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FOR HIGHWAY STANDARDS
SEE SHEET NO. 2

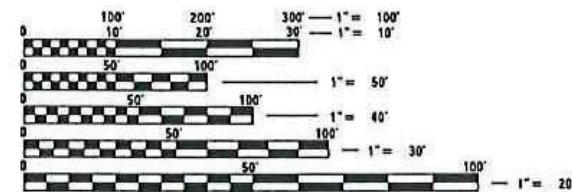
UTILITIES:
SEE SHEET NO. 2

FUNCTIONAL CLASSIFICATION

MAJOR COLLECTOR (RURAL)
DESIGN SPEED 50 MPH
2024 ADT - 460

ATTENTION CONTRACTORS

THE ILLINOIS DEPARTMENT OF TRANSPORTATION
BUREAU OF MATERIALS AND PHYSICAL RESEARCH,
"PROJECT PROCEDURES GUIDE" IS APPLICABLE
TO THIS PROJECT.



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. X233600646 & X233600652
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: ATK
PROJECT MANAGER: MRL
CONTRACT NO.: 89823

CATALOG NO. 036294-00



Know what's below.
Call before you dig.

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLAN FOR PROPOSED FEDERAL AID PROJECT SURFACE TRANSPORTATION RURAL - BRIDGE

COUNTY HIGHWAY 22 (N. HENDERSON RD.)

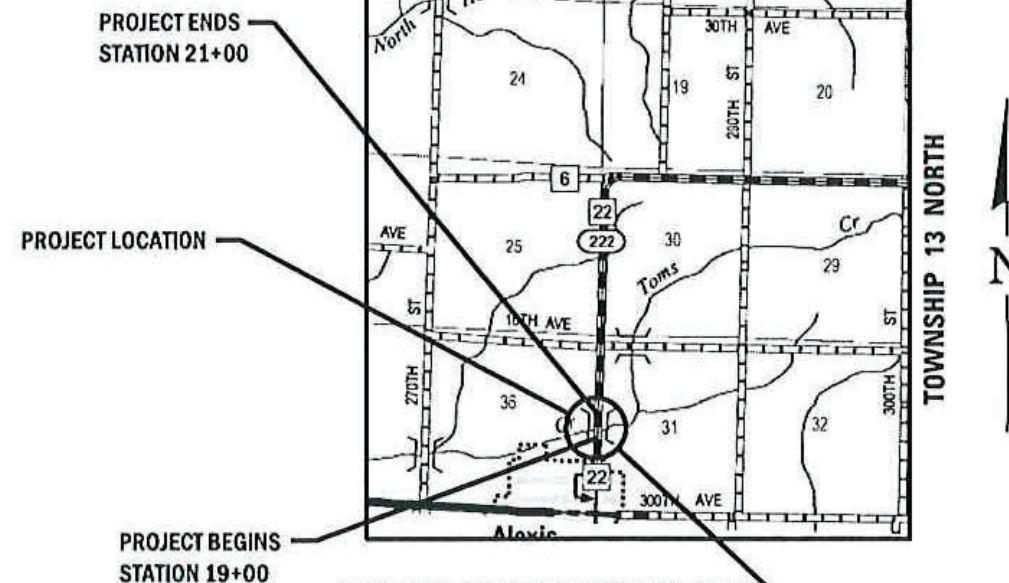
OVER TOMS CREEK

SECTION 20-00118-00-BR
PROJECT NUMBER 3J5S(767)

STRUCTURE REPLACEMENT
MERCER COUNTY

C-94-019-22

RANGE 1 WEST
OF 4TH P.M.



PROPOSED STRUCTURE: S.N. 066-3168
A TRIPLE BARREL (10'-0" X 10'-0") REINFORCED BOX CULVERT
AT STA. 20+00.00, NO SKEW

GROSS LENGTH = 200 FT. = 0.038 MILE
NET LENGTH = 200 FT. = 0.038 MILE



DATE: 10-27-25
EXPIRES 11/30/25

C.J.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	1
RMA# 1659M22				



LOCATION OF SECTION INDICATED THUS: —

MERCER COUNTY HIGHWAY DEPARTMENT

APPROVED 10-31-25
Matt Lowe
Acting MERCER COUNTY ENGINEER

PASSED 11-03-25
Tim Gartin
DISTRICT 4 LOCAL ROADS & STREETS ENGINEER

RELEASING FOR BID
BASED ON LIMITED
REVIEW 1103-25
Kensil A. Jannett
REGION 3 ENGINEER



WILLET HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
T: 309-517-1119 DESIGN FIRM: # 184-000918

GENERAL NOTES

ALL WORK COMPLETED UNDER THIS CONTRACT SHALL CONFORM TO ALL REQUIREMENTS SPECIFIED WITHIN THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2022.

IN THESE CONTRACT DOCUMENTS THE MENTION IS MADE OF THE "ENGINEER", WHICH SHALL BE DEFINED AS STATED IN ARTICLE 101.16 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS, SECTION OR SUBSECTION MONUMENTS ENCOUNTERED, UNTIL AN OWNER OR AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ANY PROPERTY MARKS, SECTION OR SUBSECTION MONUMENTS UNLESS REFERENCED, DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

THE CONTRACTOR SHALL COOPERATE WITH THE COUNTY AND ADJACENT LANDOWNERS WITH REGARDS TO ACCESS TO PRIVATE PROPERTY, AS WELL AS THE U.S. POSTAL SERVICE FOR MAIL DELIVERY.

THE LOCATION AND ELEVATION OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL VERIFY AND LOCATE ALL EXISTING UTILITIES ON OR ADJACENT TO THE SITE. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTACT J.U.L.I.E. AT 1-800-892-0123 AND THE CITY FOR EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE. DAMAGE, AND THE COST TO REPAIR SAID DAMAGE, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

CONTRACTOR SHALL CLEAN UP ALL EXCESS MATERIALS AND DEBRIS CAUSED AS A RESULT OF WORK UNDER THIS CONTRACT AT THE COMPLETION OF THE PROJECT AT NO ADDITIONAL COST.

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE RESULTING FROM THE PERFORMANCE OF THE WORK UNDER THIS CONTRACT.

COPIES OF ALL DELIVERY TICKETS FOR MATERIALS USED IN THE PROJECT SHALL BE SUBMITTED TO THE ENGINEER OR COUNTY PRIOR TO PAYMENT FOR THE WORK. EACH MATERIAL TICKET SHALL BE PROVIDED TO THE RESIDENT ENGINEER UPON DELIVERY.

FINAL INSPECTION OF THE WORK PERFORMED UNDER THIS CONTRACT WILL BE DONE BY THE ENGINEER AND COUNTY PRIOR TO FINAL ACCEPTANCE. DEFECTS SHALL BE CORRECTED BY THE CONTRACTOR WITHOUT COST TO THE COUNTY PRIOR TO ISSUANCE OF THE FINAL PAYMENT.

HIGHWAY STANDARDS

000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-04	NAME PLATE FOR BRIDGES
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS - DAY ONLY
701901-11	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001-01	OBJECT AND TERMINAL MARKERS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

GENERAL NOTES CONT.:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123. THE FOLLOWING UTILITIES WERE LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS THAT ARE MEMBERS OF JULIE:

Company	Name	Email	Phone
Ameren Illinois - North	BRIAN BLACKMAN	CBLACKMAN@AMEREN.COM	309-401-4646
Village of Alexis	JAMES BROWNLEY	ALEXISSTP@HOTMAIL.COM	309-371-3660
Frontier Communications	KALIN HINSHAW	KALIN.HINSHAW@FTR.COM	309-313-3950
	CRAIG YOUNG	CRAIG.YOUNG@FTR.COM	
Lumen	-	RELOCATIONS@LUMEN.COM	-
Mediacom	MITCH HANCOCK	MHANCOCK@MEDIACOMCC.COM	563-529-1866
Cambridge Telephone	COREY SCHUIII	COREY.SCHUIH@GENESE0.COM	309-714-0904

EXISTING MAIL BOXES, MONUMENTS, AND ANY MISC. SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND RESET BY THE CONTRACTOR. COST OF THE REMOVING AND RESETTING TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER UNIT FOR EARTH EXCAVATION (SPECIAL).

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION IN ORDER TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION. WORK PERFORMED OR MATERIALS AND EQUIPMENT INSTALLED WITHOUT INSPECTION MAY BE CONSIDERED UNACCEPTABLE AT THE DISCRETION OF THE ENGINEER AND MY HAVE TO BE REPLACED AT NO COST TO THE ENGINEER OR OWNER.

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

ALL BORROW / WASTE / USE SITES MUST BE APPROVED BY THE DEPARTMENT / OWNER PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTH MOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUIRED DUE TO DELAYS OR UNSTABLE MATERIALS CREATED AS A RESULT THEREOF.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES THROUGHOUT THE COURSE OF THE PROJECT. THE COST FOR ALL MAINTAINED AND ADJUSTMENTS TO THE EROSION CONTROL MEASURES SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE FOR EACH EROSION CONTROL DEVICE.

TREE REMOVAL WILL BE COMPLETED BY THE COUNTY

FENCE REMOVAL WILL BE COMPLETED BY THE LANDOWNER

COMMITMENTS:

TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT WILL NOT BE CLEARED BETWEEN APRIL 1ST THROUGH SEPTEMBER 30TH

THE PROJECT WILL MEET THE USACE GENERAL PERMIT TERMS AND CONDITIONS.

HOT MIX ASPHALT MIX CHART

LOCATIONS:	ENTIRE PROJECT	ENTIRE PROJECT
MIXTURE USE(S):	HMA SURFACE	HMA BINDER
BINDER GRADE (PG):	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	
MIXTURE WEIGHT:	112.0 LB/SY/IN	112.0 LB/SY/IN
QUALITY MANAGEMENT PROGRAM:	QC / QA	QC / QA
SUBLOT SIZE:	N / A	N / A
DENSITY TEST METHOD:	CORES/NUCLEAR	CORES/NUCLEAR
MATERIAL TRANSFER DEVICE (REQUIRED):	NO	NO

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



WILLET HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
T: 309-517-1119 DESIGN FIRM: # 184-000918

GENERAL NOTES

SHEET NO. 1 OF 1 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	2
WHA* 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

PAY CODE	PAY ITEM	UNIT	QUANTITY
	NAME		
20700220	POROUS GRANULAR EMBANKMENT	CU YD	928
25100630	EROSION CONTROL BLANKET	SQ YD	1,531
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	33
28000400	PERIMETER EROSION BARRIER	FOOT	619
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	1,531
28100107	STONE RIPRAP, CLASS A4	SQ YD	283
28200200	FILTER FABRIC	SQ YD	359
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	534
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1,200
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	223
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	112
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	56
44000100	PAVEMENT REMOVAL	SQ YD	393
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	24
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	36,800

+INDICATES SPECIALTY ITEM

PAY CODE	PAY ITEM	UNIT	QUANTITY
	NAME		
51500100	NAME PLATES	EACH	1
54003000	CONCRETE BOX CULVERTS	CU YD	238.4
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	197
63200310	GUARDRAIL REMOVAL	FOOT	374
67100100	MOBILIZATION	L SUM	1
+ 72500300	OBJECT MARKER - TYPE 3	EACH	4
+ 72900100	METAL POST - TYPE A	FOOT	36
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	440
X2501020	SEEDING, CLASS 2A (SPECIAL)	ACRE	0.50
X2830495	AGGREGATE DITCH (SPECIAL)	TON	76
X5810103	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	197
X6110073	EXISTING FIELD TILE REMOVAL	FOOT	194
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1

+INDICATES SPECIALTY ITEM

REVISION	DATE	BY	REMARKS	DESIGNED	ATK
				DRAWN	DAL
				REVIEWED	ATK
				APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00

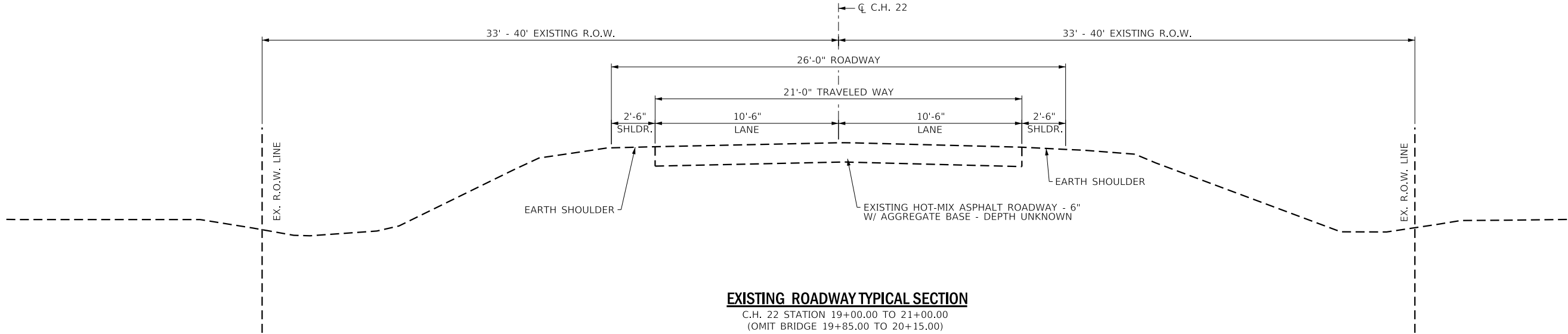


WILLET HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1515 FIFTH AVENUE, SUITE 102, MOULNE, IL 61265
T: 309-517-1119 DESIGN FIRM: # 184-000918

SUMMARY OF QUANTITIES

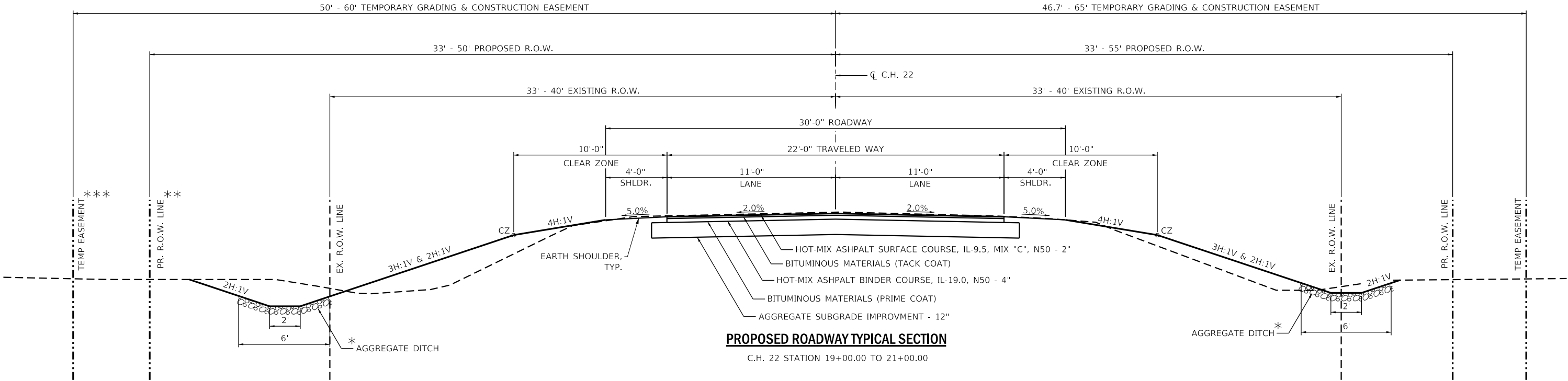
SHEET 1 OF 1

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	3
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				



EXISTING ROADWAY TYPICAL SECTION

C.H. 22 STATION 19+00.00 TO 21+00.00
(OMIT BRIDGE 19+85.00 TO 20+15.00)



PROPOSED ROADWAY TYPICAL SECTION

C.H. 22 STATION 19+00.00 TO 21+00.00

* AGGREGATE DITCH LIMITS:
RT STA: 19+00.0 TO 19+66.7
LT STA: 19+50.0 TO 19+66.7
RT STA: 20+33.0 TO 20+60.0

** PROPOSED R.O.W. LIMITS:
RT STA: 19+30.2 TO 19+75 - - OFFSET 40.0' TO 55.0'
RT STA: 19+75 TO 20+05 - - OFFSET 55.0'
RT STA: 20+05 TO 20+57 - - OFFSET 55.0' TO 40.7'
RT STA: 20+57 TO 20+59 - - OFFSET 40.7' TO 33.0'

LT STA: 19+31 TO 19+65 - - OFFSET 40.0' TO 50.0'
LT STA: 19+65 TO 20+35 - - OFFSET 50.0'
LT STA: 20+35 TO 20+85 - - OFFSET 50.0' TO 33.0'

*** TEMPORARY CONSTRUCTION & GRADING EASEMENT LIMITS:
RT STA: 19+65 - - OFFSET 51.7' TO 65.0'
RT STA: 19+65 TO 20+35 - - OFFSET 65.0'
RT STA: 20+35 - - OFFSET 65.0' TO 46.7'

LT STA: 19+65 - - OFFSET 50.0' TO 60.0'
LT STA: 19+65 TO 20+35 - - OFFSET 60.0'
LT STA: 20+35 - - OFFSET 60.0' TO 50.0'

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



WILLETT HOFMANN
& ASSOCIATES, INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
T: 309-517-1119 DESIGN FIRM: # 184-000918

TYPICAL SECTIONS

SHEET NO. 1 OF 1

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	4
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

EROSION CONTROL BLANKET		
STATION	SQ YD	REMARKS
COUNTY HIGHWAY 22		
RT 18+75 - 21+25	735	
LT 18+75 - 21+25	796	
PROJECT TOTAL	1,531	
25100630		

TEMPORARY EROSION CONTROL SEEDING		
STATION	POUND	REMARKS
COUNTY HIGHWAY 22		
RT 18+75 - 21+25	16	
LT 18+75 - 21+25	17	
PROJECT TOTAL	33	100 LBS / ACRE
28000250		

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
COUNTY HIGHWAY 22		
RT 18+75 - 19+79	141	
LT 18+75 - 19+94	152	
RT 19+94 - 21+25	177	
LT 20+10 - 21+25	149	
PROJECT TOTAL	619	
28000400		

TEMPORARY EROSION CONTROL BLANKET		
STATION	SQ YD	REMARKS
COUNTY HIGHWAY 22		
RT 18+75 - 21+25	735	
LT 18+75 - 21+25	796	
PROJECT TOTAL	1,531	
28001100		

FILTER FABRIC		
STATION	SQ YD	REMARKS
COUNTY HIGHWAY 22		
RT 19+00 - 19+67	45	AGGREGATE LINED DITCH
LT 19+50 - 19+67	12	AGGREGATE LINED DITCH
19+67 - 20+33	283	BRIDGE RIPRAP QUANTITY
RT 20+33 - 20+60	19	AGGREGATE LINED DITCH
PROJECT TOTAL	359	
28200200		

AGGREGATE SUBGRADE IMPROVEMENT		
STATION	SQ YD	REMARKS
COUNTY HIGHWAY 22		
19+00 - 21+00	534	
PROJECT TOTAL	534	2.05 TON / CU YD
30300112		

BITUMINOUS MATERIALS (PRIME COAT)		
STATION	POUND	REMARKS
COUNTY HIGHWAY 22		
19+00 - 21+00	1,200	AGGREGATE SUBGRADE APPLICATION
PROJECT TOTAL	1,200	0.25 LBS / SQ FT
40600275		

BITUMINOUS MATERIALS (TACK COAT)		
STATION	POUND	REMARKS
COUNTY HIGHWAY 22		
19+00 - 21+00	112	APPLICATION FOR TOP BINDER COURSE
19+00 - 21+01	111	APPLICATION FOR SURFACE COURSE
PROJECT TOTAL	223	0.025 LBS / SQ FT
40600290		

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50		
STATION	TON	REMARKS
COUNTY HIGHWAY 22		
19+00 - 21+00	112	APPLIED IN TWO LIFTS
PROJECT TOTAL	112	112 LBS / SY / IN
40603080		

HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50		
STATION	TON	REMARKS
COUNTY HIGHWAY 22		
19+00 - 21+00	56	APPLIED IN ONE LIFT
PROJECT TOTAL	56	112 LBS / SY / IN
40604050		

PAVEMENT REMOVAL		
STATION	SQ YD	REMARKS
COUNTY HIGHWAY 22		
19+00 - 19+84	198	EXCLUDES PVMT OVER STRUCTURE
20+16 - 21+00	195	EXCLUDES PVMT OVER STRUCTURE
PROJECT TOTAL	393	
44000100		

PIPE CULVERT REMOVAL		
STATION	FOOT	REMARKS
COUNTY HIGHWAY 22		
RT 20+06 - 20+31	24	15" CMP
PROJECT TOTAL	24	
50105220		

REVISION	DATE	BY	REMARKS	DESIGNED	ATK
				DRAWN	DAL
				REVIEWED	ATK
				APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



WILLETT HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
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T: 309-517-1119 DESIGN FIRM: # 184-000918

SCHEDULE OF QUANTITIES

SHEET 1 OF 2

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	5
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

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SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE

GUARDRAIL REMOVAL		
STATION	FOOT	REMARKS
COUNTY HIGHWAY 22		
RT 19+06 - 20+93	187	INCLUDES BRIDGE
LT 19+06 - 20+93	187	INCLUDES BRIDGE
PROJECT TOTAL		
63200310		

OBJECT MARKER - TYPE 3		
STATION	EACH	REMARKS
COUNTY HIGHWAY 22		
LT 19+83	1	NW QUADRANT
RT 19+83	1	SW QUANDRANT
LT 20+18	1	NE QUADRANT
RT 20+18	1	SE QUANDRANT
PROJECT TOTAL		
72500300		

METAL POST - TYPE A		
STATION	FOOT	REMARKS
COUNTY HIGHWAY 22		
LT 19+83	9	NW QUADRANT
RT 19+83	9	SW QUANDRANT
LT 20+18	9	NE QUADRANT
RT 20+18	9	SE QUANDRANT
PROJECT TOTAL		
72900100		

SEEDING, CLASS 2A (SPECIAL)		
STATION	ACRE	REMARKS
COUNTY HIGHWAY 22		
RT 18+75 - 21+25	0.25	Rounded to nearest 1/4 acre per BDE
LT 18+75 - 21+25	0.25	Rounded to nearest 1/4 acre per BDE
PROJECT TOTAL		
X2501020		

AGGREGATE DITCH (SPECIAL)		
STATION	TON	REMARKS
COUNTY HIGHWAY 22		
RT 19+00 - 19+67	45	R4 STONE W/ FILTER FABRIC
LT 19+50 - 19+67	12	R4 STONE W/ FILTER FABRIC
RT 20+33 - 20+60	19	R4 STONE W/ FILTER FABRIC
PROJECT TOTAL		
X2830495		

EXISTING FIELD TILE REMOVAL		
STATION	FOOT	REMARKS
COUNTY HIGHWAY 22		
RT 17+80 - 19+74	194	
PROJECT TOTAL		
X6110073		

LOCATION	EARTH EXCAVATION (SPECIAL) X2020410 (Cu Yd)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25% (Cu Yd)	EMBANKMENT (Cu Yd)	EARTH BALANCE WASTE (+) OR FURNISHED EXCAVATION (-) (Cu Yd)
C.H. 22	440	330	151	179
TOTALS	440	330	151	179

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



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& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
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T: 309-517-1119 DESIGN FIRM: # 184-000918

SCHEDULE OF QUANTITIES

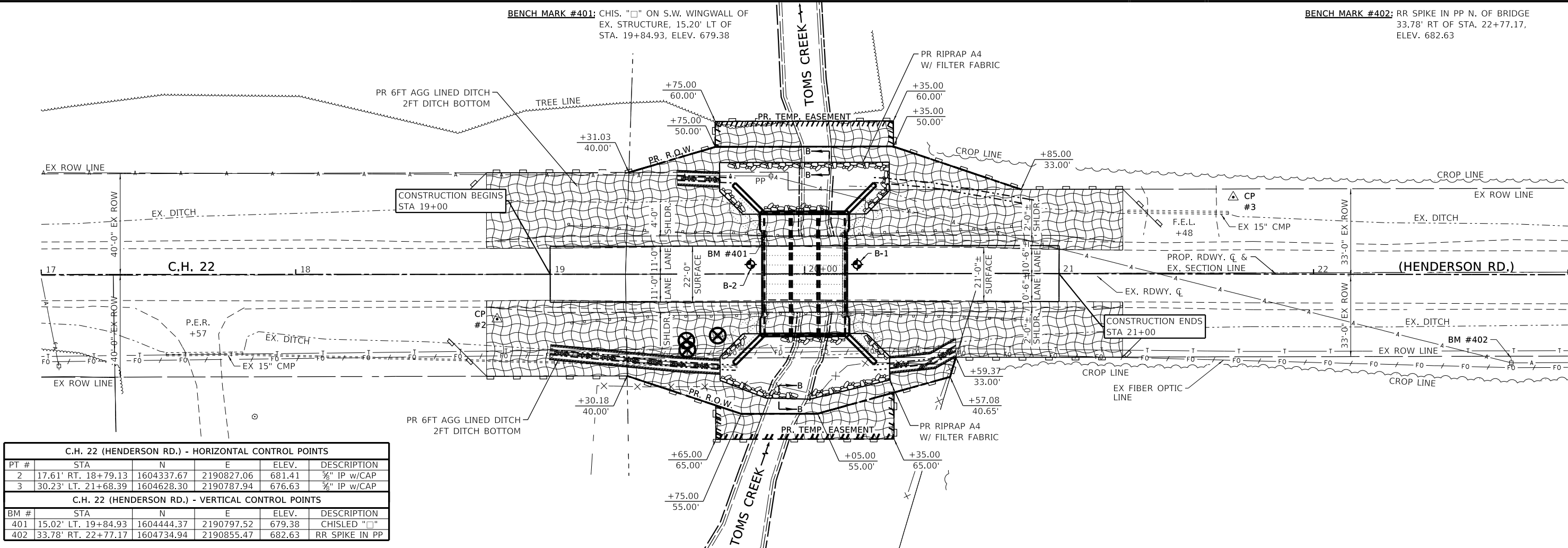
SHEET 2 OF 2

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	6
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

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EROSION CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2" = OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT. THE INDIVIDUAL ON SITE SHALL PROVIDE A REPORT TO THE INSPECTION STAFF THE FOLLOWING DAY AFTER 1/2" = OF RAIN OR MORE.

PERIMETER EROSION BARRIER SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS AND SHALL BE PLACED AS SHOWN ON THIS EROSION CONTROL PLAN AND IN ACCORDANCE WITH STATIONS SHOWN ON THE SCHEDULE OF QUANTITIES SHEET OR AS DIRECTED BY THE ENGINEER.

EROSION CONTROL BLANKET SHALL BE PLACED ON ALL DISTURBED AREAS AS SHOWN ON THIS EROSION CONTROL PLAN SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

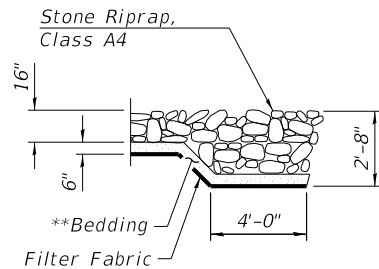
THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN 3 DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). SOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING. INCIDENTAL TO EARTH EX (SPECIAL)

ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY.

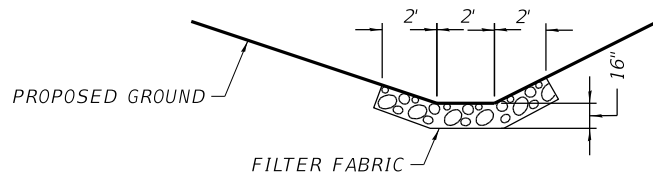
LEGEND

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET W/ SEEDING, CLASS 2A (SPECIAL)
- STONE RIPRAP, CLASS A4 W/ FILTER FABRIC
- TREE REMOVAL (TO BE DONE BY COUNTY)



SECTION B-B

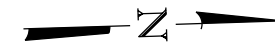
** Cost included in Stone Riprap, Class A4



AGGREGATE DITCH DETAIL



Know what's below.
Call before you dig.



SCALE: 1"=20'



REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00

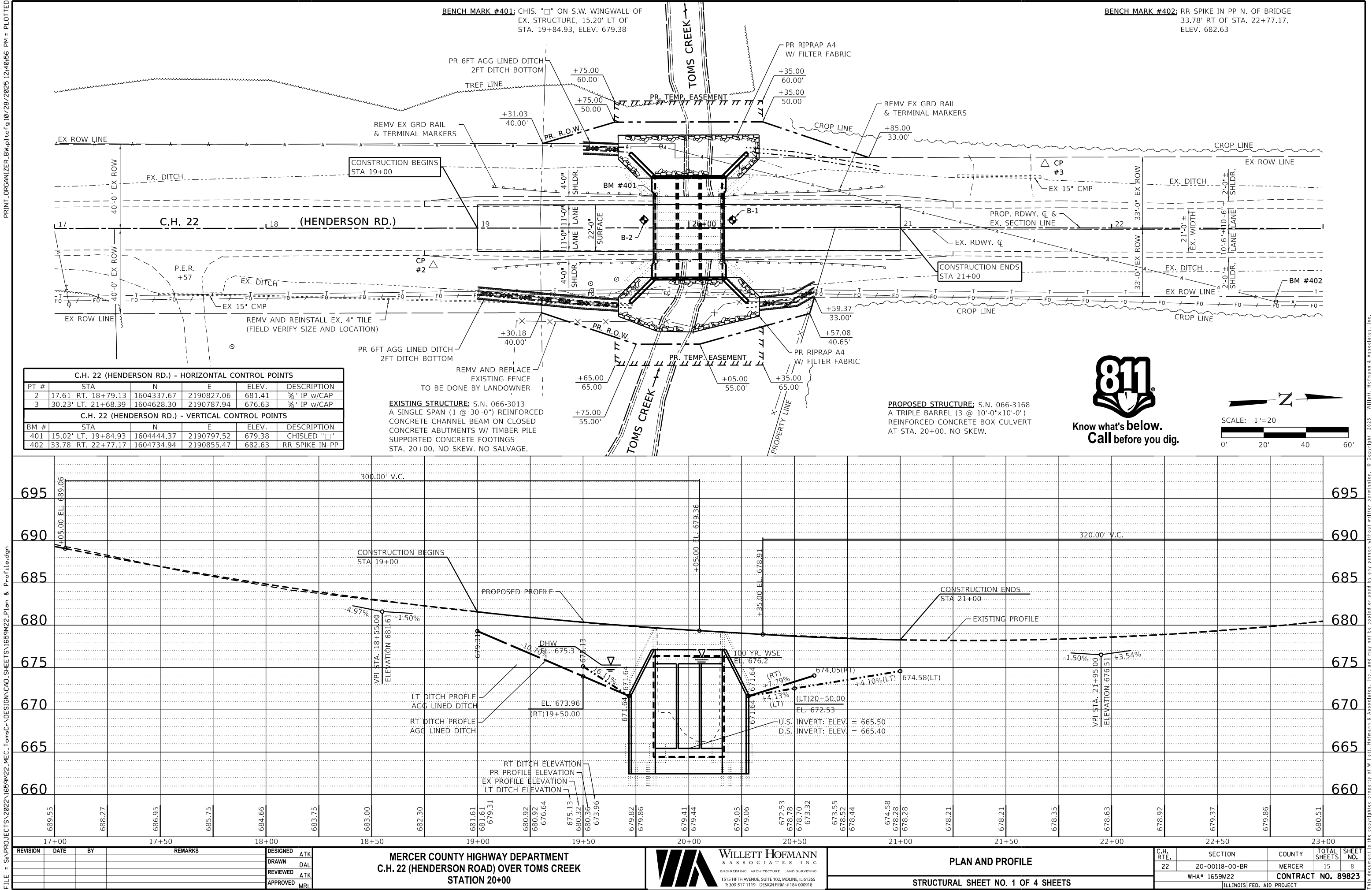


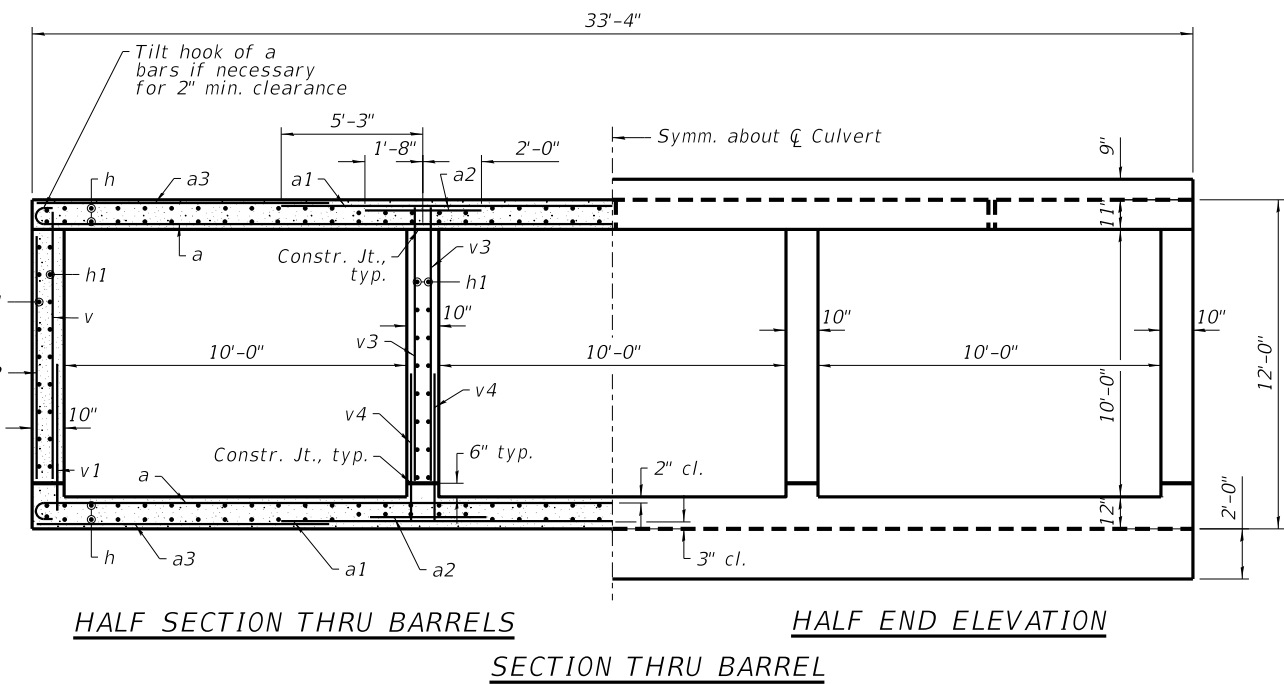
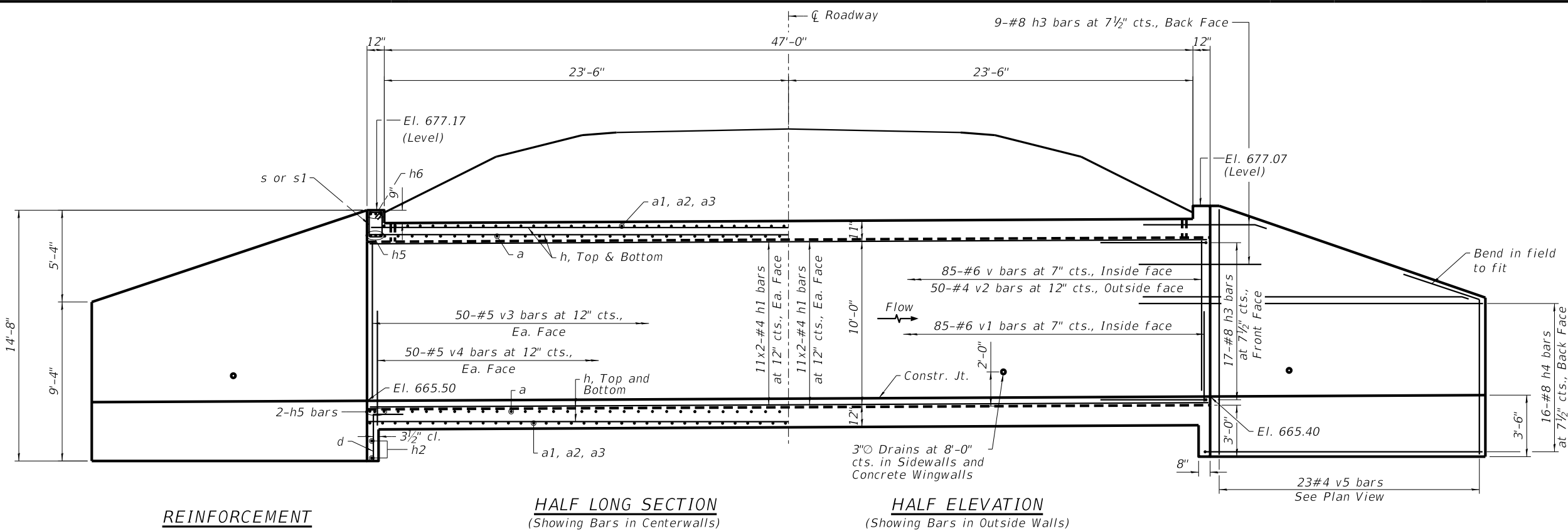
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1515 FIFTH AVENUE, SUITE 102, MOLINE, IL 61265
T: 309-517-1119 DESIGN FIRM: # 184-000918

EROSION CONTROL PLAN

SHEET NO. 1 OF 1 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	7
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				





WATERWAY INFORMATION									
Drainage Area=3.14 Sq. Mi. Low Grade Ex.: 678.21 @ Sta. 21+50 Pr.: 678.21 @ Sta. 21+50									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. Exist.	Head - Ft.	Headwater El.	Exist.	Prop.	Exist.
Design	20	1142	215	297	675.3	0.1	0.0	675.4	675.3
Base	100	1690	242	300	676.2	0.5	0.0	676.7	676.2
Scour Check	200	1955	251	300	676.5	0.8	0.0	677.3	676.5
Max. Calc	500	2320	260	300	676.8	1.3	0.0	678.1	655.2

LOADING HL-93

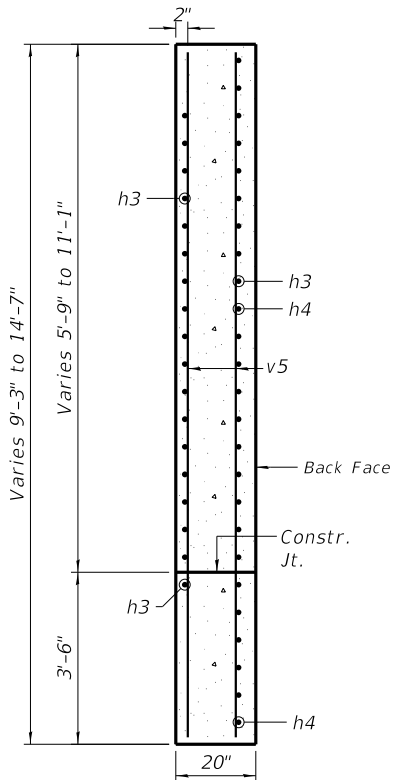
DESIGN STRESSES

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

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

MINIMUM BAR LAP	
Size	Lap
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-0"
#8	3'-5"



DATE: 10/29/25

EXPIRES 11/30/26

"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'."

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	132	7	34'-8"	U
a1	66	7	21'-4"	U
a2	128	7	3'-8"	U
a3	132	4	7'-7"	U
d	68	4	4'-4"	L
h	272	4	25'-3"	U
h1	176	4	25'-3"	U
h2	4	4	33'-0"	U
h3	104	8	9'-5"	U
h4	64	8	20'-11"	U
h5	8	6	33'-0"	U
h6	4	7	33'-0"	U
s	35	4	4'-9"	U
s1	35	4	4'-7"	U
v	174	6	10'-1"	U
v1	174	6	4'-0"	U
v2	100	4	9'-2"	U
v3	200	5	10'-1"	U
v4	200	5	3'-7"	U
v5	92	4	14'-3"	U
Porous Granular Embankment			CU YD	928
Stone Riprap, Class A4			SQ YD	283
Filter Fabric			SQ YD	283
Removal of Existing Structures			Each	1
Reinforcement Bars, Epoxy Coated			Pound	36,800
Name Plates			Each	1
Concrete Box Culverts			Cu. Yd.	238.4
Geocomposite Wall Drain			Sq. Yd.	197
Membrane Waterproofing System for Buried Structures			Sq. Yd.	197

NOTES:
See Special Provisions.
Precast Box Culvert option not allowed.
*All exposed edges shall be chamfered 3/4" unless otherwise noted.

REVISION	DATE	BY	REMARKS

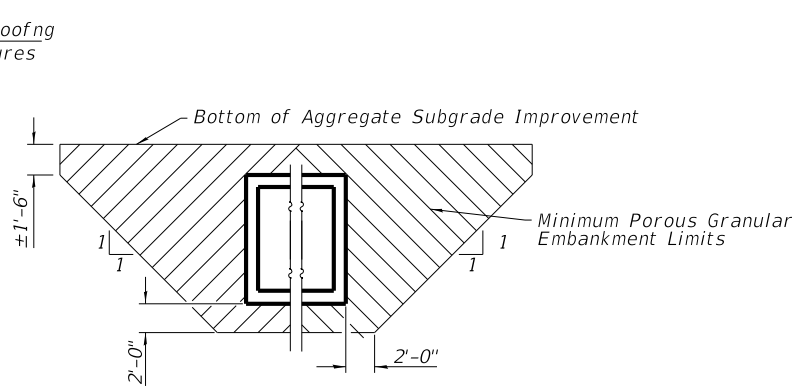
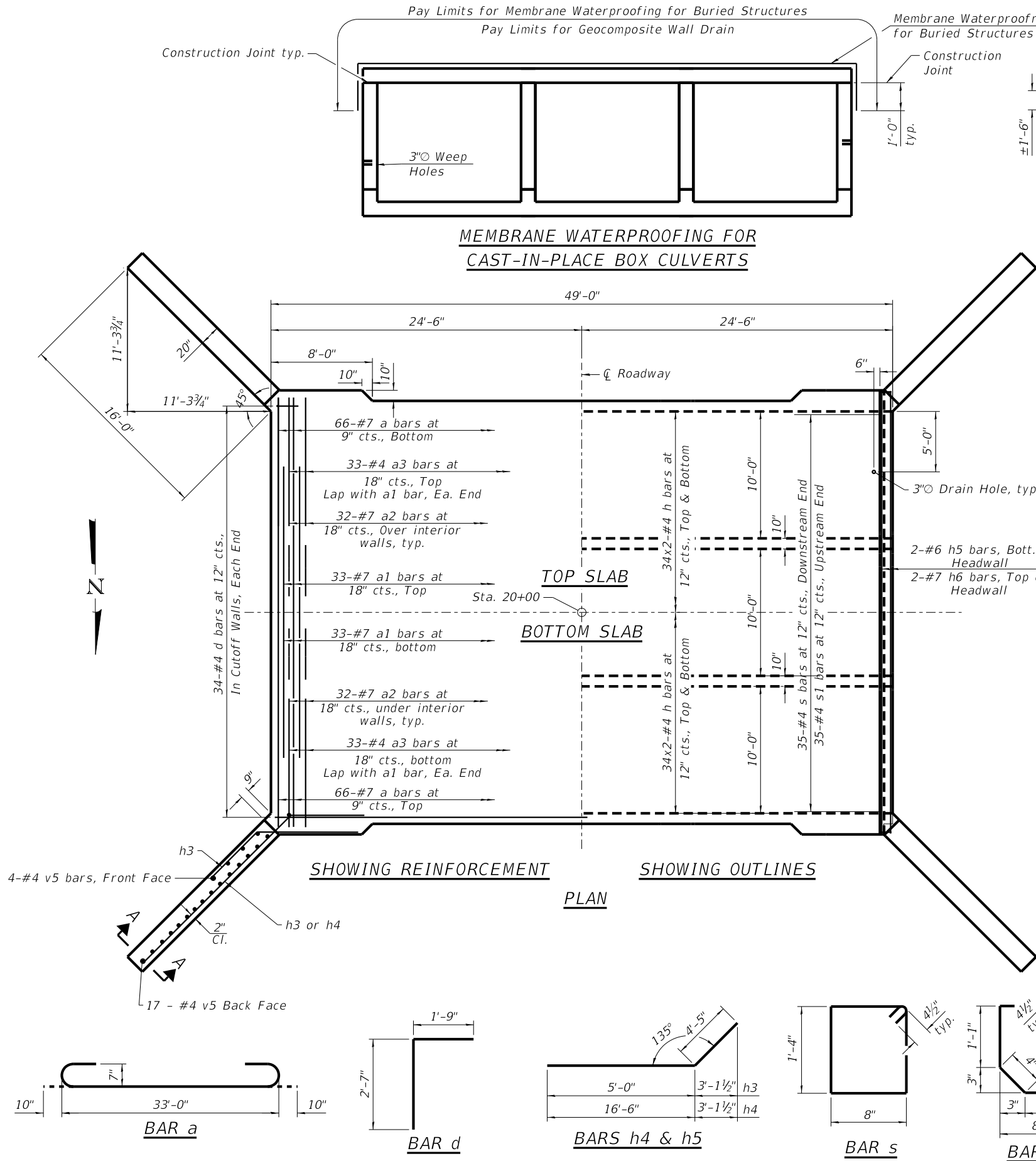
DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00

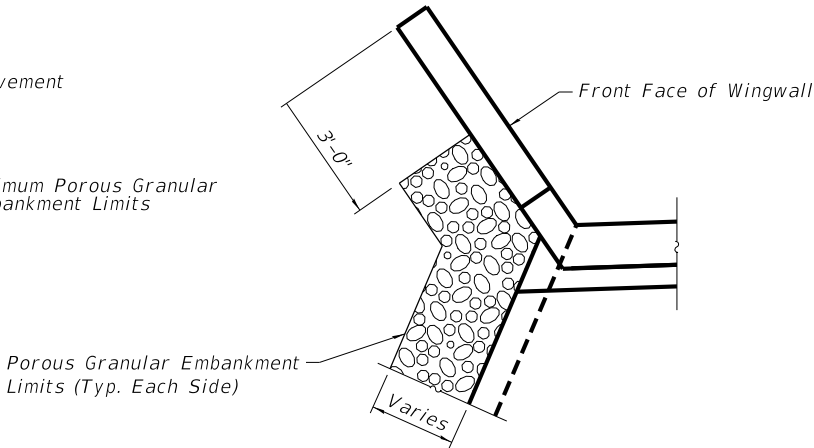


TRIPLE BARREL BOX CULVERT DETAILS
STRUCTURE NO. 066-3168
STRUCTURAL SHEET NO. 2 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	9
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

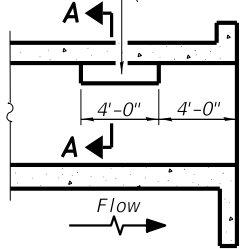


PAY LIMITS FOR POROUS GRANULAR EMBANKMENT
(Hatched area)

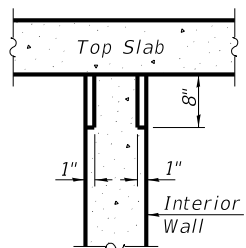


PAY LIMITS FOR POROUS GRANULAR EMBANKMENT
PLAN VIEW

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

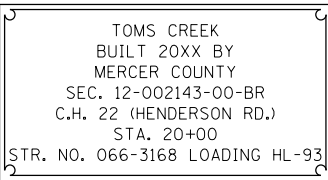


LONGITUDINAL SECTION



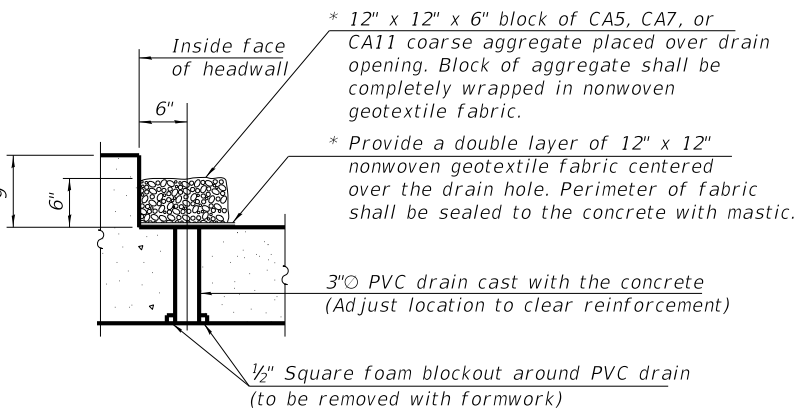
SECTION A-A

PHOEBE NESTING
SITE DETAILS
(Downstream End Only)



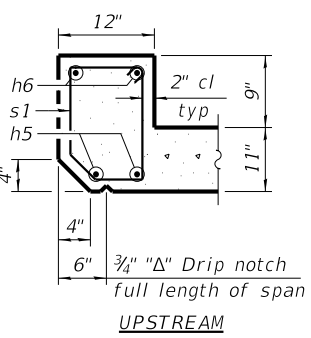
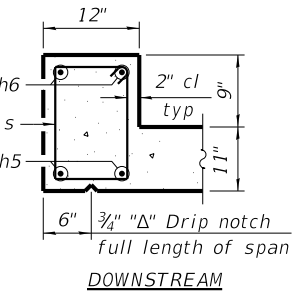
NAME PLATE LETTERING
See Sta. 515001

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)



SECTION THRU HEADWALL

REVISION	DATE	BY	REMARKS

DESIGNED	ATK
DRAWN	DAL
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00













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TRIPLE BARREL BOX CULVERT DETAILS

STRUCTURAL SHEET NO. 3 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	10
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

BORING LOG No. 1													Page 1 of 1	
PROJECT						SITE								
Bridge Replacement						Alexis, IL								
GRAPHIC LOG	Approx. Surface Elevation (ft): 678.86 Site Datum: Spike on Power Pole (682.63') Drilling Method: HSA				USCS SYMBOL	DEPTH (ft.)	SAMPLES				TESTS			OTHER
	DESCRIPTION						NUMBER	TYPE	RECOVERY	SPT - N (BLOWS / FT.)	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED STRENGTH (PSF)	
	0.5	Pavement -- Asphalt	678.4	CL	0	1	AS			5.5				
		Fill -- Sandy lean CLAY, trace gravel, very dark gray												
	2		SS			5	13	8.5						
				CL	5	3	SS	7	8	16.2				
	5.5	Possible Fill -- Lean CLAY, trace sand, dark olive brown												
	4		ST			8		19.8	104	4,000*				
	8.5		670.4	CL	10	5	SS		3	22.7				
		Alluvium -- Lean to fat CLAY, very dark gray, medium stiff to stiff												
	10.5													
				CL-CH	15	6	ST	16		29	94	2,000*		
	13.5	Alluvium -- Sandy lean CLAY, dark gray, medium stiff												
				CL	20	7	SS	12	4	24.3				
	17.0	Alluvium -- Lean CLAY, dark grayish brown, medium stiff												
				CL	25	8	SS	6	6	33.8				
	22.0	Glacial Till -- Sandy lean CLAY, trace gravel, olive brown, stiff												
				CL	30	9	SS	6	14	14.5				
	30.0	Bottom of boring												
Notes:										* Calibrated hand penetrometer Hammer Type: Manual				
Water Level:										Boring Started: 12-19-2023				
 18 Ft. While Drilling										Boring Completed: 12-19-2023				
 18 Ft. After Drilling										Rig: TRK		Foreman: JH		
 Ft.										Approved: NG		Job #: 1-5423		

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

BORING LOG No. 2												Page 1 of 1	
PROJECT						SITE							
Bridge Replacement						Alexis, IL							
GRAPHIC LOG	Approx. Surface Elevation (ft): 679.63 Site Datum: Spike on Power Pole (682.63') Drilling Method: HSA				USCS SYMBOL	DEPTH (ft.)	SAMPLES				TESTS		
	DESCRIPTION						NUMBER	TYPE	RECOVERY	SPT - N (BLOWS / FT.)	MOISTURE, %	DRY DENSITY (PCF)	UNCONFINED STRENGTH (PSF)
	0.5	Pavement -- Asphalt	679.1	CL	0								
		Fill -- Sandy lean CLAY, trace gravel, olive gray and very dark gray			1	SS	6	12	8.9				
					2	ST	10		18.2	109	6,000*		
	8.5		671.1		3	SS	13	6	19.2				
		Possible Fill -- Lean CLAY, with sand, dark grayish brown		CL	4	SS	9	4	19.1				
	11.0		668.6	CL-CH									
		Alluvium -- Lean to fat CLAY, trace sand, very dark gray, medium stiff			5	SS	15	5	30.3				
					6	SS	14	4	26.4				
	17.0		662.6	CL									
	Glacial Till -- Sandy lean CLAY, trace gravel, grayish brown, stiff		7		SS	16	9	13.8					

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES; IN-SITU, THE TRANSITION MAY BE GRADUAL.

REVISION	DATE	BY	REMARKS	DESIGNED	ATK
				DRAWN	DAL
				REVIEWED	ATK
				APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



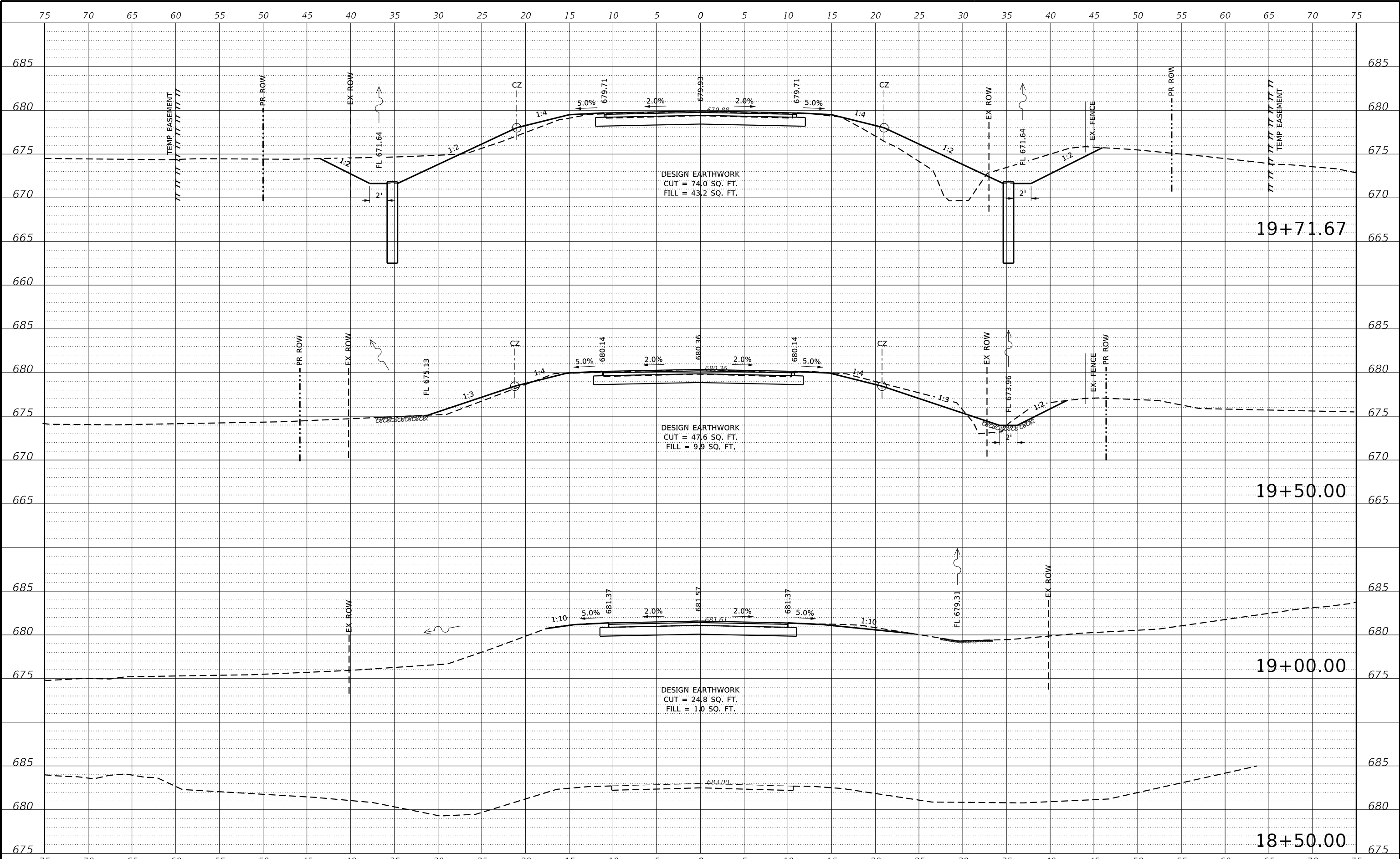
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BORING LOGS	
STRUCTURAL SHEET NO. 4 OF 4 SHEETS	

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	11
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

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REVISION	DATE	BY	REMARKS

DESIGNED	GBG
DRAWN	GBG
REVIEWED	ATK
APPROVED	MRL

MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



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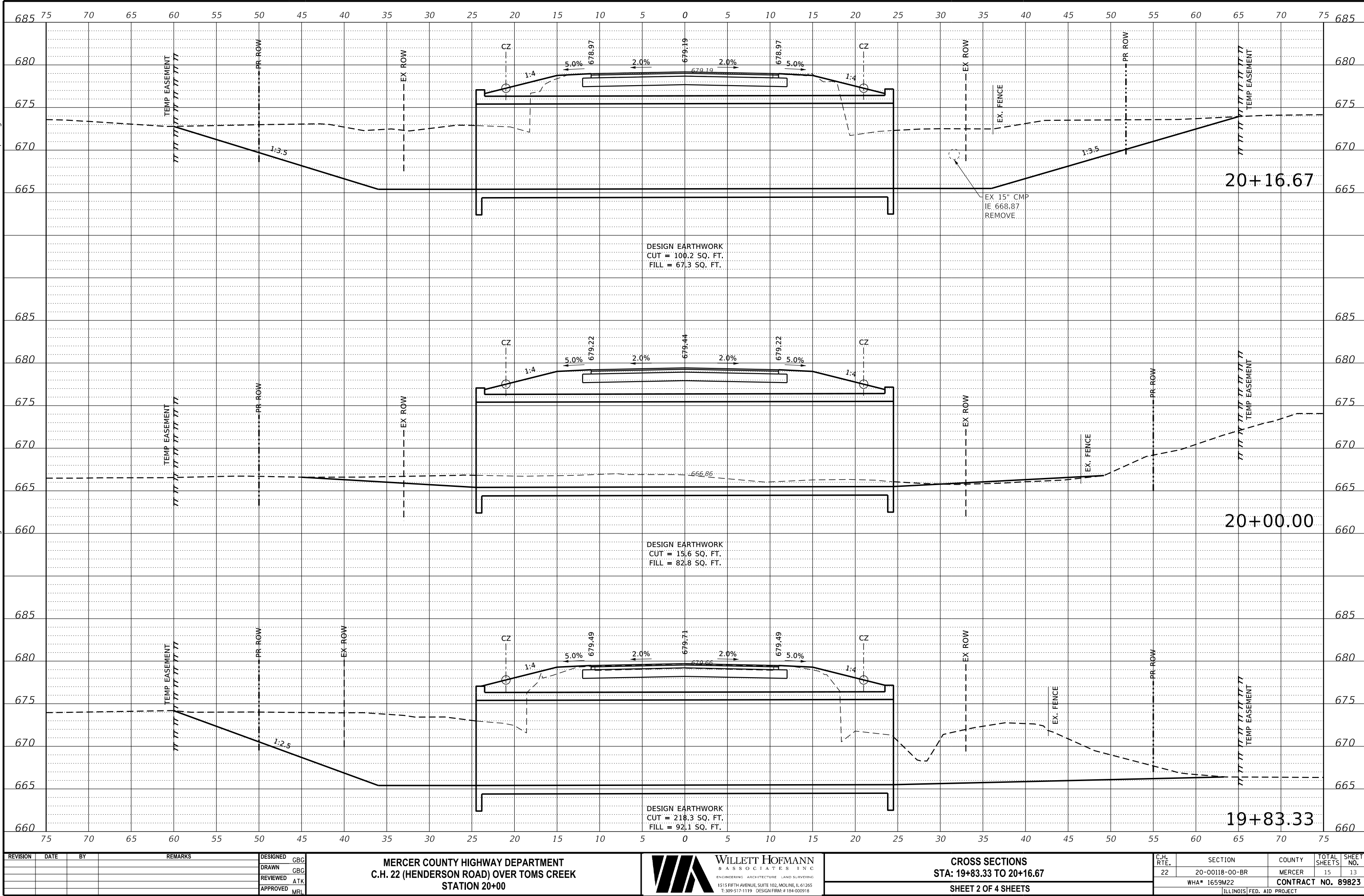
CROSS SECTIONS
STA: 12+00.00 TO 19+71.67

SHEET 1 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	12
WHA# 1659M22		CONTRACT NO. 89823		
ILLINOIS FED. AID PROJECT				

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REVISION	DATE	BY	REMARKS

DESIGNED	GBG
DRAWN	GBG
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MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



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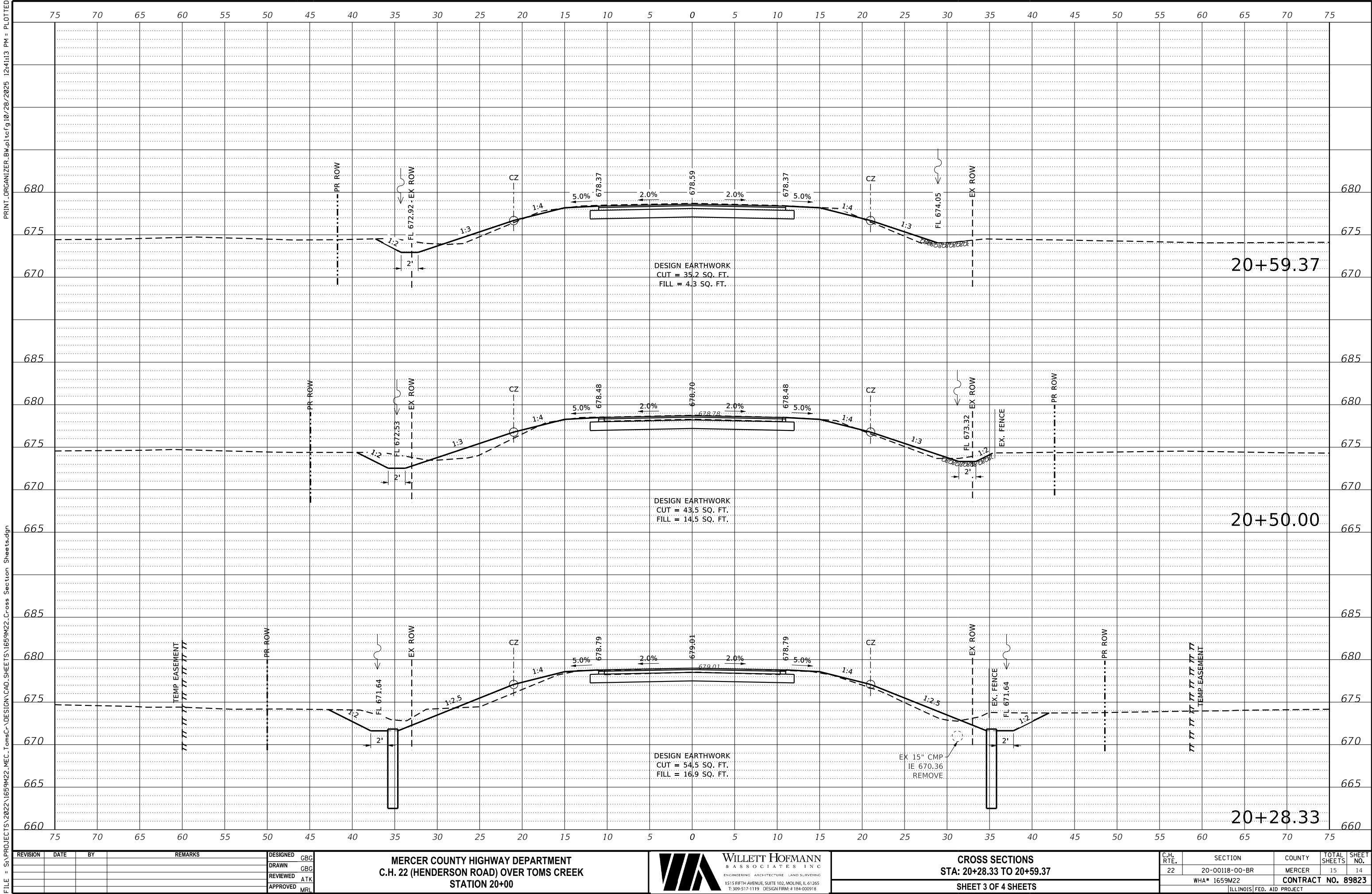
SHEET 2 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	13
WHA# 1659M22		CONTRACT NO. 89823		
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MERCER COUNTY HIGHWAY DEPARTMENT
C.H. 22 (HENDERSON ROAD) OVER TOMS CREEK
STATION 20+00



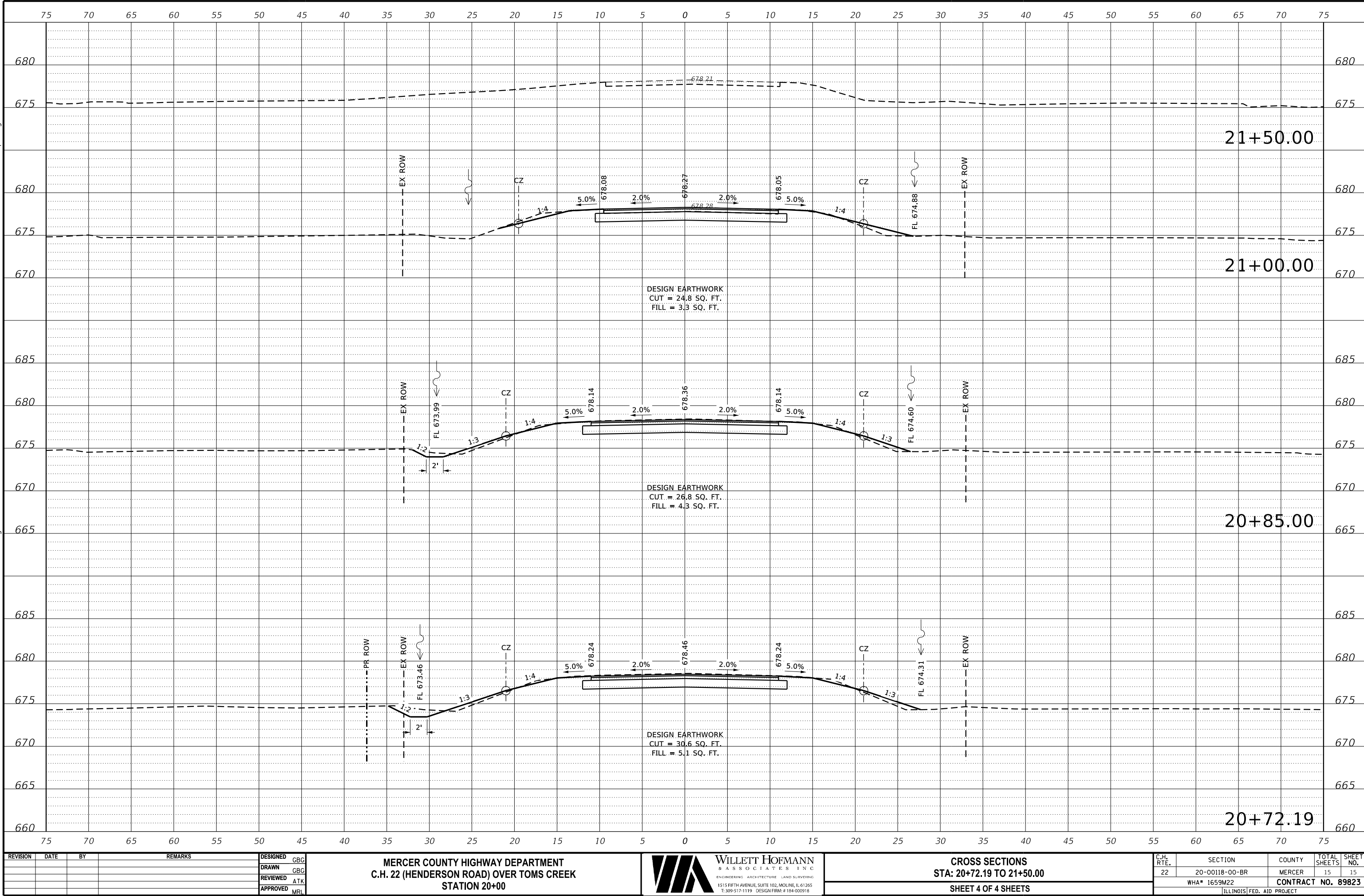
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STA: 20+28.33 TO 20+59.37
SHEET 3 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	20-00118-00-BR	MERCER	15	14
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CROSS SECTIONS
STA: 20+72.19 TO 21+50.00
SHEET 4 OF 4 SHEETS

C.H. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA* 1659M22		CONTRACT NO. 89823		
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