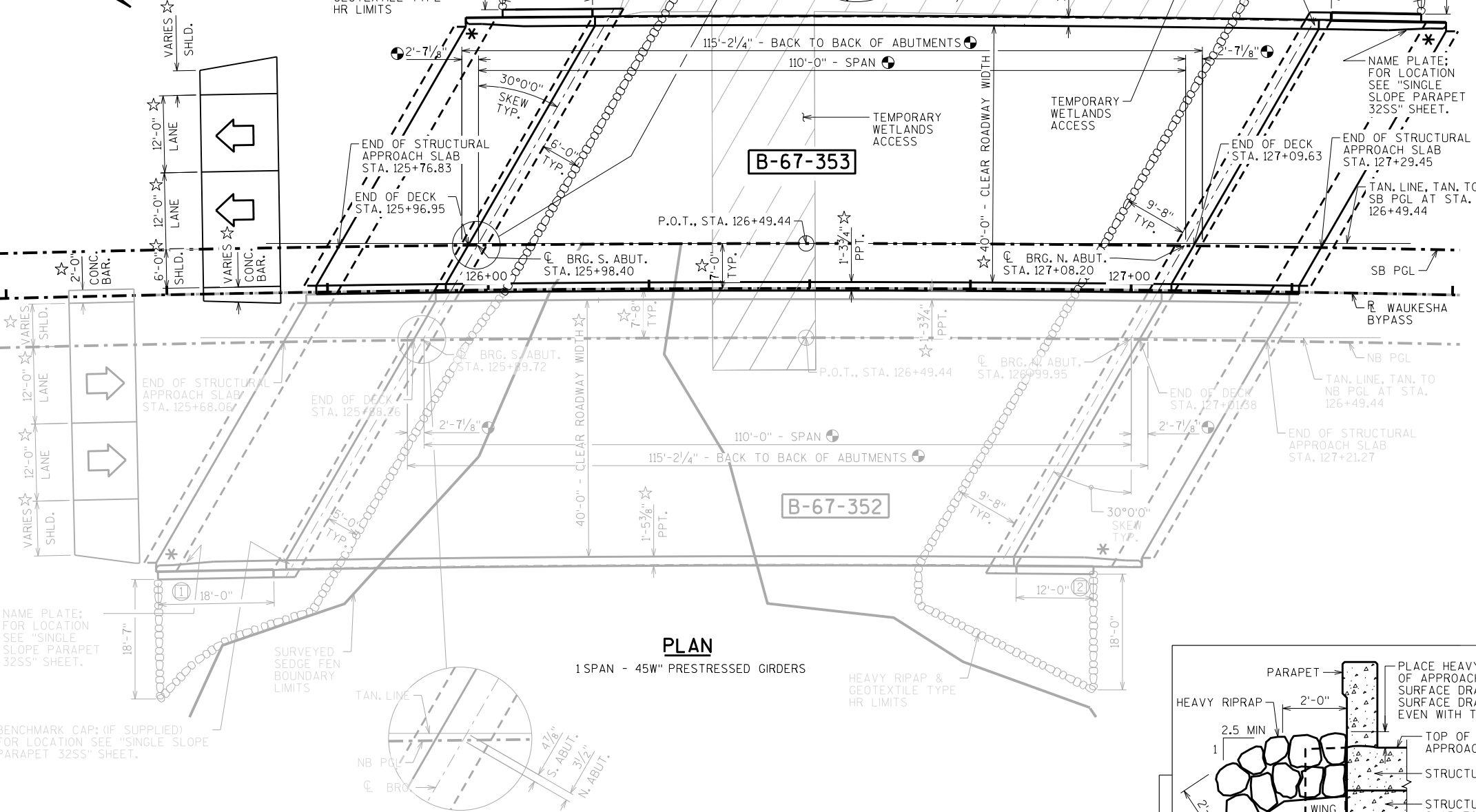
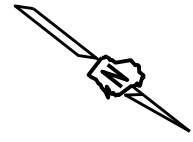


★ MEASURED RADIALLY
● MEASURED ALONG TANGENT

* PROVIDE FOR THRE BEAM
GUARD RAIL ATTACHMENT
AT UNUSED ANCHOR ASSEMBLIES
CAULK HOLES SHUT WITH
"100% SILICONE CAULK"

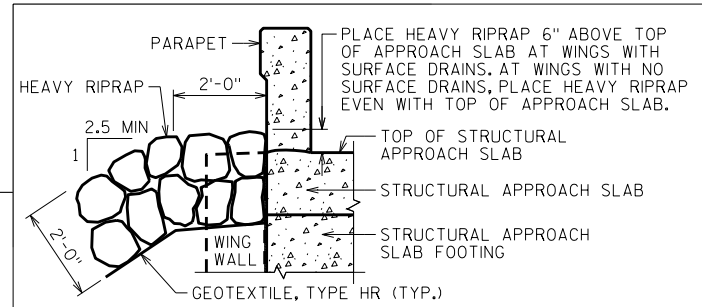
○ INDICATES WING NUMBER



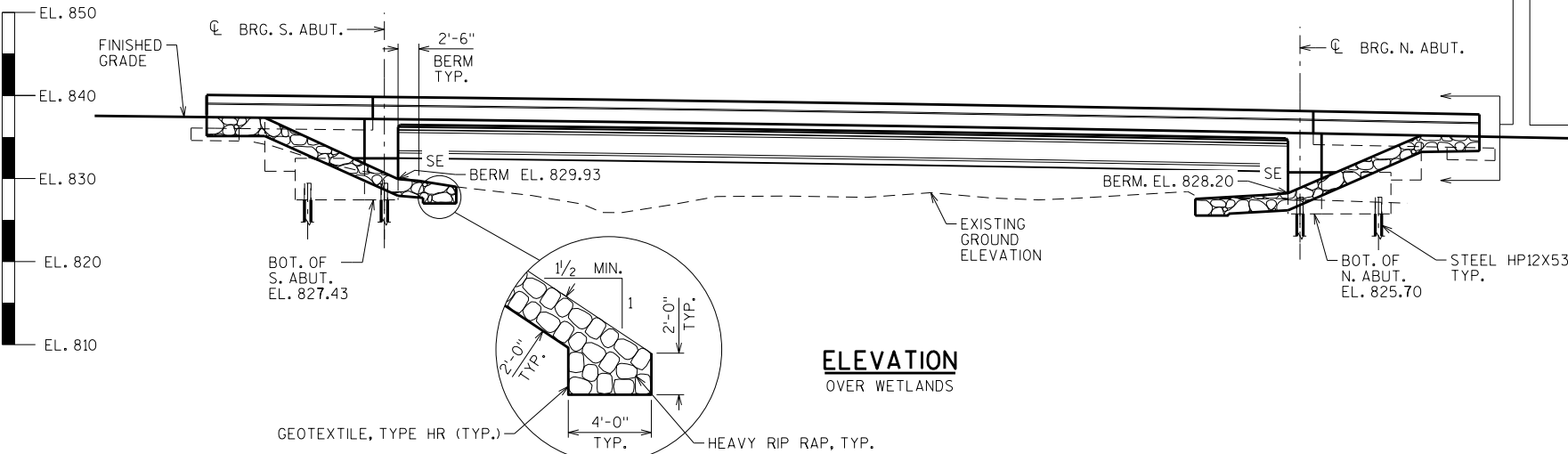
PLAN

1 SPAN - 45W" PRESTRESSED GIRDERS

HEAVY RIPAP &
GEOTEXTILE TYPE
HR LIMITS



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS



ELEVATION OVER WETLANDS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.13
OPERATING RATING FACTOR: RF = 1.63
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 & STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:

GRADE 60 — fy = 60,000 P.S.I.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

45W" PRESTRESSED GIRDERS:

CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12-INCH X 53. PILING DRIVEN
TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE
AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 60'-0" LONG AT SOUTH ABUTMENT AND 85'-0" LONG AT
NORTH ABUTMENT. PILE POINTS REQUIRED.

** 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
DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 45W" PRESTRESSED GIRDER DETAILS 1
9. 45W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGMS
11. SUPERSTRUCTURE CROSS SECTION
12. SUPERSTRUCTURE PLAN
13. SUPERSTRUCTURE DETAILS
14. DECK LAYOUT
15. APPROACH SLAB
16. APPROACH SLAB DETAILS
17. SINGLE SLOPE PARAPET 32SS
18. MODIFIED SINGLE SLOPE PARAPET 32SS

TRAFFIC VOLUME

WAUKESHA BYPASS

ADT = 17,300 (2037)
R.D.S. = 50 M.P.H.

CURVE DATA

WAUKESHA BYPASS

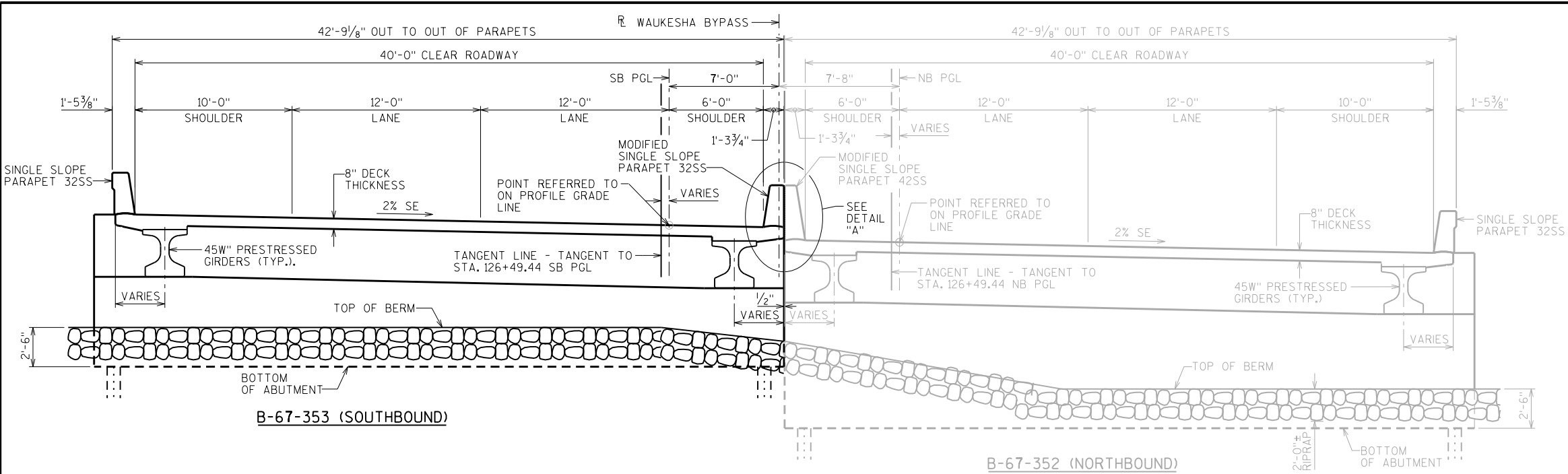
P.I. = 125+62.72
Δ = 21°44'49"
D = 1°08'45"
T = 960.45
L = 1897.77
R = 5000
S.E. = 2.0 %
P.C. = 116+02.27
P.T. = 135+00.04

NO.	DATE	REVISION	BY
BUREAU OF STRUCTURES			
ACCEPTED <i>William C. Dehner</i> 6/23/17 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-67-353			
SB WAUKESHA BYPASS OVER WETLANDS			
COUNTY	WAUKESHA	TOWN	WAUKESHA
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
MJK	SEW	MJK	SEW
GENERAL PLAN			SHEET 1 OF 18

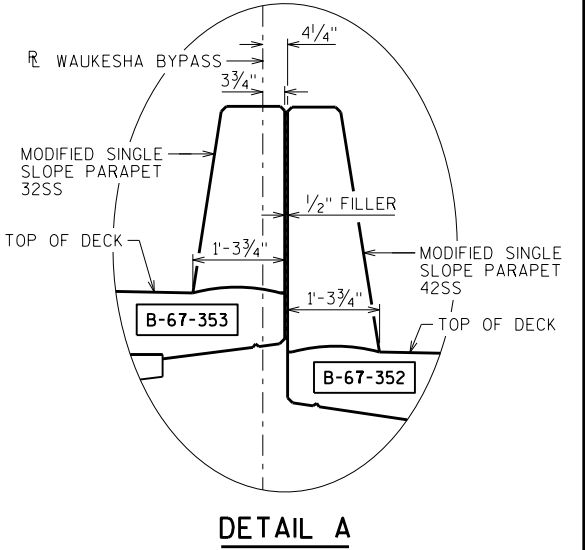
I.D. 2788-00-01N

DATE: MAY 2017

SCALE = 10.00

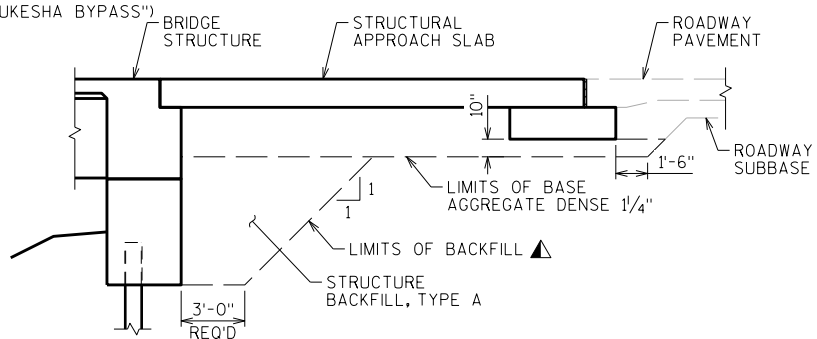


STATE PROJECT NUMBER
2788-00-71



CROSS SECTION THRU ROADWAY LOOKING NORTH (UPSTATION)

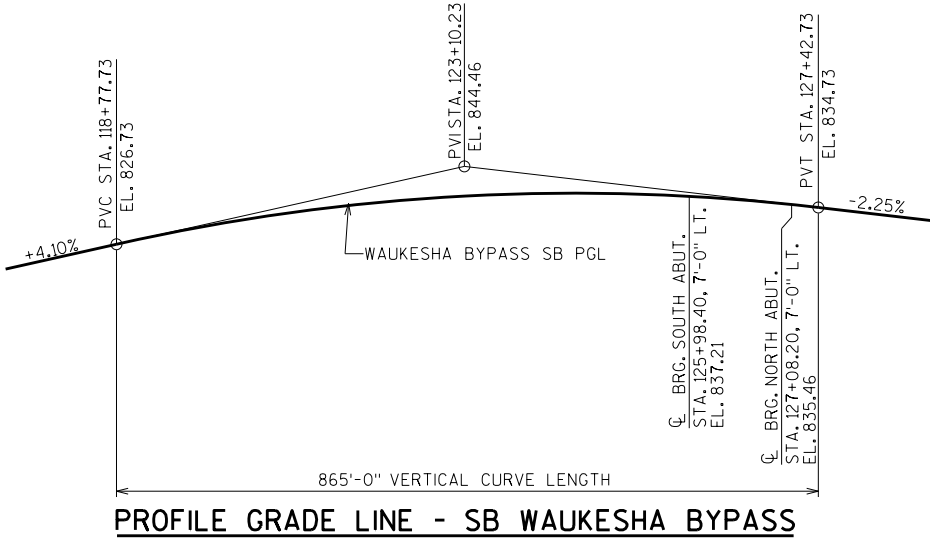
(ALL HORIZONTAL DIMENSIONS ARE MEASURED RADIALLY - NORMAL TO THE CURVED "R" WAUKESHA BYPASS)



TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITH STRUCTURAL APPROACH)

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



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.

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. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK & APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAYING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

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 IN THE ABUTMENT DETAILS.

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

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE 'GIRDER DETAILS 2' SHEET.

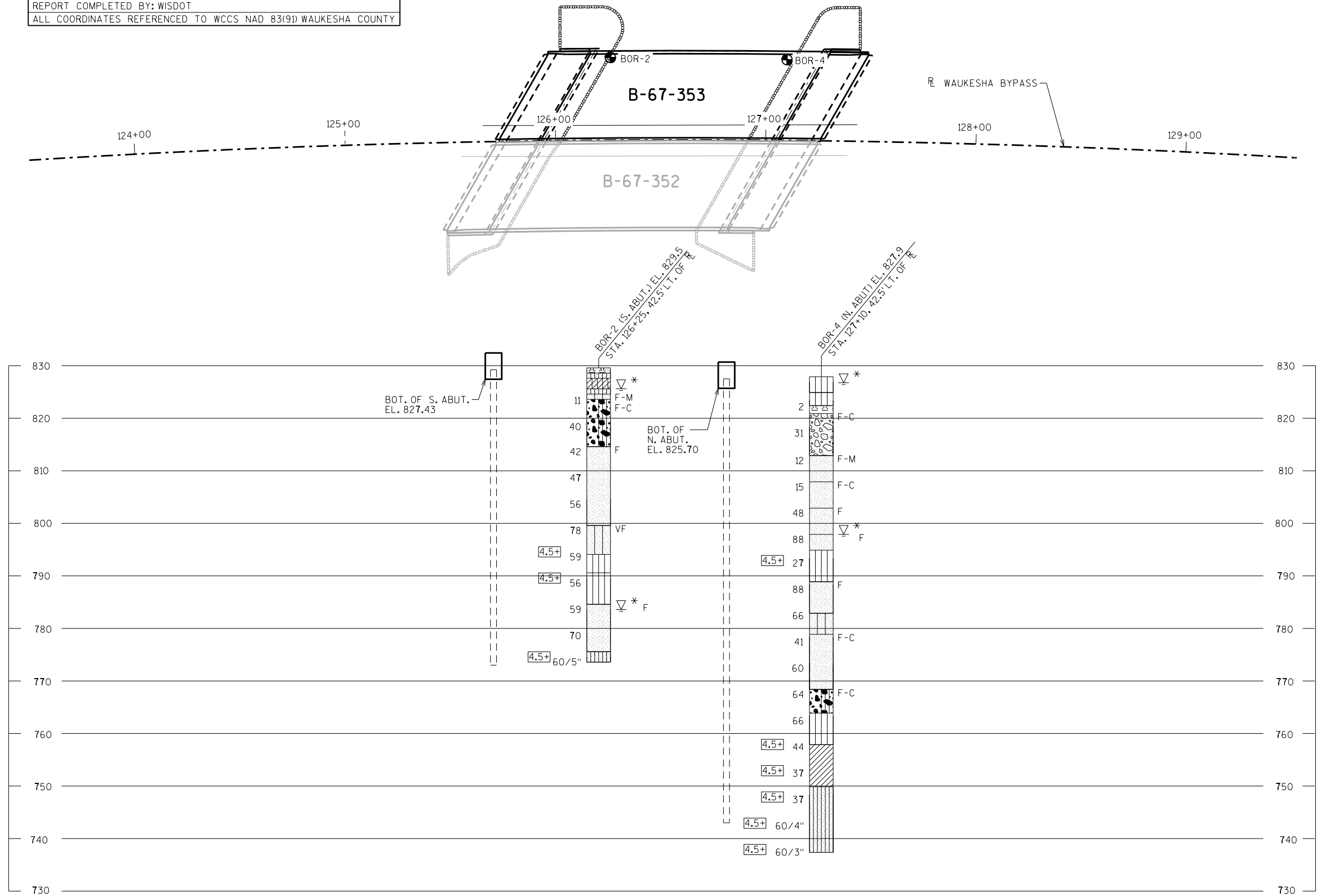
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH APPROACH SLAB	SOUTH ABUT.	NORTH ABUT.	NORTH APPROACH SLAB	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-67-353	LS	—	—	—	—	—	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	—	—	160	180	—	340
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	—	130	—	—	128	258
501.1000.S	ICE HOT WEATHER CONCRETING	LB	1,605	460	330	325	450	3,170
502.0100	CONCRETE MASONRY BRIDGES	CY	214	61	44	43	60	422
502.3200	PROTECTIVE SURFACE TREATMENT	SY	524	90	—	—	89	703
502.3210	PIGMENTED SURFACE SEALER	SY	92	17	—	—	17	126
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	777	—	—	—	—	777
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	—	—	3,275	2,995	—	6,270
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	31,840	10,870	800	785	10,870	55,165
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1,465	—	—	—	—	1,465
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	14	—	—	—	—	14
506.4000	STEEL DIAPHRAGMS B-67-353	EACH	12	—	—	—	—	12
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	—	11	11	—	22
550.0500	PILE POINTS	EACH	—	—	10	10	—	20
550.1120	PIILING STEEL HP 12-INCH X 53 LB	LF	—	—	600	850	—	1,450
606.0300	RIPRAP HEAVY	CY	—	—	75	85	—	160
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	—	80	80	—	160
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	—	—	—	—	2
645.0120	GEOTEXTILE TYPE HR	SY	—	—	113	123	—	236
	NON-BID ITEMS							
	FILLER	SIZE	—	—	—	—	—	1/2", 3/4", 1 1/2"

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
CROSS SECTION & QUANTITIES		SHEET 2	

SCALE = 4:00

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
2	3/14/2016	150694.495	670765.834
4	3/16/2016	150754.428	670706.804
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WAUKESHA COUNTY			



STATE PROJECT NUMBER		
2788-00-71		
MATERIAL SYMBOLS		
ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING

BORING #/EL. STA./OFF-SET

ST (1) 0.25 (2) 17

F-C COBBLE OR BOULDER

WEATHERED LIMESTONE

CORE RUN #1 - 24'-29' REC=80%, ROD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) 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

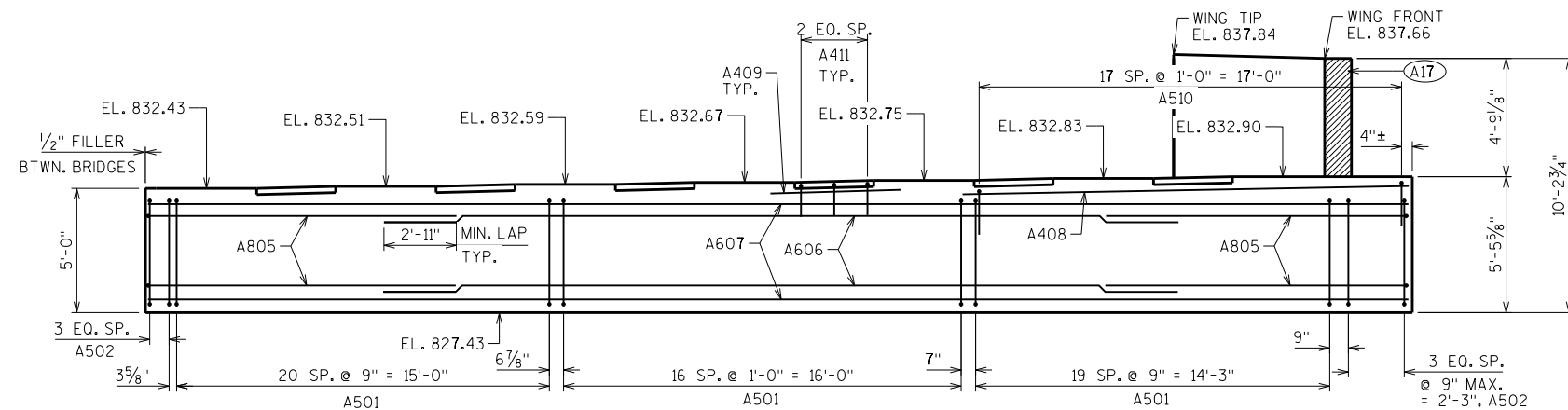
F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

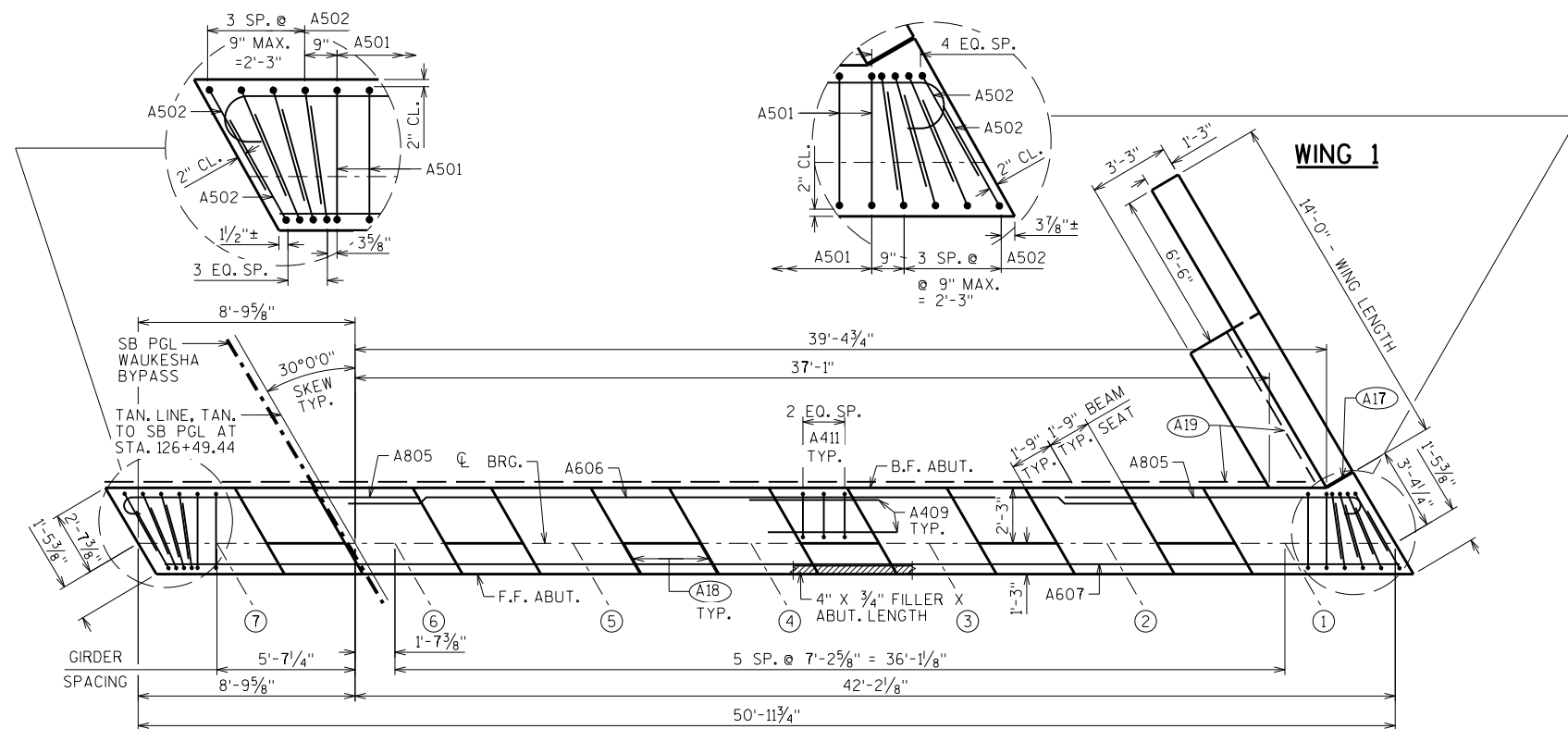
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION 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
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY TLP/MJK		PLANS CKD. SEW	
SUBSURFACE EXPLORATION		SHEET 3	

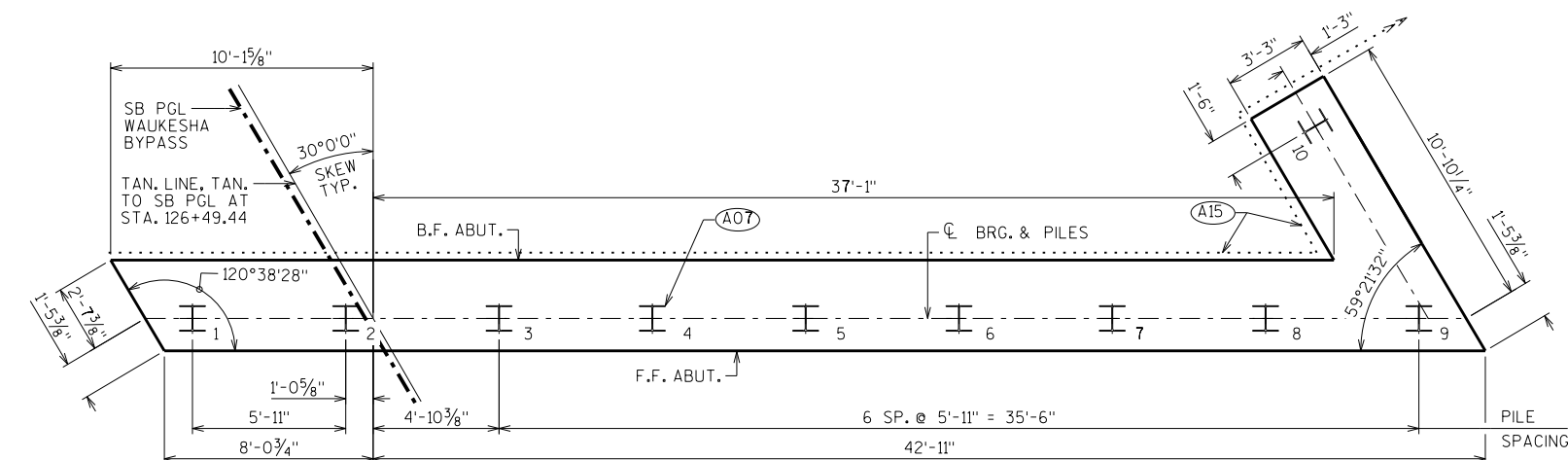
* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.



ELEVATION
LOOKING SOUTH AT FRONT FACE
ADJUST STIRRUP SPACING TO MISS PILES

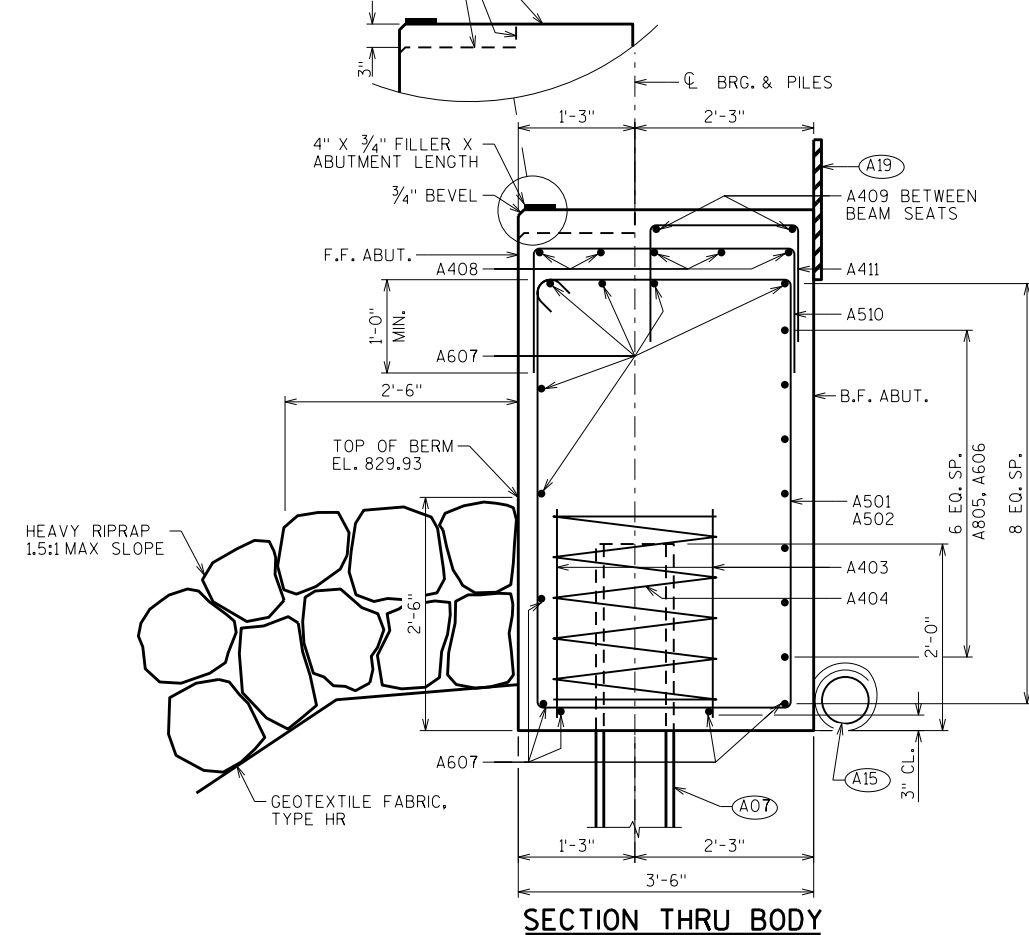


PLAN

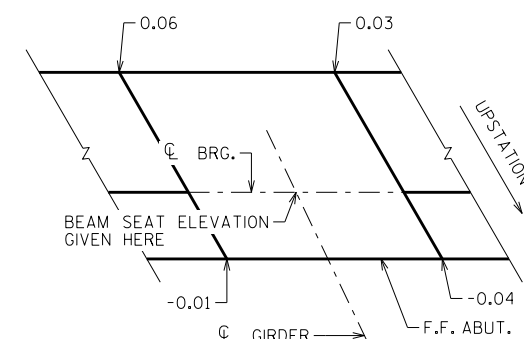


PILE PLAN

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



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL

○ INDICATES GIRDER NUMBER

(A07) SUPPORT ABUTMENT ON HP 12 x 53
STEEL PILING, ESTIMATED 60'-0" LONG
WITH A REQUIRED DRIVING RESISTANCE OF
220 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE
0.5% MIN. TO SUITABLE DRAINAGE. RODENT
SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL
ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2"
FILLER WITH NON-STAINING GRAY NON-BITUMINOUS
JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW
SURFACE OF CONCRETE). EXTEND SEALER 3"
BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES
THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

STATE PROJECT NUMBER

2788-00-71

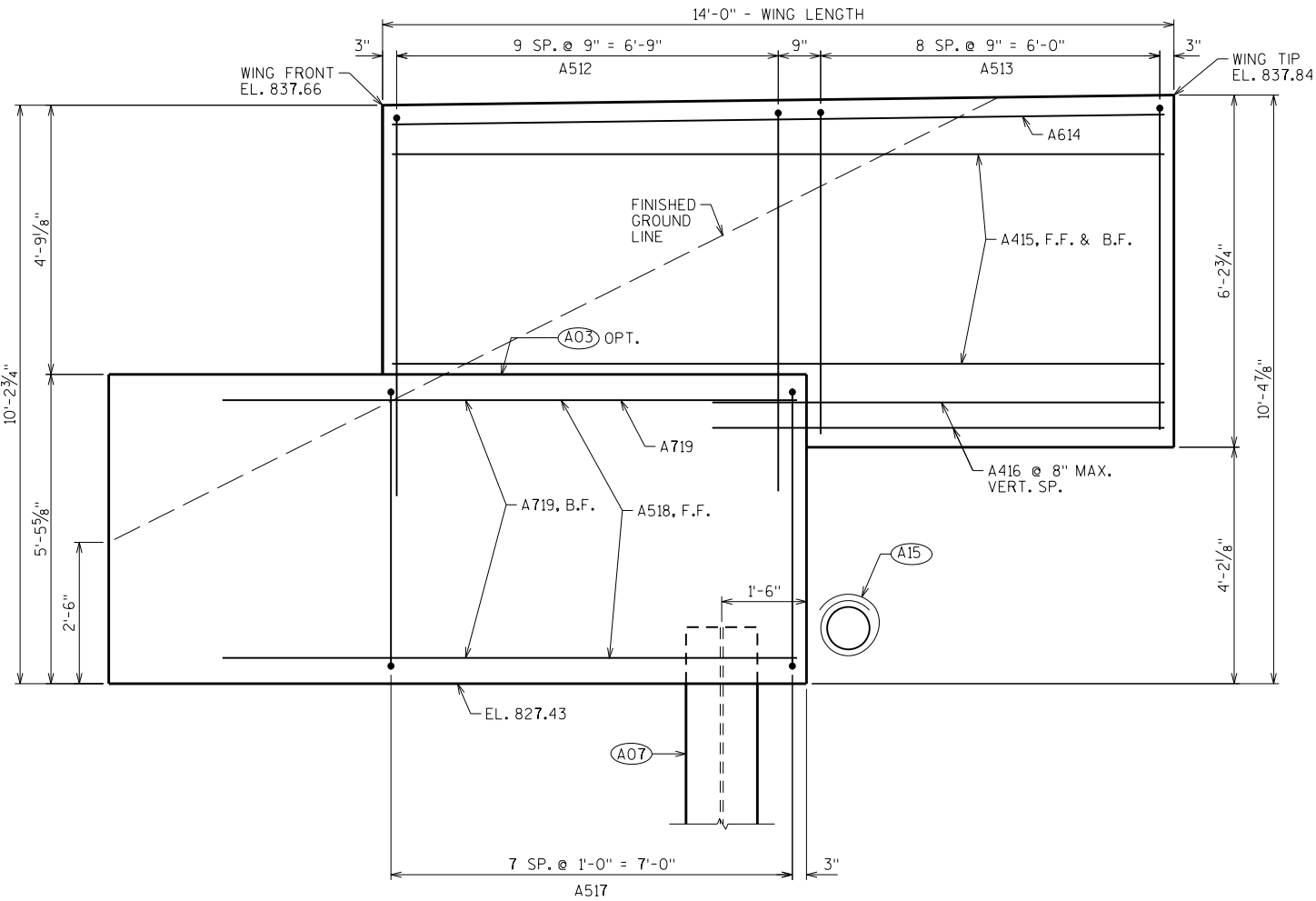
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
SOUTH ABUTMENT		SHEET 04	

SCALE = 3:50

BILL OF BARS

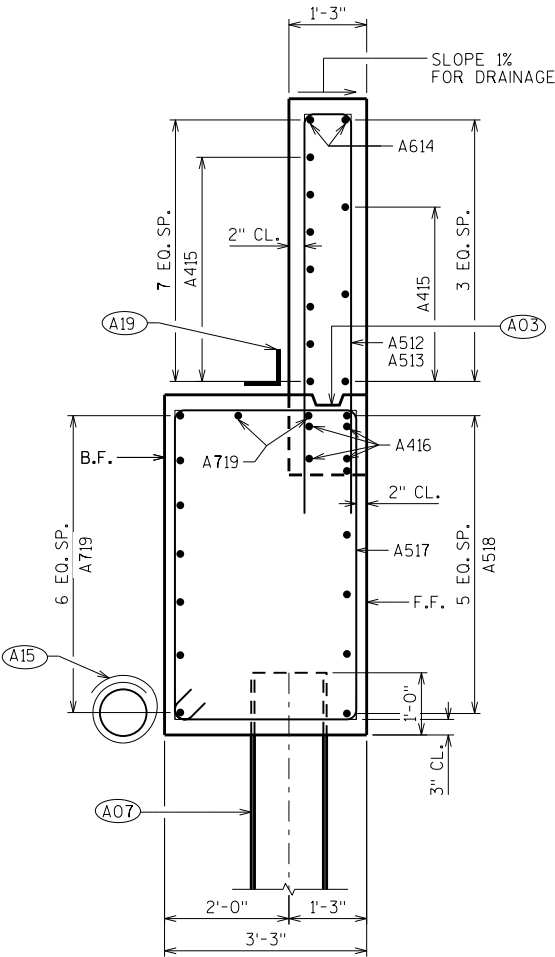
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		58	15'-8"	X		BODY-STIRRUPS
A502		16	9'-7"	X		BODY-VERTICAL-ENDS
A403		18	2'-3"			PILES-2 PER BODY PILE
A404		9	28'-0"	X		PILES-1 PER BODY PILE
A805		14	14'-11"	X		BODY-HORIZ.-B.F.
A606		7	28'-5"			BODY-HORIZ.-B.F.
A607		11	50'-7"			BODY-HORIZ.
A408		5	17'-6"			BODY-HORIZ.-OVER GIR. 1-2
A409		12	5'-3"			BODY-HORIZ.-BTWN. BEAM SEATS
A510		18	6'-7"	X		BODY-VERT.-OVER GIR. 1-2
A411		18	4'-5"	X		BODY-VERT.-BTWN. BEAM SEAT
A512	X	10	14'-2"	X		WING 1-VERT.-UPPER WING
A513	X	9	12'-2"	X		WING 1-VERT.-UPPER WING
A614	X	2	13'-8"			WING 1-HORIZ.-TOP-UPPER WING
A415	X	10	13'-8"			WING 1-HORIZ.-UPPER WING
A416	X	4	8'-0"			WING 1-HORIZ.-UPPER WING
A517	X	8	16'-4"	X		WING 1-VERT.-LOWER WING
A518	X	6	9'-2"			WING 1-HORIZ.-F.F.-LOWER WING
A719	X	9	10'-2"			WING 1-HORIZ.-B.F.-LOWER WING

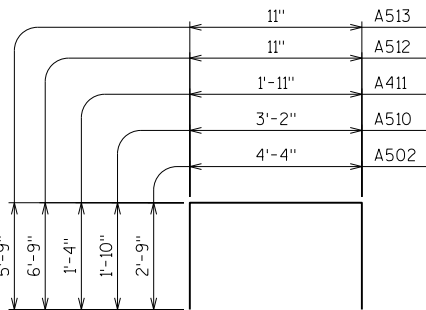
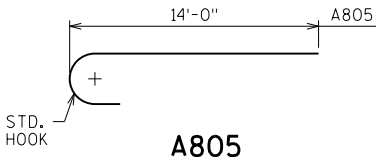
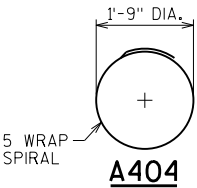


WING 1 ELEVATION

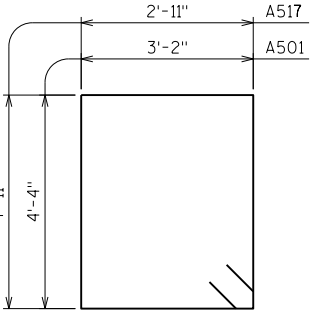
ADJUST STIRRUP SPACING TO MISS PILES



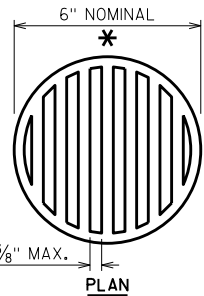
WING 1 SECTION



A502, A510, A411, A512, A513



A501, A517



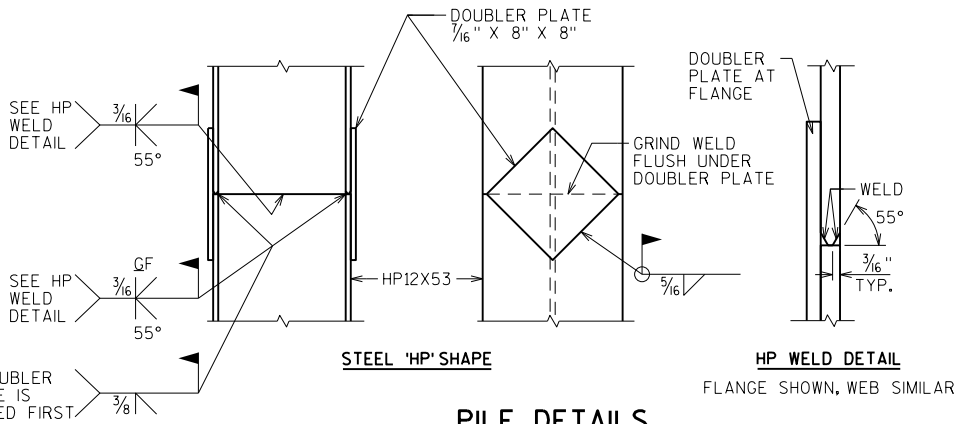
SECTION

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".

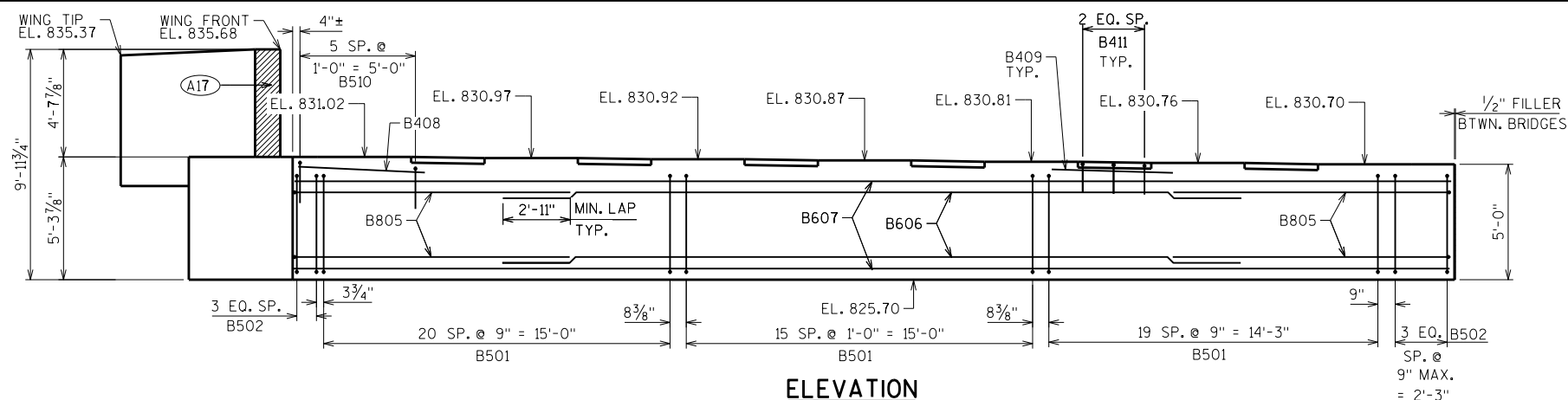
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH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



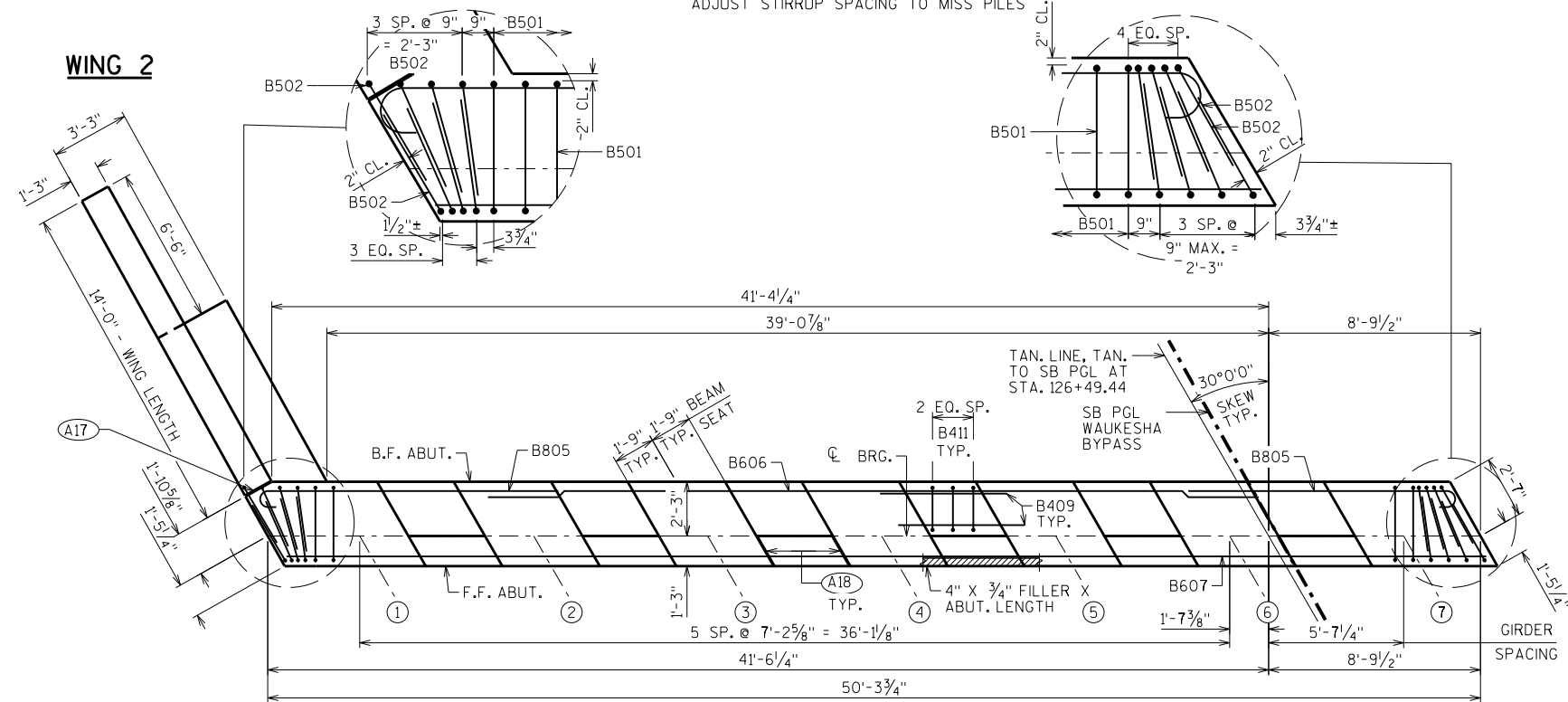
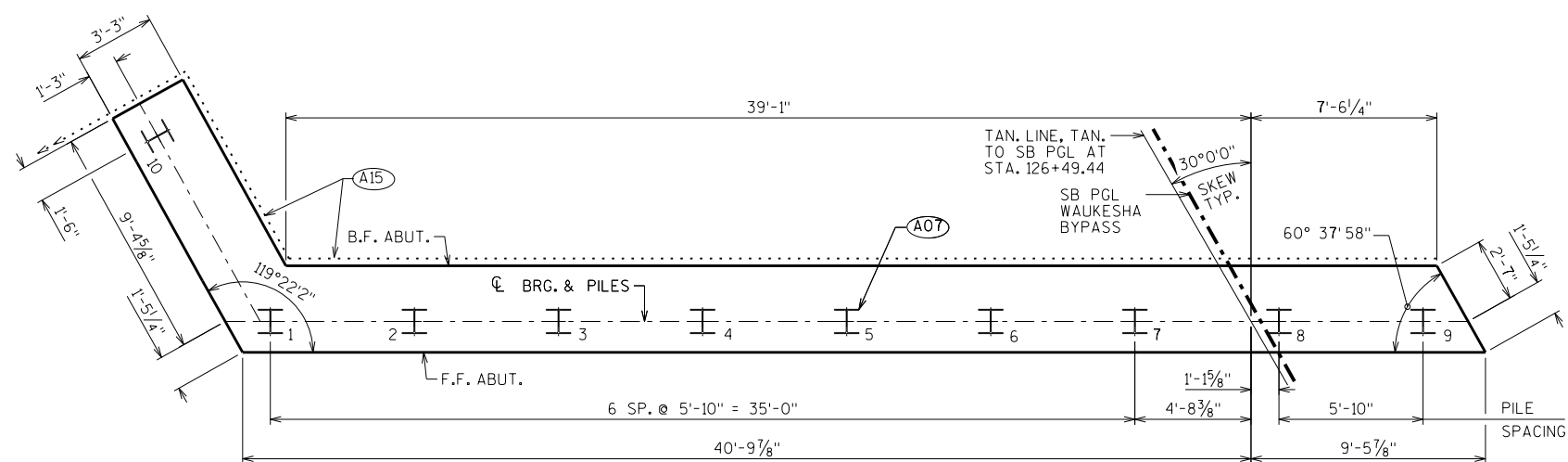
PILE DETAILS

- A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" V GROOVE @ F.F. IF JOINT IS USED).
- A07 SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING. ESTIMATED 60'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQUIRED.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTERLINE AT INSIDE FACE.
- A19 18" (RMW) RUBBERIZED MEMBRANE. WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
SOUTH ABUTMENT DETAILS		SHEET 5	

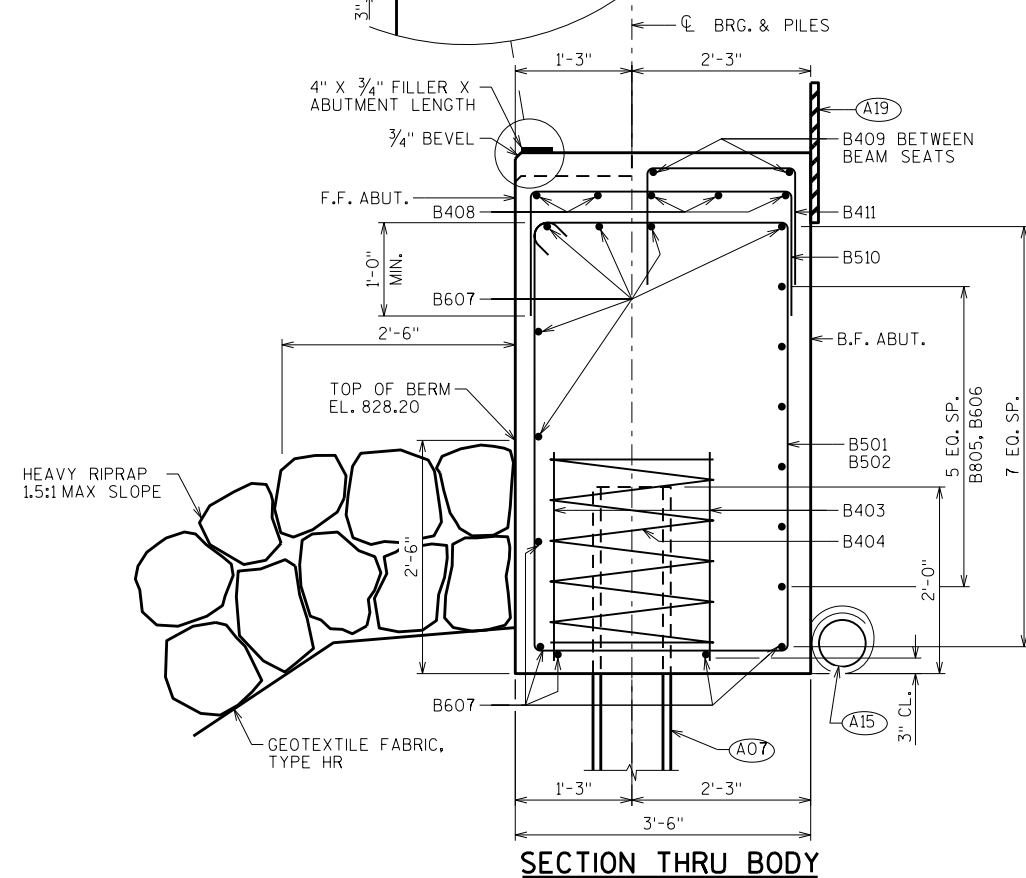
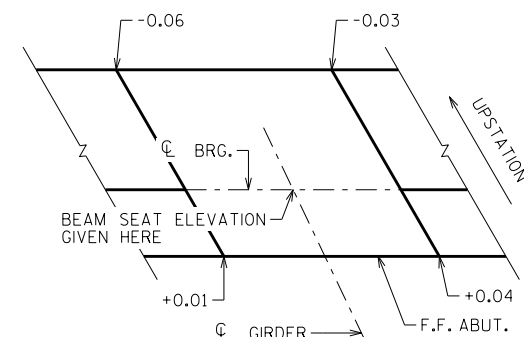
**ELEVATION**

LOOKING NORTH AT FRONT FACE
ADJUST STIRRUP SPACING TO MISS PILES

**PLAN****PILE PLAN**

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

1/2" FILLER
BTWN. BRIDGES

**SECTION THRU BODY****SLOPED BEAM SEAT DETAIL**

○ INDICATES GIRDER NUMBER

(A07) SUPPORT ABUTMENT ON HP 12 x 53
STEEL PILING, ESTIMATED 85'-0" LONG
WITH A REQUIRED DRIVING RESISTANCE OF
220 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE
0.5% MIN. TO SUITABLE DRAINAGE. RODENT
SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH); SEAL
ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2"
FILLER WITH NON-STAINING GRAY NON-BITUMINOUS
JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW
SURFACE OF CONCRETE). EXTEND SEALER 3"
BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES
THAT RUN PARALLEL WITH GIRDER.

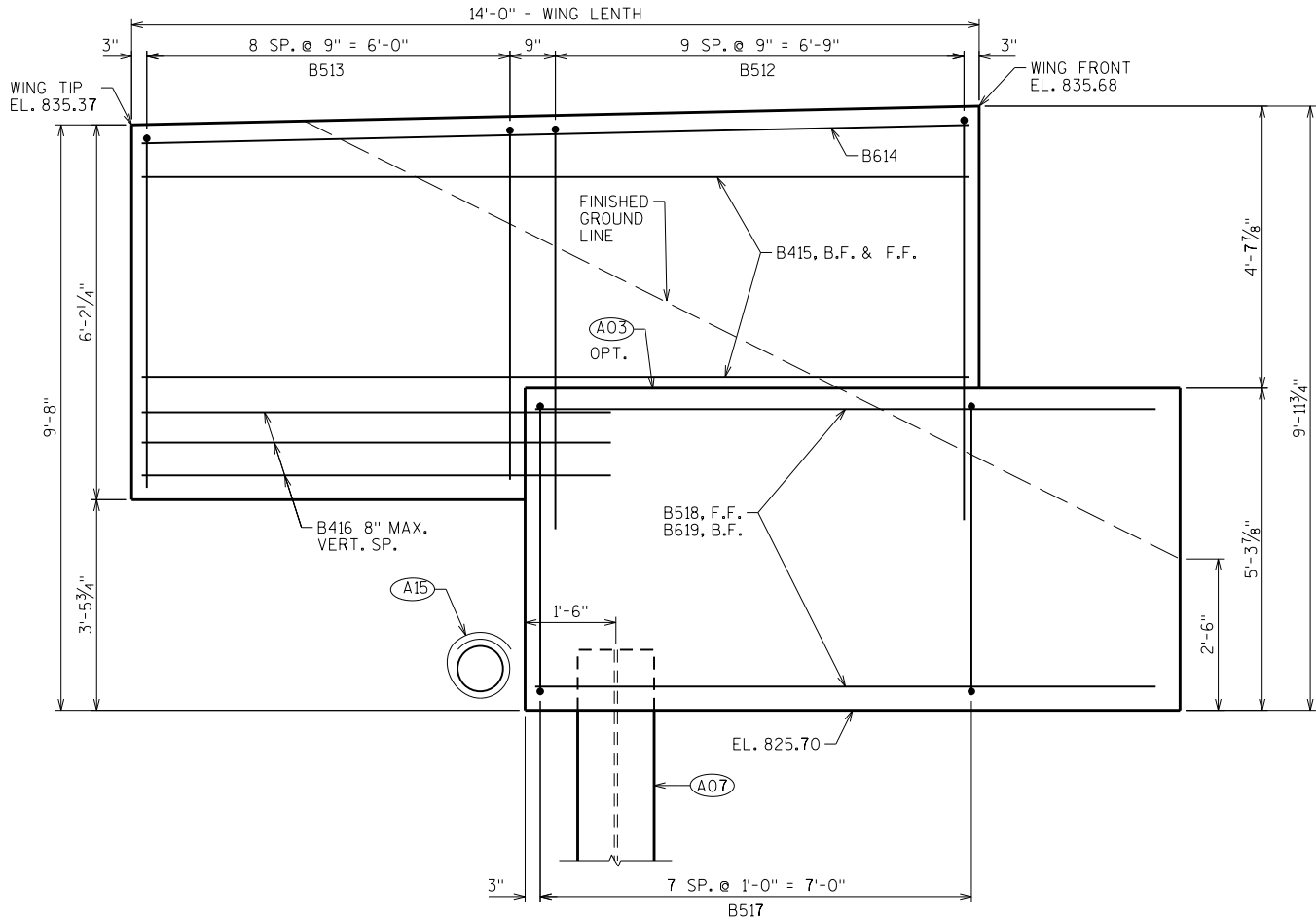
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
NORTH ABUTMENT		SHEET 6	

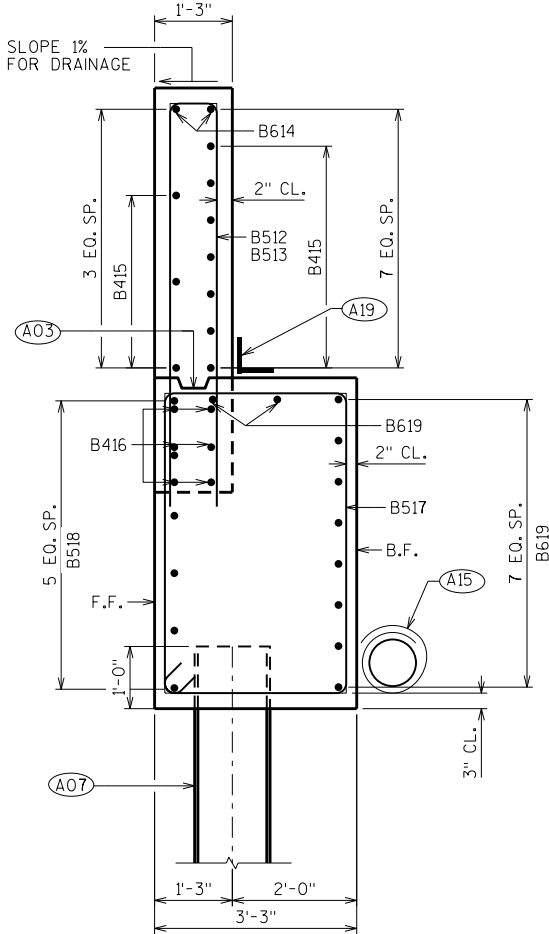
BILL OF BARS

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

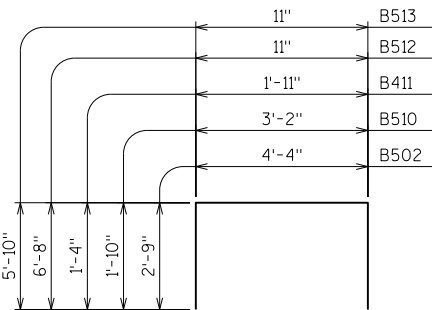
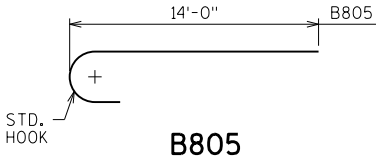
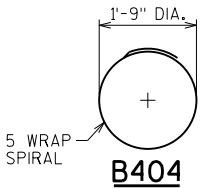
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		57	15'-8"	X		BODY-STIRRUPS
B502		16	9'-7"	X		BODY-VERTICAL-ENDS
B403		18	2'-3"			PILES-2 PER BODY PILE
B404		9	28'-0"	X		PILES-1 PER BODY PILE
B805		12	14'-11"	X		BODY-HORIZ.-B.F.
B606		6	27'-9"			BODY-HORIZ.-B.F.
B607		11	49'-11"			BODY-HORIZ.
B408		5	5'-6"			BODY-HORIZ.-OVER GIR. 1
B409		12	5'-3"			BODY-HORIZ.-BTWN. BEAM SEATS
B510		6	6'-7"	X		BODY-VERT.-OVER GIR. 1
B411		18	4'-5"	X		BODY-VERT.-BTWN. BEAM SEAT
B512	X	10	14'-0"	X		WING 2-VERT.-UPPER WING
B513	X	9	12'-4"	X		WING 2-VERT.-UPPER WING
B614	X	2	13'-8"			WING 2-HORIZ.-TOP-UPPER WING
B415	X	10	13'-8"			WING 2-HORIZ.-UPPER WING
B416	X	6	8'-0"			WING 2-HORIZ.-UPPER WING
B517	X	8	16'-2"	X		WING 2-VERT.-LOWER WING
B518	X	6	10'-3"			WING 2-HORIZ.-F.F.-LOWER WING
B619	X	10	10'-7"			WING 2-HORIZ.-B.F.-LOWER WING



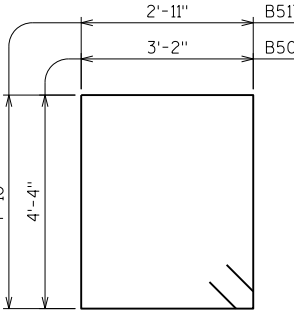
WING 2 ELEVATION



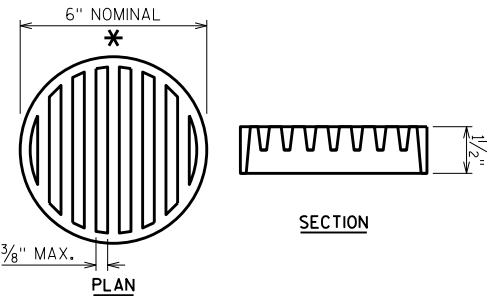
WING 2 SECTION



B502, B510, B411, B512, B513



B501, B517

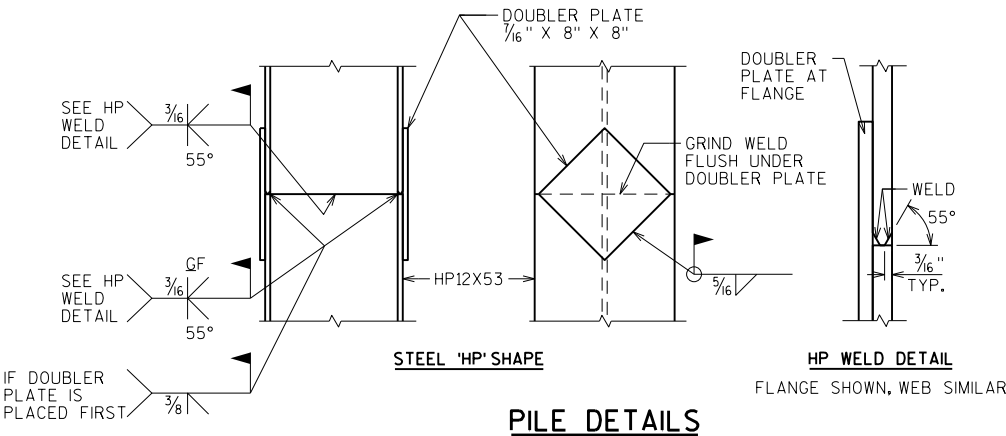


RODENT SHIELD DETAIL

* 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.



PILE DETAILS

- A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" V GROOVE @ F.F. IF JOINT IS USED).
- A07 SUPPORT ABUTMENT ON HP 12 X 53 STEEL PILING, ESTIMATED 85'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQUIRED.
- A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTERLINE AT INSIDE FACE.
- A19 18" (RMW) RUBBERIZED MEMBRANE. WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
NORTH ABUTMENT DETAILS		SHEET 7	

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

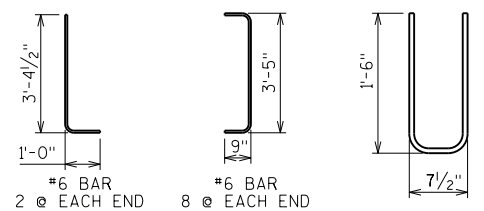
STRANDS SHALL BE FLUSH WITH END OF GIRDER, FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER, FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

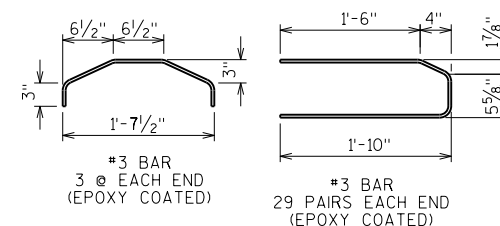
AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF)
ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP
REINFORCEMENT SHOWN, UPON APPROVAL OF THE
STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE
LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF
270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE
"STEEL DIAPHRAGMS" SHEET.



#5 BAR
1 @ EACH END



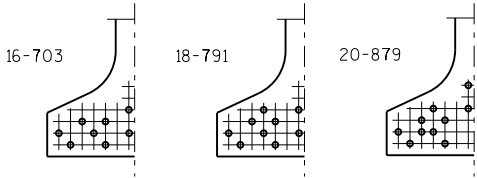
29 PAIRS EACH E
(EPOXY COATED)

(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

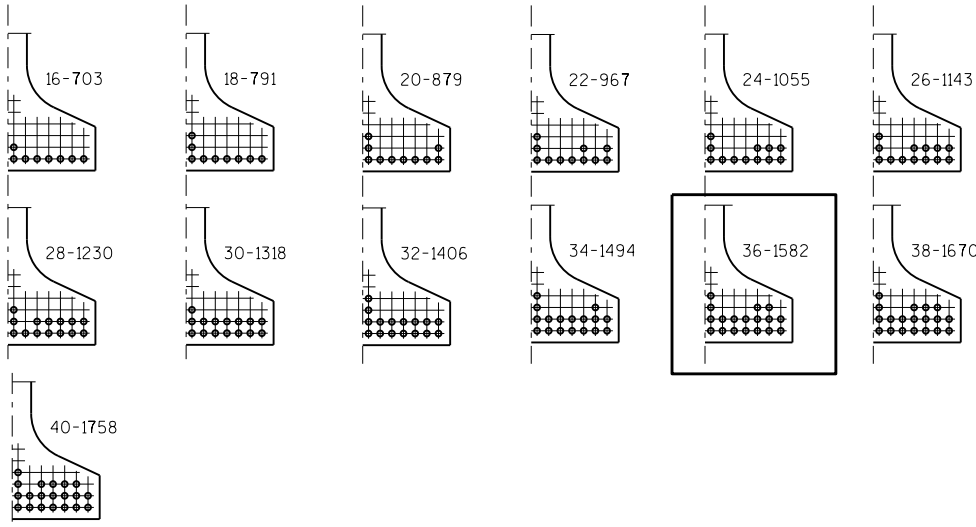
GIRDER DATA

[illegible]



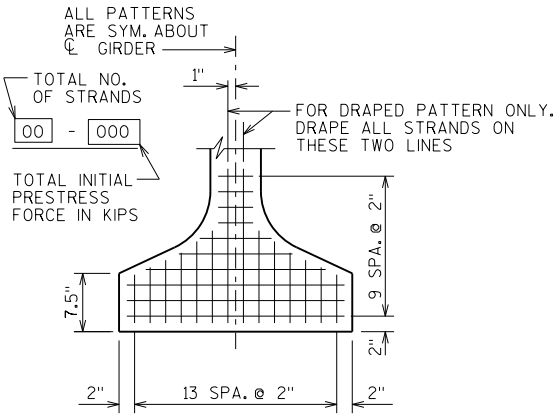
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY
TO AVOID DRAPING OF STRANDS

0.6"φ STRANDS

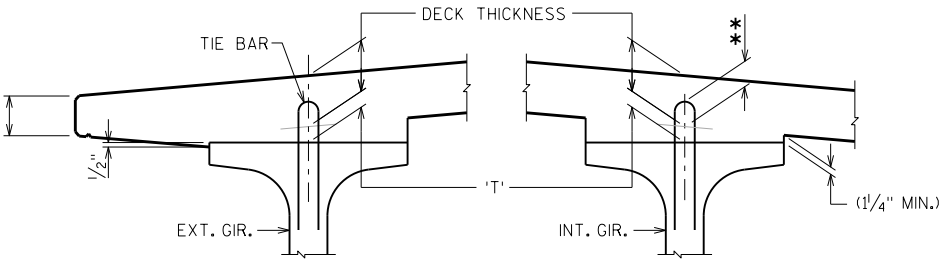


ARRANGEMENT AT \bar{C} SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"φ STRANDS



TYP. STRAND PATTERN



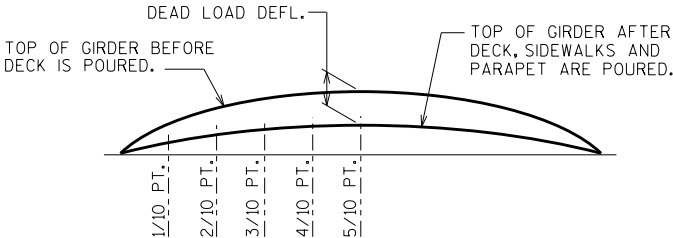
DECK HAUNCH DETAIL

IF 1/4" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN 1/2" OR, ** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

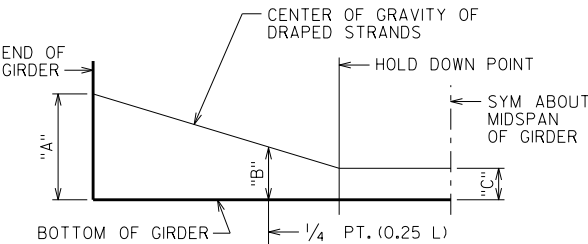
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT \bar{C} OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.0" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	4.03

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY MJK		PLANS CK'D. SEW	
45W" PRESTRESSED GIRDER DETAILS 2			SHEET 9

NOTES

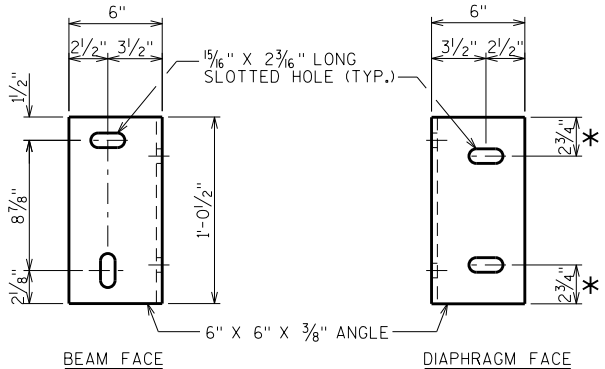
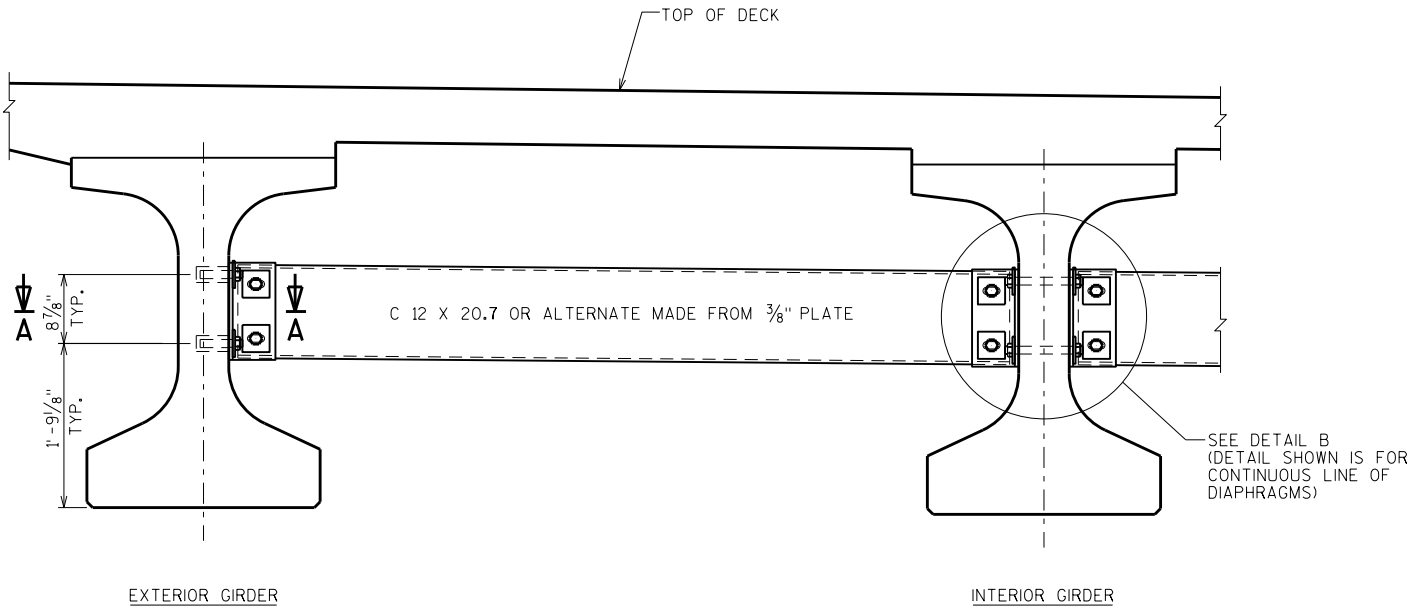
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-67-353", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

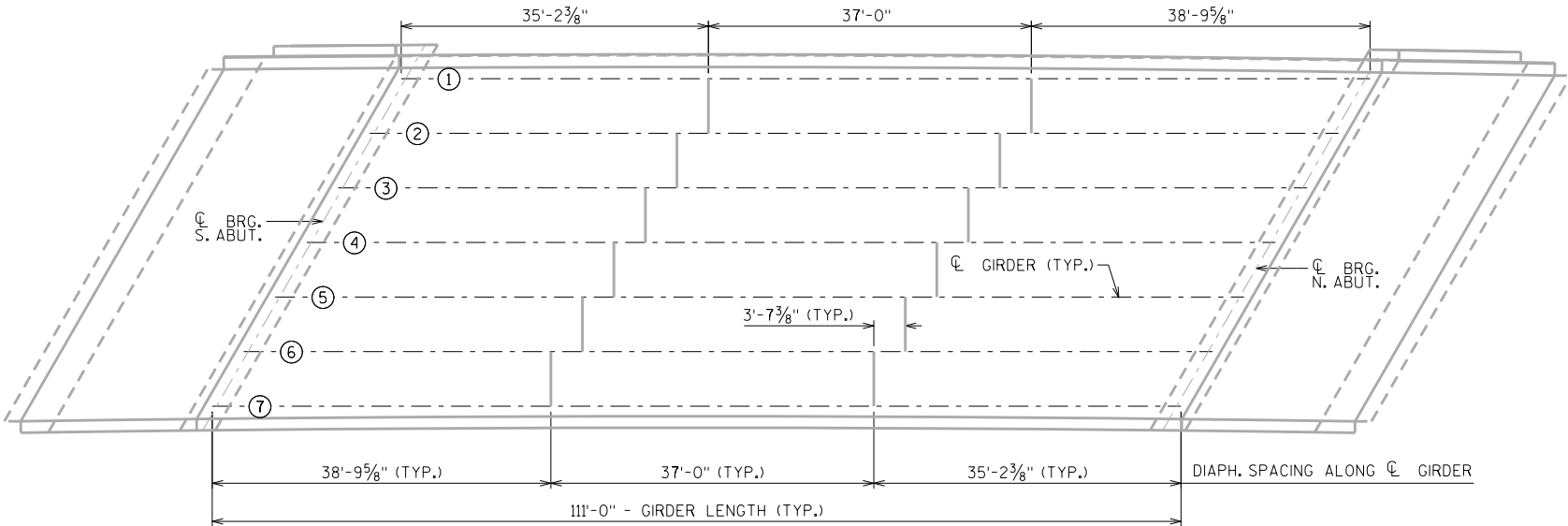
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.



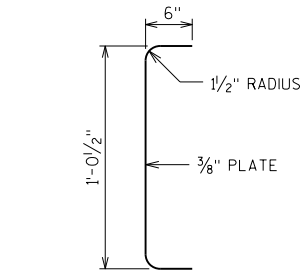
DIAPHRAGM SUPPORT

* 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

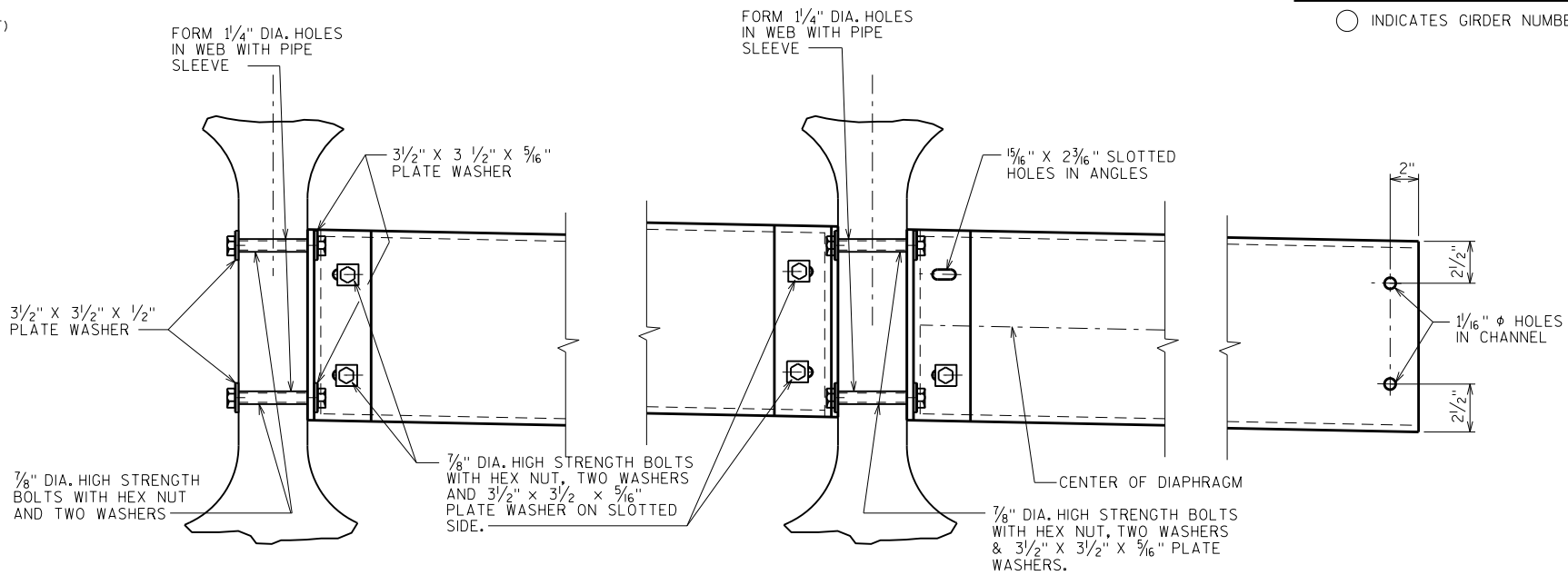


DIAPHRAGM FRAMING PLAN

○ INDICATES GIRDER NUMBER

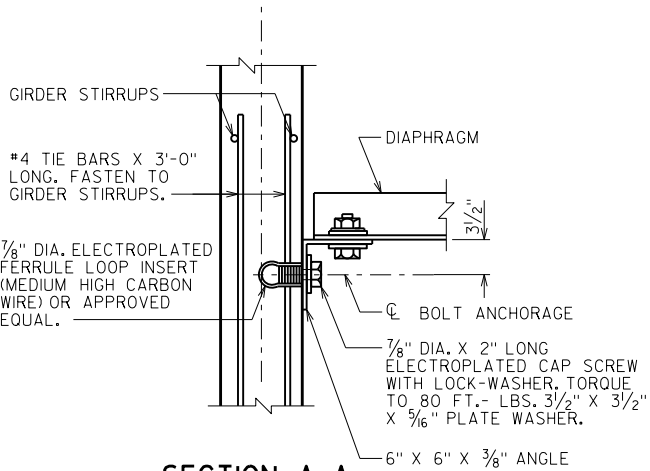


SECTION THRU ALTERNATE DIAPHRAGM



DETAIL B

SECTION A-A
(FOR EXTERIOR ATTACHMENT)



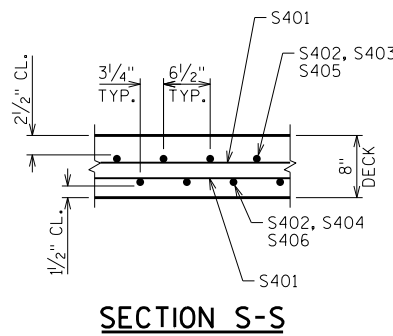
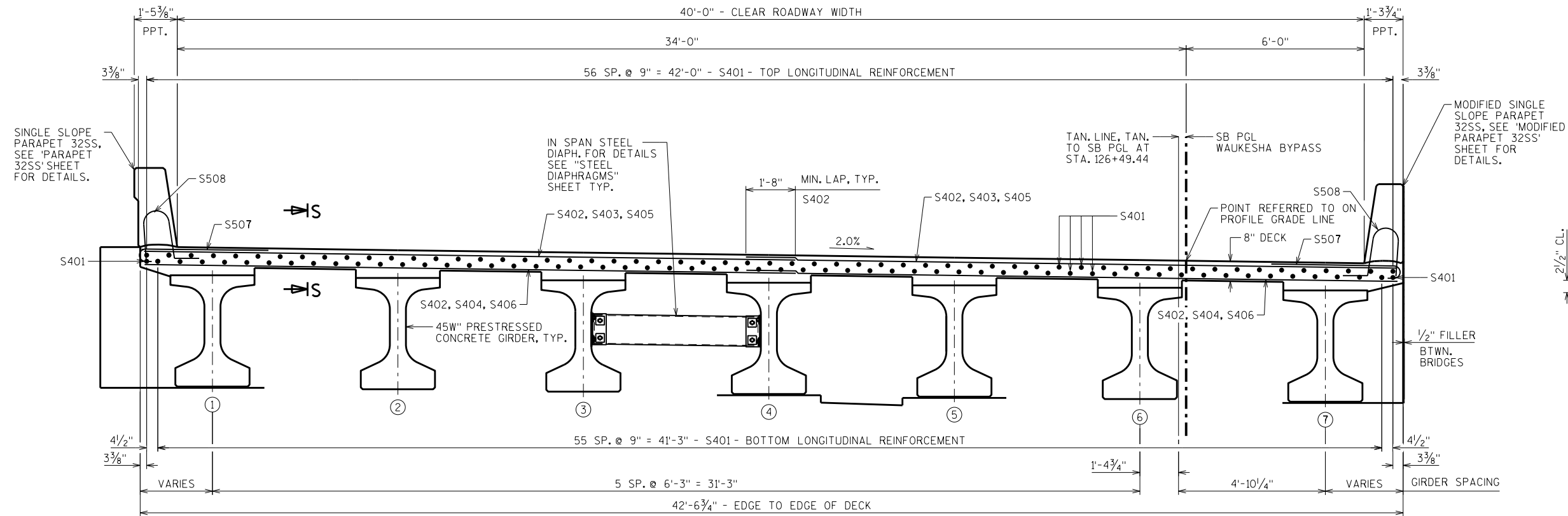
FORM 1/4" DIA. HOLES IN WEB WITH PIPE SLEEVE

FORM 1/4" DIA. HOLES IN WEB WITH PIPE SLEEVE

(FOR STAGGERED DIAPHRAGM)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

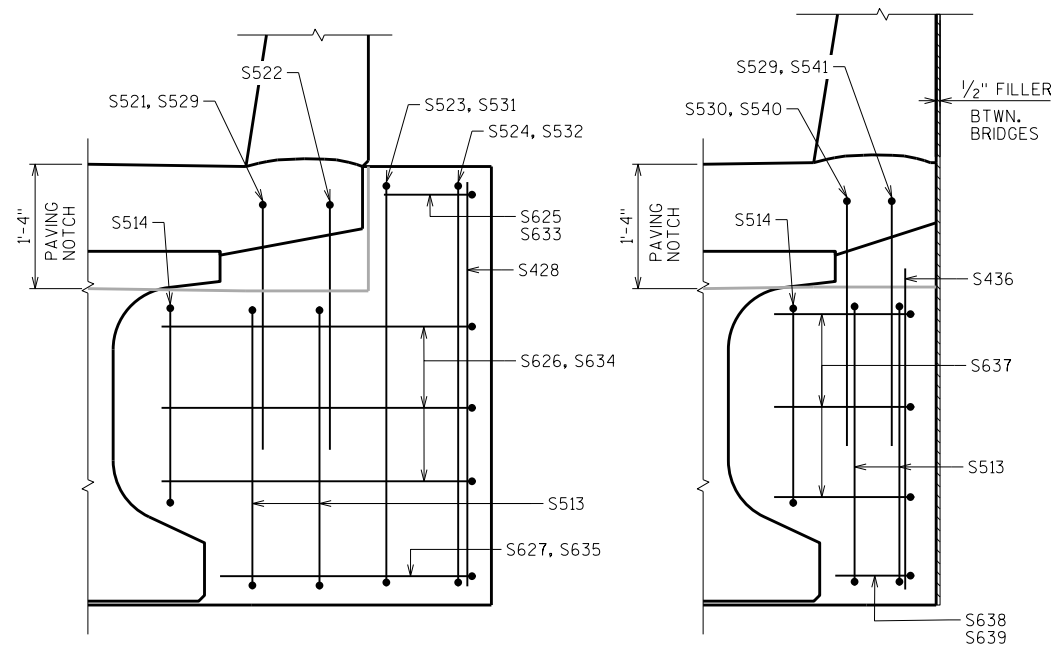
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
STEEL DIAPHRAGMS		SHEET 10	



CROSS SECTION THRU ROADWAY

ALL HORIZONTAL DIMENSIONS MEASURED RADIALLY - EXCEPT FOR GIRDER SPACING DIMENSIONS
LOOKING NORTH

○ INDICATES GIRDER NUMBER

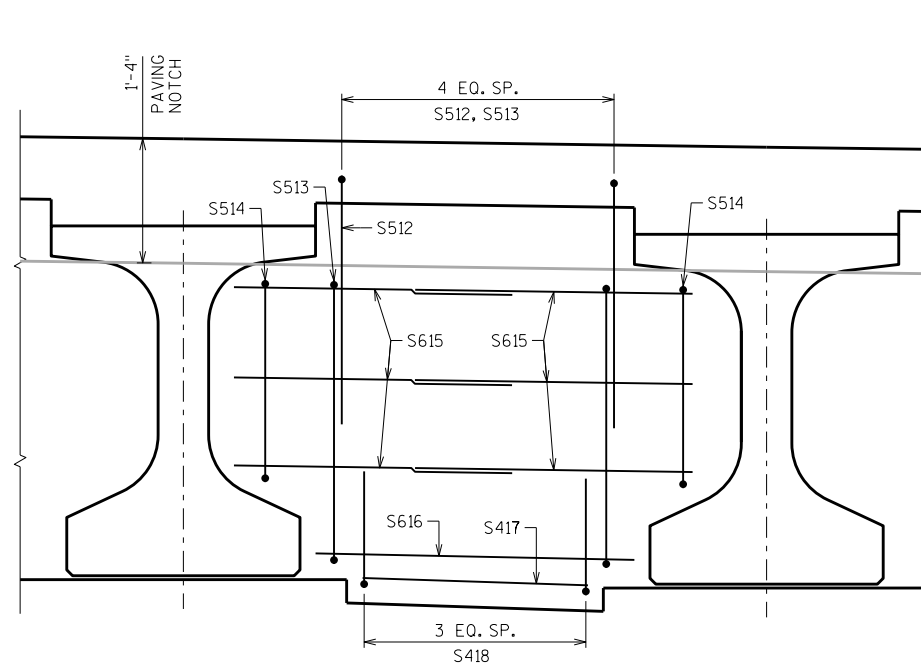


ABUTMENT DIAPHRAGM
WEST EXTERIORS

DECK REINFORCEMENT NOT SHOWN FOR CLARITY
SOUTH ABUT. SHOWN. (WING 1 CORNER)
NORTH ABUT. (WING 2 CORNER) SIMILAR

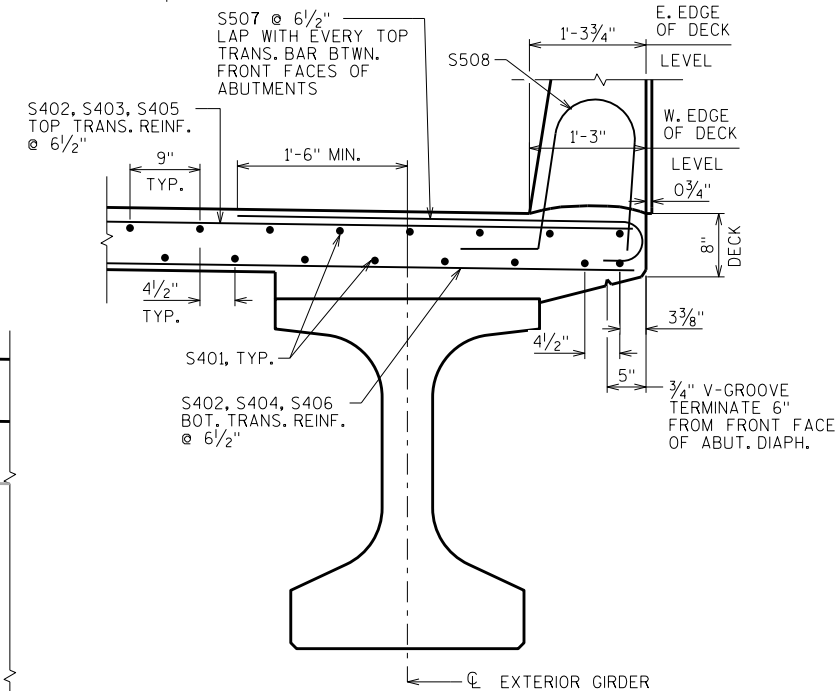
ABUTMENT DIAPHRAGM
EAST EXTERIORS

DECK REINFORCEMENT NOT SHOWN FOR CLARITY
NORTH ABUT. SHOWN. (NE CORNER)
SOUTH ABUT. (SE CORNER) SIMILAR



INTERIOR DIAPHRAGM AT ABUTMENTS

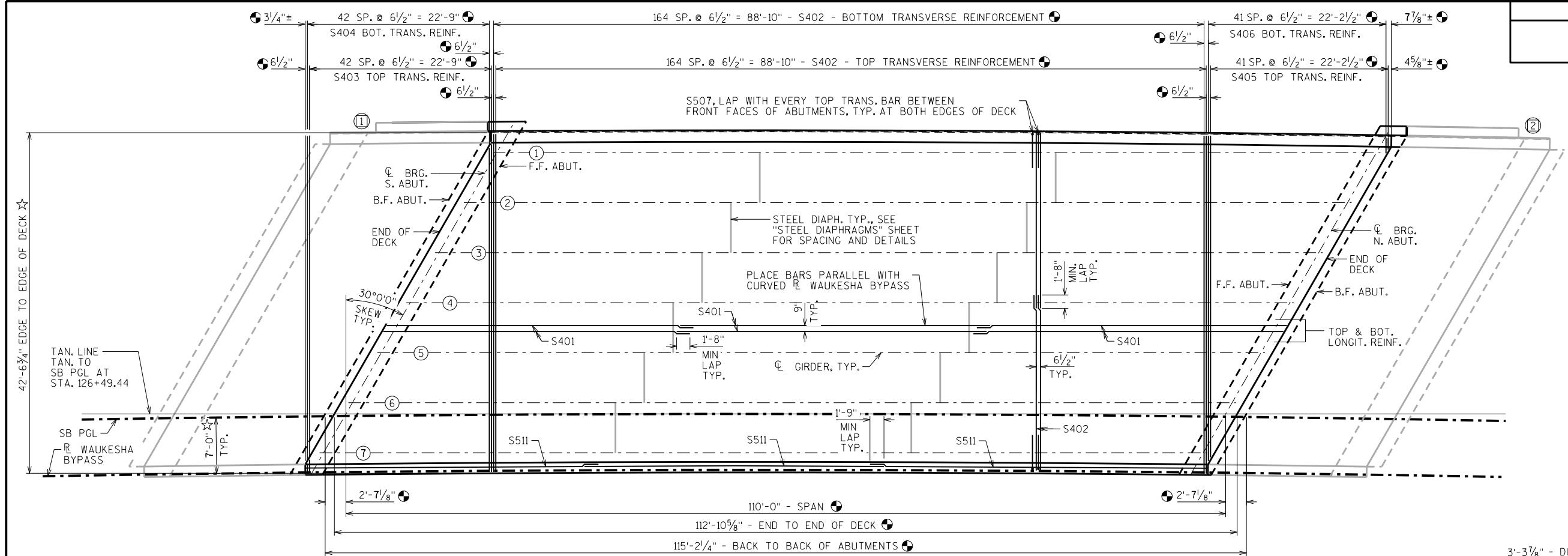
DECK REINFORCEMENT NOT SHOWN FOR CLARITY
TYPICAL BETWEEN GIRDERS



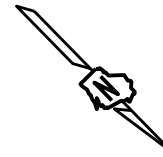
EDGE OF DECK DETAIL

TYP. AT BOTH EDGES

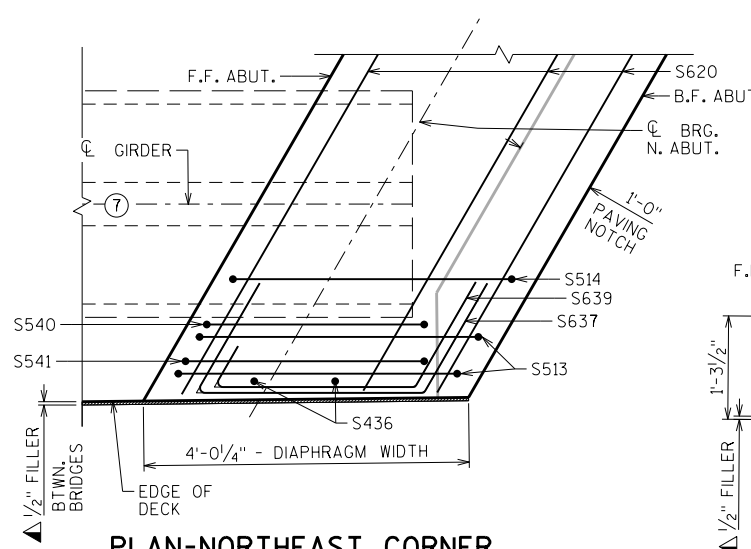
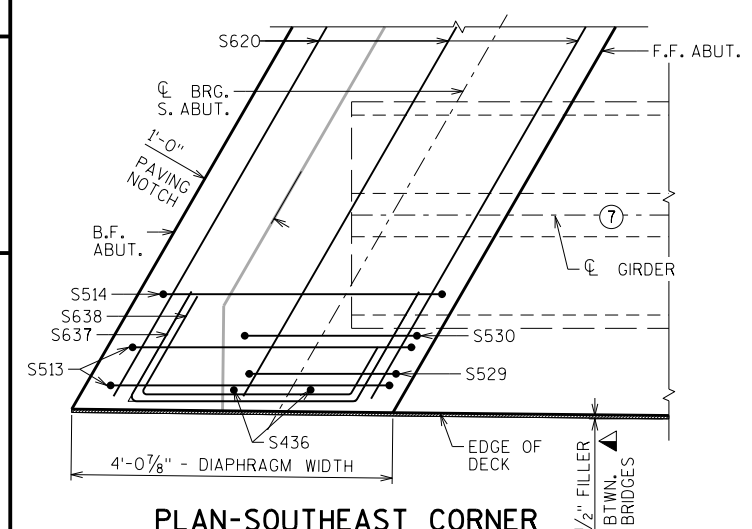
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
SUPERSTRUCTURE CROSS SECTION			SHEET 11



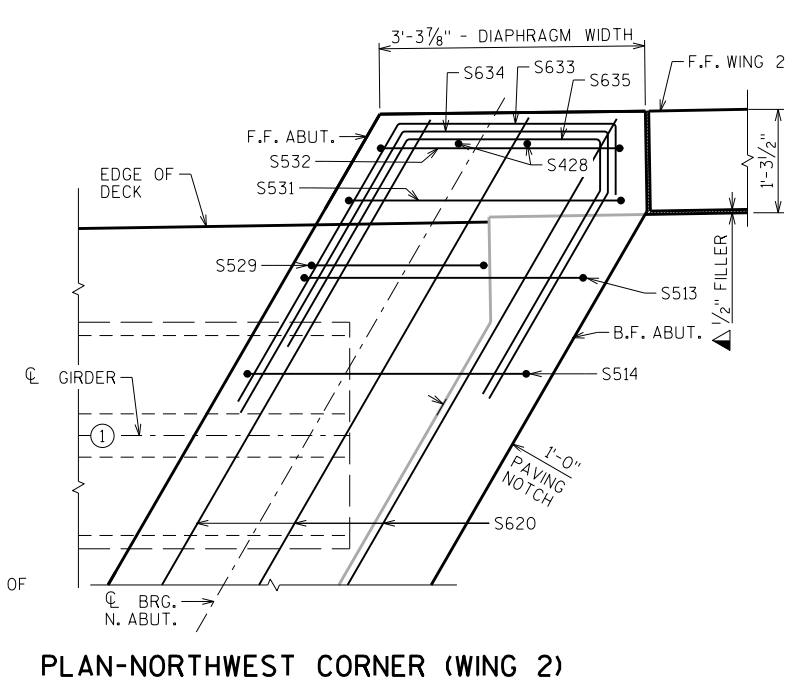
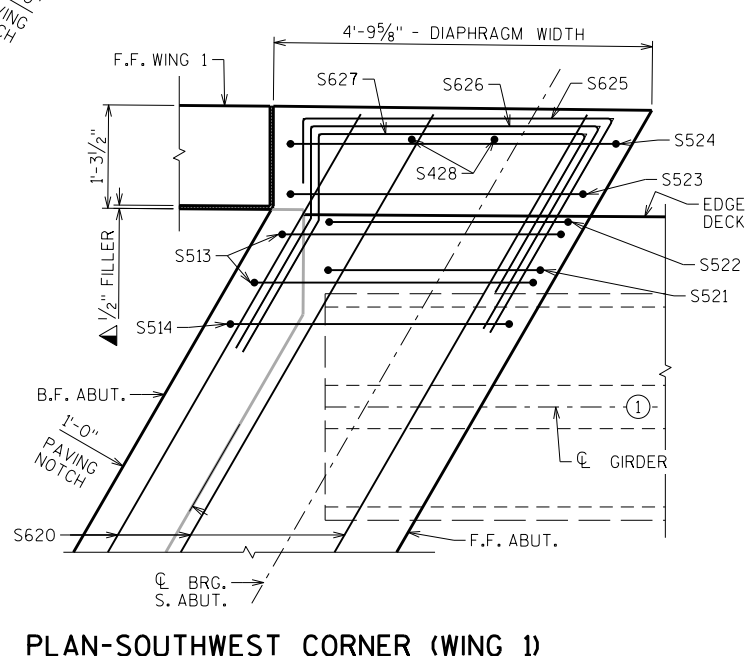
- ☆ MEASURED RADIALLY
- ⊙ MEASURED ALONG TANGENT
- INDICATES GIRDER NUMBER
- INDICATES WING NUMBER



PLAN



▲ SEAL ALL HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING, GRAY AND NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
SUPERSTRUCTURE PLAN		SHEET 12	

SCALE = 7:00

BILL OF BARS

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

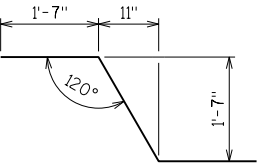
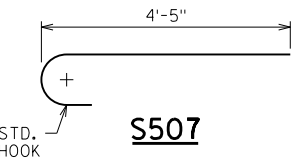
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	345	38'-8"			DECK-LONGIT.-TOP & BOT.
S402	X	660	22'-2"			DECK-TRANS.-TOP & BOT.
S403	X	43	21'-4"		▲	DECK-TRANS.-SOUTH END-TOP
S404	X	43	20'-10"		▲	DECK-TRANS.-SOUTH END-BOT.
S405	X	42	20'-10"		▲	DECK-TRANS.-NORTH END-TOP
S406	X	42	21'-3"		▲	DECK-TRANS.-NORTH END-BOT.
S507	X	396	5'-0"	X		DECK-TOP-TRANS.-HOOK BARS
S508	X	340	4'-5"	X		PARAPETS/DECK-VERT.-TRANS.
S509	X	340	5'-0"	X		32SS PARAPET-VERT.-TRANS.
S510						NOT USED
S511	X	36	38'-10"			PARAPETS-HORIZ.-LONGIT.
S512	X	60	7'-7"	X		ABUT. DIAPH.-VERT.-BTWN. GIR.
S513	X	67	13'-10"	X		ABUT. DIAPH.-STIRRUPS-BTWN. GIR. & AT EXTERIORS
S514	X	28	12'-0"	X		ABUT. DIAPH.-STIRRUPS-AT GIR. & AT EXTERIORS
S615	X	72	3'-9"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S616	X	12	3'-9"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S417	X	24	2'-9"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S418	X	48	3'-5"	X		ABUT. DIAPH.-VERT.-BTWN. GIR.
S519	X	28	6'-0"			ABUT. DIAPH.-HORIZ.-THRU GIR.
S620	X	24	26'-5"			ABUT. DIAPH.-HORIZ.
S521	X	1	7'-10"	X		ABUT. DIAPH.-VERT.-EXT.-WING 1
S522	X	1	8'-2"	X		ABUT. DIAPH.-VERT.-EXT.-WING 1
S523	X	1	16'-10"	X		ABUT. DIAPH.-VERT.-EXT.-WING 1
S524	X	1	17'-8"	X		ABUT. DIAPH.-VERT.-EXT.-WING 1
S625	X	1	7'-11"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 1
S626	X	3	10'-2"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 1
S627	X	1	8'-7"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 1
S428	X	4	4'-4"			ABUT. DIAPH.-VERT.-EXT.-WINGS
S529	X	2	7'-0"	X		ABUT. DIAPH.-VERT.-EXT.-WING 2 & SE CORNER
S530	X	1	7'-5"	X		ABUT. DIAPH.-VERT.-EXT.-SE CORNER
S531	X	1	16'-4"	X		ABUT. DIAPH.-VERT.-EXT.-WING 2
S532	X	1	15'-6"	X		ABUT. DIAPH.-VERT.-EXT.-WING 2
S633	X	1	6'-5"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 2
S634	X	3	7'-11"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 2
S635	X	1	7'-2"	X		ABUT. DIAPH.-HORIZ.-EXT.-WING 2
S436	X	4	3'-5"			ABUT. DIAPH.-VERT.-EXT. SE & NE CORNERS
S637	X	6	7'-4"	X		ABUT. DIAPH.-HORIZ.-EXT. SE & NE CORNERS
S638	X	1	6'-7"	X		ABUT. DIAPH.-HORIZ.-EXT. SE CORNER
S639	X	1	6'-7"	X		ABUT. DIAPH.-HORIZ.-EXT. NE CORNER
S540	X	1	7'-8"	X		ABUT. DIAPH.-VERT.-EXT. NE CORNER
S541	X	1	8'-1"	X		ABUT. DIAPH.-VERT.-EXT. NE CORNER
SS901		86	5'-0"	X		ABUT. DIAPH.-APP. SLAB TIE

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

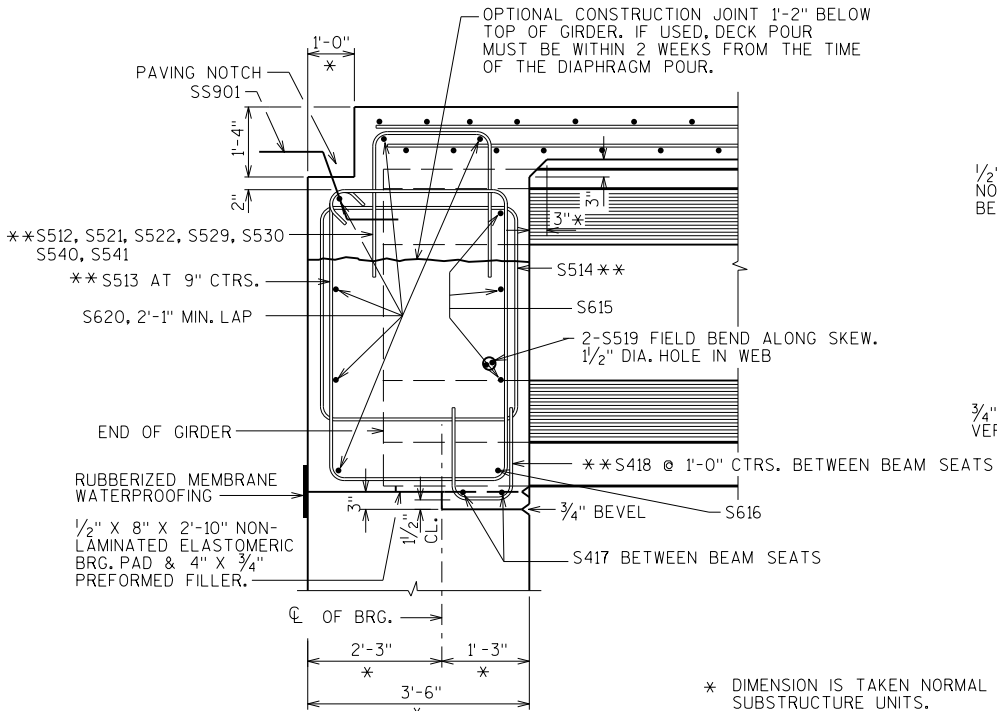
BAR MARK	NO. REQ'D.	LENGTH
S403	1 SERIES OF 43	1'-9" TO 40'-11"
S404	1 SERIES OF 43	1'-3" TO 40'-5"
S405	1 SERIES OF 42	1'-5" TO 40'-2"
S406	1 SERIES OF 42	1'-10" TO 40'-7"

BUNDLE AND TAG EACH SERIES SEPARATELY.



SS901

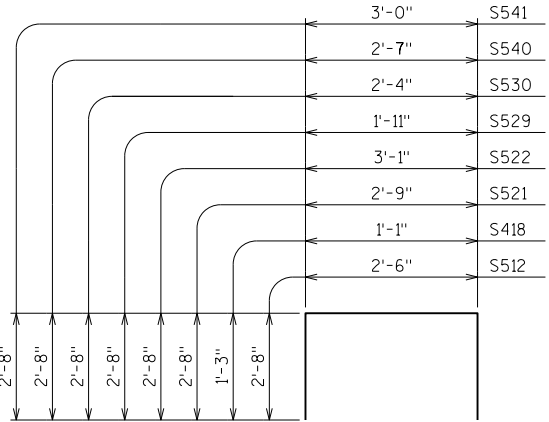
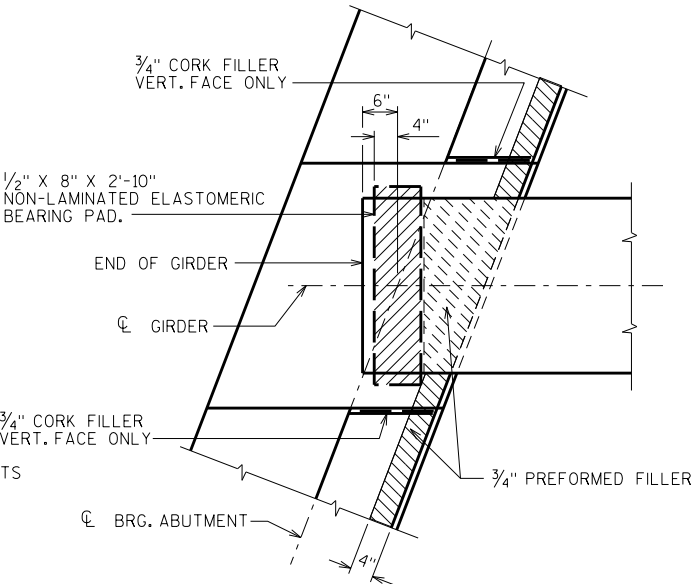
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION		
STRUCTURE B-67-353		
DRAWN BY MJK		PLANS CK'D. SEW
SUPERSTRUCTURE DETAILS		SHEET 13



PART LONGIT. SECTION

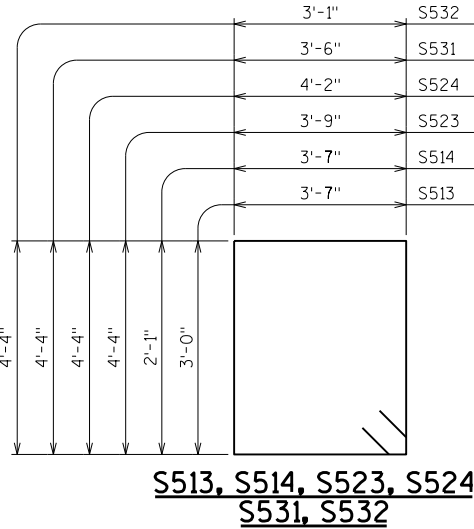
* DIMENSION IS TAKEN NORMAL TO CL SUBSTRUCTURE UNITS.
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO CL GIRDERS

BEARING PAD DETAIL

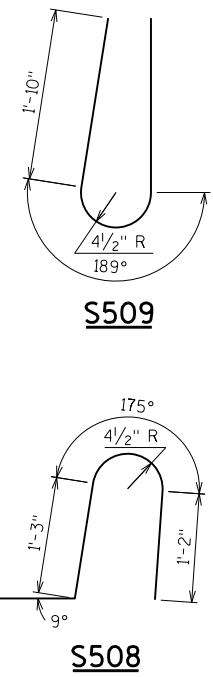


S512, S418, S521, S522
S529, S530, S540, S541

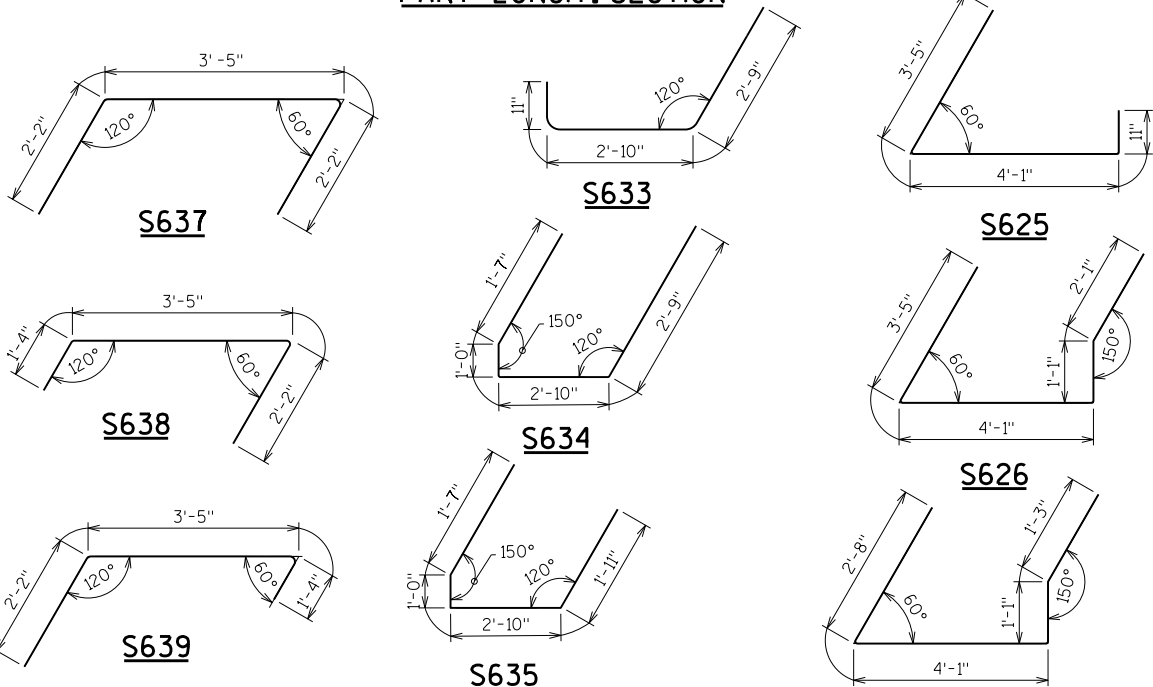
STAINLESS STEEL



S513, S514, S523, S524
S531, S532



S508



TOP OF DECK ELEVATIONS

EOD = EDGE OF DECK, GL = GUTTERLINE

	CL BRG. S. 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.	CL BRG. N. ABUT.
W EOD	837.63	837.48	837.32	837.15	836.98	836.79	836.60	836.40	836.18	835.96	835.74
W GL	837.64	837.49	837.33	837.16	836.99	836.80	836.61	836.41	836.20	835.98	835.75
G 1	837.62	837.47	837.32	837.15	836.97	836.79	836.60	836.40	836.19	835.97	835.74
G 2	837.55	837.40	837.24	837.08	836.91	836.72	836.53	836.34	836.13	835.92	835.69
G 3	837.47	837.33	837.17	837.01	836.84	836.66	836.47	836.28	836.07	835.86	835.64
G 4	837.39	837.25	837.10	836.94	836.77	836.59	836.41	836.22	836.01	835.80	835.59
G 5	837.31	837.17	837.02	836.87	836.70	836.53	836.35	836.15	835.96	835.75	835.53
G 6	837.23	837.10	836.95	836.79	836.63	836.46	836.28	836.09	835.90	835.69	835.48
G 7	837.15	837.02	836.87	836.72	836.56	836.39	836.22	836.03	835.84	835.63	835.42
E GL	837.13	837.00	836.86	836.71	836.55	836.38	836.21	836.02	835.83	835.62	835.41
E EOD	837.14	837.01	836.87	836.72	836.56	836.39	836.22	836.03	835.84	835.64	835.42

TABLE OF TAN. OFFSETS

TANGENCY OFFSETS ARE NORMAL TO TANGENT LINE

LOCATION	A	B	C
℄ BRG. S. ABUT.	-	7'-6 $\frac{3}{8}$ "	3 $\frac{3}{8}$ "
-50	-	7'-6 $\frac{3}{4}$ "	3"
-40	-	7'-5 $\frac{5}{8}$ "	1 $\frac{3}{8}$ "
-30	35'-1 $\frac{7}{8}$ "	7'-4 $\frac{7}{8}$ "	1 $\frac{1}{8}$ "
-20	35'-2 $\frac{1}{2}$ "	7'-4 $\frac{1}{4}$ "	$\frac{1}{2}$ "
-10	35'-2 $\frac{7}{8}$ "	7'-3 $\frac{3}{8}$ "	$\frac{1}{8}$ "
P.O.T. (0)	35'-3"	7'-3 $\frac{3}{4}$ "	0"
10	35'-2 $\frac{7}{8}$ "	7'-3 $\frac{3}{8}$ "	$\frac{1}{8}$ "
20	35'-2 $\frac{1}{2}$ "	7'-4 $\frac{1}{4}$ "	$\frac{1}{2}$ "
30	35'-1 $\frac{7}{8}$ "	7'-4 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "
40	35'-1 $\frac{1}{8}$ "	7'-5 $\frac{5}{8}$ "	1 $\frac{3}{8}$ "
50	35'-0"	7'-6 $\frac{3}{4}$ "	3"
℄ BRG. N. ABUT.	34'-10 $\frac{7}{8}$ "	-	4 $\frac{1}{8}$ "
60	34'-10 $\frac{3}{4}$ "	-	4 $\frac{3}{8}$ "
70	34'-9 $\frac{1}{8}$ "	-	5 $\frac{7}{8}$ "

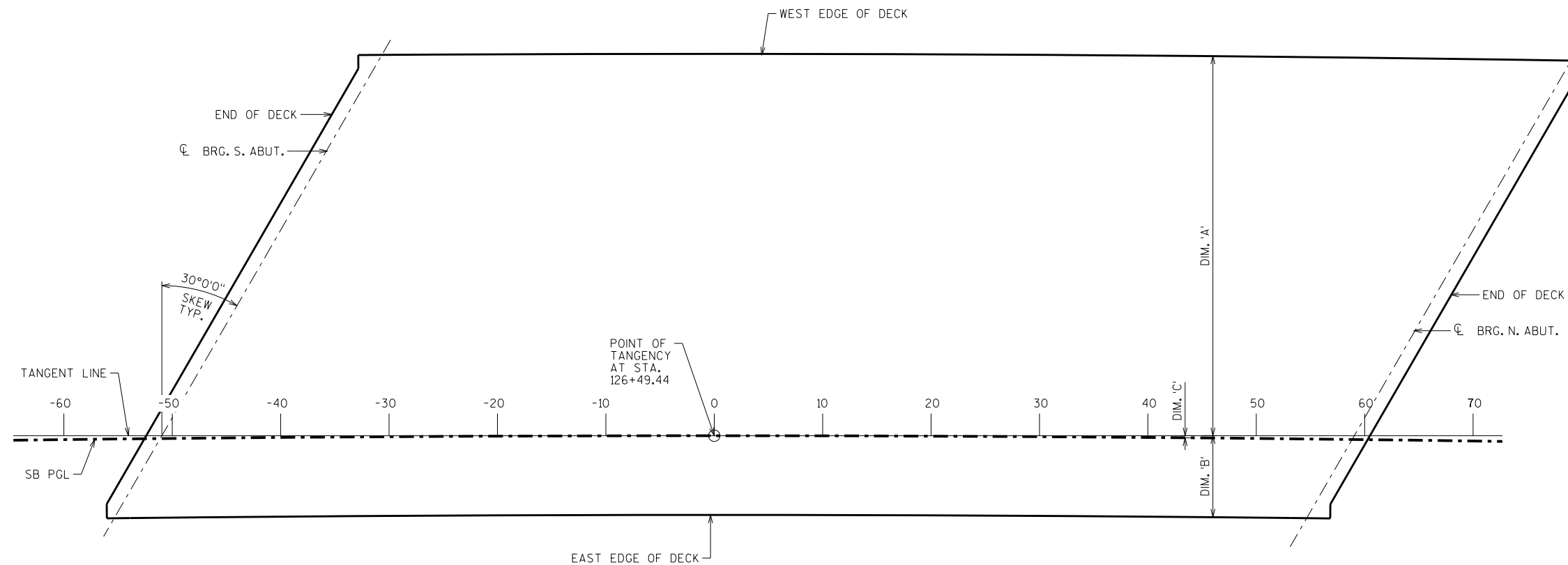
NOTES:

DIMENSION 'A' = DISTANCE BETWEEN THE 'TANGENT LINE'
AND THE WEST 'EDGE OF DECK'.

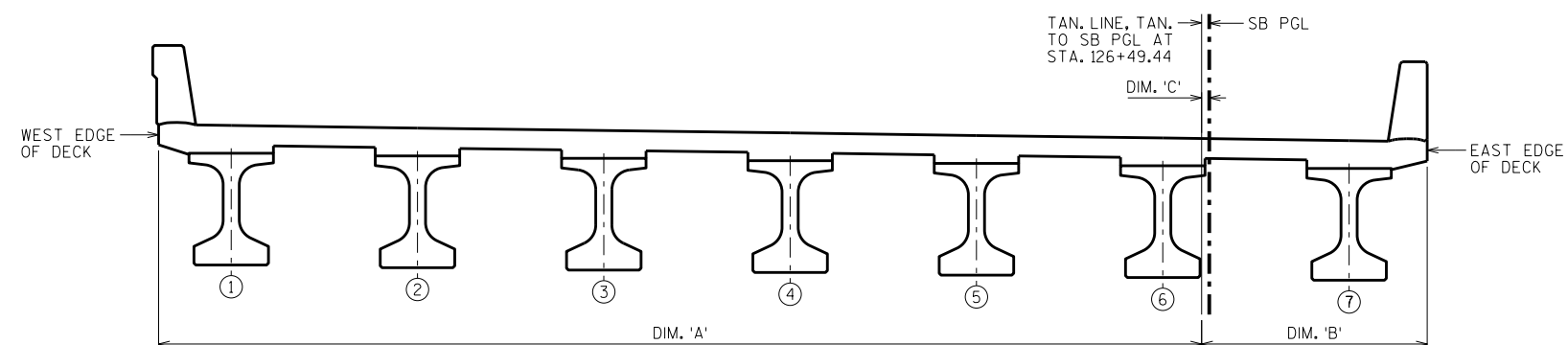
DIMENSION 'B' = DISTANCE BETWEEN THE 'TANGENT LINE'
AND THE EAST 'EDGE OF DECK'.

DIMENSION 'C' = DISTANCE BETWEEN THE 'TANGENT LINE' AND THE SOUTHBOUND PROFILE GRADE LINE OF THE WAUKESHA BYPASS.

○ INDICATES GIRDER NUMBER



PLAN



CROSS SECTION THRU BRIDGE

LOOKING NORTH
HORIZONTAL DIMENSIONS MEASURED NORMAL TO TANGENT LINE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
		DRAWN BY	PLANS CK'D. SEW
DECK LAYOUT		SHEET 14	

MEASURED ALONG TANGENT



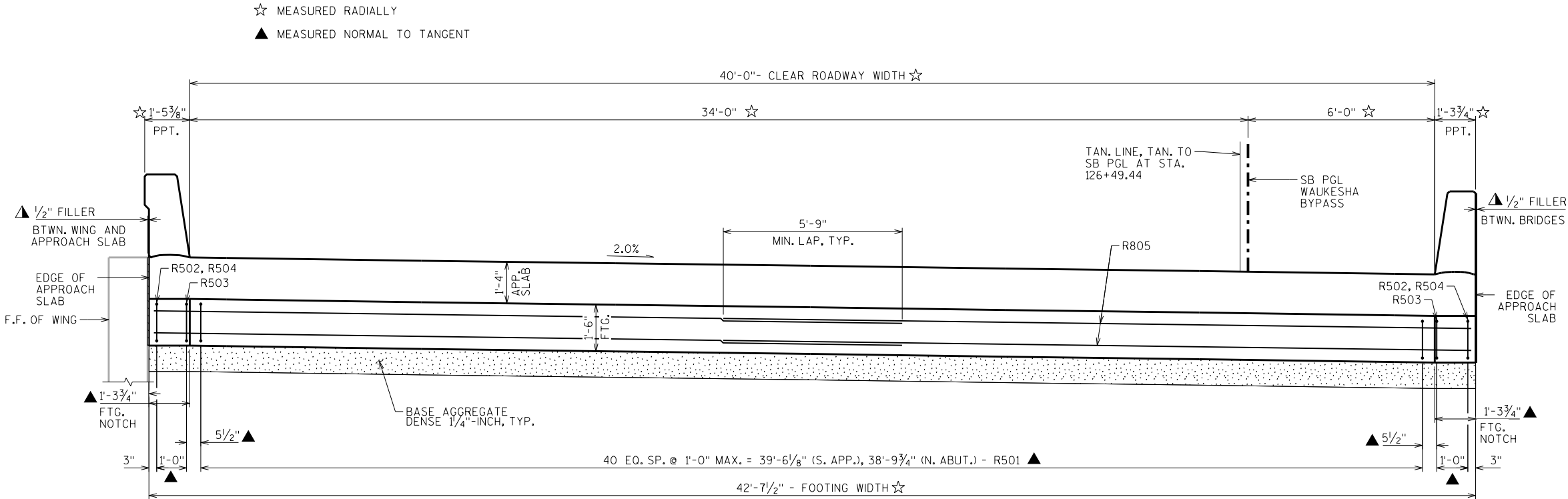
STA.	OFFSET TO SB PGL	ELEV.
127+48.18	34' LT	835.29
127+29.45	0'	835.02
127+26.11	6' RT	834.97

CONCRETE STRENGTH, f'_c :	4,000 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60, f_y :	60,000 P.S.I.
ALLOWABLE SOIL BEARING PRESSURE:	2,000 P.S.F.



▲ 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), EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
APPROACH SLAB		SHEET 15	



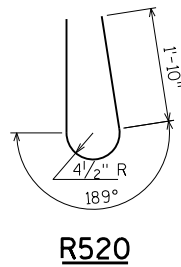
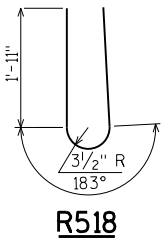
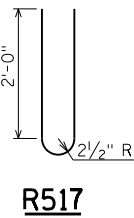
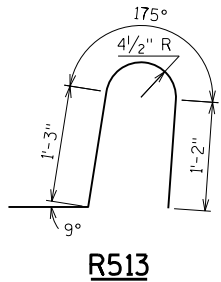
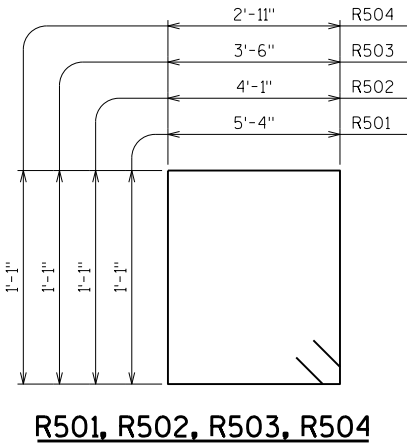
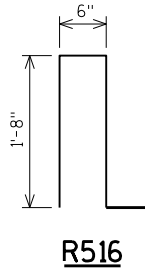
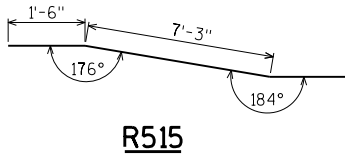
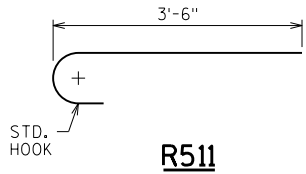
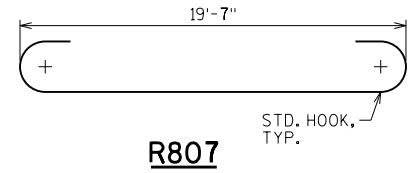
CROSS SECTION THRU APPROACH SLAB

LOOKING NORTH
SHOWING FOOTING REINFORCEMENT ONLY

BILL OF BARS

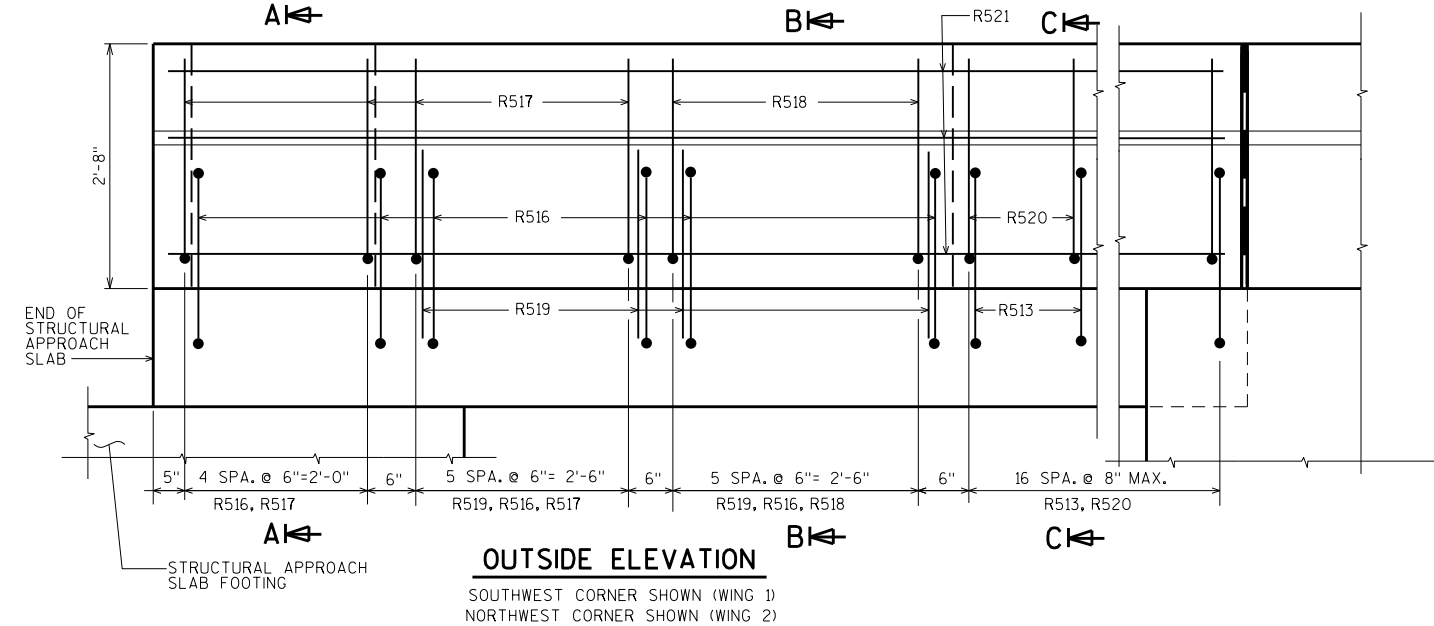
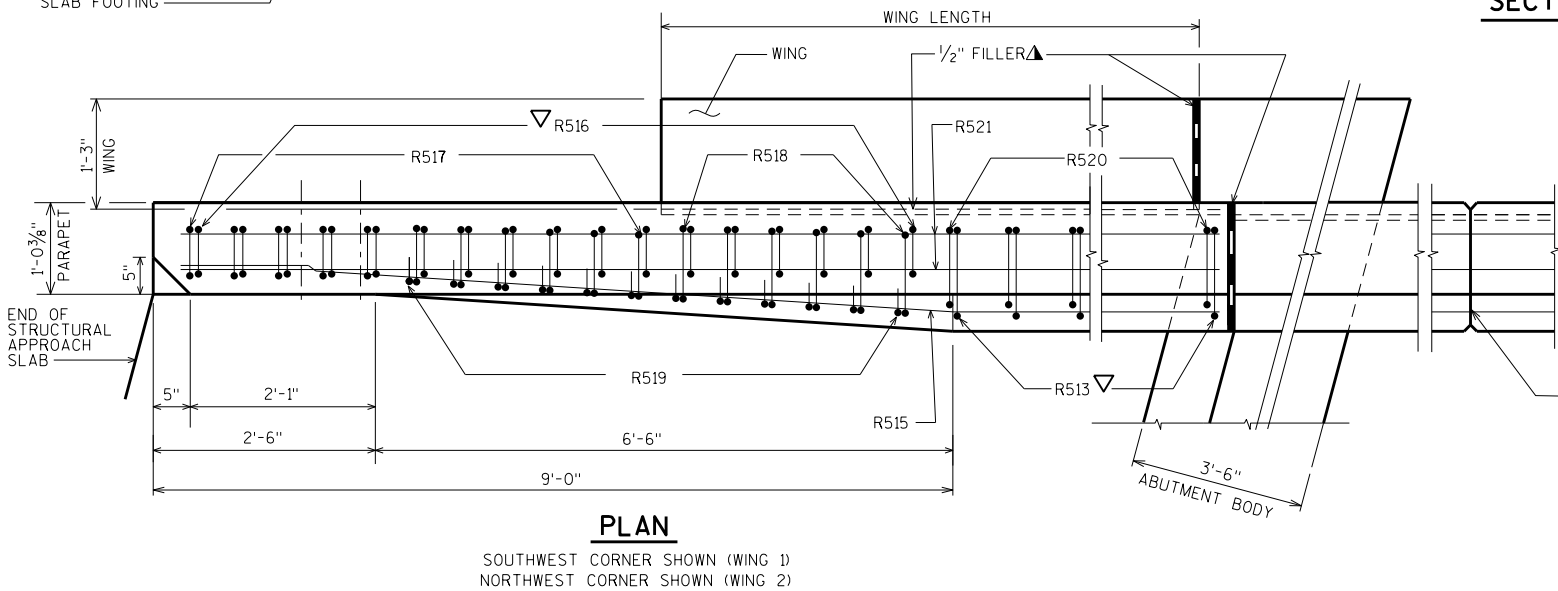
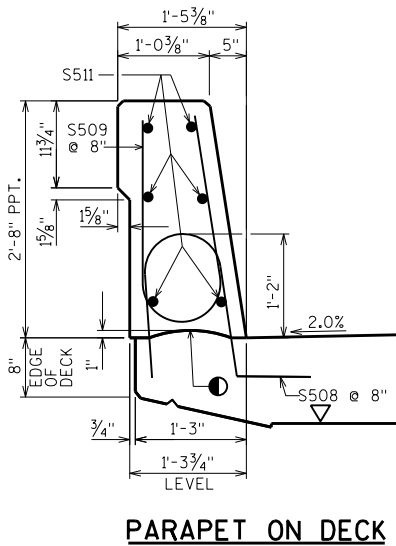
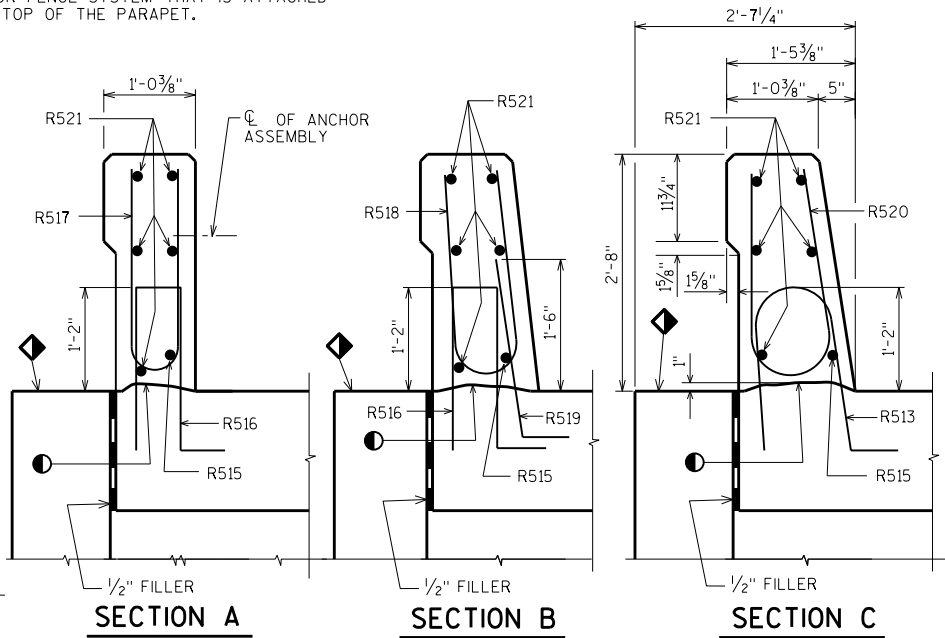
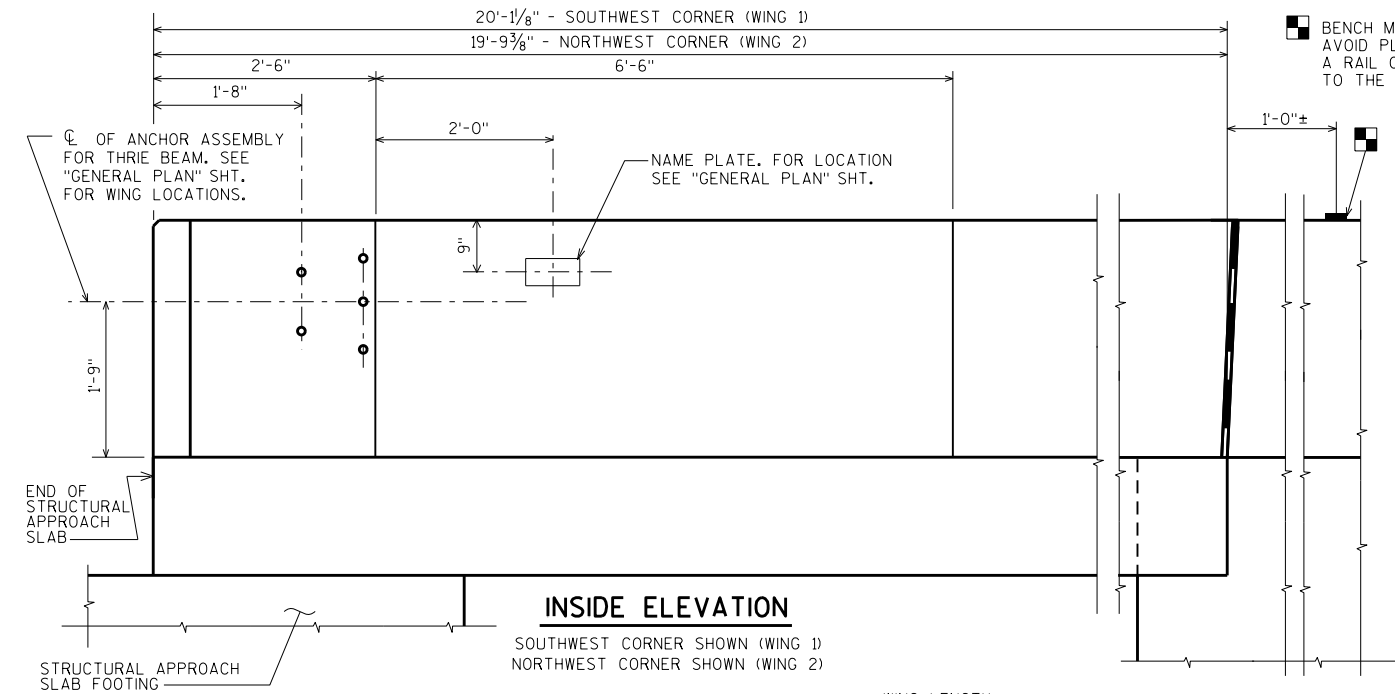
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.		LENGTH	BENT	BAR SERIES	LOCATION
		SOUTH SLAB	NORTH SLAB				
R501	X	41	41	13'-6"	X		FOOTING-VERT.-LONGIT.-STIRRUP
R502	X	1	1	11'-0"	X		FOOTING-VERT.-LONGIT.-STIRRUP-SW & NE CORNERS
R503	X	2	2	9'-10"	X		FOOTING-VERT.-LONGIT.-CORNERS
R504	X	1	1	8'-8"	X		FOOTING-VERT.-LONGIT.-STIRRUP-SE & NW CORNERS
R805	X	24	24	27'-7"			FOOTING-HORIZ.-TRANS.-TOP & BOT.
R806	X	4	4	1'-4"			FOOTING-HORIZ.-TRANS.-TOP & BOT.
R807	X	72	72	21'-5"	X		SLAB-HORIZ.-LONGIT.-BOT.
R508	X	44	44	19'-7"			SLAB-HORIZ.-LONGIT.-TOP
R509	X	42	42	26'-0"			SLAB-HORIZ.-TRANS.-BOT.
R510	X	42	42	26'-2"			SLAB-HORIZ.-TRANS.-TOP
R511	X	40	40	4'-1"	X		SLAB-HORIZ.-TRANS.-TOP-HOOKED BARS
NOT USED → R512							
R513	X	57	57	4'-5"	X		PARAPETS-VERT.-TRANS.
NOT USED → R514							
R515	X	1	1	19'-6"	X		PARAPET 32SS-HORIZ.
R516	X	17	17	4'-4"	X		PARAPET 32SS-VERT.-TRANS.
R517	X	11	11	4'-9"	X		PARAPET 32SS-VERT.-TRANS.
R518	X	6	6	4'-10"	X		PARAPET 32SS-VERT.-TRANS.
R519	X	12	12	2'-9"	X		PARAPET 32SS-VERT.-TRANS.
R520	X	57	57	5'-0"	X		PARAPETS-VERT.-TRANS.
R521	X	11	11	19'-5"			PARAPETS-HORIZ.

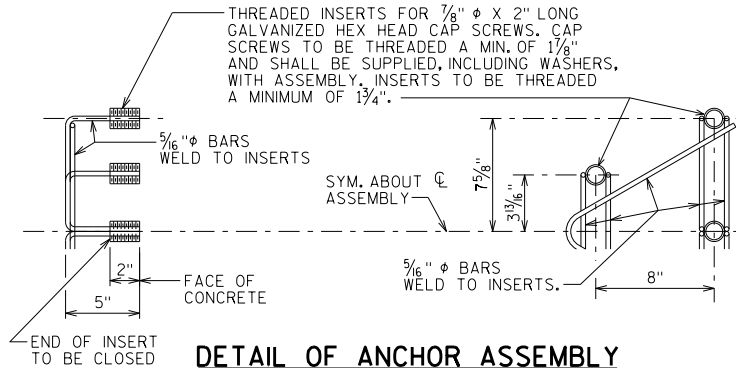


▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING, GRAY, NON BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
APPROACH SLAB DETAILS		SHEET 16	

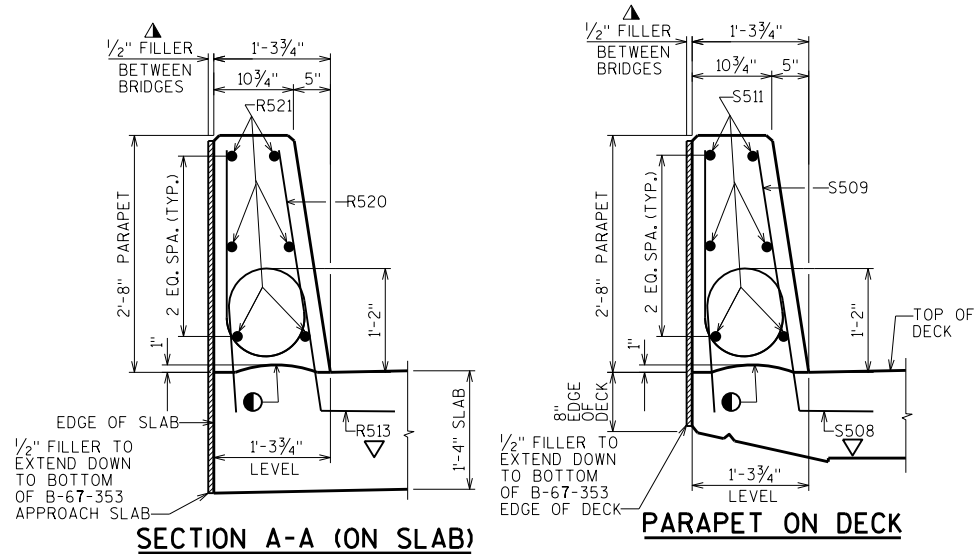
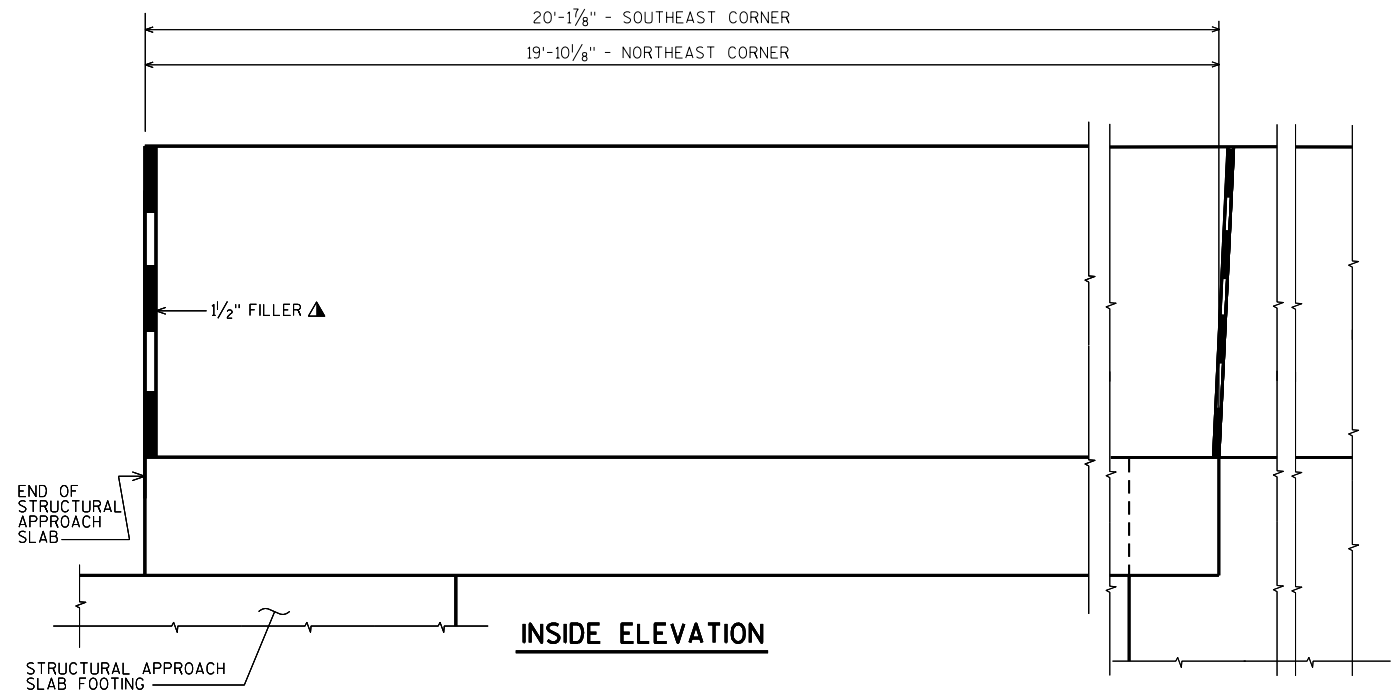


NOTES:
SEE THE 'APPROACH SLAB DETAILS' SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE SLAB PARAPET R-BARS.
SEE THE "SUPERSTRUCTURE DETAILS" SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE DECK PARAPET S-BARS.

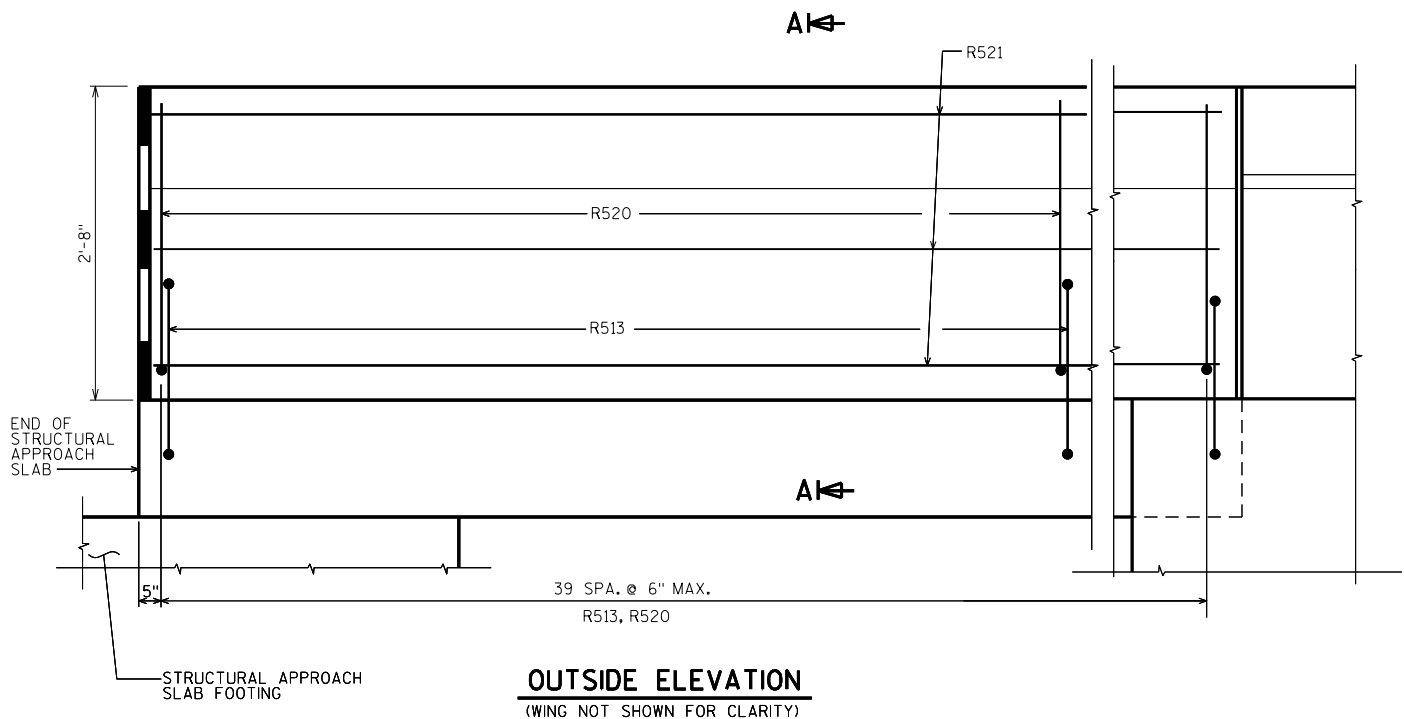
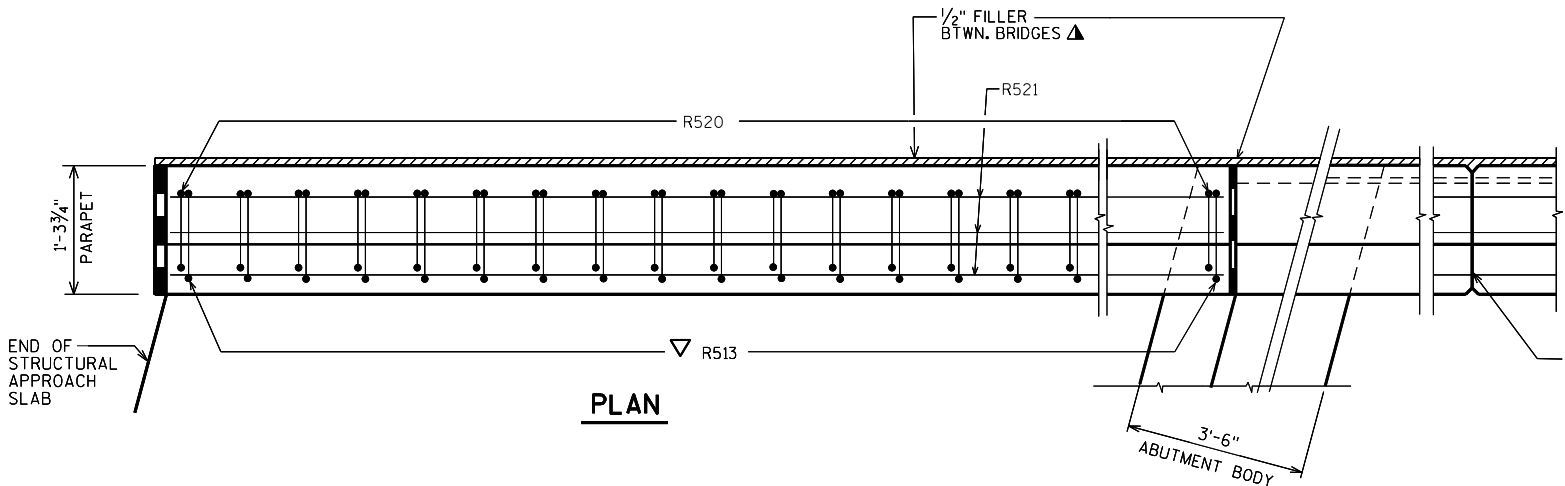


- SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER, (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE), EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- SLOPE FOR DRAINAGE
- CONST. JOINT - STRIKE OFF AS SHOWN.
- R516 AND R513 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY MJK		PLANS CK'D. SEW	
SINGLE SLOPE PARAPET 32SS			SHEET 17



NOTES:
SEE THE 'APPROACH SLAB DETAILS' SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE SLAB PARAPET R-BARS.
SEE THE "SUPERSTRUCTURE DETAILS" SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE DECK PARAPET S-BARS.



▲ 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). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

● CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R513 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-67-353			
DRAWN BY		MJK	PLANS CK'D. SEW
MODIFIED SINGLE SLOPE PARAPET 32SS		SHEET 18	