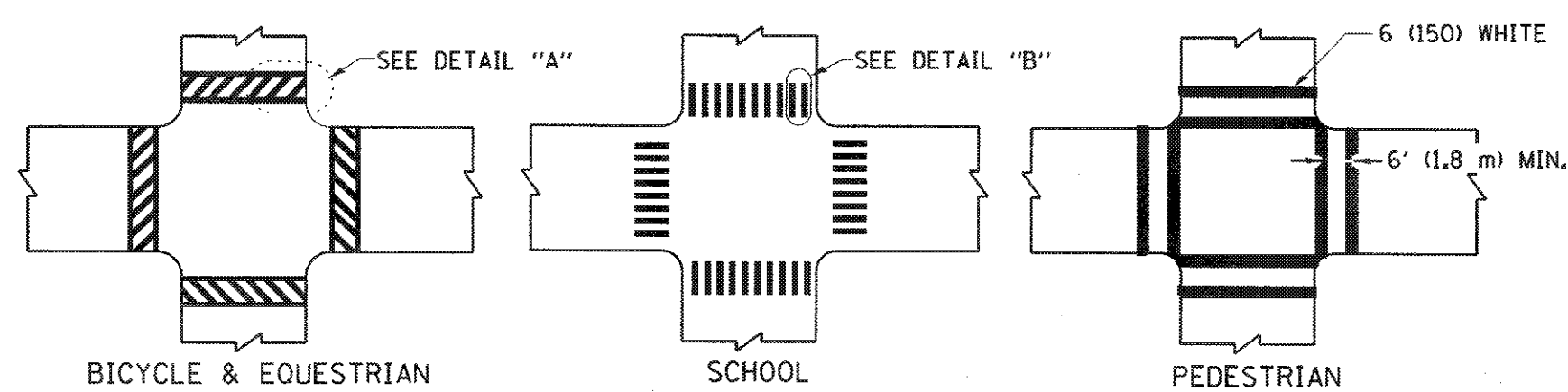


MULTI-LANE UNDIVIDED



MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

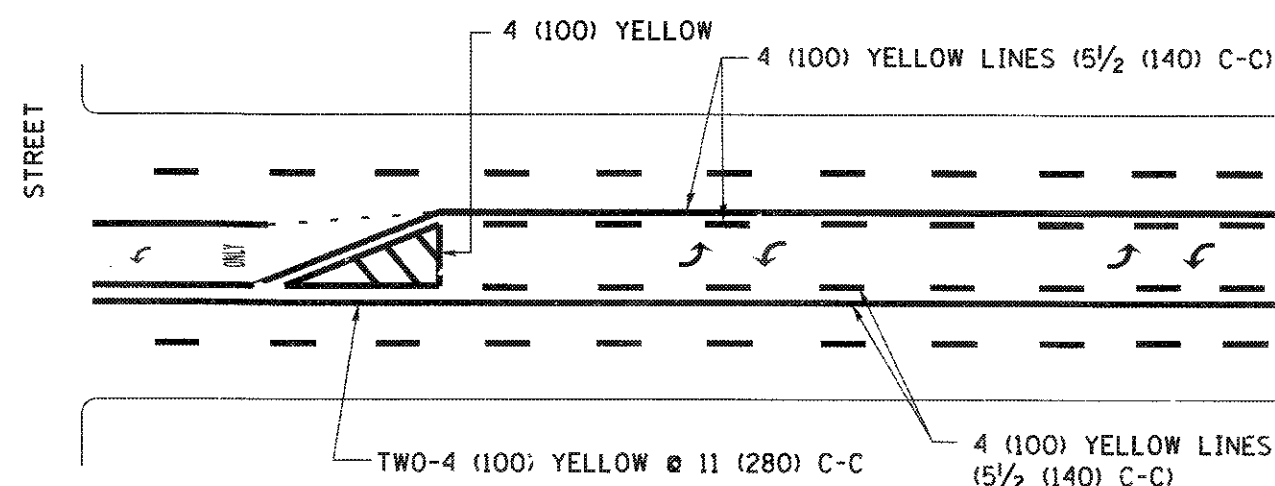
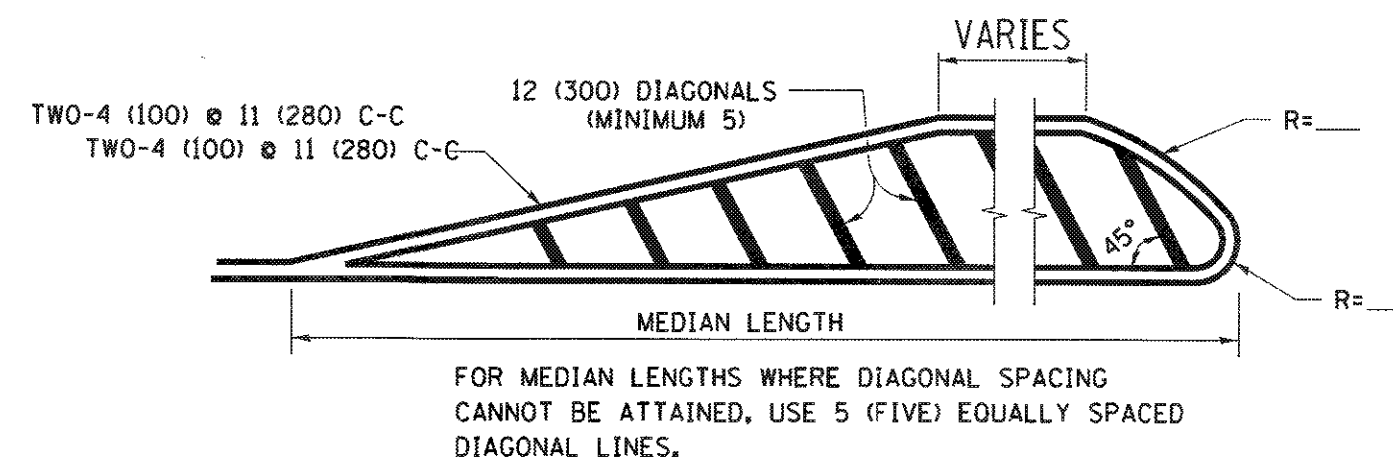
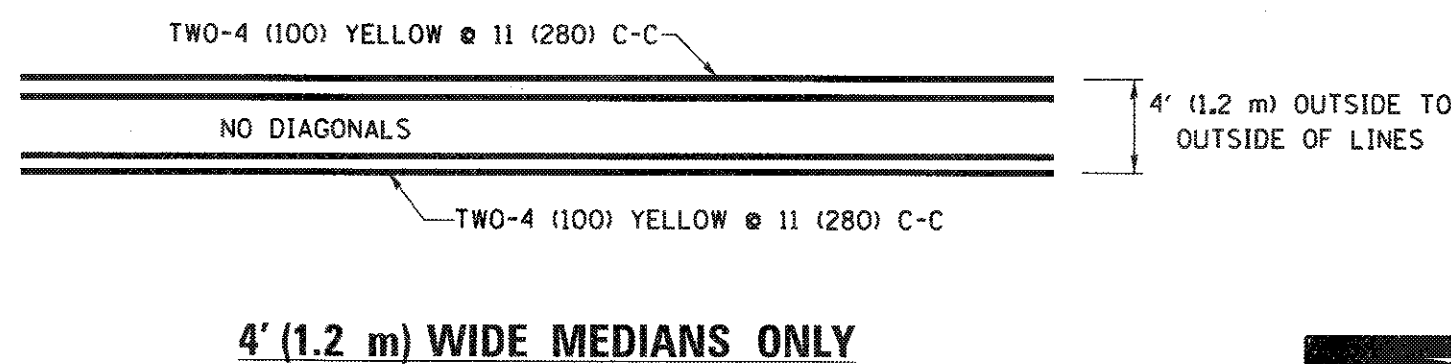


DETAIL "A"

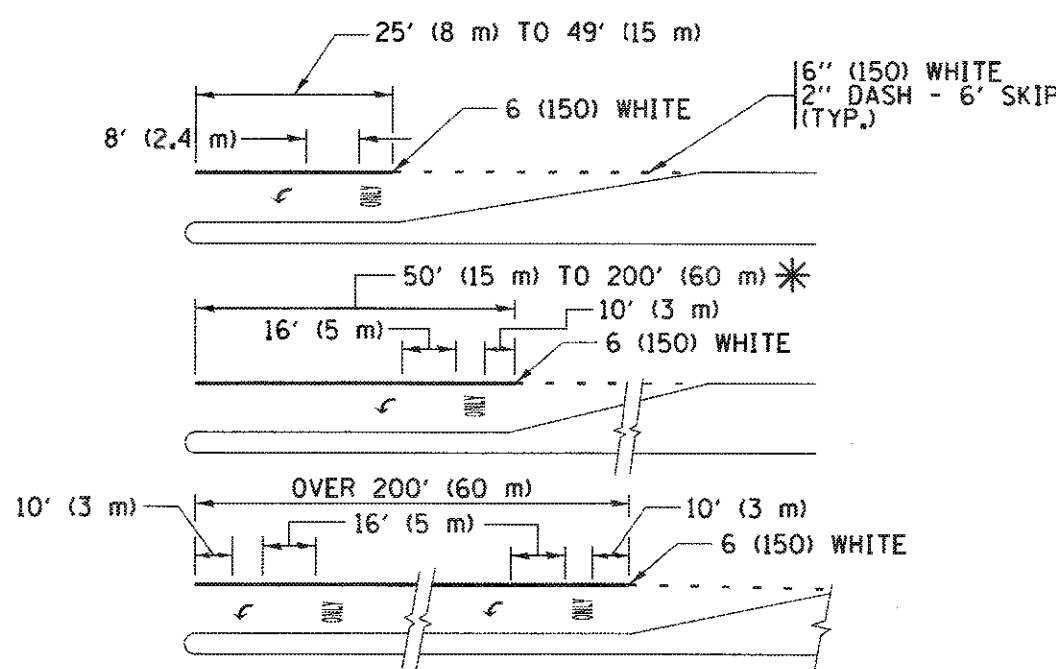
DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



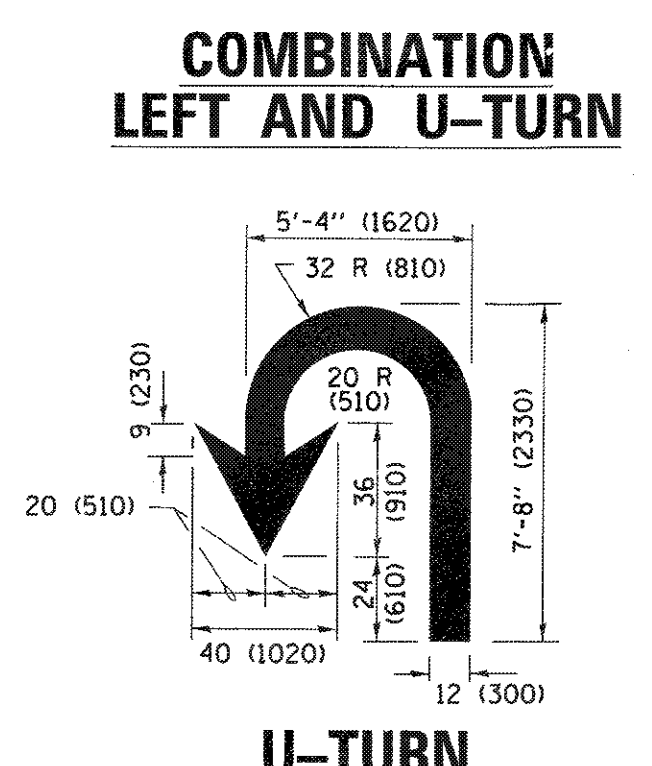
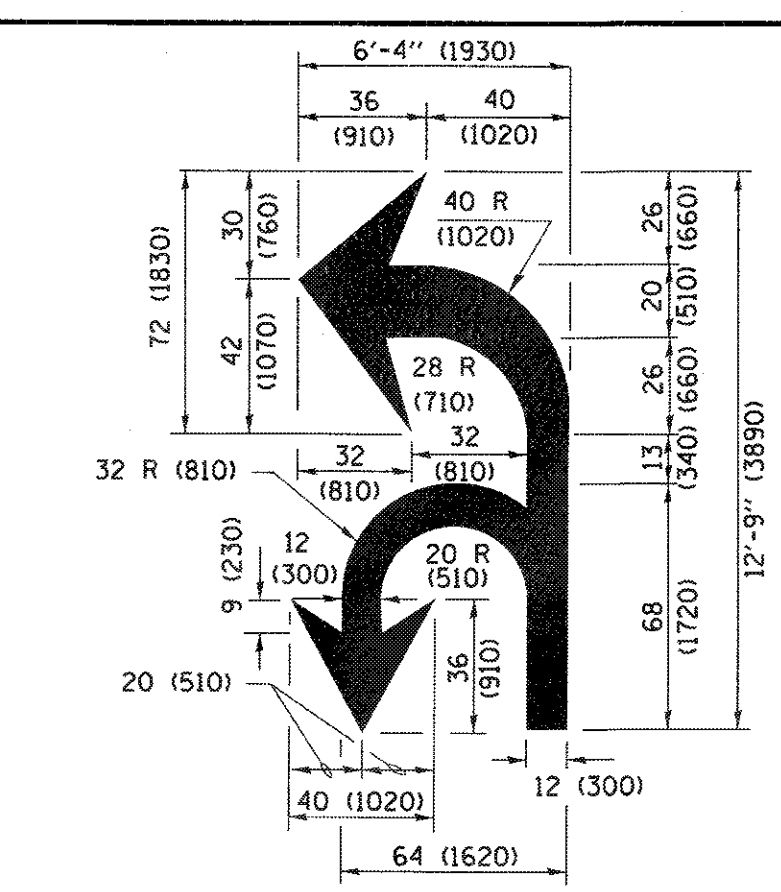
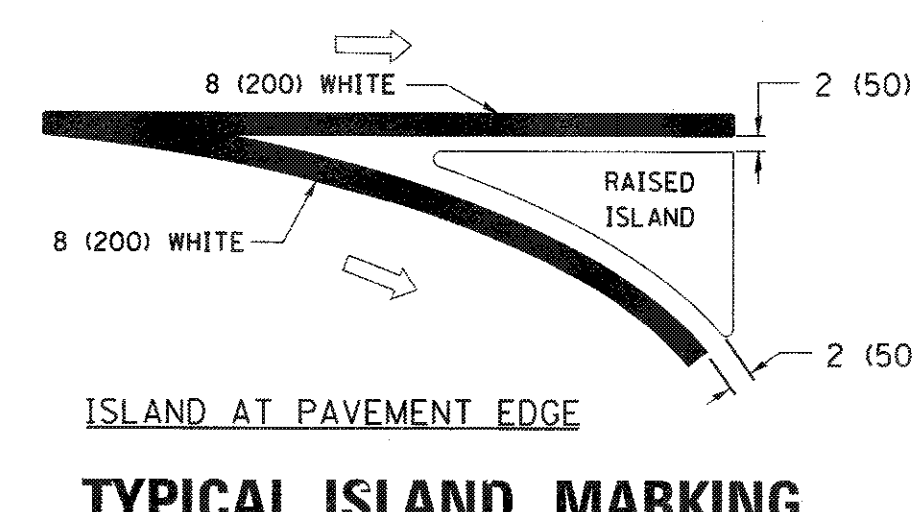
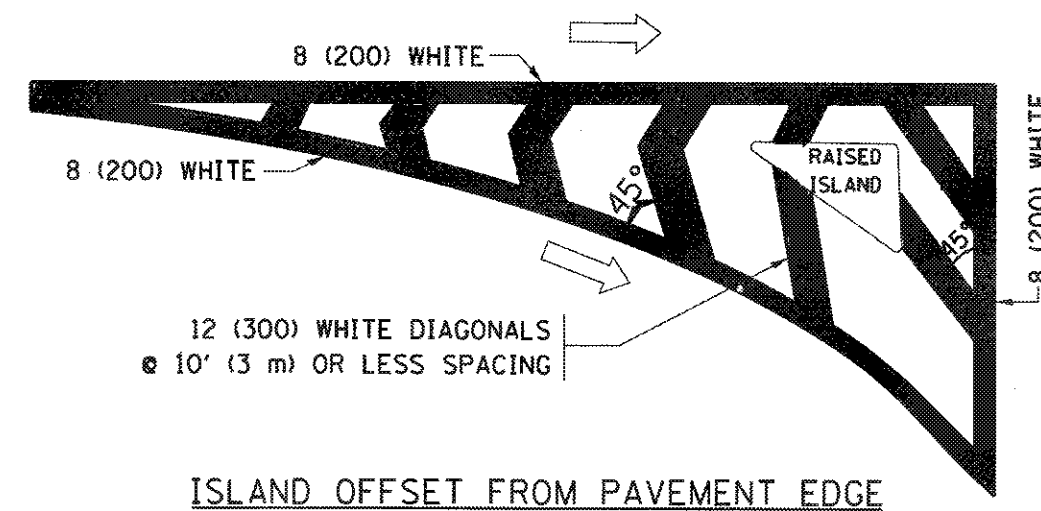
MEDIAN WITH TWO-WAY LEFT TURN LANE
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE
TYPICAL TURN LANE MARKING



LANE REDUCTION TRANSITION
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS 18" (2.4m)	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

FILE NAME = S:\S:\P\1100001\TRANS\1100001-D\stDetail.dgn

USER NAME =	DESIGNED - EVERS	REVISED -C. JUCIUS 09-09-09
PLOT SCALE =	DRAWN -	REVISED -C. JUCIUS 07-01-13
PLOT DATE =	CHECKED -	REVISED -C. JUCIUS 12-21-15
	DATE - 03-19-90	REVISED -C. JUCIUS 04-12-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		
TYPICAL PAVEMENT MARKINGS		
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. 13+50.00 TO STA. 21+50.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-00-BR	WILL	29	22
TC-13		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

FILE NAME = S:\Struct\11000001\TRANS\11000001-Dist\Details.dgn

ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

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

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

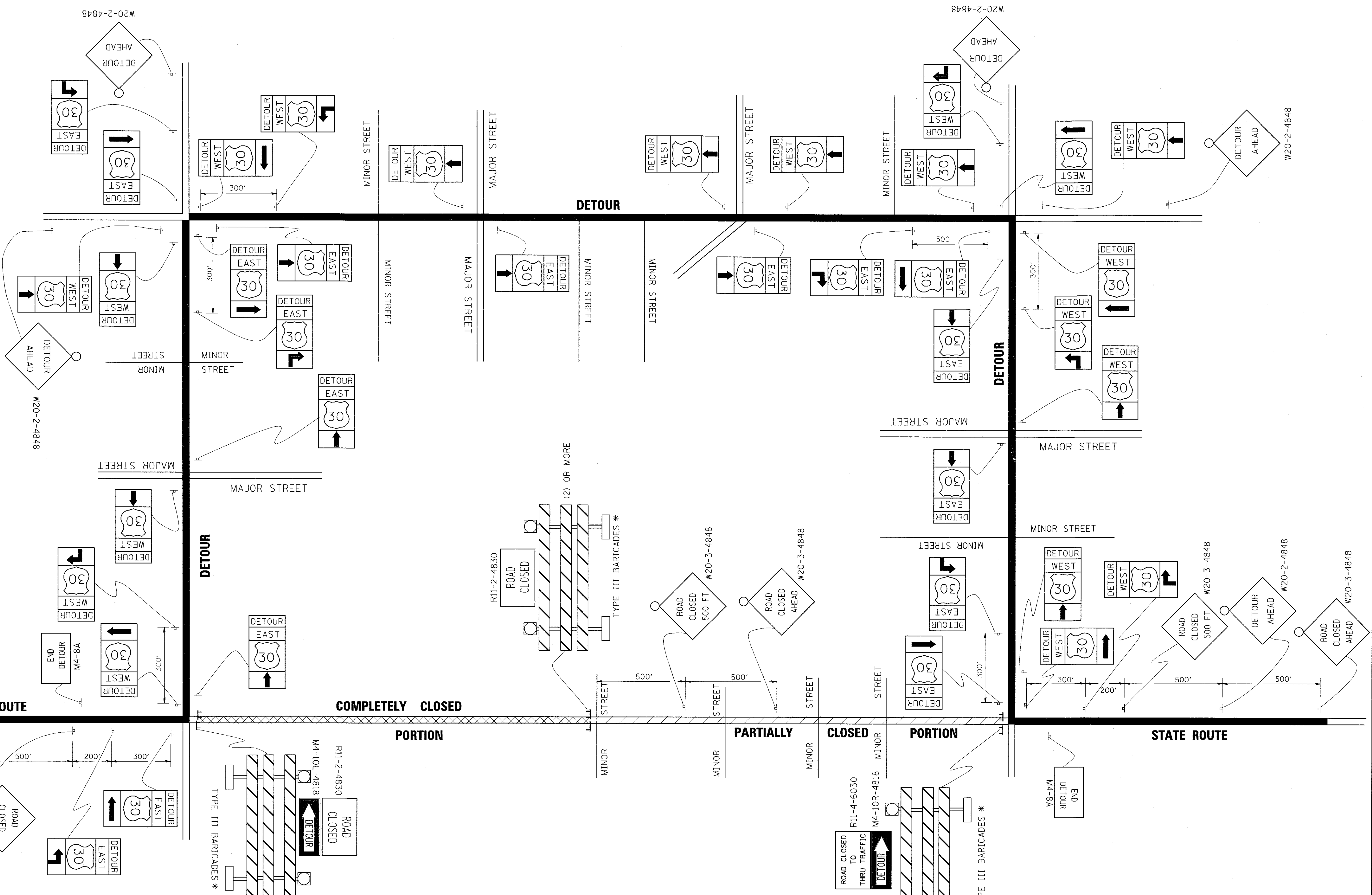
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



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

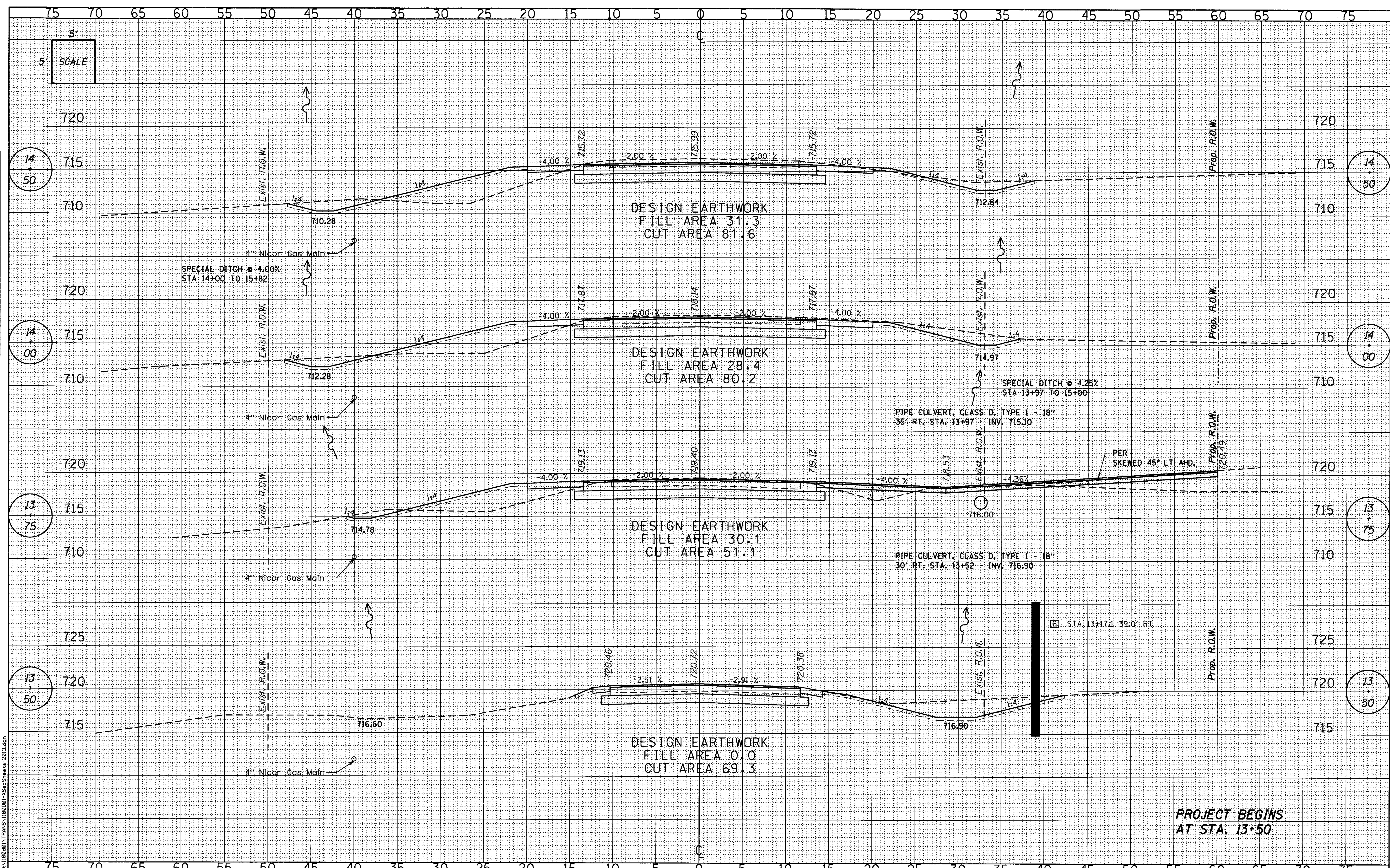
USER NAME =	DESIGNED -	REVISED - 10-18-02
	DRAWN -	REVISED - R. BORO 09-14-09
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE =	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING
FOR CLOSING STATE HIGHWAYS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 13+50.00 TO STA. 21+50.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-00-BR	WILL	29	23
TC-21		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				



DATE	
BY	
FINAL SURVEY	
SWIFTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SWIFTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

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DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

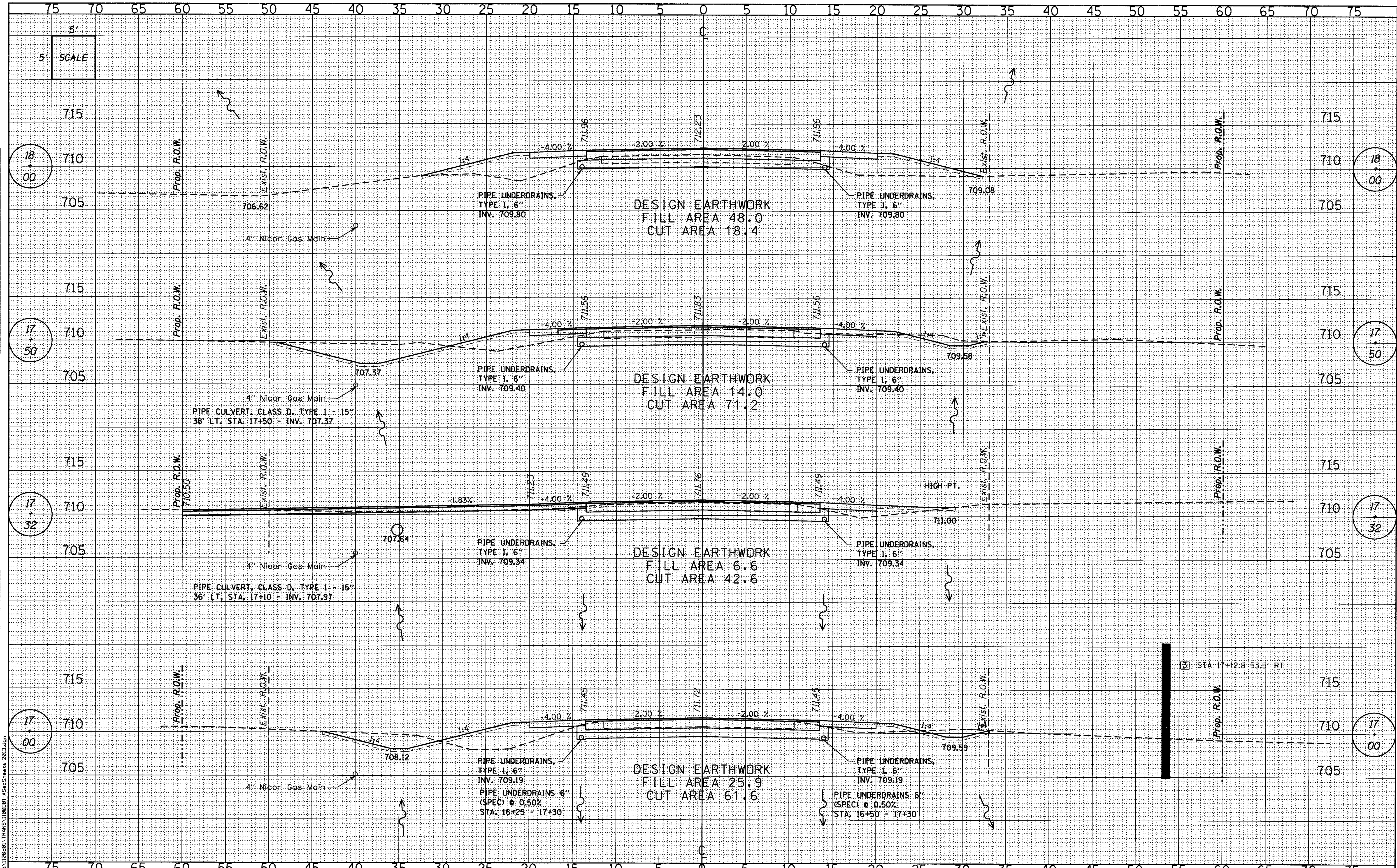
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 1 OF 6 SHEETS STA. 13+50.00 TO STA. 14+50.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	24
WHA* 1100001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

**PROJECT BEGINS
AT STA. 13+50**



DATE	
BY	
FINAL SURVEY	
SURVEY PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SURVEY PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

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DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

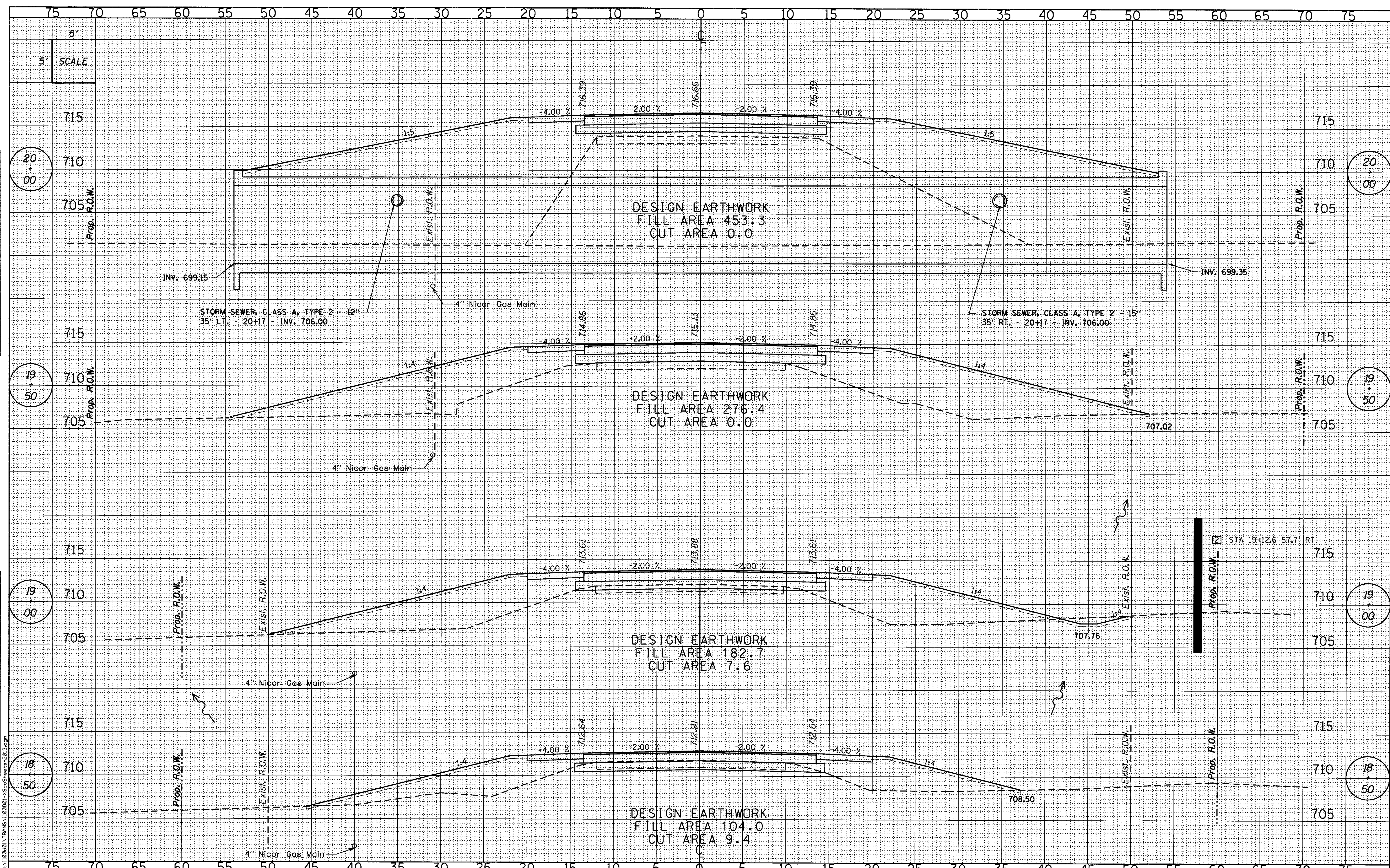
CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 3 OF 6 SHEETS STA. 17+00.00 TO STA. 18+00.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	26
WHA* 110001		CONTRACT NO. 63707		
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	
NO. OF SHEETS	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NO. OF SHEETS	
NOTE BOOK	
NO.	
AREAS CHECKED	



WILLETT HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

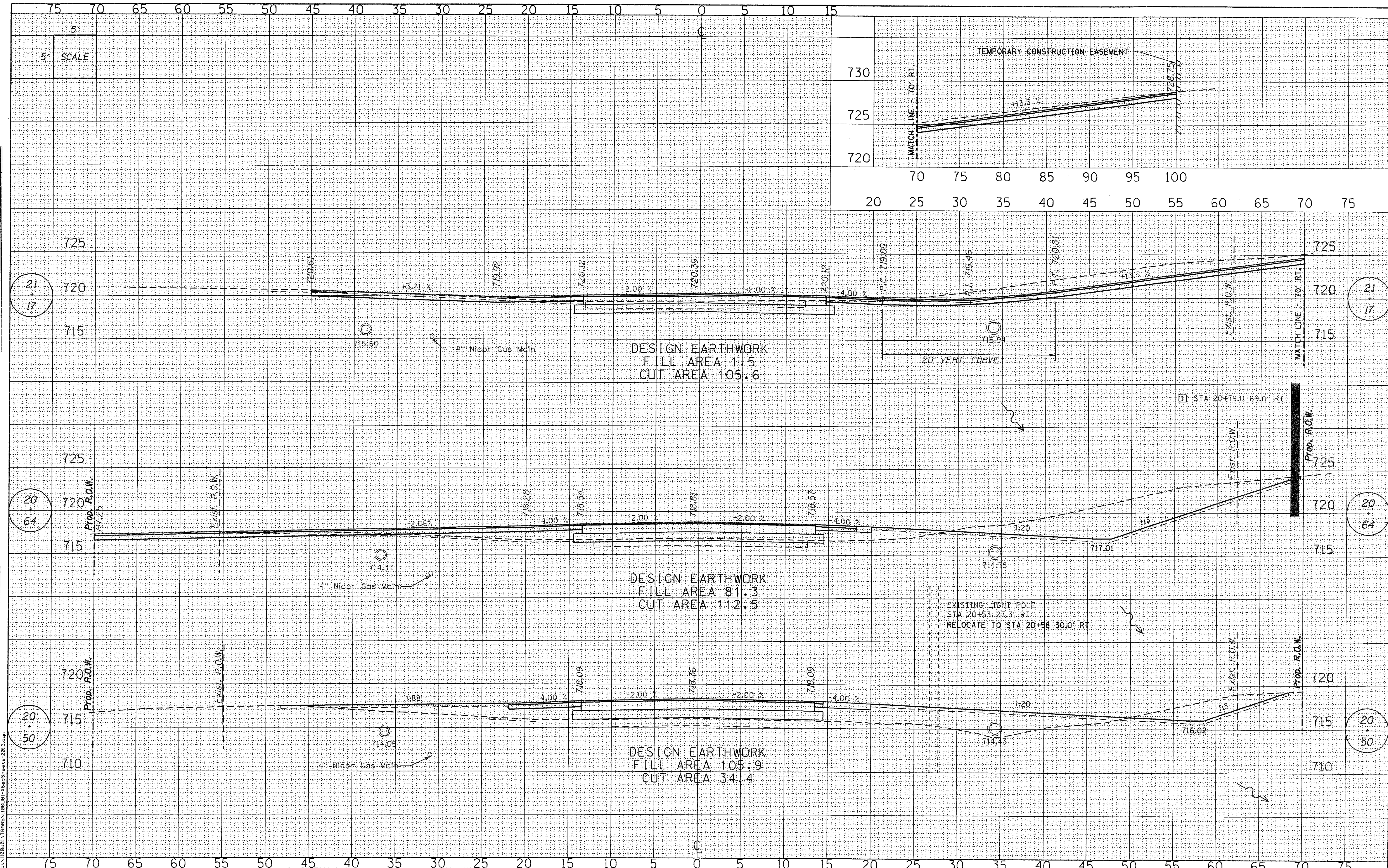
CROSS SECTIONS		
C.H. 23	SECTION 01-00112-01-BR	COUNTY WILL
	WHA* 1100001	CONTRACT NO. 63707
SCALE: 1" = 5'-0"	SHEET NO. 4 OF 6 SHEETS	STA. 18+50.00 TO STA. 20+00.00

TOTAL SHEETS 29	SHEET NO. 27
ILLINOIS FED. AID PROJECT	

FILE = S:\Struct\11000001\TRANS\11000001_XSecSheets-2013.dgn

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
AREAS CHECKED	



WILLET HOFMANN ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 3RD STREET, DIXON, IL 61021-0957
 T. 815-284-5341 DESIGN FIRM #154-000418

DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 5 OF 6 SHEETS STA. 20+50.00 TO STA. 21+17.00

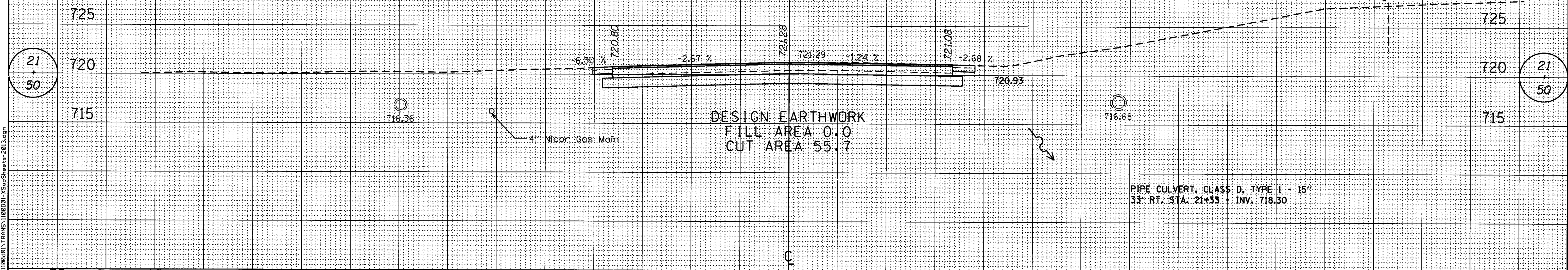
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	29
WHA# 1100001			CONTRACT NO. 63707	
ILLINOIS FED. AID PROJECT				

FILE: S:\AS\p\1100001\TRANS\1100001-25.dwg

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

5'
5' SCALE

PROJECT ENDS
AT STA. 21+50



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



DESIGNED - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -
DRAWN - M.A.H.	REVISED -
CHECKED - B.S.K.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: 1" = 5'-0" SHEET NO. 6 OF 6 SHEETS STA. 21+50.00 TO STA. 21+50.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23	01-00112-01-BR	WILL	29	29
WHA* 1100001			CONTRACT NO. 63707	

ILLINOIS FED. AID PROJECT

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

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

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