

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.23
OPERATING RATING: RF = 1.59
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE $f_c = 4,000$ PSI
ALL OTHER $f_c = 3,500$ PSI
BAR STEEL REINFORCEMENT
GRADE 60 $f_y = 60,000$ PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 45'-0" LONG AT W. ABUT.
ESTIMATED 35'-0" LONG AT E. ABUT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

$Q_{100} = 1,390$ C.F.S.
 $Q_{BRIDGE} = 1,379$ C.F.S.
 $Q_{ROADWAY} = 11$ C.F.S.
 $V_{100} = 5.64$ F.P.S.
 $HW_{100} = EL. 772.54$
WATERWAY AREA = 244.4 SQ. FT.
DRAINAGE AREA = 16.5 SQ. MI.
SCOUR CRITICAL CODE = 5

ROADWAY OVERTOPPING

FREQUENCY = 42 YEARS
 $Q_{42} = 1,140$ C.F.S.
 $HW_{42} = EL. 772.31$

2-YEAR FREQUENCY:

$Q_2 = 380$ C.F.S.
 $V_2 = 3.49$ F.P.S.
 $HW_2 = EL. 768.62$

CURVE DATA

FEATURE ON: CTH JJ

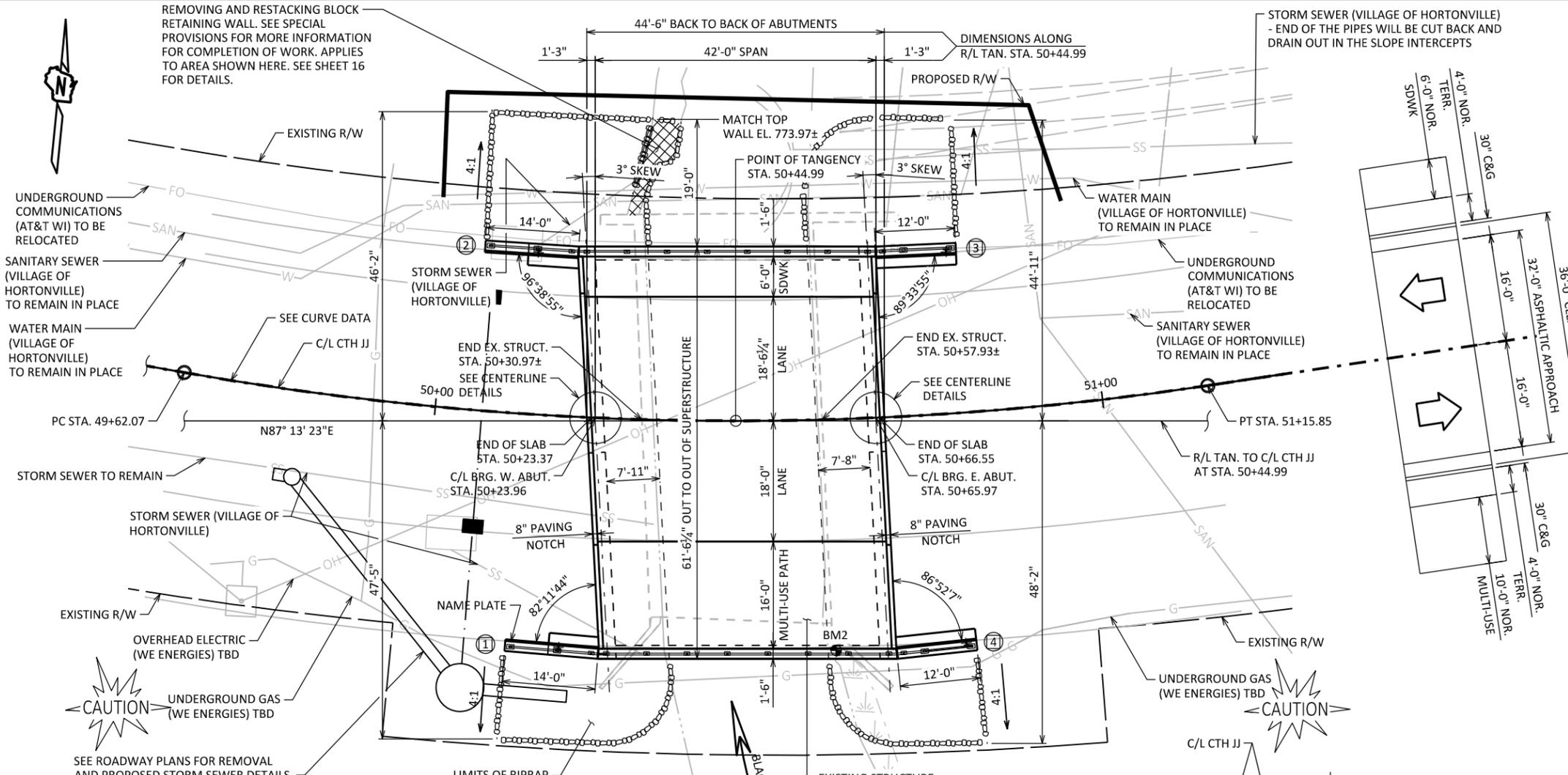
P.I. = STA. 50+39.64
 $\Delta = 18^\circ 32' 58''$ LT
 $D = 12^\circ 03' 44''$
 $T = 77.57'$
 $L = 153.78'$
 $R = 475.00'$
S.E. = N/A - NOR. CROWN
P.C. = STA. 49+62.07
P.T. = STA. 51+15.85

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.	X (EASTING)	Y (NORTHING)
1	47+98	SE COR. FIRST STEP TO HO #623, 58' LT.	780.86	765009.77	589251.60
2	50+59	BRIDGE CAP IN SE WINGWALL, 32' RT.	774.19	765263.98	589137.33
3	52+05	NE COR. CONC. STEP, 97' RT.	772.72	765423.95	589097.46
4	52+36	CHIS. SQUARE IN LIGHT POLE BASE, 159' RT.	774.19	765466.09	589042.32

REMOVING AND RESTACKING BLOCK RETAINING WALL. SEE SPECIAL PROVISIONS FOR MORE INFORMATION FOR COMPLETION OF WORK. APPLIES TO AREA SHOWN HERE. SEE SHEET 16 FOR DETAILS.

STORM SEWER (VILLAGE OF HORTONVILLE) - END OF THE PIPES WILL BE CUT BACK AND DRAIN OUT IN THE SLOPE INTERCEPTS



LEGEND

COST OF EXCAVATION SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-44-489".

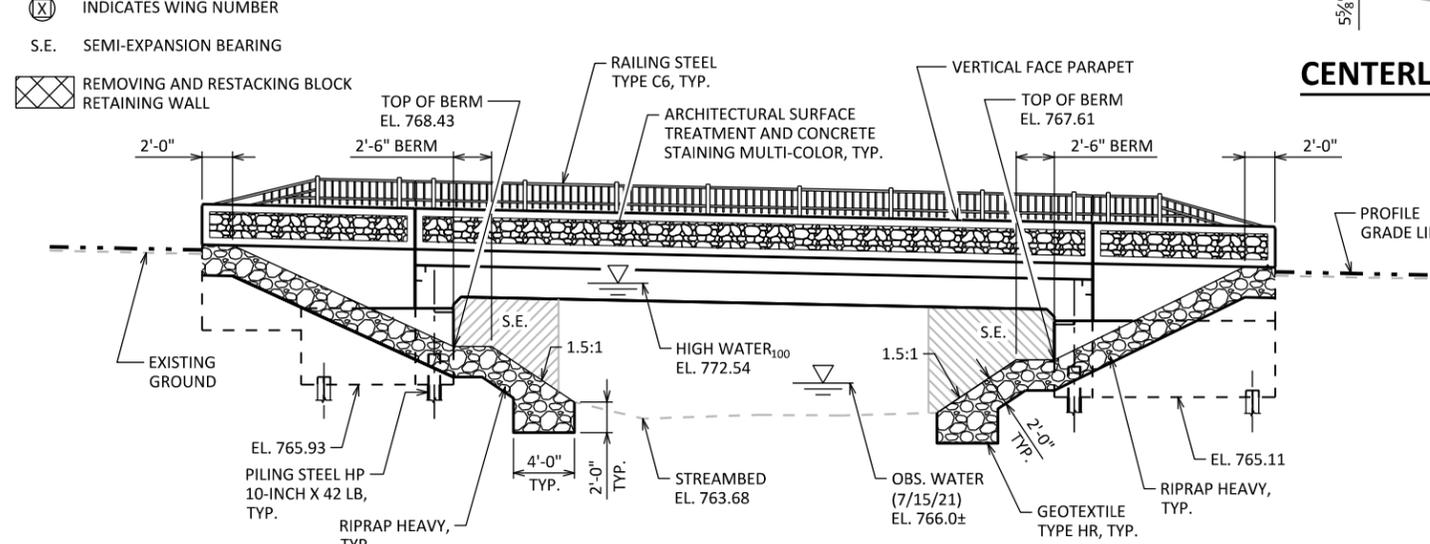
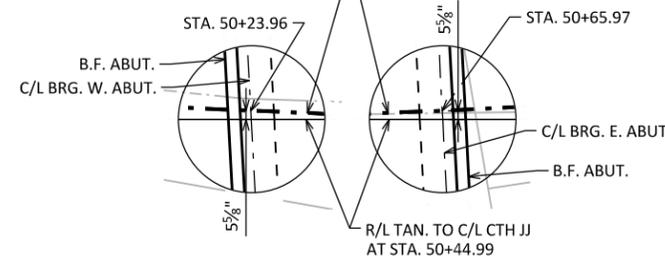
INDICATES WING NUMBER
S.E. SEMI-EXPANSION BEARING

REMOVING AND RESTACKING BLOCK RETAINING WALL

PLAN

SINGLE SPAN CONCRETE FLAT SLAB

CENTERLINE DETAILS

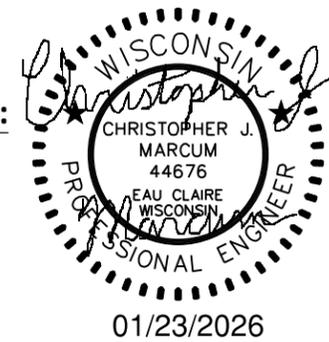


ELEVATION

LOOKING NORTH
(NORMAL TO BLACK OTTER CREEK)

LIST OF DRAWINGS:

- GENERAL PLAN & ELEVATION
- CROSS SECTION & QUANTITIES
- SUBSURFACE EXPLORATION
- WEST ABUTMENT
- WEST ABUTMENT WING DETAILS
- WEST ABUTMENT BILL OF BARS
- EAST ABUTMENT
- EAST ABUTMENT WING DETAILS
- EAST ABUTMENT BILL OF BARS
- SUPERSTRUCTURE
- SUPERSTRUCTURE DETAILS
- SUPERSTRUCTURE MULTI-USE PATH DETAILS
- SUPERSTRUCTURE SIDEWALK DETAILS
- COMBINATION RAIL TYPE C6
- COMBINATION RAIL TYPE C6
- ALT. CONST. JT. & ARCHITECTURAL SURF. TREATMENT



NO.	DATE	REVISION	BY

ENGINEERING

OUTAGAMIE COUNTY HIGHWAY DEPARTMENT

ACCEPTED _____ DATE _____
HIGHWAY COMMISSIONER

STRUCTURE B-44-489

CTH JJ OVER BLACK OTTER CREEK

COUNTY OUTAGAMIE VILLAGE HORTONVILLE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY RAC CK'D CJM DRAWN BY RAC PLANS CK'D CJM

GENERAL PLAN & ELEVATION

SHEET 1 OF 16

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN ON THIS SHEET.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK, SIDEWALK, MULTI-USE TRAIL, AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTES AT ABUTMENTS.

EXCAVATE TO THE BOTTOM OF ABUTMENT ELEVATION PRIOR TO DRIVING PILES.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATIVE METHOD IS APPROVED BY THE ENGINEER.

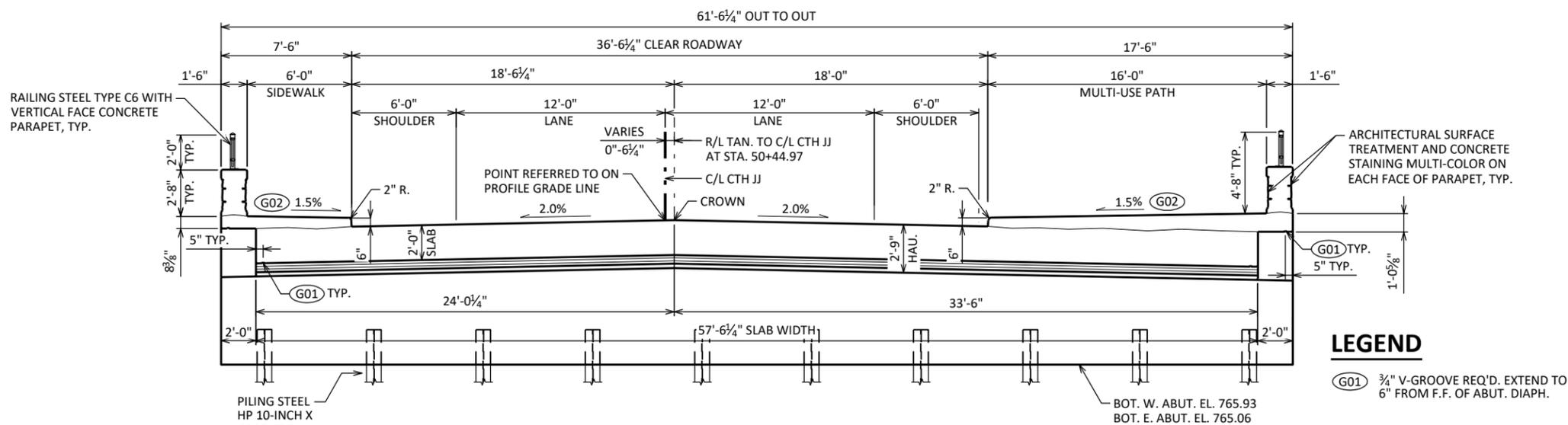
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE WISDOT STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE WISDOT STANDARD SPECIFICATIONS AND THE WISDOT STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR 2026.

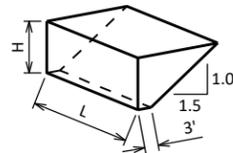
THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE, THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

EXISTING SUBSTRUCTURE LOCATIONS ARE BASED ON SURVEY. REMOVE EXISTING SUBSTRUCTURES AS NEEDED TO CONSTRUCT NEW SUBSTRUCTURES. COST OF REMOVAL IS INCIDENTAL TO THE BID ITEM "REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS."



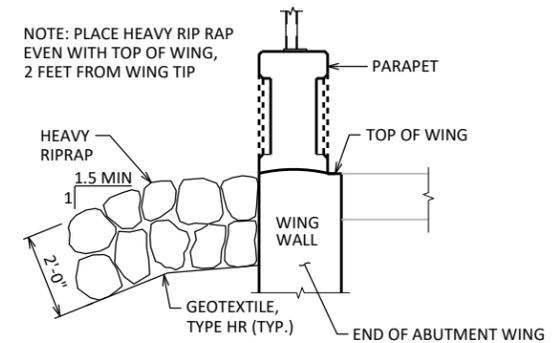
TYPICAL CROSS SECTION THRU BRIDGE

G02 ± 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE, THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER

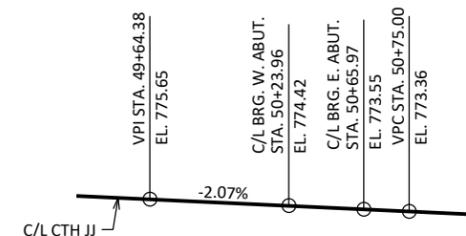


ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
 H = AVERAGE ABUTMENT FILL HEIGHT (FT)
 EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)$
 $V_{CY} = V_{CF}/27$
 $V_{TON} = V_{CY}(2.0)$



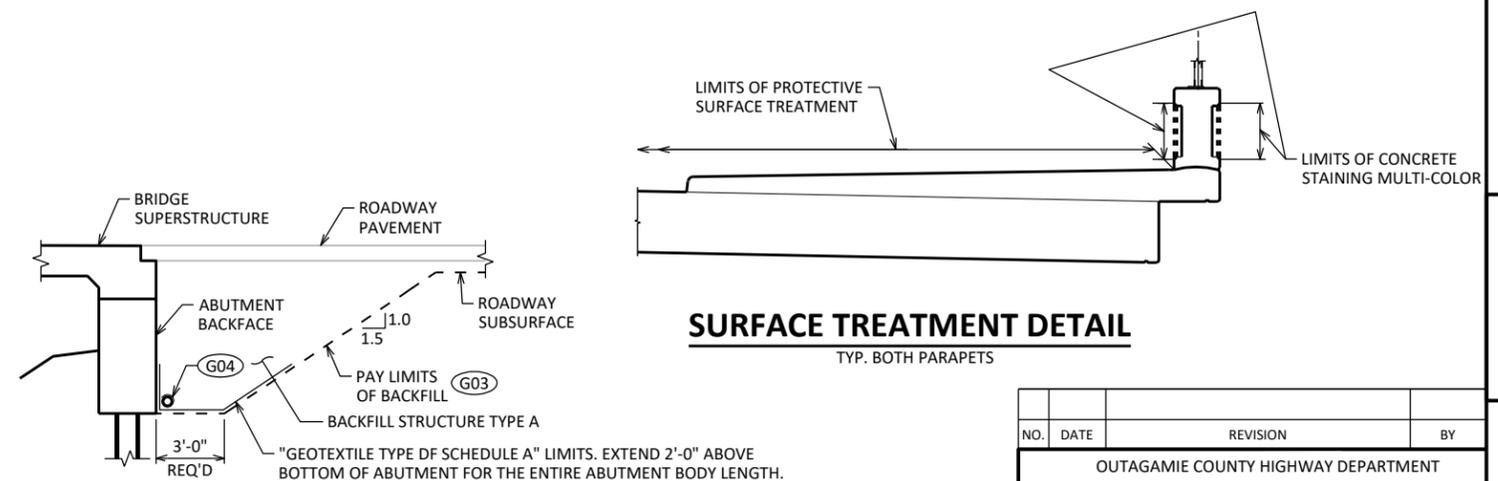
TYPICAL FILL SECTION AT WING TIPS



PROFILE GRADE LINE

TOTAL ESTIMATED QUANTITIES - FOR INFORMATION ONLY

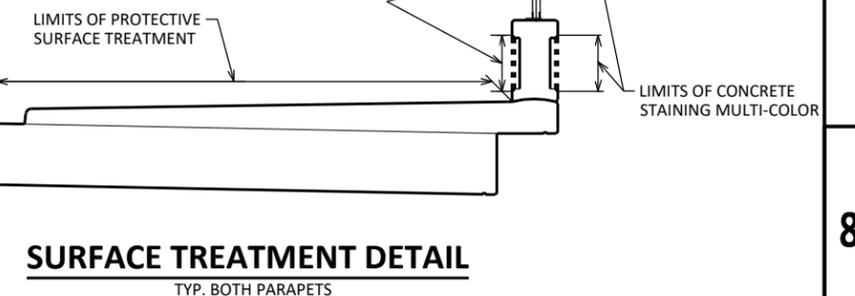
WISDOT BID ITEM NUMBER	BID ITEMS	UNIT	WEST ABUT.	EAST ABUT.	SUPER.	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS B-44-709	EACH	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-44-489	EACH	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	275	275	---	550
502.0100	CONCRETE MASONRY BRIDGES	CY	52	54	242	348
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	307	307
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	3,610	3,730	---	7,340
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2,260	2,290	43,340	47,890
513.7031	RAILING STEEL TYPE C6	LF	28	24	89	141
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	15	16	---	31
517.1015.S	CONCRETE STAINING MULTI-COLOR B-44-489	SF	86	73	289	448
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-44-489	SF	86	73	289	448
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	540	350	---	890
606.0300	RIPRAP HEAVY	CY	110	100	---	210
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	100	110	---	210
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	60	60	---	120
645.0120	GEOTEXTILE TYPE HR	SY	205	180	---	385
999.2000.S	INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 50+45	EACH	---	---	1	1
SPV.0060.13	REMOVING AND RESTACKING BLOCK RETAINING WALL	EACH	1	---	---	1
	NON-BID ITEMS					
	PERFORMED JOINT FILLER	SIZE				1/2", 3/4"
	NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER	SIZE				1"
	NAME PLATE	EACH				1



TYPICAL SECTION THRU ABUTMENT

G03 BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

G04 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



SURFACE TREATMENT DETAIL

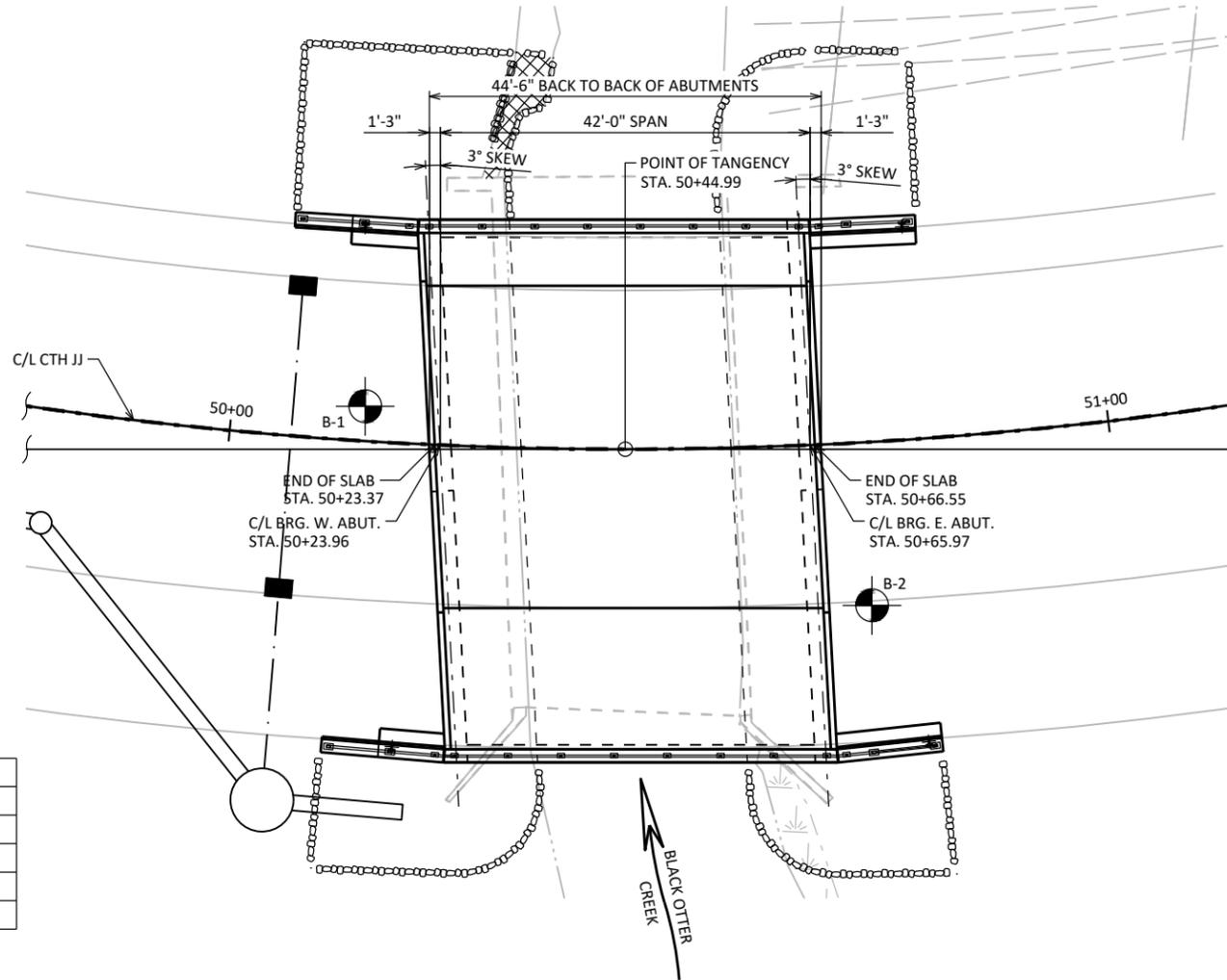
TYP. BOTH PARAPETS

NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY ZRT/RAC		PLANS CK'D CJM	
CROSS SECTION & QUANTITIES			SHEET 2 OF 16

NOTE:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

BORING STATIONS AND OFFSETS ARE BASED ON C/L CTH JJ.



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	07-30-2021	589171.086	765219.549
B-2	07-30-2021	589151.271	765278.186

BORINGS COMPLETED BY: ECS MIDWEST, LLC
 REPORT COMPLETED BY: ECS MIDWEST, LLC
 ALL COORDINATES REFERENCED TO WCCS NAD 83(11) OUTAGAMIE COUNTY

PROJECT NUMBER
582500

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING

UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)
 UNLESS OTHERWISE SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▼ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

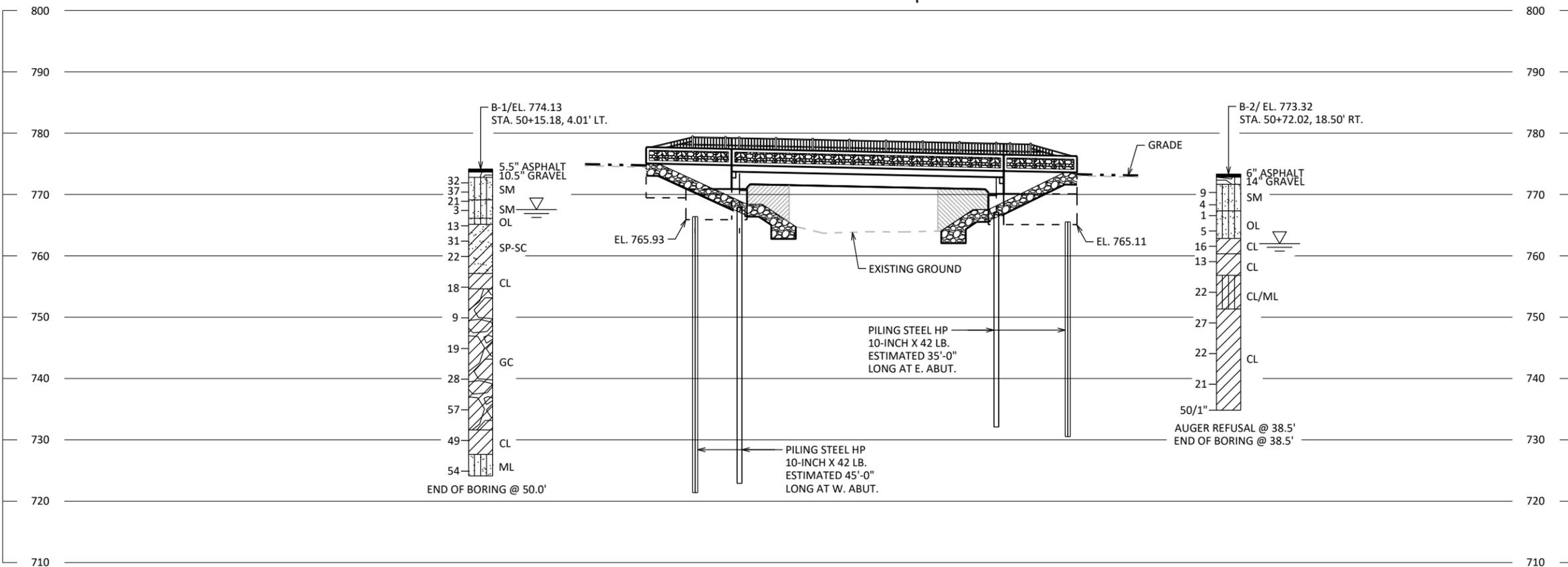
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE ENGINEER DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			

STRUCTURE B-44-489

DRAWN BY ZRT/RAC PLANS CK'D CJM

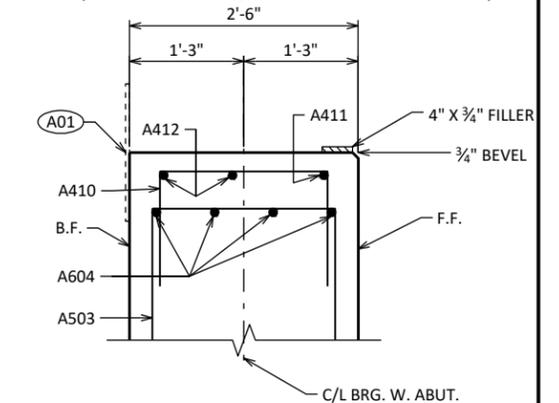
SUBSURFACE EXPLORATION SHEET 3 OF 16



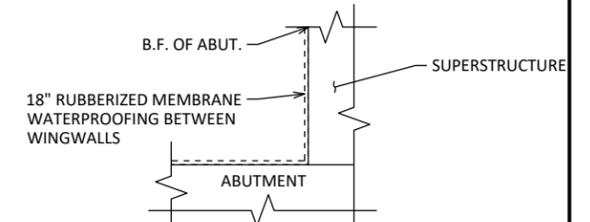
8

8

NOTE:
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



SECTION B

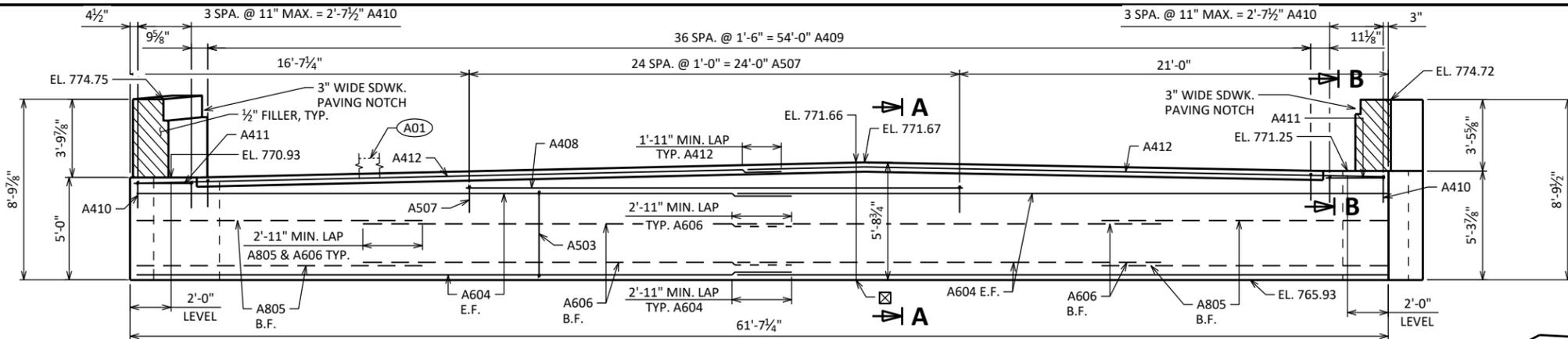


SECTION H

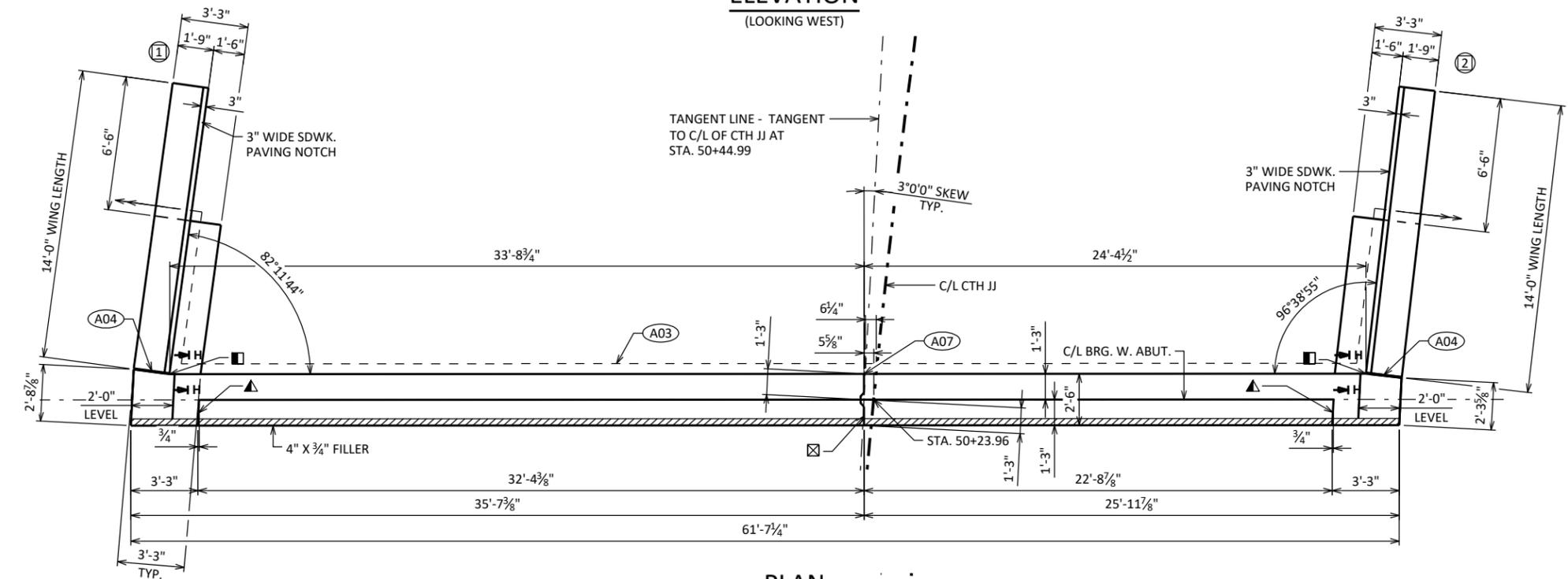
LEGEND

- ☒ VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" X 8". BEVEL EXPOSED EDGES 3/4". CLEAR PILES BY 9" MIN. FOR ALTERNATE CONST. JT. DETAILS SEE SHEET 16. SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING. IF OPTIONAL CONSTRUCTION IS USED, COMPLETE CONCRETE POUR ON NORTH SIDE OF ABUTMENT FIRST, THEN COMPLETE CONCRETE POUR ON SOUTH SIDE OF ABUTMENT SECOND.
- ▲ 3/4" CORK FILLER ON VERTICAL FACE ONLY.
- VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL
- FOR PILE SPLICE DETAIL SEE SHEET 6.
- B.F. DENOTES BACK FACE
- E.F. DENOTES EACH FACE
- F.F. DENOTES FRONT FACE
- (A01) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.
- (A02) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A03) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL.
- (A04) 1/2" FILLER. EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL. FILLER INCLUDED IN WING LENGTH.
- (A07) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL OPTIONAL CONST. JOINT IF USED.
- (X) INDICATE WING WALL NUMBER

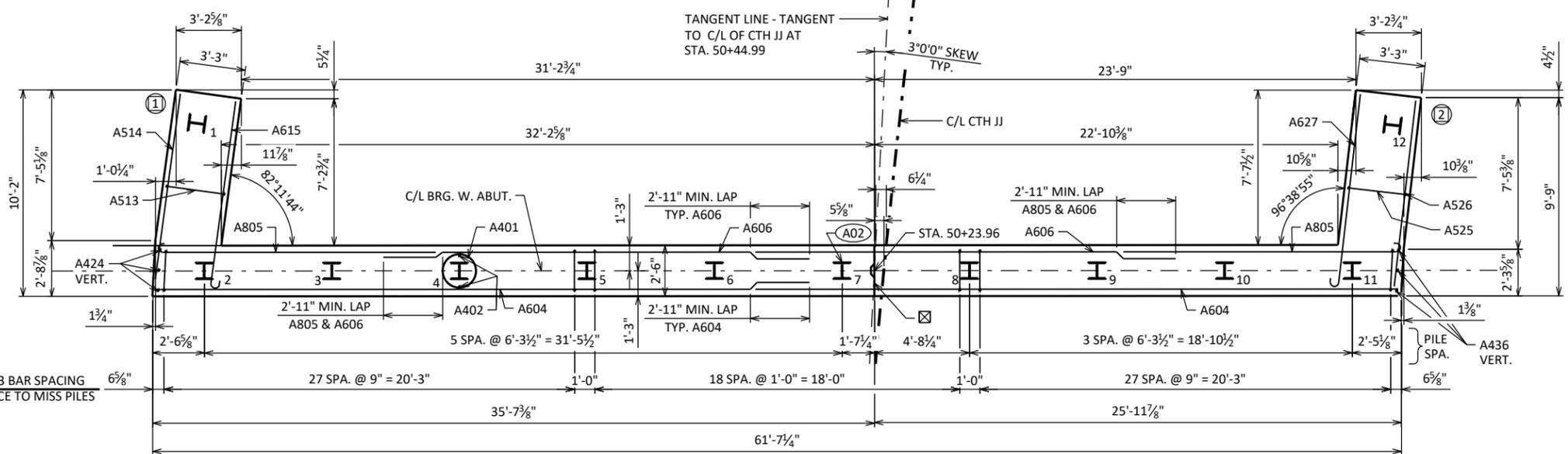
FOR SECTION A SEE SHEET 6



ELEVATION
(LOOKING WEST)

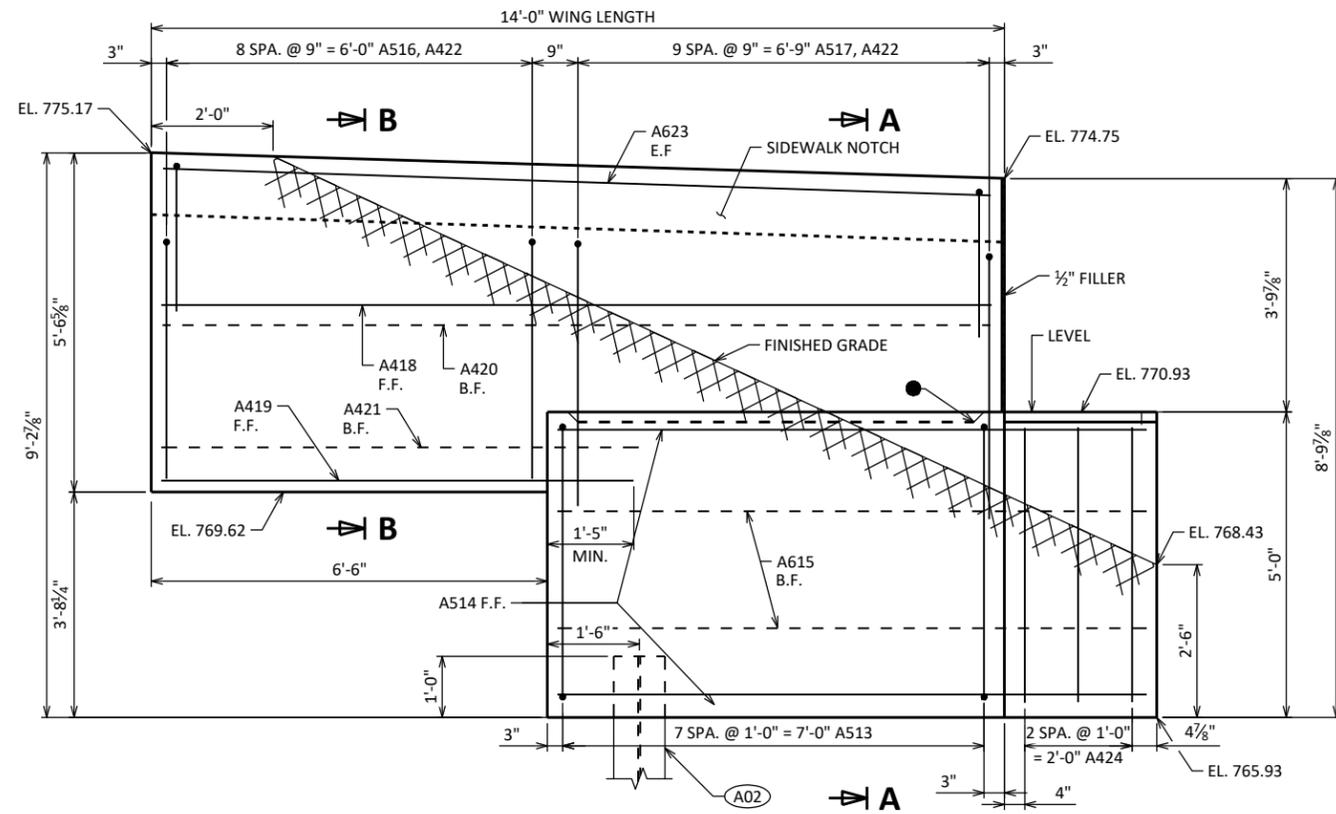


PLAN



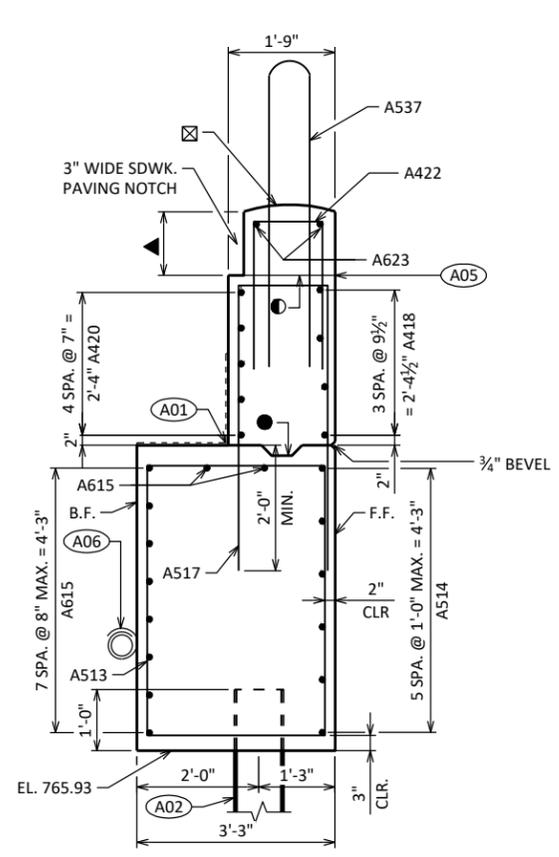
PILE LAYOUT

NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
WEST ABUTMENT			SHEET 4 OF 16

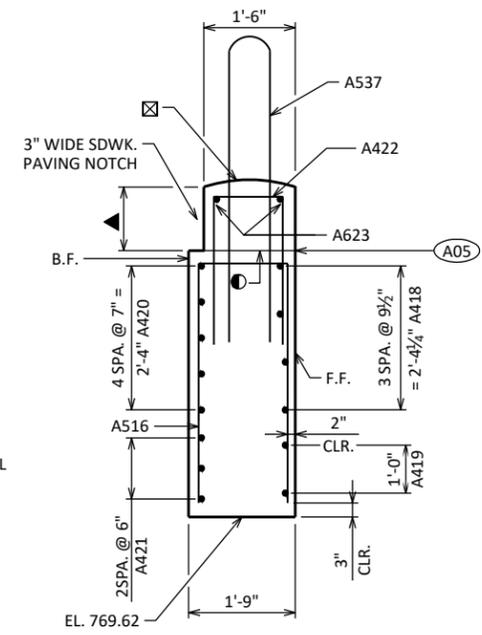


ELEVATION - WING 1

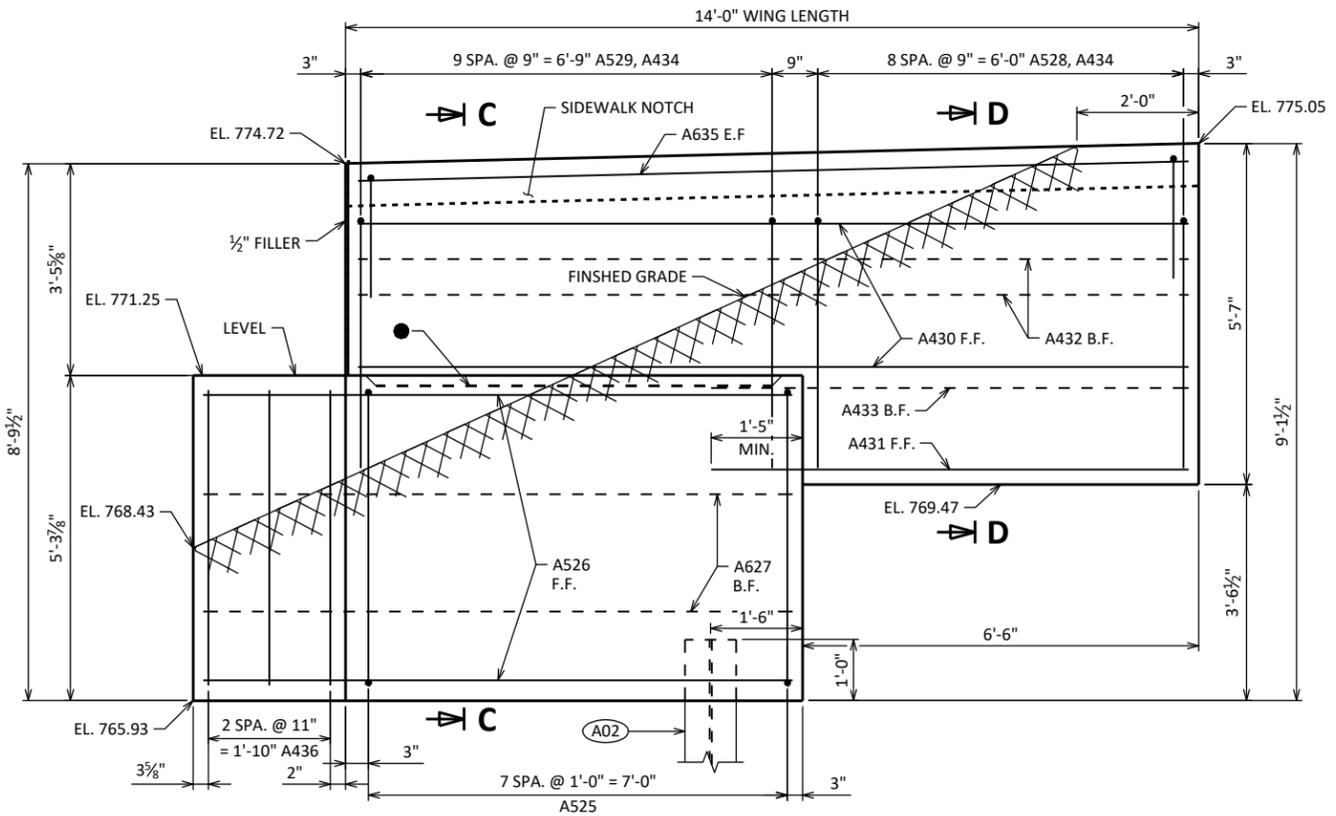
(LOOKING AT FRONT FACE)
PARAPET REINFORCEMENT EMBEDDED INTO WING NOT SHOWN FOR CLARITY



SECTION A

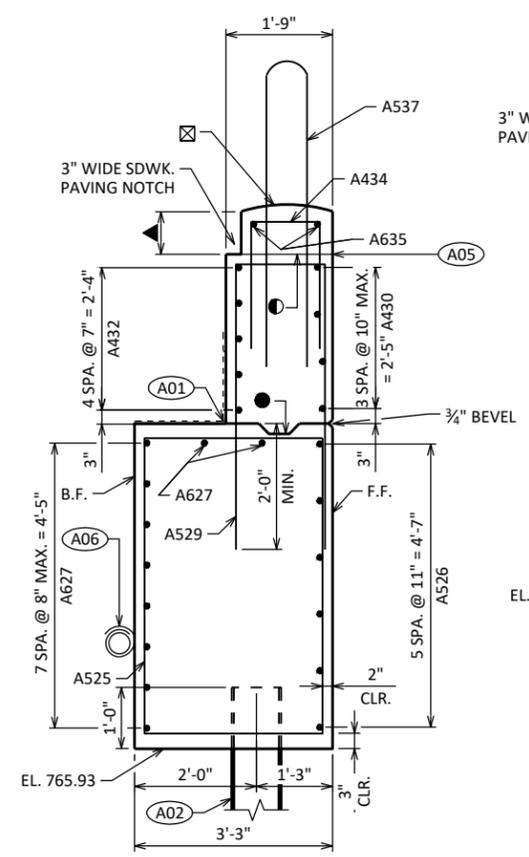


SECTION B

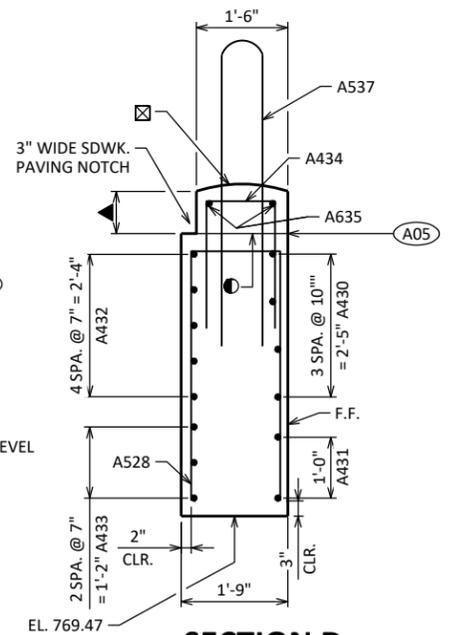


ELEVATION - WING 2

(LOOKING AT FRONT FACE)
PARAPET REINFORCEMENT EMBEDDED INTO WING NOT SHOWN FOR CLARITY



SECTION C



SECTION D

NOTES

- SEE SHEET 6 FOR W. ABUT. BILL OF BARS.
- SEE SHEET 2 FOR TYPICAL FILL SECTION AT WING TIPS
- SEE SHEET 14 FOR SECTIONS THRU PARAPET AND TRANSITION, AND FOR PARAPET REINFORCEMENT IN WING WALLS.
- CONCRETE POURED UNDERWATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE WISDOT STANDARD SPECIFICATIONS.
- DASHED BAR STEEL LINES SHOWN ON THIS SHEET INDICATE BACK FACE BARS.
- ABUTMENT BODY STEEL NOT SHOWN FOR CLARITY.
- PARAPET DETAILS AND REINFORCEMENT EMBEDDED INTO WINGS NOT SHOWN FOR CLARITY.
- FOR PILE SPLICE DETAIL SEE SHEET 6.
- PARAPETS NOT SHOWN FOR CLARITY.

LEGEND

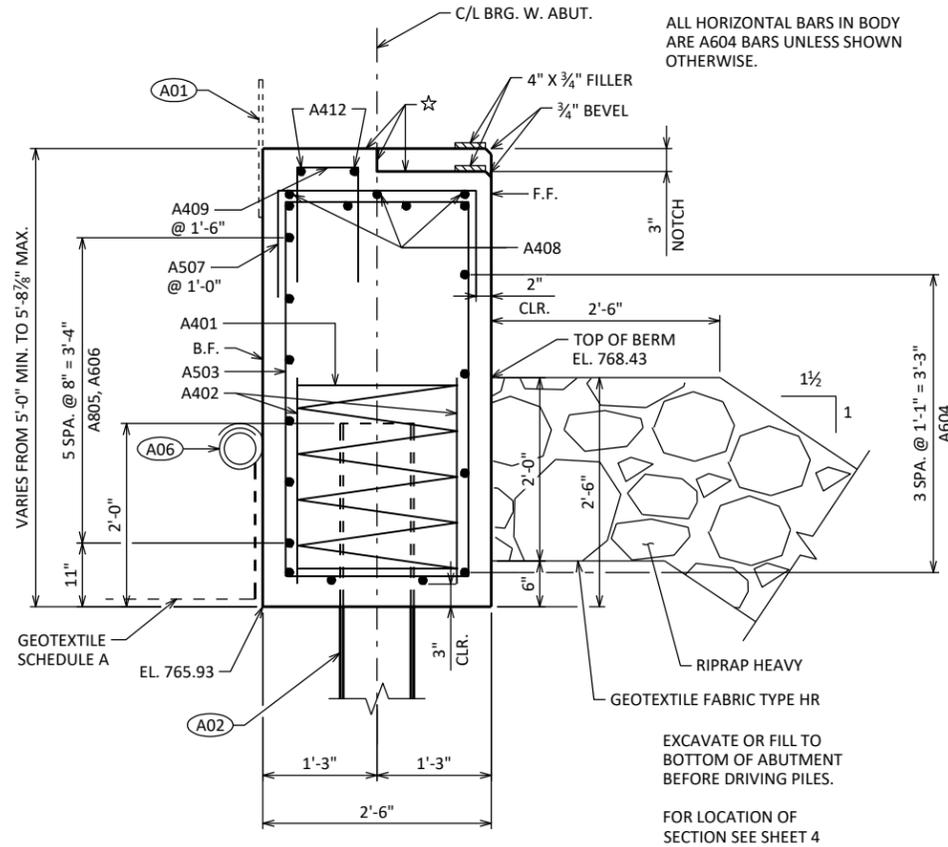
- ◀ MATCH SIDEWALK NOTCH DEPTH AT END OF BRIDGE DECK
- OPT. CONST. JT. LEAVE ROUGH. IF USED UTILIZE RUBBERIZED MEMBRANE WATERPROOFING (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES").
- ☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH
- OPT. KEYED CONST. JOINT - FORMED BY A SURFACE BEVELED 2" X 6" WITH MEMBRANE ON BACK FACE.
- B.F. DENOTES BACK FACE
- E.F. DENOTES EACH FACE
- F.F. DENOTES FRONT FACE
- (A01) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.
- (A02) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A05) 3/4" V-GROOVE ON FRONT FACE OF WINGWALL.
- (A06) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL. RODENT SHIELD TO BE INCIDENTAL TO "PIPE UNDERDRAIN WRAPPED (6-INCH)". KEEP ENDS OF PIPE UNDERDRAIN WRAPPED ABOVE NORMAL WATER ELEVATION.

NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY		PLANS CK'D	
BY RAC		CJM	
WEST ABUTMENT WING DETAILS			SHEET 5 OF 16

BILL OF BARS

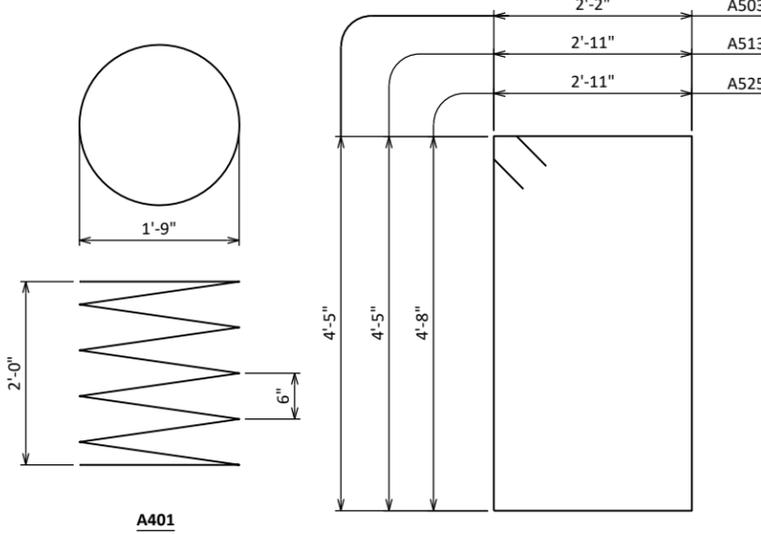
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		10	28'-0"	X		BODY @ PILES
A402		20	2'-3"			BODY @ PILES
A503		75	13'-10"	X		BODY VERT.
A604		22	32'-2"			BODY HORIZ.
A805		12	14'-11"	X		BODY HORIZ. @ WING B.F.
A606		12	21'-1"			BODY HORIZ. BETW. WINGS B.F.
A507		25	5'-1"	X		BODY VERT. TOP
A408		3	24'-4"			BODY HORIZ. TOP
A409		37	3'-3"	X		BODY VERT. TOP
A410		8	4'-6"	X		BODY VERT. TOP @ WINGS
A411		2	2'-9"			BODY HORIZ. TOP F.F. @ WINGS
A412		4	31'-8"			BODY HORIZ. TOP
A513	X	8	15'-4"	X		WING 1 VERT.
A514	X	6	9'-10"	X		WING 1 HORIZ. F.F.
A615	X	10	10'-1"	X		WING 1 HORIZ. B.F. & TOP
A516	X	9	8'-10"	X		WING 1 VERT.
A517	X	10	10'-10"	X		WING 1 VERT.
A418	X	4	13'-7"			WING 1 HORIZ. F.F.
A419	X	2	7'-10"			WING 1 HORIZ. F.F.
A420	X	5	13'-7"			WING 1 HORIZ. B.F.
A421	X	3	7'-9"			WING 1 HORIZ. B.F.
A422	X	19	5'-10"	X		WING 1 VERT.
A623	X	2	13'-7"			WING 1 HORIZ. E.F.
A424	X	3	4'-7"			BODY VERT. @ WING 1
A525	X	8	15'-10"	X		WING 2 VERT.
A526	X	6	9'-5"	X		WING 2 HORIZ. F.F.
A627	X	10	10'-2"	X		WING 2 HORIZ. B.F. & TOP
A528	X	9	9'-2"	X		WING 2 VERT.
A529	X	10	11'-6"	X		WING 2 VERT.
A430	X	4	13'-7"			WING 2 HORIZ. F.F.
A431	X	2	7'-10"			WING 2 HORIZ. F.F.
A432	X	5	13'-7"			WING 2 HORIZ. B.F.
A433	X	3	7'-10"			WING 2 HORIZ. B.F.
A434	X	19	5'-2"	X		WING 2 VERT.
A635	X	2	13'-7"			WING 2 HORIZ. E.F.
A436	X	3	4'-10"			BODY VERT. @ WING 2
A537	X	44	10'-4"	X		PARAPETS VERT.
A538	X	16	13'-7"			PARAPET HORIZ.



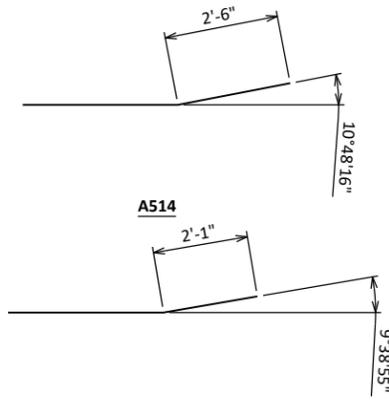
SECTION A

DIMENSIONS ARE NORMAL TO C/L BRG.



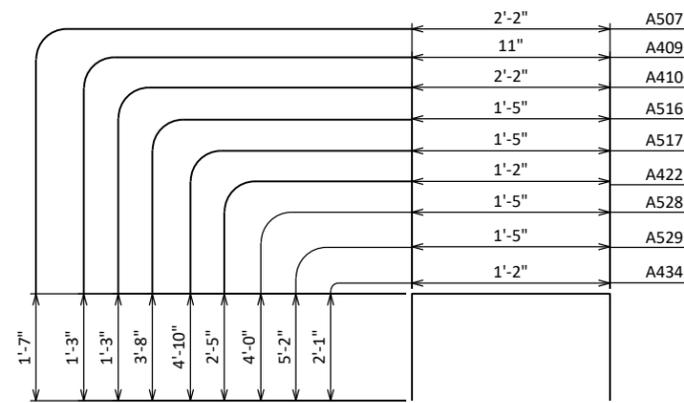
A401

A503, A513, A525



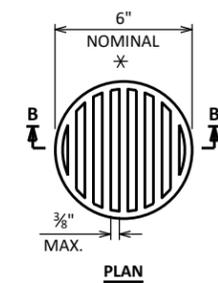
A514

A526



A507, A409, A410, A516, A517, A422, A528, A529, A434

BENDING DIMENSIONS ARE OUT TO OUT OF BARS



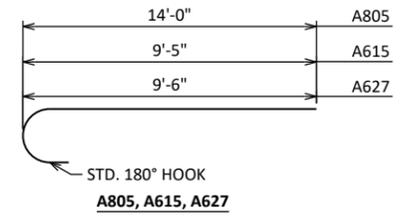
RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

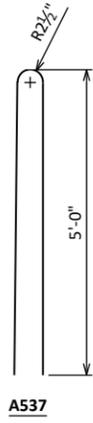
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

SECTION B-B



A805, A615, A627



A537

LEGEND

☆ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING FILLER AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03"

FOR PILE SPlice DETAIL SEE SHEET 6.

B.F. DENOTES BACK FACE

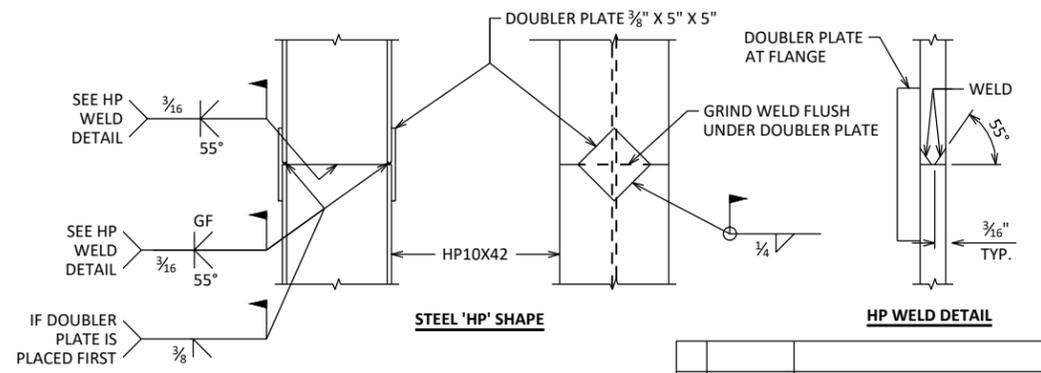
E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

(A01) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.

(A02) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

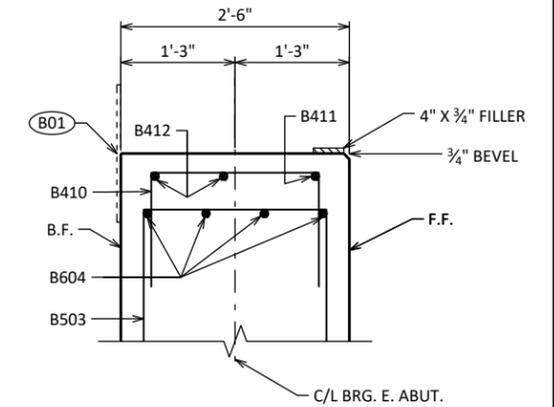
(A06) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL. RODENT SHIELD TO BE INCIDENTAL TO "PIPE UNDERDRAIN WRAPPED (6-INCH)". KEEP ENDS OF PIPE UNDERDRAIN WRAPPED ABOVE NORMAL WATER ELEVATION.



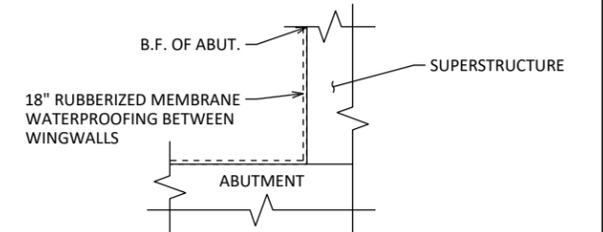
'HP' PILE DETAILS

NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
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DRAWN BY RAC		PLANS CK'D CJM	
WEST ABUTMENT BILL OF BARS		SHEET 6 OF 16	

NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 3/8" BELOW SURFACE OF CONCRETE).



SECTION B



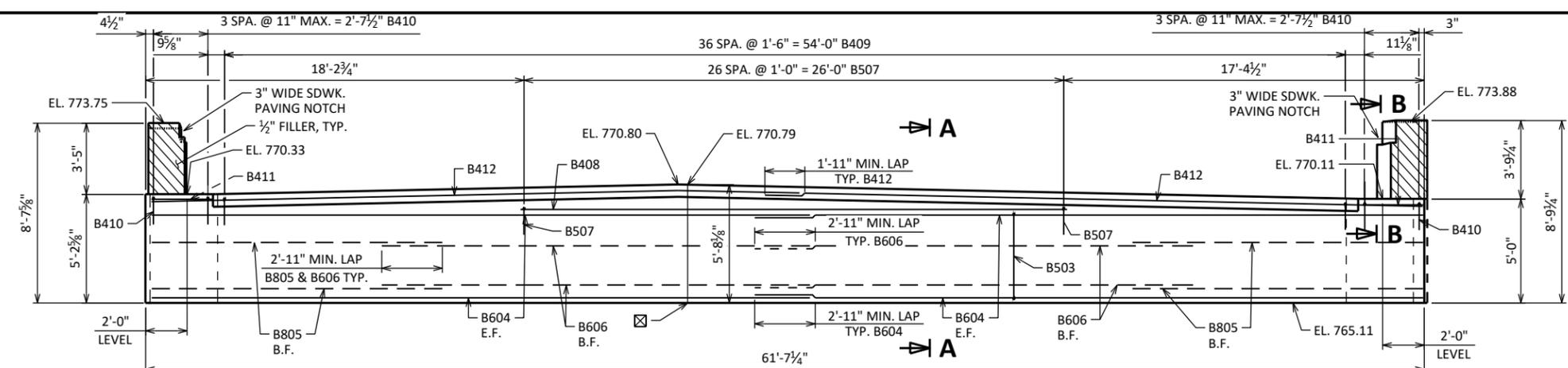
SECTION H

LEGEND

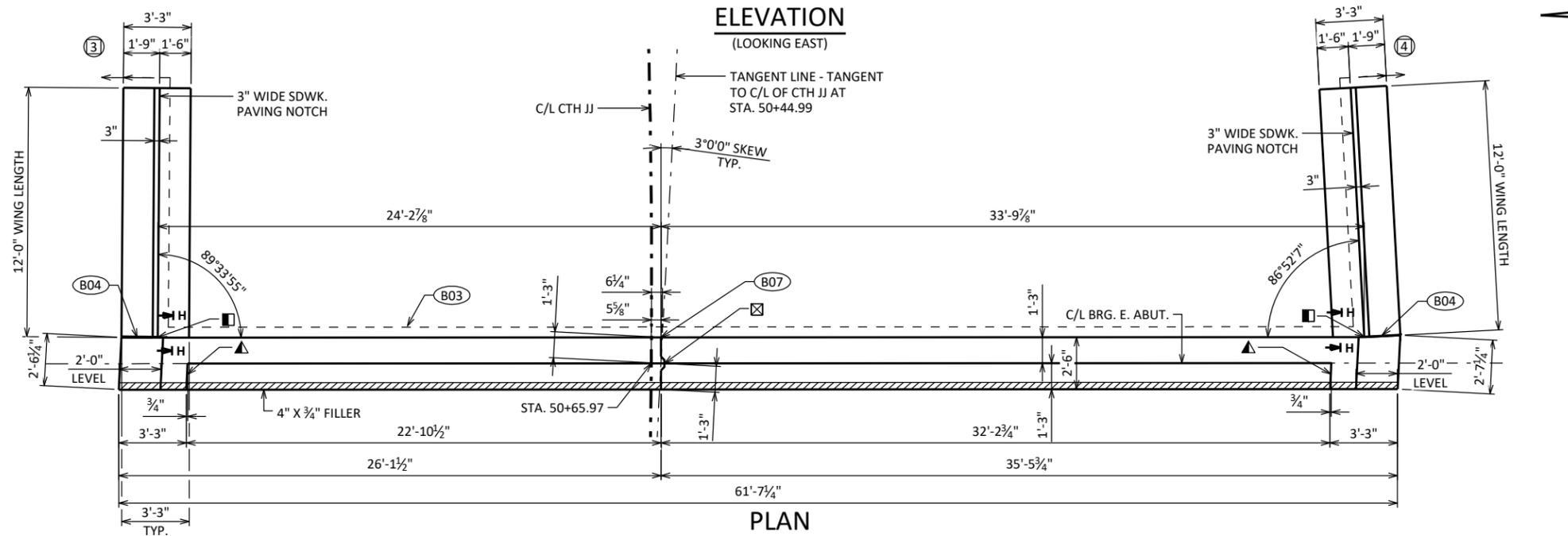
- ☒ VERT. CONST. JT. - KEYWAY FORMED BY A BEVELED 2" X 8". BEVEL EXPOSED EDGES 3/4". CLEAR PILES BY 9" MIN. FOR ALTERNATE CONST. JT. DETAILS SEE SHEET 16. SEAL JOINT AT BACK FACE WITH 18" RUBBERIZED MEMBRANE WATERPROOFING. IF OPTIONAL CONSTRUCTION IS USED, COMPLETE CONCRETE POUR ON NORTH SIDE OF ABUTMENT FIRST, THEN COMPLETE CONCRETE POUR ON SOUTH SIDE OF ABUTMENT SECOND.
 - ▲ 3/4" CORK FILLER ON VERTICAL FACE ONLY.
 - VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL
- FOR PILE SPLICE DETAIL SEE SHEET 6.
- B.F. DENOTES BACK FACE
 - E.F. DENOTES EACH FACE
 - F.F. DENOTES FRONT FACE
- (B01) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.
 - (B02) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
 - (B03) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL.
 - (B04) 1/2" FILLER. EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL. FILLER INCLUDED IN WING LENGTH.
 - (B07) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL OPTIONAL CONST. JOINT IF USED.

FOR SECTION A SEE SHEET 9

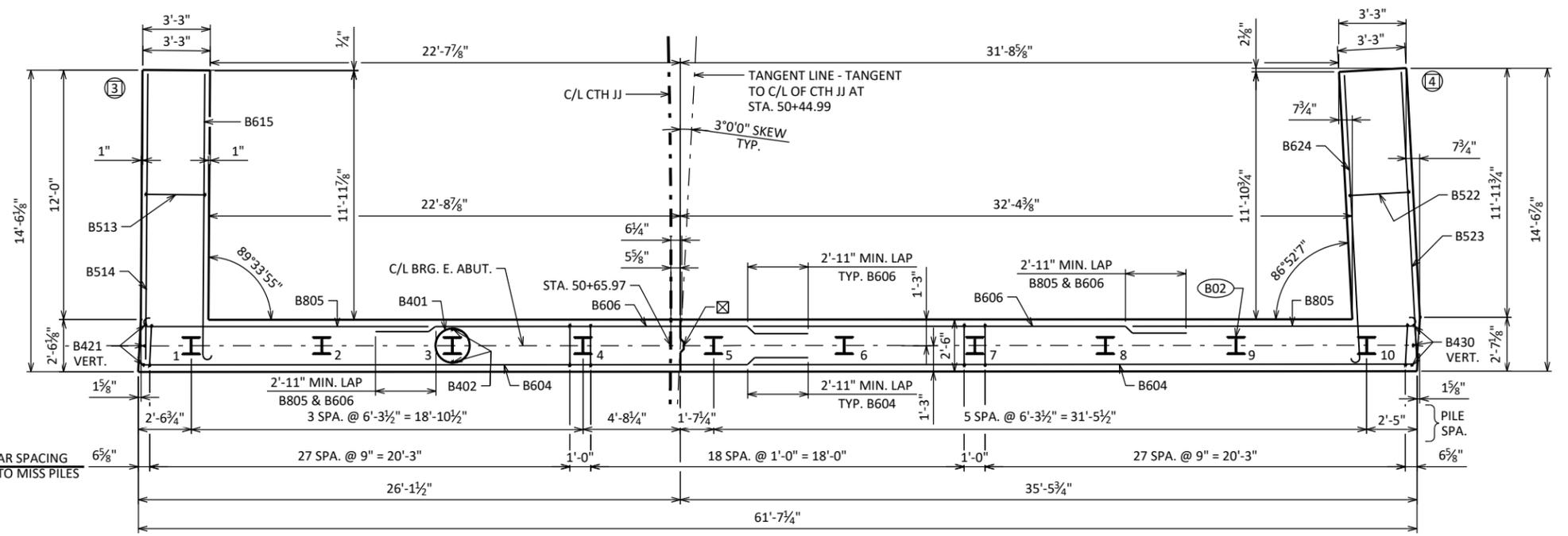
NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
EAST ABUTMENT			SHEET 7 OF 16



ELEVATION (LOOKING EAST)



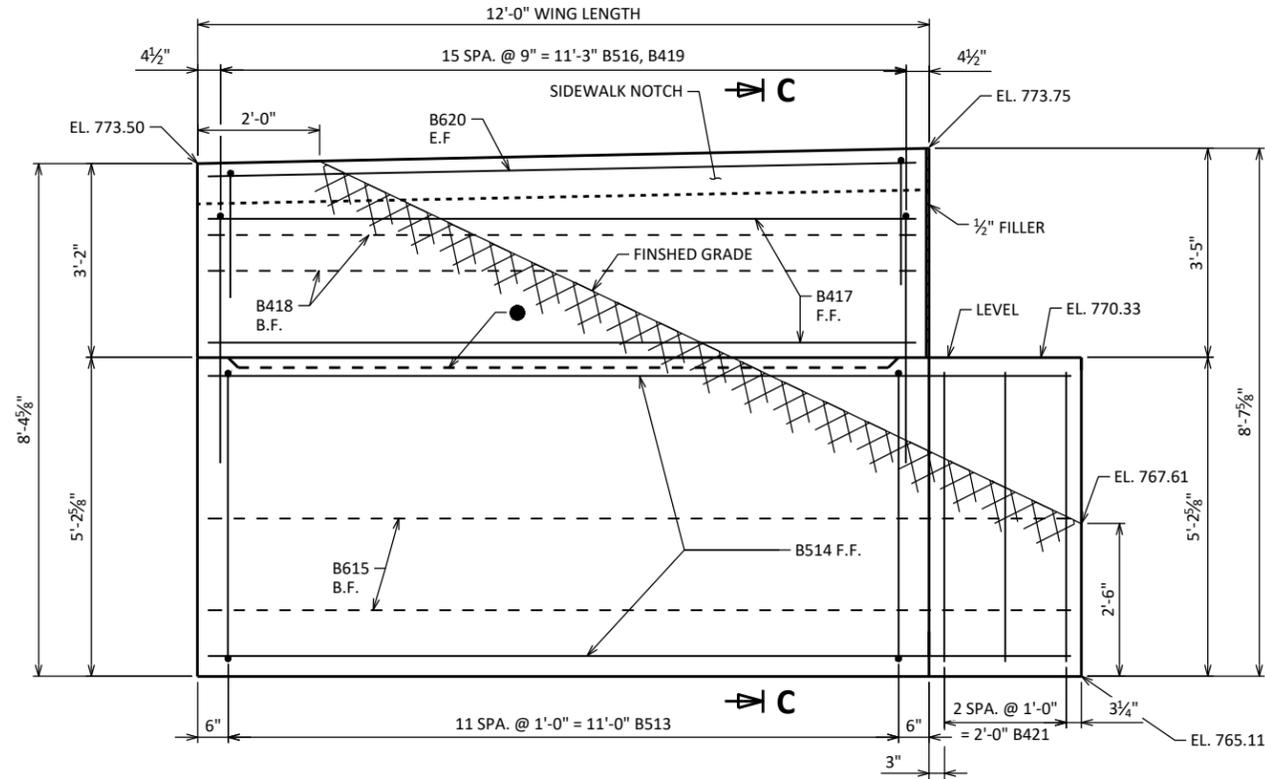
PLAN



PILE LAYOUT

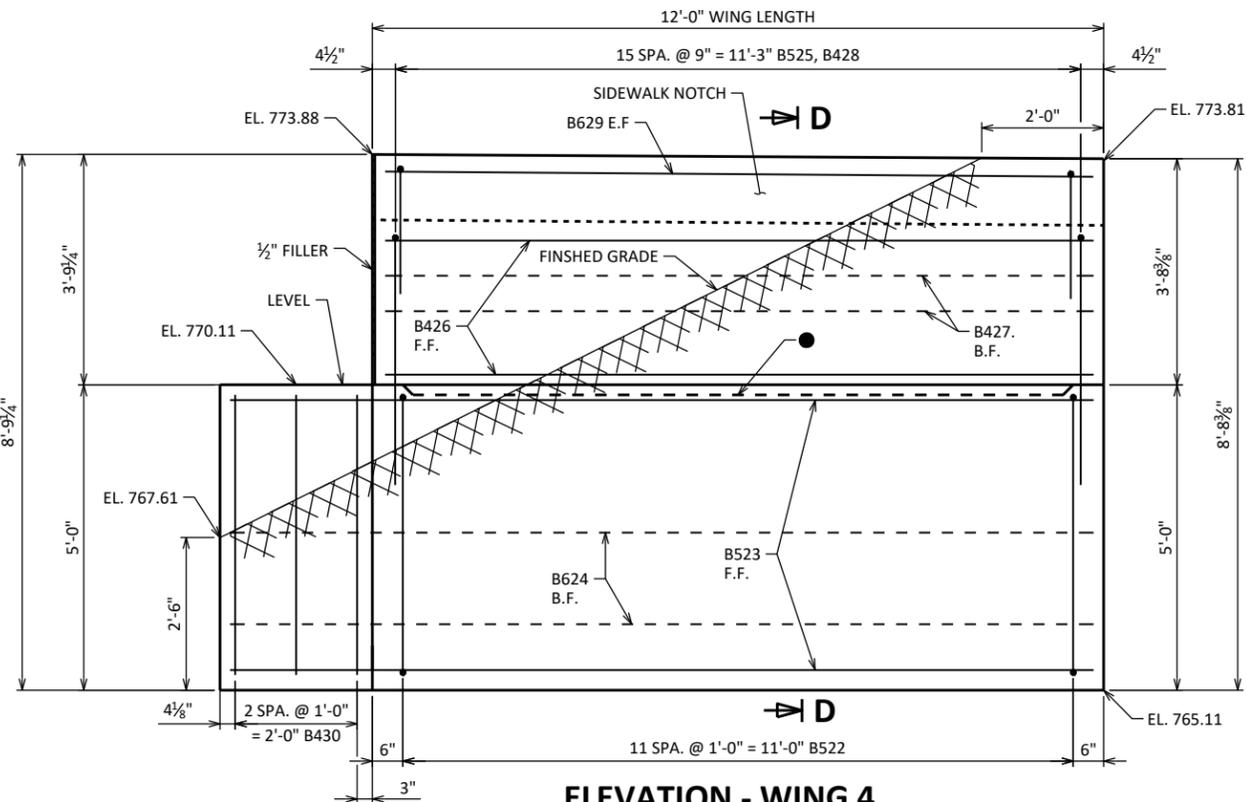
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8



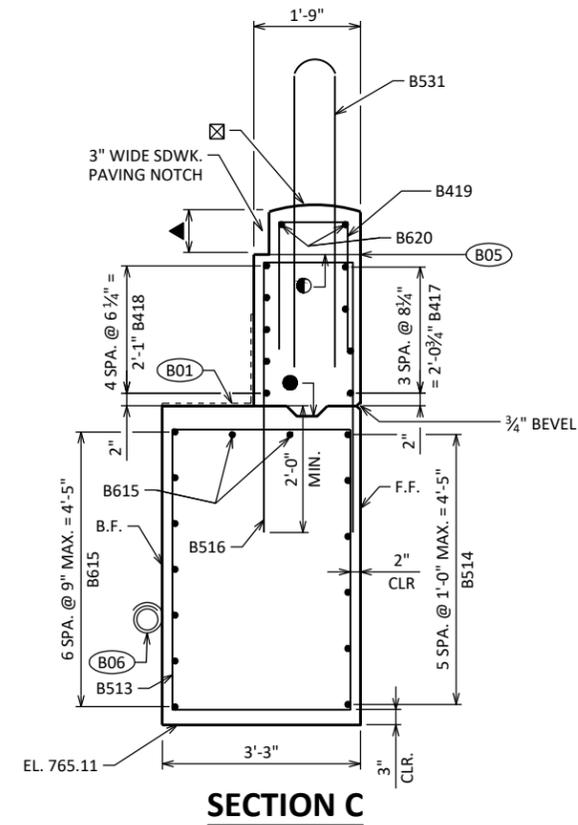
ELEVATION - WING 3

(LOOKING AT FRONT FACE)
 PARAPET REINFORCEMENT EMBEDDED INTO WING NOT SHOWN FOR CLARITY

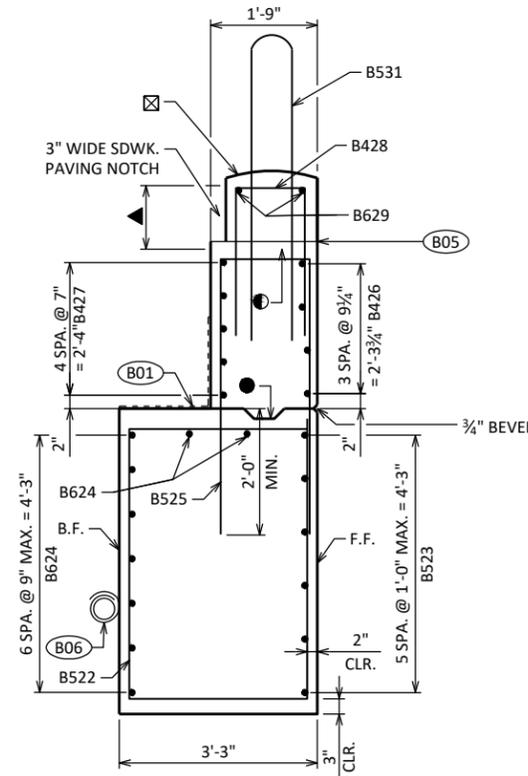


ELEVATION - WING 4

(LOOKING AT FRONT FACE)
 PARAPET REINFORCEMENT EMBEDDED INTO WING NOT SHOWN FOR CLARITY



SECTION C



SECTION D

NOTES

- SEE SHEET 9 FOR E. ABUT. BILL OF BARS.
- SEE SHEET 2 FOR TYPICAL FILL SECTION AT WING TIPS
- SEE SHEET 14 FOR SECTIONS THRU PARAPET AND TRANSITION, AND FOR PARAPET REINFORCEMENT IN WING WALLS.
- CONCRETE POURED UNDERWATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE WISDOT STANDARD SPECIFICATIONS.
- DASHED BAR STEEL LINES SHOWN ON THIS SHEET INDICATE BACK FACE BARS.
- ABUTMENT BODY STEEL NOT SHOWN FOR CLARITY.
- PARAPET DETAILS AND REINFORCEMENT EMBEDDED INTO WINGS NOT SHOWN FOR CLARITY.
- FOR PILE SPLICE DETAIL SEE SHEET 6.
- PARAPETS NOT SHOWN FOR CLARITY.

LEGEND

- ☒ MATCH SIDEWALK NOTCH DEPTH AT END OF BRIDGE DECK
- OPT. CONST. JT. LEAVE ROUGH. IF USED UTILIZE RUBBERIZED MEMBRANE WATERPROOFING (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES").
- ☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH
- OPT. KEYED CONST. JOINT - FORMED BY A SURFACE BEVELED 2" X 6" WITH MEMBRANE ON BACK FACE.
- B.F. DENOTES BACK FACE
- E.F. DENOTES EACH FACE
- F.F. DENOTES FRONT FACE
- B01 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.
- B05 3/4" V-GROOVE ON FRONT FACE OF WINGWALL.
- B06 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL. RODENT SHIELD TO BE INCIDENTAL TO "PIPE UNDERDRAIN WRAPPED (6-INCH)". KEEP ENDS OF PIPE UNDERDRAIN WRAPPED ABOVE NORMAL WATER ELEVATION.

8

8

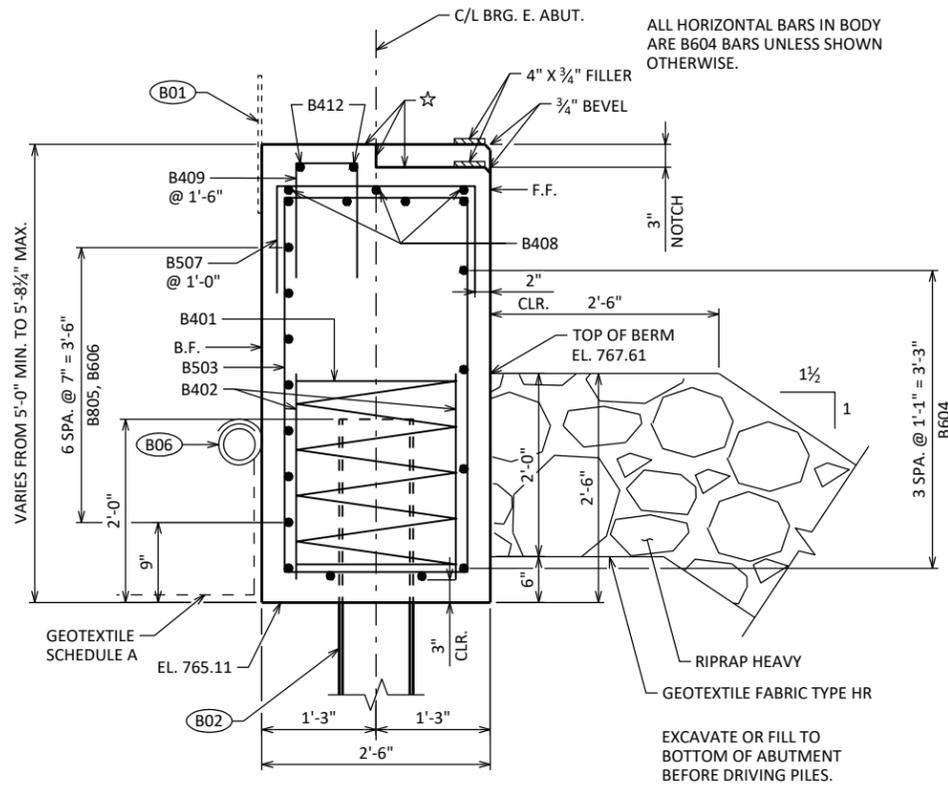
NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
EAST ABUTMENT WING DETAILS			SHEET 8 OF 16

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		10	28'-0"	X		BODY @ PILES
B402		20	2'-3"			BODY @ PILES
B503		75	13'-10"	X		BODY VERT.
B604		22	32'-2"			BODY HORIZ.
B805		14	12'-11"	X		BODY HORIZ. @ WING B.F.
B606		14	23'-1"			BODY HORIZ. BETW. WINGS B.F.
B507		27	5'-1"	X		BODY VERT. TOP
B408		3	26'-4"			BODY HORIZ. TOP
B409		37	3'-3"	X		BODY VERT. TOP
B410		8	4'-6"	X		BODY VERT. TOP @ WINGS
B411		2	2'-9"			BODY HORIZ. TOP F.F. @ WINGS
B412		4	31'-8"			BODY HORIZ. TOP
B513	X	12	15'-8"	X		WING 3 VERT.
B514	X	6	14'-2"	X		WING 3 HORIZ. F.F.
B615	X	9	14'-9"	X		WING 3 HORIZ. B.F. & TOP
B516	X	16	10'-4"	X		WING 3 VERT.
B417	X	4	11'-7"			WING 3 HORIZ. F.F.
B418	X	5	11'-7"			WING 3 HORIZ. B.F.
B419	X	16	5'-6"	X		WING 3 VERT.
B620	X	2	11'-7"			WING 3 HORIZ. E.F.
B421	X	3	4'-9"			BODY VERT. @ WING 3
B522	X	12	15'-4"	X		WING 4 VERT.
B523	X	6	14'-2"	X		WING 4 HORIZ. F.F.
B624	X	9	14'-7"	X		WING 4 HORIZ. B.F. & TOP
B525	X	16	10'-2"	X		WING 4 VERT.
B426	X	4	11'-7"			WING 4 HORIZ. F.F.
B427	X	5	11'-7"			WING 4 HORIZ. B.F.
B428	X	16	6'-2"	X		WING 4 VERT.
B629	X	2	11'-7"			WING 4 HORIZ. E.F.
B430	X	3	4'-7"			BODY VERT. @ WING 4
B531	X	40	10'-4"	X		PARAPETS VERT.
B532	X	16	11'-7"			PARAPET HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS



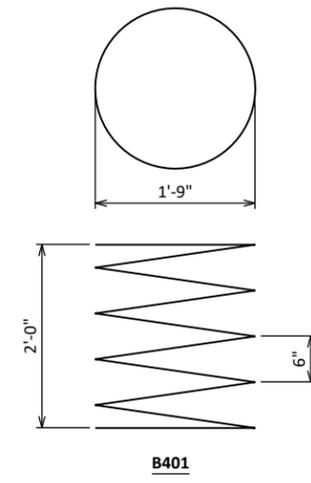
SECTION A

DIMENSIONS ARE NORMAL TO C/L BRG.

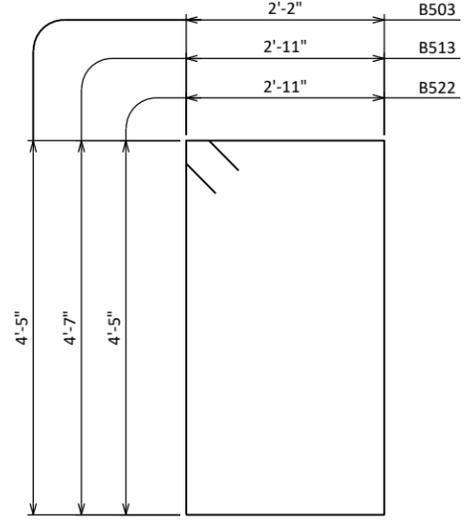
ALL HORIZONTAL BARS IN BODY ARE B604 BARS UNLESS SHOWN OTHERWISE.

EXCAVATE OR FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILES.

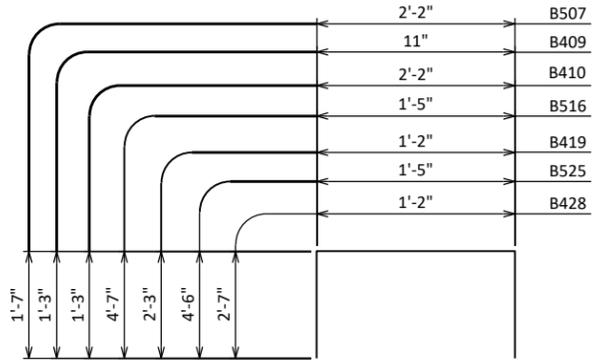
FOR LOCATION OF SECTION SEE SHEET 7



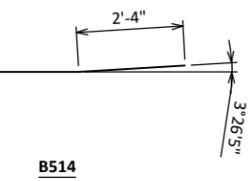
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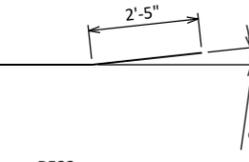
B503, B513, B522



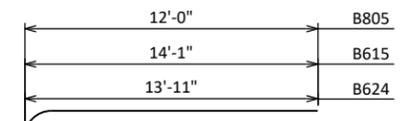
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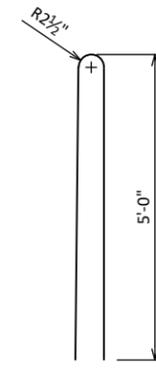
B514



B523



B805, B615, B624



B531

LEGEND

☆ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING FILLER AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03"

FOR PILE SPLICE DETAIL SEE SHEET 6.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

(B01) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACK FACE.

(B02) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING. ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(B06) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED. SEE SHEET 6 FOR RODENT SHIELD DETAIL. RODENT SHIELD TO BE INCIDENTAL TO "PIPE UNDERDRAIN WRAPPED (6-INCH)". KEEP ENDS OF PIPE UNDERDRAIN WRAPPED ABOVE NORMAL WATER ELEVATION.

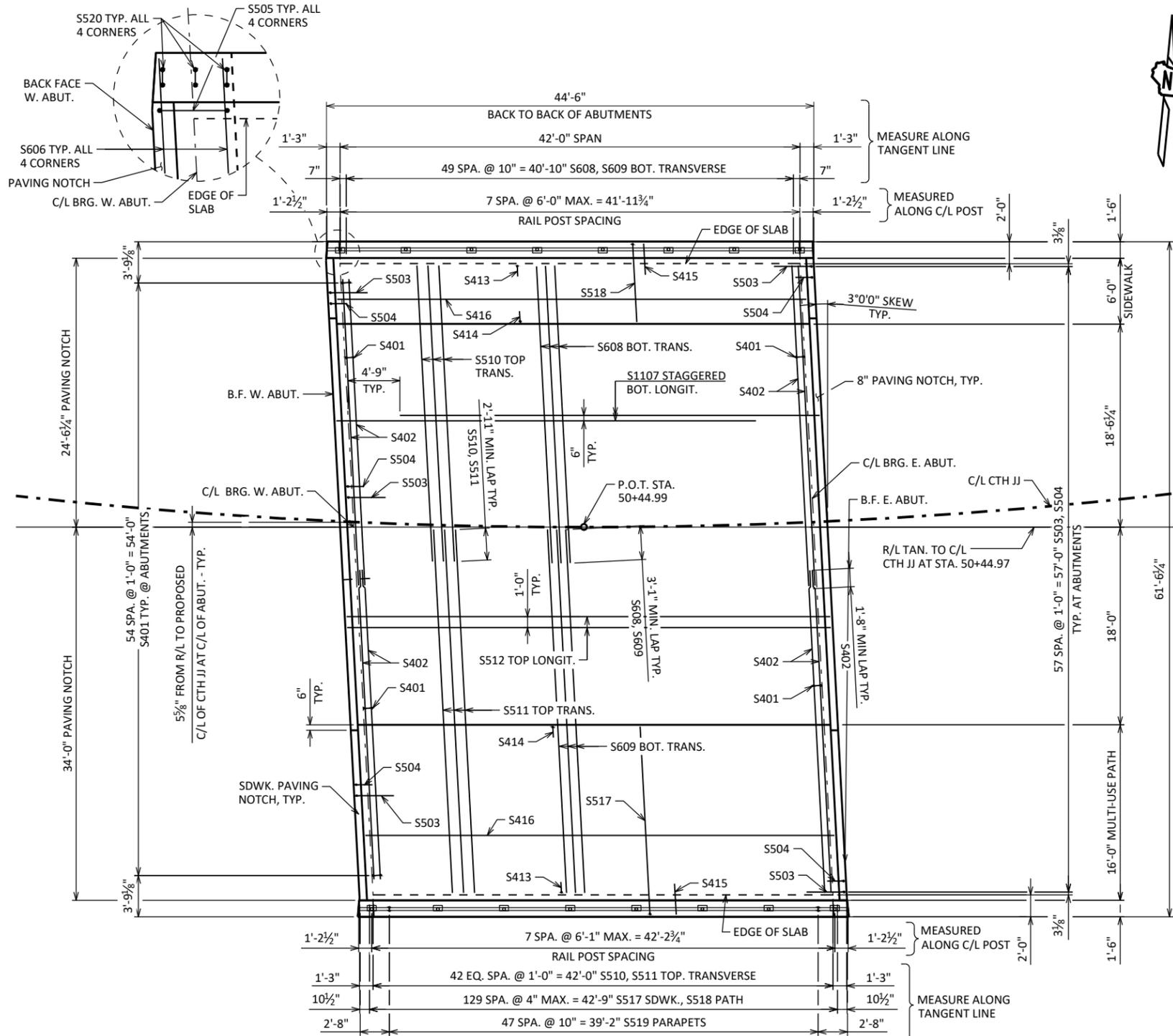
NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
EAST ABUTMENT BILL OF BARS			SHEET 9 OF 16

BILL OF BARS

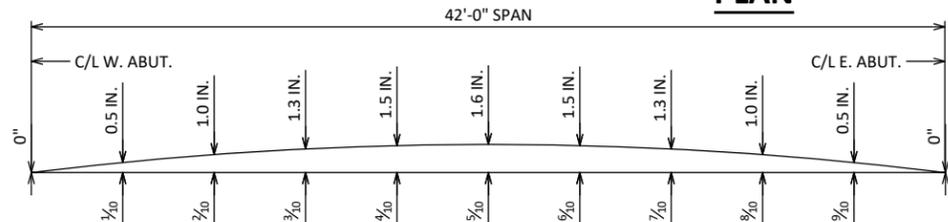
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	110	3'-3"	X		SLAB @ ABUT. NOTCH
S402	X	8	28'-2"			SLAB @ ABUT. NOTCH HORIZ.
S503	X	116	7'-7"	X		SLAB @ ABUT. @ RDWY.
S504	X	116	3'-9"	X		SLAB @ ABUT. @ RDWY.
S505	X	12	9'-10"	X		SLAB @ ABUT. @ SDWK.
S606	X	24	5'-4"			SLAB @ ABUT. @ SDWK. HORIZ.
S1107	X	115	38'-4"			SLAB LONG. BOT.
S608	X	58	27'-0"			SLAB TRANS. BOT.
S609	X	58	33'-4"			SLAB TRANS. BOT.
S510	X	45	26'-10"			SLAB TRANS. TOP
S511	X	45	33'-4"			SLAB TRANS. TOP
S512	X	58	42'-10"			SLAB LONGIT. TOP
S413	X	174	3'-11"	X		SLAB @ SDWK.
S414	X	174	3'-9"	X		SLAB @ SDWK.
S415	X	60	2'-10"			SDWK. TRANS. BOT.
S416	X	40	42'-10"			SDWK. LONG. BOT. & TOP
S517	X	130	17'-9"	X		SDWK. TRANS. TOP
S518	X	130	7'-9"	X		SDWK. TRANS. TOP
S519	X	96	6'-9"	X		SDWK. @ PARAPET VERT.
S520	X	12	11'-8"	X		SDWK. @ PARAPET VERT.
S521	X	16	43'-10"			SDWK. @ PARAPET HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PLAN

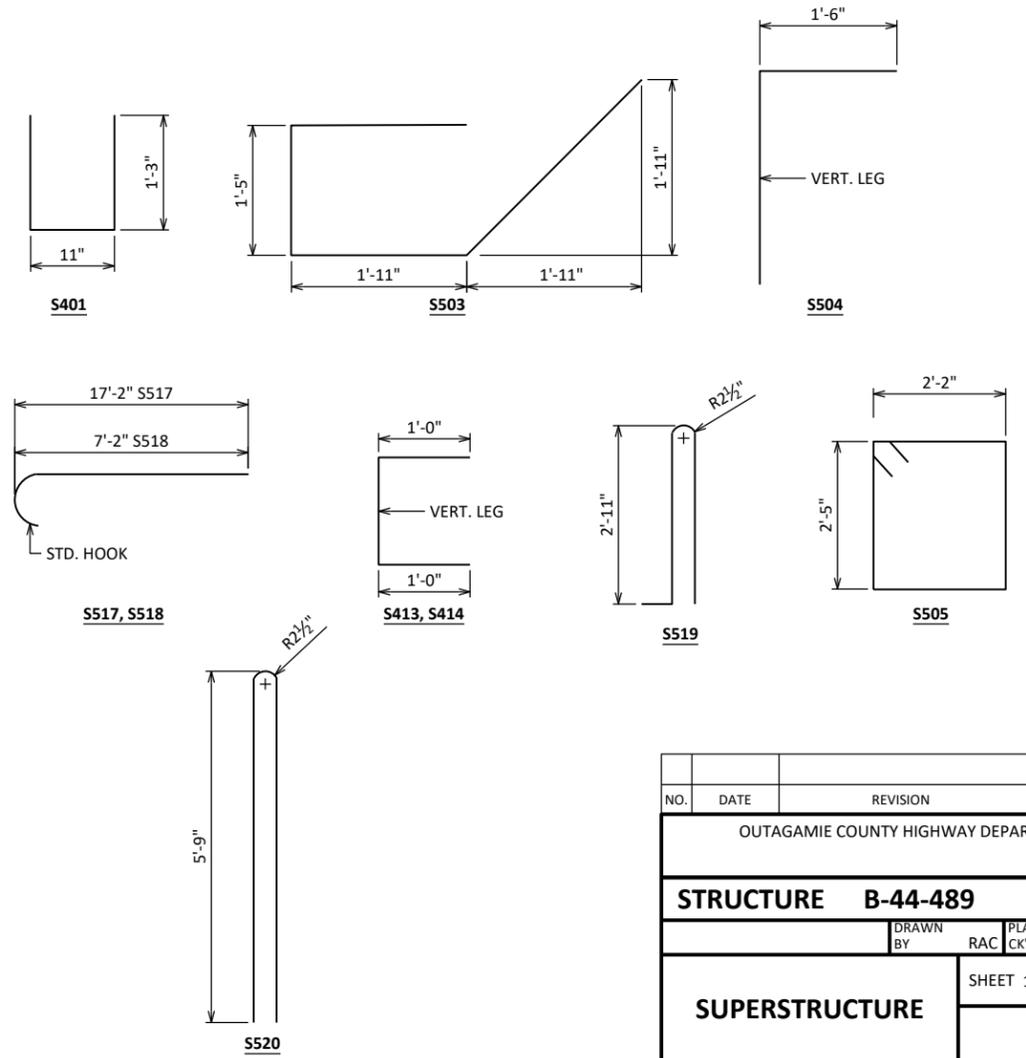


CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

SLAB SUPPORTED FALSEWORK SHALL REMAIN IN-PLACE UNTIL ALL STAGES OF THE SUPERSTRUCTURE HAS CURED, FOR DEFLECTION CONTROL BETWEEN STAGES. DO NOT RELEASE ANY FALSEWORK UNTIL PARAPETS, SIDEWALKS, AND MEDIANS HAVE CURED.

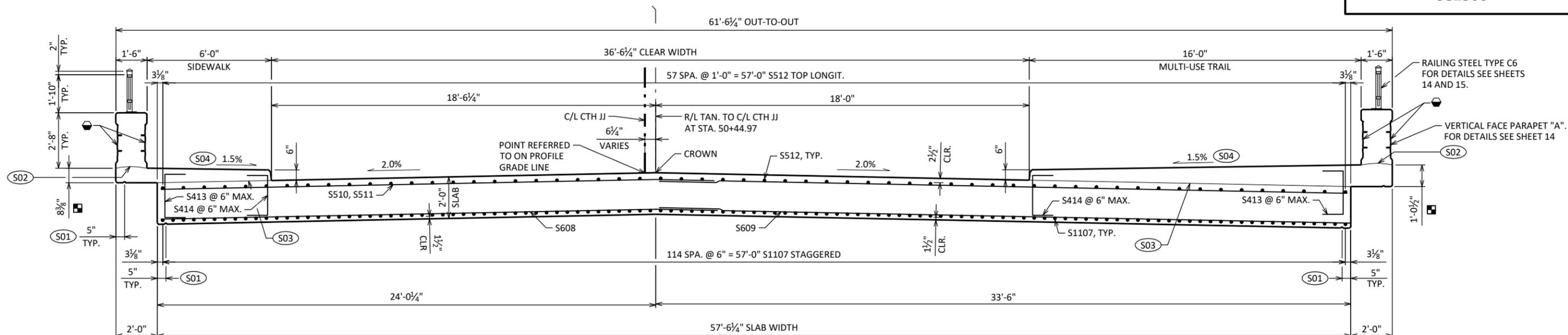


NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
SUPERSTRUCTURE			SHEET 10 OF 16

NOTE: SIDEWALK AND PARAPET BAR STEEL OMITTED FOR CLARITY, SEE SHEETS 12, 13, AND 14 FOR DETAILS.

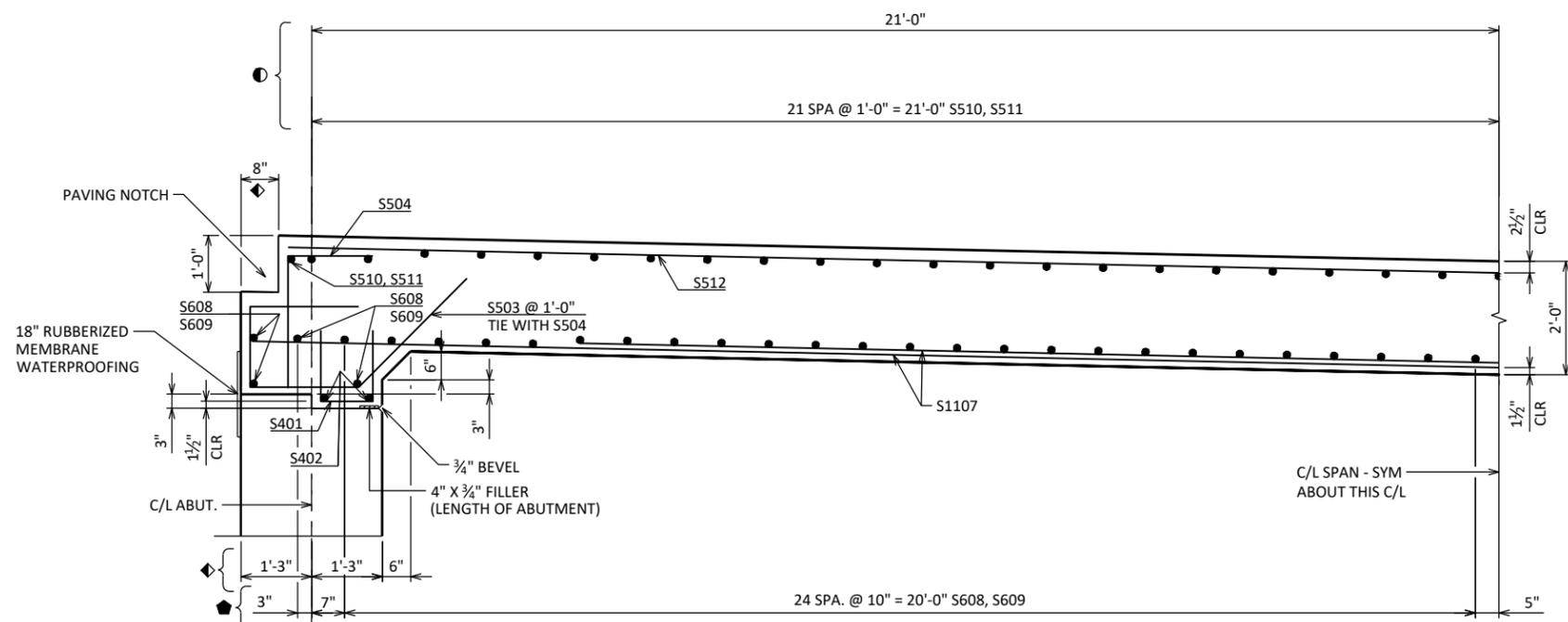
PROJECT NUMBER

582500



TYPICAL SECTION THRU BRIDGE

LOOKING EAST



PART LONGITUDINAL SECTION

LEGEND

- S01 3/4" "V" GROOVE REQUIRED. EXTEND TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.
- S02 CONST. JOINT. STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- S03 CONST. JOINT. STRIKE OFF AND LEAVE ROUGH. MATCH ROADWAY CROSS SLOPE.
- S04 ± 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER
- 8" MIN. SIDEWALK THICKNESS ALSO REQ'D AT EDGE OF SLAB
- ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING MULTI-COLOR, FOR DETAILS SEE SHEET 16

- ◆ DIMENSION MEASURED NORMAL TO C/L OF SUBSTRUCTURE
- ◆ DIMENSIONS MEASURED ALONG TANGENT LINE

NOTES

- TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAINS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.
- ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).
- SLAB-SUPPORTING FALSEWORK SHALL REMAIN IN-PLACE UNTIL ALL STAGES OF THE SUPERSTRUCTURE HAS CURED, FOR DEFLECTION CONTROL BETWEEN STAGES. DO NOT RELEASE ANY FALSEWORK UNTIL PARAPETS, SIDEWALKS, AND MEDIANS HAVE CURED.
- CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
- PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 1/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD ELEVATIONS ON AS BUILT PLANS.

TOP OF DECK ELEVATIONS

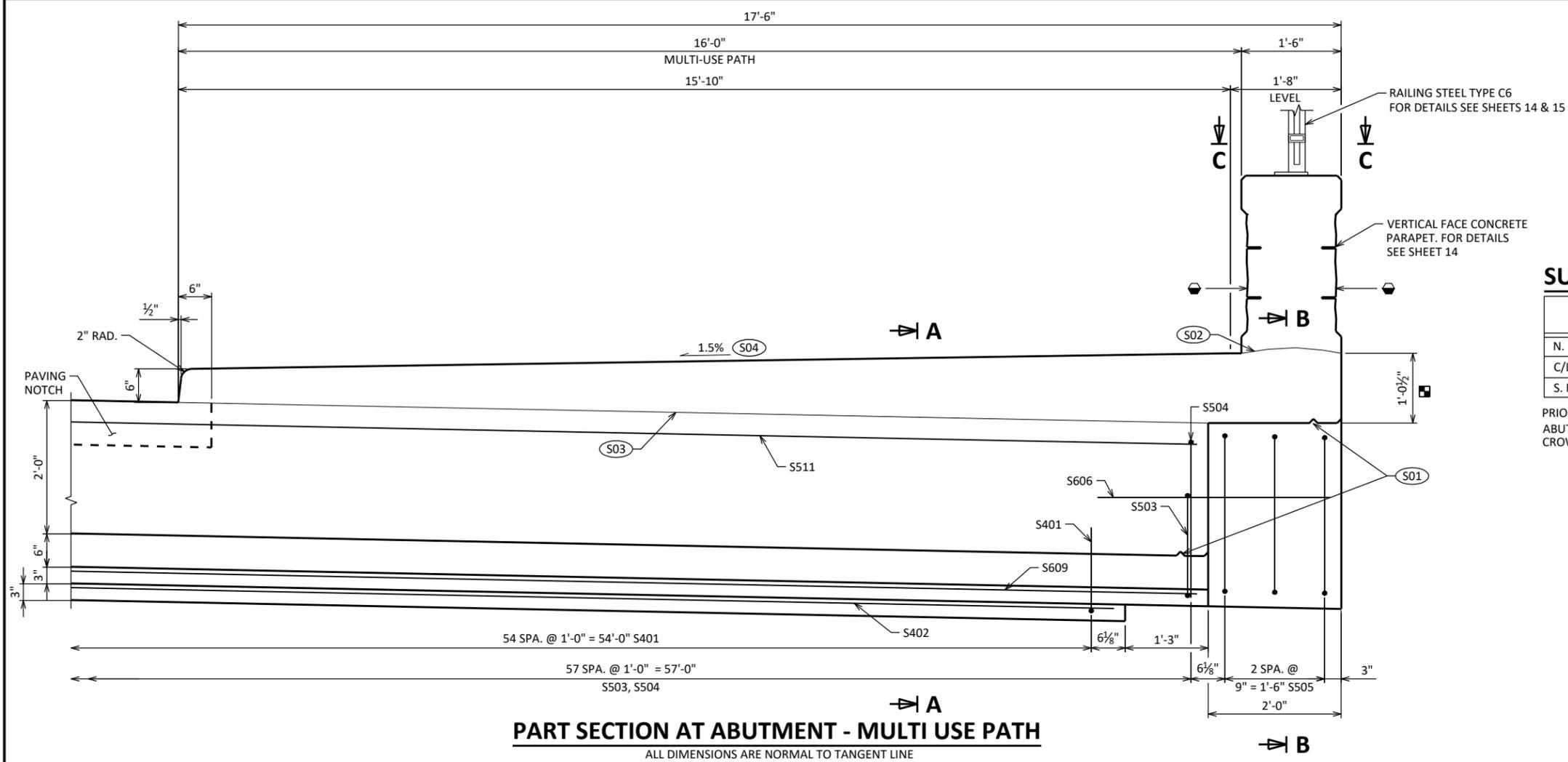
LOCATION	C/L BRG. W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. E. ABUT.
N. PARAPET	774.69	774.60	774.50	774.41	774.32	774.23	774.13	774.04	773.95	773.87	773.78
N. EDGE OF SLAB	774.00	773.90	773.81	773.71	773.62	773.53	773.44	773.35	773.26	773.17	773.08
N. FLOWLINE	774.09	774.00	773.91	773.81	773.72	773.63	773.54	773.45	773.36	773.28	773.19
C/L CTH JJ	774.42	774.33	774.24	774.15	774.07	773.98	773.89	773.81	773.72	773.63	773.55
TANGENT LINE	774.41	774.32	774.24	774.15	774.07	773.98	773.89	773.81	773.72	773.63	773.54
S. FLOWLINE	774.01	773.93	773.85	773.77	773.69	773.60	773.52	773.43	773.35	773.26	773.17
S. EDGE OF SLAB	773.68	773.60	773.52	773.44	773.36	773.28	773.20	773.11	773.03	772.95	772.86
S. PARAPET	774.72	774.64	774.57	774.49	774.41	774.32	774.24	774.16	774.08	773.99	773.91

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

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SUPERSTRUCTURE DETAILS			SHEET 11 OF 16

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PART SECTION AT ABUTMENT - MULTI USE PATH

ALL DIMENSIONS ARE NORMAL TO TANGENT LINE

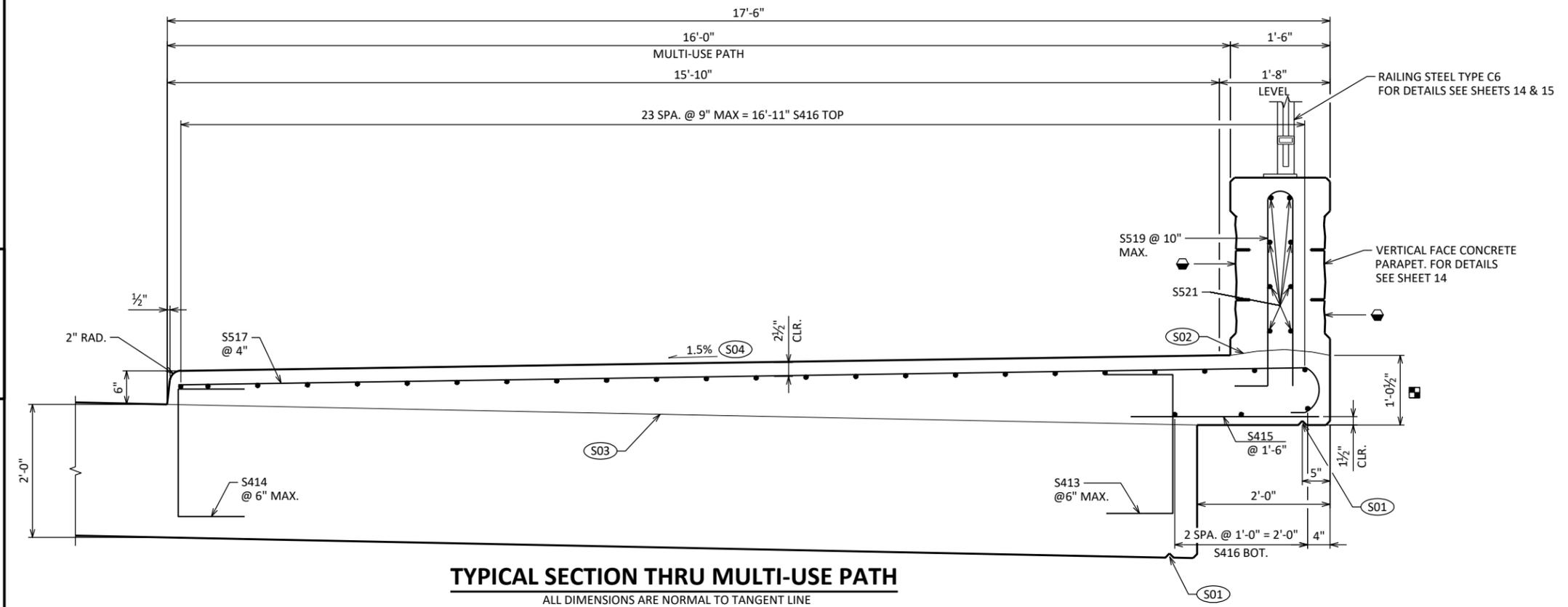
SURVEY TOP OF SLAB ELEVATIONS

LOCATION	W. ABUT.	5/10 PT.	E. ABUT.
N. EDGE OF SLAB			
C/L CTH JJ			
S. EDGE OF SLAB			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF DECK AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

LEGEND

- (S01) 3/4" "V" GROOVE REQUIRED. EXTEND TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.
- (S02) CONST. JOINT. STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- (S03) CONST. JOINT. STRIKE OFF AND LEAVE ROUGH. MATCH ROADWAY CROSS SLOPE.
- (S04) ± 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER
- 8" MIN. SIDEWALK THICKNESS ALSO REQ'D AT EDGE OF SLAB
- ◐ ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING MULTI COLOR. FOR DETAILS SEE SHEET 16

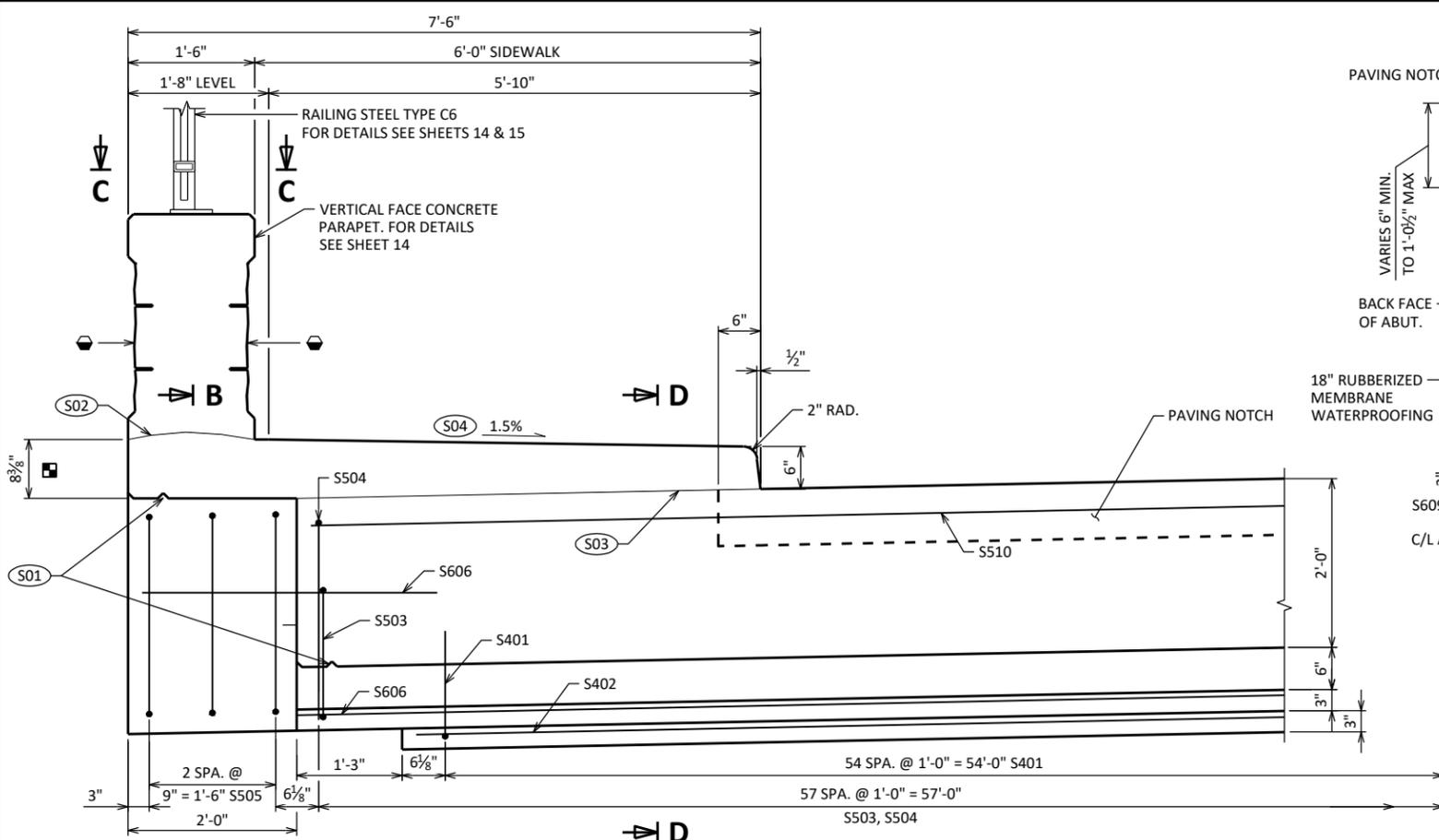


TYPICAL SECTION THRU MULTI-USE PATH

ALL DIMENSIONS ARE NORMAL TO TANGENT LINE

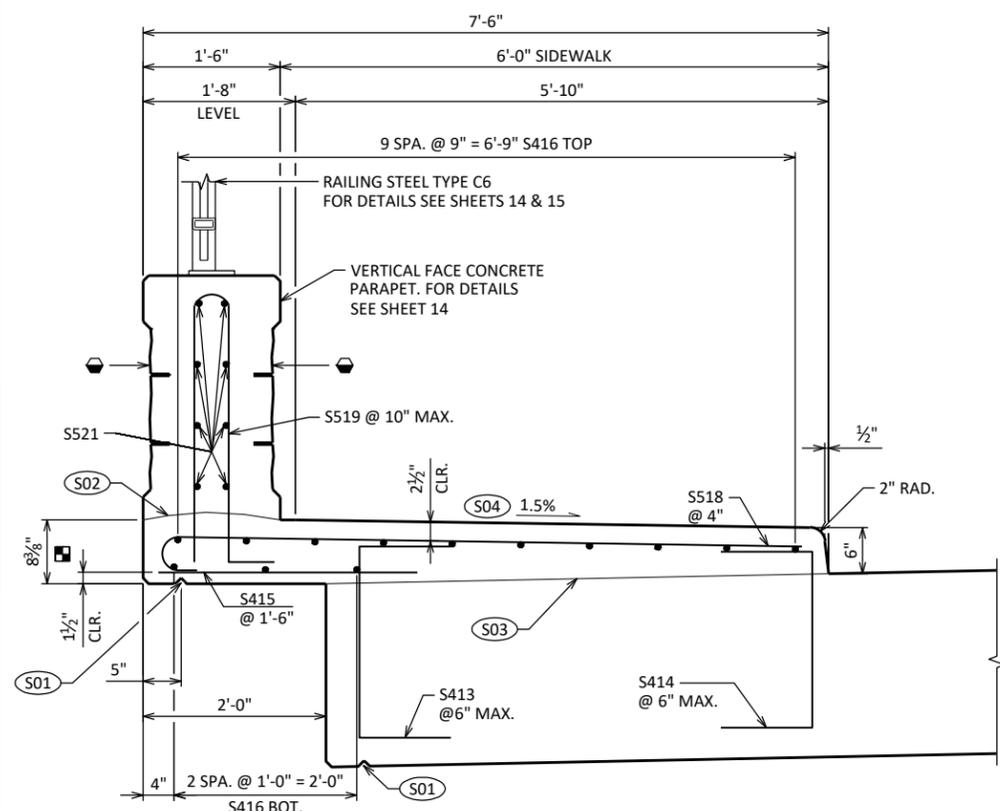
FOR DETAILS OF SECTION A, B, & C, SEE SHEET 13.

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SUPERSTRUCTURE MULTI-USE PATH DETAILS			SHEET 12 OF 16



PART SECTION AT ABUTMENT - SIDEWALK

ALL DIMENSIONS ARE NORMAL TO TANGENT LINE

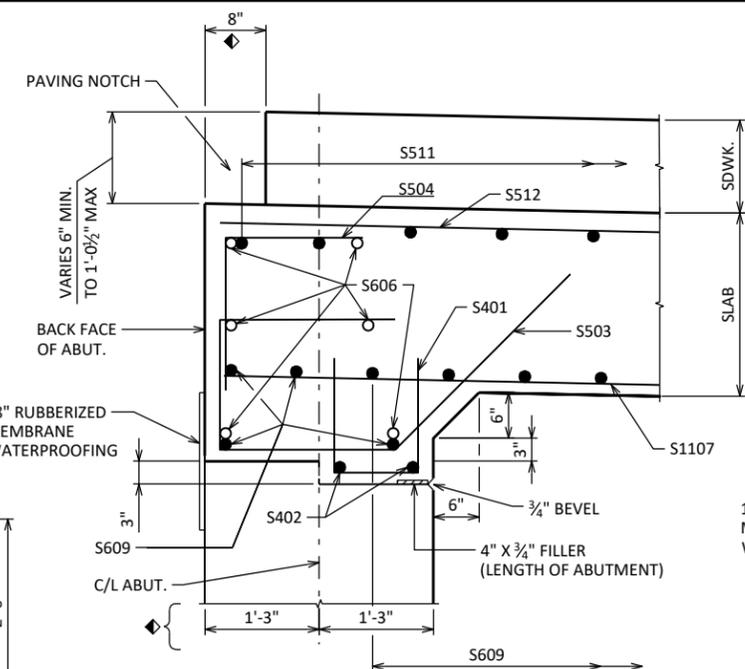


TYPICAL SECTION THRU SIDEWALK

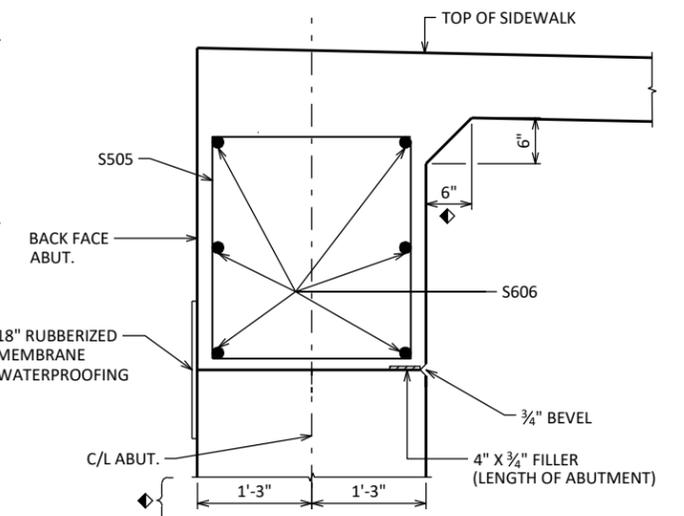
ALL DIMENSIONS ARE NORMAL TO TANGENT LINE

LEGEND

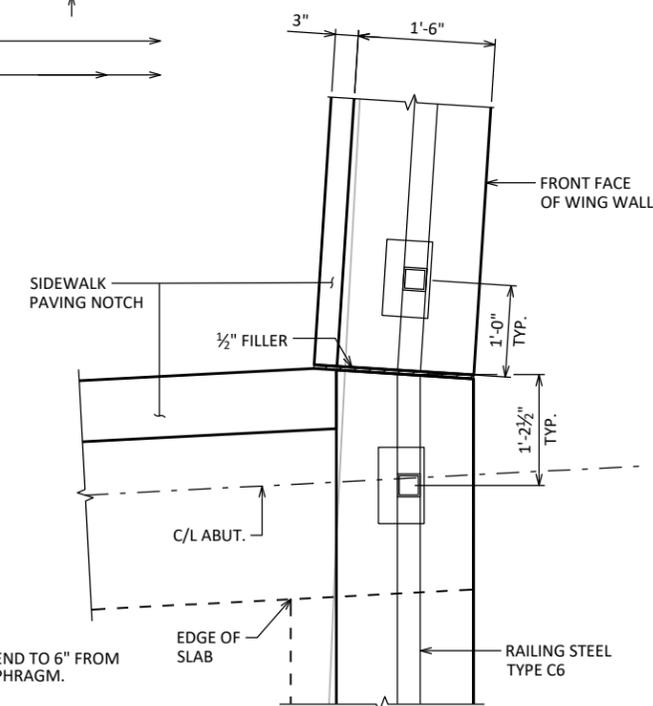
- (S01) 3/4" "V" GROOVE REQUIRED. EXTEND TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGM.
- (S02) CONST. JOINT. STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- (S03) CONST. JOINT. STRIKE OFF AND LEAVE ROUGH. MATCH ROADWAY CROSS SLOPE.
- (S04) ± 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER
- 8" MIN. SIDEWALK THICKNESS ALSO REQ'D AT EDGE OF SLAB
- ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING MULTI COLOR. FOR DETAILS SEE SHEET 16
- DIMENSIONS MEASURE NORMAL TO C/L SUBSTRUCTURE



SECTION A

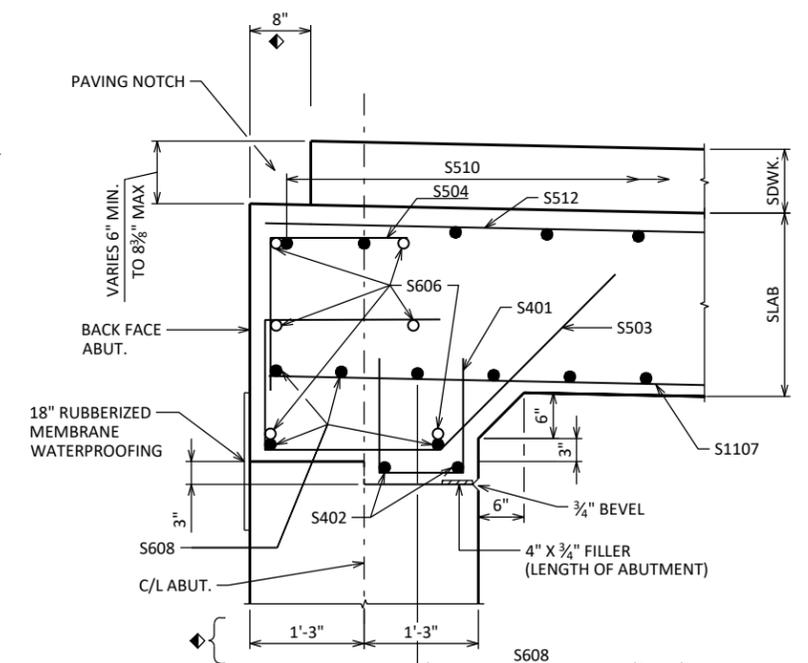


SECTION B



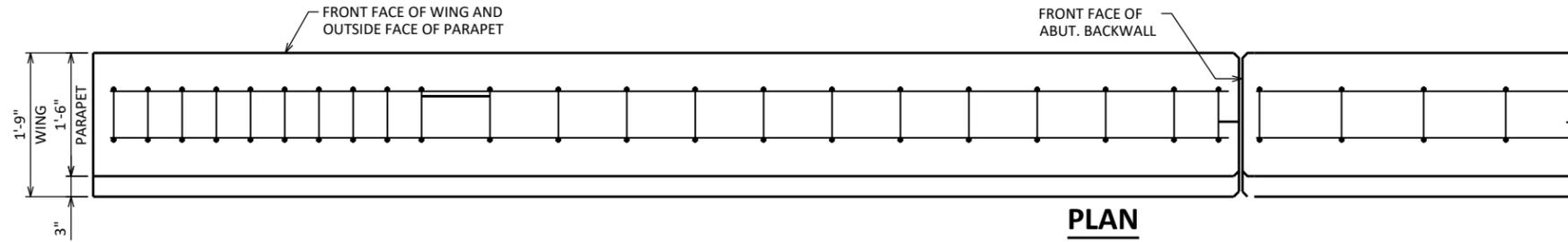
SECTION C

WING 2 SHOWN. OTHER WINGS SIMILAR.

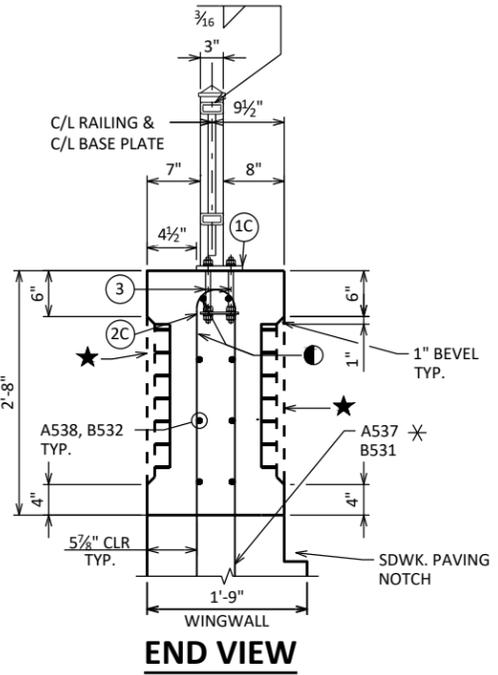


SECTION D

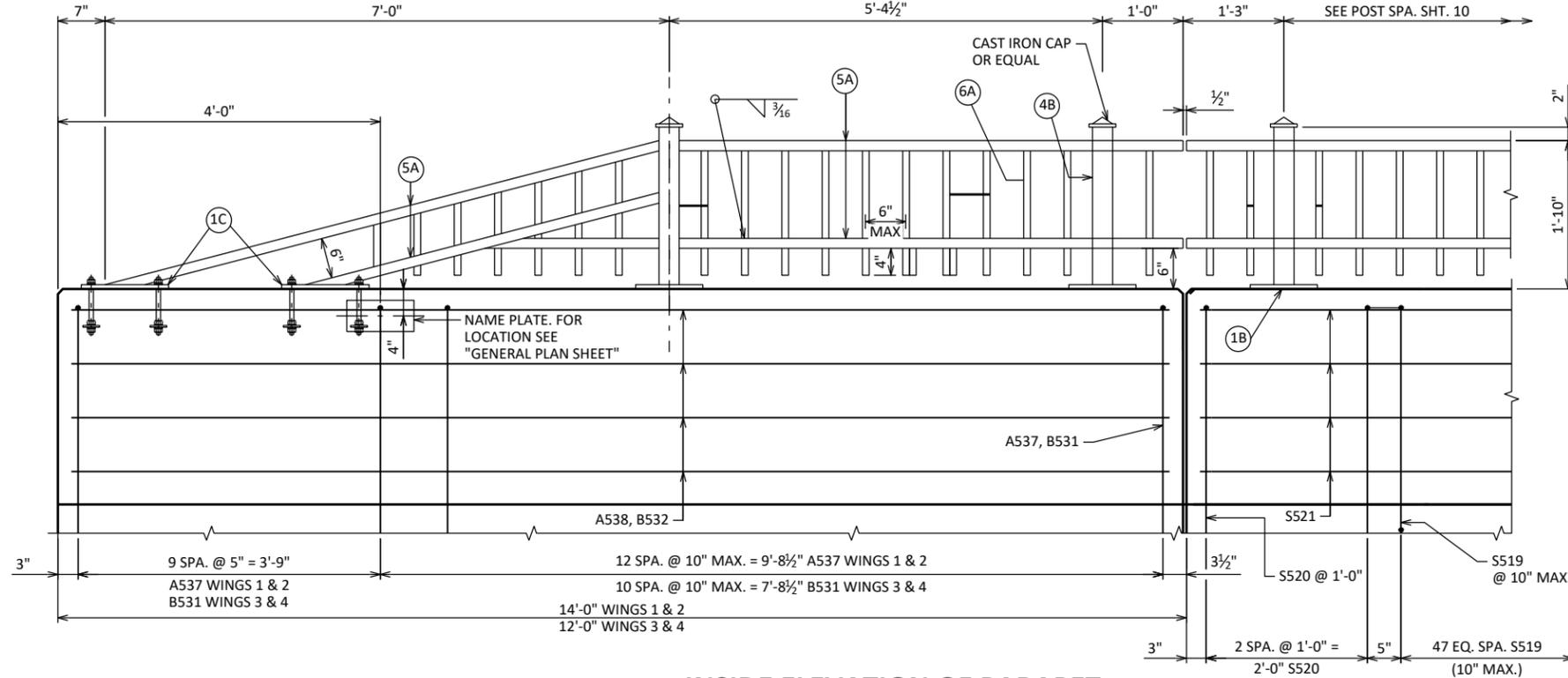
NO.	DATE	REVISION	BY
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT			
STRUCTURE B-44-489			
DRAWN BY RAC		PLANS CK'D CJM	
SUPERSTRUCTURE SIDEWALK DETAILS			SHEET 13 OF 16



PLAN



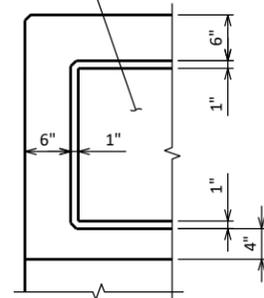
END VIEW



INSIDE ELEVATION OF PARAPET

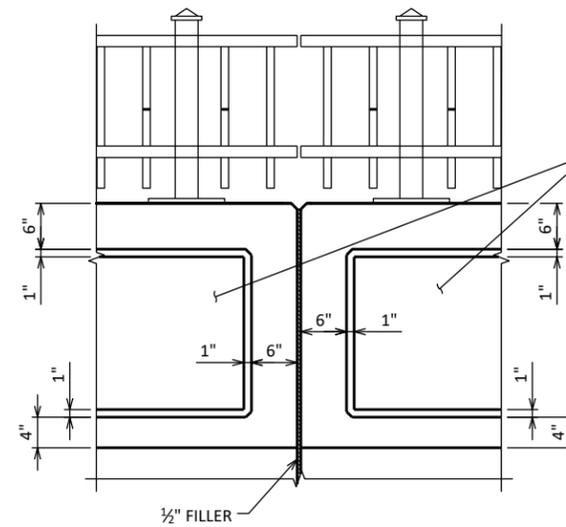
SHOWING WINGS 1 & 2
WINGS 3 & 4 SIMILAR

ARCHITECTURE SURFACE TREATMENT AND CONCRETE STAINING MULTI COLOR B-44-489. SEE SHEET 16 FOR DETAILS.

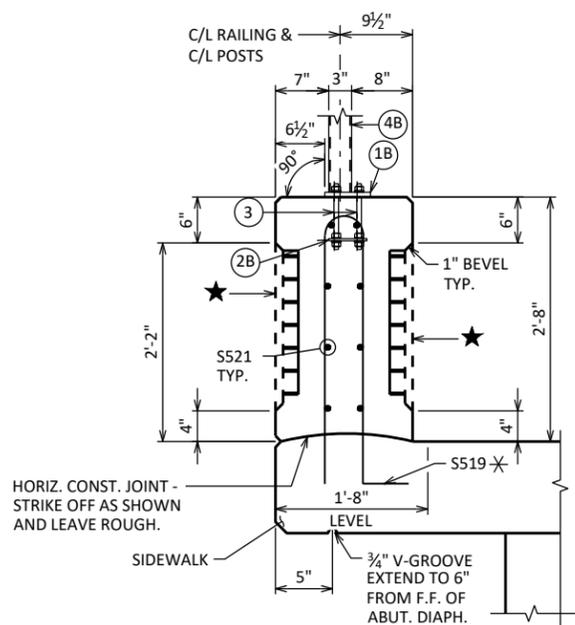


ARCHITECTURAL SURFACE TREATMENT AT END OF WINGS

ARCHITECTURE SURFACE TREATMENT AND CONCRETE STAINING MULTI COLOR B-44-489. SEE SHEET 16 FOR DETAILS.



ARCHITECTURAL SURFACE TREATMENT AT ABUTMENT



SECTION THRU PARAPET ON BRIDGE

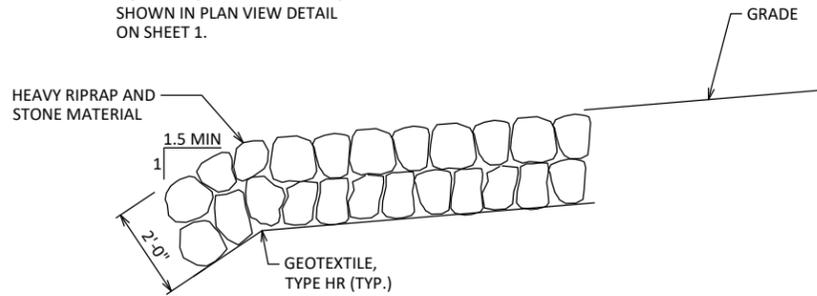
* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD.

LEGEND

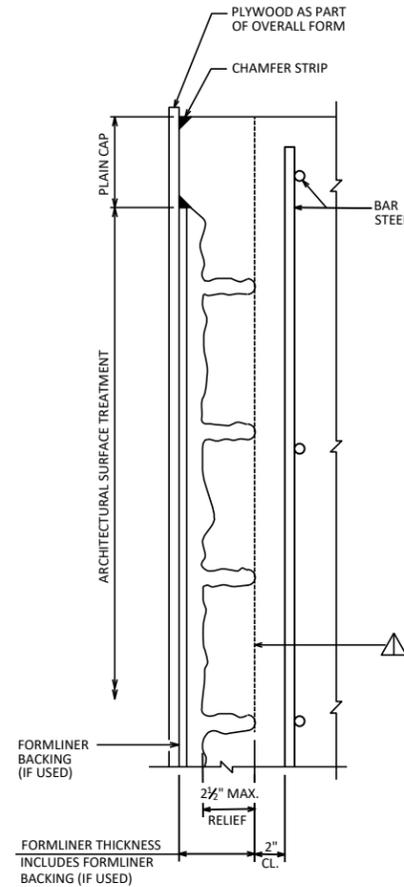
- ★ ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING MULTI COLOR. FOR DETAILS SEE SHEET 16.
- WHEN ADHESIVE ANCHORS ARE USED, FIELD BEND AND/OR DISPLACE TO AVOID HITTING LONGITUDINAL BAR WHEN DRILLING FOR ADHESIVE ANCHORS.

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COMBINATION RAIL TYPE "C6"		SHEET 14 OF 16	

NOTE: PLACE HEAVY RIPRAP AS SHOWN IN PLAN VIEW DETAIL ON SHEET 1.



TYPICAL RIPRAP DETAIL FOR "REMOVING AND RESTACKING CONCRETE BLOCK WALL"

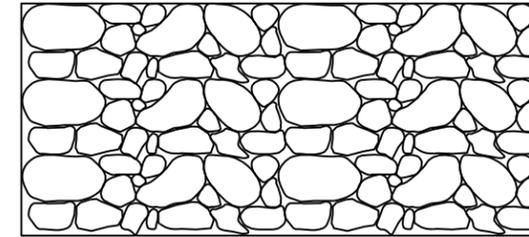


SECTION THRU FORMLINER

STRUCTURAL CONCRETE CAN ONLY BE ASSUMED TO THIS LINE. PROVIDE ADDITIONAL STRUCTURE SIZE AS NECESSARY TO MAINTAIN MINIMUM FULL STRUCTURAL CONCRETE DIMENSIONS AS INDICATED ON THE STANDARDS.

PARAPET NOTES

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.

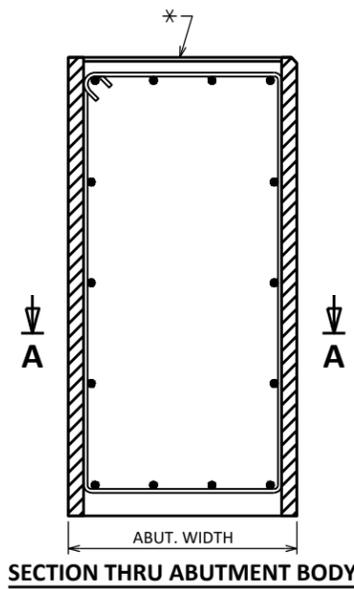


FIELD STONE - RANDOM

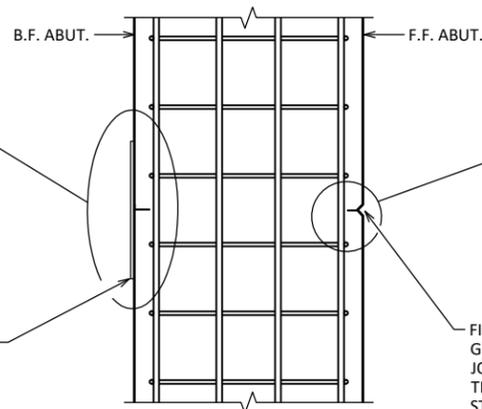
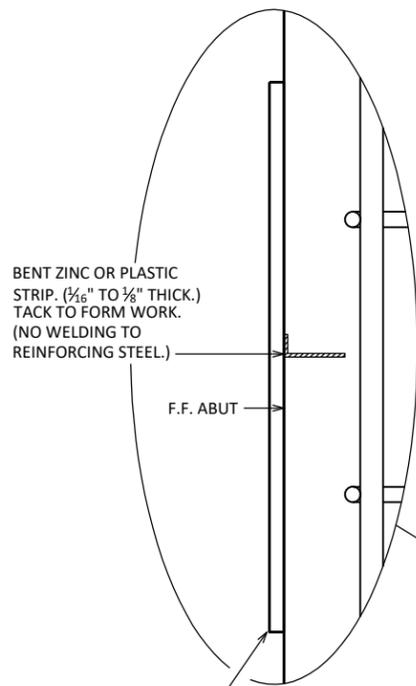
FORMLINER THICKNESS = 3/4"
SIZES BETWEEN 6" & 24"
MAX. RELIEF = 2 1/2"

PARAPET NOTES

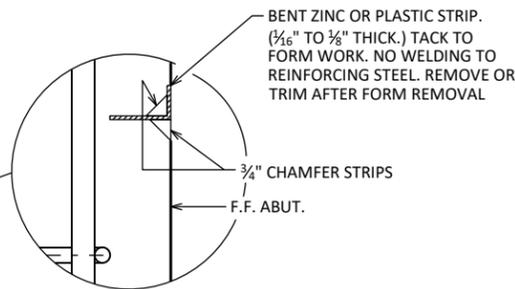
FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.



SECTION THRU ABUTMENT BODY



SECTION A-A



FILL WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER AFTER TRIMMING OR REMOVING STRIP

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATIVE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

* USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

OUTAGAMIE COUNTY HIGHWAY DEPARTMENT

STRUCTURE B-44-489

DRAWN BY	PLANS CK'D
RAC	CJM

ALT. CONST. JT. & ARCHITECTURAL SURF. TREATMENT

SHEET 16 OF 16