REHABILITATION STRUCTURE SURVEY REPORT

Wisconsin Department of Transportation

DT1696 6/2012

☒ **Grade Separation** ☐ **Stream Crossing** ☐ **Culvert**

☐ **Railroad** ☐ **Retaining Wall** ☐ **Noise Barrier**

☐ **Sign Structure** ☐ **Other:** _____

For guidance see: **http://dotnet/dtid_bos/extranet/structures/reports-checklists.htm**

Design Project ID 1190-02-34	Construction Project ID 1190-02-64	Highway (Project Name) EAU CLAIRE - CHIPPEWA FALLS		
Final Plan Due Date 05/01/2018	Preliminary Plan Due Date 05/01/2018	☒ Town ☐ Village ☐ City HALLIE		
PS&E Date 08/01/2018	Letting Date 02/12/2019	County CHIPPEWA		
Structure Number B-09-262		Section 36	Town 28N	Range 09W
Station 43+48.125 - 45+92.875	Latitude: 445141.59 Longitude: 912538.03	☒ YES ☐ NO Structure Located on National Highway System		
For Survey and CADD Files Horizontal Coordinate System: Vertical Datum:		**Traffic Forecast Data**		
		Design Year	Average Daily Traffic (ADT)	Roadway Design Speed	Functional Class
Feature On MELBY STREET		Feature On 2014	6700	40 MPH	Local-Urban
Feature Under USH 53		Feature Under 2014	34500	70 MPH	Principal Arterial
Region Contact: Adam Hetrick (Area Code) Telephone Number(s): 715-836-2855 Email: adam.hetrick@dot.wi.gov		Consultant Contact: (Area Code) Telephone Number(s): Email:			

Work To Be Performed

Field Information Required
Item Number *(see Pages 2–4)*

- ☐ A. Structural Repair 1–3, 22
- ☒ B. Overlay 1–3, 10–22, 26–28, 32, 34
  - ☐ Concrete Overlay ☐ Asphalt Overlay
  - ☐ Polymer Modified Asphalt Overlay ☒ Thin Bonded Polymer Overlay
  - ☐ Other: _____
- ☐ C. New Bearings 3, 8, 9, 22
- ☐ D. New Railings 15–17, 20–23
- ☒ E. Curb and Sidewalk Repair 2, 3, 16, 22, 23
- ☐ F. Abutment Repair 2, 3, 12, 16
- ☐ G. Pier Repair 2, 3, 12, 16
- ☐ H. New Deck 1–6, 9, 10, 13–28, 32–34
- ☐ I. Widening 1–28, 30, 32–35
- ☐ J. Joint Repair 2, 3, 8, 16, 19, 22
- ☐ K. Surface Repair 2, 3, 22
- ☐ L. Raising Bridge 3, 6, 9, 16, 20–24
- ☐ M. Slope Stabilization 1–3, 30
- ☐ N. Scour Repair ..... 1, 2 or 3, 16, 19, 21, 27, 29, 31–35
- ☐ O. Painting 16, 22, 24
- ☐ P. Other: _____

Field Information Required

If no structure number exists provide the following: Small County Map on which the location of proposed structure is shown in red and any highway relocation in green. In addition, provide Location Map of scale not less than 1" = 2000' showing the structure location and number.

☒ 1. Most recent inspection report, brief history of bridge construction date, and description of repairs with dates.

☒ 2. Outline deficient areas on existing structure plan or drawing.

☒ 3. Photographs of details requiring repairs or modifications, such as: bearings, x-frames, joints, etc. Photograph all deficient areas. Clearly label all photographs.

☐ 4. Provide proposed typical section for roadway and structure showing dimensions and cross slopes.

☐ 5. Survey beam seat or girder elevations at both sides of bridge at all substructure units.

☐ 6. Provide cross-section elevations at 10 foot intervals extending across the structure and a minimum of 100 feet beyond each end. Sections should be normal to centerline and show elevations at centerline roadway and gutter line. Take elevations along joints and at floor drains.

☐ 7. Show and identify starting stationing on bridge.

☐ 8. Record measurement, temperature of the structure, and date taken for each of the following:
(a) Joint opening measured normal to joint at centerline of roadway and both curb lines.
(b) Clearance between girder ends at piers.
(c) Distance from front face of abutment backwall to closest point of girder end measured parallel to girder.
(d) Temperature of structure determined by averaging top and under deck (if accessible) readings.

☐ 9. Fixed and expansion bearings - condition and orientation.

☒10. Number and width of proposed pours including construction staging sequence.

☒11. Location of existing construction joints in the deck.

☒12. Estimated Quantities:

Preparation, Decks, Type 1	Sq. Yd. 0	
Preparation, Decks, Type 2	Sq. Yd. 0	
Full Depth Deck Repair	Sq. Yd. 0	Galvanic Anodes? NO
Concrete Surface Repair Superstructure	Sq. Ft. 0	Galvanic Anodes? NO
Concrete Surface Repair Substructure	Sq. Ft. 0	Galvanic Anodes? NO
Curb Repair	LF. 0	Galvanic Anodes? NO

☒13. Sufficiency number: 98.7 (obtain from HSI Bridge Inventory System)

☒14. Appraisal and Condition Rating

	Deck Condition	Superstructure Condition	Substructure Condition	Load Capacity Appraisal	Structural EVAL Appraisal
Current	6	7	7	5	7

☒ 15. Load Ratings

	Inventory	Operational
Current Calculated Date: 6/4/2013	HS20	HS38
After Completed by Bridge Designer		

☒ 16. Utilities on/near Structure. (WisDOT policy is to avoid placing utilities on the structure.)
☐ Yes ☒ No

Type	Owner and Contact Information	Size	Opening at Abutment	Weight	Pressure

☒ 17. Is existing bridge railing deficient?
☐ Yes ☒ No If Yes – Replacement Rail Type:

☒ 18. Drains to be:
☐ Raised ☐ Closed ☐ Downspouted ☐ New

☒ 19. Traffic maintained on bridge during work?
☒ Yes ☐ No If Yes – Include sketches

☒ 20. Will guard rail be attached?
☐ Yes ☒ No If Yes – Which corners? Existing guardrail to remain at all corners.

☒ 21. Will work to be performed eliminate all deficiencies?
☒ Yes ☐ No If No – Explain:

☒ 22. Hazardous waste (asbestos) to be removed?
☐ Yes ☒ No If Yes – Explain:

☒ 23. Wing location(s) for surface drain anchors: NE and SE

☒ 24. Painting?
☐ Yes ☒ No If Yes – Explain on Page 4
(all, part, railing, color system, containment, bid items)

☐ 25. Desired roadway width: *(new deck / widening)* _____ Ft.
Desired sidewalk clear width: Left: _____ Ft. Right: _____ Ft.

☒ 26. Maximum increase in grade line elevation 3/8 In.

☒ 27. Benchmark description to be shown

☒ 28. Desired final cross slopes on bridge 0.02 Ft./Ft.

☐ 29. Underwater Inspection Report including:
- Streambed Cross Section With Pier, Footing and Seal Elevations
- Pier Elevation Drawings
- Pier Layout
- Hydrographic Survey

☐ 30. Slope stabilization, provide:
Type: _____ Quantity: _____ CY.
Slope: _____ Ft./Ft. Fill: _____ CY.

☐ 31. Preliminary layout of grout bags or proposed scour repair.
C.I.P. Articulated Mats (for Scour) _____ CY.
Grout Bags (for Scour) _____ CY.
Heavy Riprap _____ CY.
Extra Heavy Riprap _____ CY.

☒ 32. Report submitted with Preliminary Plan requires **no** CADD file submittal *(See ESubmittal instructions)*.

☐ 33. Report submitted for development of Preliminary Plan to structure design engineer requires CADD file (if available) submittal and Report submittal to Soils Engineer if project involves foundation modifications.

☒ 34. Coordinate with structure design engineer **before** going into the field if existing structure has no available plans, if staged construction is planned, or if there are adjoining/adjacent structures that will remain in place.

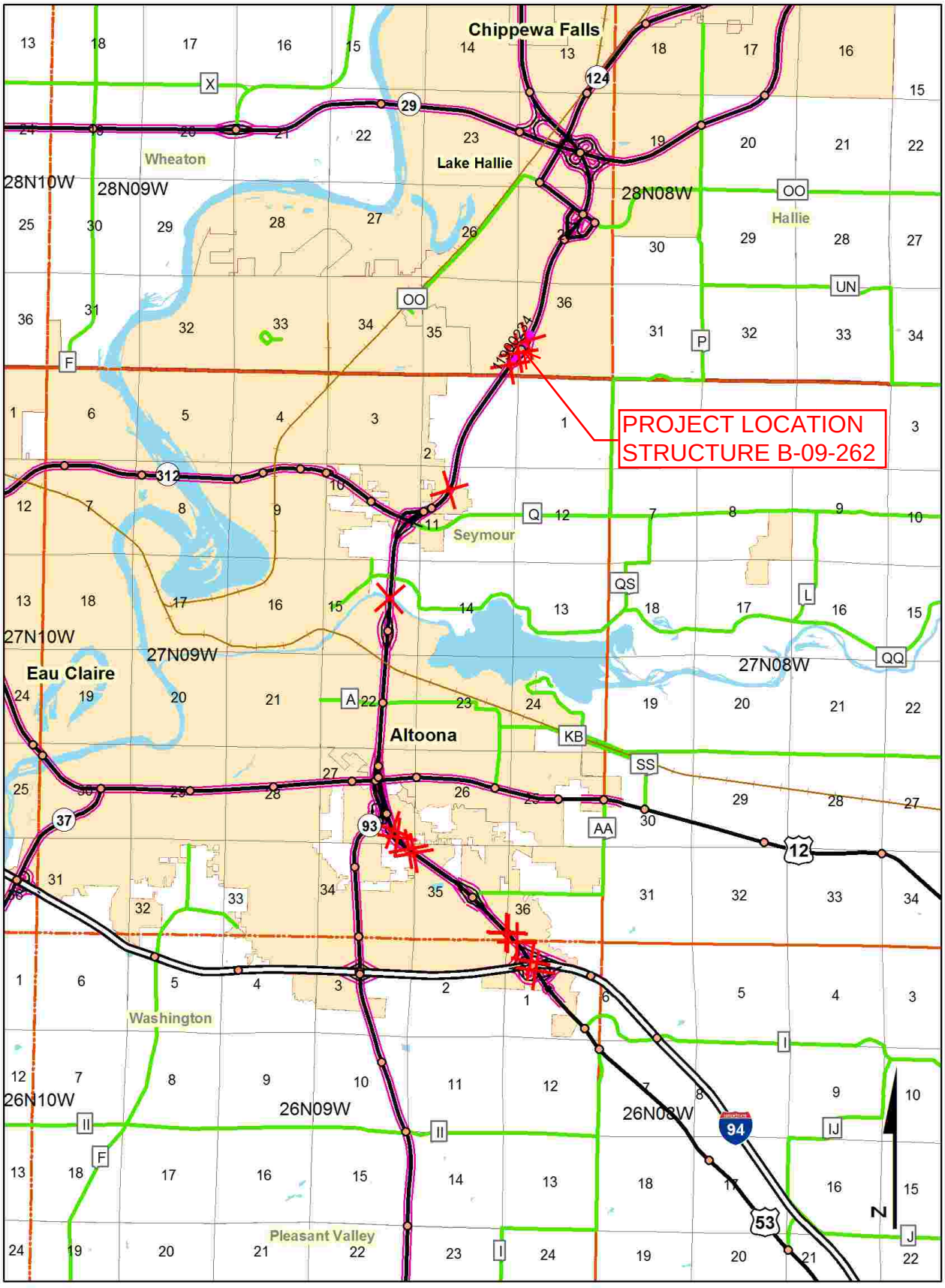
☐ 35. If project involves substructure widening coordinate with structure and/or hydraulic design engineer to determine if information on the separation and/or stream crossing SSR will be required.

Additional Information

Elaborate on other concerns such as: DNR, Local, Utility Conflicts, Aesthetics, Railing Type and Staged Construction.
Please be as detailed and specific as possible.

1.) Structure built in 2003. No repairs since construction. See attached Bridge Inspection Report.
2.) Deficient areas to be determined in the field by the engineer. See attached Bridge Inspection Report. A Polymer Overlay is proposed because of deficiency over the entire structure due to poor bridge deck surface. The deck has transverse cracks at the negative moment area and diagonal / longitudinal cracks with efflorescence at the abutments (Approximately 5%) and has two spalls in the SE corner. The deck has transverse cracks at the pier and diagonal cracks at the ends. The roadway approach joint is failed and settled at the median. A Polymer Overlay is also proposed for the sidewalk on the bridge.
3.) See attached photographs.
10.) This work will be constructed half at a time under traffic using single lane closures during non-peak hours with night work. All lanes will be opened to traffic daily.
11.) See asbuilt plans.
16.) No utilities on or near structure. No conflicts anticipated.
18.) Existing drains on the bridge deck to remain.
19.) This work will be constructed half at a time under traffic using single lane closures during non-peak hours with night work. All lanes will be opened to traffic daily.
22.) See attached Asbestos Inspection Report. No asbestos-containing material was found.
27.) To be determined.
32.) See preliminary plans.

CDR Map


Chippewa Falls
Wheaton
Lake Hallie
Hallie
Seymour
Eau Claire
Altoona
Washington
Pleasant Valley
28N10W
28N09W
28N08W
27N10W
27N09W
27N08W
26N10W
26N09W
26N08W
PROJECT LOCATION
STRUCTURE B-09-262
N

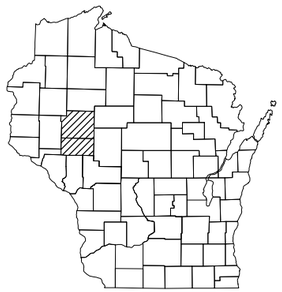
PROJECT ID: 1190-02-64

WITH:

COUNTY: EAU CLAIRE / CHIPPEWA

ORDER OF SHEETS

TOTAL SHEETS =



N

DESIGN DESIGNATION

A.A.D.T.	=
A.A.D.T.	=
D.H.V.	=
D.D.	=
T.	=
DESIGN SPEED	=
ESALS	=

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1190-02-64		

EAU CLAIRE - CHIPPEWA FALLS

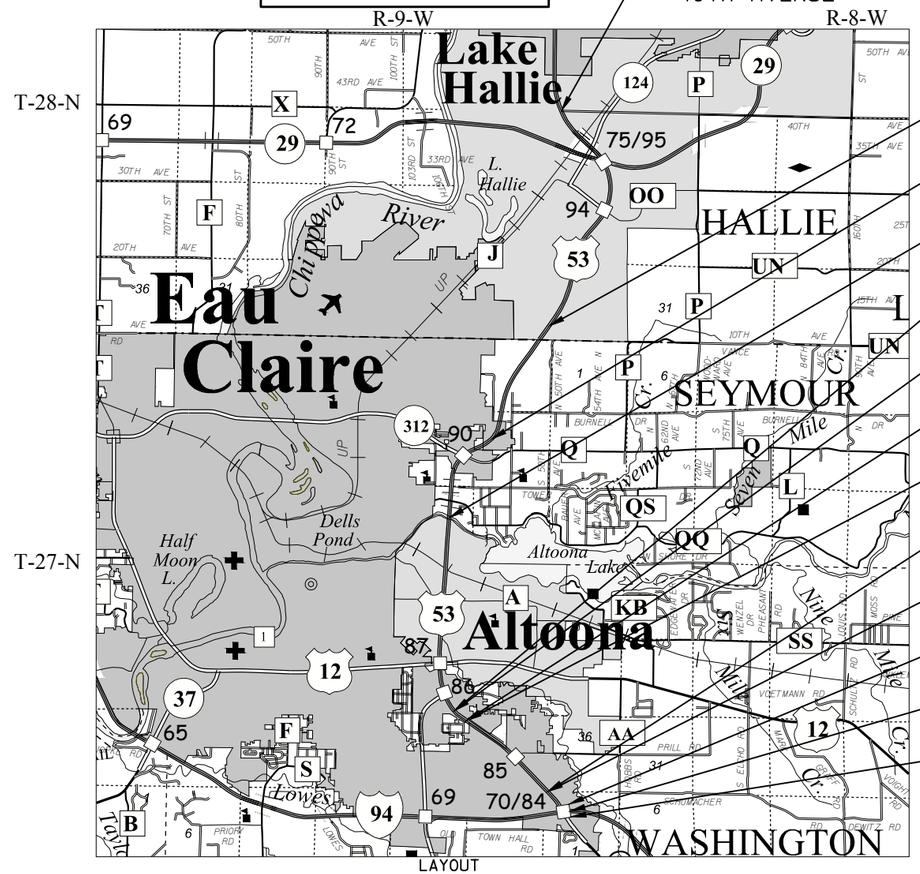
IH 94 TO 40TH AVENUE (11 BRIDGES)

USH 53

EAU CLAIRE AND CHIPPEWA COUNTIES

STATE PROJECT NUMBER
1190-02-64

END PROJECT
STA. 83+66.39 N.B.
40TH AVENUE



LAYOUT

SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 11.26 MILES

STRUCTURE B-09-262

STRUCTURE B-18-190

STRUCTURE B-18-168

STRUCTURE B-18-178

STRUCTURE B-18-182

STRUCTURE B-18-183

STRUCTURE B-18-184

STRUCTURE B-18-37

STRUCTURE B-18-38

STRUCTURE B-18-35

STRUCTURE B-18-36

BEGIN PROJECT
STA. 38+66.40 N.B.
IH 94
X = 359529.44
Y = 262430.72

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, EAU CLAIRE COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	WISDOT
Designer	ADAM HETRICK
Project Manager	DAVID KOEPP
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	TMOTHY MASON

APPROVED FOR THE DEPARTMENT

DATE: _____ _____ (Signature)

E

Melby St

Exit Street View

N

WRONG WAY

© 2015 Google

© 2015 Google

Report a problem

Google earth

44°51'40.89" N 91°25'36.12" W elev 930 ft eye alt 946 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Google earth
Report a problem
44°51'41.49" N 91°25'37.10" W elev 930 ft eye alt 943 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'41.39" N 91°25'37.35" W elev 929 ft eye alt 941 ft


Melby St
Exit Street View
ONLY
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'40.83" N 91°25'35.80" W elev 920 ft eye alt 930 ft


Melby St
Exit Street View
N
ONLY
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'40.58" N 91°25'35.07" W elev 921 ft eye alt 931 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'41.62" N 91°25'36.60" W elev 934 ft eye alt 938 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'40.54" N 91°25'34.69" W elev 929 ft eye alt 937 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Google earth
Report a problem
44°51'41.04" N 91°25'35.83" W elev 927 ft eye alt 935 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'42.06" N 91°25'38.09" W elev 924 ft eye alt 930 ft


Melby St
Exit Street View
N
© 2015 Google
© 2015 Google
Report a problem
Google earth
44°51'42.26" N 91°25'38.95" W elev 927 ft eye alt 933 ft

route: 053N county: CHIPPEWA date: 08/13/2013 plm: 070.447

Lat: 44.86018488 Long: -91.42775916 Elev: 822.37 ft.

\\doteauplog1p\photolog\Rg5\053N_R5_2013\\Front\Dir_073\F_07347.jpg

route: 053S county: CHIPPEWA date: 08/14/2013 plm: 132.763

Lat: 44.86264524 Long: -91.42598169 Elev: 817.98 ft.

\\doteauplog1p\photolog\Rg5\053S_R5_2013\\Front\Dir_135\F_13504.jpg

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Inspection Report for B-09-262

MELBY STREET over USH 53

May 21,2015

Type	Prior	Frequency (mos)	Performed
Routine	05-21-15	24	X
SI&A	05-31-13	48	

Latitude	44°51'41.59"N	Owner	STATE HIGHWAY DEPT
Longitude	91°25'38.03"W	Maintainer	STATE HIGHWAY DEPT

Time Log

Hours	Minutes
1	10

Team members

	Name	Number	Signature	Date
Inspector	Haig, Gregory	5014	Completed by HSI System Account(HSI)	
Reviewer				

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

Identification & Location

Feature On:	Section Town Range:	Structure Number:
MELBY STREET	S36 T28N R09W	B-09-262
Feature Under:	County:	
USH 53	CHIPPEWA(09)	
Location	Municipality:	Structure Name:
USH 53	TOWN-HALLIE(09028)	

Geometry

measurements in feet, except where noted

Approach Roadway Width:	Bridge Roadway Width:	Total Length:
45	57.7	246.1
Approach Pavement Width:	Deck Width:	Deck Area (sq ft):
36	65.0	15996

Traffic

	Lanes	ADT	ADT year	Traffic Pattern
On	3	6700	2014	TWO WAY TRAFFIC
Under	4	34500	2014	TWO WAY TRAFFIC

Capacity

Load Rating

Inventory rating:	Overburden depth (in):	Last rating date:	Controlling:
HS20	0.0	06-04-13	INTERIOR DECK GIRDER Fatigue
Operating rating:	Deck surface material:	Re-rate for capacity (Y/N):	Control location:
HS38	CONCRETE		SPAN 1
Posting:	Re-rate notes:		

Hydraulic

Classification

Scour Critical Code(113):	Q100 (ft3/sec):	
(N) NO WATERWAY	0	
High water elevation (ft):	Velocity (ft/sec):	Sufficieny #:
0.0	0.0	98.7

Span(s)

Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	CONT PREST CONC	DECK GIRDER	54	116.7	
2	CONT PREST CONC	DECK GIRDER	54	125.7	Y

Expansion joint(s)

Temperature:

File:	New:

Vertical Clearance

	Measurement file (ft)	File Date	Measurement new (ft)
Highway Minimum Under Cardinal	17.19	25-Mar-2002	
Highway Minimum Under Non-Cardinal	18.57	25-Mar-2002	
Highway Minimum On			
Railroad Minimum Under			

Elements

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State 1	2	3	4
X	**12**		**Reinforced Concrete Deck**	SF	16,481	16,371	110	0	0
		1130	Cracking (RC)	SF		0	110	0	0
			Cracks with effloresecence in the soffit Approximately 9 at each abutment.						
	8000		Wearing Surface (Bare)	SF	16,481	15,974	500	7	0
		3210	Debonding/Spall/Patched Area/Pothole	SF		0	0	4	0
			2 spalls at the SE corner. 1ft x 3 3ft. and 1 ft. x 1ft.						
		3220	Crack (Wearing Surface)	SF		0	500	3	0
			large 3 ft. long crack at the SE corner. Minor transverse cracks at pier and diagonal cracks at ends.						
	8522		Coated Reinforcing	SF	16,481	0	0	0	0
			transv. cracks at the negative moment area, Diagonal / longitudinal cracks w/eff at abutments (Approx 5%).						
X	**109**		**Prestressed Concrete Open Girder**	LF	2,430	2,430	0	0	0
			Longitudinal cracks at girder 1 at west abutment, girders 1 and 10 at east abutment near top of web. Diagonal crack at girder 6 at west abutment - did not see in 2011 **or 2015**						
X	**205**		**Reinforced Concrete Column**	EA	2	2	0	0	0
			Couple horizontal cracks around both. very minor						
X	**215**		**Reinforced Concrete Abutment**	LF	134	110	24	0	0
		1130	Cracking (RC)	LF		0	24	0	0
			1 crack at the corner of the beam seat at both ends. Counted 13 at the east abutment and 10 at the west, all were superficial. Major effloresence and leaching throughout						
X	**234**		**Reinforced Concrete Cap**	LF	60	59	1	0	0
		1130	Cracking (RC)	LF		0	1	0	0
			Vertical crack at center.						
X	**331**		**Reinforced Concrete Bridge Rail**	LF	492	392	100	0	0
		1130	Cracking (RC)	LF		0	100	0	0
			Normal cracking throughout.						
X	**8400**		**Integral Wingwall**	EA	4	4	0	0	0
			Minor washing around both north wings. **Major washing around NE wing.**						

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

Structure No.: **B-09-262**

Assessments

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State 1	2	3	4
X	**9004**		**Drainage - Deck**	EA	2	0	0	0	2
			Major washout at NE corner with loss of fill in the approach. County was notifies and is being repaired.						
X	**9007**		**Median**	EA	2	1	1	0	0
			cracks at neg moment areas - settlement of ends **Scaling all along the edge of sidewalk.**						
X	**9043**		**Slope Protection- Crushed Aggregate with Bit.**	EA	2	0	2	0	0
			very weedy needs to be sprayed. **Very loose.**						
X	**9167**		**Steel Diaphragm**	EA	36	36	0	0	0
X	**9322**		**Approach Roadway - Concrete (non-structural)**	EA	2	0	2	0	0
			Approach joint failed. Settled at median 2".						
X	**9335**		**Decorative Rail**	EA	2	0	2	0	0
			Coating is peeling off the railing.						

NBI Ratings

	File	New
Deck	6	6
Superstructure	7	7
Substructure	7	7
Culvert	N	N
Channel	N	N
Waterway	N	N

Structure Specific Notes

Inspection Specific Notes

Inspector Site-Specific Safety Considerations

Structure Inspection Procedures

Special Requirements

	Chk	Comments
Traffic Control		
Access Equipment		
Other		

Construction History

Year	Work Performed	FOS id
2003	NEW STRUCTURE	1190-00-80

Maintenance Items History

Item	Recommended by	Status	Status change	Year completed

Maintenance Items

Item	Priority	Recommended by	Status	Status change
Drainage - Repair Washouts / Erosion	CRITICAL	Haig, Gregory (5014)	IDENTIFIED	05/26/15
To be repaired immediately. County is already on scene.				
IMP-Polymer Modified Overlay		Haig, Gregory (5014)	IDENTIFIED	05/26/15

Routine

Document Comment/Description

Soffit cracks and efflorescence on abutment diaphragm

Routine

Document Comment/Description

Cracks in West abutment

Routine

Document Comment/Description

Cracks with efflorescence at west abutment.

Routine

Document Comment/Description

Washout at NE corner.

Routine

Document Comment/Description

Washout at NE corner. Goes about 15-20 ft. under approach.

Routine

Document Comment/Description

Spalls and crack at SE corner.

Routine

Document Comment/Description

Scaling along sidewalk

Routine

Document Comment/Description

Failing approach at east end.

Wisconsin Dept. of Transportation
Structure Inventory Data

Bridge B090262

Structure No.:	Municipality:	Section:	Town:	Range:	Maintenance Agency:	Owner:
B090262	TOWN-HALLIE(09028)				STATE HIGHWAY DEPT	STATE HIGHWAY DEPT
Replaced Structure No.:	**Historical Sig.:** 5	**Latitude:** 445141.59	**Longitude:** 912538.03		**County:** CHIPPEWA(09)	**District:** 6

ABUTMENT DATA (CARDINAL)

1. Abutment Type: SILL/SEMI EXP/RECT
2. Pile Type: STEEL
3. Pile Size: 305 MM (12")
4. Slope Protection Type: STAB CR STONE
5. Rdwy. Width: 57.7 **ft**
6. Deck Width: 65.0 **ft**
7. Wing Type: PARALLEL TO ROADWAY

ABUTMENT DATA (NON-CARDINAL)

1. Abutment Type: SILL/SEMI EXP/RECT
2. Pile Type: STEEL
3. Pile Size: 305 MM (12")
4. Slope Protection Type: STAB CR STONE
5. Rdwy. Width: 57.7 **ft**
6. Deck Width: 65.0 **ft**
7. Wing Type: PARALLEL TO ROADWAY

GEOMETRIC DATA

1. Structure Length: 246.1 **ft (Back to Back Abuts. Along Rrdwy. Centerline)**
2. No. Lanes On: 3
3. L. Sdk. Width On: 0.0 **ft**
4. R. Sdk. Width On: 6.0 **ft**
5. Median Type:
6. Median Width: 5.9 **ft**
7. Skew Angle: 0 **Deg.**
8. Direction Skew Angle:
9. Horizontal Curve: 0.0 **Radius, ft**
10. Dir.-Hor. Curve:
11. Girder Spacing: 6.6 **ft**
12. Height: 54.0 **ft (Top Pier Footing to Top Deck or Streambed Elev. to Top Deck)**
13. NBI Bridge Length Met: true

APPROACH DATA

1. Appr. Pavement Width: 36 **ft**
2. Rt. Shoulder Width: 4 **ft**
3. Lt. Shoulder Width: 5 **ft**
4. Total Width (Sum Above): 45 **ft**
5. Guardrail Termination: 1
6. Guardrail Adequacy: 1
7. Railing Attachment Type:
8. Railing Design Year: 1965 AASHO
9. Left Outer Railing Type: SLOPED FACE PARAPET LF(91)
10. Right Outer Railing Type: TYPE A ROADWAY - STEEL(1)
11. Left Inner Railing Type:
12. Right Inner Railing Type:

HYDRAULIC DATA

1. Design Flood Frequency: 0 **yrs**
2. Design Discharge: 0 **cu-ft/s**
3. Max. Velocity: 0.0 **ft/s**
4. Drainage Area: 0.0 **sq. ft**
5. High Water Elev.: 0.0 **ft**
6. Scour Critical Code: N
7. Scour Calculated?: false

CAPACITY DATA

1. Design MS: HS20
2. Inventory MS: HS24.4
3. Operating MS: HS57.8
4. Max. Veh. Wt.: 250 **kips**
5. Load Rating Basis.: LFR
6. Load Governing Member: DECK GIRDER
7. Deck Composition:
8a. Deck Membrane:
8b. Deck Surface: CONCRETE

STRUCTURE SERVICE DATA

1. Hwy. On Detour Length: 3 **ft**
2. Type Service On: HIGHWAY
3. Type Service Under: HIGHWAY

APPRAISAL UPDATE

1. Load Capacity: 5-LEGAL LOAD STRESS NOT EXCEEDED
2. Geom. On: 9-COND EXCEED DESIRABLE CRITERIA
3. Geom. Under: 6-COND EQUAL TO MIN CRITERIA
4. Appr. Align: 8-COND EQUAL DESIRABLE CRITERIA
5. Horiz. Align:
6. Vert. Align:

PLANNING DATA

1. Functional Classification: LOCAL-URBAN(19)
2. ADT: 2250
3. ADT-Year: 2004
4. Truck ADT %: 0
5. Future ADT: 3700
6. Future ADT-Year: 2024

CONDITION DATA

Deck: 6	**SuperStructure:** 7	**SubStructure:** 7	**Channel:** N
Culvert: N	**Waterway:** N		

Bridge B090262

CONSTRUCTION DATE

Project ID	Construction Contractor	Construction Designer	Construction Year	Plans Reel Number	Letting Date	Survey Received	Work Performed
1190-00-80	HOFFMAN CONST.	WESTBROOK ASSOCIATED ENGINEERS	2003	PLAN	11-Jun-2002	05-Feb-2002	NEW STRUCTURE

CLEARANCE DATE

Clearance Lane Number	Minimum Vertical	Minimum Vertical Date	Minumum Horizontal Distance	Right Minimum Lateral
	18.57	25-Mar-2002	67.5	31.5
	17.19	25-Mar-2002	77.5	25.8

Left Minimum Lateral	Railroad Right Minimum Lateral	Railroad Left Minimum Lateral	Railroad Vertical Distance	Railroad Horizontal Distance
12.0				
27.9				

ROUTE DATE

Number	Direction	Type	Structure Route On / Under	Structure Route Cardinal / NonCardinal
	E		O	C
053	N		U	C
053	S		U	N

Number	Structure Route Location	Highway Feature Name	Structure Route Local System	Highway Feature Designation
	USH 53	MELBY STREET	LRD	MAINLINE
053	MELBE ST	USH 53	USH	MAINLINE
053	MELBE ST	USH 53	USH	MAINLINE

Number	Structure Route Primary Flag	Designed National Network Flag	Structure Defense Highway Designation	Highway On Inventory Route
	Y	N	0	NON
053	Y	N	0	NHS
053	N	N	0	NHS

PIER DATE

Number	Pier Type	Piling Type	Piling Size	Pier Skew Angle	Direction of Skew
1	HAMMERHEAD	STEEL	305 MM (12")		

SPAN DATE

Number	Type	Length	Configuration	Material	Girder or Truss Height	Girder or Truss Spacing
1		116.7	DECK GIRDER	CONT PREST CONC	54.0	6.6
2		125.7	DECK GIRDER	CONT PREST CONC	54.0	6.6

EXPANSIONJOINT DATE

Number	Location	Type	Inactive Date

708 Heartland Trail, Suite 3000
Madison, WI 53717

608.826.3600 PHONE
608.826.3941 FAX

www.TRCsolutions.com

Bridge Asbestos Inspection Report

WisDOT Project ID: 1190-02-34
Structure Number: B-09-0262
Structure Name: Melby Street over USH 53
City/County: Town of Hallie, Chippewa County
Lat/Long Coordinates: 445141.59/ 912538.03
TRC Project Number: 235777.0000.0000
Date Inspected: June 22, 2015
Inspected By/License Number: Nathan Braun, AII-206950

Findings:

The inspection to identify and collect samples for potential asbestos-containing material (ACM) was completed following WisDOT standard sampling procedure for bridge inspections found in FDM 21-35-45.

None of the materials that were identified as potentially ACM and sampled tested positive for asbestos. The work on this bridge can proceed as planned. Standard Special Provision (STSP) 107-125 should be included in the specifications.

Sample Number	Sample Description	Sample Location	Analytical Results and Method	Friable/ Non-friable or No ACM	Quantity of ACM Material
1	Concrete	Parapet	PLM, non-detect	No ACM	0
2	Concrete	Parapet	PLM, non-detect	No ACM	
3	Concrete	Parapet	PLM, non-detect	No ACM	
4	Concrete	Sidewalk	PLM, non-detect	No ACM	0
5	Concrete	Sidewalk	PLM, non-detect	No ACM	
6	Concrete	Sidewalk	PLM, non-detect	No ACM	
7	Concrete	Abutment	PLM, non-detect	No ACM	0
8	Concrete	Abutment	PLM, non-detect	No ACM	
9	Concrete	Abutment	PLM, non-detect	No ACM	
10	Concrete	Deck	PLM, non-detect	No ACM	0
11	Concrete	Deck	PLM, non-detect	No ACM	
12	Concrete	Deck	PLM, non-detect	No ACM	

Sample Number	Sample Description	Sample Location	Analytical Results and Method	Friable/ Non-friable or No ACM	Quantity of ACM Material
13	Paint	Fence	PLM, non-detect	No ACM	0
14	Paint	Fence	PLM, non-detect	No ACM	
15	Paint	Fence	PLM, non-detect	No ACM	
16	Caulk	Around fence attachment plate	PLM, non-detect	No ACM	0
17	Caulk	Around fence attachment plate	PLM, non-detect	No ACM	
18	Caulk	Around fence attachment plate	PLM, non-detect	No ACM	
19	Caulk	Parapet expansion joint	PLM, non-detect	No ACM	0
20	Caulk	Parapet expansion joint	PLM, non-detect	No ACM	
21	Caulk	Parapet expansion joint	PLM, non-detect	No ACM	
22	Concrete	Girder	PLM, non-detect	No ACM	0
23	Concrete	Girder	PLM, non-detect	No ACM	
24	Concrete	Girder	PLM, non-detect	No ACM	
25	Paint	Abutment	PLM, non-detect	No ACM	0
26	Paint	Abutment	PLM, non-detect	No ACM	
27	Paint	Abutment	PLM, non-detect	No ACM	

If you have any questions, please contact me, at (608) 826-3628.

TRC Environmental Corporation

Daniel Haak
Project Manager

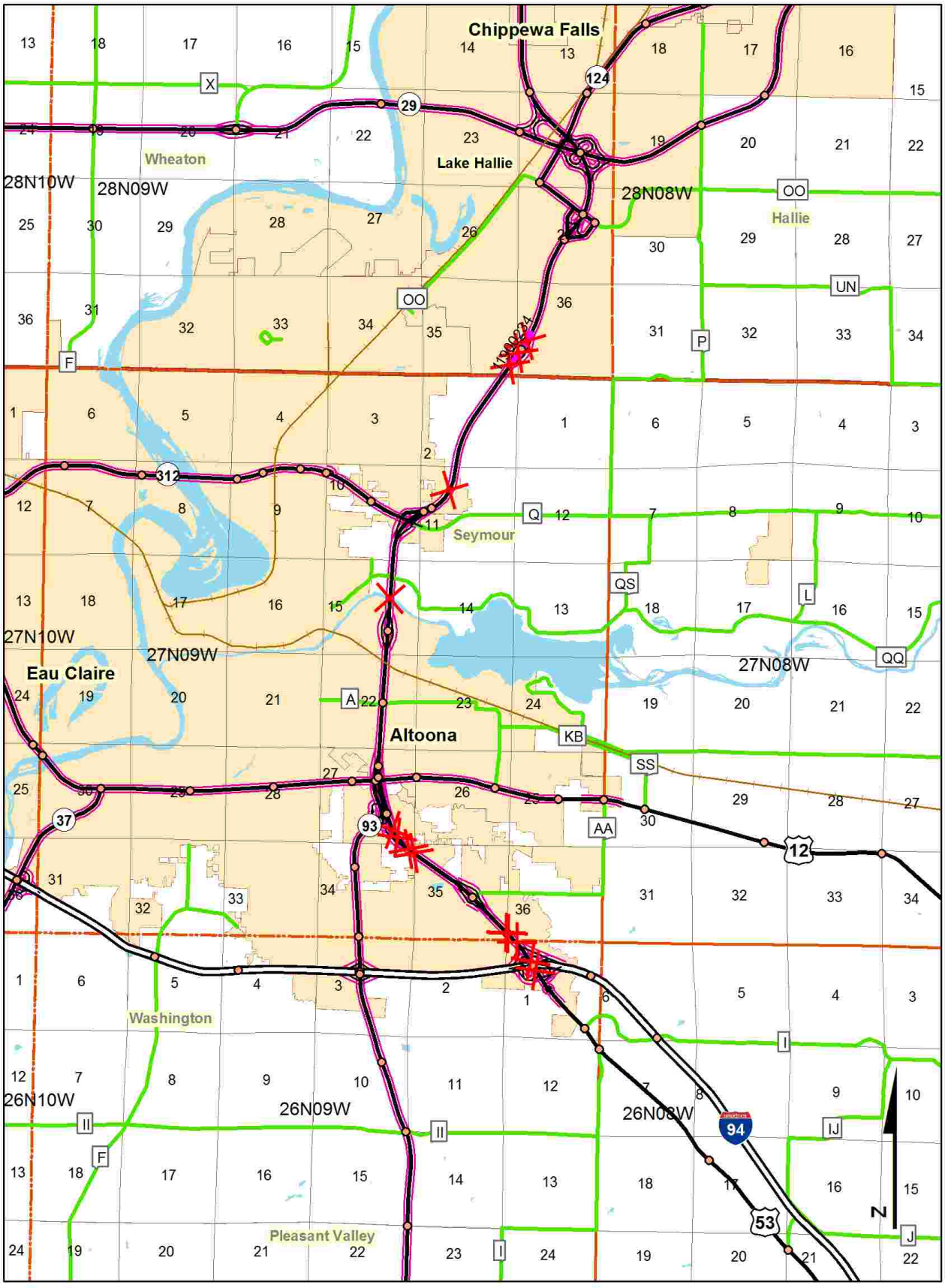
Nathan Braun
Asbestos Inspector

Attachments: Location Map, Photos, Laboratory Report

Report Distribution:

Recipient	Electronic (PDF) Copy	Paper Copy
BTS-ESS sharlene.tebeest@dot.wi.gov	X (via email)	X
REC amy.adrihan@dot.wi.gov; nicholasA.schaff@dot.wi.gov	X (via email)	
Project Manager david.koepp@dot.wi.gov	X (via email)	
Other		

CDR Map


Chippewa Falls
Wheaton
Lake Hallie
Hallie
Seymour
Eau Claire
Altoona
Washington
Pleasant Valley
28N10W
28N09W
28N08W
27N10W
27N09W
27N08W
26N10W
26N09W
26N08W
124
29
312
37
93
12
94
53
X
F
OO
UN
P
Q
QS
L
QQ
A
KB
SS
AA
II
IJ
I
J
N

B-09-0262

Concrete on parapet

Concrete on sidewalk

Concrete and paint on abutment

Concrete on deck

Paint on fence

Caulk around fence attachment plates

Caulk in parapet expansion joint

Concrete on girder

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

BULK ASBESTOS ANALYSIS REPORT

CLIENT: Wisconsin Department of Transportation

Lab Log #: 0046145
Project #: 235777.0000.0000
Date Received: 06/24/2015
Date Analyzed: 06/25/2015

Site: DOT Bridge Inspection, B-9-262

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
B-9-262 (1)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (2)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (3)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (4)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (5)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (6)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (7)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (8)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (9)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (10)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (11)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (12)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (13)	Black	Yes	No	- -	- - -	ND	None
B-9-262 (14)	Black	Yes	No	- -	- - -	ND	None
B-9-262 (15)	Black	Yes	No	- -	- - -	ND	None
B-9-262 (16)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (17)	Grey	Yes	No	- -	- - -	ND	None

Industrial Hygiene Laboratory
21 Griffin Road North
Windsor, CT 06095
(860) 298-6308

TRC
Results you can rely on

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Color	Homogenous	Multi-Layered	Layer No.	Other Matrix Materials	Asbestos %	Asbestos Type
B-9-262 (18)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (19)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (20)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (21)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (22)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (23)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (24)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (25)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (26)	Grey	Yes	No	- -	- - -	ND	None
B-9-262 (27)	Grey	Yes	No	- -	- - -	ND	None

Reporting limit- asbestos present at 1%
ND - asbestos was not detected
Trace - asbestos was observed at level of less than 1%
NA/PS - Not Analyzed / Positive Stop
SNA- Sample Not Analyzed- See Chain of Custody for details

Note: Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. In those cases, EPA recommends, and certain states (e.g. NY) require, that negative results be confirmed by quantitative transmission electron microscopy.

The Laboratory at TRC follows the EPA's Interim Method for the Determination of Asbestos in Bulk Insulation (1982), and the EPA recommended Method for the Determination of Asbestos in Bulk Building Materials (EPA/600/R-93/116), July 1993, R.L. Perkins and B.W. Harvey which utilizes polarized light microscopy (PLM). Our analysts have completed an accredited course in asbestos identification. TRC's Laboratory is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP), for Bulk Asbestos Fiber Analysis, NVLAP Code 18/A01, effective through June 30, 2015. TRC is an American Industrial Hygiene Association (AIHA) accredited lab for PLM effective through October 1, 2016. Asbestos content is determined by visual estimate unless otherwise indicated. Quality Control is performed in-house on at least 10% of samples and the QC data related to the samples is available upon written request from the client.

Analyzed by: Amanda Parkins, Laboratory Analyst

Reviewed by: Kathleen Williamson, Laboratory Manager

Date Issued
06/26/2015

TRC LABORATORY ASBESTOS ANALYTICAL ACCREDITATIONS

NVLAP Lab Code 101424-0 AIHA-LAP,LLC #100122 CT #PH-0426 ME LA-0075, LB-0071 MA #AA000052 NY #10980 WV# LT000411
RI #AAL-007 TX #300354 VT #AL014538 LA#05011 VA #3333 000283 AZ #A20944 HI #L-09-004 NJ #CT004 CA #2907
CO# AL-15020 PHIL# 461 PA#68-03387

Jun 02

INDEX OF SHEETS

TOTAL SHEETS = 520

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1190-00-80		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

EAU CLAIRE - CHIPPEWA FALLS ROAD

LASALLE ST. - C.T.H. OO

U.S.H. 53

EAU CLAIRE / CHIPPEWA COUNTY

AS BUILT PLAN

PROJECT ENGINEER JEFFREY P. SWANSON

GENERAL CONTRACTOR HOFFMAN CONST. CO.

BEGIN & END CONSTRUCTION 8/9/02-8/29/03

CONTRACT COST 8,489,610.65

C.C.O. #'S 1 THRU 8

PROJECT ID: 1190-00-80

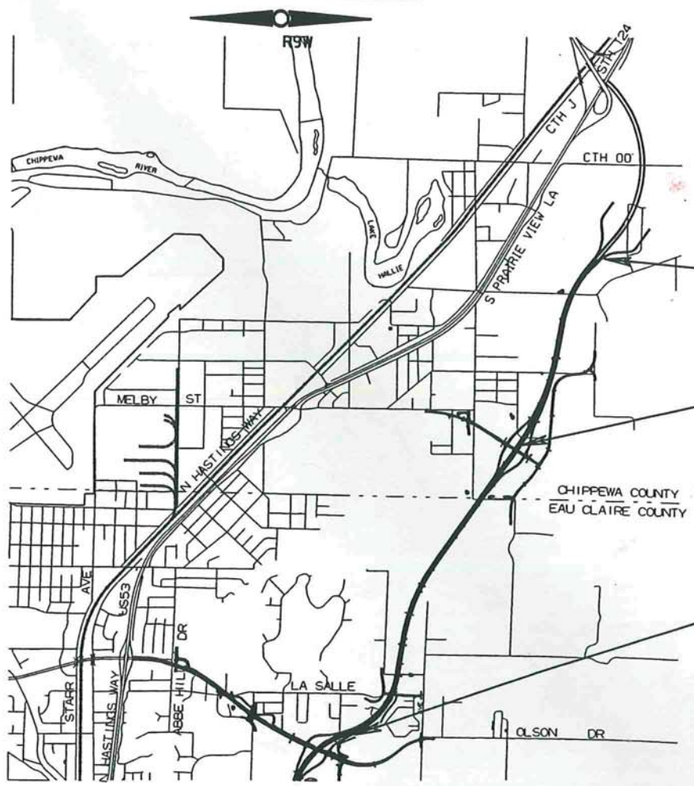
COUNTY: EAU CLAIRE

DES/GN ID 1190-00-06

+50 D

N

STATE PROJECT NUMBER
1190-00-80



END PROJECT 1190-00-80
STA. 601+02 U.S.H. 53
N 384098.044
E 1601154.911

STRUCTURE B-09-0262

BEGIN PROJECT 1190-00-80
STA. 425+00 U.S.H. 53
N 368978.142
E 1593151.725

NOT TO SCALE
SCALE 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 3.334 MI.

"Coordinates on this plan are referenced to the Wisconsin State Plane Coordinate System (WSPCS), 'Central' Zone."

DESIGN DESIGNATION

A.D.T.	(2004)	= 25600
A.D.T.	(2014)	= 29500
D.H.V.	(2024)	= 33600
D.		= 50/50
T.		= 5.9
DESIGN SPEED		= 70 MPH
ESALS		= 6,453,200

CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE (P.L. + 58.1)
LOT LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SURVEY LINE
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
MARSH AREA
WOODED OR SHRUB AREA

COMBUSTIBLE FLUIDS (CAUTION)
UNDERGROUND UTILITIES
GAS (G)
ELECTRIC (E)
TELEPHONE OR TELEGRAPH (T)
COMMUNICATIONS LINE (C)
SERVICE PEDESTAL
POWER POLE
TELEPHONE POLE
RAILROAD
SANITARY SEWER (SAN)
STORM SEWER (SS)
WATER (W)
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
CULVERT (Profile View)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	DTD DIST. 6
Designer	MIKE BERTHOLD
District Examiner	SCOTT IVES
District Supervisor	RICK SHERMO
Proj. Dev. Engineer	LARRY JONES
C.O. Examiner	C. BUJANOWSKI

APPROVED FOR DISTRICT OFFICE
DATE: 2/28/02 (Signature)

E

BENCHMARKS

NO.	DESCRIPTION	ELEV.
32	PK IN PP @ S.W. COR. OF HANSON RD. AND BRUCE ST.	924.13
33	PK IN PP @ E. SIDE OF INTERSECTION OF HANSON RD. & MELBY ST.	912.76
34	PK IN PP @S.E. COR. OF HANSON RD. @ VAN DRESSER ST.	900.06

GEORGE M. JOHNSON ADDITION

STA. 14+55, 30.55'LT.
1-12" X 36' C.P. CLASS III REQD.
2-APRON ENDWALLS REQD.

STA. 15+24, 30.55'LT.
1-12" X 36' C.P. CLASS III REQD.
2-APRON ENDWALLS REQD.

SW-NE 35-28-9

ALVIN & RUTH E. ANDRESS

HALEY ST. (115TH ST.)

SE-NW 35-28-9

LORETTA ST. (113TH ST.)

EAU CLAIRE ENERGY COOPERATIVE

SW-NE 35-28-9

HALLIE SANITARY DISTRICT 1

CAUTION

HANSON ST. (118TH ST.)

FIRST FEDERAL SAVINGS BANK LACROSSE - MADISON

LOTS 1,2,3,4 AND 5, BLOCK 8 BLOOMFIELD HILLS ADDITION

SE-NE 35-28-9

STA. 25'M'+87, RT
ASPHALTIC FLUME

CHARLES LIEN

NE-SE 35-28-9

EXCEL ENERGY NATURAL GAS

25'U

30'M

MATCH EXISTING

S 88°07'24.0" E

10'M

35'M

AMERITECH

MELBY ST. (15TH AVE.)

PI 13+70.91

N 379347.567
E 1595460.951

MATCH 13+00
13+15
1-12" RCP CLASS II
2-R.C. A.E.W.

Curve Data
DELTA = 30°42'11.9" (RT)
D = 1°45'00.0"
T = 898.851
L = 1754.475
E = 121.143
R = 3274.045
DB = S 88°07'24.0" E
DA = S 57°25'12.1" E
PC STA = 13+70.91
PC N = 379332.1450
PC E = 1595931.6084
PI STA = 22+69.76
PI X = 1596829.9769
PI Y = 379302.7092
PT STA = 31+25.38
PT N = 1597587.3848
PT E = 378818.6993

NW-SE 35-28-9

NATIONAL PRESTO

DENNIS C. AND CLAUDETTE F. JENSEN

HEPPNER DR. (118TH ST.)

PI 22+69.76

WAYNE J. AND JUDY A. COOK

PE 22+60 RT
1-18" X 36' CP CMP III
2-A.E.W.

QIANNA L. BLACKBURN

CHARTER COMMUNICATIONS

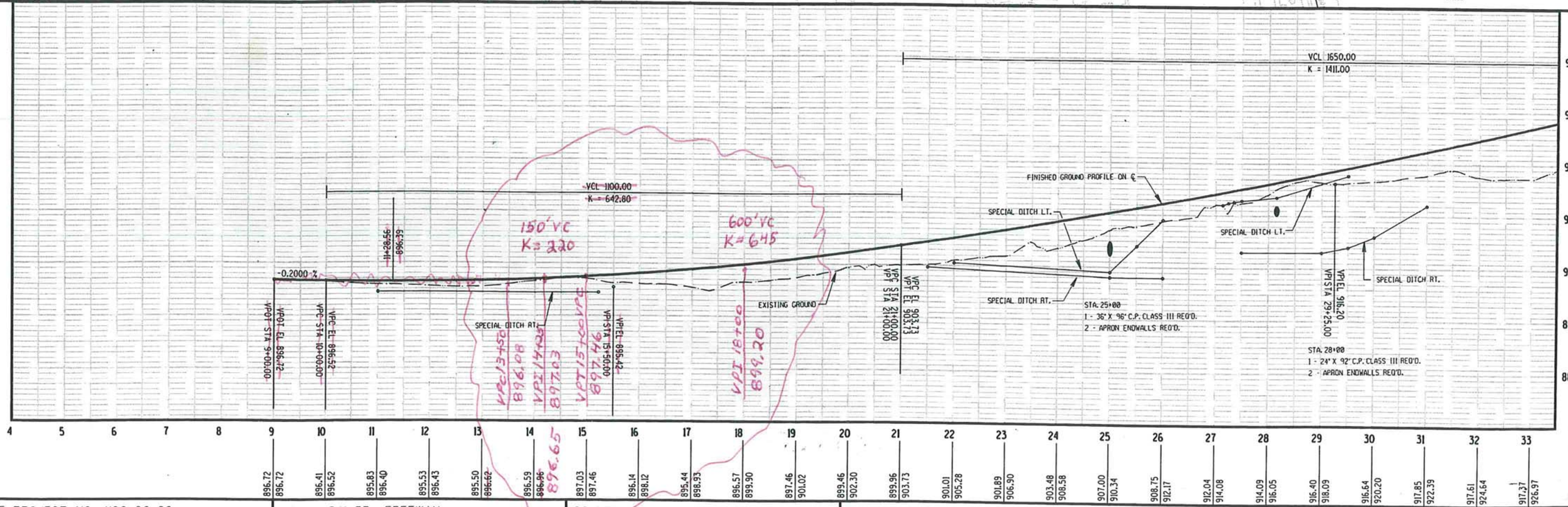
DETENTION POND

PT 31+25.38

S 57° 25' 12.1" E

NE-SW 35-28-9

0 100 FEET 200 300
SCALE



STATE PROJECT NO: 1190-00-80	HWY: U.S.H. 53 FREEWAY	COUNTY: EAU CLAIRE / CHIPPEWA	15TH AVE (MELBY STREET)	SHEET NO: . 5.25	E

FILE NAME : 1:\microstation\Projects\d6_11900006\d6_11900080\plpr226.DGN
PLOT DATE : 20-MAR-2002 10:38
REV.: 2-27-02 JDB
ORG DATE :
PLOT NAME :
ORIGINATOR :
PLOT SCALE : 2.000000:1.000000

WISDOT/CADDS SHEET 42

LEVELS ON - 4, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63

BENCHMARKS

NO.	DESCRIPTION	ELEV.
33	PK IN PP ⌀ E. SIDE OF INTERSECTION OF HANSON RD. & MELBY ST.	912.76
34	PK IN PP ⌀S.E. COR. OF HANSON RD. ⌀ VAN DRESSER ST.	900.06

EAU CLAIRE ENERGY COOPERATIVE

VIKING GAS TRANSMISSION CO.

NE-SE 35-28-9

NE-SW 36-28-9

NW-SW 36-28-9

SE-SW 36-28-9

SW-SW 36-28-9

MELBY ST. / 15TH AVE.

S 57°25'12.1" E

35'W

40'W

45'W

50'W

P.I. 45+00.00

P.I. 51+53.00

USH 53 S.B.

USH 53 N.B.

FAY C. BURKE

ALVIN WILLIAM ANDRESS

CAUTION

CAUTION

STEEL THRIE BEAM, STRUCTURE APPROACH
STA. 43+01 - 43+34, LT
STA. 42+98 - 43+31, RT
STA. 46+09 - 46+42, LT
STA. 46+06 - 46+39, RT

STEEL PLATE BEAM GUARD, CLASS A
STA. 42+82 - 43+01, LT
STA. 42+79 - 42+98, RT
STA. 46+42 - 46+61, LT
STA. 46+39 - 46+58, RT

ENERGY ABSORBING TERMINAL
STA. 42+32, LT
STA. 42+29, RT
STA. 47+11, LT
STA. 47+08, RT

0 100 FEET 200 300
SCALE

960.0 950.0 940.0 930.0 920.0 910.0 900.0

FINISHED GROUND PROFILE ON ℄

+2.6807 %

-1.3000 %

-4.0800 %

+0.0112 %

+2.0000 %

VPC STA 39+40.00
VPC EL 943.41

VPI STA 41+40.00
VPI EL 948.77

VPT STA 43+40.00
VPT EL 946.17

VPC STA 46+35.00
VPC EL 942.59

VPI STA 47+90.00
VPI EL 940.32

VPT STA 49+65.00
VPT EL 933.32

VPI STA 51+50.00
VPI EL 926.62

VPC STA 49+75.00
VPC EL 932.92

VPT STA 53+25.00
VPT EL 925.94

VPOT STA 53+53.00
VPOT EL 926.42

VCL 350.00
K = 87.26

K = 100.49
VCL 400.00

K = 129.63
VCL 350.00

42+09.37
941.02

VPI STA 37+50.00
VPI EL 936.32

STA. 39+86.31
SKEW 95° RHF
MIN. 3.5' BETWEEN PIPES
2 - 36" X 280' R.C.C.P. CLASS V
4 - REINFORCED CONC. APRON ENDWALLS

SPECIAL DITCH RT.

STA. 43+25
1 - 30" X 264' R.C.C.P. CLASS V
2 - REINFORCED CONC. APRON ENDWALLS

STA. 46+20
1 - 30" X 260' R.C.C.P. CLASS V
2 - REINFORCED CONC. APRON ENDWALLS

SPECIAL DITCH RT.

SPECIAL DITCH LT.

STA. 49+50
2 - 48" X 242' R.C.C.P. CLASS V
4 - REINFORCED CONC. APRON ENDWALLS

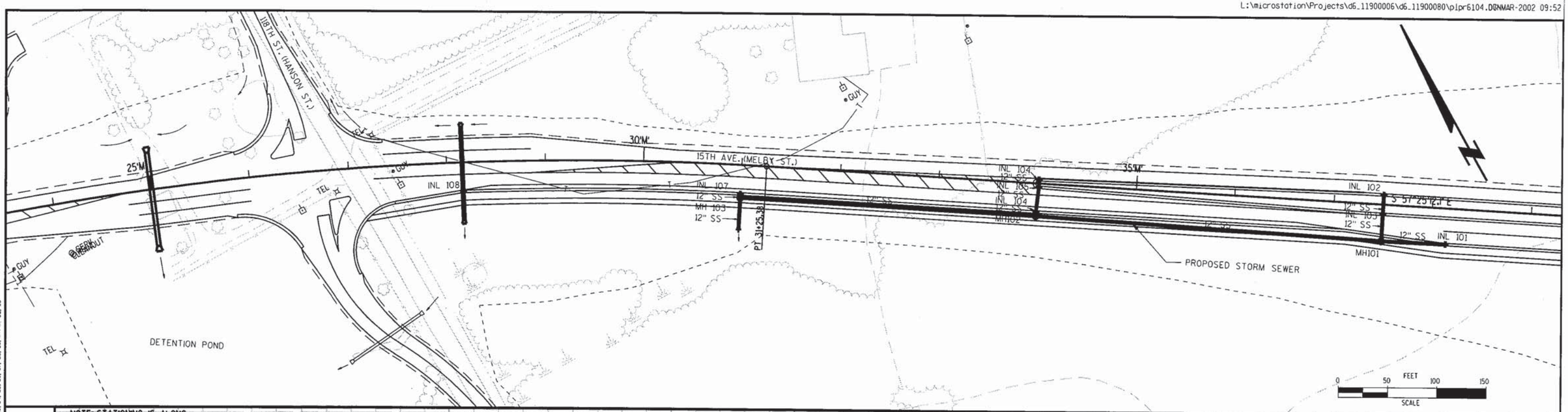
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
926.97	929.37	931.84	934.37	936.98	939.66	942.34	944.84	946.42	947.01	946.61	945.39	944.09	942.79	941.21	938.87	935.76	931.96	928.82	926.82	925.97									
919.60	922.00	924.40	926.80	929.20	931.60	934.00	936.40	938.80	941.20	943.60	946.00	948.40	950.80	953.20	955.60	958.00	960.40	962.80	965.20	967.60	970.00	972.40	974.80	977.20	979.60	982.00	984.40	986.80	989.20

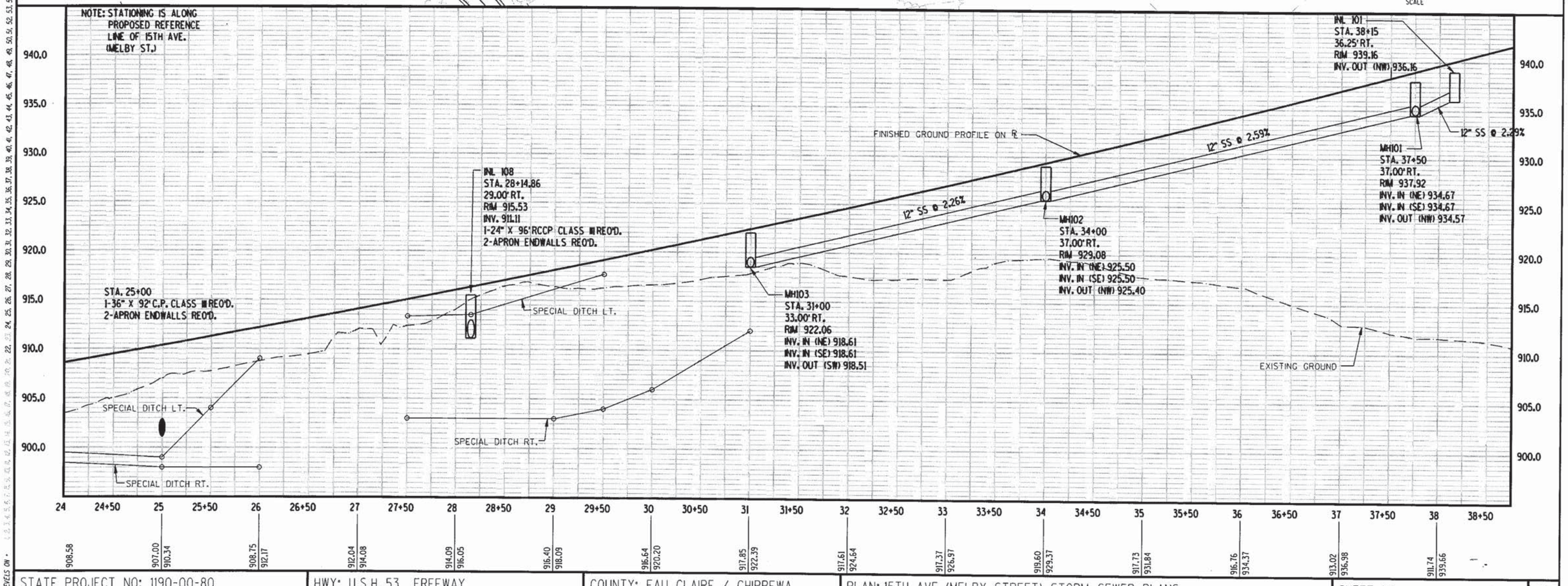
LEVELS ON · 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63

STATE PROJECT NO: 1190-00-80	HWY: U.S.H. 53 FREEWAY	COUNTY: EAU CLAIRE / CHIPPEWA	15TH AVE (MELBY STREET) - 'M' LINE	SHEET NO: . 5.26	E

FILE NAME : L:\microstation\Projects\d6_11900006\d6_11900080\plpr227.DGN
PLOT DATE : 07-MAR-2002 15:39
ORG DATE :
PLOT NAME :
ORIGINATOR :
PLOT SCALE : 2.000000:1.000000

WISDOT/CADDS SHEET 42



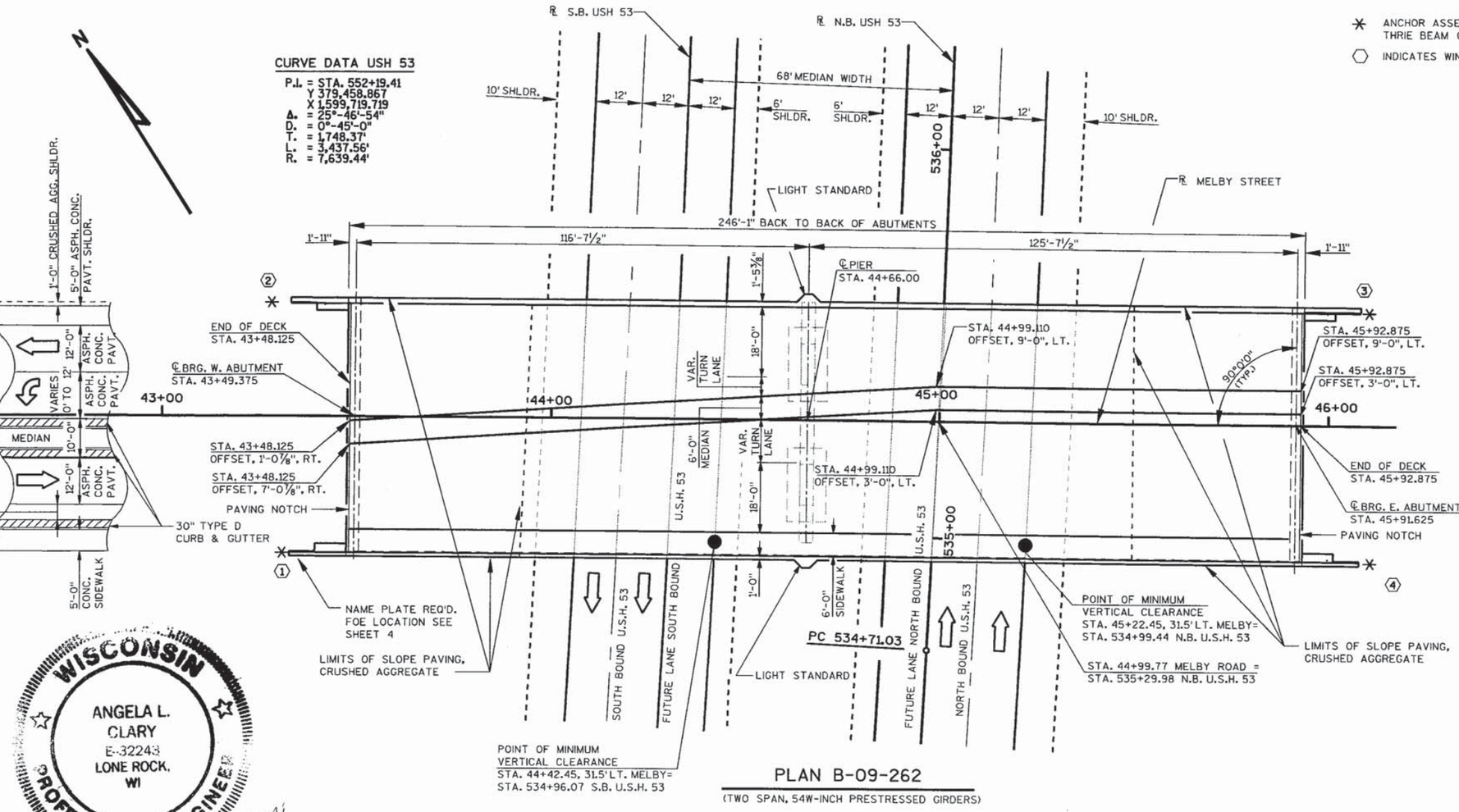


STATE PROJECT NO: 1190-00-80	HWY: U.S.H. 53 FREEWAY	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN: 15TH AVE (MELBY STREET) STORM SEWER PLANS	SHEET NO: 5.27 E

FILE NAME : L:\microstation\Projects\d6_11900006\d6_11900080\plpr6104.DGN
PLOT DATE : 07-MAR-2002 09:52
ORG DATE :
PLOT NAME :
ORIGINATOR :
PLOT SCALE : 2.000000:1.000000
WSDOT/CADDS SHEET 42

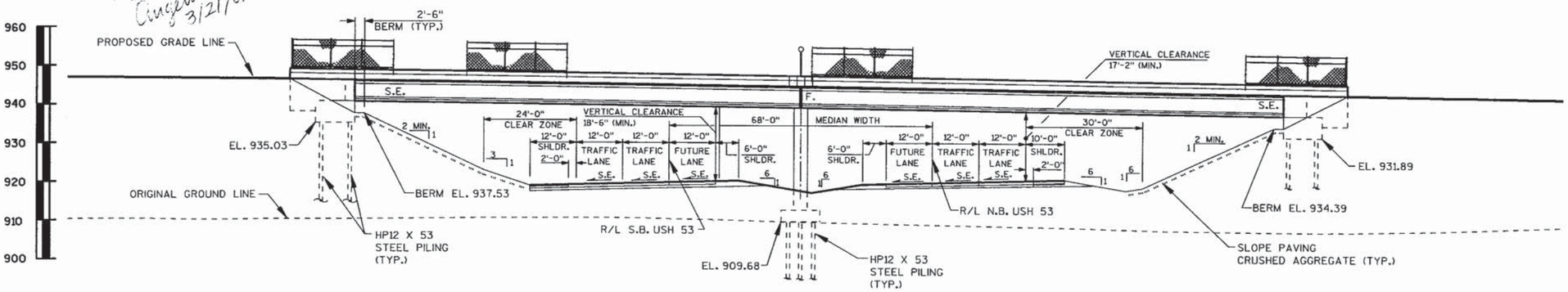
LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

1190-00-80	8.1



PLAN B-09-262

(TWO SPAN, 54W-INCH PRESTRESSED GIRDERS)



ELEVATION

(LOOKING NORMAL TO U.S.H. 53)

NOTE: FUTURE LANES ARE SHOWN FOR INFORMATION ONLY

WISCONSIN
ANGELA L. CLARY
E-32243
LONE ROCK, WI
PROFESSIONAL ENGINEER

Angela L. Clary 3/21/02

DESIGN DATA

LIVE LOAD:

DESIGN RATING	HS20
INVENTORY RATING	HS24
OPERATIONAL RATING	HS58
MAXIMUM STANDARD PERMIT VEHICLE	250 KIPS

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

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY, SLAB	f'c= 4,000 p.s.i.
ALL OTHER	f'c= 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 p.s.i.
54W INCH PRESTRESSED GIRDERS	f'c= 6,000 p.s.i.
CONCRETE MASONRY	
STRANDS -0.6" DIA. WITH AN ULTIMATE TENSILE STRENGTH OF	fu = 270,000 p.s.i.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP12 X 53 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 69.5 TONS PER PILE. ESTIMATE 65'-0" PILE LENGTHS.

PIER TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO MINIMUM BEARING VALUE OF 65 TONS PER PILE. ESTIMATE 40'-0 " PILE LENGTH.

TRAFFIC DATA

OVERPASS

A.D.T. (2004)	2,250
A.D.T. (2024)	3,700
DESIGN SPEED	40 M.P.H.

UNDERPASS

A.D.T. (2004)	25,600
A.D.T. (2024)	32,750
DESIGN SPEED	70 M.P.H.

LIST OF DRAWINGS

BRIDGE OFFICE CONTACT
GERRY ANDERSON
(608) 266-8488

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

MELBY STREET OVER USH 53

COUNTY	CHIPPEWA	TOWN ~~CITY/VILLAGE~~	HALLIE
DESIGN SPEC.	AASHTO 1998	LOAD HS-20	CONST. SPEC.
DESIGNED BY ALC/JFR	DESIGN CK'D. JJK	DRAWN BY BXJ	PLANS CK'D. ALC

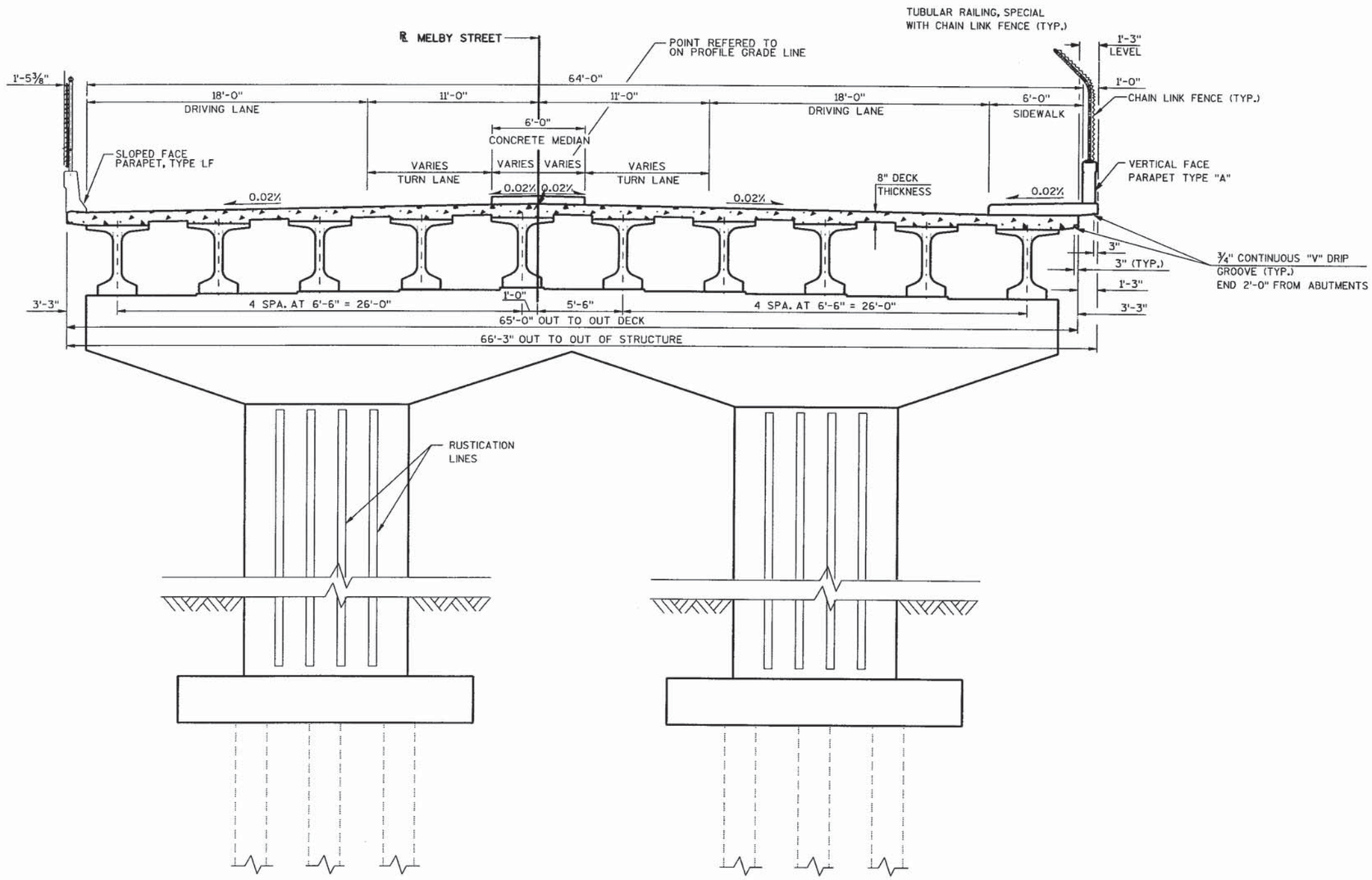
APPROVED Gerry Anderson 03-25-02
CHIEF STRUCTURAL DESIGN ENGINEER DATE

GENERAL PLAN

SHEET 1 OF 21

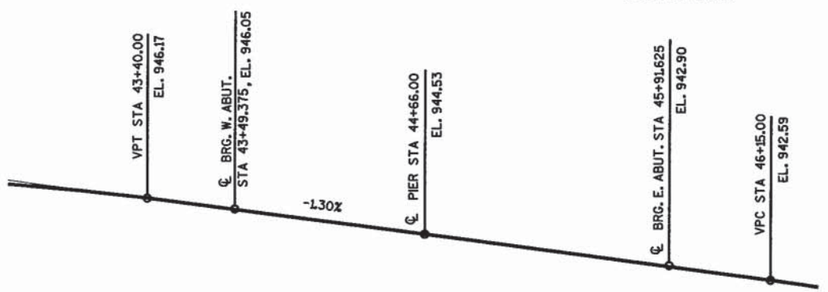
DATE:

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.2

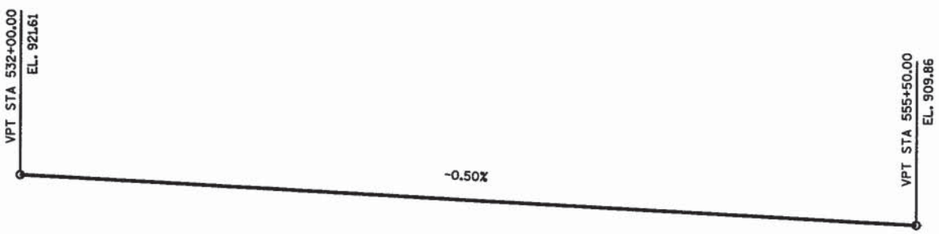


TYPICAL SECTION THRU ROADWAY

(LOOKINIG EAST)



PROFILE GRADE LINE, MELBY STREET



PROFILE GRADE LINE, N.B. & S.B. U.S.H. 53

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL REINFORCING BARS ARE ENGLISH AND THE 1ST DIGIT OF A 3 DIGIT AND FIRST 2 DIGITS OF A 4 DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

FILLER SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M153, TYPE I, II, OR III. OR A.A.S.H.T.O. DESIGNATION M213.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2 INCHES FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH DEPTH OF 2½ INCHES WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

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

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED STONE, TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

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

THE STRUCTURE SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND THE PAINTING DETAILS AS SHOWN IN THE PLANS.

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

CROSS SECTION &GENERAL NOTES

SHEET 2 OF 21

FILE = SCALE = 1/8"=1'-0"

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : W:\RD\6473\melby\080102.dgn PLOT DATE : 08-MAR-2002 13:07 PLOT BY : BOBBY JONES PLOT NAME : 080102 ORG DATE : Originator : Dist PLOT SCALE : 96.000000:1.000000 I.D.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.3

NOTES:

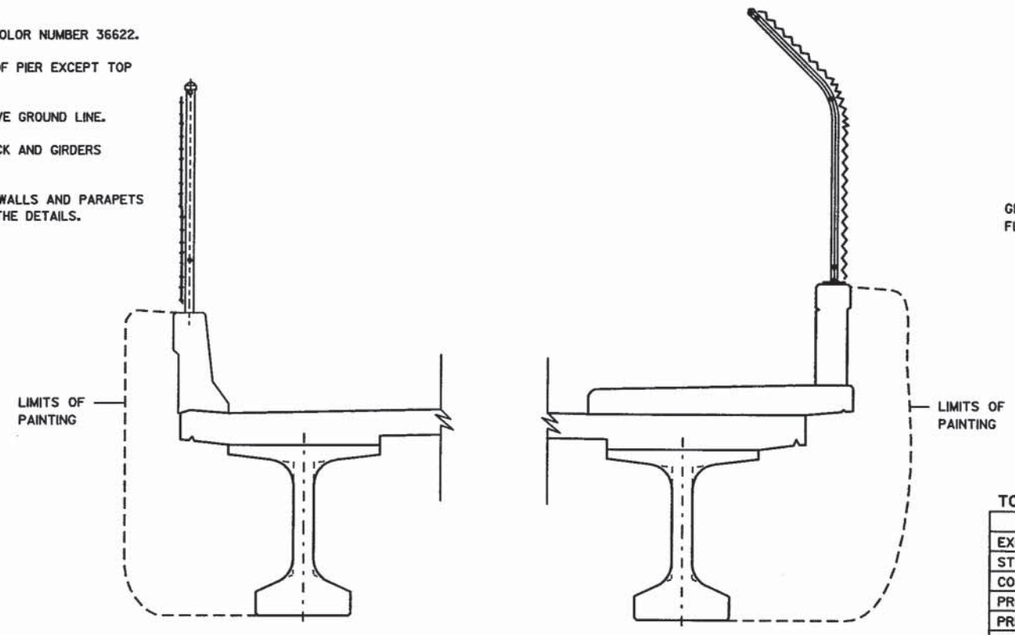
PAINT SHALL BE FEDERAL STANDARD COLOR NUMBER 36622.

PAINT ALL ABOVE GROUND SURFACES OF PIER EXCEPT TOP OF CAP.

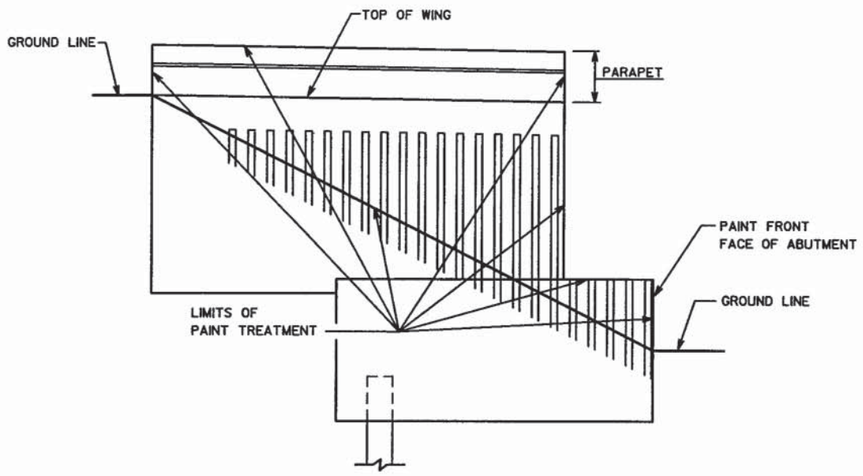
PAINT FRONT FACE OF ABUTMENT ABOVE GROUND LINE.

PAINT EXTERIOR FACE OF PARAPET, DECK AND GIRDERS AS SHOWN IN DETAILS.

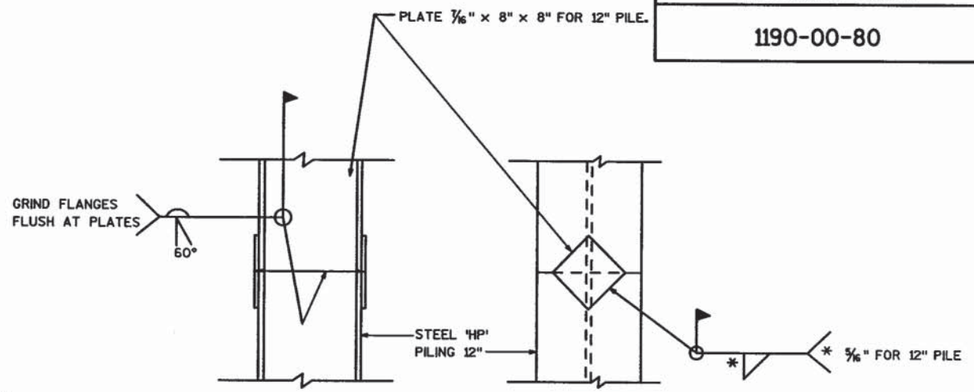
PAINT FRONT FACE OF ABUTMENT WINGWALLS AND PARAPETS ABOVE THE GROUNDLINE AS SHOWN IN THE DETAILS.



SUPERSTRUCTURE PAINTING DETAILS



ABUTMENT PAINTING DETAILS



PILE SPLICE DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	W. ABUT	PIER	E. ABUT	SUPER.	TOTAL
EXCAVATION FOR STRUCTURES, BRIDGE B-09-262	L.S.	----	----	----	----	1
STRUCTURE BACKFILL	C.Y.	370	----	370	----	740
CONCRETE MASONRY, BRIDGES	C.Y.	62.7	153.2	62.7	1,166.2	1,444.8
PROTECTIVE SURFACE TREATMENT	S.Y.	----	----	----	1,925	1,925
PRESTRESSED GIRDER, I-TYPE, 54W-INCH	L.F.	----	----	----	2,430	2,430
HIGH-STRENGTH BAR STEEL, REINFORCEMENT, BRIDGES	LB.	3,940	4,620	3,940	----	12,500
COATED HIGH-STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LB.	1,820	32,370	1,820	135,580	171,590
NON-LAMINATED ELASTOMERIC BEARING PADS	EACH	10	20	10	----	40
STEEL DIAPHRAGMS, STRUCTURE B-09-262	EACH	----	----	----	36	36
STEEL PILING, DELIVERED AND DRIVEN, HP12-INCH 53 POUND	L.F.	1,170	1,440	1,170	----	3,780
RUBBERIZED MEMBRANE WATERPROOFING	S.Y.	97.5	----	97.5	----	195
SLOPE PAVING, CRUSHED AGGREGATE	S.Y.	375	----	325	----	700
PIPE UNDERDRAIN, 6-INCH	L.F.	93	----	93	----	186
PIPE UNDERDRAIN, UNPERFORATED, 6-INCH	L.F.	10	----	10	----	20
GEOTEXTILE FABRIC, TYPE DF	S.Y.	75	----	75	----	150
ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	----	2	----	4
CONSTRUCTION STAKING, STRUCTURE LAYOUT, STRUCTURE, B-09-262	EACH	----	----	----	1	1
NONMETALLIC, CONDUIT, SCHEDULE 40, 2-INCH	L.F.	----	----	----	570	570
NONMETALLIC, CONDUIT, SCHEDULE 40, 3-INCH	L.F.	----	----	----	570	570
PULL BOXES, STEEL, 24 X 36-INCH	EACH	----	----	----	4	4
JUNCTION BOXES, 8 X 8 X 8 INCH	EACH	----	----	----	2	2
CHAIN LINK FENCE VINYL COATED, 8 FT.	L.F.	----	----	----	547	547
ANCHOR ASSEMBLIES, LIGHT POLES	EACH	----	----	----	2	2
CONCRETE MASONRY, ANCHORS, TYPE S, 1/2-INCH	EACH	----	----	----	328	328
PAINTING CONCRETE, STRUCTURE, B-09-262	S.Y.	52	208	52	671	983
QUALITY MANAGEMENT PROGRAM, READY-MIXED CONCRETE MASONRY FOR BRIDGES	C.Y.	62.7	153.2	62.7	1,166.2	1,444.8
QUAILITY MANAGEMENT PROGRAM, MASONRY STRENGTH INCENTIVE, READY MIXED CONCRETE	DOL.	627	1532	627	11662	14448
		----	----	----	----	1/2" & 3/4"
NON-BID ITEMS		----	----	----	----	----
FILLER	SIZE	----	----	----	----	----

BENCH MARKS

NO.	DESCRIPTION	ELEV.
28	PK NAIL IN POWER POLE N. COR. 50th AVE & NORDIC DR.	937.39
30	PK NAIL IN BOTTOM OF FENCE POST NEAR TEL PED W. OF COR. OF NORDIC DR. & HANSON RD.	953.73
32	PK NAIL IN POWER POLE @ S.W. COR. OF HANSON RD. & BRUCE ST.	924.13
33	PK NAIL IN POWER POLE @ E. SIDE OF INTERSECTION OF HANSON RD. & MELBY ST.	912.76
34	PK NAIL IN POWER POLE @ S.E. COR. OF HANSON RD. & VAN DRESSER ST.	900.06

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

DETAILS & QUANTITIES

SHEET 3 OF 21

I.D.

FILE= SCALE = 1/8"=1'-0"

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : w:\RD\6473\melby\080103.dgn PLOT DATE : 19-MAR-2002 14:26 PLOT BY : ##...plotuser...## PLOT NAME : ##....plotname....## ORG DATE : Originator : Dist PLOT SCALE : 96.000000:1.000000

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.4

ABBREVIATIONS

F— FINE M— MEDIUM C— COARSE
WS— WEATHERED SO— SOUND

MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350#WT. FALLING 18" ON A 2" O.D. POINT.

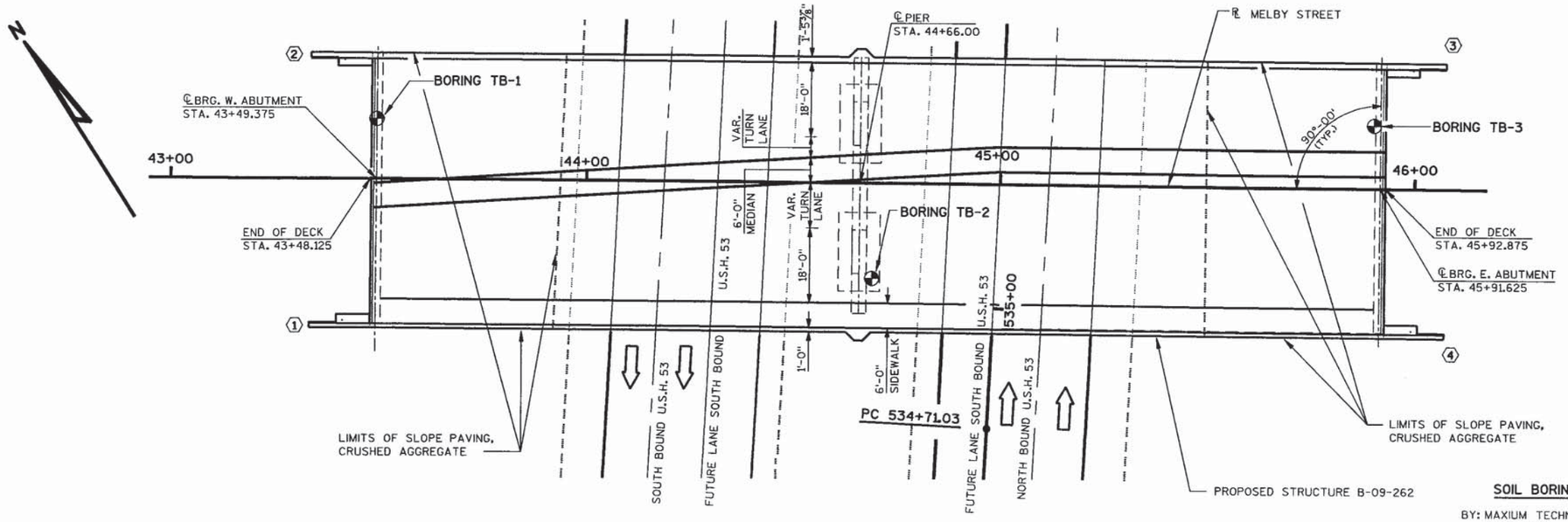
LEGEND OF BORING

BORING NO.
ELEV. STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE— S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A O.D. X I. 4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

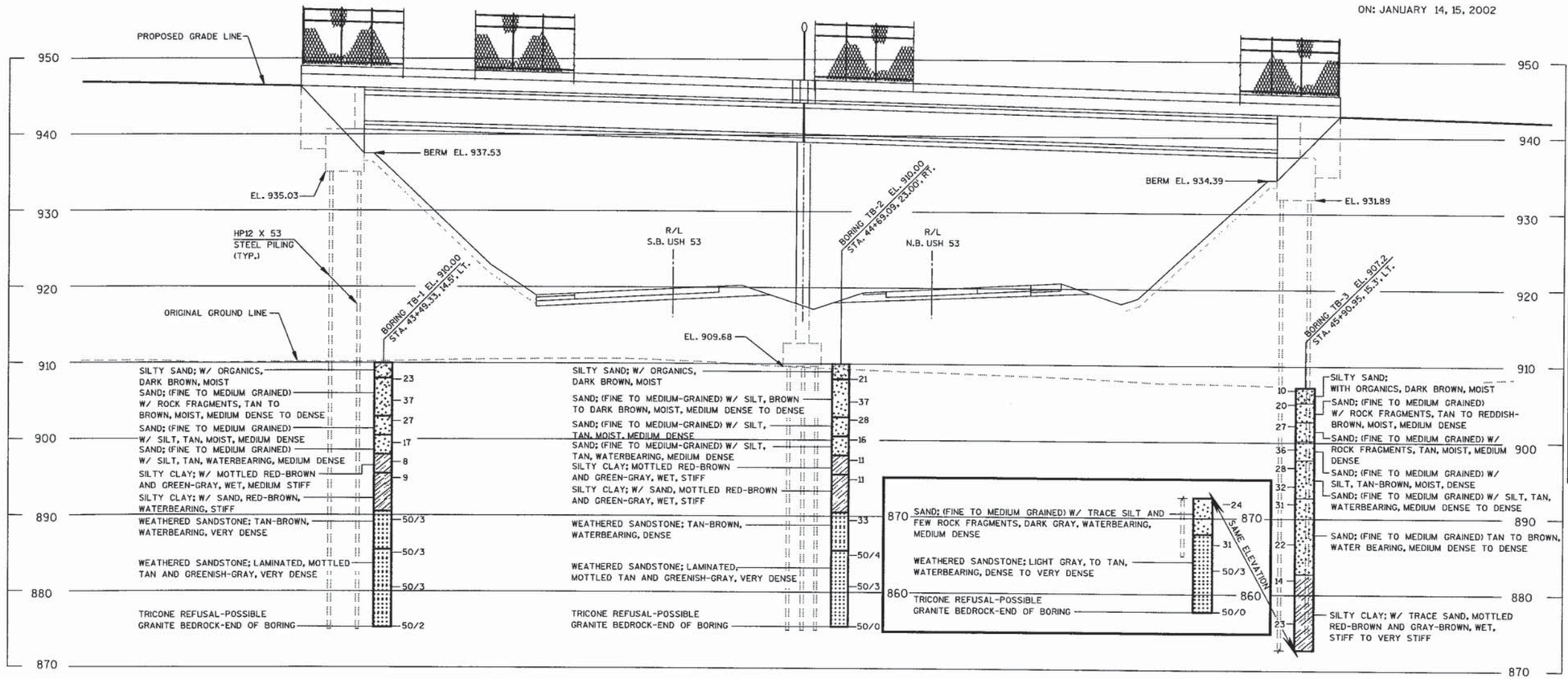
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE DIVISION OF HIGHWAYS DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.



SOIL BORINGS

BY: MAXIUM TECHNOLOGIES, INC. WAUSAU, WI.

ON: JANUARY 14, 15, 2002



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	

SUBSURFACE EXPLORATION

SHEET 4 OF 21

FILE= SCALE = 1/16"=1'-0"

LEVELS ON = 1, 4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47, 49,50,51,52,53,54,55,56,57,58,59,60,61,62.

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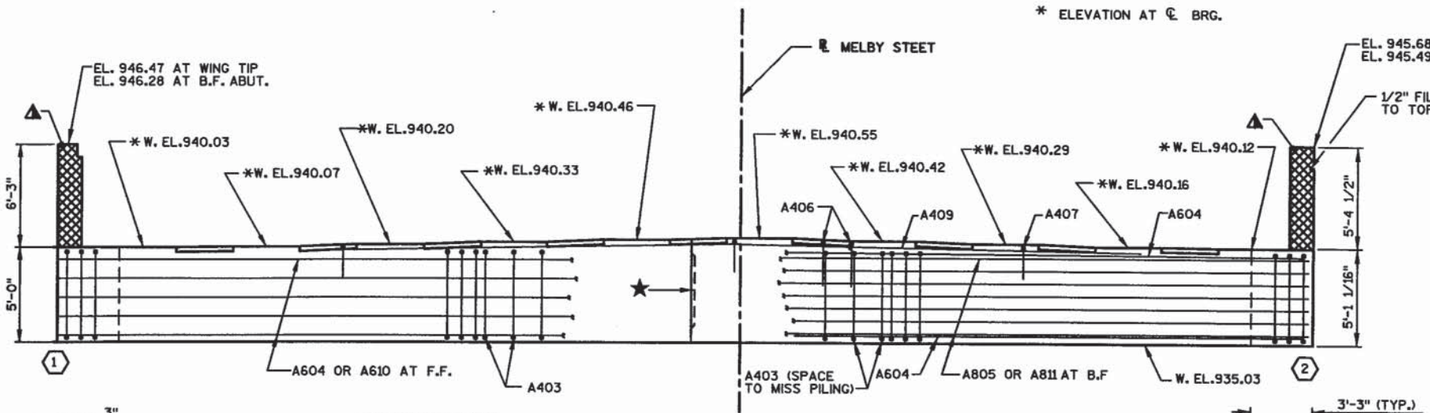
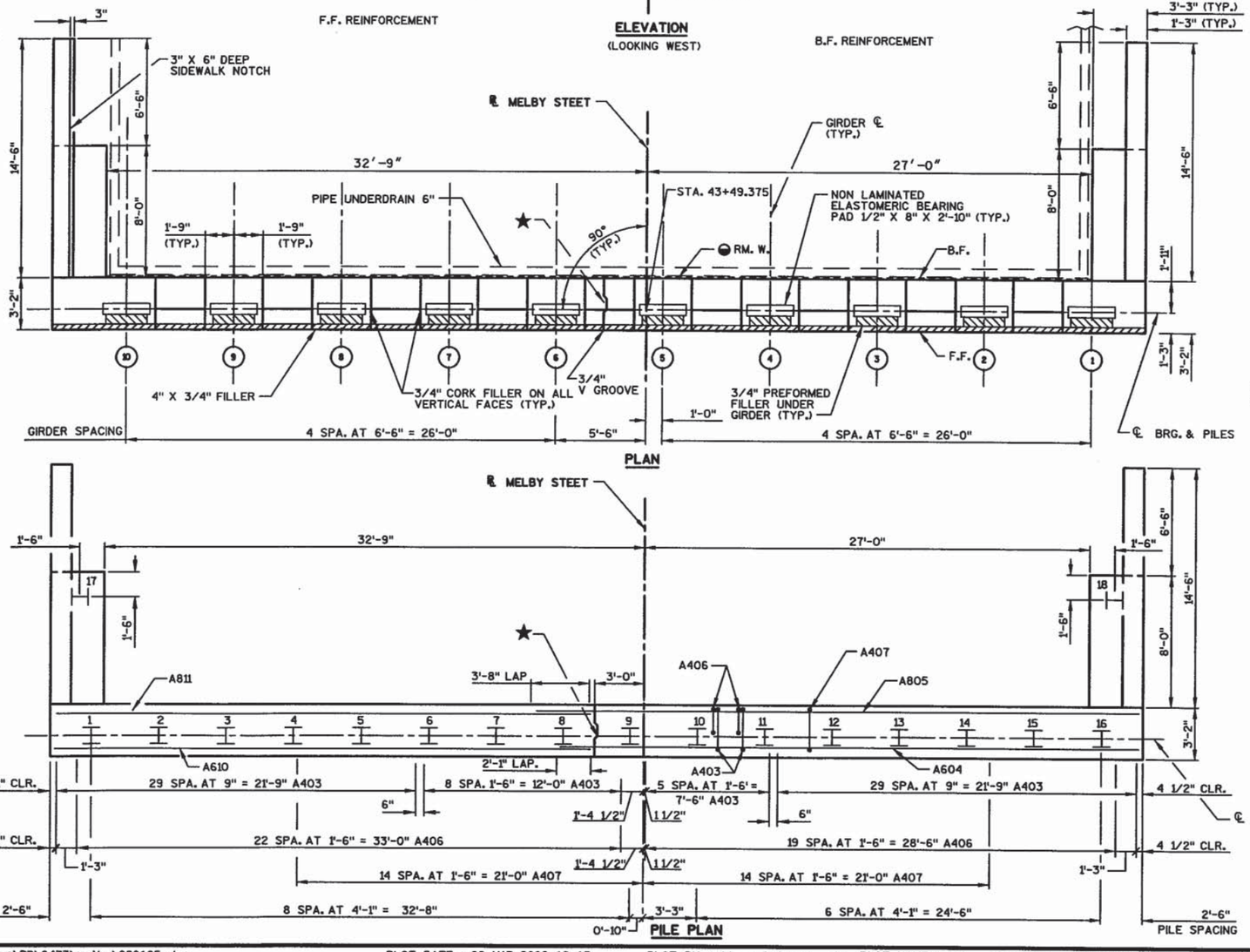
STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.5

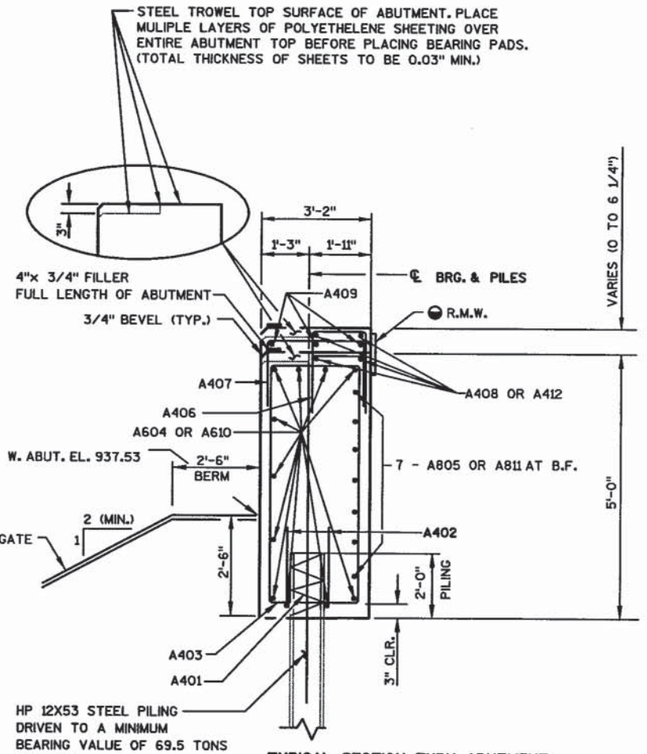
★ VERTICAL CONSTRUCTION JOINT. KEYWAY FORMED BY BEVELED 2" X 8", 3/4" V GROOVE AT THE FRONT FACE, 18" RMW AT BACK FACE.

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

◒ 18" RUBBERIZED MEMBRANE WATERPROOFING (R.M.W.) SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON B.F.







ESTIMATE 65'-0" PILE LENGTHS.

PILING SHALL BE PLACED PRIOR TO PLACEMENT OF EARTH FILL.

PILING SHALL BE SHORED IN A VERTICAL POSITION AS NECESSARY TO MAINTAIN PROPER ALIGNMENT.

FOR PILE SPLICE DETAIL SEE SHEET 3

F.F. - FRONT FACE

B.F. - BACK FACE

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC. 1996	DRAWN BY TF	PLANS CK'D. ALC

WEST ABUTMENT

SHEET 5 OF 21

FILE= SCALE = 1/4"=1'-0"

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

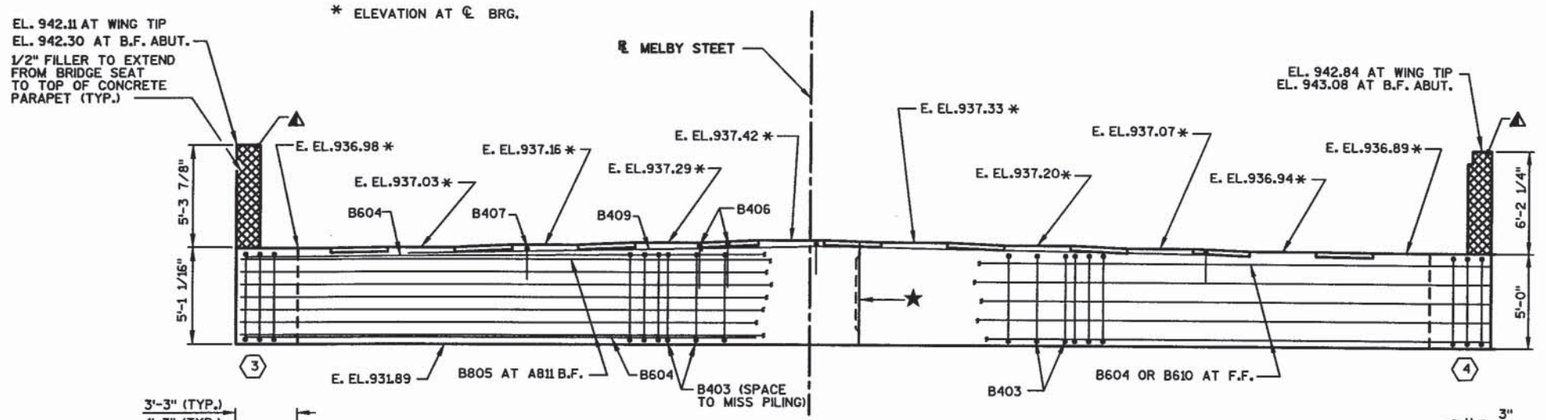
FILE NAME : w:\RD\6473\melby\080105.dgn PLOT DATE : 08-MAR-2002 12:15 PLOT BY : **...plotuser...** PLOT NAME : **....plotname....** ORG DATE : Originator : Dist PLOT SCALE : 96.000000:1.000000 I.D.

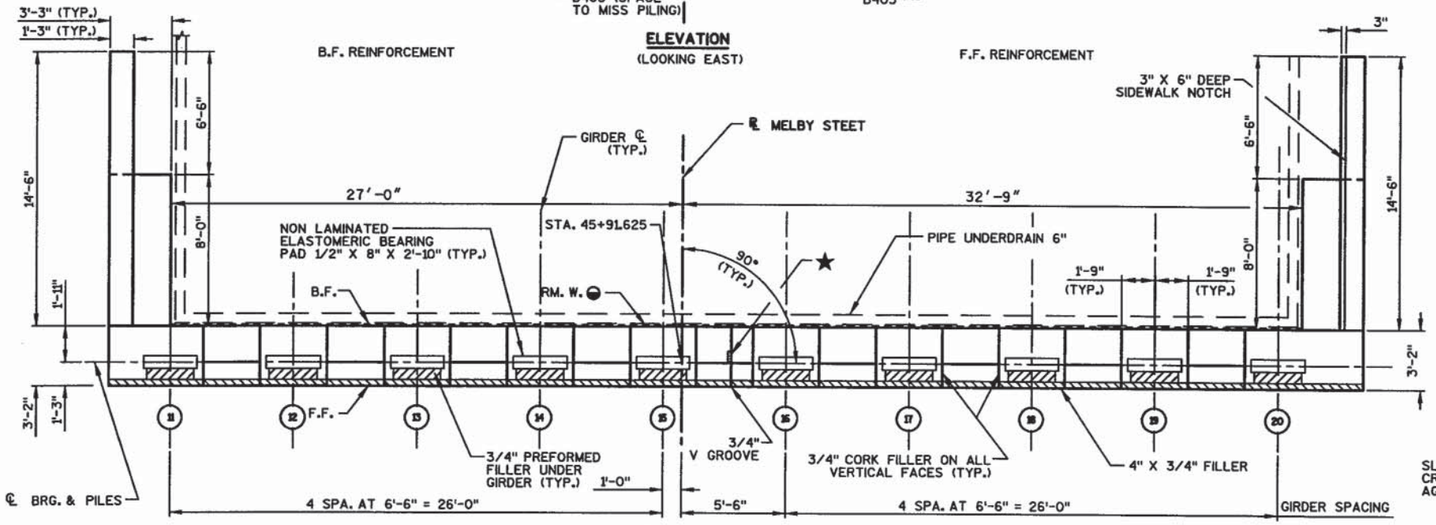
STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.6

★ VERTICAL CONSTRUCTION JOINT. KEYWAY FORMED BY BEVELED 2" X 8", 3/4" V GROOVE AT THE FRONT FACE, 18" RMW AT BACK FACE.

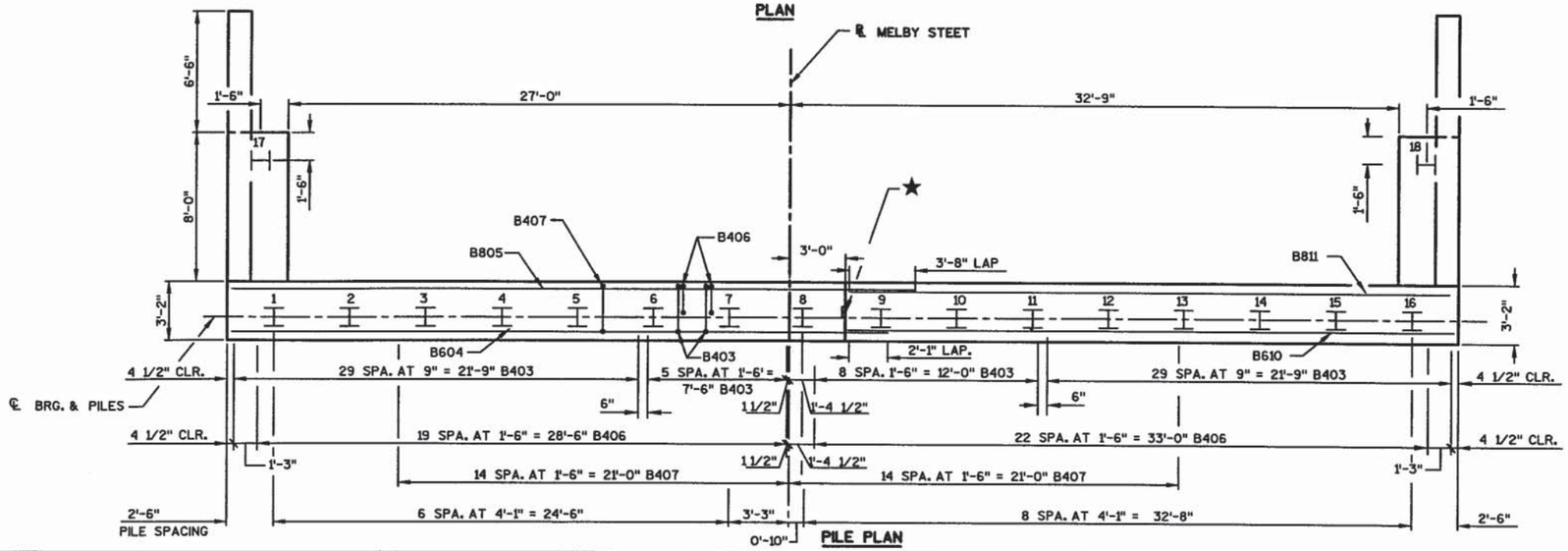
▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUW JOINT SEALER. (1" DEEP AND HOLDING 1/8" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

◒ 18" RUBBERIZED MEMBRANE WATERPROOFING (R.M.W.) SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON B.F.

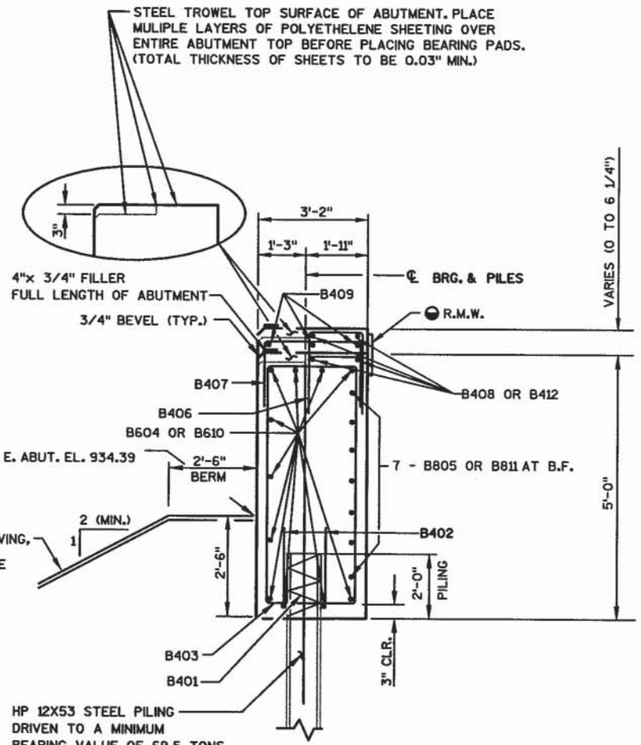




PLAN



PILE PLAN



TYPICAL SECTION THRU ABUTMENT

ESTIMATE 65'-0" PILE LENGTHS.

PILING SHALL BE PLACED PRIOR TO PLACEMENT OF EARTH FILL.

PILING SHALL BE SHORED IN A VERTICAL POSITION AS NECESSARY TO MAINTAIN PROPER ALIGNMENT.

FOR PILE SPLICE DETAIL SEE SHEET 3

F.F. - FRONT FACE

B.F. - BACK FACE

NO.	DATE	REVISION	BY

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619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	TF	PLANS CK'D.	ALC

EAST ABUTMENT

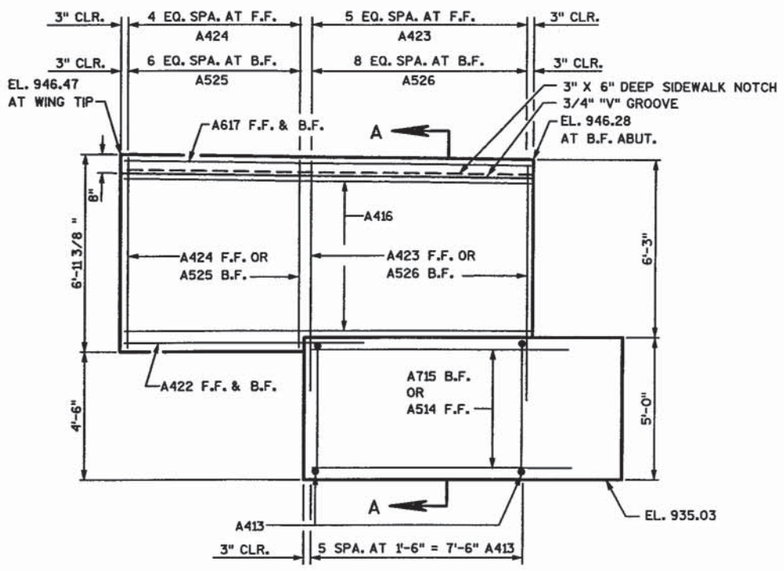
SHEET 6 OF 21

FILE= SCALE = 1/4"=1'-0"

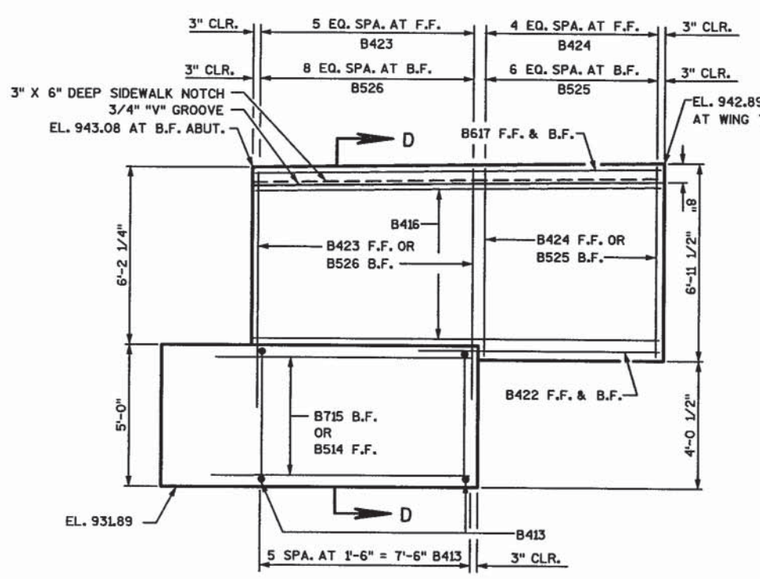
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : w:\RD\6473\melby\080106.dgn PLOT DATE : 08-MAR-2002 12:18 PLOT BY : **...plotuser...** PLOT NAME : **....plotname....** ORG DATE : Originator : Dist PLOT SCALE : 96.000000:1.000000 I.D.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.7

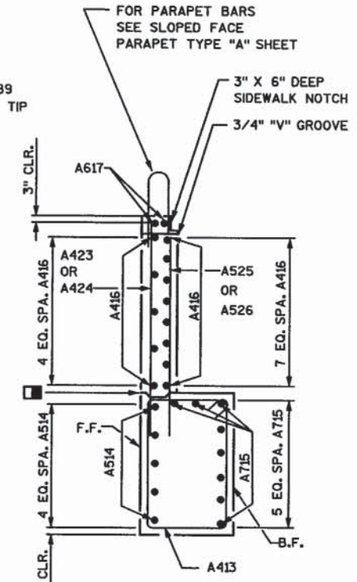


WING 1 ELEVATION

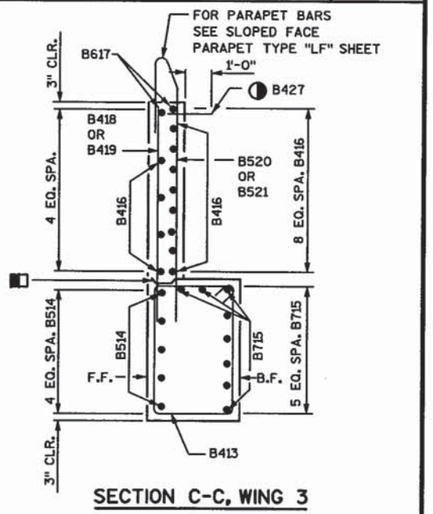


WING 4 ELEVATION

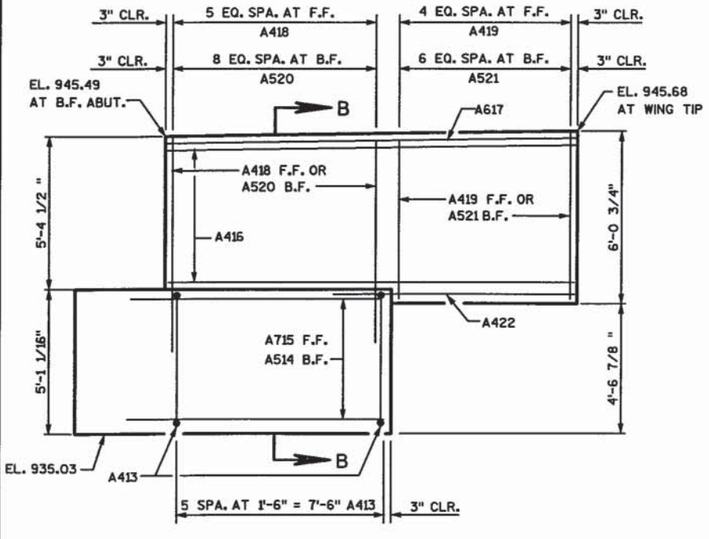
F.F. = FRONT FACE
B.F. = BACK FACE



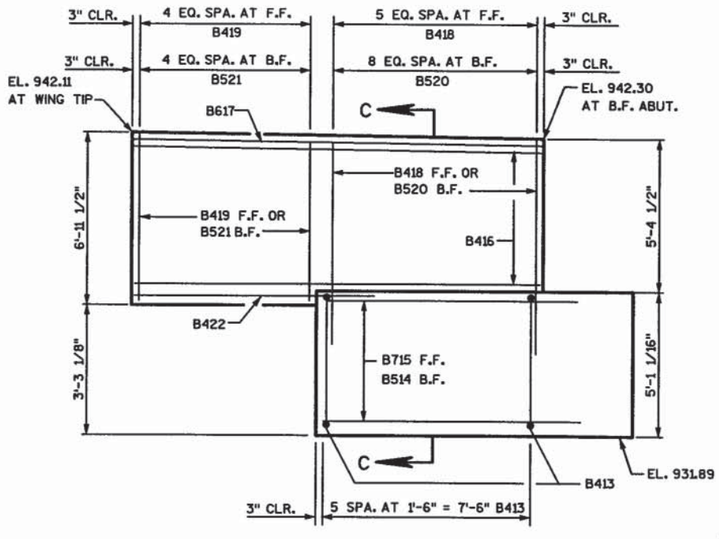
SECTION A-A, WING 1



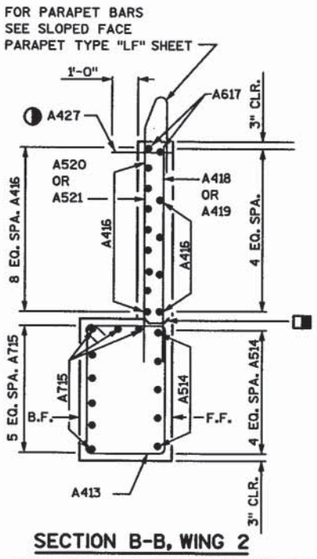
SECTION C-C, WING 3



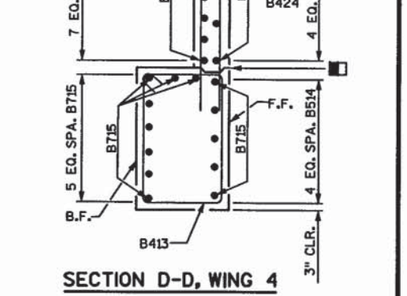
WING 2 ELEVATION



WING 3 ELEVATION



SECTION B-B, WING 2



SECTION D-D, WING 4

OPTIONAL KEYED CONSTRUCTION JOINT FORMED BY SURFACED BEVELED 2"x6", PROVIDE 3/4" V-GROOVE ON F.F. OF WING WALL.

B427 AT 1'-0" CTRS. ALONG ENTIRE WING LENGTH ADJACENT TO CONCRETE SURFACE DRAIN.

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	TQF	PLANS CK'D.	ALC

WINGS DETAILS

SHEET 7 OF 21

FILE= SCALE = 3/8"=1'-0

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : w:\RD\6473\melby\080107.dgn PLOT DATE : 08-MAR-2002 12:09 PLOT BY : ##...plotuser...## PLOT NAME : ##....plotname....## ORG DATE : Originator : Dist PLOT SCALE : 64.000000:1.000000 I.D.

BILL OF BARS (WEST ABUTMENT)

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
A401		16	28-0	X		BODY AT PILES B.F.	VERT.
A402		32	2-3			BODY AT PILES	VERT.
A403		75	14-8	X		BODY - STIRRUPS	VERT.
A604		11	35-4			BODY - F.F.	HORIZ.
A805		7	36-11			BODY - B.F.	HORIZ.
A406		45	4-5	X		BODY - TIES AT TOP B.F.	VERT.
A407		29	5-7	X		BODY - TIES AT TOP B.F.	VERT.
A408		2	35-4			BODY - AT TOP	HORIZ.
A409		6	26-1			BODY - AT TOP	HORIZ.
A610		11	32-7			BODY - F.F.	HORIZ.
A811		7	32-7			BODY - B.F.	HORIZ.
A412		2	32-7			BODY - AT TOP	HORIZ.
A413	12		15-2	X		WING 1& 2 - STIRRUPS	VERT.
A514	10		9-6			WING 1& 2 - F.F.	HORIZ.
A715	16		10-7			WING 1& 2 - B.F.	HORIZ.
A416	24		14-1			WING 1& 2 - F.F. & B.F.	HORIZ.
A617	4		14-1			WING 1& 2 - F.F. & B.F.	HORIZ.
A418	6		6-9			WING 2 - F.F.	VERT.
A419	5		6-6			WING 2 - F.F.	VERT.
A520	9		6-9			WING 2 - B.F.	VERT.
A521	7		6-6			WING 2 - B.F.	VERT.
A422	4		8-0			WING 1& 2 - BTM	HORIZ.
A423	6		7-7			WING 1- F.F.	VERT.
A424	5		6-6			WING 1- F.F.	VERT.
A525	7		6-6			WING 1- B.F.	VERT.
A526	9		7-7			WING 1- B.F.	VERT.
A427	14		2-0			WING - TIE BARS AT CONC. SURFACE DRAIN	HORIZ.

F.F. - FRONT FACE
B.F. - BACK FACE

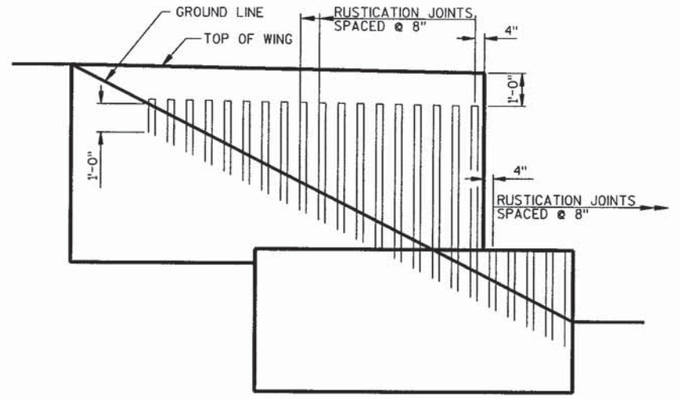
BILL OF BARS (EAST ABUTMENT)

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION	
B401		16	28-0	X		BODY AT PILES B.F.	VERT.
B402		32	2-3			BODY AT PILES	VERT.
B403		75	14-8	X		BODY - STIRRUPS	VERT.
B604		11	35-4			BODY - F.F.	HORIZ.
B805		7	36-11			BODY - B.F.	HORIZ.
B406		45	4-5	X		BODY - TIES AT TOP B.F.	VERT.
B407		29	5-7	X		BODY - TIES AT TOP B.F.	VERT.
B408		2	35-4			BODY - AT TOP	HORIZ.
B409		6	26-1			BODY - AT TOP	HORIZ.
B610		11	32-7			BODY - F.F.	HORIZ.
B811		7	32-7			BODY - B.F.	HORIZ.
B412		2	32-7			BODY - AT TOP	HORIZ.
B413	12		15-2	X		WING 3 & 4 - STIRRUPS	VERT.
B514	10		9-6			WING 3 & 4 - F.F.	HORIZ.
BT15	16		10-7			WING 3 & 4 - B.F.	HORIZ.
B416	24		14-1			WING 3 & 4 - F.F. & B.F.	HORIZ.
B617	4		14-1			WING 3 & 4 - F.F. & B.F.	HORIZ.
B418	6		6-9			WING 3 - F.F.	VERT.
B419	5		6-6			WING 3 - F.F.	VERT.
B520	9		6-9			WING 3 - B.F.	VERT.
B521	7		6-6			WING 3 - B.F.	VERT.
B422	4		8-0			WING 3 & 4 - BTM	HORIZ.
B423	6		7-7			WING 4 - F.F.	VERT.
B424	5		6-6			WING 4 - F.F.	VERT.
B525	7		6-6			WING 4 - B.F.	VERT.
B526	9		7-7			WING 4 - B.F.	VERT.
B427	14		2-0			WING - TIE BARS AT CONC. SURFACE DRAIN	HORIZ.

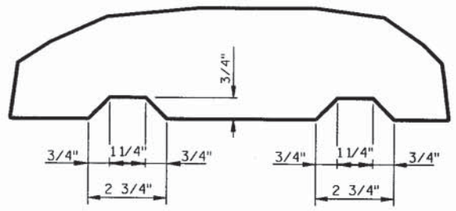
F.F. - FRONT FACE
B.F. - BACK FACE

THE FIRST DIGIT OF A BAR MARK SIGNIFIES THE BAR SIZE.
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.8



ELEVATION OF RUSTICATION JOINTS

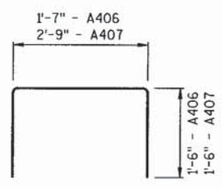


RUSTICATION JOINT DETAIL

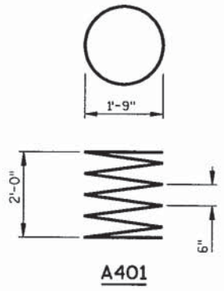
NOTE: VERTICAL JOINTS ONLY. INCIDENTAL TO "CONCRETE MASONRY, BRIDGES"

	GIRDER	EL. A	EL. B
WEST ABUTMENT	1	940.14	940.10
	2	940.18	940.14
	3	940.31	940.27
	4	940.44	940.40
	5	940.57	940.53
	6	940.48	940.44
	7	940.35	940.31
	8	940.22	940.18
	9	940.09	940.05
	10	940.05	940.01
EAST ABUTMENT	11	936.96	937.00
	12	937.01	937.05
	13	937.14	937.18
	14	937.27	937.31
	15	937.40	937.44
	16	937.31	937.35
	17	937.05	937.22
	18	937.18	937.09
	19	936.92	936.96
	20	936.87	936.91

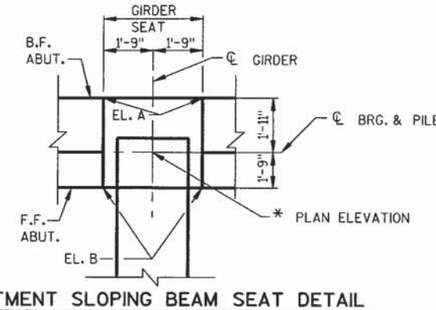
TABLE B



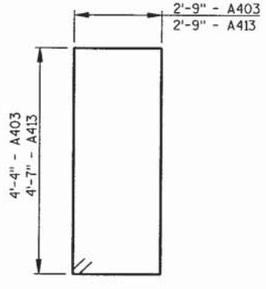
A406 & A407



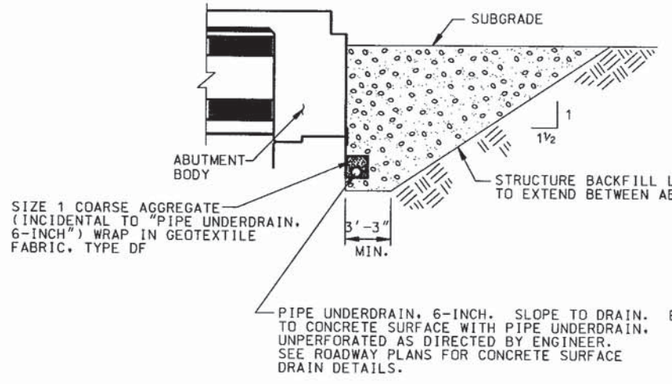
A401



ABUTMENT SLOPING BEAM SEAT DETAIL



A403 & A413



STRUCTURE BACKFILL & PIPE UNDERDRAIN DETAIL
(TYPICAL AT BOTH ABUTMENTS)

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC. 1996	DRAWN BY TQF	PLANS CK'D. ALC

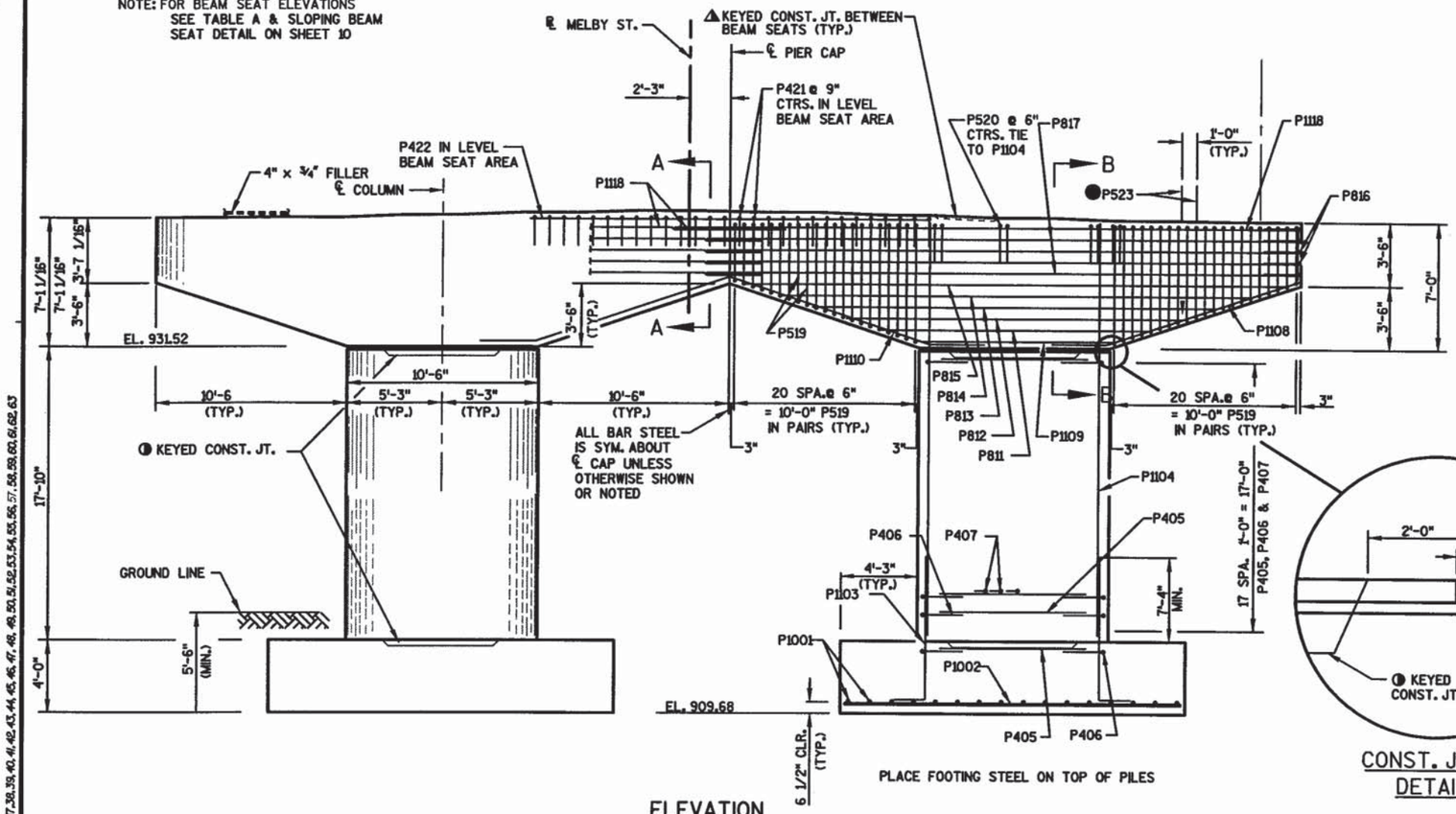
ABUTMENT DETAILS

SHEET 8 OF 21

FILE NAME : W:\RD\6473\melby\080108.dgn
PLOT DATE : 08-MAR-2002 13:08
PLOT BY : BOBBY JONES
PLOT NAME : 080108
ORG DATE :
Originator : Dist
PLOT SCALE : 64.000000:1.000000
I.D.
FILE= SCALE = 3/8"=1'-0

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.9

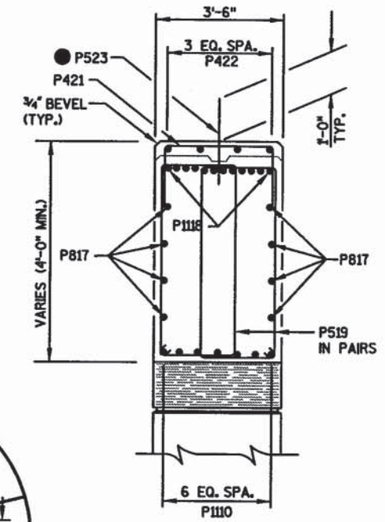
NOTE: FOR BEAM SEAT ELEVATIONS SEE TABLE A & SLOPING BEAM SEAT DETAIL ON SHEET 10



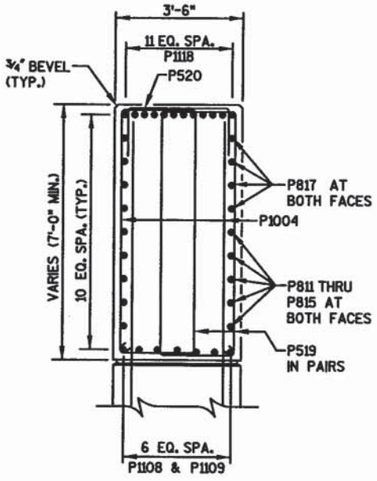
PLACE FOOTING STEEL ON TOP OF PILES

ELEVATION
(LOOKING EAST)

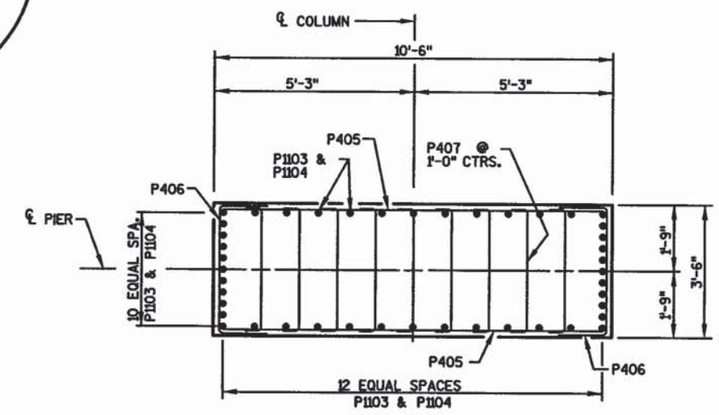
CONST. JOINT DETAIL



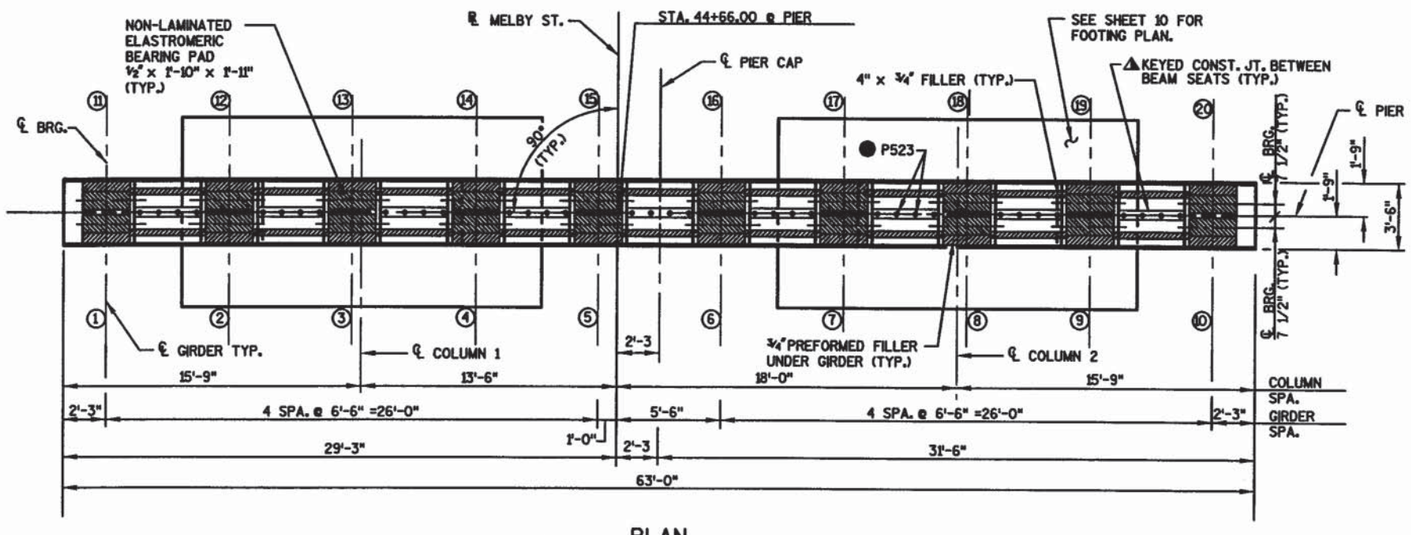
SECTION A-A



SECTION B-B



SECTION THRU PIER SHAFT



PLAN

MINIMUM BAR LAPS

No. 7 BARS	4'-11"
No. 9 BARS	8'-1"
No. 4 BARS	2'-5"

▲ KEYED CONSTRUCTION JOINT FORMED BY SURFACED, BEVELED 2" X 6"

● P521 BARS MAY BE PLACED AFTER THE CONCRETE HAS BEEN POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. IMBED BAR 1'-0"

◑ KEYED CONSTRUCTION JOINT FORMED BY A SURFACED, BEVELED KEYWAY 4" DEEP x 1'-2" WIDE x 7'-6" LONG

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
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P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	TAF	ALC

PIER DETAILS

SHEET 9 OF 21

FILE= SCALE = 1/4"=1'0"

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

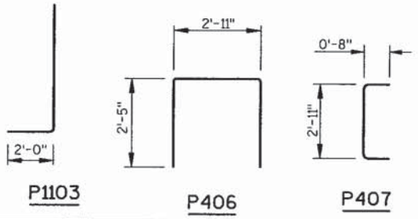
FILE NAME : w:\RD\6473\melby\080109.dgn PLOT DATE : 08-MAR-2002 14:53 PLOT BY : ##...plotuser...## PLOT NAME : ##....plotname....## ORG DATE : Originator : Dist PLOT SCALE : 96.000000:1.000000 I.D.

BILL OF BARS

MARK	COATED	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P1001		34	9-6			FOOTING BTM. MAT. LONGIT.
P1002		32	18-6			FOOTING BTM. MAT. TRANS.
P1103	X	88	12-6			FOOTING AT SHAFT - DOWEL VERT.
P1104	X	88	24-6			COLUMN TIE
P405	X	72	10-0			COLUMN TRANS. HORIZ.
P406	X	72	7-7			COLUMN TIE HORIZ.
P407	X	324	4-1			COLUMN TIE HORIZ.
P1108	X	14	16-10			CAP BOTTOM HORIZ.
P1109	X	14	10-2			CAP BOTTOM HORIZ.
P1110	X	7	28-5			CAP BOTTOM HORIZ.
P811	X	4	14-1			CAP SIDES HORIZ.
P812	X	4	18-0			CAP SIDES HORIZ.
P813	X	4	21-11			CAP SIDES HORIZ.
P814	X	4	25-9			CAP SIDES HORIZ.
P815	X	4	29-8			CAP SIDES HORIZ.
P816	X	6	8-9			CAP ENDS TIE HORIZ.
P817	X	16	33-9			CAP SIDES HORIZ.
P1118	X	24	40-7			CAP TOP HORIZ.
▲ P519	X	168	9-1			CAP STIRRUPS VERT.
P520	X	44	6-9	X		CAP TOP TIES VERT.
P421	X	40	5-10	X	X	CAP TOP TIES VERT.
P422	X	4	26-0	X		CAP TOP HORIZ.
P523	X	36	2-0	X		CAP DOWELS
P524		38	9-6			FOOTING TOP MAT. LONGIT.
P525		20	18-6			FOOTING TOP. MAT. TRANS.

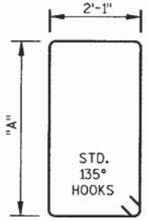
THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.

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



P1103 P406 P407

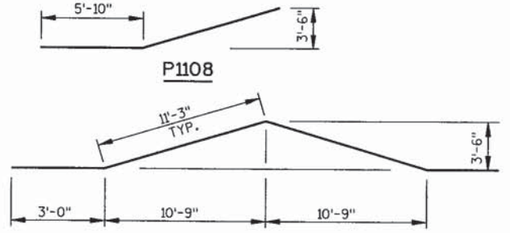
MARK	"A"
P519	3'-3"
	3'-5"
	3'-7"
	3'-9"
	3'-11"
	4'-1"
	4'-3"
	4'-5"
	4'-7"
	4'-9"
	4'-11"
	5'-1"
	5'-3"
	5'-5"
	5'-7"
	5'-9"
	5'-11"
	6'-1"
	6'-3"
	6'-5"
	6'-7"



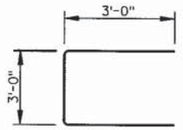
P519

BAR SERIES TABLE

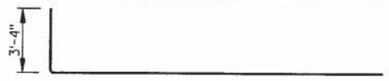
MARK	No. REQ'D.	LENGTH
P519	8 SERIES OF 21	11'-6" TO 18'-2"



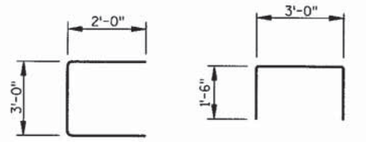
P1108 P1110



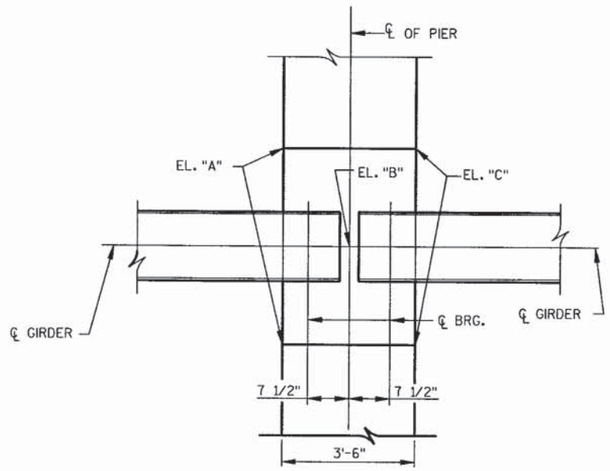
P816



P1118



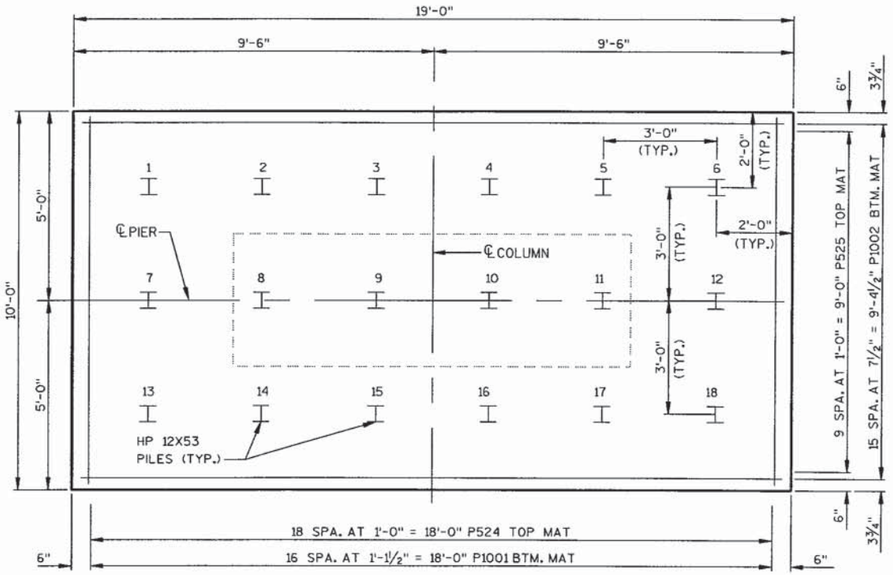
P520 P421



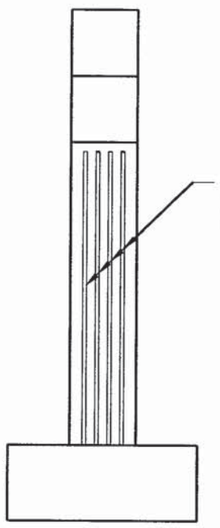
SLOPING BEAM SEAT DETAIL

TABLE A

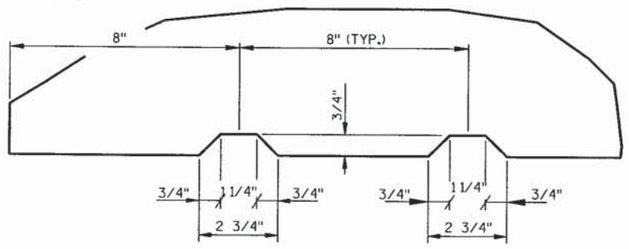
	SEAT LOCATION	EL. "A"	EL. "B"	EL. "C"
PIER 1	1/11	938.62	938.61	938.60
	2/12	938.67	938.66	938.64
	3/13	938.80	938.78	938.77
	4/14	938.93	938.91	938.90
	5/15	939.06	939.04	939.03
	6/16	938.97	938.95	938.94
	7/17	938.84	938.82	938.81
	8/18	938.71	938.69	938.68
	9/19	938.58	938.56	938.55
	10/20	938.53	938.52	938.51



FOOTING PLAN



END VIEW OF PIER



RUSTICATION JOINT DETAIL

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.10

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC. 1996	DRAWN BY TAF	PLANS CK'D. ALC

PIER DETAILS

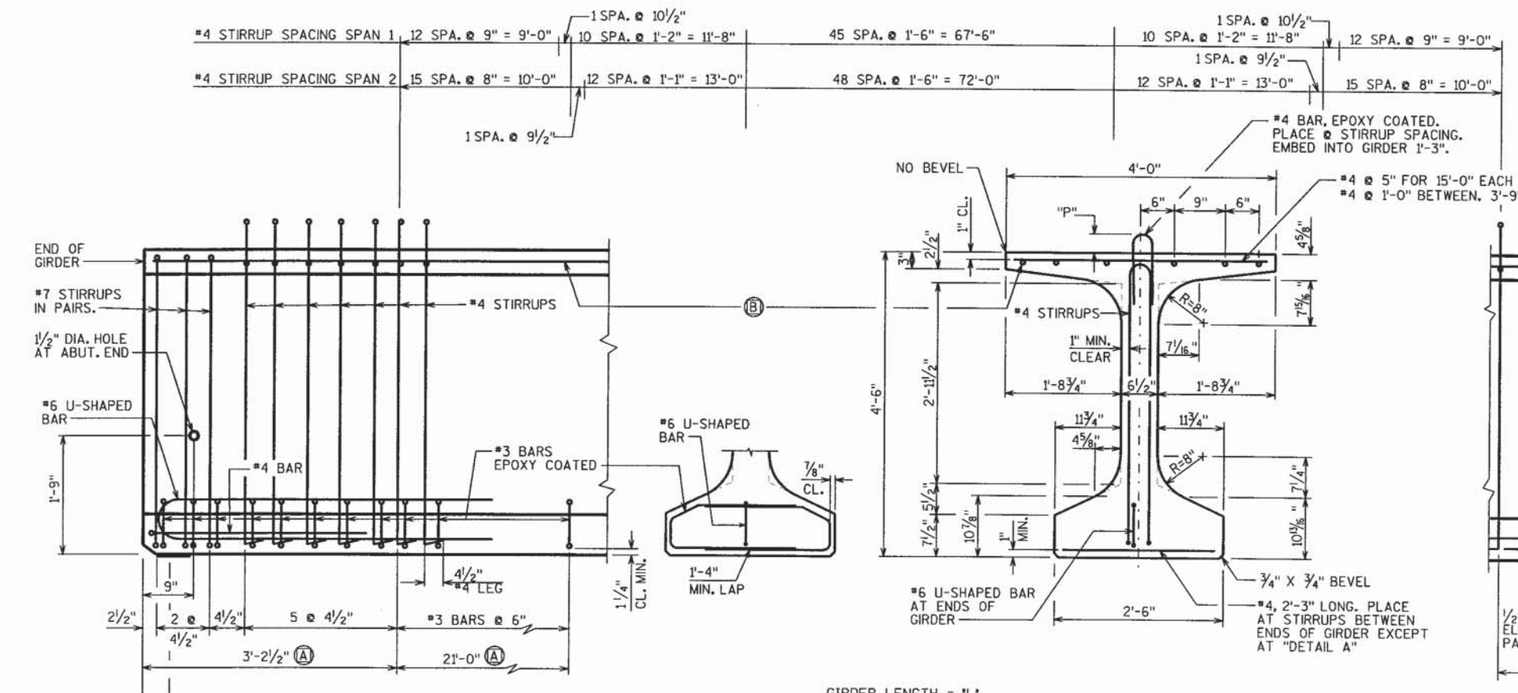
SHEET 10 OF 21

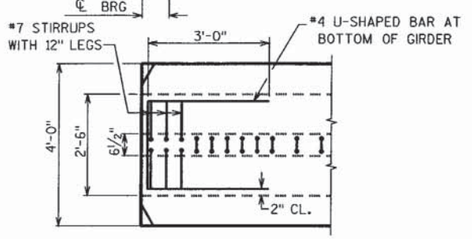
FILE= SCALE = 1/4"=1'-0"

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : w:\RD\6473\melby\080110.dgn PLOT DATE : 21-MAR-2002 15:30 PLOT BY : BOBBY JONES PLOT NAME : 080110 ORG DATE : Originator : Dist PLOT SCALE : 48.000000:1.000000 I.D.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.11



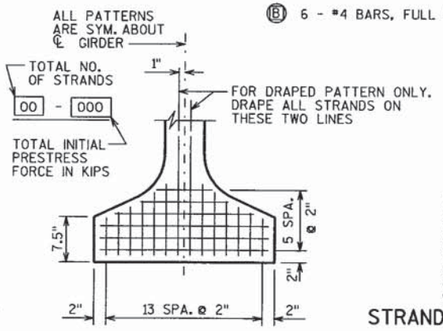


TOP VIEW OF GIRDER ENDS

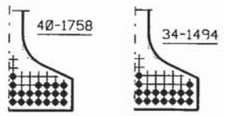
SIDE VIEW & TYP. SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

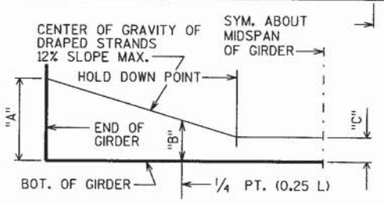
(B) 6 - #4 BARS, FULL LENGTH, 1'-11" MIN. LAP



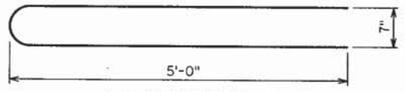
TYP. STRAND PATTERN



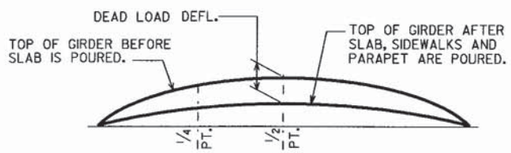
STRAND ARRANGEMENT AT ℄ SPAN FOR GIRDERS WITH DRAPED STRANDS



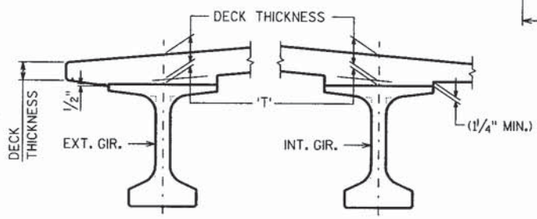
DRAPED STRAND PROFILE



#6 U-SHAPED BAR



DEAD LOAD DEFLECTION DIAGRAM



SLAB HAUNCH DETAIL

IF 1¼" 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. IF GRADE LINE IS RAISED FROM PLAN PROFILE, CONTACT THE STRUCTURES SECTION. PLAN DECK THICKNESS SHALL BE HELD.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT ⅛ 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'

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) ¼	DEAD LOAD DEFL. (IN.) ½	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.)	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	DRAPED PATTERN f'ci (P.S.I.) *	DRAPED PATTERN (IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	UNDRAPED PATTERN f'ci (P.S.I.) *
1	117'-0"	1.77	2.48	7500	7	0.6	34	5100	49	16	19	5	--	--
1	126'-0"	2.16	3.03	7500	7	0.6	40	6200	49	16	19	5	--	--

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED LIQUID BOND BREAKER SHALL BE APPLIED TO THE TOP SURFACE OF THE GIRDER EXCEPT FOR THE CENTER 18". APPLY NO MORE THAN 7 DAYS PRIOR TO POURING THE DECK.

NOX-CRETE:
SILCOSEAL 2000 F (2 COATS)
MASTER BUILDERS:
FIRST COAT - PRECO FORM-COTE
SECOND COAT - RHEOFINISH 220

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6"ϕ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

BEND EACH END OF #4 STIRRUPS 4½" AND #7 STIRRUPS 12".

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

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, 2 OPTIONS ARE AVAILABLE:

1. USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.
2. USE ASTM A615, GRADE 40 REINFORCEMENT AND A MODIFIED STIRRUP SPACING SUBMITTED TO AND APPROVED BY THE STRUCTURES DEVELOPMENT SECTION. PHONE: (608) 266-8494

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

WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A497.

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	BXJ	ALC

54W" PRESTRESSED GIRDER DETAILS

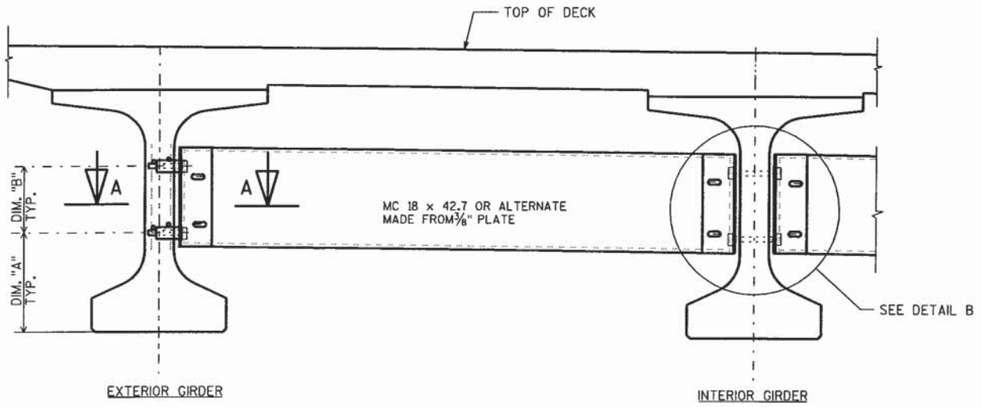
SHEET 11 OF 21

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

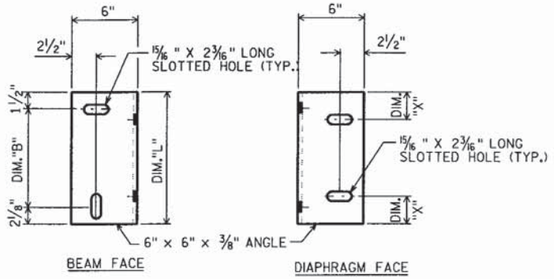
FILE NAME : W:\RD\6473\melby\080111.dgn PLOT DATE : 08-MAR-2002 13:08 PLOT BY : BOBBY JONES PLOT NAME : 080111 ORG DATE : Originator : Dist PLOT SCALE : 5.600000:1.000000

FILE = SCALE = I.D.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.12



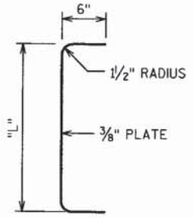
PART TRANSVERSE SECTION AT DIAPHRAGM



DIAPHRAGM SUPPORT

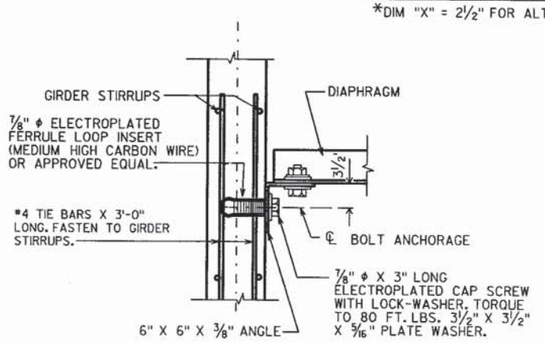
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
54W"	1'-9⅛"	1'-5⅞"	1'-9½"	4¼"



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECT. A-A

(FOR EXTERIOR ATTACHMENT)

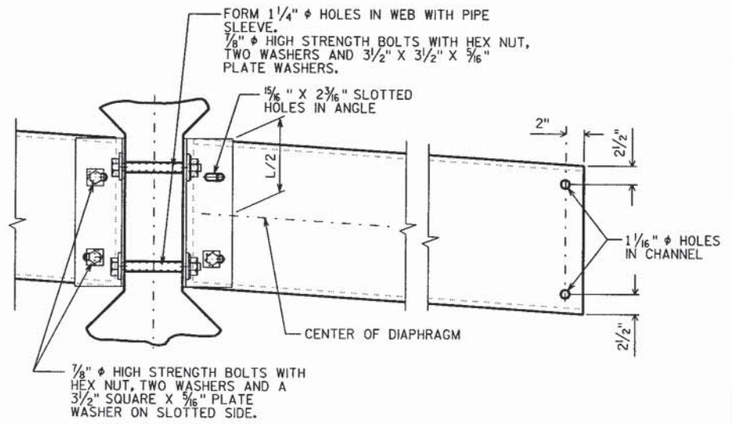
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGM", STRUCTURE, EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

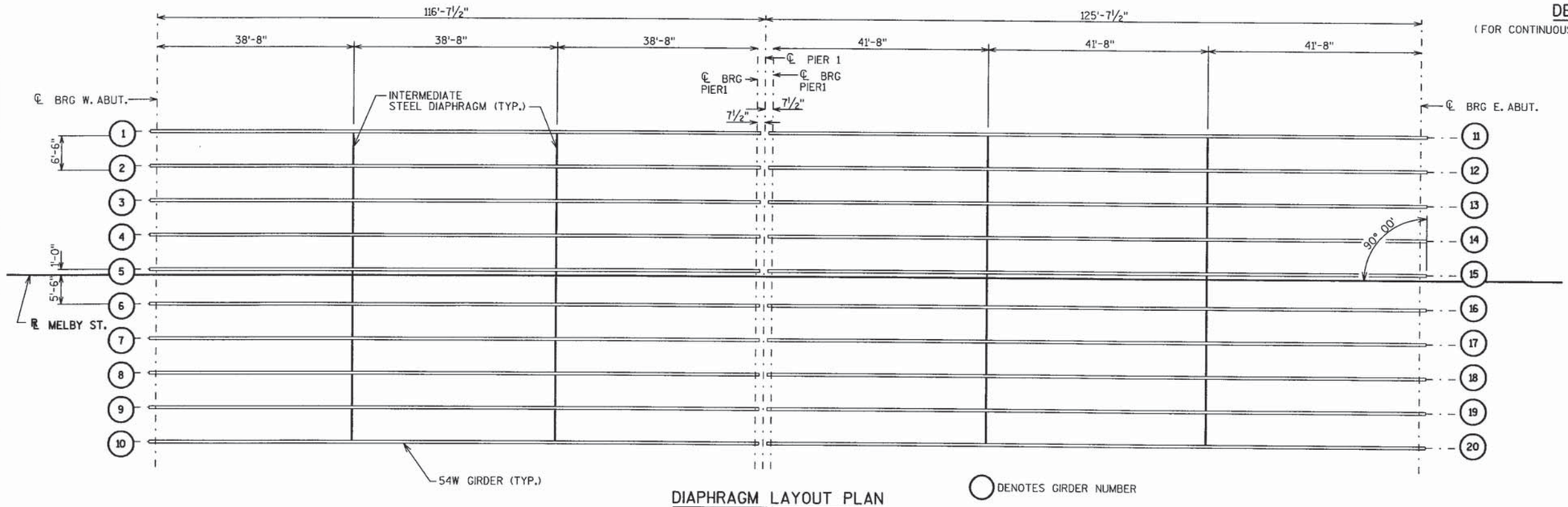
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)



DIAPHRAGM LAYOUT PLAN

◯ DENOTES GIRDER NUMBER

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

INTERM. STEEL DIAPHRAGM

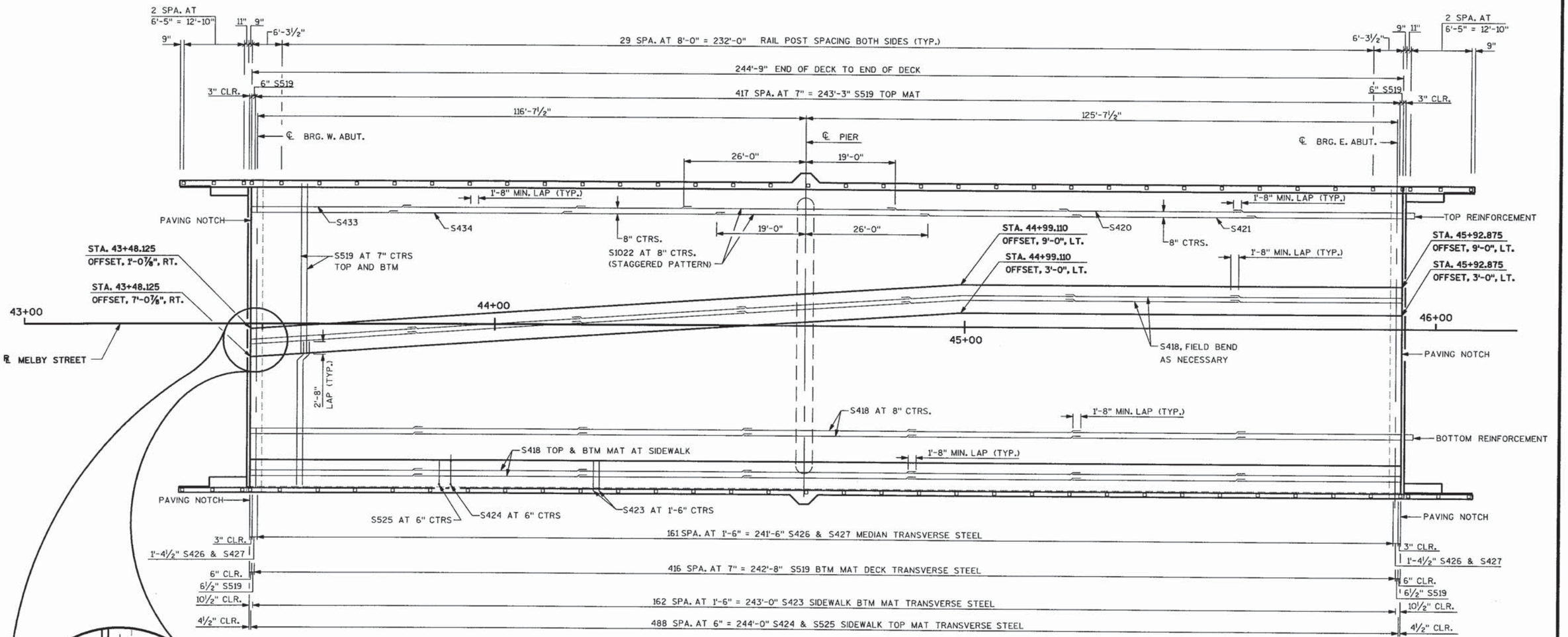
SHEET 12 OF 21

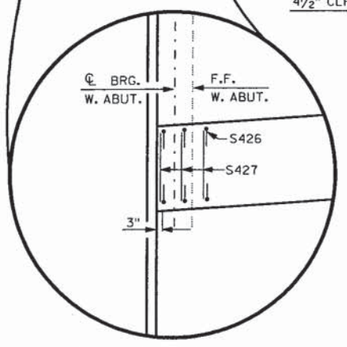
FILE =
SCALE =
I.D.

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

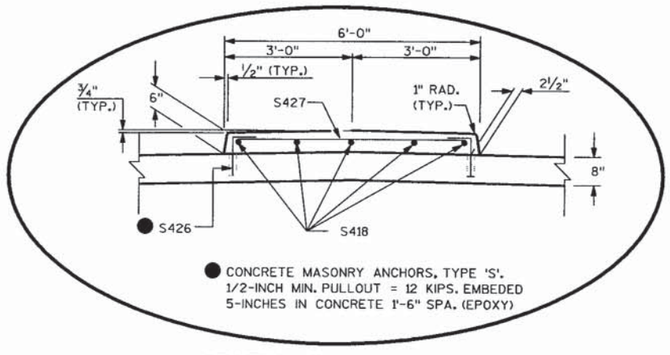
FILE NAME : W:\RD\6473\melby\080112.dgn
PLOT DATE : 08-MAR-2002 13:08
PLOT BY : BOBBY JONES
PLOT NAME : 080112
ORG DATE :
Originator : Dist
PLOT SCALE : 0.360000:1.000000

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.13





TRANSVERSE MEDIAN REINF.



● CONCRETE MASONRY ANCHORS, TYPE 'S'.
1/2-INCH MIN. PULLOUT = 12 KIPS. EMBEDED
5-INCHES IN CONCRETE 1'-6" SPA. (EPOXY)

SECTION THRU MEDIAN

REINFORCEMENT PLAN

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
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DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

SUPERSTRUCTURE

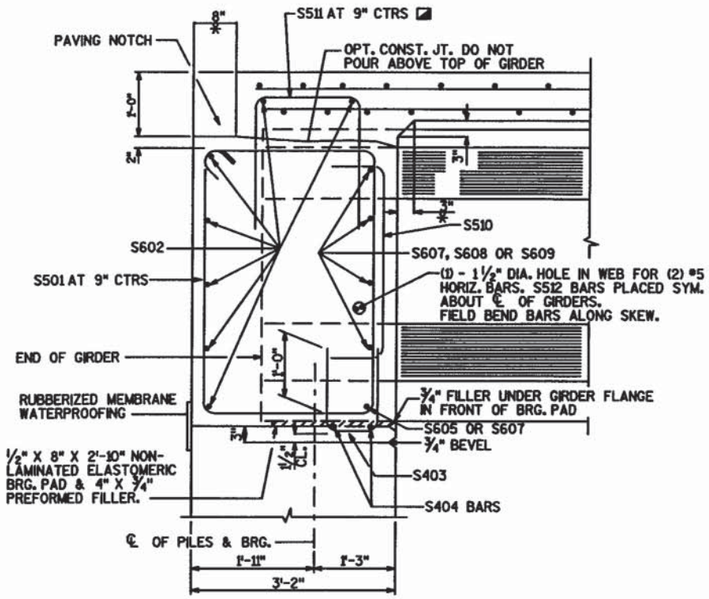
SHEET 13 OF 21

FILE= SCALE = 3/32 "=1'-0"

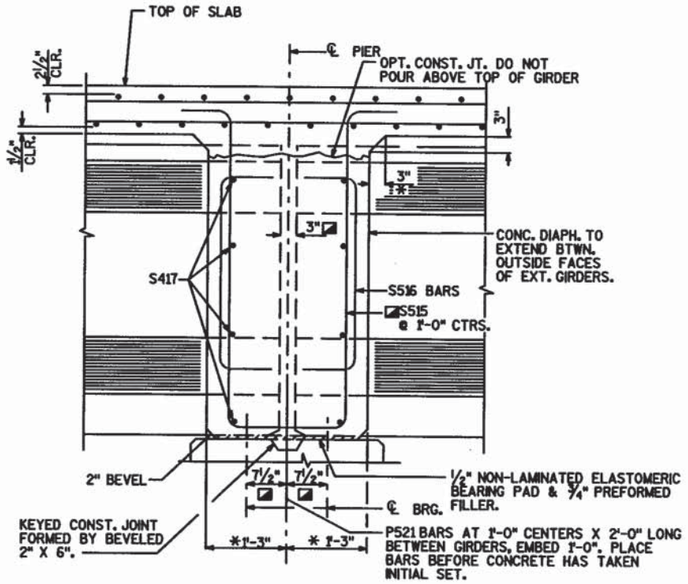
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39, 41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : W:\RD\6473\melby\080113.dgn PLOT DATE : 08-MAR-2002 13:08 PLOT BY : BOBBY JONES PLOT NAME : 080113 ORG DATE : Originator : Dist PLOT SCALE : 255.999939:1.000000 I.D.

STATE PROJECT NUMBER	SHEET NO.
1109-00-80	8.14



AT ABUTMENTS

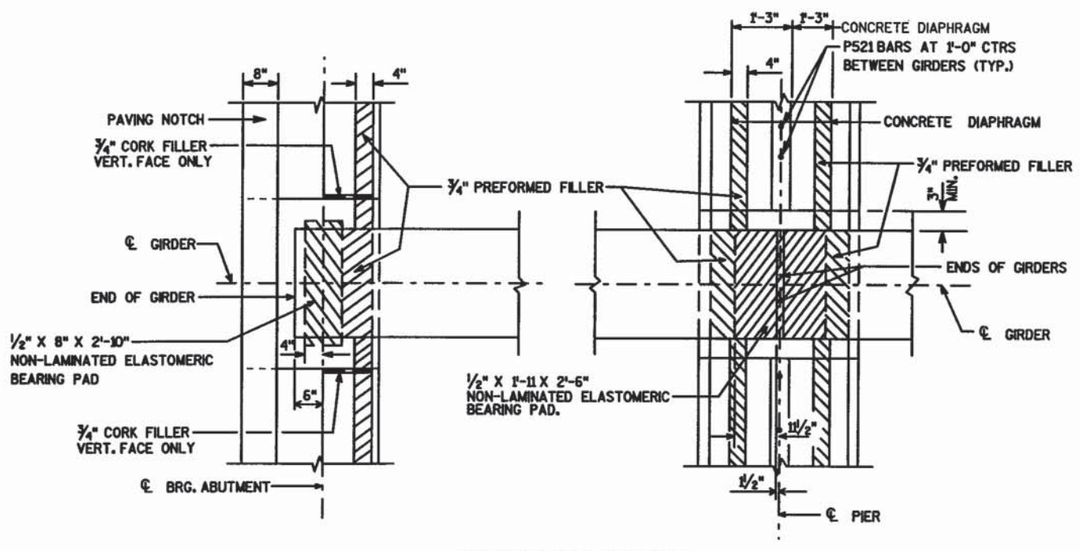


AT PIER

PARTIAL LONGITUDINAL SECTION

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS

◪ DIMENSION IS TAKEN PARALLEL TO ℄ GIRDER



BEARING PAD DETAILS

		SPAN 1						SPAN 2					
		℄ BRG. W. ABUT	¼PT.	½PT.	¾PT.	℄ BRG. PIER		℄ BRG. PIER	¼PT.	½PT.	¾PT.	℄ BRG. E. ABUT
GIRDER 1	T.D.	945.51	945.13	944.75	944.38	944.00	GIRDER 11	943.98	943.58	943.17	942.77	942.36
	T.G.	944.66				943.15		943.15				941.52
GIRDER 2	T.D.	945.64	945.26	944.88	944.51	944.13	GIRDER 12	944.11	943.71	943.30	942.90	942.49
	T.G.	944.71				943.20		943.19				941.57
GIRDER 3	T.D.	945.77	945.39	945.01	944.64	944.26	GIRDER 13	944.24	943.84	943.43	943.03	942.62
	T.G.	944.84				943.33		943.32				941.70
GIRDER 4	T.D.	945.90	945.52	945.14	944.77	944.39	GIRDER 14	944.37	943.97	943.56	943.16	942.75
	T.G.	944.97				943.46		943.45				941.83
GIRDER 5	T.D.	946.03	945.65	945.27	944.90	944.52	GIRDER 15	944.50	944.10	943.69	943.29	942.88
	T.G.	945.10				943.59		943.58				941.96
GIRDER 6	T.D.	945.94	945.56	945.18	944.81	944.43	GIRDER 16	944.41	944.01	943.60	943.20	942.79
	T.G.	945.01				943.50		943.49				941.87
GIRDER 7	T.D.	945.81	945.43	945.05	944.68	944.30	GIRDER 17	944.28	943.88	943.47	943.07	942.66
	T.G.	944.88				943.37		943.36				941.74
GIRDER 8	T.D.	945.68	945.30	944.92	944.55	944.17	GIRDER 18	944.15	943.75	943.34	942.94	942.53
	T.G.	944.75				943.24		943.23				941.61
GIRDER 9	T.D.	945.55	945.17	944.79	944.42	944.04	GIRDER 19	944.02	943.62	943.21	942.81	942.40
	T.G.	944.62				943.11		943.10				941.48
GIRDER 10	T.D.	945.42	945.04	944.66	944.29	943.91	GIRDER 20	943.89	943.49	943.08	942.68	942.27
	T.G.	944.57				943.06		943.06				941.43

NO.	DATE	REVISION	BY

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STATE OF WISCONSIN
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DIVISION OF HIGHWAYS

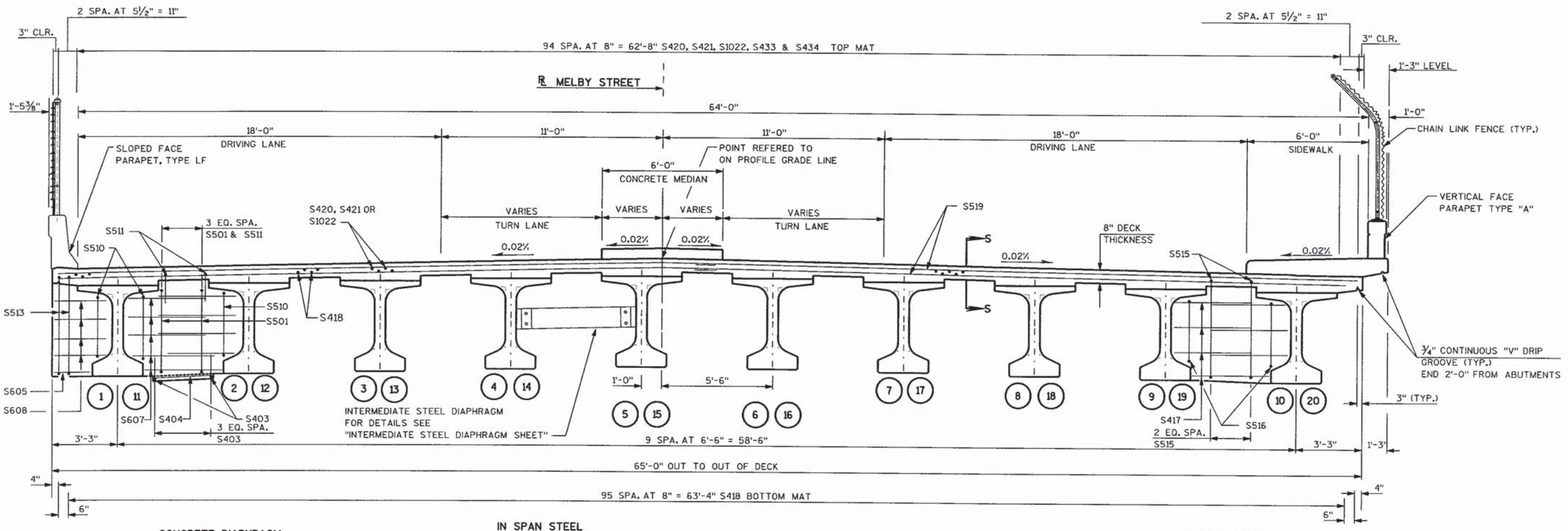
STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

SUPERSTRUCTURE DETAILS

SHEET 14 OF 21

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.15



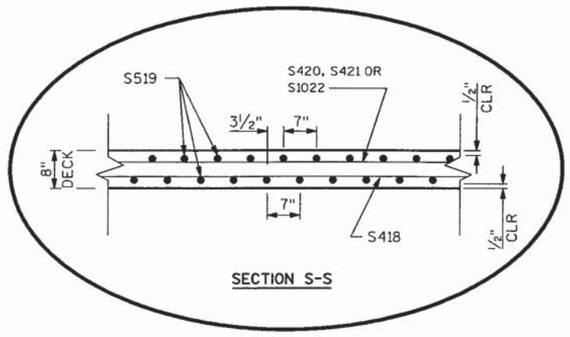
CONCRETE DIAPHRAGM AT ABUTMENT

IN SPAN STEEL DIAPHRAGM

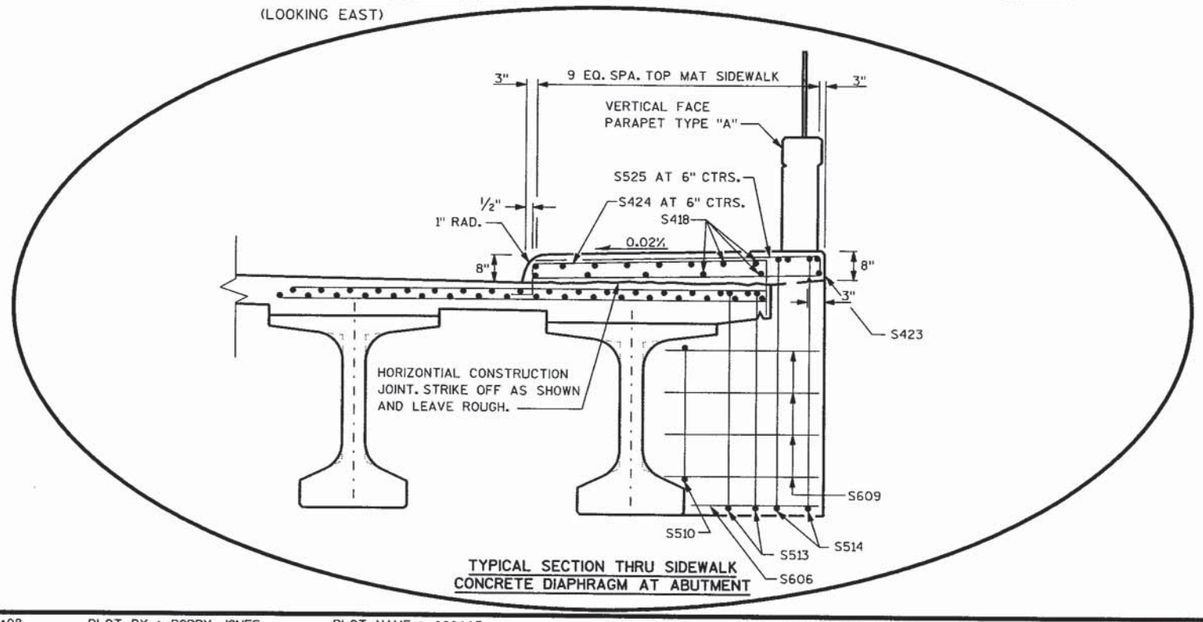
CONCRETE DIAPHRAGM AT PIER

CROSS SECTION THRU ROADWAY

(LOOKING EAST)



SECTION S-S



TYPICAL SECTION THRU SIDEWALK CONCRETE DIAPHRAGM AT ABUTMENT

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC. 1996	DRAWN BY BXJ	PLANS CK'D. ALC

SUPERSTRUCTURE DETAILS

SHEET 15 OF 21

FILE= SCALE = 3/8"=1'-0"

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : W:\RD\6473\melby\080115.dgn PLOT DATE : 08-MAR-2002 13:08 PLOT BY : BOBBY JONES PLOT NAME : 080115 ORG DATE : Originator : Dist PLOT SCALE : 64.000000:1.000000

I.D.

STATE PROJECT NUMBER	SHEET NO.
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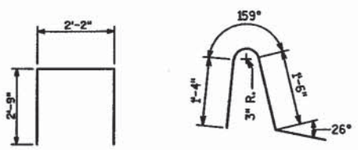
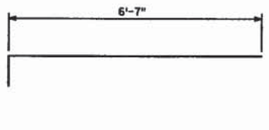
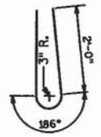


S511

S528



S525



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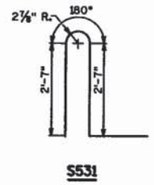
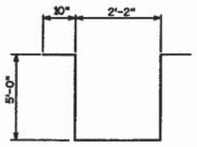
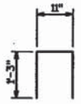


S531



S515



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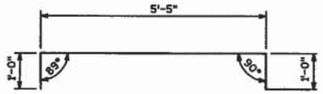
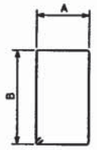


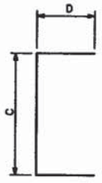
S424

S426



S501, S513, S514

MARK	A	B
S501	2-10	4-2
S513	2-10	5-0
S514	2-10	5-8



S510, S516

MARK	C	D
S510	3-1	0-11
S516	3-0	0-11

BILL OF BARS
(SUPERSTRUCTURE)

MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	BAR SERIES	LOCATION
S501	72		14-8	X		ABUT. DIAPH. STIRRUPS VERT.
S602	28		34-9			ABUT. DIAPH. B.F. TRANSVERSE
S403	72		3-3	X		ABUT. DIAPH. U-BAR BETWEEN GIRDERS VERT.
S404	36		2-6			ABUT. DIAPH. TRANSVERSE
S605	2		1-8			ABUT. DIAPH. EXT. NORTH SIDE F.F. TRANSVERSE
S606	2		2-11			ABUT. DIAPH. EXT. SOUTH SIDE F.F. TRANSVERSE
S607	162		3-10			ABUT. DIAPH. BETWEEN GIRDERS F.F. TRANSVERSE
S608	8		2-8			ABUT. DIAPH. EXT. NORTH SIDE F.F. TRANSVERSE
S609	8		3-9			ABUT. DIAPH. EXT. SOUTH SIDE F.F. TRANSVERSE
S510	40		4-9	X		ABUT. DIAPH. STIRRUPS VERT.
S511	72		7-5	X		ABUT. DIAPH. U-BAR BETWEEN GIRDERS VERT.
S512	40		6-0			ABUT. DIAPH. AT GIRDER WEB HORIZ.
S513	8		16-3	X		ABUT. DIAPH. AT EXT. GIRDER VERT.
S514	4		17-7	X		ABUT. DIAPH. AT SIDEWALK VERT.
S515	27		13-4	X		PIER DIAPH. STIRRUPS VERT.
S516	36		4-7	X		PIER DIAPH. STIRRUPS VERT.
S417	126		3-10			PIER DIAPH. F.F. & B.F. TRANSVERSE
S418	833		36-5			DECK LONGITUDINAL BTM. & SIDEWALK & MEDIAN
S519	1678		33-8			DECK TRANSVERSE TOP & BTM.
S420	147		37-8			DECK LONGITUDINAL TOP SPAN 2
S421	150		35-4			DECK LONGITUDINAL TOP SPAN 2
S1022	99		45-0			DECK LONGITUDINAL TOP AT PIER
S423	163		6-8			SIDEWALK TRANSVERSE BTM.
S424	489		8-10	X		SIDEWALK TRANSVERSE TOP
S525	489		6-9	X		SIDEWALK TRANSVERSE TOP
● S426	328		1-10	X		MEDIAN VERT.
S427	164		5-7			MEDIAN TRANSVERSE
S528	370		4-5	X		PARAPET "LF" VERT.
S529	370		4-10	X		PARAPET "LF" VERT.
S530	25		51-7			PARAPET "LF" LONGITUDINAL
S531	247		8-10	X		PARAPET "A" VERT.
S432	42		37-1			PARAPET "A" LONGITUDINAL
S433	147		34-8			DECK LONGITUDINAL TOP SPAN 1
S434	150		32-4			DECK LONGITUDINAL TOP SPAN 1

● CONCRETE MASONRY ANCHORS, TYPE S, 1/2-INCH

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

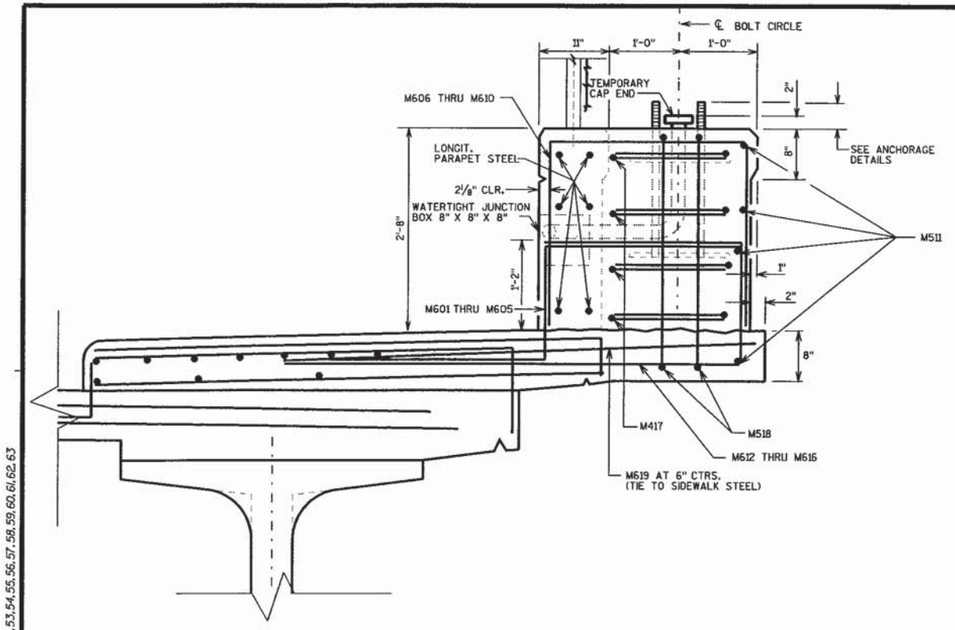
STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

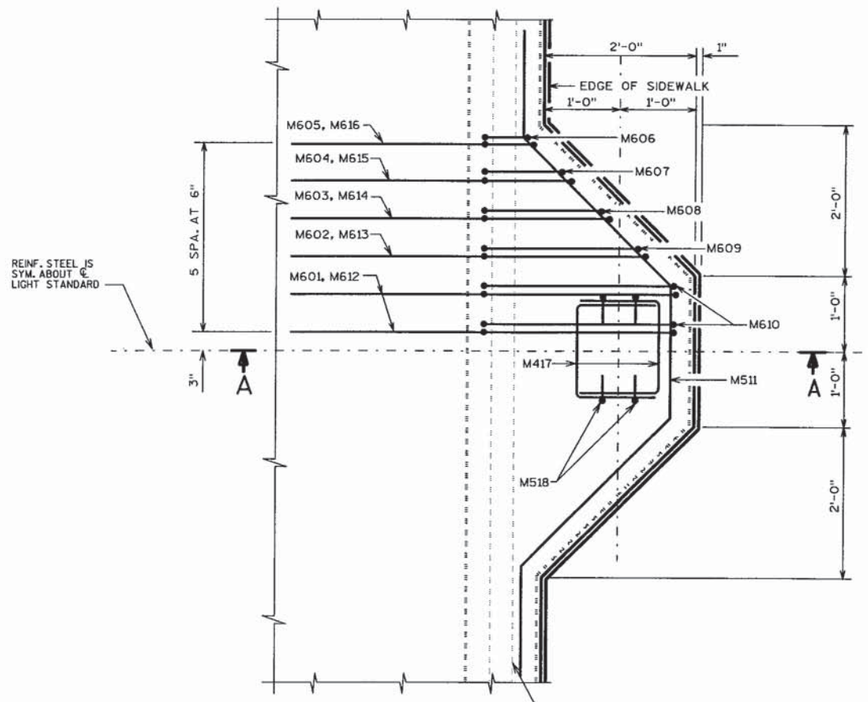
SUPERSTRUCTURE DETAILS

SHEET 16 OF 21

FILE=
SCALE =



SECTION A-A



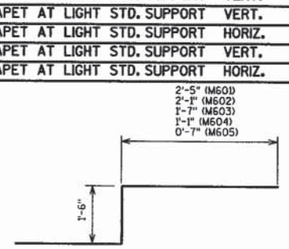
* NOTE: THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.

PLAN

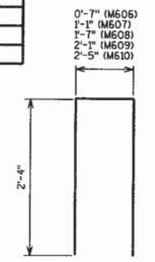
BILL OF BARS

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

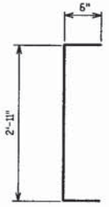
MARK	COATED	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
M601	X	4	6-6	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M602	X	2	6-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M603	X	2	5-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M604	X	2	5-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M605	X	2	4-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M606	X	2	4-11	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M607	X	2	5-5	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M608	X	2	5-11	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M609	X	2	6-5	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M610	X	4	6-9	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M511	X	4	10-9	X		PARAPET AT LIGHT STD. SUPPORT HORIZ.
M612	X	4	9-0	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M613	X	2	8-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M614	X	2	8-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M615	X	2	7-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M616	X	2	7-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M417	X	8	4-4	X		PARAPET AT LIGHT STD. SUPPORT HORIZ.
M518	X	4	3-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
M619	X	13	7-0			PARAPET AT LIGHT STD. SUPPORT HORIZ.



M601 THRU M605



M606 THRU M610



M518

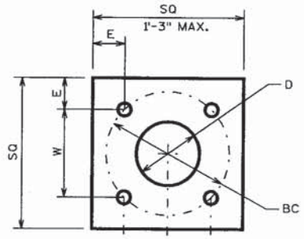
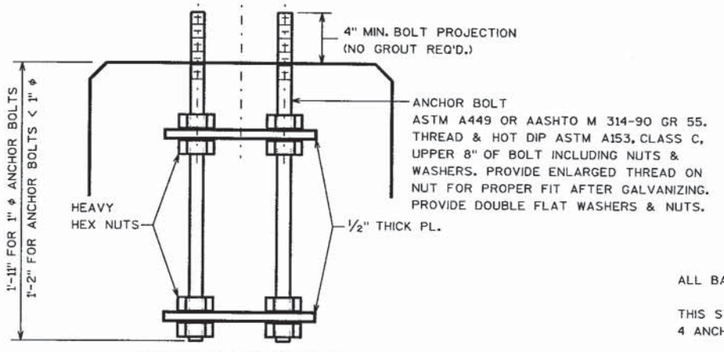


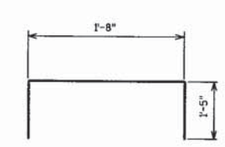
TABLE FOR "TYPE 5 LIGHT POLE" FROM FACILITIES DEV. MANUAL - S.D.D. 9 E 1-3d WITH 1" ϕ ANCHOR BOLTS.

SQ	1'-1½"
E	2⅝"
W	8⅛"
BC	11½"
D	9½"

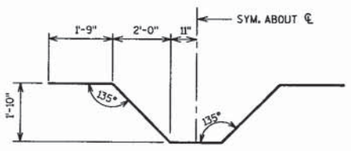
W = 0.707 x BC
SQ = BC + 2d
d = ANCHOR BOLT DIA.
E = (SQ-W)/2
$D_{MAX.}$ = BC - 2d
$D_{MIN.}$ = 2 X CONDUIT DIA. + 1"



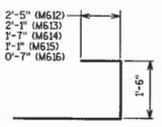
ANCHORAGE DETAIL



M417



M511



M612 THRU M616

GENERAL NOTES

ALL BARS TO BE EPOXY COATED.

THIS STANDARD IS DESIGNED TO ACCOMMODATE 4 ANCHOR BOLTS OF A MAXIMUM DIAMETER OF 1".

ANCHORAGE TO BE PAID FOR AS "ANCHOR ASSEMBLY LIGHT POLES" EA.

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.17

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	BXJ	ALC

LIGHT STANDARD DETAILS A PPT

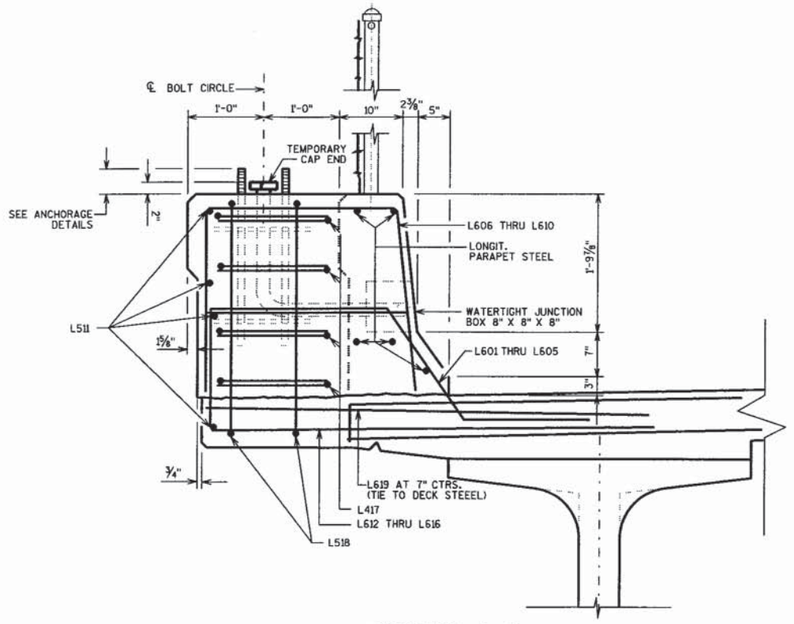
SHEET 17 OF 21

I.D.

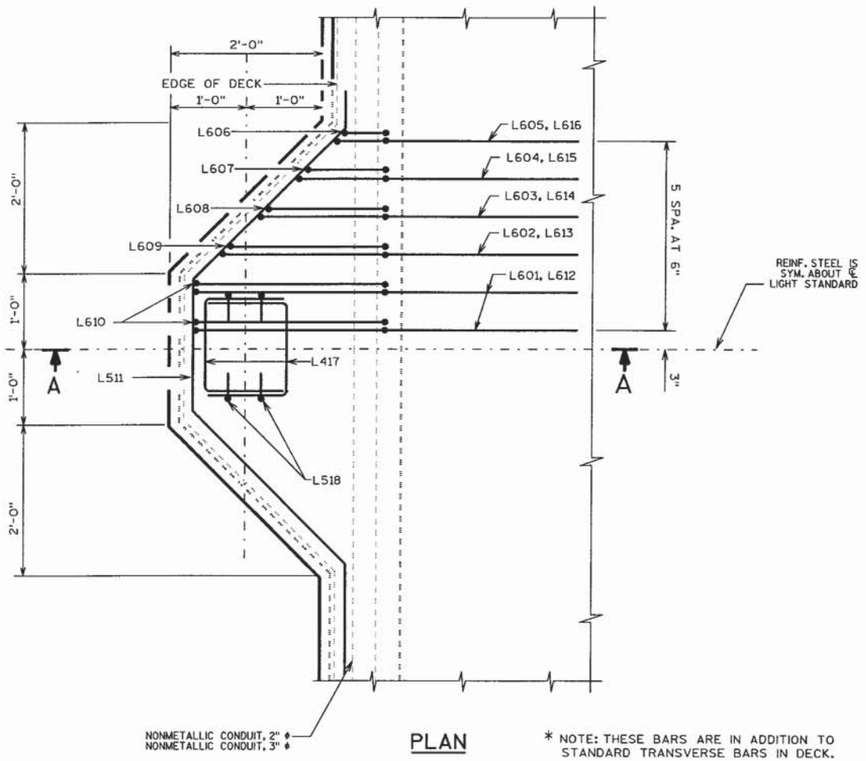
FILE= SCALE = 1"=1'-0"

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : W:\RD\6473\melby\080117.dgn PLOT DATE : 08-MAR-2002 13:08 PLOT BY : BOBBY JONES PLOT NAME : 080117 ORG DATE : Originator : Dist PLOT SCALE : 23.999994:1.000000



SECTION A-A



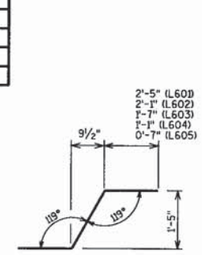
PLAN

* NOTE: THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.

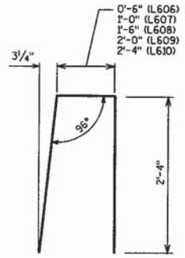
BILL OF BARS

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

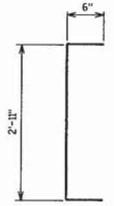
MARK	COATED	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
L601	X	4	6-9	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L602	X	2	6-5	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L603	X	2	5-11	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L604	X	2	5-5	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L605	X	2	4-11	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L606	X	2	4-10	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L607	X	2	5-4	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L608	X	2	5-10	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L609	X	2	6-4	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L610	X	4	6-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L511	X	4	10-9	X		PARAPET AT LIGHT STD. SUPPORT HORIZ.
L612	X	4	9-0	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L613	X	2	8-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L614	X	2	8-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L615	X	2	7-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L616	X	2	7-2	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L417	X	8	4-4	X		PARAPET AT LIGHT STD. SUPPORT HORIZ.
L518	X	4	3-8	X		PARAPET AT LIGHT STD. SUPPORT VERT.
L619	X	12	7-0			PARAPET AT LIGHT STD. SUPPORT HORIZ.



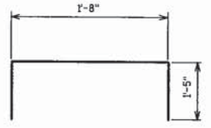
L601 THRU L605



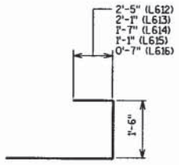
L606 THRU L610



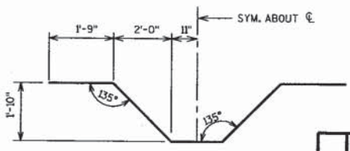
L518



L417



L612 THRU L616



L511

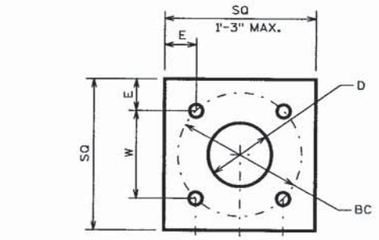
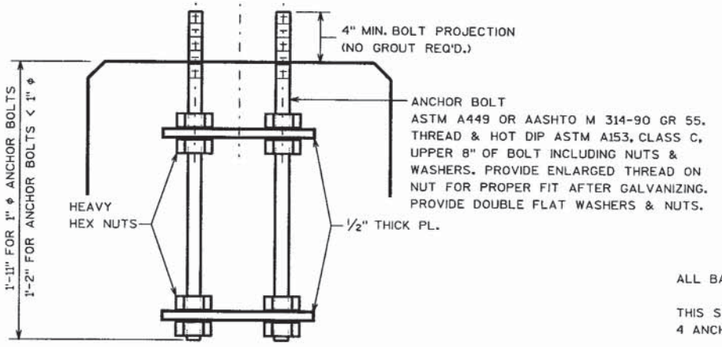


TABLE FOR "TYPE 5 LIGHT POLE" FROM FACILITIES DEV. MANUAL - S.D.D. 9 E 1-3d WITH 1" ϕ ANCHOR BOLTS.

SQ	1'-1½"
E	2⅝"
W	8⅛"
BC	11½"
D	9½"

W = 0.707 x BC
SQ = BC + 2d
d = ANCHOR BOLT DIA.
E = (SQ-W)/2
$D_{MAX.}$ = BC - 2d
$D_{MIN.}$ = 2 X CONDUIT DIA. + 1"



ANCHORAGE DETAIL

GENERAL NOTES

ALL BARS TO BE EPOXY COATED.

THIS STANDARD IS DESIGNED TO ACCOMMODATE 4 ANCHOR BOLTS OF A MAXIMUM DIAMETER OF 1".

ANCHORAGE TO BE PAID FOR AS "ANCHOR ASSEMBLY LIGHT POLES" EA.

NO.	DATE	REVISION	BY

WESTBROOK ASSOCIATED ENGINEERS, INC.
619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-09-262

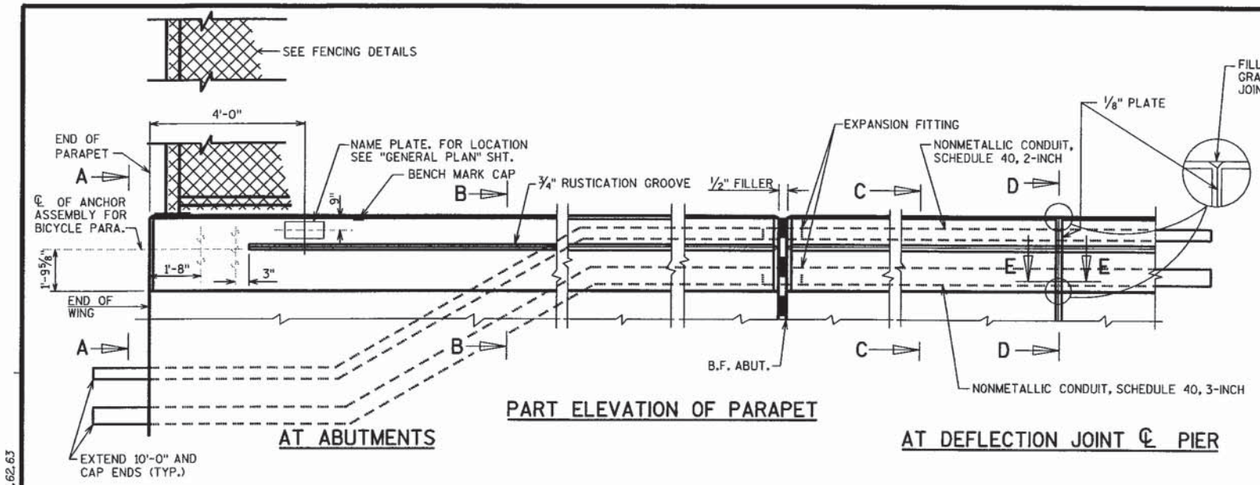
CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	BXJ	ALC

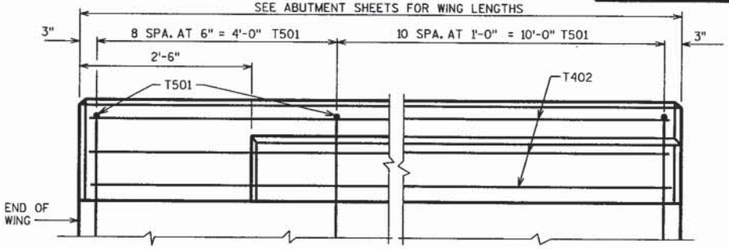
LIGHT STANDARD DETAILS LF PPT

SHEET 18 OF 21

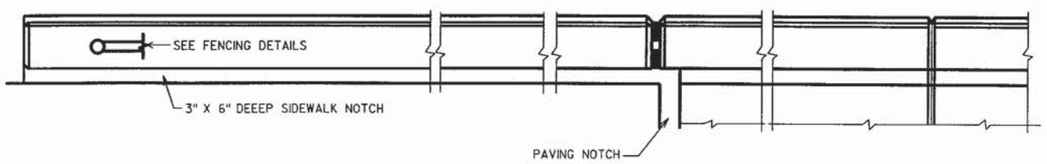
FILE = SCALE = 1"=1'-0"

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.19





VIEW SHOWING FRONT FACE OF PARAPET REINFORCEMENT

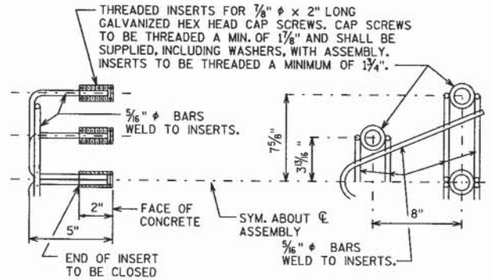


PART PLAN OF PARAPET

BILL OF BARS

FOR ABUTMENT PARAPETS

BAR MARK	COAT	W. ABUT.	E. ABUT.	LENGTH	BENT	LOCATION
T501	X	19	19	8'-0"	X	PARAPET VERT.
T402	X	6	6	14'-1"		PARAPET HORIZ.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

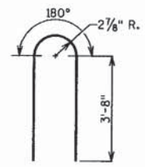
ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLY FOR BEAM GUARD", EACH.

NOTES

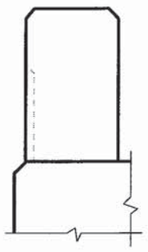
WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "D" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.

▨ HORIZ. CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH.

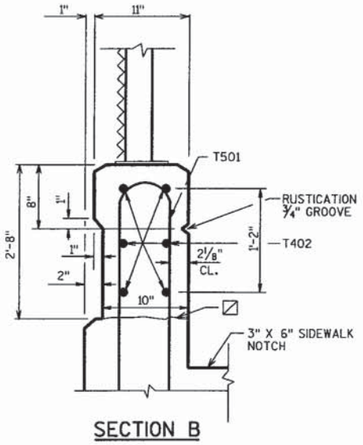
⊛ END 2'-0" AWAY FROM FACE OF ABUT.



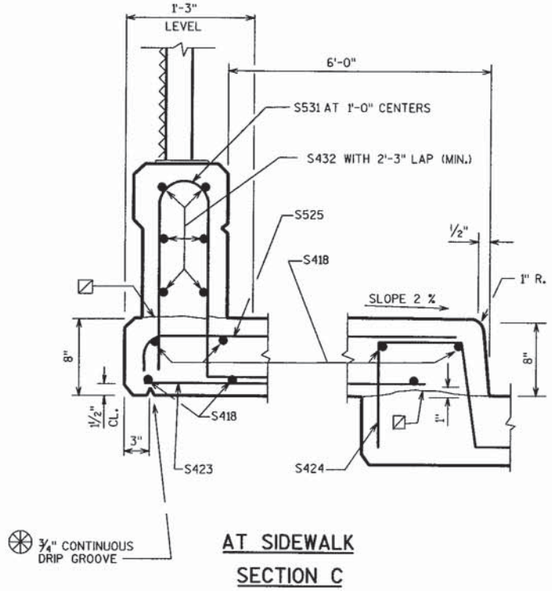
T501



VIEW A

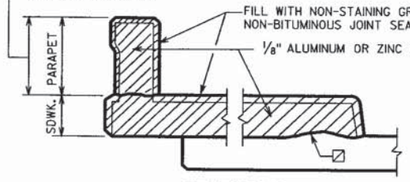


SECTION B



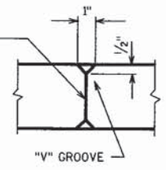
AT SIDEWALK
SECTION C

DETAILS OF DEFLECTION JOINTS IN PARAPET - SIMILAR TO THAT SHOWN IN THIS AREA



SECTION D

SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK AT ℄ PIER.



SECTION E

NO.	DATE	REVISION	BY

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619 EAST HOXIE STREET
P.O. BOX 429
SPRING GREEN, WISCONSIN 53588

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE

CONST. SPEC.	DRAWN BY	PLANS CK'D.
1996	BXJ	ALC

VERTICAL FACE PARAPET "A"

SHEET 19 OF 21

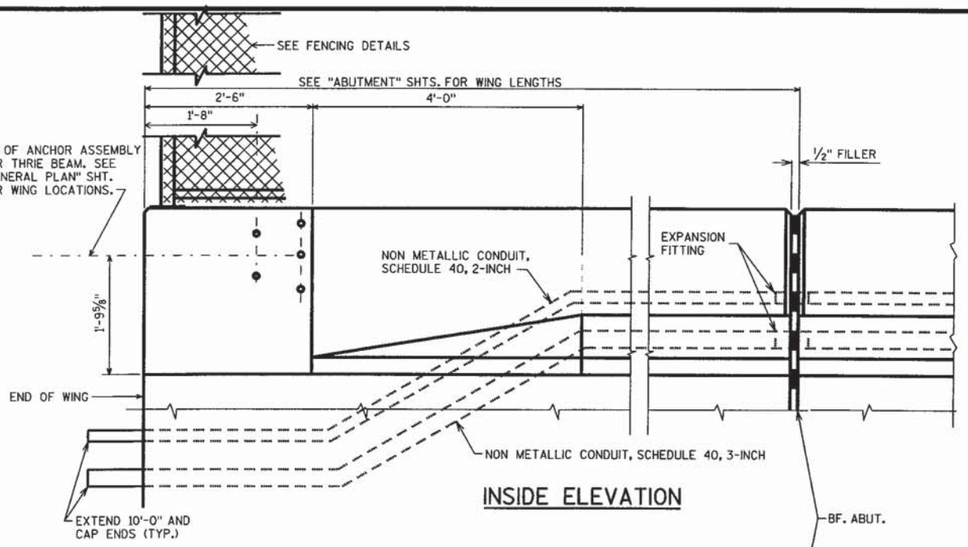
I.D.

FILE = SCALE =

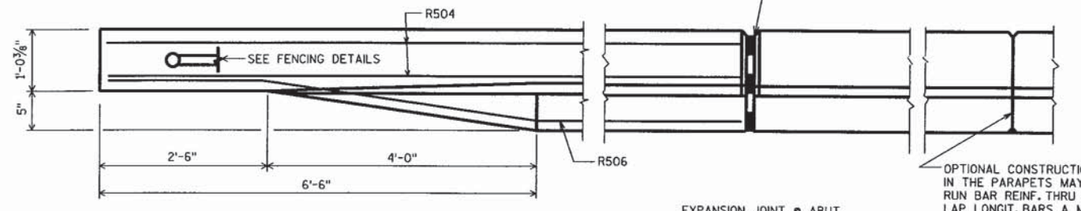
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME : W:\RD\6473\melby\080119.dgn PLOT DATE : 08-MAR-2002 13:08 PLOT BY : BOBBY JONES PLOT NAME : 080119 ORG DATE : Originator : Dist PLOT SCALE : 51.600000:1.000000

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.20



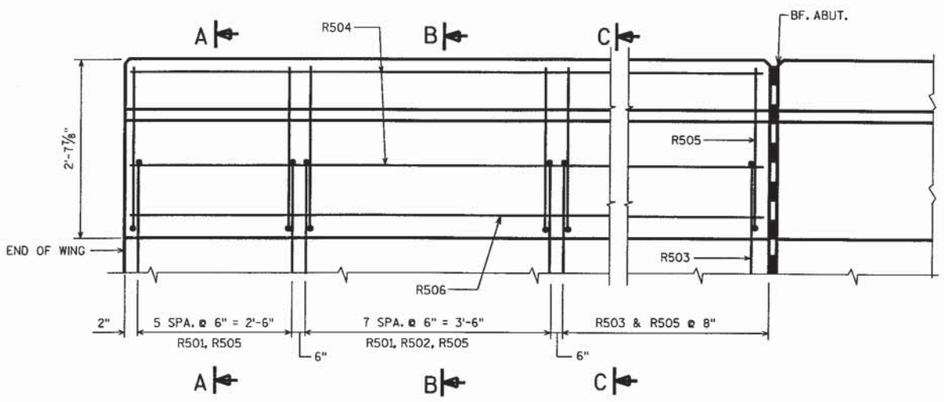
INSIDE ELEVATION



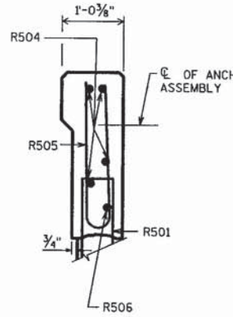
EXPANSION JOINT ℄ ABUT.

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.

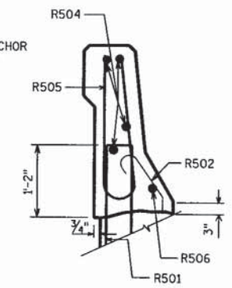
PLAN



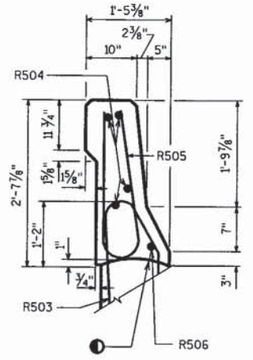
OUTSIDE ELEVATION



SECTION A



SECTION B

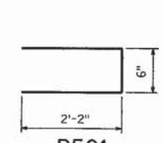


SECTION C

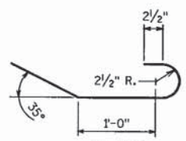
BILL OF BARS

FOR ABUTMENT PARAPETS

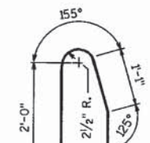
BAR MARK	COAT	W. ABUT.	E. ABUT.	LENGTH	BENT	LOCATION
R501	X	14	14	4'-7"	X	PARAPET VERT.
R502	X	8	8	3'-2"	X	PARAPET VERT.
R503	X	12	12	4'-8"	X	PARAPET VERT.
R504	X	4	4	14'-0"		PARAPET HORIZ.
R505	X	26	26	4'-10"	X	PARAPET VERT.
R506	X	1	1	14'-1"	X	PARAPET HORIZ.



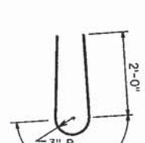
R501



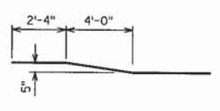
R502



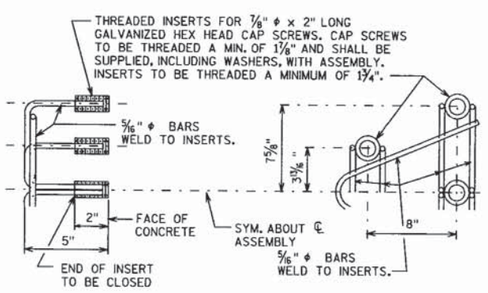
R503



R505



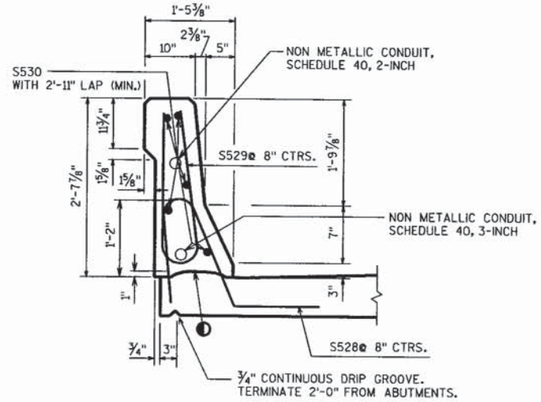
R506



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLY FOR BEAM GUARD", EACH.



SECTION THRU PARAPET ON BRIDGE

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

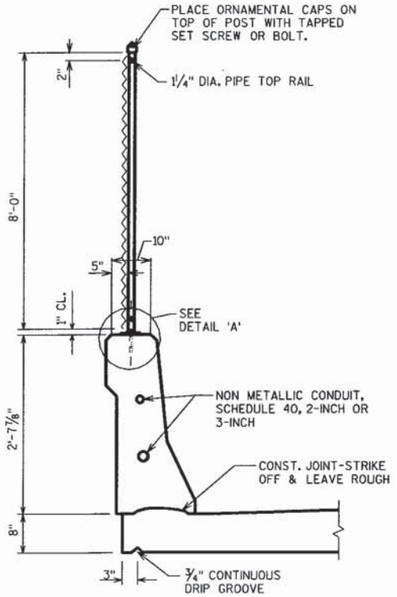
STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

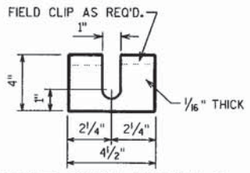
SLOPED FACE PARAPET "LF"

SHEET 20 OF 21

STATE PROJECT NUMBER	SHEET NO.
1190-00-80	8.21

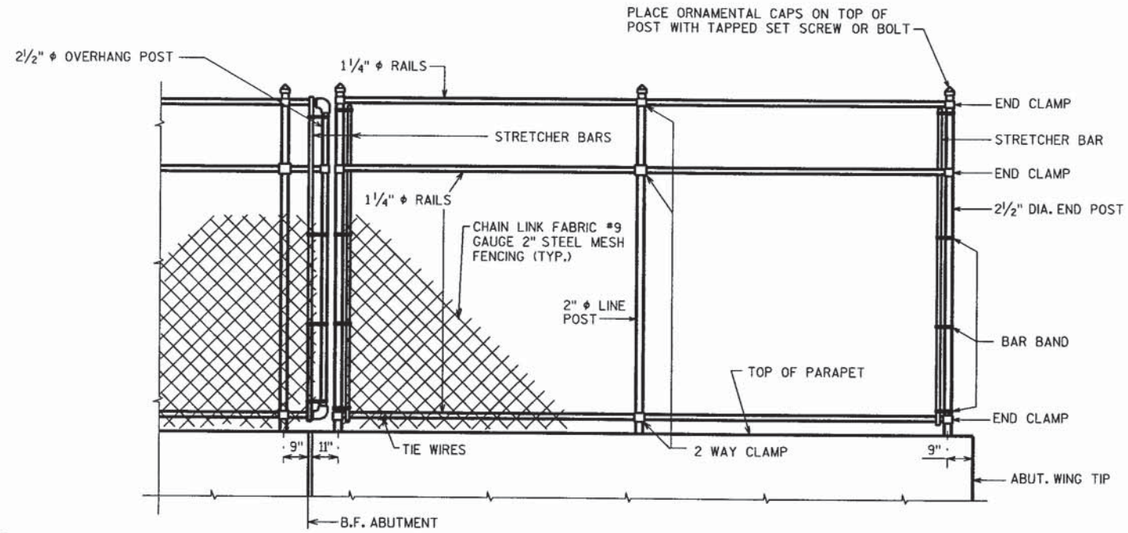


SECTION THRU FENCE AT TYPE "LF" PARAPET

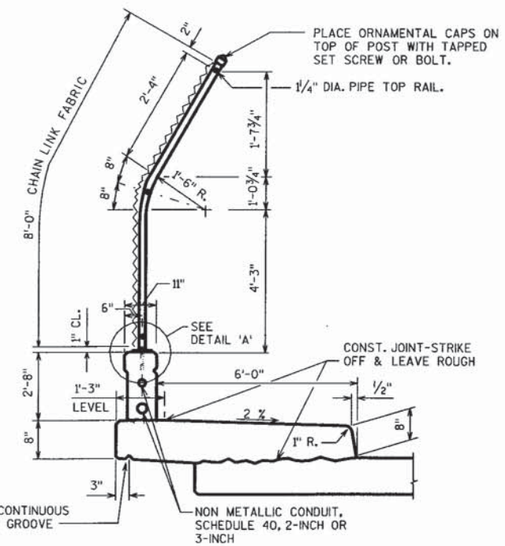


POST SHIM DETAILS

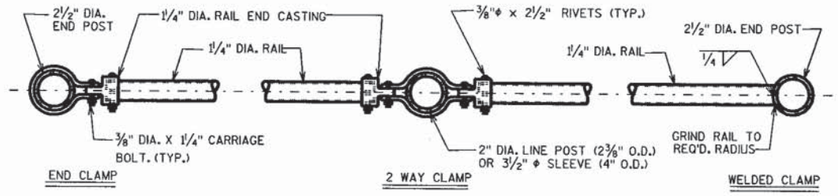
SHIMS REQUIRED ONLY WHEN POSTS ARE WELDED TO BASE PLATES. PROVIDE 4 SHIMS PER POST.



FENCE PART ELEVATION

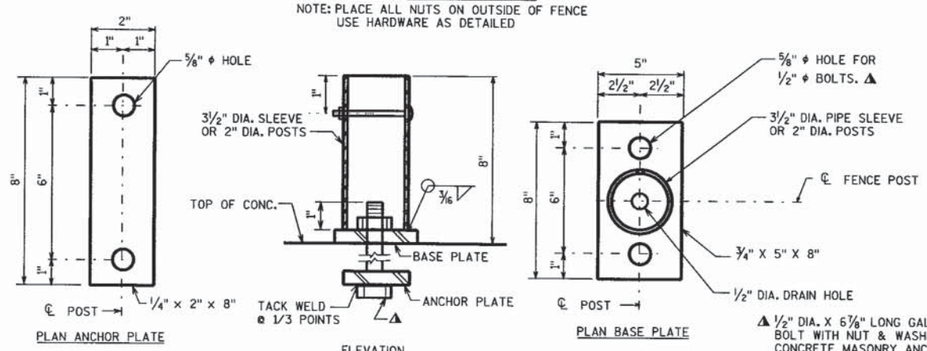


SECTION THRU FENCE AT SIDEWALK



PLAN OF RAILING

NOTE: PLACE ALL NUTS ON OUTSIDE OF FENCE
USE HARDWARE AS DETAILED

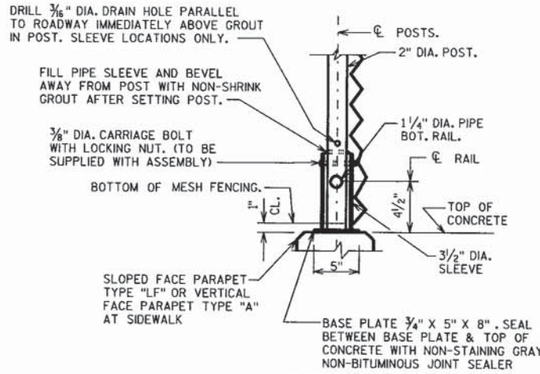


POST ATTACHMENT

UNIT SHALL BE GALV. AFTER FABRICATION

NOTE: IN LIEU OF USING THE 3½" ϕ SLEEVE, THE 2" ϕ FENCE POST MAY BE WELDED TO THE BASE PLATE.

▲ ½" DIA. X 6⅞" LONG GALVANIZED HEX BOLT WITH NUT & WASHER. TYPE S, ½" ϕ CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" ϕ BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE ✿ IN "GENERAL NOTES".



DETAIL A

GENERAL NOTES

POSTS ARE TO BE SET VERTICAL.

KNUCKLE TOP AND BOTTOM OF 2" MESH CHAIN LINK FENCING.

ALL FENCING COMPONENTS SHALL BE GALVANIZED STEEL OR APPROVED ALTERNATE LISTED BELOW.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF FENCE.

TOP RAIL SHALL BE CONTINUOUS OVER INTERIOR POSTS. MINIMUM LENGTH OF TOP RAIL BETWEEN SPLICES SHALL BE 20'-0". PLACE TOP RAIL SPLICES NEAR ¼ POINTS OF POST SPACING. NO. 9 GAGE TIES AT 9" SPACING REQ'D. ON RAILS & POSTS WITHOUT STRETCHER BARS.

✿ ½" CONCRETE MASONRY ANCHOR, TYPE "S" 6" MIN. EMBEDMENT (EPOXY ANCHORED MIN. PULLOUT OF 10 KIPS, THREADED LENGTH OF ANCHOR, WASHER, AND NUT SHALL BE GALVANIZED.

VINYL COATED CHAIN LINK FENCE AND ALL HARDWARE SHALL BE BLACK.

CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-181, TYPE IV, CLASS B ANY SPECIFICATIONS IN 616.2.3. THAT CONFLICTS WITH AASHTO M-181 SHALL NOT APPLY.

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STRUCTURE B-09-262

CONST. SPEC.	1996	DRAWN BY	BXJ	PLANS CK'D.	ALC

FENCE DETAILS

SHEET 21 OF 21