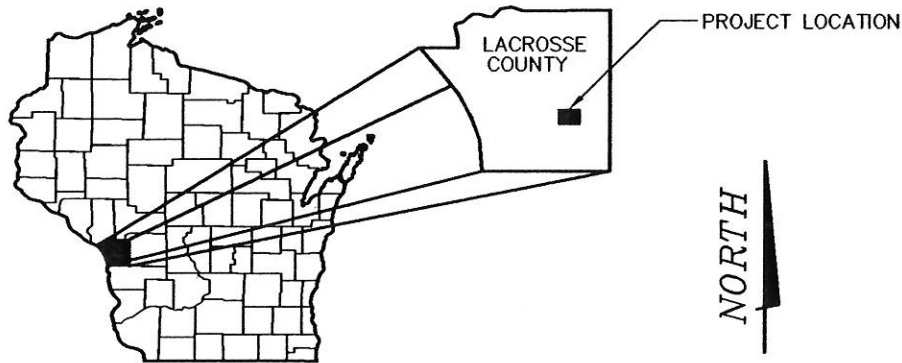


PROJECT I.D. 5345-04-71 COUNTY: LACROSSE WITH: N/A

ORDER OF SHEETS

Section No. 1	Title
Section No.	Typical Sections and Details (Includes Erosion Control Plan)
Section No.	Estimate of Quantities
Section No.	Miscellaneous Quantities
Section No.	Right of Way Plat
Section No.	Plan and Profile
Section No.	Standard Detail Drawings
Section No.	Sign Plates
Section No.	Structure Plans
Section No.	Computer Earthwork Data
Section No.	Cross Sections

TOTAL SHEETS =



PROJECT LOCATION

NORTH

DESIGN DESIGNATION

A.D.T. (2004)	=	16
A.D.T. (2024)	=	24
D.H.V. (2024)	=	4
D.	=	60/40
T.	=	10%
DESIGN SPEED	=	30 M.P.H.
ESALS	=	N/A

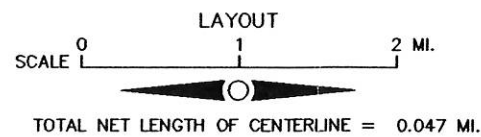
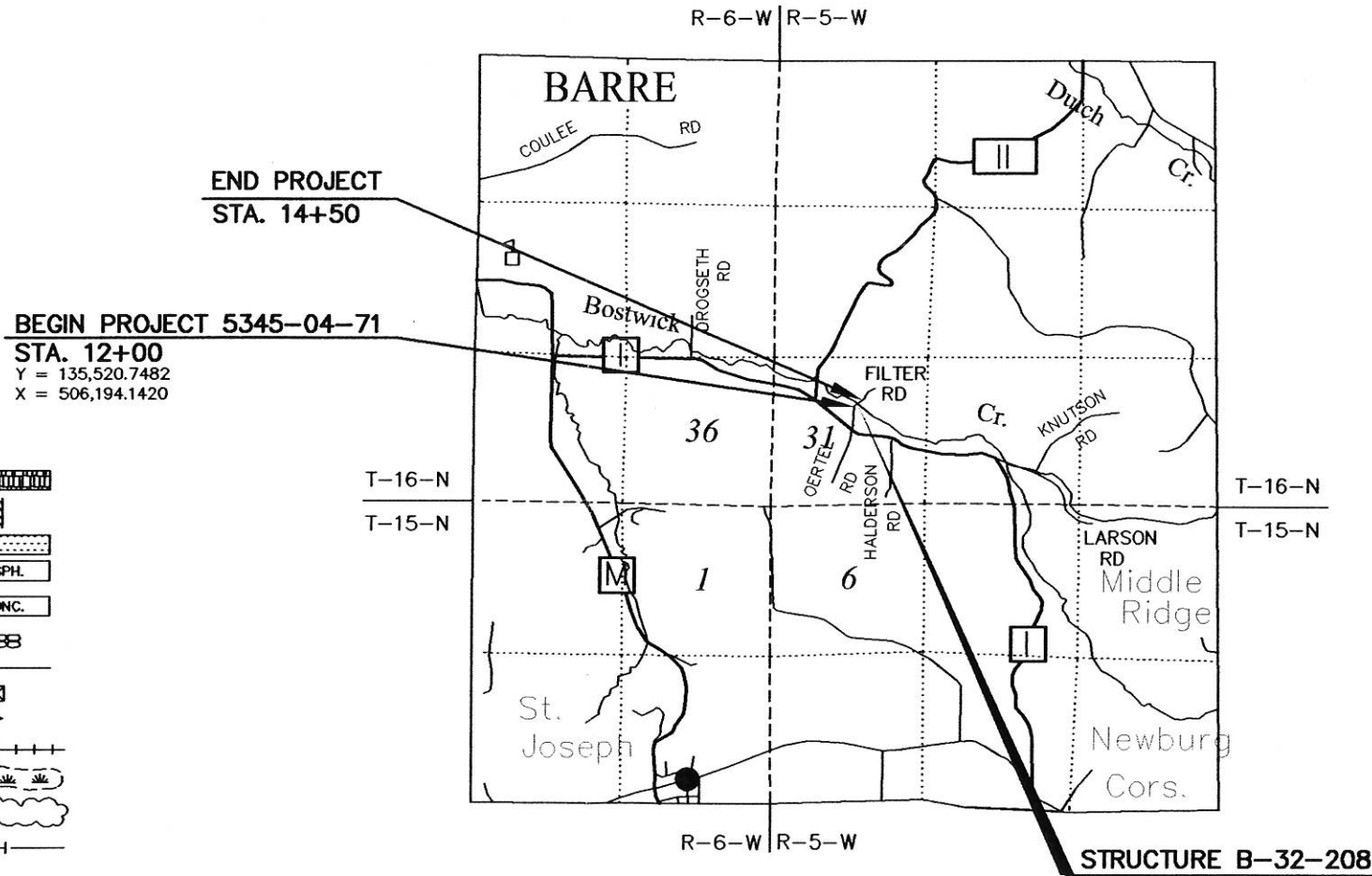
CONVENTIONAL SYMBOLS

COUNTY LINE	---	EROSION MAT	[Symbol]
CORPORATE LIMITS	///	DITCH DIKE	[Symbol]
PROPERTY LINE	---	SOD	[Symbol]
LOT LINE	---	ASPHALTIC FLUME	[Symbol]
LIMITED EASEMENT	---	CONCRETE FLUME OR DITCH	[Symbol]
EXISTING RIGHT OF WAY	---	HEAVY RIPRAP	[Symbol]
NEW RIGHT OF WAY	---	INTERCEPTING EMBANKMENT	[Symbol]
REFERENCE LINE	---	SERVICE PEDESTAL	[Symbol]
SLOPE INTERCEPT	---	CABLE MARKER	[Symbol]
ORIGINAL GROUND	---	RAILROADS	[Symbol]
MARSH OR ROCK PROFILE	---	MARSH	[Symbol]
CULVERT IN PLACE	[Symbol]	WOODED AREA	[Symbol]
CULVERT REQUIRED	[Symbol]	OVERHEAD UTILITIES	[Symbol]
CULVERT REQUIRED (Profile)	[Symbol]	UNDERGROUND UTILITIES	[Symbol]
COMBUSTIBLE FLUIDS (UNDER PRESSURE)	[Symbol]	GAS	[Symbol]
POWER POLE	[Symbol]	ELECTRIC	[Symbol]
TELEPHONE POLE	[Symbol]	TELEPHONE	[Symbol]
SILT FENCE	[Symbol]	CABLE TV	[Symbol]
TEMPORARY DITCH CHECKS	[Symbol]	WATER	[Symbol]
TURBIDITY BARRIER	[Symbol]	SANITARY SEWER	[Symbol]
		STORM SEWER	[Symbol]
		FIBER OPTIC	[Symbol]

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
FILTER ROAD, TOWN OF BANGOR
(BOSTWICK CREEK BRIDGE AND APPROACHES)

TOWN ROAD
LACROSSE COUNTY

STATE PROJECT NUMBER
5345-04-71



NOTE:
COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, LACROSSE COUNTY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5345-04-71		

ACCEPTED FOR
TOWN BANGOR
4-16-03 *Ronald K. ...*
(Date) (Town Chairman)

ACCEPTED FOR
COUNTY of LACROSSE
4-16-03 *Dennis ...*
(Date) (County Commissioner)

ORIGINAL PLANS PREPARED BY
JEWELL & Associates, Inc.
CONSULTING ENGINEERS & SURVEYORS
SPRING GREEN, WISCONSIN

WISCONSIN
FREDERICK G. GRUBER
E-28972
SPRING GREEN, WI
PROFESSIONAL ENGINEER

WISCONSIN
GREG A. JEWELL
E-27616
Spring Green Wis.
PROFESSIONAL ENGINEER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor JEWELL & ASSOCIATES, INC.
Designer JEWELL & ASSOCIATES, INC.
District Examiner *NATHAN BYOM*
District Supervisor *RANDY BYOM*
C. O. Examiner

APPROVED FOR DISTRICT OFFICE
DATE 4/24/03 *Randy Byom*
(Signature)

STANDARD DETAIL DRAWINGS

- | | |
|---------|--|
| 8E8-3 | TYPICAL INSTALLATIONS OF EROSION BALES/TEMPORARY DITCH CHECKS |
| 8E9-5 | SILT FENCE |
| 8E11-2 | TURBIDITY BARRIER |
| 12A3-7 | NAME PLATE (STRUCTURES) |
| 15A2-5 | DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR |
| 15C2-3 | BARRICADES AND SIGNS FOR ROAD CLOSURES |
| 15C6-4 | SIGNING AND MARKING FOR TWO LANE BRIDGES |
| 15C12-2 | TRAFFIC CONTROL FOR LANE CLOSURE
(SUITABLE FOR MOVING OPERATIONS) |
| 15D31-1 | TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY |

GENERAL NOTES

- EROSION CONTROL DETAILS ARE SHOWN ON THE EROSION CONTROL PLAN.
- MULCH ALL SLOPES AS DIRECTED BY THE ENGINEER.
- FINISHING ITEMS SHALL BE PLACED 5 FT. BEYOND THE SLOPE INTERCEPT WITH THE ORIGINAL GROUND AS SHOWN ON THE CROSS SECTIONS AND DISTURBED AREAS.
- SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION AND IN PLACE PRIOR TO BRIDGE REMOVAL.
- NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.
- TEMPORARY DITCH CHECKS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
- EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.
- FILL EXPANSION IS ESTIMATED AT 25%
- DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), AND SEEDED (USE SEED MIX NO. 30), AND MULCHED AS DIRECTED BY THE ENGINEER.
- WHEN THE QUANTITY OF THE ITEM OF BASE COURSE IS MEASURED FOR PAYMENT BY THE CUBIC YARD, THE DEPTH OR THE THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

3 1/2-INCH ASPHALTIC SURFACE SHALL BE CONSTRUCTED WITH A 1 3/4-INCH UPPER LAYER AND A 1 3/4-INCH LOWER LAYER.

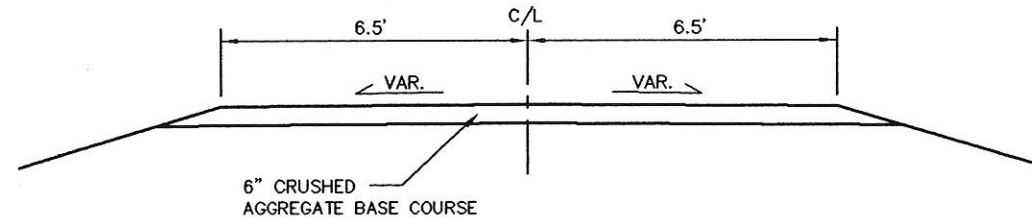
THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ELEVATIONS SHOWN ON THE PLAN ARE REFERRED TO THE U.S.G.S. DATUM, NAD 1929.

THE ASPHALTIC SURFACE SHALL TAPER FROM 24 FEET IN WIDTH AT THE STRUCTURE TO 18 FEET IN WIDTH AT STATION 12+34 AND STATION 13+67.

BENCHMARKS ON THIS PLAN ARE REFERENCED TO BM, BANGOR, 1 MILE NORTHWESTERLY OF NEWBURG CORNERS AT THE INTERSECTION OF STATE HIGHWAY "33" AND COUNTY ROAD "1". THEN NORTHWESTERLY ALONG COUNTY ROAD "1", APPROX. 3.30 MILES NEAR THE CENTER OF SECTION 31, T.16N., R.5W. TO THE 7" SQUARE x 30" CONCRETE MARKER WITH BRASS CAP, WHICH IS LOCATED 36 FT. SOUTH OF THE CENTERLINE ON TOP OF THE DITCH BACKSLOPE. RESET BY THE COUNTY SURVEYOR HAVING A RECORDED ELEVATION OF 808.70 (RESTAMPED 809).

THE WISCONSIN DEPARTMENT OF TRANSPORTATION WILL FURNISH THE CONTRACTOR A MONUMENT WHICH SHALL BE SET IN THE STRUCTURE AS DESIGNATED BY THE ENGINEER.



EXISTING TYPICAL SECTION

FILTER ROAD

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	JT	Joint	SEC	Section
AC	Acre	JCT	Junction	SHLDR	Shoulder
AGG	Aggregate	LHF	Left-Hand Forward	SHR	Shrinkage
AH	Ahead	L	Length of Curve	SW	Sidewalk
<	Angle	LIN FT	Linear Foot	S	South
ASPH	Asphaltic	or LF		SQ	Square
AVG	Average	LC	Long Chord of Curve	SF or SQ FT	Square Feet
ADT	Average Daily Traffic	MH	Manhole	SY or SQ YD	Square Yard
BK	Back	MB	Mailbox	STD	Standard
BF	Back Face	ML or M/L	Match Line	SDD	Standard Detail Drawings
BM	Bench Mark	N	North	STH	State Trunk Highways
BR	Bridge	Y	North Grid Coordinate	STA	Station
C or C/L	Center Line	OD	Outside Diameter	SS	Storm Sewer
CC	Center to Center	PLE	Permanent Limited Easement	SG	Subgrade
CTH	County Trunk Highway	PT	Point	SE	Superelevation
CR	Creek	PC	Point of Curvature	SL or S/L	Survey Line
CR	Crushed	PI	Point of Intersection	SV	Septic Vent
CY or	Cubic Yard	PRC	Point of Reverse Curvature	T	Tangent
CP	Culvert Pipe	PT	Point of Tangency	TEL	Telephone
C & G	Curb and Gutter	POT	Point on Curve	TEMP	Temporary
D	Degree of Curve	PVC	Point on Tangent	TI	Temporary Interest
DHV	Design Hour Volume	PCC	Polyvinyl Chloride	TLE	Temporary Limited Easement
DIA	Diameter		Portland Cement	t	Ton
E	East	LB	Concrete	T or TN	Town
X	East Grid Coordinate	PSI	Pounds Per Square Inch	TRANS	Transition
ELEC	Electric (al)	PE	Private Entrance	TL or T/L	Transit Line
EL or ELEV	Elevation	R	Radius	T	Trucks (percent of)
ESALS	Equivalent Single Axle Loads	RR	Railroad	TYP	Typical
EBS	Excavation Below Subgrade	R	Range	UNCL	Unclassified
FF	Face to Face	RL or R/L	Reference Line	UG	Underground Cable
FE	Field Entrance	RP	Reference Point	USH	United States Highway
FI	Field	RCCP	Reinforced Concrete Culvert Pipe	VAR	Variable
FG	Finished Grade	REQD	Required	V	Velocity or Design Speed
FL or F/L	Flow Line	RES	Residence or Residential	VERT	Vertical
FT	Foot	RW	Retaining Wall	VC	Vertical Curve
FTC	Footing	RT	Right	VOL	Volume
GN	Grid North	RHF	Right-Hand Forward	WM	Water Main
HT	Height	R/W	Right-of-Way	WV	Water Valve
CWT	Hundredweight	R	River	W	West
HYD	Hydrant	RD	Road	WB	Westbound
INL	Inlet	RDWY	Roadway	YD	Yard
ID	Inside Diameter	SALV	Salvaged		
INV	Invert	SAN S	Sanitary Sewer		
IP	Iron Pipe or Pin				
IRS	Iron Rod Set				

CONTACTS

DESIGN CONSULTANT:

JEWELL & ASSOCIATES, INC.
P.O. BOX 995
156 W. JEFFERSON ST.
SPRING GREEN, WI 53588
ATTN: GREG JEWELL/FRED GRUBER
PH: (608) 588-7484
FAX: (608) 588-9322
E MAIL: fred.gruber@jewellassoc.com

DNR LIAISON:

STATE OF WISCONSIN
DEPT. OF NATURAL RESOURCES
PO BOX 4001
1300 W. CLAIREMONT ST.
EAU CLAIRE, WI 54702
ATTN: JAMES DOPERALSKI, JR.
PH: (608) 789-5511

UTILITIES

DIGGERS HOTLINE

Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

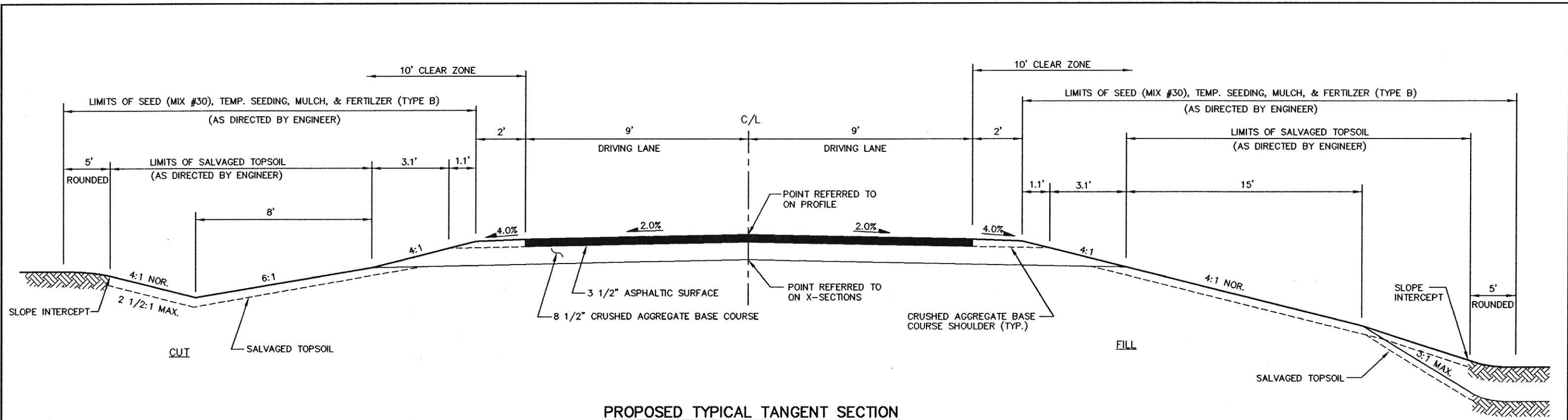
WS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

ELECTRIC

XCEL ENERGY
1003 SOUTH BLACK RIVER STREET
P.O. BOX 188
SPARTA, WI 54656
ATTN: KAYE CROOK
PH: (608) 789-3677 EXT.-14

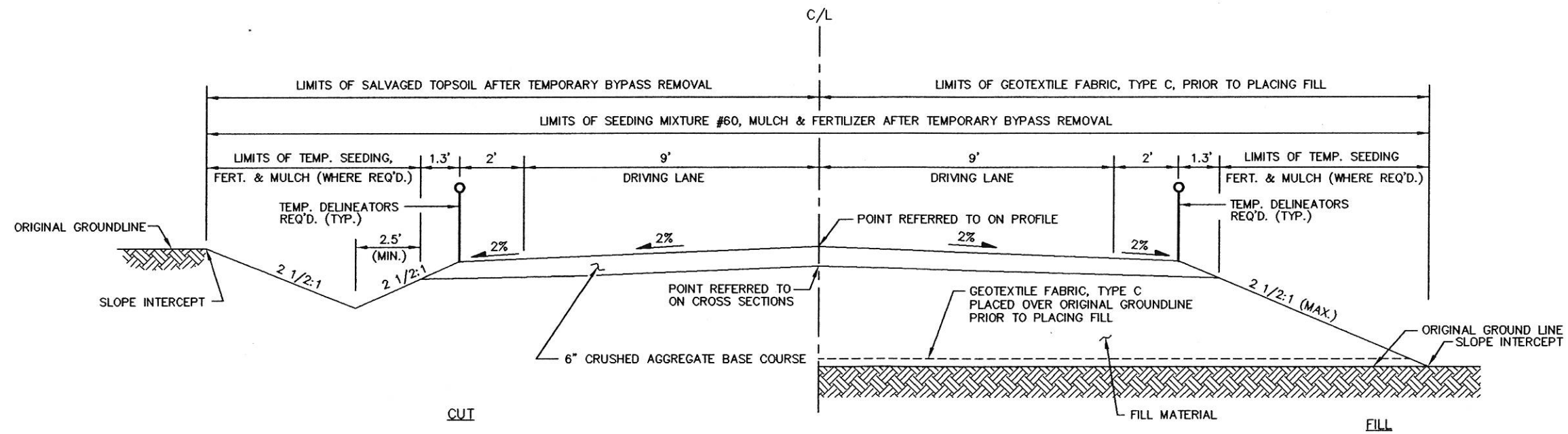
TELEPHONE

CENTURYTEL
333 NORTH FRONT STREET
LA CROSSE, WI 54601
ATTN: BRIAN STELPLUGH
PH: (608) 796-5142
FAX: (608) 796-5525



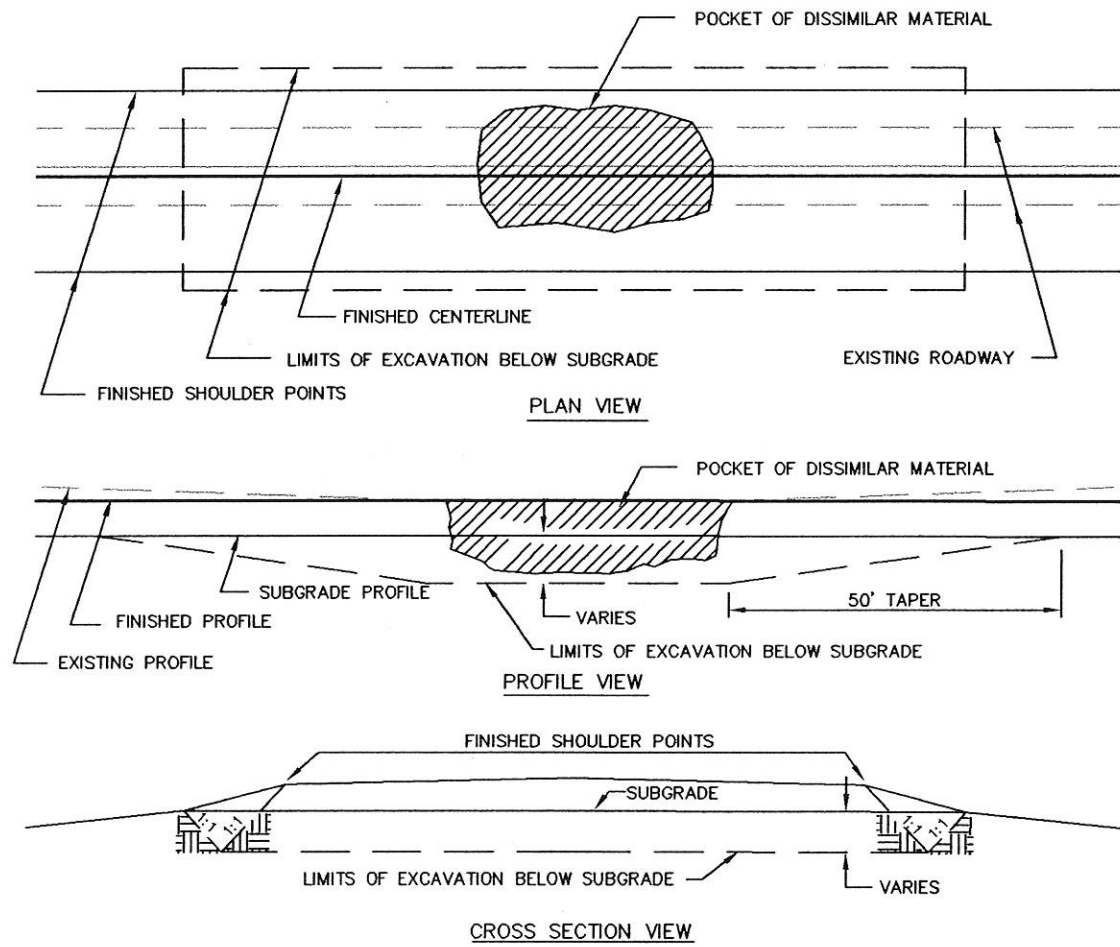
PROPOSED TYPICAL TANGENT SECTION

FILTER ROAD
(STA. 12+00 - STA. 14+50)



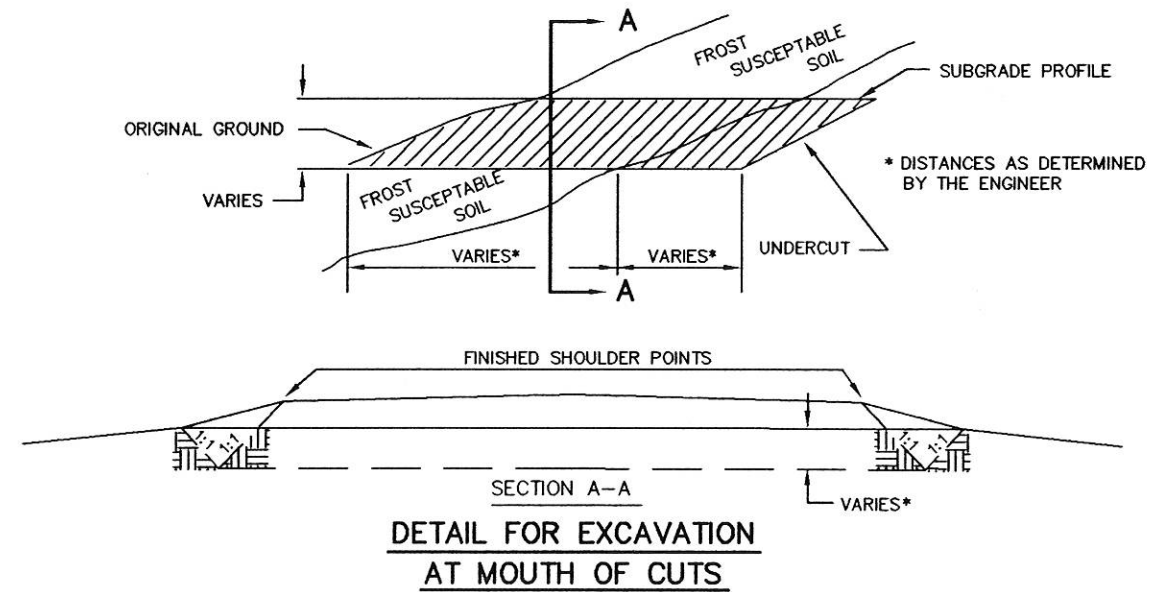
TYPICAL SECTION FOR TEMPORARY BYPASS

FILTER ROAD



1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

EXCAVATION BELOW SUBGRADE (E.B.S.)



LEGEND

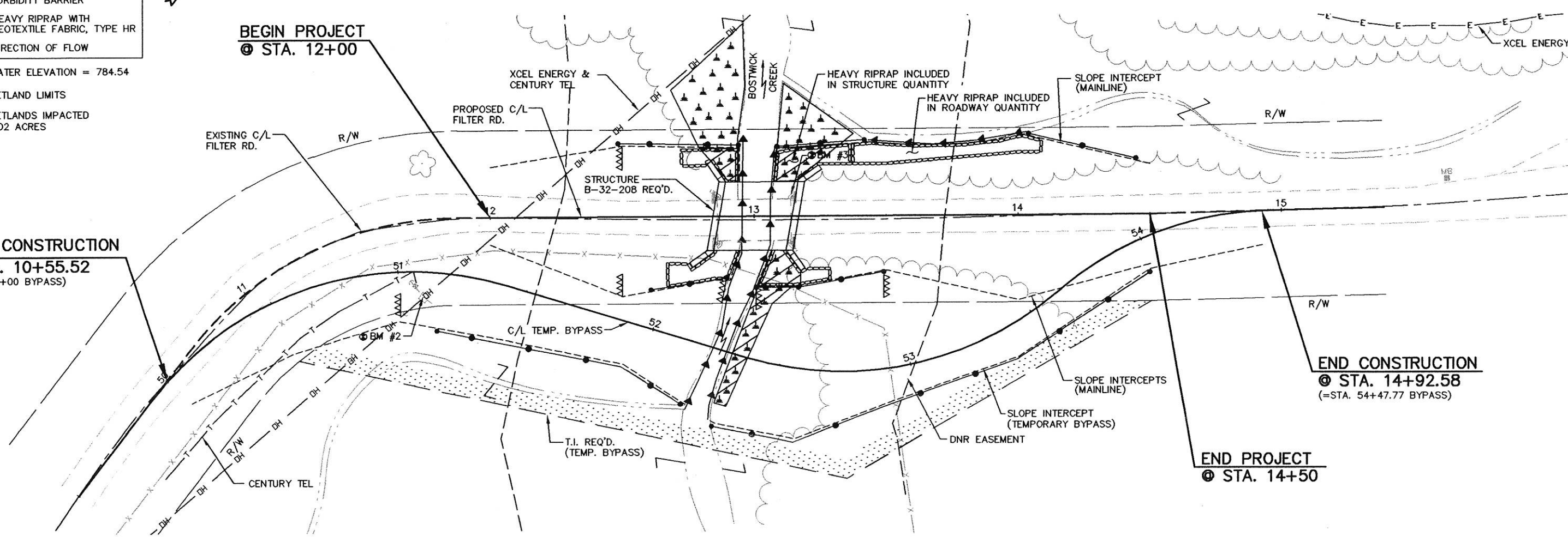
- △△△△ TEMPORARY DITCH CHECKS
- SILT FENCE
- ←←←← TURBIDITY BARRIER
- ▨ HEAVY RIPRAP WITH GEOTEXTILE FABRIC, TYPE HR
- DIRECTION OF FLOW

Q₂ HIGHWATER ELEVATION = 784.54

- ▨ = WETLAND LIMITS
- ▨ = WETLANDS IMPACTED 0.02 ACRES

BEGIN CONSTRUCTION
 @ STA. 10+55.52
 (=STA. 50+00 BYPASS)

BEGIN PROJECT
 @ STA. 12+00

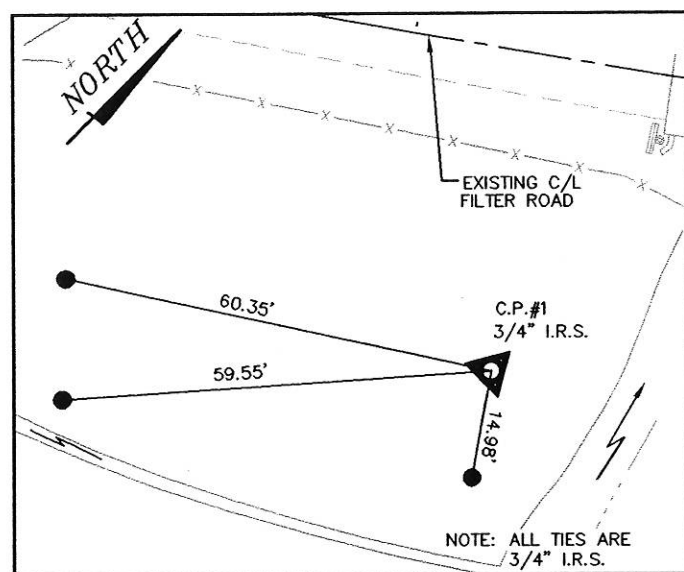


END CONSTRUCTION
 @ STA. 14+92.58
 (=STA. 54+47.77 BYPASS)

END PROJECT
 @ STA. 14+50

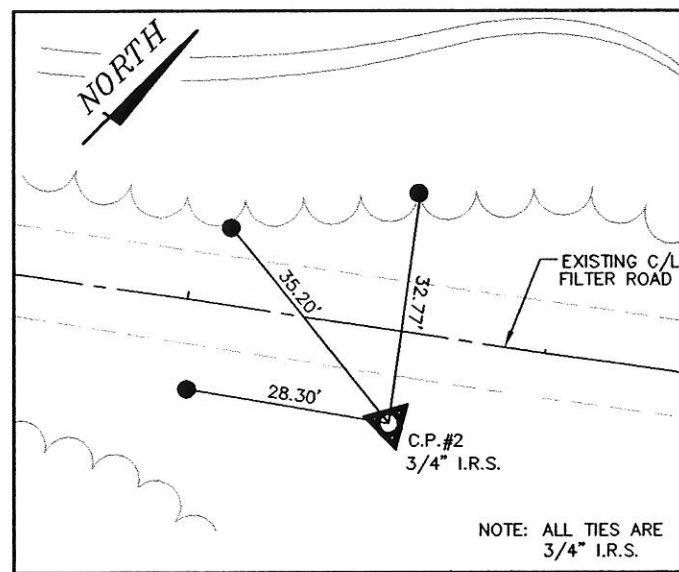
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
MEDIAN STRIP-TURF	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
SIDE SLOPE-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 0.95 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.65 ACRES

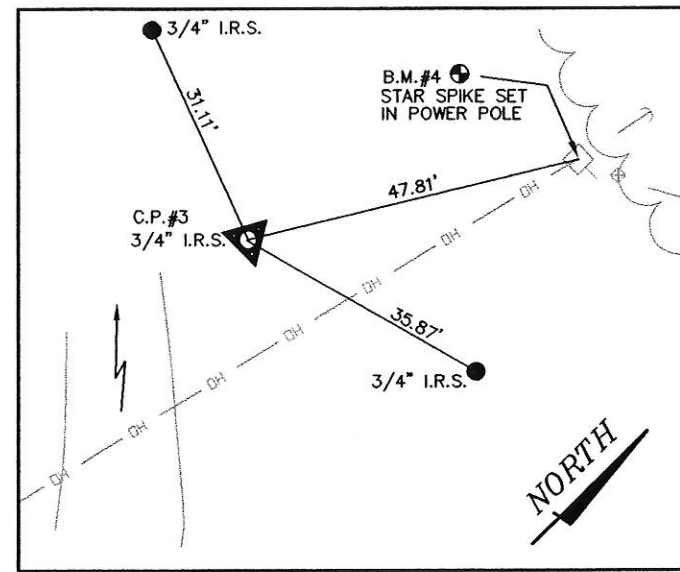


TIES TO C.P. #1
 STA. 12+67.76, 45.3' RT.
 Y = 135524.32
 X = 506275.58

LEGEND
 I.R.S. = IRON ROD SET



TIES TO C.P. #2
 STA. 14+30.20, 13.0' RT.
 Y = 135646.48
 X = 506387.41



TIES TO C.P. #3
 STA. 13+16.60, 110.3' LT.
 Y = 135678.62
 X = 506222.89

FILTER ROAD STATION LAYOUT

STATION	Y	X	REMARKS
12+00	135520.75	506194.14	BEGIN PROJECT
12+50	135550.34	506234.45	---
12+83.60	135570.22	506261.54	C/L WEST ABUTMENT
13+00	135579.92	506274.76	---
13+17.60	135590.34	506288.95	C/L EAST ABUTMENT
13+50	135609.51	506315.07	---
14+00	135639.10	506355.37	---
14+50	135668.68	506395.68	END PROJECT

TEMPORARY BYPASS STATION LAYOUT

STATION	Y	X	REMARKS
50+00	135398.07	506130.95	BEGIN BYPASS
50+50	135445.50	506145.67	---
51+00	135483.46	506177.71	---
51+50	135506.20	506221.91	---
52+00	135522.66	506269.12	---
52+50	135539.73	506316.10	---
53+00	135569.29	506356.01	---
53+50	135612.06	506381.26	---
54+00	135658.83	506398.42	---
54+49.01	135695.44	506430.54	END BYPASS

MAINLINE CURVE DATA
CURVE NO. 4
PI Sta = 11+32.54
Y = 135475.52
X = 506132.52
R = 125.00
D = 45°50'12"
Δ = 44°04'25"
Δ = 52°17'25"
L = 118.64
T = 63.81
C = 114.57
PC Sta = 10+68.73
Y = 135411.72
X = 506130.93
PT Sta = 11+87.37
Y = 135513.28
X = 506183.96

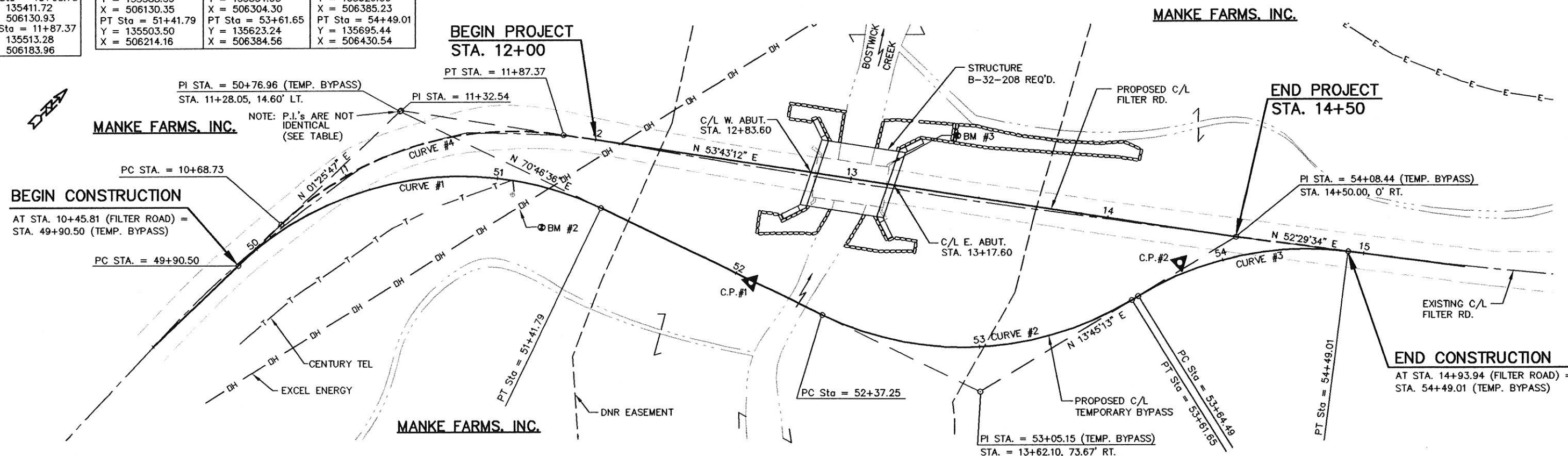
TEMPORARY BYPASS CURVE DATA		
CURVE NO. 1	CURVE NO. 2	CURVE NO. 3
PI Sta = 50+76.96	PI Sta = 53+05.15	PI Sta = 54+08.44
Y = 135475.03	Y = 135557.28	Y = 135668.68
X = 506132.51	X = 506368.41	X = 506395.68
R = 125.00	R = 125.00	R = 125.00
D = 45°50'12"	D = 45°50'12"	D = 45°50'12"
Δ = 69°20'49"R	Δ = 57°01'23"L	Δ = 38°44'21"R
L = 151.29	L = 124.41	L = 84.52
T = 86.47	T = 67.90	T = 43.94
C = 142.22	C = 119.33	C = 82.92
PC Sta = 49+90.50	PC Sta = 52+37.25	PC Sta = 53+64.49
Y = 135388.59	Y = 135534.93	Y = 135626.00
X = 506130.35	X = 506304.30	X = 506385.23
PT Sta = 51+41.79	PT Sta = 53+61.65	PT Sta = 54+49.01
Y = 135503.50	Y = 135623.24	Y = 135695.44
X = 506214.16	X = 506384.56	X = 506430.54

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	11+79	STAR SPIKE SET IN P/P POLE, S.W. OF BRIDGE; 28.29' RT.	792.11
3	13+13	CHISELED "+" ON N.E. WING WALL; 7.58' LT.	790.42
4	13+59	STAR SPIKE SET IN P/P POLE, N.E. OF BRIDGE; 128.75' LT.	789.96

CONTROL POINTS

NO.	STATION	DESCRIPTION	NORTHING	EASTING
1	12+68	3/4" IRON ROD SET, 45.3' RT.	135524.32	506275.58
2	14+30	3/4" IRON ROD SET, 13.0' RT.	135646.48	506387.41
3	13+17	3/4" IRON ROD SET, 110.3' LT.	135678.62	506222.89



SCL-001 REVISED 1-04-2002

CLEARING & GRUBBING

STATION - STATION	LOCATION	CLEARING (STA.)	GRUBBING (STA.)
12+00 - 14+50	FILTER RD.	3	3
TOTALS =		3	3

*** HEAVY RIPRAP**

STATION - STATION	LOCATION	C.Y.
13+37 - 14+10	FILTER RD., LT.	55
TOTAL =		55

WOOD POSTS, 4X4 INCH X 10-FT.

LOCATION	EACH
4 BRIDGE CORNERS	4
TOTAL =	4

EARTHWORK SUMMARY

	MAINLINE	BYPASS CONSTRUCTION	BYPASS REMOVAL
COMMON EXCAVATION	162 C.Y.	231 C.Y.	427 C.Y.
FILL	88 C.Y.	417 C.Y.	227 C.Y.
FILL EXPANSION	25%	25%	25%
WASTE	52 C.Y.	--	143 C.Y.
BORROW	--	290 C.Y.	--

COMMON EXCAVATION

MAINLINE	162 C.Y.
BYPASS CONSTRUCTION	231 C.Y.
BYPASS REMOVAL	427 C.Y.
TOTAL =	820 C.Y.

BORROW EXCAVATION

BYPASS CONSTRUCTION	290 C.Y.
TOTAL =	290 C.Y.

SILT FENCE

STATION - STATION	LOCATION	DELIVERED (L.F.)	INSTALLED (L.F.)	MAINTENANCE (L.F.)
11+75 - 14+50	FILTER RD., RT.	290	290	580
12+45 - 13+45	FILTER RD., LT.	80	80	160
14+05 - 14+50	FILTER RD., LT.	50	50	100
12+60 - 12+85	FILTER RD., RT.	25	25	50
13+00 - 13+50	FILTER RD., RT.	50	50	100
---	UNDISTRIBUTED	25	25	50
TOTALS =		520	520	1040

SIGNS, TYPE II, REFLECTIVE

LOCATION	S.F.
4 BRIDGE CORNERS	12
TOTAL =	12

REMOVING SIGNS, TYPE II

LOCATION	EACH
3 CORNERS OF EXISTING BRIDGE	3
TOTAL =	3

CRUSHED AGGREGATE BASE COURSE

STATION - STATION	LOCATION	BASE (C.Y.)	SHOULDER (C.Y.)
12+00 - 12+84	FILTER RD., MAINLINE	82	5
13+17 - 14+50	FILTER RD., MAINLINE	129	8
50+00 - 54+40	TEMP. BYPASS	257	--
---	UNDISTRIBUTED	17	2
TOTALS =		485	15

TURBIDITY BARRIERS

STATION	LOCATION	S.Y.
12+90	WEST BANK	67
13+10	EAST BANK	77
13+75	DITCH, 27' LT.	43
---	UNDISTRIBUTED	13
TOTAL =		200

REMOVING SMALL SIGN SUPPORTS

LOCATION	EACH
4 CORNERS OF EXISTING BRIDGE	4
TOTAL =	4

ASPHALTIC SURFACE

STATION - STATION	LOCATION	TON
12+00 - 12+84	FILTER RD., MAINLINE	37
13+17 - 14+50	FILTER RD., MAINLINE	57
---	UNDISTRIBUTED	6
TOTAL =		100

TEMPORARY DITCH CHECKS

STATION	LOCATION	DELIVERED (L.F.)	INSTALLED (L.F.)
11+60	FILTER RD., RT.	9	9
12+50	FILTER RD., LT.	9	9
12+50	FILTER RD., RT.	9	9
13+50	FILTER RD., RT.	9	9
12+85	FILTER RD., RT.	9	9
13+00	FILTER RD., RT.	9	9
---	UNDISTRIBUTED	6	6
TOTALS =		60	60

*** GEOTEXTILE FABRIC, TYPE HR**

STATION - STATION	LOCATION	S.Y.
13+37 - 14+10	FILTER ROAD	100
TOTAL =		100

* MORE LISTED IN STRUCTURE PLAN

FINISHING ITEMS

STATION - STATION	LOCATION	SALVAGED TOPSOIL (S.Y.)	MULCHING (S.Y.)	FERTILIZER TYPE B (CWT.)	SEEDING, TEMPORARY (LB.)	SEEDING, MIXTURE NO. 30 (LB.)	SEEDING, MIXTURE NO. 60 (LB.)	SEEDING, BORROW PIT (LB.)
12+00 - 14+50	FILTER RD., LT.	142	397	0.25	11	7	--	--
12+00 - 14+50	FILTER RD., RT.	155	411	0.26	11	7	--	--
50+00 - 54+47.77	TEMP. BYPASS CONSTRUCTION	--	341	0.22	9	--	--	--
50+00 - 54+47.77	TEMP. BYPASS REMOVAL	1194	1194	0.75	--	--	11	--
---	BORROW PIT	--	87	0.05	2	--	--	1
---	UNDISTRIBUTED	59	70	0.47	7	1	4	4
TOTALS =		1550	2500	2.0	40	15	15	5

GEOTEXTILE FABRIC, TYPE C

STATION - STATION	LOCATION	S.Y.
12+50 - 14+50	TEMP. BYPASS	418
---	UNDISTRIBUTED	12
TOTAL =		430

LEGEND

HEAVY RIPRAP WITH GEOTEXTILE FABRIC, TYPE HR

DIRECTION OF FLOW

MAINLINE CURVE DATA

CURVE NO. 4

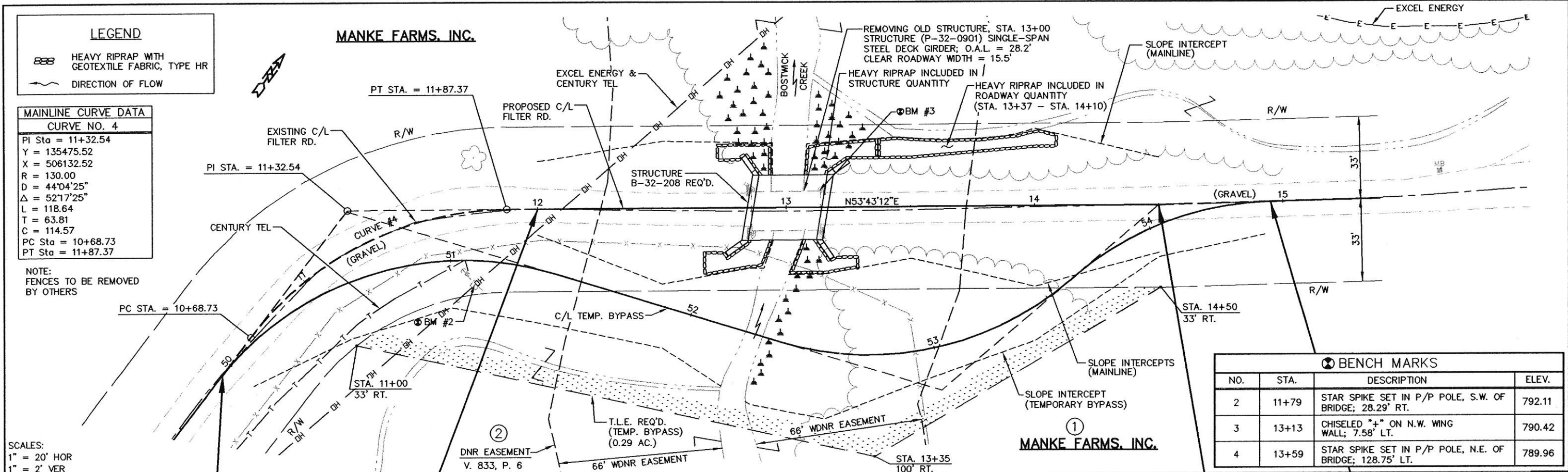
PI Sta = 11+32.54
 Y = 135475.52
 X = 506132.52
 R = 130.00
 D = 44°04'25"
 Δ = 52°17'25"
 L = 118.64
 T = 63.81
 C = 114.57
 PC Sta = 10+68.73
 PT Sta = 11+87.37

NOTE:
 FENCES TO BE REMOVED BY OTHERS

SCALES:
 1" = 20' HOR
 1" = 2' VER

MANKE FARMS, INC.

EXCEL ENERGY

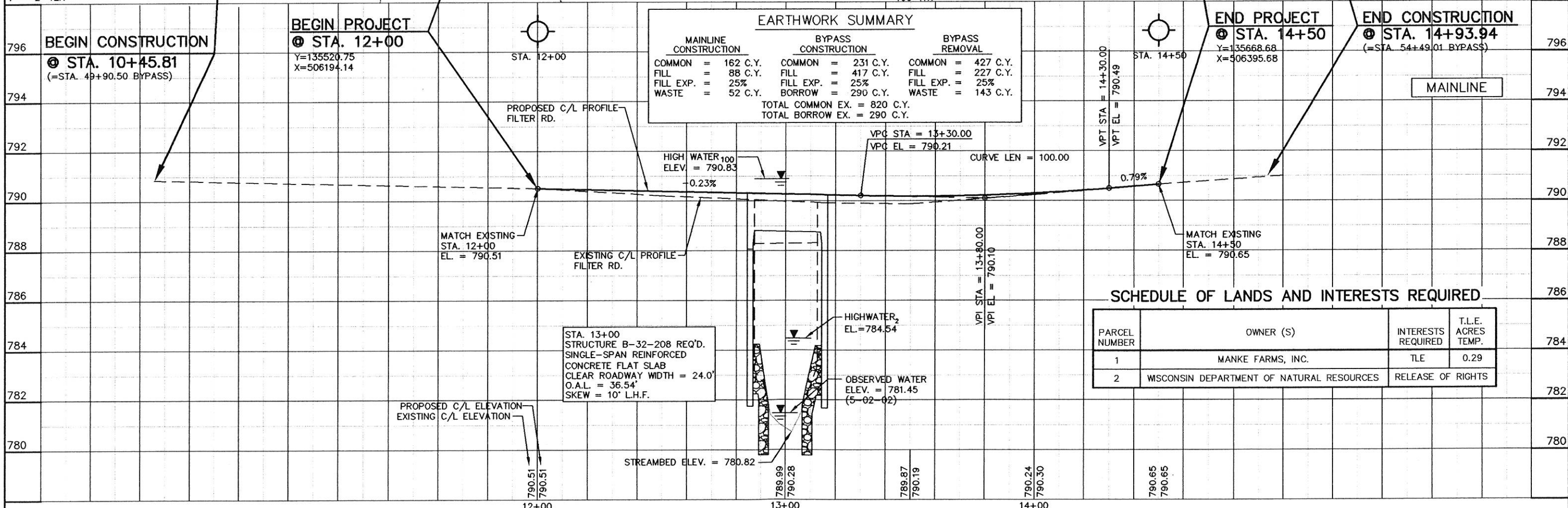


BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	11+79	STAR SPIKE SET IN P/P POLE, S.W. OF BRIDGE; 28.29' RT.	792.11
3	13+13	CHISELED "+" ON N.W. WING WALL; 7.58' LT.	790.42
4	13+59	STAR SPIKE SET IN P/P POLE, N.E. OF BRIDGE; 128.75' LT.	789.96

EARTHWORK SUMMARY

MAINLINE CONSTRUCTION		BYPASS CONSTRUCTION		BYPASS REMOVAL	
COMMON	= 162 C.Y.	COMMON	= 231 C.Y.	COMMON	= 427 C.Y.
FILL	= 88 C.Y.	FILL	= 417 C.Y.	FILL	= 227 C.Y.
FILL EXP.	= 25%	FILL EXP.	= 25%	FILL EXP.	= 25%
WASTE	= 52 C.Y.	BORROW	= 290 C.Y.	WASTE	= 143 C.Y.
TOTAL COMMON EX. = 820 C.Y.		TOTAL BORROW EX. = 290 C.Y.			



SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTERESTS REQUIRED	T.L.E. ACRES TEMP.
1	MANKE FARMS, INC.	TLE	0.29
2	WISCONSIN DEPARTMENT OF NATURAL RESOURCES	RELEASE OF RIGHTS	

TEMPORARY BYPASS CURVE DATA		
CURVE NO. 1	CURVE NO. 2	CURVE NO. 3
PI Sta = 50+76.96	PI Sta = 53+05.15	PI Sta = 54+08.44
Y = 135475.03	Y = 135557.28	Y = 135668.68
X = 506132.51	X = 506368.41	X = 506395.68
R = 125.00	R = 125.00	R = 125.00
D = 45°50'12"	D = 45°50'12"	D = 45°50'12"
Δ = 69°20'49"R	Δ = 57°01'23"L	Δ = 38°44'21"R
L = 151.29	L = 124.41	L = 84.52
T = 86.47	T = 67.90	T = 43.94
C = 142.22	C = 119.33	C = 82.92
PC Sta = 49+90.50	PC Sta = 52+37.25	PC Sta = 53+64.49
PT Sta = 51+41.79	PT Sta = 53+61.65	PT Sta = 54+49.01

LEGEND

HEAVY RIPRAP WITH GEOTEXTILE FABRIC, TYPE HR

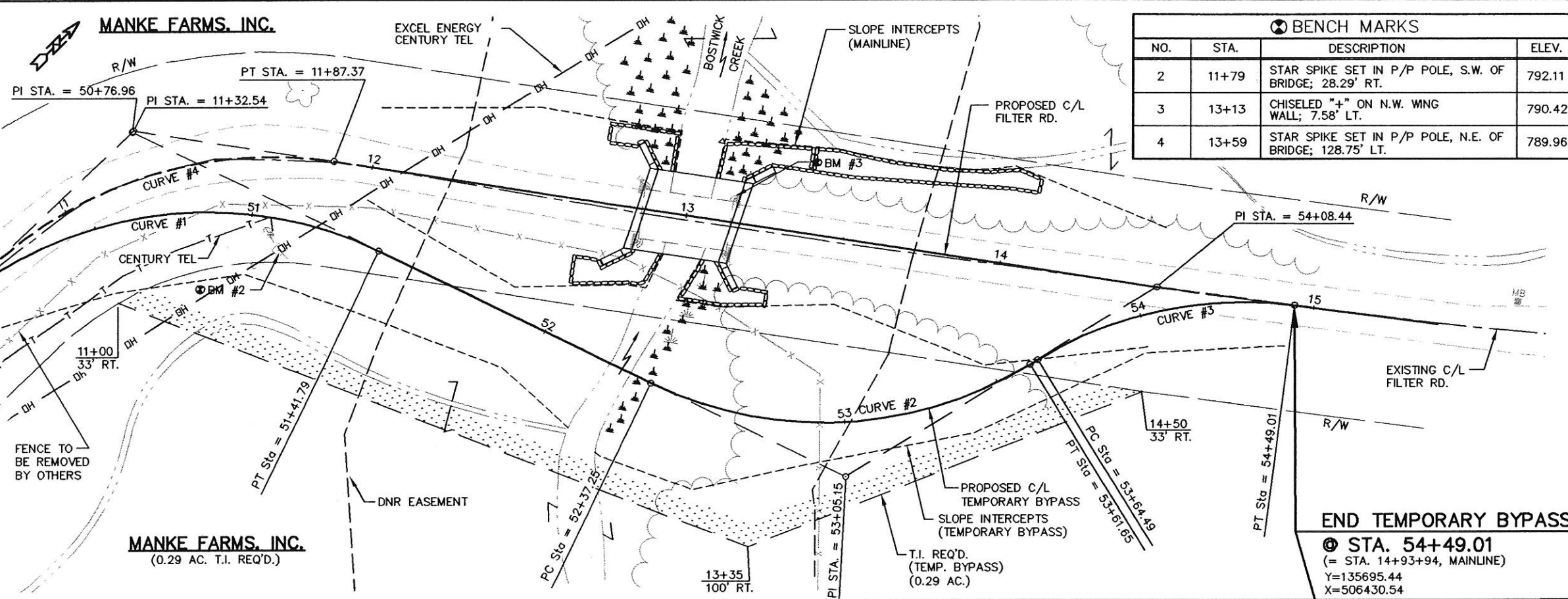
DIRECTION OF FLOW

MAINLINE CURVE DATA	
CURVE NO. 4	
PI Sta = 11+32.54	Y = 135475.52
X = 506132.52	R = 130.00
D = 44°04'25"	Δ = 52°17'25"
L = 118.64	T = 63.81
C = 114.57	PC Sta = 10+68.73
PT Sta = 11+87.37	PT Sta = 11+87.37

SCALES:
1" = 20' HOR
1" = 2' VER

STA. 49+90.50
(= STA. 10+45.81, MAINLINE)
Y=135388.59
X=506130.35

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
2	11+79	STAR SPIKE SET IN P/P POLE, S.W. OF BRIDGE; 28.29' RT.	792.11
3	13+13	CHISELED "+" ON N.W. WING WALL; 7.58' LT.	790.42
4	13+59	STAR SPIKE SET IN P/P POLE, N.E. OF BRIDGE; 128.75' LT.	789.96



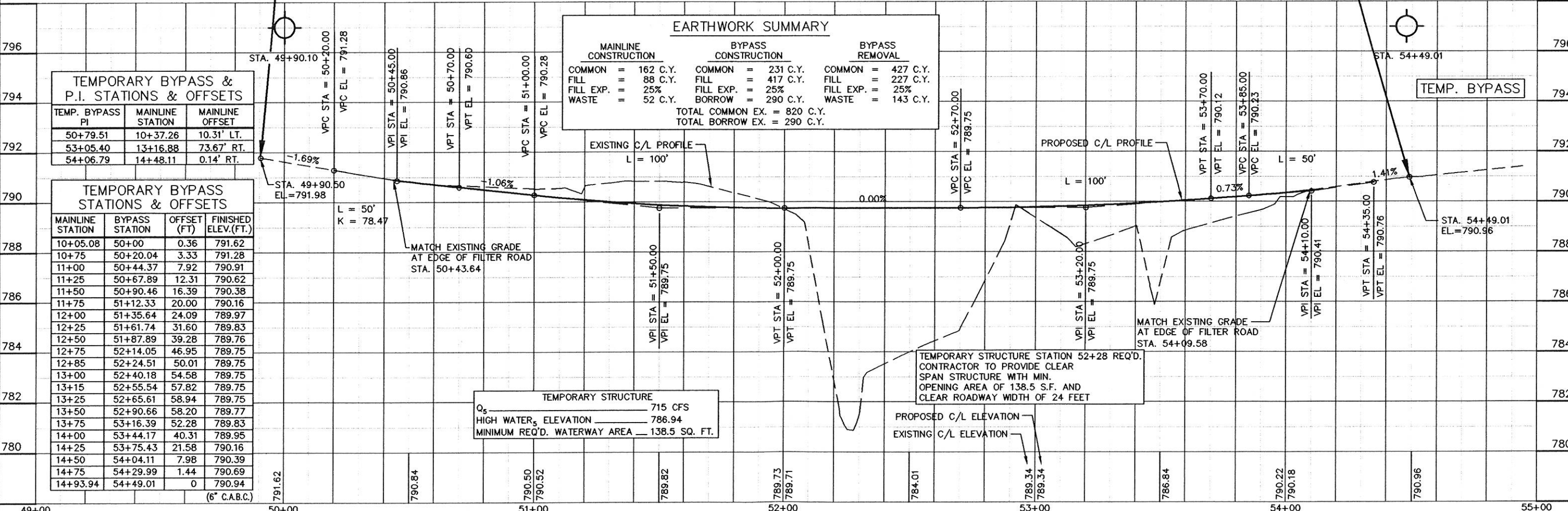
EARTHWORK SUMMARY		
MAINLINE CONSTRUCTION	BYPASS CONSTRUCTION	BYPASS REMOVAL
COMMON = 162 C.Y.	COMMON = 231 C.Y.	COMMON = 427 C.Y.
FILL = 88 C.Y.	FILL = 417 C.Y.	FILL = 227 C.Y.
FILL EXP. = 25%	FILL EXP. = 25%	FILL EXP. = 25%
WASTE = 52 C.Y.	BORROW = 290 C.Y.	WASTE = 143 C.Y.
TOTAL COMMON EX. = 820 C.Y.		
TOTAL BORROW EX. = 290 C.Y.		

TEMPORARY BYPASS & P.I. STATIONS & OFFSETS			
TEMP. BYPASS PI	MAINLINE STATION	MAINLINE OFFSET	
50+79.51	10+37.26	10.31' LT.	
53+05.40	13+16.88	73.67' RT.	
54+06.79	14+48.11	0.14' RT.	

TEMPORARY BYPASS STATIONS & OFFSETS			
MAINLINE STATION	BYPASS STATION	OFFSET (FT)	FINISHED ELEV.(FT.)
10+05.08	50+00	0.36	791.62
10+75	50+20.04	3.33	791.28
11+00	50+44.37	7.92	790.91
11+25	50+67.89	12.31	790.62
11+50	50+90.46	16.39	790.38
11+75	51+12.33	20.00	790.16
12+00	51+35.64	24.09	789.97
12+25	51+61.74	31.60	789.83
12+50	51+87.89	39.28	789.76
12+75	52+14.05	46.95	789.75
12+85	52+24.51	50.01	789.75
13+00	52+40.18	54.58	789.75
13+15	52+55.54	57.82	789.75
13+25	52+65.61	58.94	789.75
13+50	52+90.66	58.20	789.77
13+75	53+16.39	52.28	789.83
14+00	53+44.17	40.31	789.95
14+25	53+75.43	21.58	790.16
14+50	54+04.11	7.98	790.39
14+75	54+29.99	1.44	790.69
14+93.94	54+49.01	0	790.94

TEMPORARY STRUCTURE	
Q _s	715 CFS
HIGH WATER _s ELEVATION	786.94
MINIMUM REQ'D. WATERWAY AREA	138.5 SQ. FT.

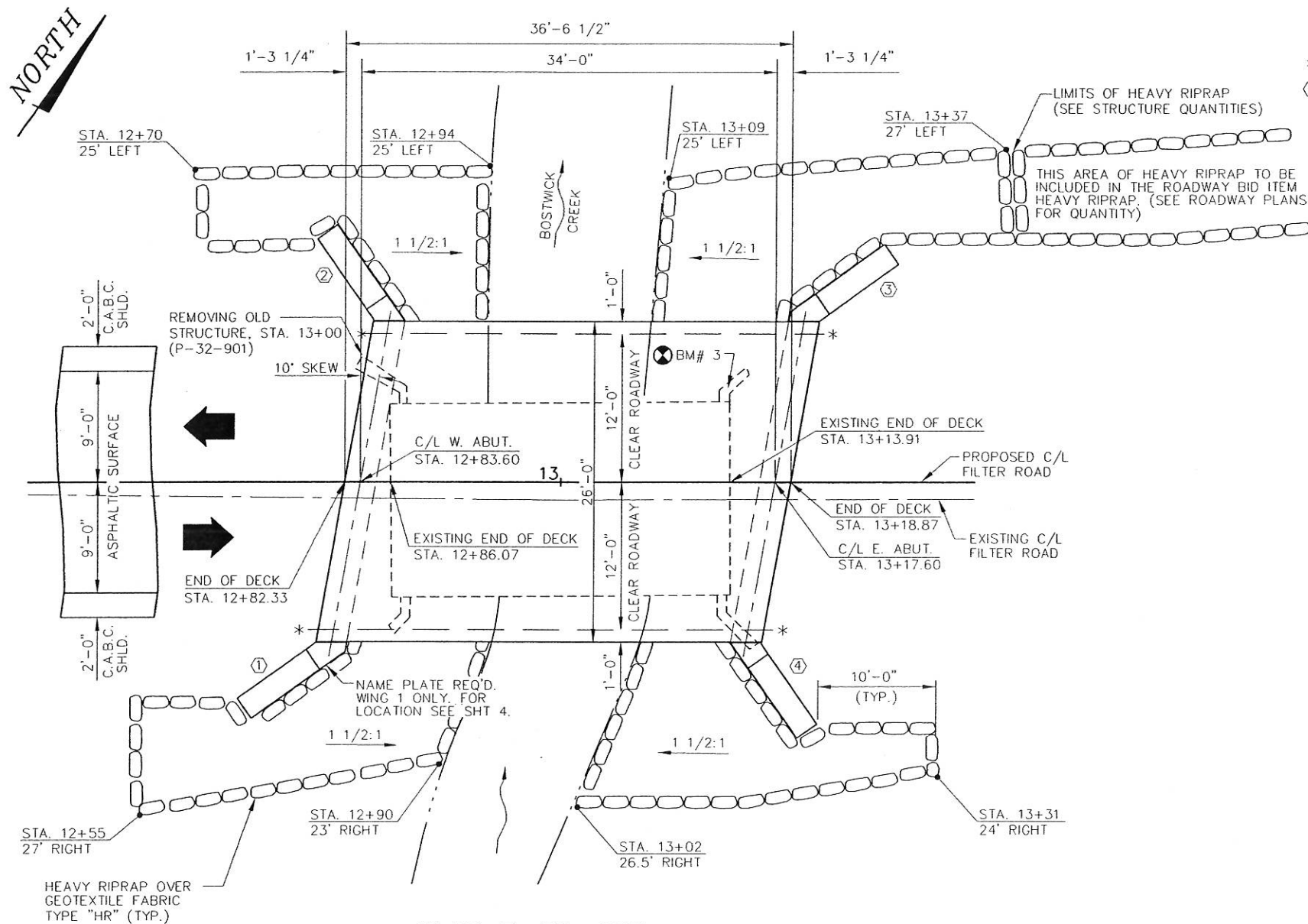
TEMPORARY STRUCTURE STATION 52+28 REQ'D. CONTRACTOR TO PROVIDE CLEAR SPAN STRUCTURE WITH MIN. OPENING AREA OF 138.5 S.F. AND CLEAR ROADWAY WIDTH OF 24 FEET



2508-RC01004

DOT-BDI REVISED: B-25-98

2508-01-FSH REVISED: 12-3-02 SCALE: 1" = 12'



* ANCHOR ASSEMBLY FOR THRIE BEAM GUARD
 ○ INDICATES WING NUMBER

STATE PROJECT NUMBER SHEET NO.

5345-04-71

DESIGN DATA

LIVE LOAD:
 DESIGN RATING _____ HS20
 INVENTORY RATING _____ HS25
 OPERATIONAL RATING _____ HS42
 MAXIMUM STANDARD PERMIT VEHICLE LOAD _____ 230 Kips

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

ULTIMATE DESIGN STRESSES:
 CONCRETE MASONRY, SLAB _____ $f'c = 4,000$ P.S.I.
 ALL OTHER _____ $f'c = 3,500$ P.S.I.
 HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 _____ $F_y = 60,000$ P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH x 42 POUND STEEL PILING, DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATE 31' PILE LENGTHS AT THE WEST ABUTMENT AND 28' PILE LENGTHS AT THE EAST ABUTMENT. PILE POINTS ARE REQUIRED.

TRAFFIC DATA

A.D.T. (2004) _____ 16
 A.D.T. (2024) _____ 24
 DESIGN SPEED _____ 30 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY
 DRAINAGE AREA _____ 8.9 SQ. MI.
 Q_{100} TOTAL _____ 2200 C.F.S.
 THROUGH STRUCTURE _____ 1560 C.F.S.
 OVERTOPPING ROADWAY _____ 640 C.F.S.
 VELOCITY - THROUGH STRUCTURE _____ 8.11 F.P.S.
 WATERWAY AREA - THROUGH STRUCTURE _____ 192.5 SQ. FT.
 HIGH WATER₁₀₀ ELEVATION _____ 790.83
 SCOUR CRITICAL CODE _____ 8

DESIGN ROADWAY OVERFLOW FREQUENCY
 OVERFLOW FREQUENCY _____ 31 YEARS
 Q_{31} _____ 1580 C.F.S.
 HIGH WATER₃₁ ELEVATION _____ 789.82

TEMPORARY STRUCTURE
 Q_5 _____ 715 C.F.S.
 HIGH WATER₅ ELEVATION _____ 786.94
 MINIMUM REQ'D. WATERWAY AREA _____ 138.50 SQ. FT.

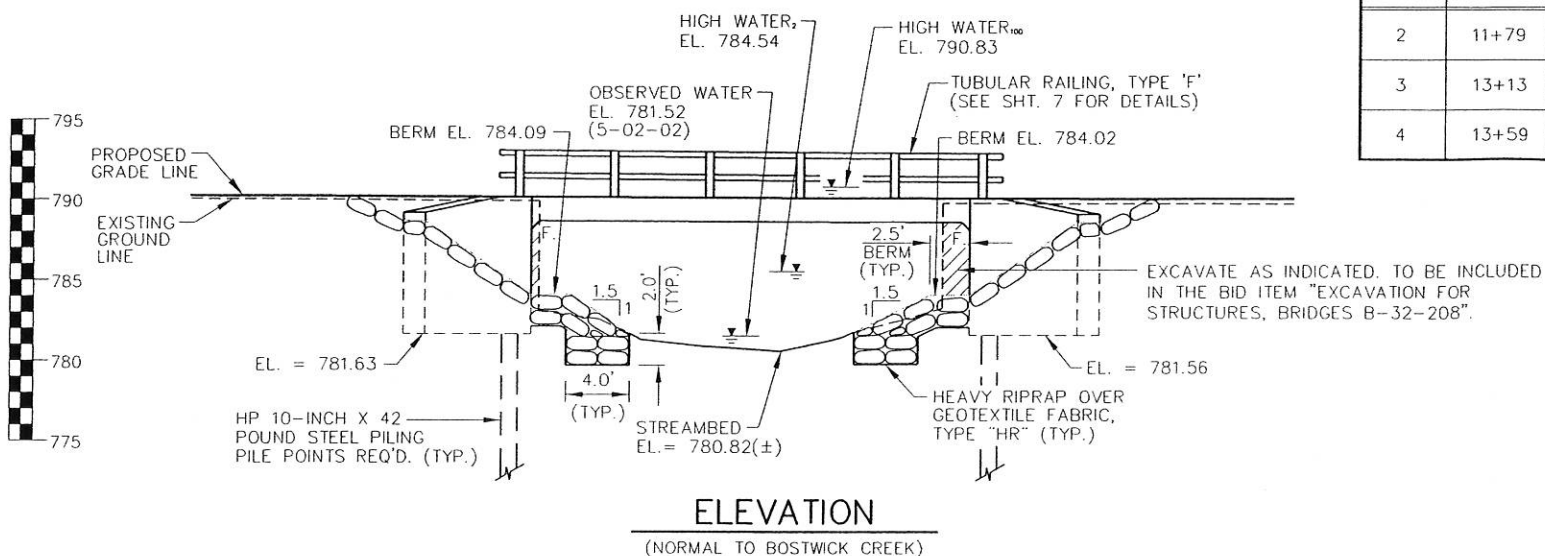
EROSION CONTROL
 HIGH WATER₂ ELEVATION _____ 784.54

LIST OF DRAWINGS

- GENERAL PLAN _____ 1.
- CROSS SECTION AND QUANTITIES _____ 2.
- SUBSURFACE EXPLORATION _____ 3.
- ABUTMENTS _____ 4.
- ABUTMENT DETAILS _____ 5.
- SUPERSTRUCTURE _____ 6.
- TUBULAR RAILING, TYPE 'F' _____ 7.

⊙ BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	11+79	STAR SPIKE SET IN P/P POLE, S.W. OF BRIDGE; 28.29' RT.	792.11
3	13+13	CHISELED "+" ON N.E. WING WALL; 7.58' LT.	790.42
4	13+59	STAR SPIKE SET IN P/P POLE, N.E. OF BRIDGE; 128.75' LT.	789.96



DESIGN CONSULTANT
 GREG A. JEWELL, PE, RLS
 (608) 588-7484

BRIDGE OFFICE CONTACT
 GERRY ANDERSON
 (608) 266-8488



JEWELL & Associates, Inc.
 CONSULTING ENGINEERS & SURVEYORS
 SPRING GREEN, WISCONSIN www.jewellassoc.com

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS STRUCTURE B-32-208 FILTER ROAD OVER BOSTWICK CREEK			
County	LACROSSE	Town	BANGOR
Design Spec.	A.A.S.H.T.O.2002	Load	HS20
Designed By	PTB	Design Checked	GAJ
Drawn By	MJA	Plans Checked	PTB
Approved _____		Date _____	
Chief Structures Design Engineer			
GENERAL PLAN			SHEET 1 OF 7

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
 JOINT FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M153, TYPE I, II, OR III, OR A.A.S.H.T.O. DESIGNATION M213.
 THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC, TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS, OR AS DIRECTED BY THE ENGINEER.

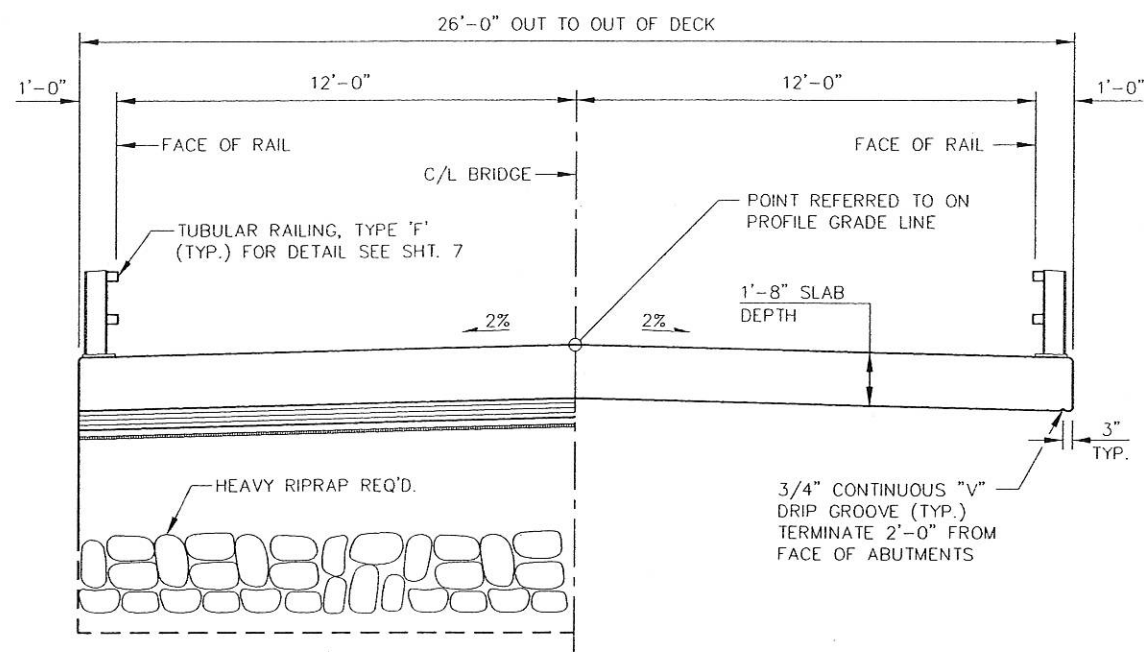
AT THE ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. SEE THIS SHEET FOR DETAIL.

THE EXISTING STRUCTURE (P-32-901) IS A SINGLE-SPAN CONCRETE DECK, STEEL GIRDER STRUCTURE SUPPORTED ON CONCRETE FULL RETAINING ABUTMENTS 28.2' OVERALL LENGTH BY 15.5' CLEAR ROADWAY WIDTH WHICH SHALL BE REMOVED UNDER THE BID ITEM "REMOVING OLD STRUCTURE, STATION 13+00".

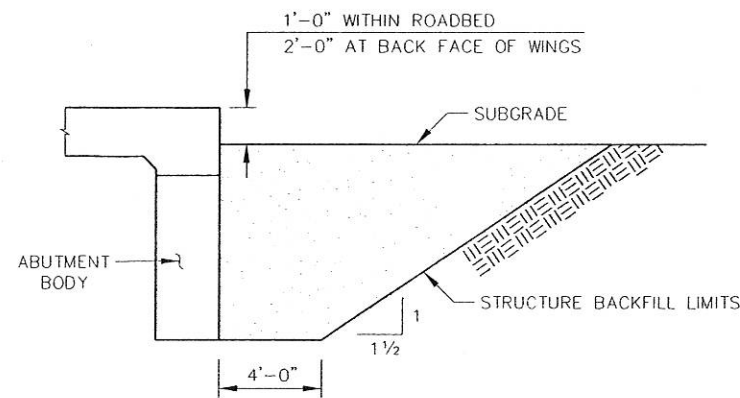
SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR SUBSTRUCTURE UNITS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP AND SIDES OF THE DECK (CONCRETE MATERIAL ONLY).

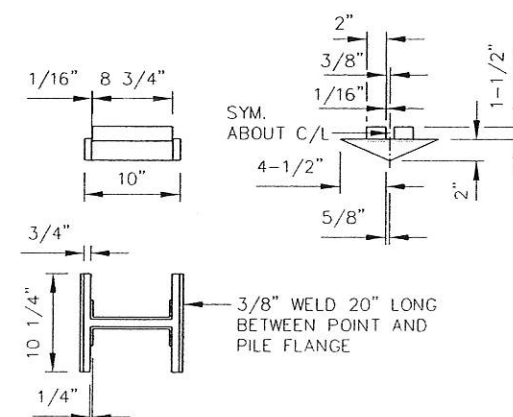
ALL REINFORCING BARS ARE ENGLISH AND THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.



AT ABUT. IN SPAN
CROSS SECTION THROUGH ROADWAY
 (LOOKING EAST)

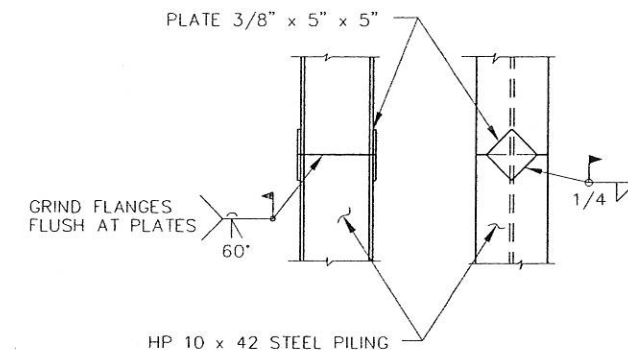


STRUCTURE BACKFILL DETAIL
 (TYPICAL AT BOTH ABUTMENTS)



NOTE:
 POINTS SHALL BE MADE FROM CAST STEEL (A.S.T.M. A27 GRADE 65-35) AND SHALL BE ONE OF THE FOLLOWING OR AN APPROVED EQUAL NO. H.P.A. 1057 AS SUPPLIED BY INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., NO. 10 MAC-4 AS SUPPLIED BY J.C. McELROY CO., INC. OR PRUYN POINT NO. HP-75750, HP-77750-B, HP77600-B, OR HP-7780-B AS MANUFACTURED BY ASSOCIATED PILE AND FITTING CORPORATION. (DIMENSIONS AS SHOWN ABOVE MAY VARY BY MODEL AND MANUFACTURER.)

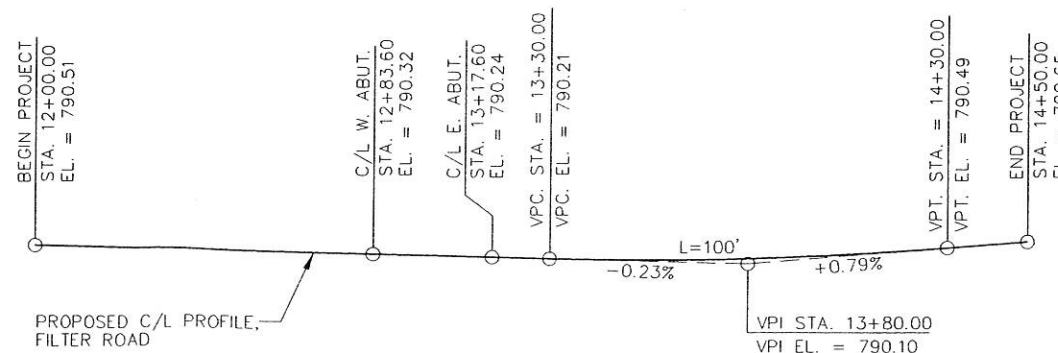
PILE POINT DETAILS



PILE SPLICE DETAILS

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	W. ABUT.	SUPER.	E. ABUT.	TOTALS
REMOVING OLD STRUCTURE, STATION 13+00	L.S.	--	--	--	1
EXCAVATION FOR STRUCTURES, BRIDGES B-32-208	L.S.	--	--	--	1
STRUCTURE BACKFILL	C.Y.	100	--	100	200
CONCRETE MASONRY, BRIDGES	C.Y.	26	63	26	115
PROTECTIVE SURFACE TREATMENT	S.Y.	--	120	--	120
HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	2470	7060	2470	12,000
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	--	2160	--	2160
STEEL PILING, DELIVERED AND DRIVEN, HP 10-INCH 42 POUND	L.F.	185	--	170	355
PILE POINTS	EACH	6	--	6	12
TUBULAR RAILING, TYPE F, STRUCTURE B-32-208	L.S.	--	--	--	1
RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	5	--	5	10
HEAVY RIPRAP	C.Y.	66	--	71	137
GEOTEXTILE FABRIC, TYPE HR	S.Y.	125	--	135	260
NON BID ITEMS					
FILLER	SIZE	--	--	--	1/2" & 3/4"



PROFILE GRADE LINE
 (FILTER ROAD)

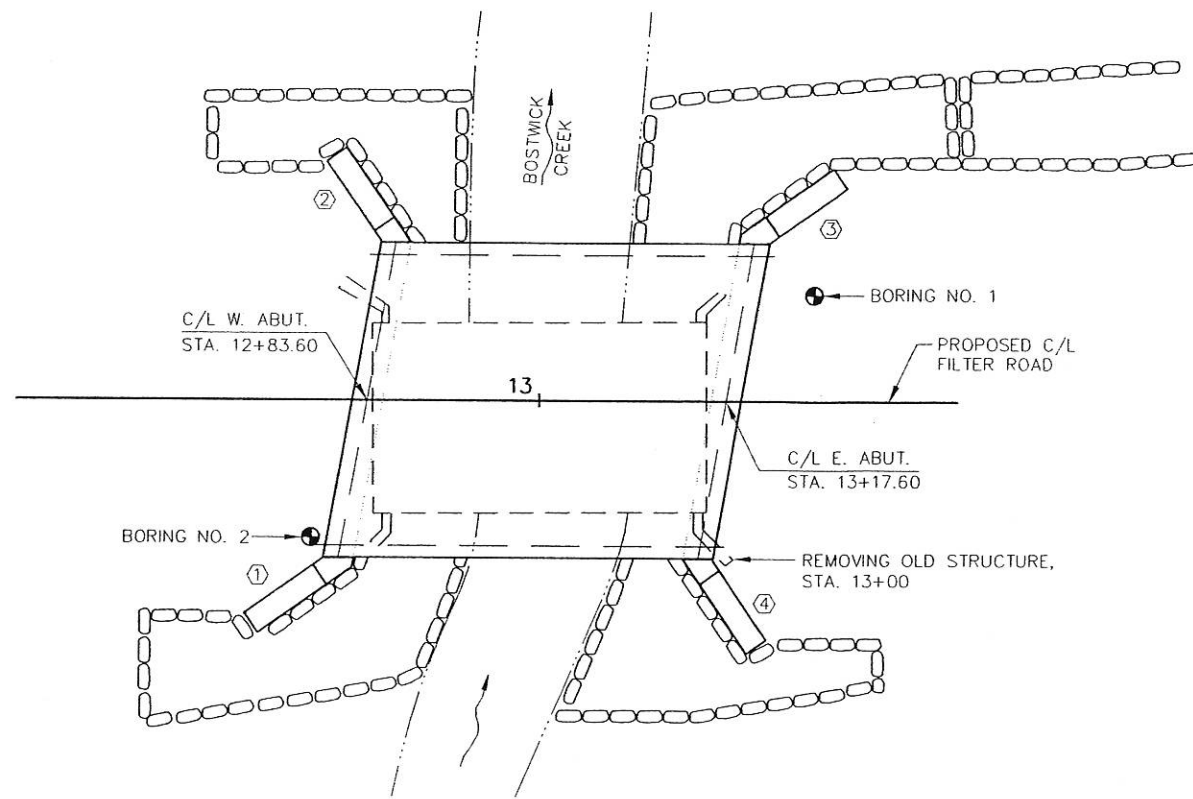
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
JEWELL & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS SPRING GREEN, WISCONSIN www.jewellassoc.com			
STRUCTURE B-32-208			
Const. Spec.	1996	Drawn By	MJA
		Plans Checked	PTB
CROSS SECTION AND QUANTITIES			SHEET 2 OF 7



SOIL BORINGS

BY: SOILS & ENGINEERING SERVICES, INC.
 1102 STEWART STREET
 MADISON, WI. 53713-4648
 PH: (608) 274-7600

ON: DECEMBER 3, 2002



STRUCTURE B-32-208
 (SINGLE-SPAN FLAT SLAB)

STATE PROJECT NUMBER	SHEET NO.
5345-04-71	

ABBREVIATIONS

F - Fine M - Medium C - Course
 Ws - Weathered So - Sound

MATERIAL SYMBOLS

Asphalt	Silt	Sandstone
Sand	Peat	Limestone
Gravel	Clay	Igneous Rock

LEGEND OF PROBING

Probing No. Sta. Elevation

95/6 = 96 Blows for 6" Penetration. Probing Taken with a 350# Weight Falling 18" on a 2" O.D. Point.

7 Average Blows Per Foot

Refusal 95/6

LEGEND OF BORING

Unconfined Strength → 7.7 8 *

Blows Per Ft. Using 140# Wt. Falling 30"

Wash Sample

Shelby Tube — S.T.

No Ground Water Observed Above This Elevation

Ground Water Elevation

Boring No. Sta. Elevation

Sandy Gravel

Boulders or Cobbles

F. Sand

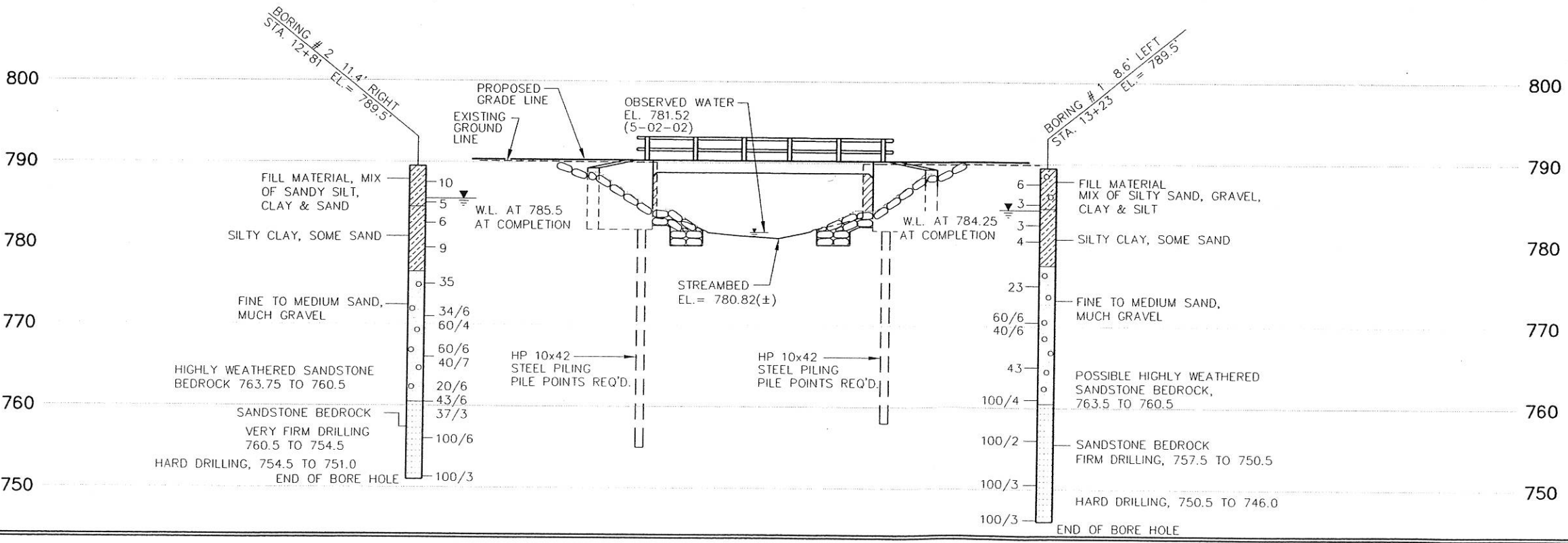
Silty Clay

So. Limestone

Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O.D. X 1.4" I.D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction of the drive pipe

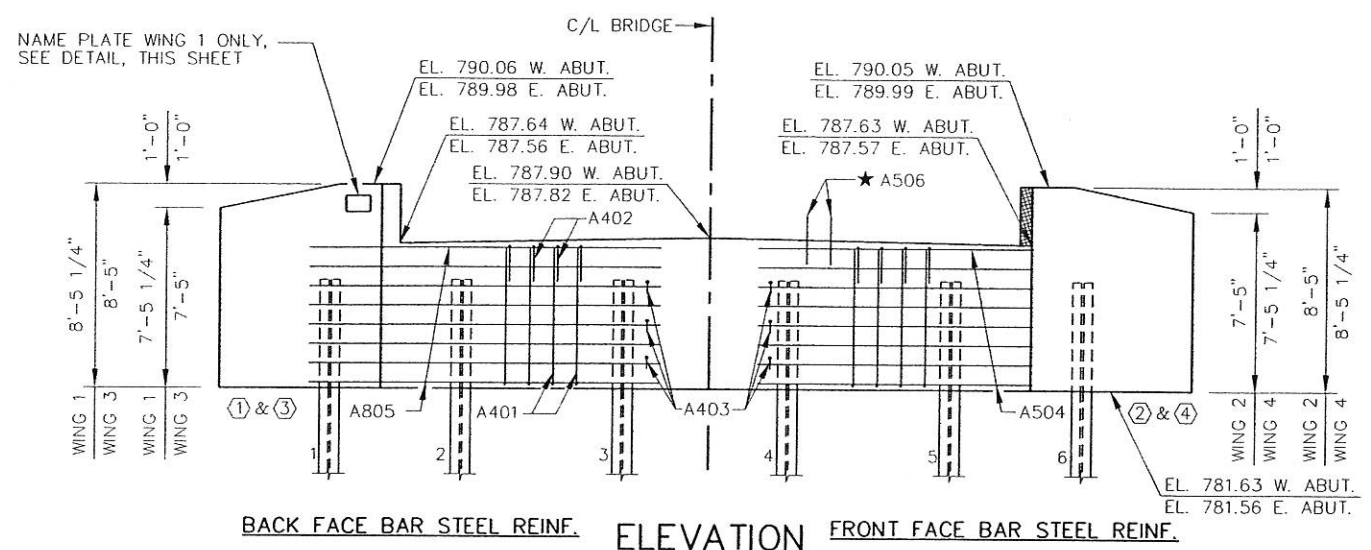
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the division of highways does not warrant conditions below the depths investigated or that the classification of material encountered in the investigations is necessarily typical of the entire site.

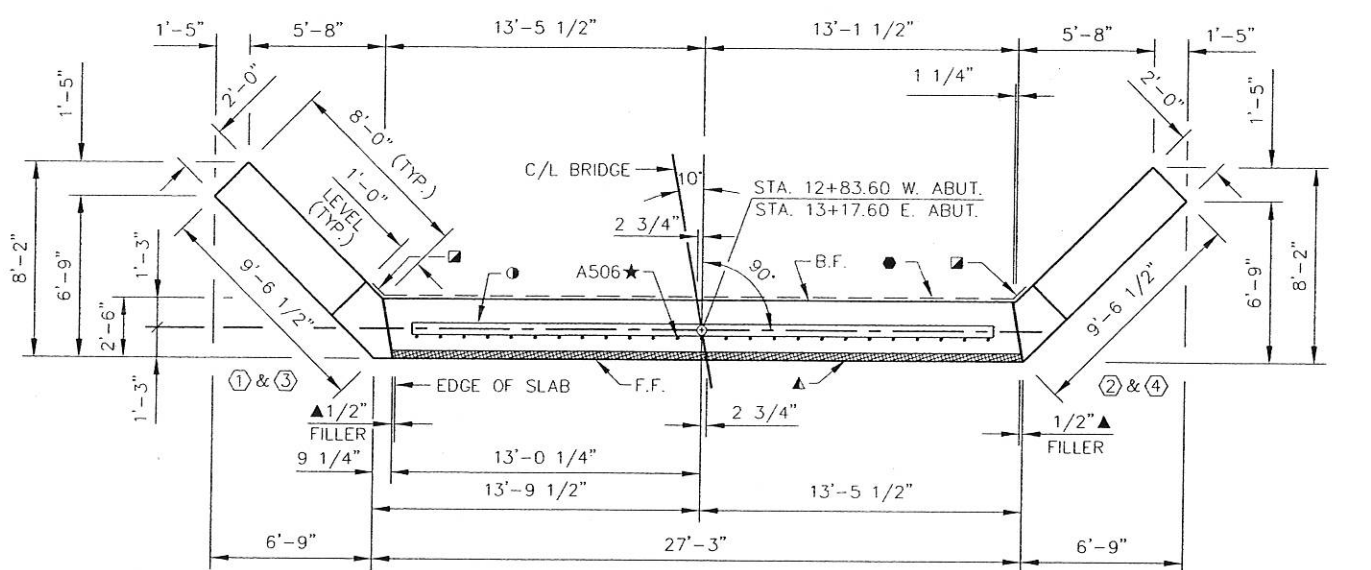


No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
JEWELL & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS SPRING GREEN, WISCONSIN www.jewellassoc.com			
STRUCTURE B-32-208			
Const. Spec.	1996	Drawn By MJA	Plans Checked PTB
SUBSURFACE EXPLORATION			SHEET 3 OF 7

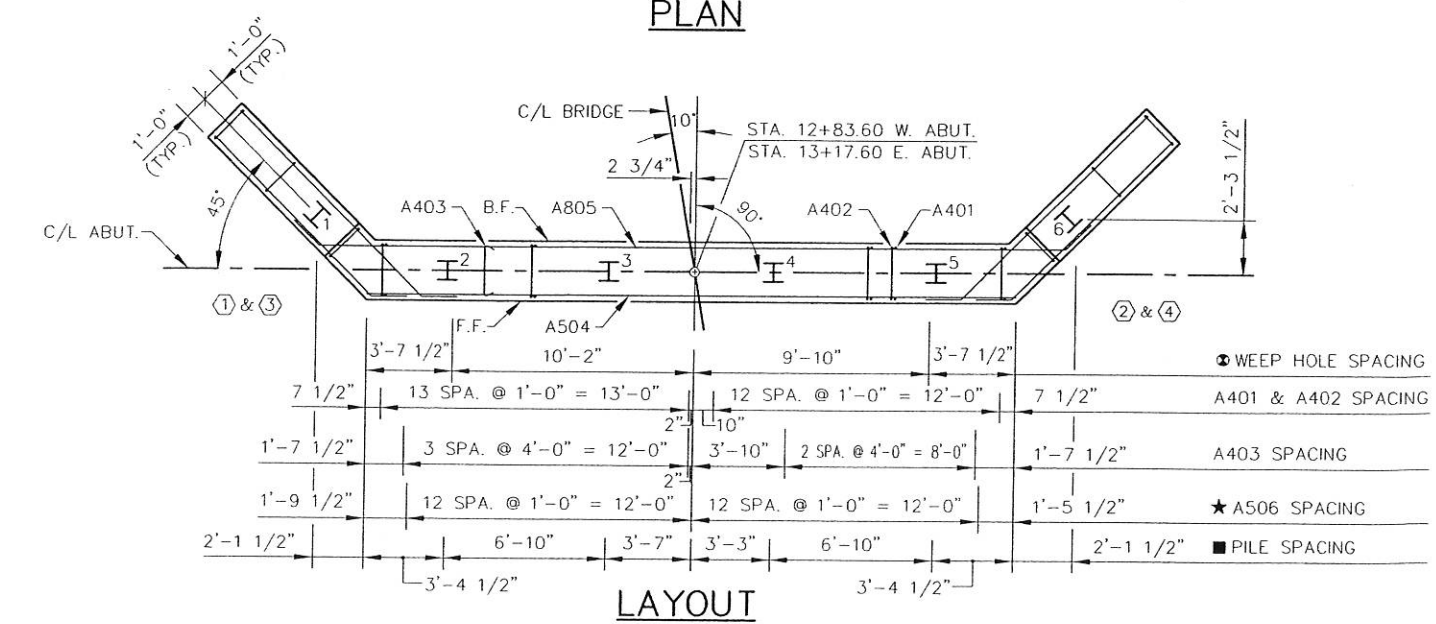
2487-03-BOR REVISED 12-15-02 SCALE 3/4" = 1'-0"



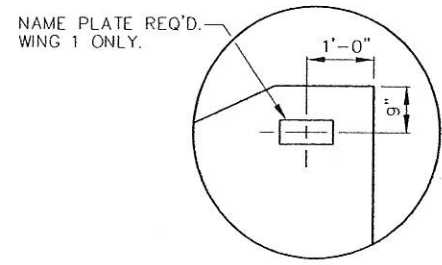
ELEVATION
(WEST ABUTMENT LOOKING WEST)
(EAST ABUTMENT LOOKING EAST)



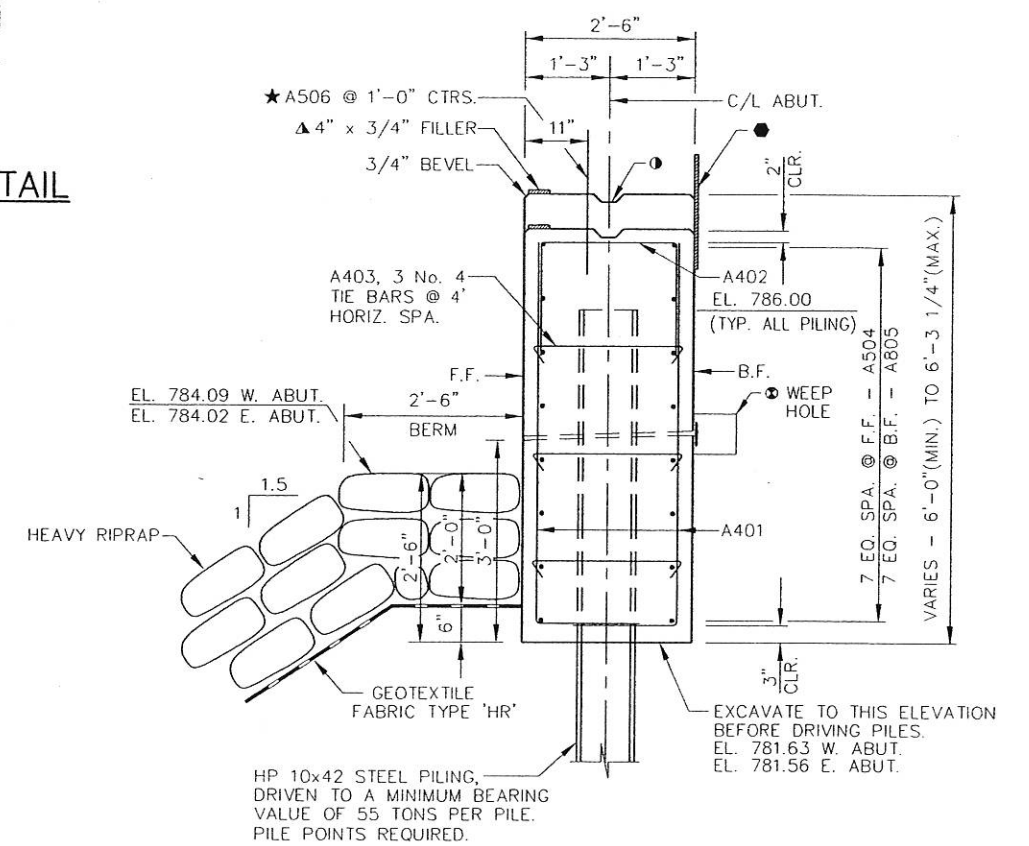
PLAN



LAYOUT



NAME PLATE DETAIL



TYPICAL SECTION THROUGH ABUTMENT BODY

NOTES

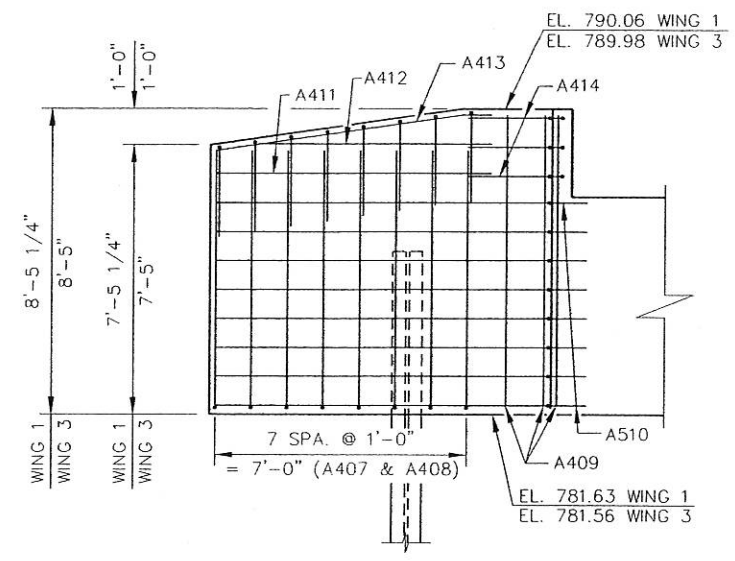
- SOME BARS HAVE BEEN OMITTED FOR CLARITY. SEE SHEET 5 FOR BILL OF BARS.
- DO NOT PLACE FILL HIGHER THAN 3 FEET FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.
- F.F. - FRONT FACE
- B.F. - BACK FACE

LEGEND

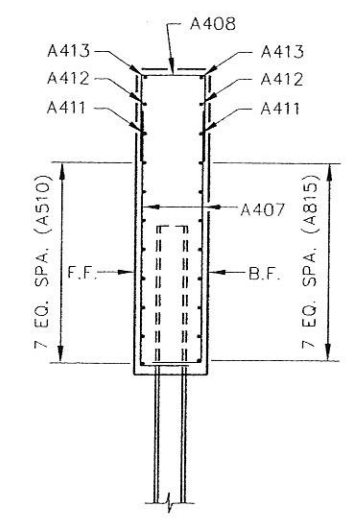
- KEYED CONSTRUCTION JOINT FORMED BY SURFACED & BEVELED 2x6.
- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING, EXTEND FROM 9" BELOW BRIDGE SEAT TO 1" BELOW TOP OF WINGS.
- 18" RUBBERIZED MEMBRANE WATERPROOFING, (HORIZONTAL).
- 1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).
- 4"x3/4" FILLER, EXTEND FULL LENGTH OF ABUTMENTS BETWEEN EDGES OF SLAB.
- A506 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE IT HAS TAKEN ITS INITIAL SET. EMBED BAR 1'-0".
- 2" DIAMETER WEEP HOLE AT 20'-0" SPA. USE GEOTEXTILE FABRIC, TYPE 'HR' WITH 3/4" WASHED STONE AT EACH HOLE (ON B.F. 12"x12"x12" MIN.) COST INCIDENTAL TO "CONCRETE MASONRY, BRIDGES".
- PILE SPACING MEASURED AT BASE OF SHAFT.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
JEWELL & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS SPRING GREEN, WISCONSIN www.jewellassoc.com			
STRUCTURE B-32-208			
Const. Spec.	1996	Drawn By	MJA
		Plans Checked	PTB
ABUTMENTS			SHEET 4 OF 7

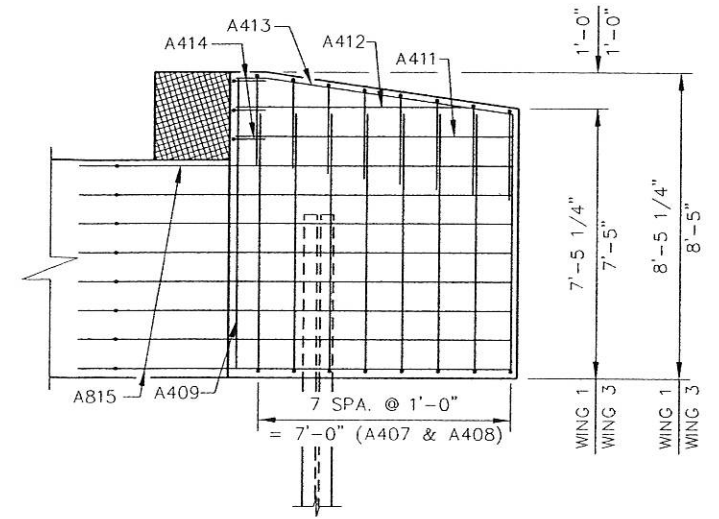
1817-4-ABUT. REVISED: 7-21-99 SCALE: 1/4" = 1'-0" 601-802 REVISED: 10-19-98



F.F. ELEVATION - WING 1 & 3



SECTION A-A

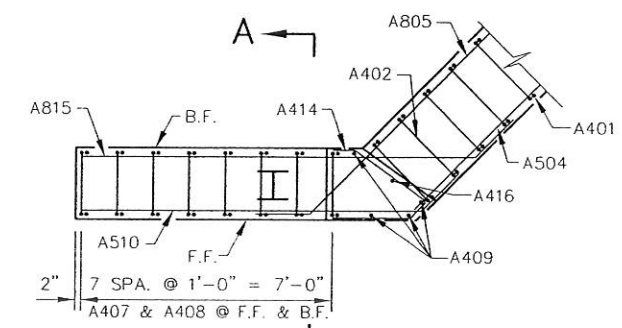


B.F. ELEVATION - WING 1 & 3

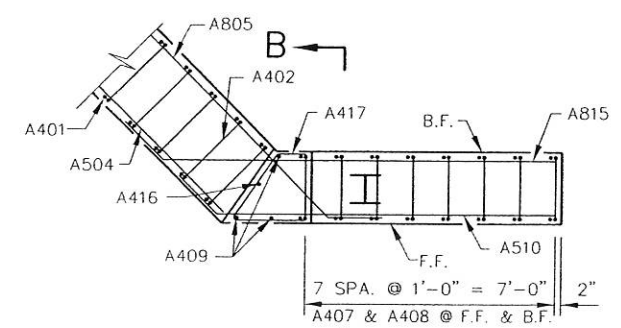
BILL OF BARS
TWO ABUTMENTS SHOWN **4,940 LBS.**

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
A401	108	7-2	X	BODY - VERT. - F.F. & B.F.
A402	54	5-0	X	BODY - TOP
A403	42	2-10	X	TIE BARS
A504	16	27-0		BODY - HORIZ. - F.F.
A805	16	34-4	X	BODY - HORIZ. - B.F.
A506	50	2-0		BODY - VERT. - DOWELS
A407	64	8-4	X	WINGS - VERT.
A408	32	5-10	X	WINGS - VERT. - TOP
A409	14	8-0		WINGS - VERT.
A510	32	10-8	X	WINGS - HORIZ. - F.F.
A411	8	7-8		WINGS - HORIZ. - TOP - F.F. & B.F.
A412	8	6-6		WINGS - HORIZ. - TOP - F.F. & B.F.
A413	8	7-8	X	WINGS - TOP - F.F. & B.F.
A414	6	6-6	X	WINGS 1 & 3 - TOP
A815	32	12-4	X	WINGS - HORIZ. - B.F.
A416	4	3-4		WINGS - VERT. - TOP
A417	6	5-8	X	WINGS 2 & 4 - TOP

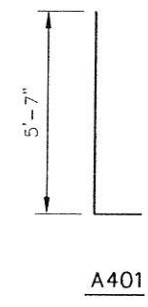
NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



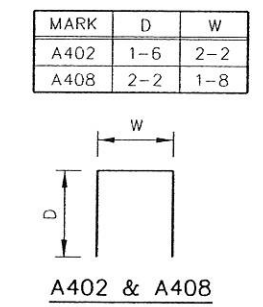
PLAN VIEW - WING 1 & 3



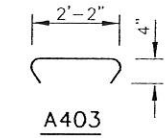
PLAN VIEW - WING 2 & 4



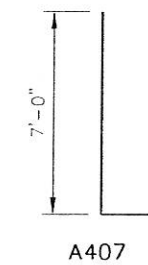
A401



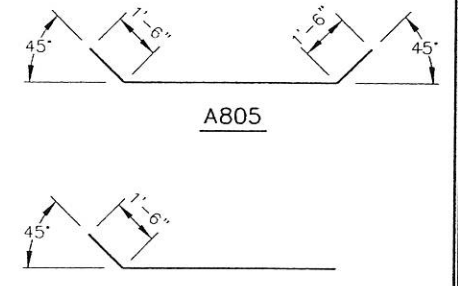
A402 & A408



A403



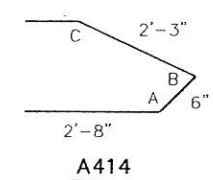
A407



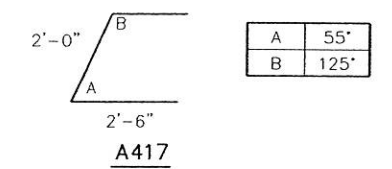
A510 & A815

MARK	A
A413	171'52"

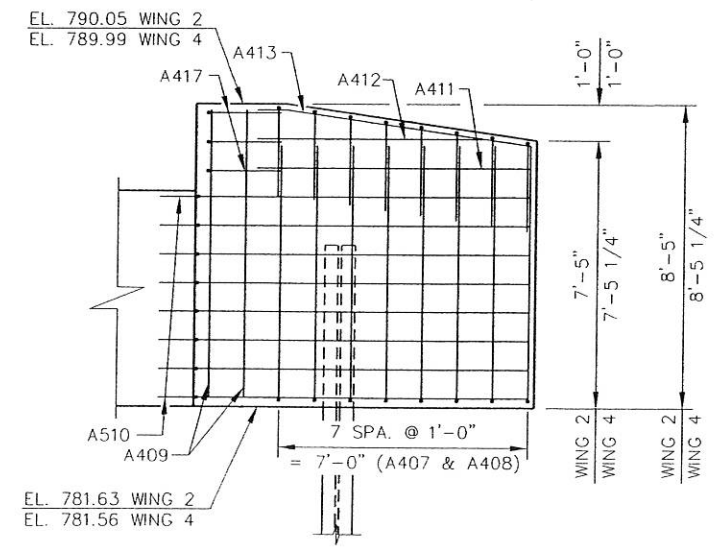
A	135'
B	80'
C	145'



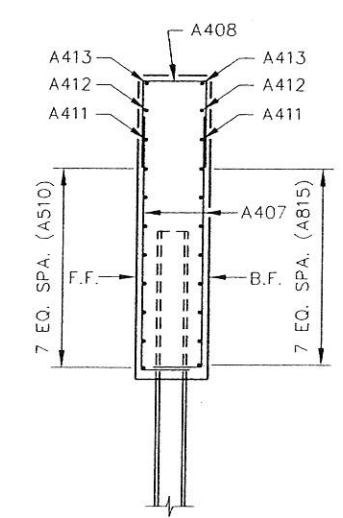
A414



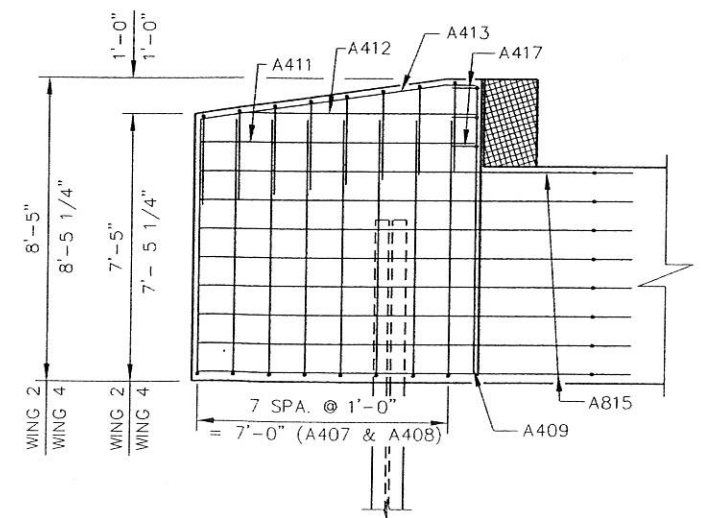
A417



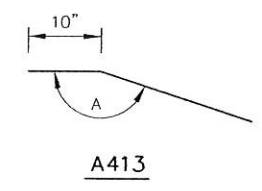
F.F. ELEVATION - WING 2 & 4



SECTION B-B



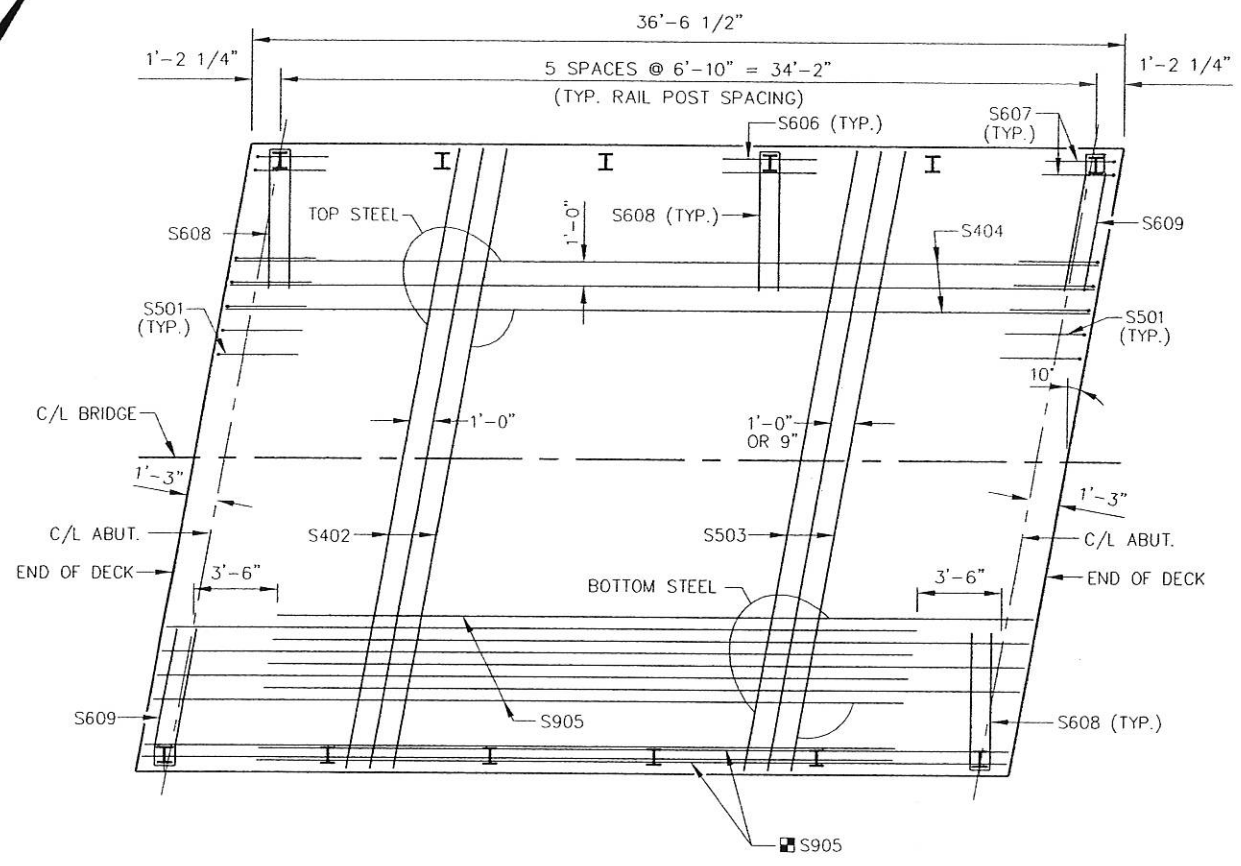
B.F. ELEVATION - WING 2 & 4



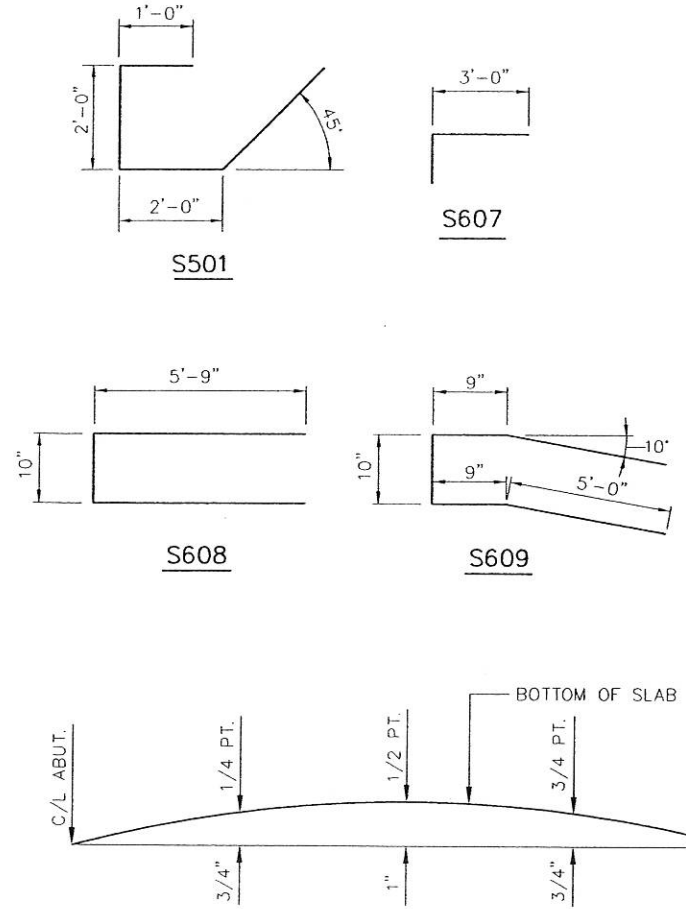
A413

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
JEWELL & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS SPRING GREEN, WISCONSIN www.jewellassoc.com			
STRUCTURE B-32-208			
Const. Spec.	1996	Drawn By	MJA
Plans Checked	PTB		
ABUTMENT DETAILS			SHEET 5 OF 7

100-05-WINGS REVISED: 8-8-00 SCALE: 3/16" = 1'-0"

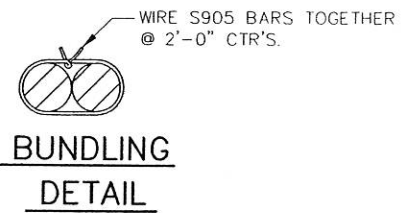


PLAN



CAMBER DIAGRAM

CAMBER SPAN AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE PLASTIC FLOW. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.



BUNDLING DETAIL

BILL OF BARS 7,060 LBS. UNCOATED
2,160 LBS. COATED

BAR MARK	CONT.	NO. REQ'D.	LENGTH	BENT	BUN-DLE	LOCATION
S501	X	54	7-6	X		AT END OF DECK
S402	X	42	26-0			SLAB, TOP, TRANSVERSE
S503		44	26-0			SLAB, BOTTOM, TRANSVERSE
S404	X	27	36-2			SLAB, TOP, LONGIT.
S905		55	31-8		■	SLAB, BOTTOM, LONGIT.
S606	X	16	4-0			AT INTERIOR RAIL POSTS
S607	X	8	4-0	X		AT END RAIL POSTS
S608	X	10	12-0	X		AT INTERIOR AND END RAIL POSTS
S609	X	2	12-0	X		AT END RAIL POSTS

NOTES: THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE. DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

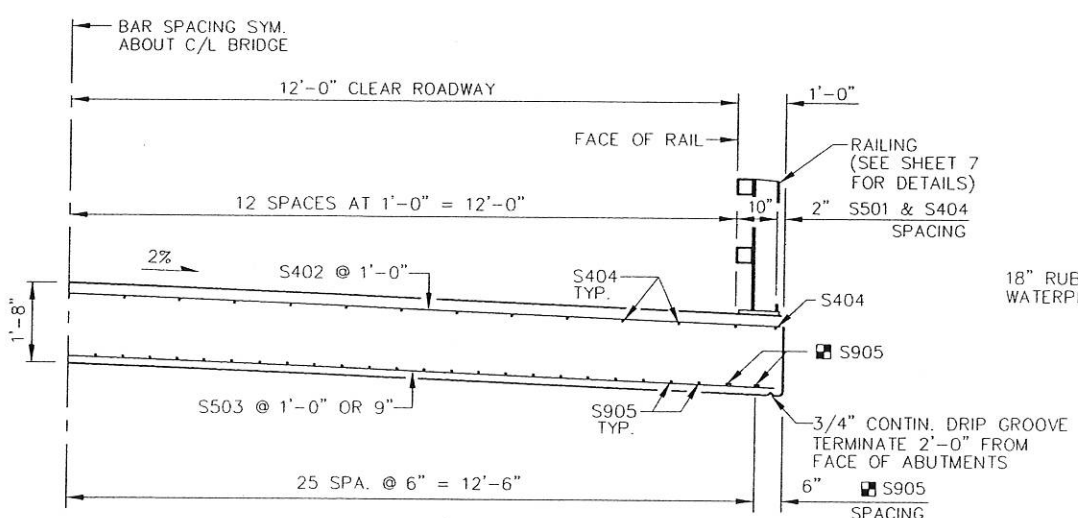
■ TWO ADDITIONAL S905 BARS REQUIRED ON EACH OUTER EDGE OF SLAB. BUNDLE ONE ADDITIONAL BAR TO EACH OF THE TWO OUTER S905 BARS. SEE BUNDLING DETAIL, THIS SHEET.

NOTES

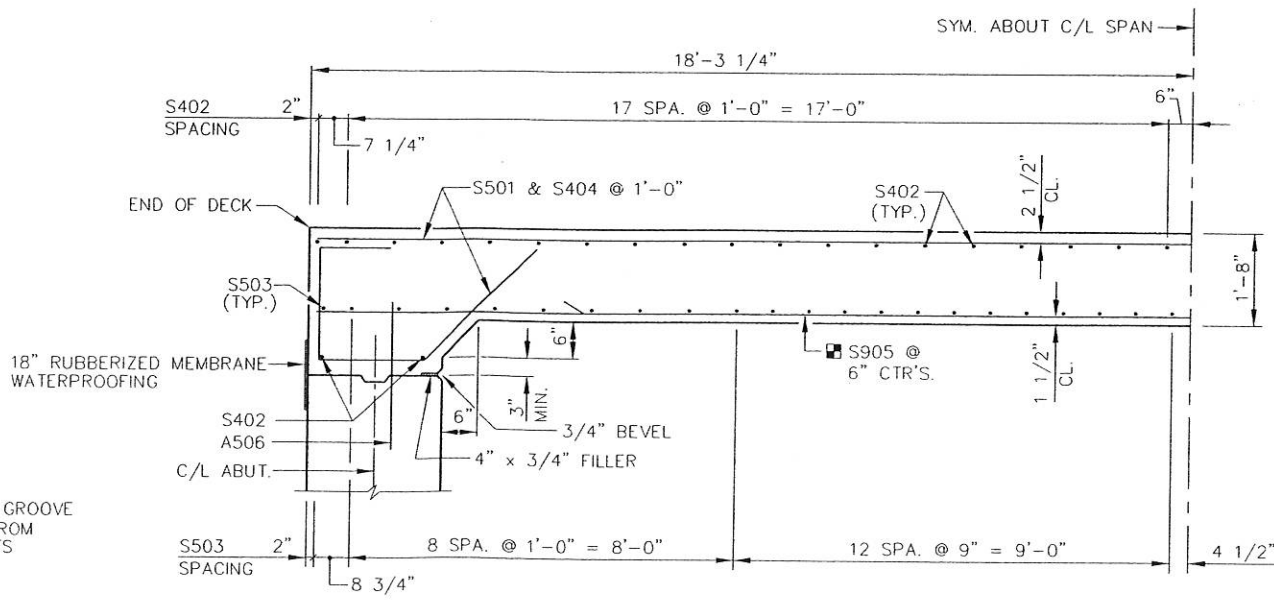
ALTERNATE TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROX. 3'-0" CENTERS. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROX. 4'-0" CENTERS.

TRANSVERSE BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF SUBSTRUCTURE UNITS.

THE SLAB THICKNESS DIMENSION IS MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).



CROSS SECTION THROUGH ROADWAY
NOT TO SCALE



PARTIAL LONGIT. SECTION THROUGH ROADWAY
NOT TO SCALE

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
JEWELL & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS SPRING GREEN, WISCONSIN www.jewellassoc.com			
STRUCTURE B-32-208			
Const. Spec.	1996	Drawn By	MJA
		Plans Checked	PTB
SUPERSTRUCTURE			SHEET 6 OF 7

1831-07-SUPR REVISED: 11-8-93 SCALE: 1/8" = 1'-0"