

PROJECT ID:
WITH: 1300-15-70

COUNTY:
MILWAUKEE

ORDER OF SHEETS

| | | |
|-------------|---|------------------------------|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details |
| Section No. | 3 | Estimate of Quantities |
| Section No. | 3 | Miscellaneous Quantities |
| Section No. | 4 | Right of Way Plat |
| Section No. | 5 | Plan and Profile |
| Section No. | 6 | Standard Detail Drawings |
| Section No. | 7 | Sign Plates |
| Section No. | 8 | Structure Plans |
| Section No. | 9 | Computer Earthwork Data |
| Section No. | 9 | Cross Sections |

TOTAL SHEETS =



DESIGN DESIGNATION

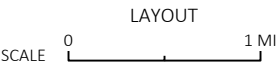
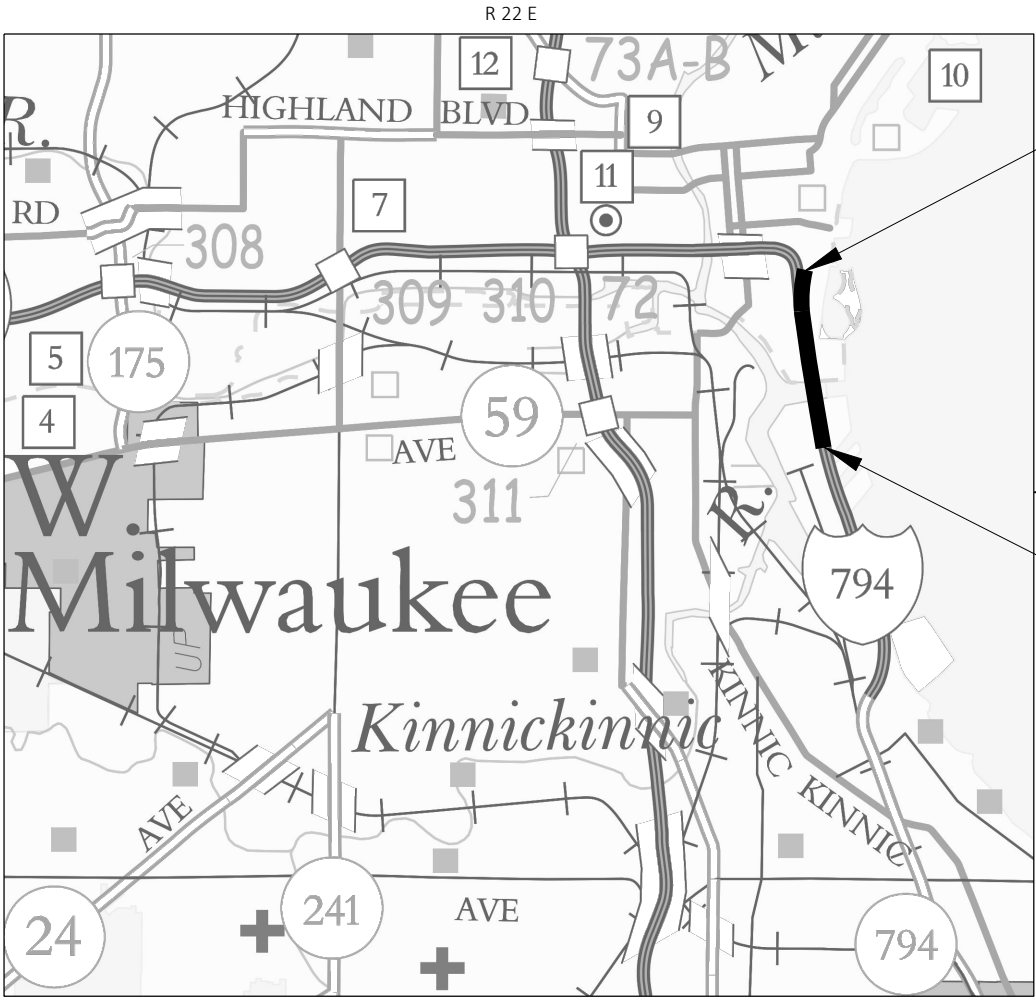
| | |
|--------------|---|
| A.A.D.T. | = |
| A.A.D.T. | = |
| D.H.V. | = |
| D.D. | = |
| T. | = |
| DESIGN SPEED | = |
| ESALS | = |

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 | |
| EXISTING CULVERT | |
| PROPOSED CULVERT (Box or Pipe) | |
| COMBUSTIBLE FLUIDS | |
| MARSH AREA | |
| WOODED OR SHRUB AREA | |

| | |
|---|--|
| PROFILE | |
| GRADE LINE | |
| ORIGINAL GROUND | |
| MARSH OR ROCK PROFILE (To be noted as such) | |
| SPECIAL DITCH | |
| GRADE ELEVATION | |
| CULVERT (Profile View) | |
| UTILITIES | |
| ELECTRIC | |
| FIBER OPTIC | |
| GAS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE | |
| WATER | |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |

| | |
|--|-------|
| | ROCK |
| | LABEL |
| | 95.36 |
| | E |
| | FO |
| | G |
| | SAN |
| | SS |
| | T |
| | W |
| | |
| | |
| | |



TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MILWAUKEE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (1991).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MILWAUKEE - CUDAHY

S OF CLYBOURN - N OF LINCOLN MEMORIAL

IH 794

MILWAUKEE COUNTY

| |
|----------------------|
| STATE PROJECT NUMBER |
| 1300-15-70 |

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 1300-15-70 | | |
| | | |
| | | |
| | | |

DRAFT PS&E
DECEMBER 1, 2022

END PROJECT 1300-15-70
STA 423+52

T 7 N
T 6 N

BEGIN PROJECT 1300-15-70
STA 126+34
Y = 293045.58
X = 609100.59

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

| | |
|---------------------|-----------------|
| PREPARED BY | |
| Surveyor | WISDOT |
| Designer | AMANDA JOHANSEN |
| Project Manager | |
| Regional Examiner | |
| Regional Supervisor | WAFABQJQAQ |

| | |
|-----------------------------|-------------|
| APPROVED FOR THE DEPARTMENT | |
| DATE: | (Signature) |

E

| | | | | | | | |
|------------------------|--|-------------|-------------------|----------------------------------|--------------|---|--|
| 2 | <div>GENERAL NOTES</div> <div>THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.</div> | | | | 2 | | |
| | <div>ORDER OF SECTION 2 DETAIL SHEETS</div> <div>GENERAL NOTES AND UTILITY CONTACTS PROJECT OVERVIEW TRAFFIC CONTROL ALIGNMENT LAYOUT</div> | | | | | | |
| | <div>OTHER CONTACTS</div> <div><div><div><div>WISCONSIN DEPARTMENT OF TRANSPORTATION</div><div>AMANDA JOHANSEN - PROJECT MANAGER 141 NW BARSTOW ST WAUKESHA, WI 53187 PHONE: (262) 521-4465 amanda.johansen@dot.wi.gov</div></div><div><div>WISCONSIN DEPARTMENT OF NATURAL RESOURCES</div><div>KRISTINA BETZOLD 2300 N MARTIN LUTHER KING JR DR MILWAUKEE, WI 53212 PHONE: (414) 263-8517 CELL: (414) 507-4946 kristina.betzold@wisconsin.gov</div></div><div><div>WISCONSIN DEPARTMENT OF TRANSPORTATION</div><div>TOMMY CURRAN ENVIRONMENTAL COORDINATOR 141 NW BARSTOW ST WAUKESHA, WI 53187 PHONE: (262) 548-5682 thomas1.curran@dot.wi.gov</div></div><div><div>WISCONSIN DEPARTMENT OF TRANSPORTATION</div><div>AMANDA WILKER UTILITY COORDINATOR 141 NW BARSTOW ST WAUKESHA, WI 53187 PHONE: (262) 548-6478 CELL: (507) 676-4719 amanda.wilker@dot.wi.gov</div></div></div><div><div>MILWAUKEE COUNTY TRANSIT SYSTEM (MCTS)</div><div>1942 N 17TH ST MILWAUKEE, WI 53205</div><div><div>ARMOND SENSABAUGH</div><div>TRANSPORTATION COORDINATOR (DETOURS) PHONE: (414) 343-1728 asensabaugh@mcts.org</div><div><div>DAVID LOCHER</div><div>TRANSPORTATION MANAGER (BUS STOPS) PHONE: (414) 343-1727</div><div><div>LIGHT THE HOAN</div><div>MICHAEL HOSTAD 247 FRESHWATER WAY SUITE 400 MILWAUKEE, WI 53204 PHONE: (414) 905-0104 CELL: (414) 651-3141 michael@lightthehoan.com</div></div></div></div></div></div> | | | | | | |
| | <div><div><div><div><div><div>DIGGERSHOTLINE</div><div>Dial 811 or (800)242-8511</div><div>www.DiggersHotline.com</div></div></div></div></div></div> | | | | | | |
| PROJECT NO: 1300-15-70 | | HWY: IH 794 | COUNTY: MILWAUKEE | GENERAL NOTES & UTILITY CONTACTS | 1 OF 1 SHEET | E | |

UTILITY CONTACTS

AT&T LEGACY-COMMUNICATION LINE

VANESSA ROSS
555 E. COOK STREET
SPRINGFIELD, IL 62703
PHONE: (217) 814-2314
vf2021@att.com

AT&T LOCAL NETWORK - COMMUNICATION LINE

DALE DEFEVER
39869 LINN ST
CANTON, MI 48147
PHONE: (586) 242-2671
dd2579@att.com

AT&T MOBILITY - COMMUNICATION LINE

MARC BROWN
301 E MILWAUKEE ST
JANESVILLE, WI 53545
PHONE: (608) 755-5535
mb2682@att.com

AT&T WISCONSIN-COMMUNICATION LINE

JAY BULANEK
435 S. 95TH ST
MILWAUKEE, WI 53214-1226
PHONE: (262) 896-7669
jb5175@att.com

AT&T WISCONSIN - COMMUNICATION LINE

MATHEW DINNAUER
435 S. 95TH ST
MILWAUKEE, WI 53214-1226
PHONE: (262) 896-7690
md9542@att.com

ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION

TRANS 220 MAILBOX
801 O'KEEFE ROAD
DE PERE, WI 54115
PHONE: (920) 338-6582
dl-ATCDOTNotifications@atcllc.com

CITY OF MILWAUKEE - ROAD FACILITY

JERREL KRUSCHKE
841 N BROADWAY, ROOM 501
MILWAUKEE, WI 53202
PHONE: (414) 286-3301
jkrusc@milwaukee.gov

CROWN CASTLE FIBER LLC - COMMUNICATION LINE

SAMUEL FRANKLIN
947 PARKVIEW BLVD
LOMBARD, IL 60148
PHONE: (847) 273-2938
samuel.franklin@crowncastle.com

EVERSTREAM - COMMUNICATION LINE

EVERSTREAM UTILITY COORDINATION
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE: (414) 409-1709
WI-Relocations@everstream.net

LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE

NETWORK RELOCATIONS
1025 ELDORADO BLVD
BROOMFIELD, CO 80021
relocations@lumen.com

MIDWEST FIBER NETWORKS LLC - COMMUNICACCION LINE

RICHARD TRGOVEC
6070 NORTH FLINT
GLENDALE, WI 53209
PHONE: (414) 459-3554
rtrgovec@midwestfibernetworks.com

MILWAUKEE COUNTY DEPARTMENT OF TRANSPORTATION - ROAD FACILITY

EDUARDO SANTIAGO
10320 WATERTOWN PLANK RD
WAUWATOSA, WI 53226
PHONE: (414) 257-4563
Eduardo.Santiago@milwaukeecountywi.gov

MILWAUKEE COUNTY PARKS DEPARTMENT - ELECTRICIY

BLAKE PRUSAK
1150 N 68TH ST
MILWAUKEE, WI 53213
Blake.Prusak@milwaukeecountywi.gov

MILAUEKE METROPOLITAN SEWERAGE DISTRICT - SEWER

MICKI KLAPP-SULLIVAN
260 W SEEBOTH ST
MILWAUKEE, WI 53204
PHONE: (414) 225-2178
MKlappaSullivan@mmsd.com

PORT OF MILWAUKEE - RAILROAD FACILITY

BRIAN KASPRZYK
2323 S LINCOLN MEMORIAL DR
MILWAUKEE, WI 53207
PHONE: (414) 286-8141
brian.kasprzyk@milwaukee.gov

ROGERS TELECOM - COMMUNICATION LINE

VICKIE MORAN
4804 N 40TH ST
SHEBOYGAN, WI 53083
PHONE: (920) 395-7125
vmoran@gabes.com

SPECTRUM - COMMUNICATION LINE

BEAU ABUYA
1320 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
PHONE: (414) 908-1343
wis.engineering@charter.com

TDS METROCOM LLC - COMMUNICATION LINE

MATTHEW SCHULTE
16924 WEST VICTOR RD
NEW BERLIN, WI 53151
PHONE: (262) 754-3063
matt.schulte@tdstelecom.com

USDI - GAS/PETROLEUM

MICHAEL WEILER
1927 MILLER DRIVE
OLNEY, IL 62450
PHONE: (618) 392-5502
mweilr@usdi.us

VERIZON BUSINESS - COMMUNICATION LINE

RJ CICATELLO JR.
15725 WEST RYERSON ROAD
NEW BERLIN, WI 53151
PHONE: (262) 782-9836
randy.cicatello@verizon.com

WE ENERGIES - ELECTRICITY

WE ENERGIES UTILITIES COORDINATOR
500 S 116TH ST
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
We-Utility-relocations@we-energies.com

WE ENERGIES - GAS/PETROLEUM

WE ENERGIES UTILITY COORDINATOR
500 S 116TH ST
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
We-Utility-relocations@we-energies.com

WE ENERGIES - STEAM

WE ENERGIES UTILITY COORDINATOR
500 S 116TH ST
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
We-Utility-relocations@we-energies.com

WEST SHORE PIPE LINE COMPANY- GAS/PETROLEUM

DAVID JONES
FIVE TEK PARK, 9999 HAMILTON BLVD
BREINIGSVILLE, PA 18031
PHONE: (610) 904-4409
DAJones@buckeye.com

WINDSTREAM NTI, LLC- COMMUNICATION LINE

LORI KETTER
314 N. DANZ AVENUE
GREEN BAY, WI 54302
PHONE: (414) 274-9215
Lori.Ketter@windstream.com

WISCONSIN DEPARTMENT OF TRANSPORTATION - COMMUNICATION LINE

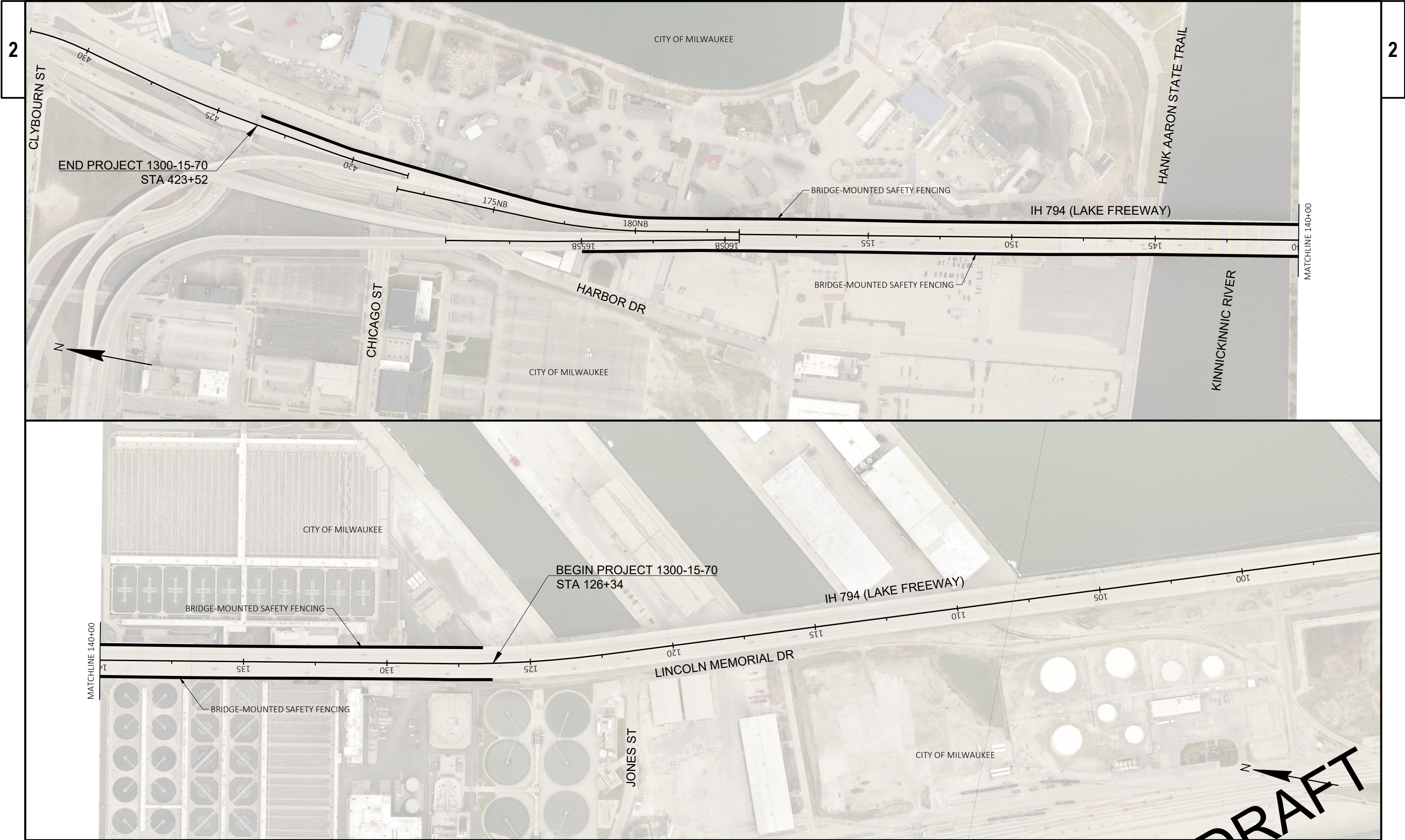
JEFF MADSON
433 W. ST. PAUL AVE SUITE 300
MILWAUKEE, WI 53203-3007
PHONE: (414) 225-3723
Jeffery.Madson@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION - STREET LIGHTING

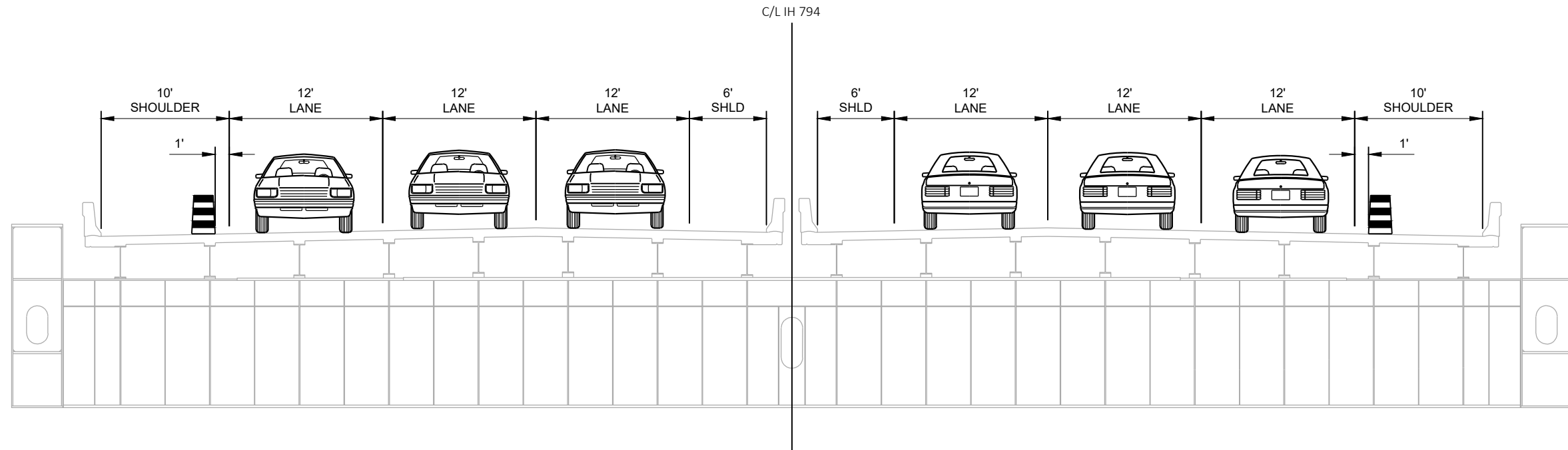
ERIC PEREA
141 NW BARSTOW STREET
WAUKESHA, WI 53188
PHONE: (262) 574-5422
Eric.Perea@dot.wi.gov

WISCONSIN DEPARTMENT OF TRANSPORTATION - WISCONSIN SIGNAL

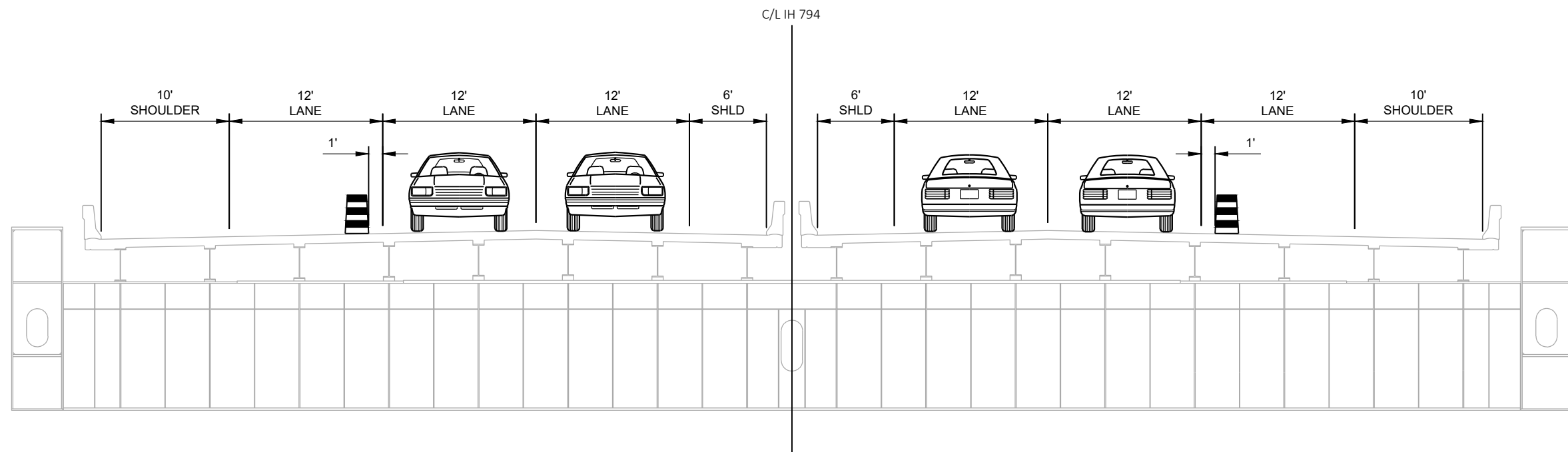
DERRIN WOLFORD
141 NW BARSTOW STREET
WAUKESHA, WI 53188
PHONE: (262) 521-4409
derrin.wolford@dot.wi.gov



| | | | | | |
|------------------------|-------------|-------------------|------------------|-------|---|
| PROJECT NO: 1300-15-70 | HWY: IH 794 | COUNTY: MILWAUKEE | PROJECT OVERVIEW | SHEET | E |
|------------------------|-------------|-------------------|------------------|-------|---|



TYPICAL SECTION
I-794 (SHOULDER CLOSURE)



TYPICAL SECTION
I-794 (LANE CLOSURE)

DRAFT



THE OUTSIDE LANE WILL BE CLOSED AND THE INSIDE LANE(S) WILL BE OPEN TO TRAFFIC DURING OFF-PEAK HOURS. ALL TRAFFIC MOVEMENTS WILL REMAIN OPEN TO TRAFFIC DURING PEAK HOURS.

—

LEGEND

↑

↑

●

●

⬆

⬆

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS

TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

FLASHING ARROW BOARD

SIGN ON TEMPORARY SUPPORT

➡

Ⓢ

FBS

DIRECTION OF TRAFFIC

PORTABLE TRAFFIC SENSOR (PTS)

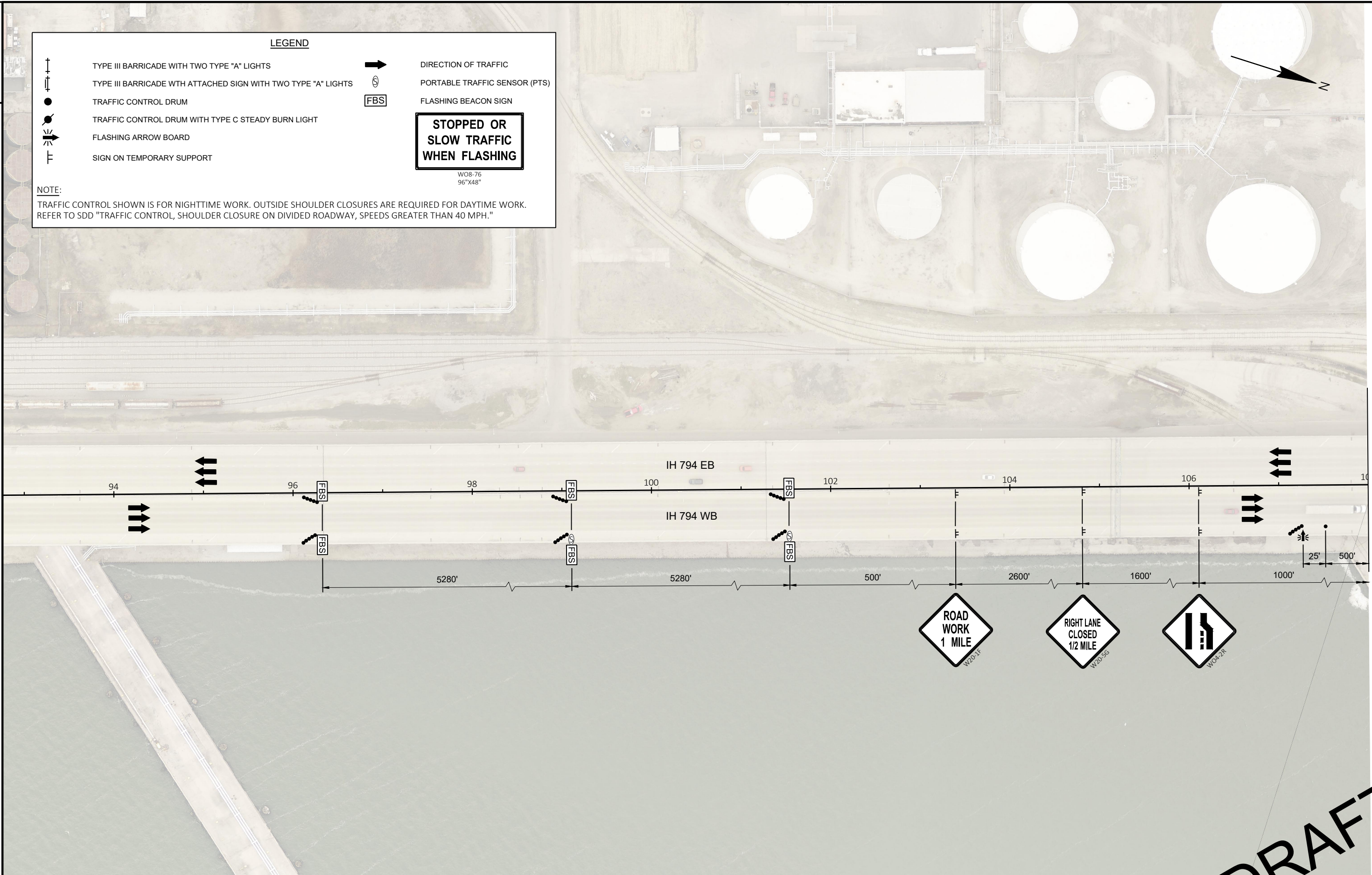
FLASHING BEACON SIGN

STOPPED OR SLOW TRAFFIC WHEN FLASHING

WO8-76
96"x48"

NOTE:

TRAFFIC CONTROL SHOWN IS FOR NIGHTTIME WORK. OUTSIDE SHOULDER CLOSURES ARE REQUIRED FOR DAYTIME WORK. REFER TO SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH."



DRAFT

LEGEND

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS

TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

FLASHING ARROW BOARD

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

PORTABLE TRAFFIC SENSOR (PTS)

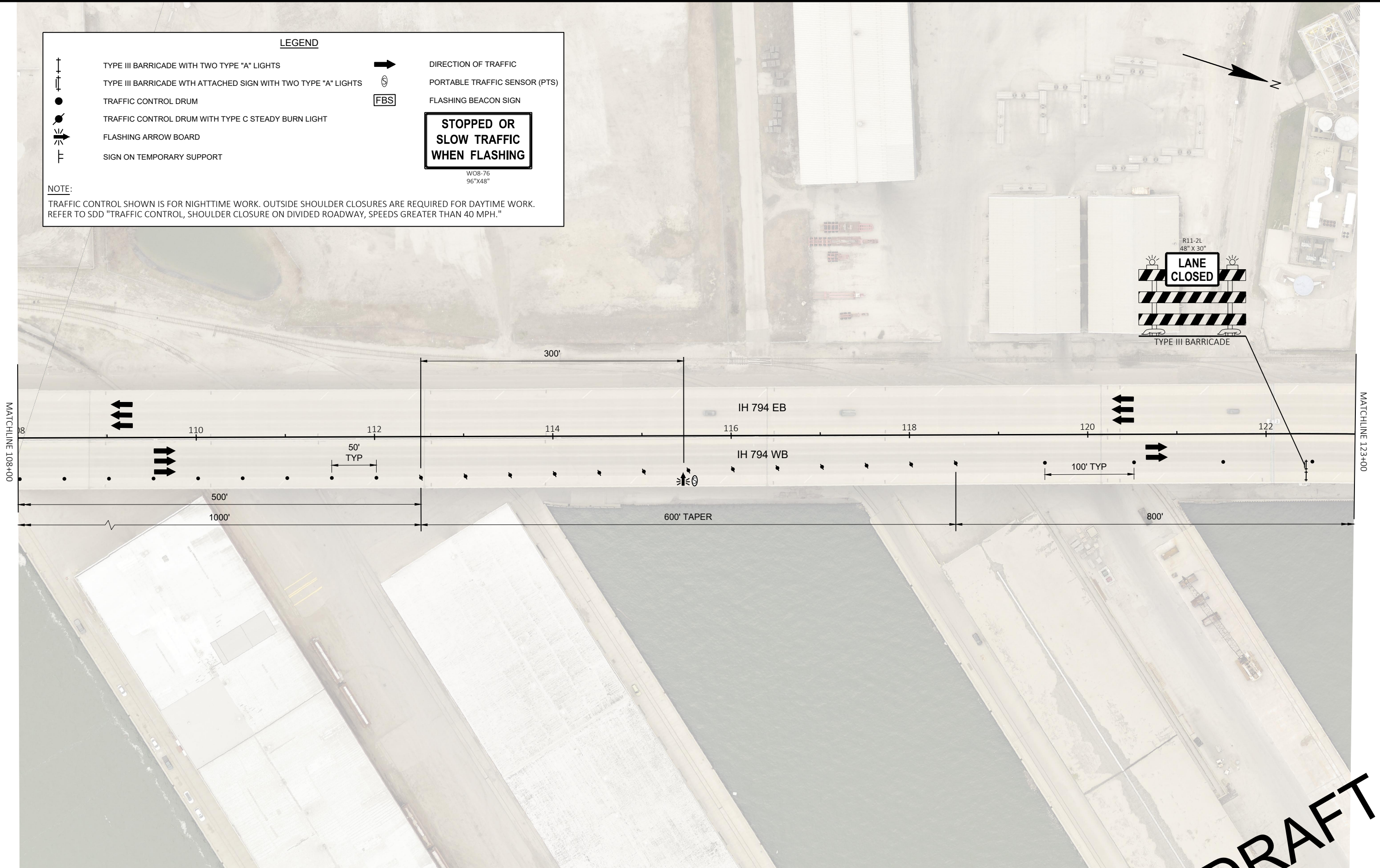
FLASHING BEACON SIGN

STOPPED OR SLOW TRAFFIC WHEN FLASHING

W08-76
96"X48"

NOTE:

TRAFFIC CONTROL SHOWN IS FOR NIGHTTIME WORK. OUTSIDE SHOULDER CLOSURES ARE REQUIRED FOR DAYTIME WORK. REFER TO SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH."



DRAFT

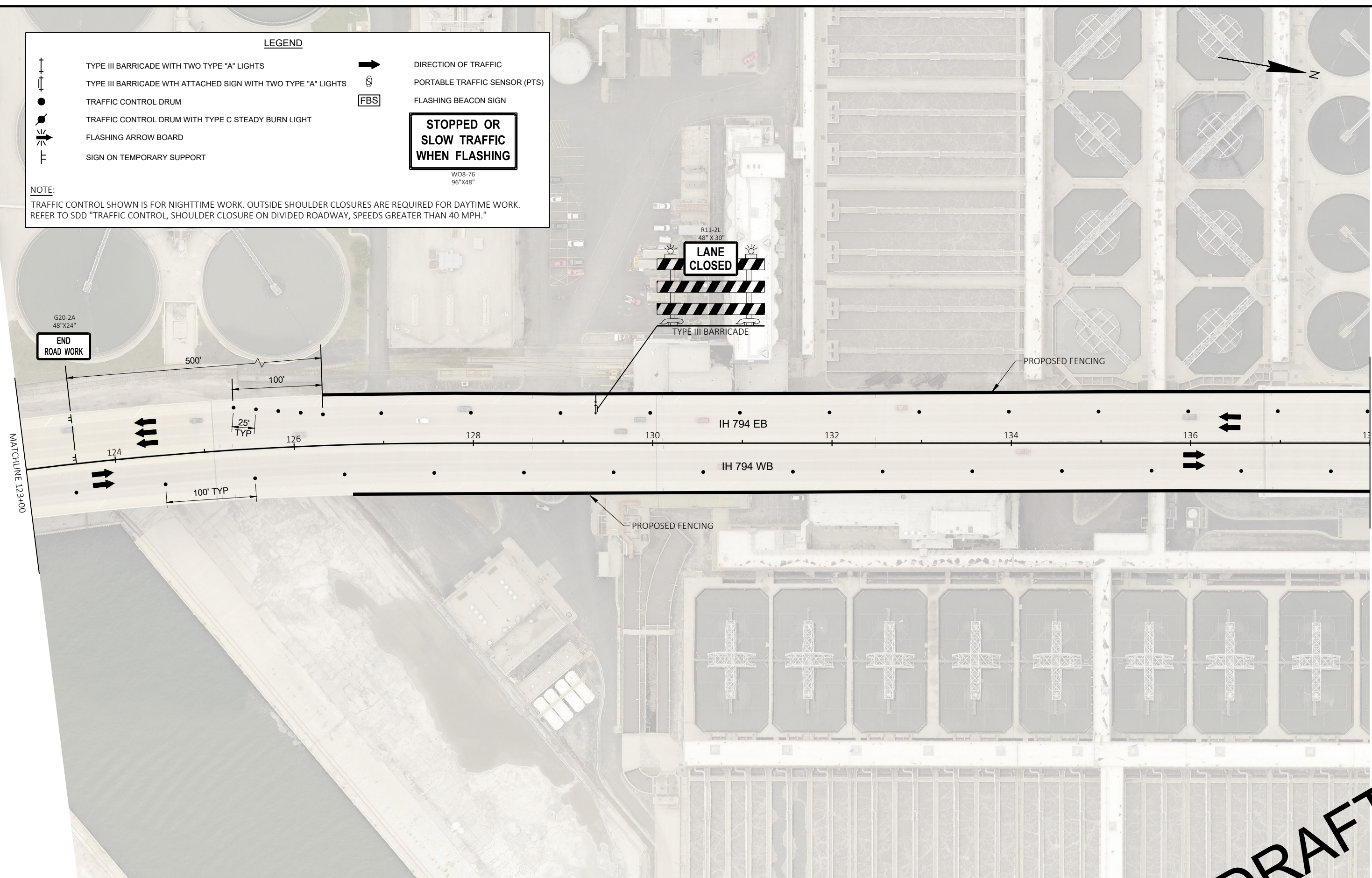
LEGEND

- | | | | |
|--|--|--|-------------------------------|
| | TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS | | DIRECTION OF TRAFFIC |
| | TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS | | PORTABLE TRAFFIC SENSOR (PTS) |
| | TRAFFIC CONTROL DRUM | | FLASHING BEACON SIGN |
| | TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | | |
| | FLASHING ARROW BOARD | | |
| | SIGN ON TEMPORARY SUPPORT | | |

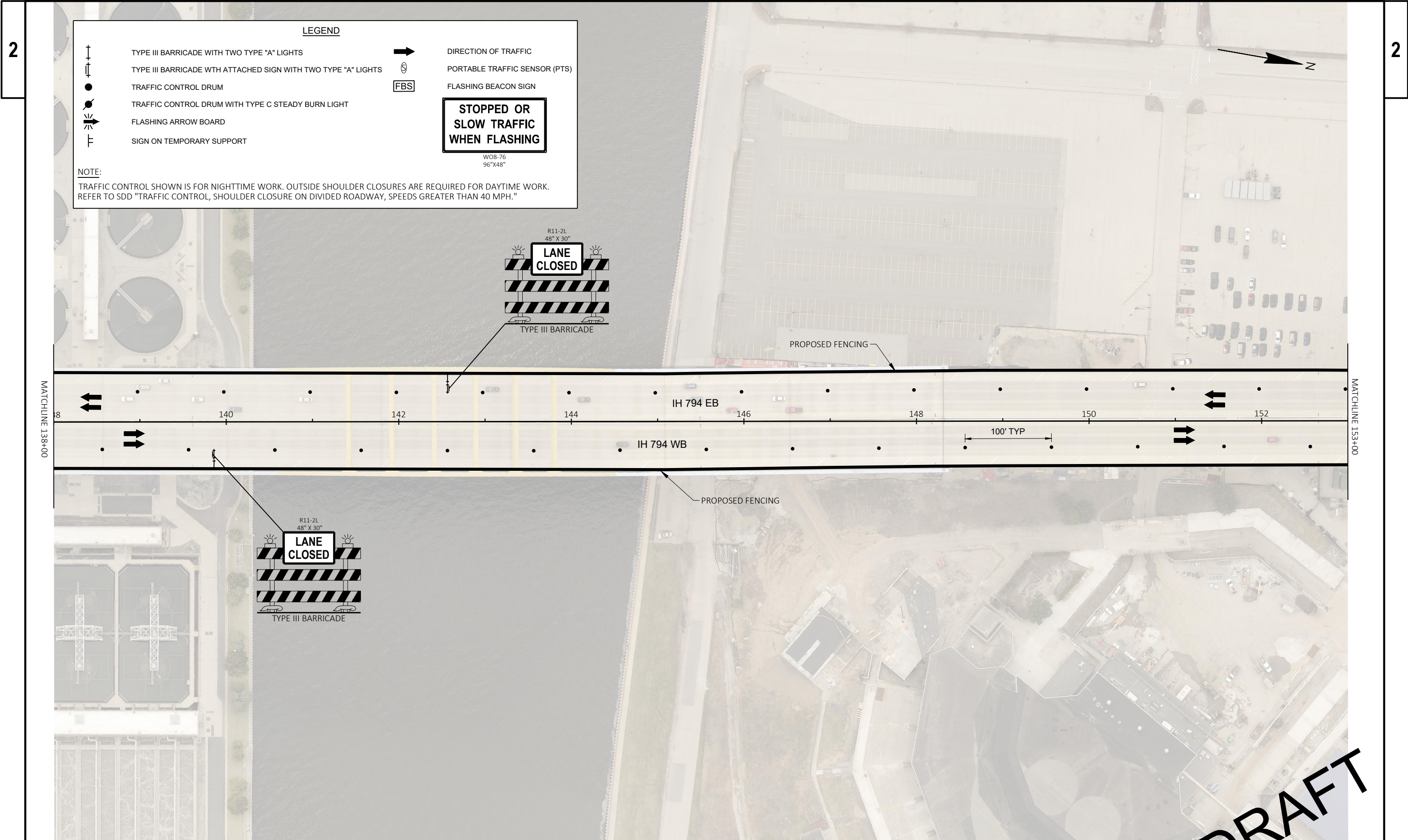
**STOPPED OR
SLOW TRAFFIC
WHEN FLASHING**

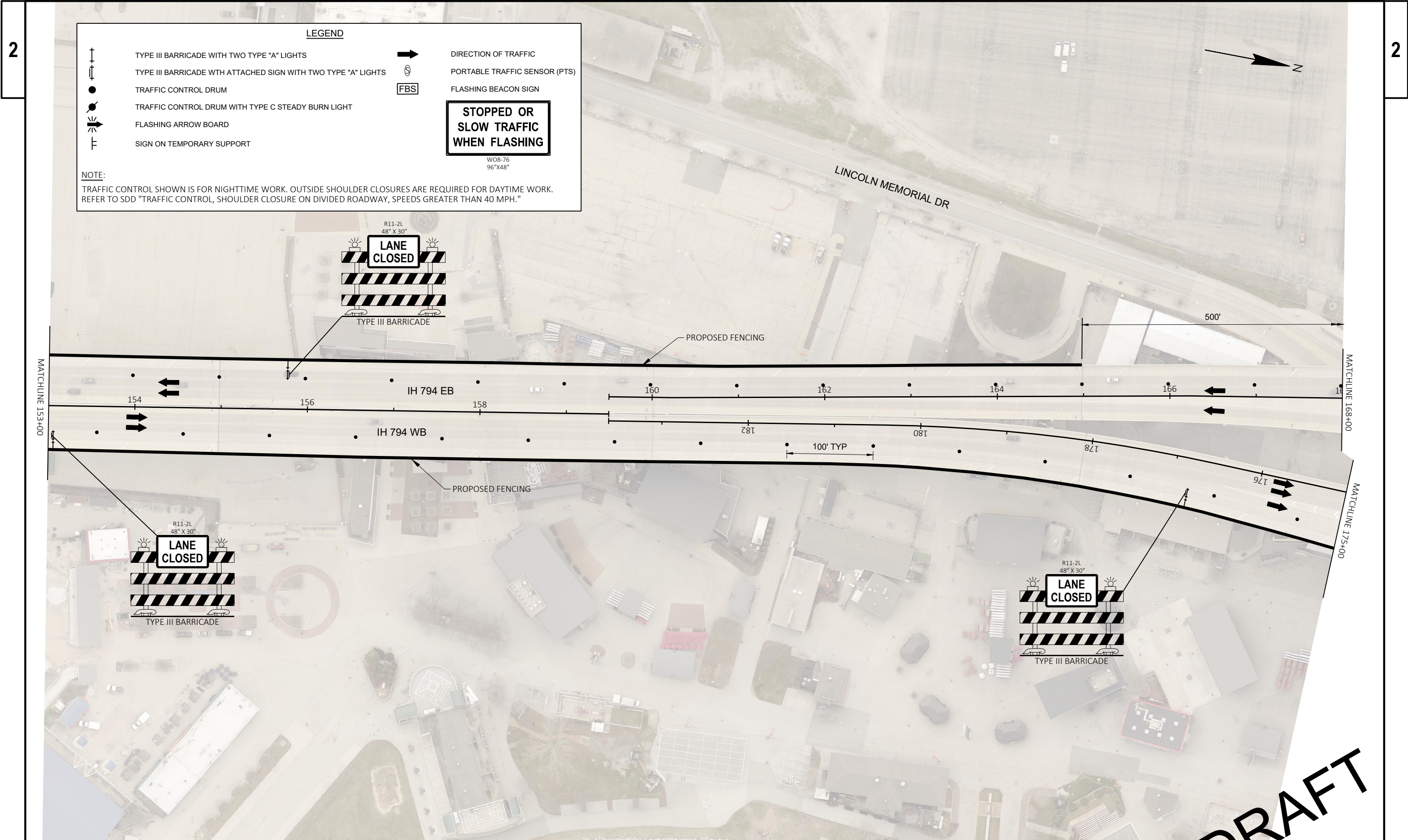
W08-76
96"X48"

NOTE:
TRAFFIC CONTROL SHOWN IS FOR NIGHTTIME WORK. OUTSIDE SHOULDER CLOSURES ARE REQUIRED FOR DAYTIME WORK.
REFER TO SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH."




DRAFT







LEGEND




TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS




TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS




TRAFFIC CONTROL DRUM




TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT




FLASHING ARROW BOARD




SIGN ON TEMPORARY SUPPORT



DIRECTION OF TRAFFIC



PORTABLE TRAFFIC SENSOR (PTS)



FLASHING BEACON SIGN

**STOPPED OR
SLOW TRAFFIC
WHEN FLASHING**

W08-76
96"X48"

NOTE:

TRAFFIC CONTROL SHOWN IS FOR NIGHTTIME WORK. OUTSIDE SHOULDER CLOSURES ARE REQUIRED FOR DAYTIME WORK. REFER TO SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH."

MATCHLINE 153+00

MATCHLINE 168+00

MATCHLINE 175+00

PROJECT NO: 1300-15-70

HWY: IH 794

COUNTY: MILWAUKEE

TRAFFIC CONTROL

SHEET

E

FILE NAME : \\WKERTOV\FILP\01\N3PUBLIC\PD5\C3D\13001500\SHETSPLAN\025102_TC.DWG

LAYOUT NAME - 05

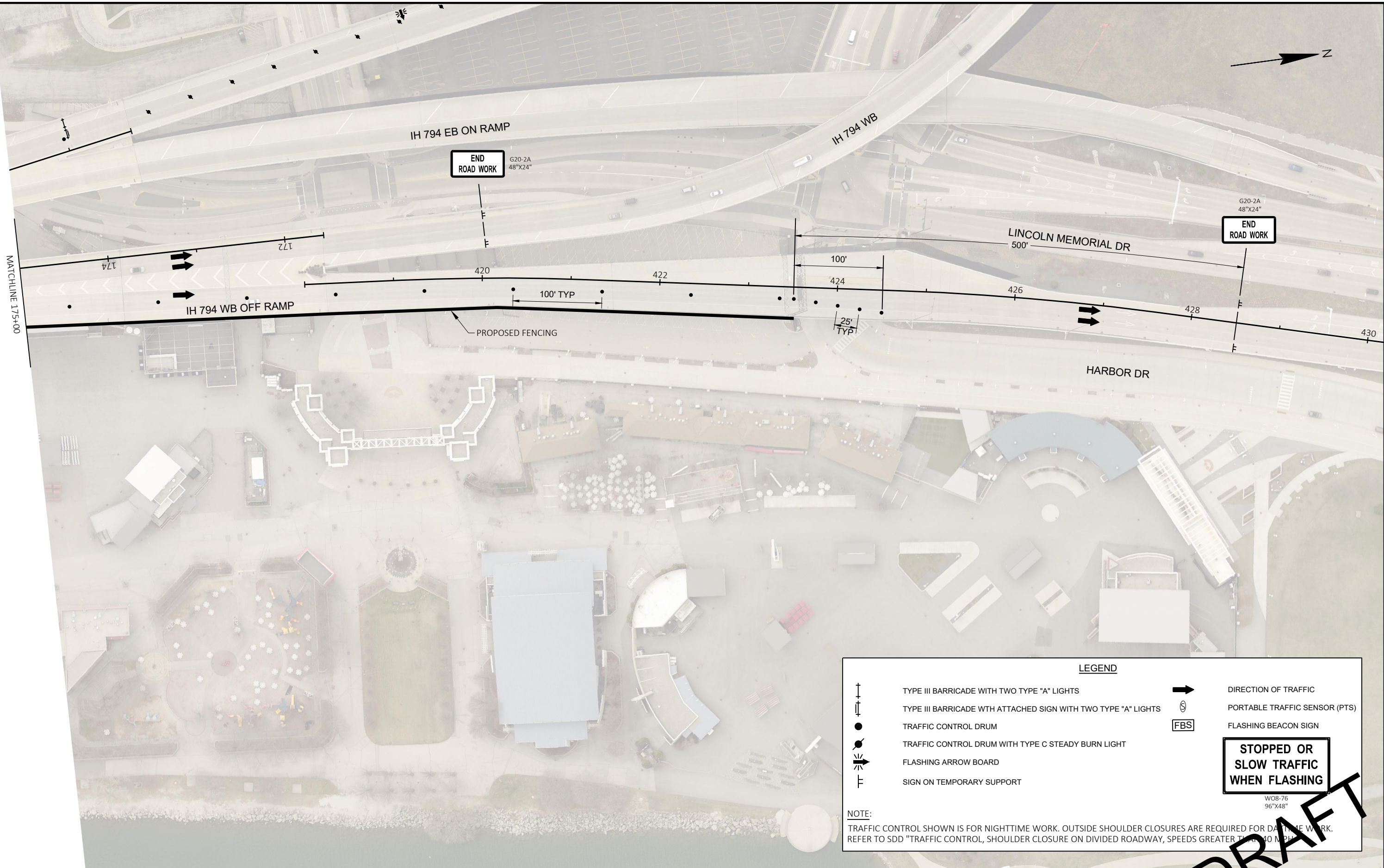
PLOT DATE : 11/16/2022 9:43 AM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



LEGEND

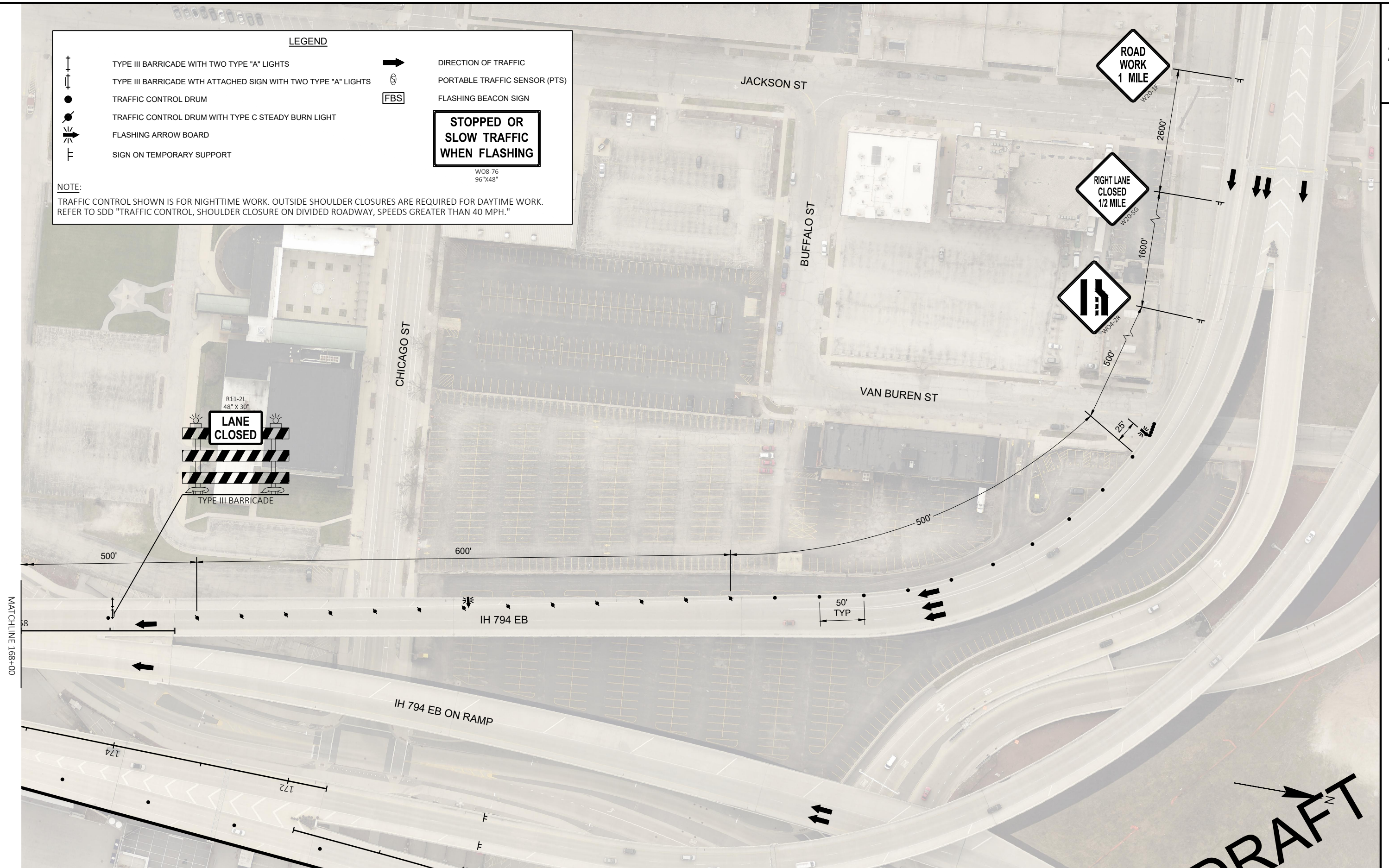
| | | | |
|--|--|--|-------------------------------|
| | TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS | | DIRECTION OF TRAFFIC |
| | TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS | | PORTABLE TRAFFIC SENSOR (PTS) |
| | TRAFFIC CONTROL DRUM | | FLASHING BEACON SIGN |
| | TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | | |
| | FLASHING ARROW BOARD | | |
| | SIGN ON TEMPORARY SUPPORT | | |

**STOPPED OR
SLOW TRAFFIC
WHEN FLASHING**

W08-76
96"X48"

NOTE:

TRAFFIC CONTROL SHOWN IS FOR NIGHTTIME WORK. OUTSIDE SHOULDER CLOSURES ARE REQUIRED FOR DAYTIME WORK. REFER TO SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH."



PROJECT NO: 1300-15-70

HWY: IH 794

COUNTY: MILWAUKEE

TRAFFIC CONTROL

SHEET

E

FILE NAME : \\WKERTOVFILP01\N3PUBLIC\PD5\C3D\13001500\SHETSPLAN\025102_TC.DWG
LAYOUT NAME - 07

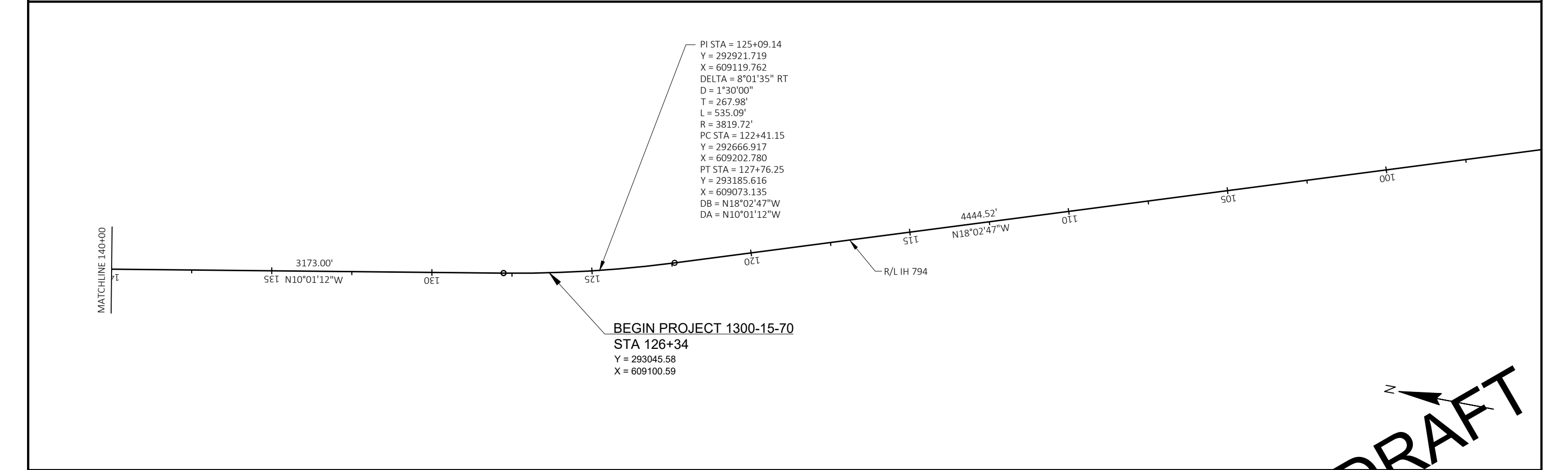
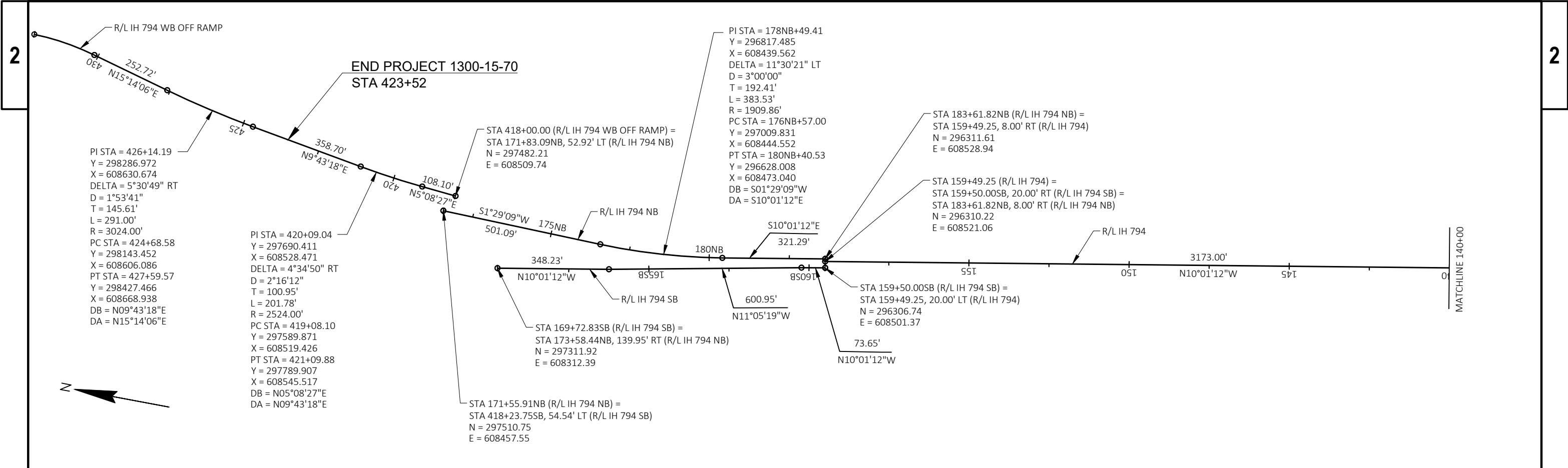
PLOT DATE : 11/16/2022 11:44 AM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



| TRAFFIC CONTROL | | | | | | | | | | | | | | | |
|-----------------|---------------|-----------------------|-------|------------------------------------|-------|---------------------------------------|-------|---------------------------------------|-------|------------------------------|-------|-----------------------|-------|---|------|
| | | 643.0300 | | 643.0420 | | 643.0705 | | 643.0715 | | 643.0800 | | 643.0900 | | 643.4100.S | |
| | | TRAFFIC CONTROL DRUMS | | TRAFFIC CONTROL BARRICADE TYPE III | | TRAFFIC CONTROL WARNING LIGHTS TYPE A | | TRAFFIC CONTROL WARNING LIGHTS TYPE C | | TRAFFIC CONTROL ARROW BOARDS | | TRAFFIC CONTROL SIGNS | | TRAFFIC CONTROL INTERIM LANE CLOSURE EACH | |
| CATEGORY | LOCATION | DURATION DAYS | *EACH | DAYS | *EACH | DAYS | *EACH | DAYS | *EACH | DAYS | *EACH | DAYS | *EACH | DAYS | EACH |
| 1000 | IH 794 WB | 80 | 121 | 9,680 | 8 | 640 | 16 | 1,280 | 13 | 1,040 | 2 | 160 | 14 | 12,800 | 80 |
| | IH 794 EB | 65 | 76 | 6,080 | 8 | 640 | 16 | 1,280 | 13 | 1,040 | 2 | 160 | 9 | 12,800 | 65 |
| | UNDISTRIBUTED | | | 3,940 | | 320 | | 640 | | 520 | | 80 | | 6,400 | 36 |
| TOTAL | | | | 19,700 | | 1,600 | | 3,200 | | 2,600 | | 400 | | 32,000 | 181 |

*FOR INFORMATION ONLY

| BASIC TRAFFIC QUEUE WARNING SYSTEM (ITEM 643.1205.S) | | | | |
|--|-----------|-----------------------------|--------------------------------|--------------------------------|
| CATEGORY | LOCATION | FLASHING BEACON SIGNS (FBS) | PORTABLE TRAFFIC SENSORS (PTS) | BASIC QUEUE WARNING SYSTEM DAY |
| 1000 | IH 794 WB | 3 | 3 | 80 |

THESE ITEMS ARE PART OF THE QWS AND ARE PAID FOR ONE COMPLETE SYSTEM PER ROADWAY

DRAFT

NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL
STRUCTURE PLANS.

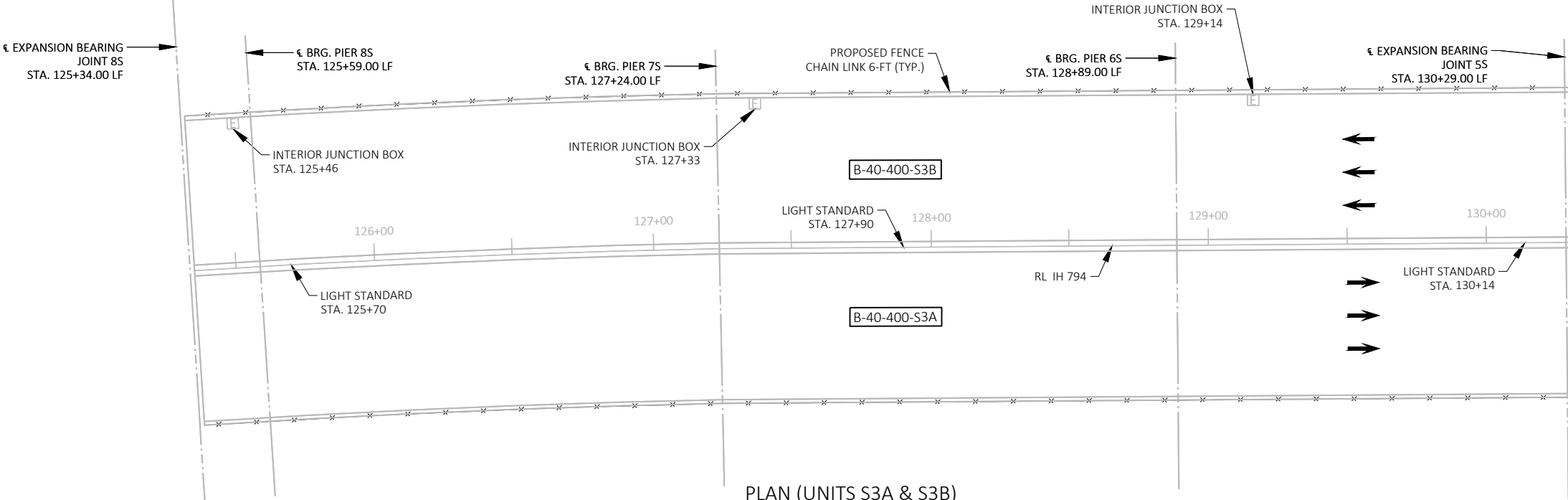
LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

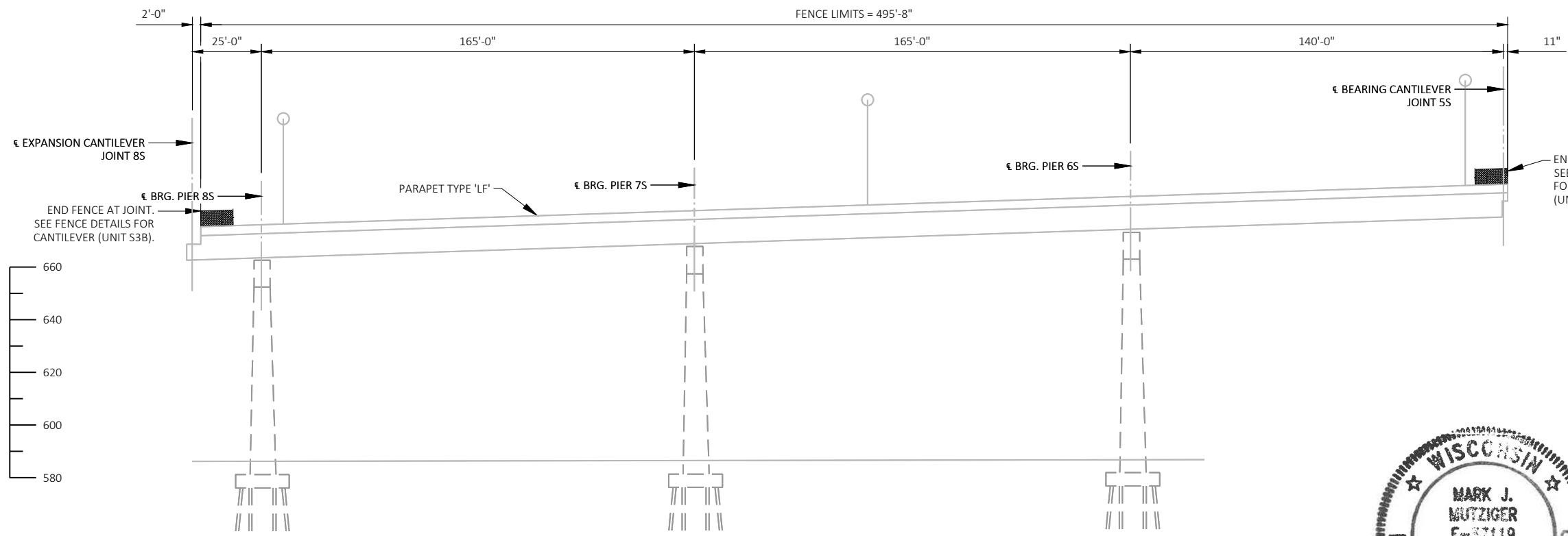
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

LIST OF DRAWINGS

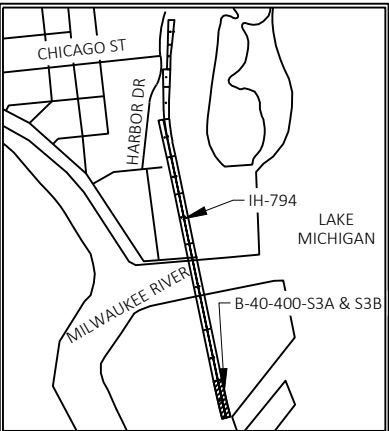
1. GENERAL PLAN & ELEVATION
2. CROSS SECTIONS
3. PARAPET DETAILS
4. FENCE DETAILS
5. MODULAR JOINT DETAILS



PLAN (UNITS S3A & S3B)



ELEVATION
LOOKING WEST



LOCATION MAP

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
|-----|------|----------|----|

COLLINS ENGINEERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ DATE _____
CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-40-400-S3A & S3B

IH 794 LAKE FREEWAY OVER JOCK RR

COUNTY MILWAUKEE TOWN/CITY/VILLAGE MILWAUKEE

DESIGN SPEC. REHABILITATION

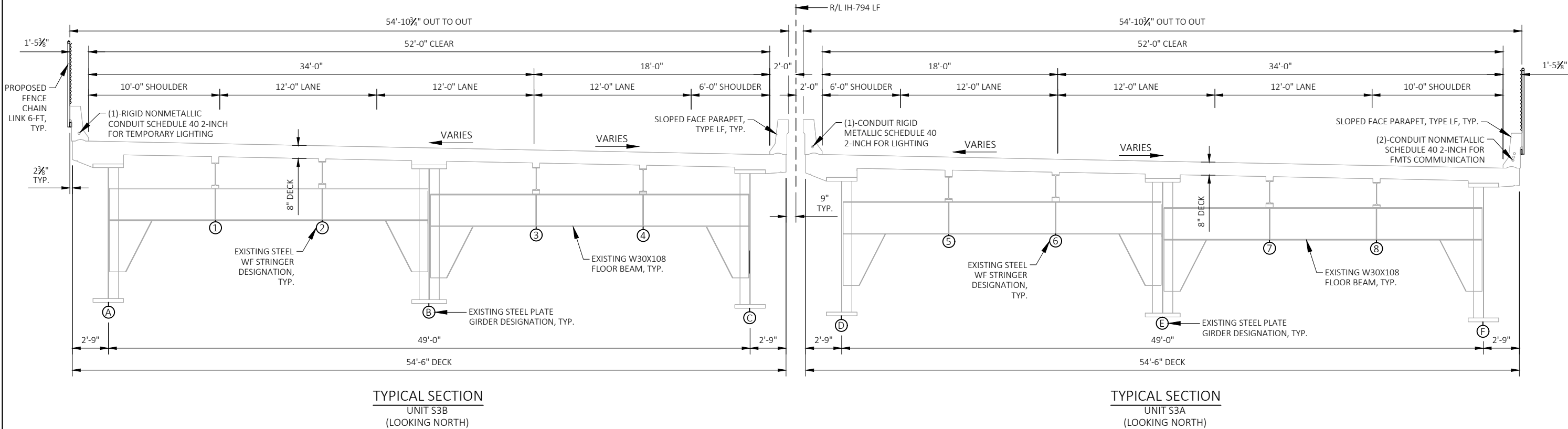
DESIGNED BY JCG CK'D BY JCG DRAWN BY MDG PLANS CK'D BY JCG

GENERAL PLAN
& ELEVATION

SHEET 1 OF 5

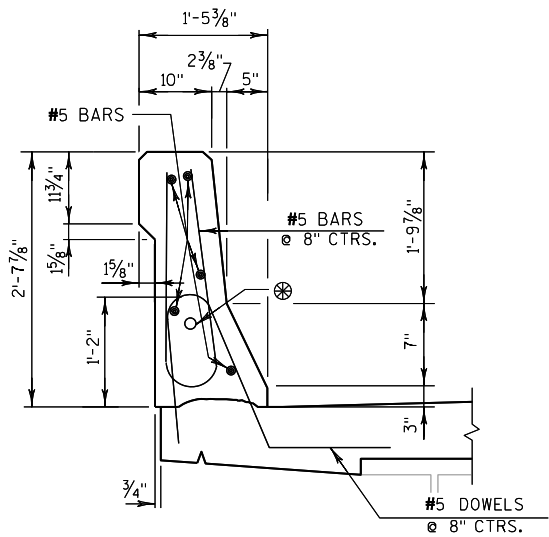
STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905

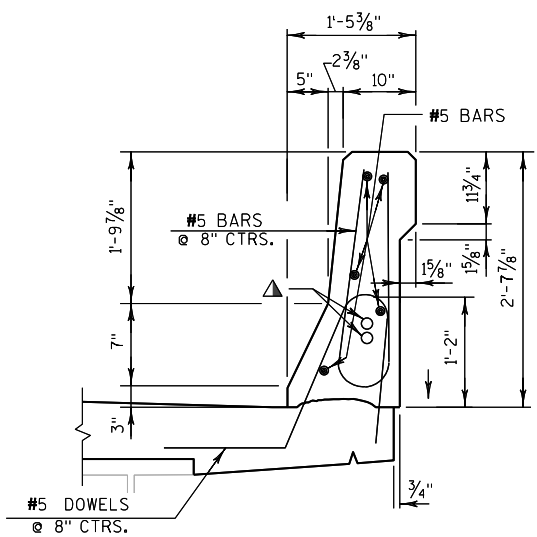


| ESTIMATE OF QUANTITIES | | | |
|------------------------|-----------------------|-----|------|
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
| 616.0206 | FENCE CHAIN LINK 6-FT | 992 | LF |

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40-400-S3A & S3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTIONS | | SHEET 2 OF 5 | |



SECTION THRU
OUTSIDE PARAPET
UNIT S3B



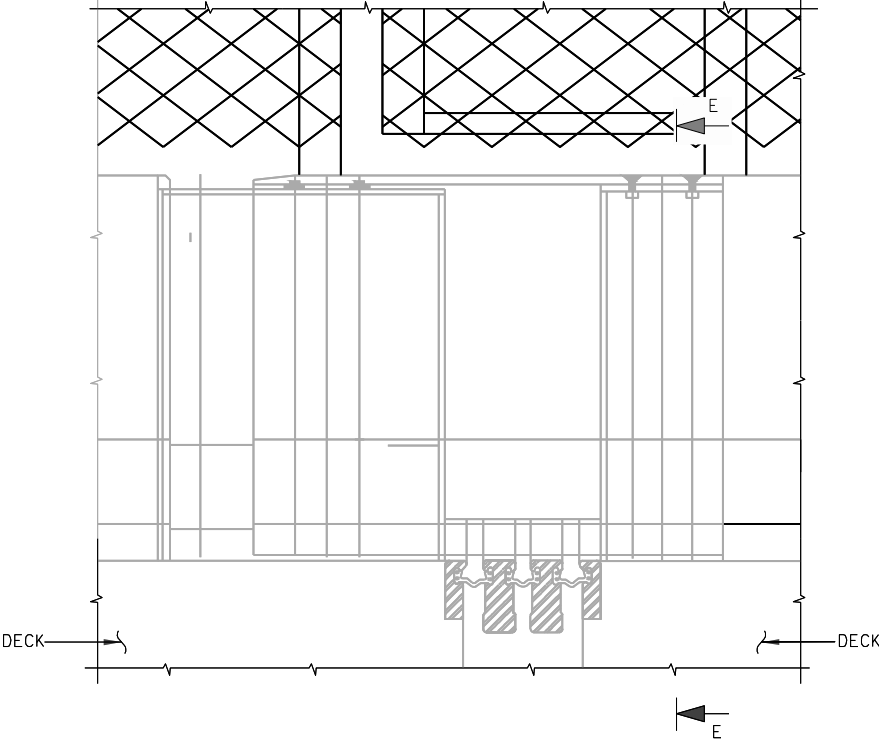
SECTION THRU
OUTSIDE PARAPET
UNIT S3A

LEGEND

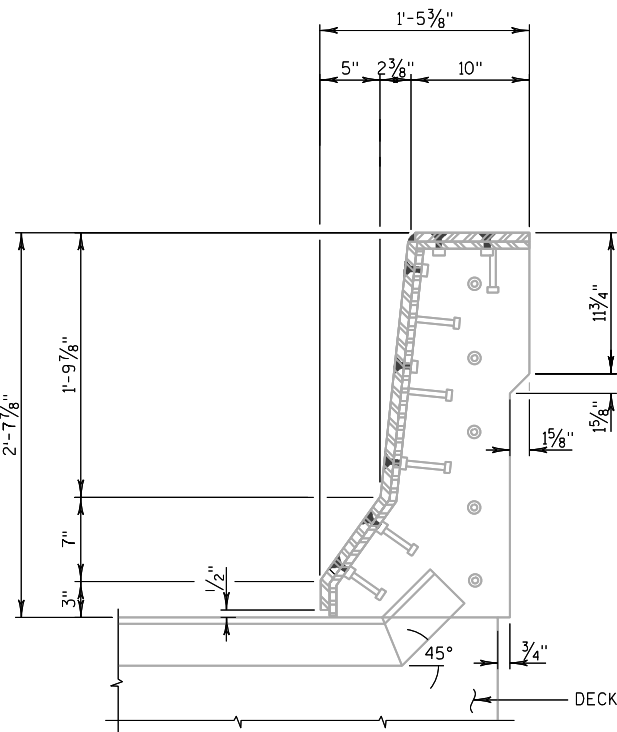
- ⊗ (1)-"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR TEMPORARY ROADWAY LIGHTING
- Δ (2)-"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FMTS COMMUNICATIONS

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40-400-S3A & S3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 5 | |

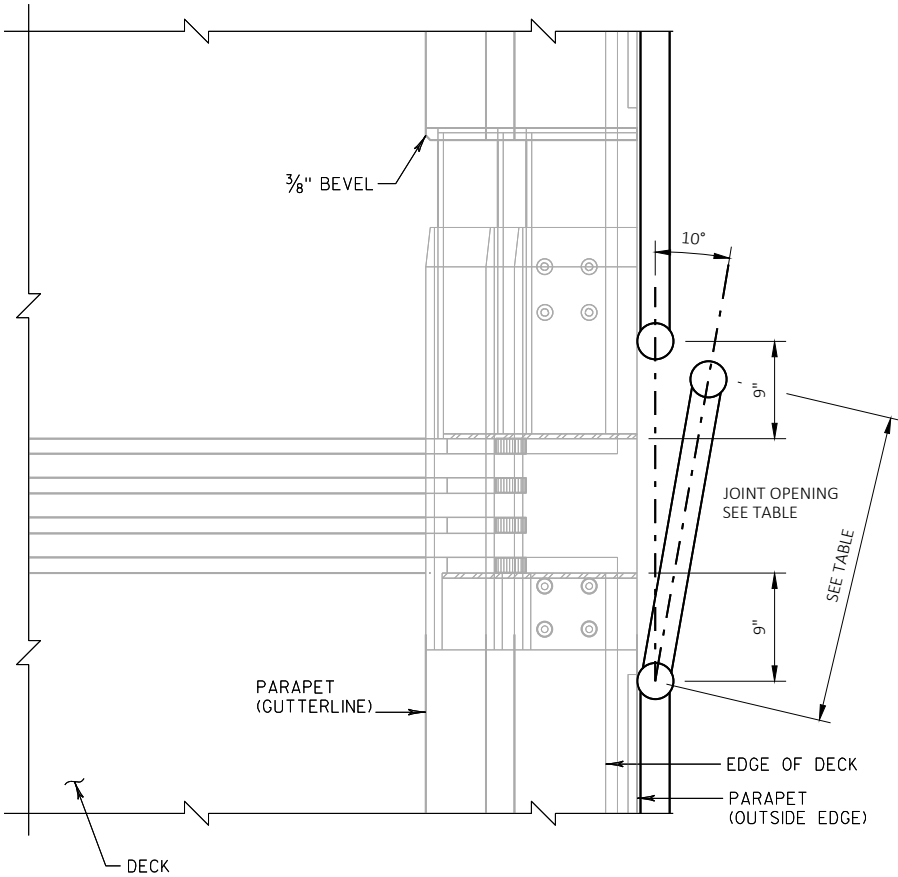
PROTECTIVE SCREENING SHALL BE STRAIGHT.



ELEVATION OF PARAPET



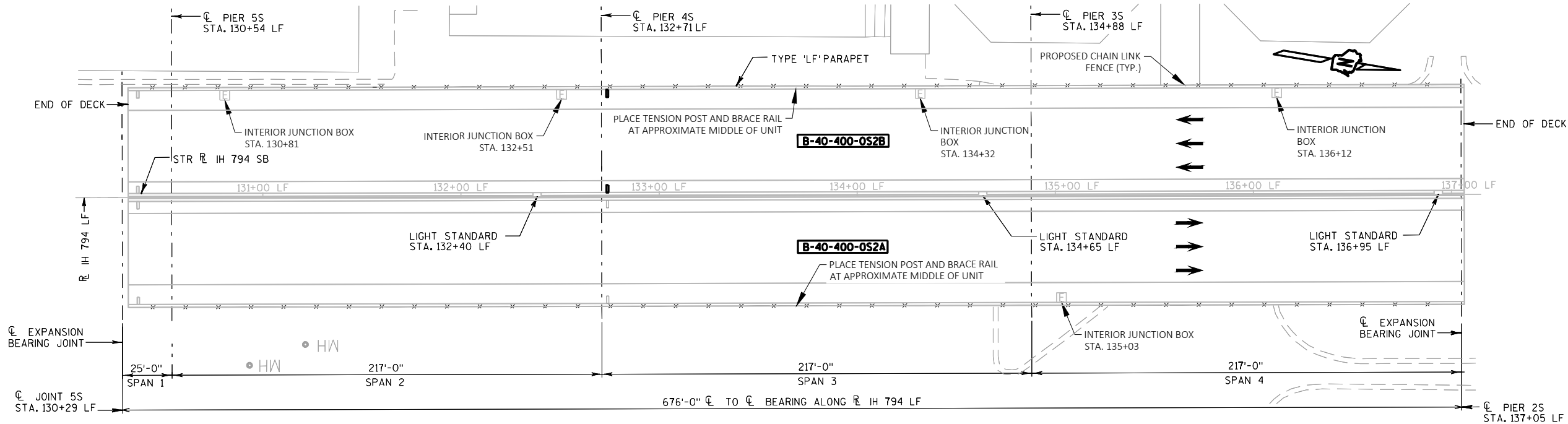
SECTION E-E



PLAN OF PARAPET

| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| SB | S3B TO S4B | 12 | 30 |
| NB | S3A TO S2A | 12.5 | 30 |

| NO. | DATE | REVISION | BY |
|---|------|-------------|--------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-400-S3A & S3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| MODULAR JOINT DETAILS | | SHEET | 5 OF 5 |



NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS- 33
MAXIMUM WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

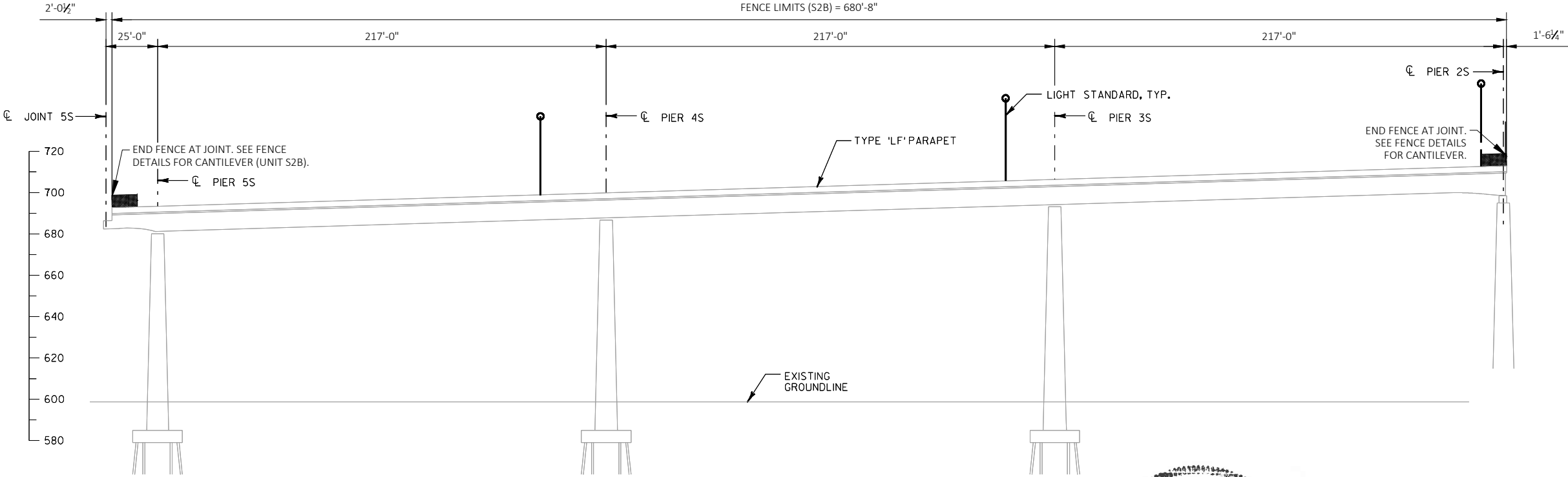
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

LIST OF DRAWINGS

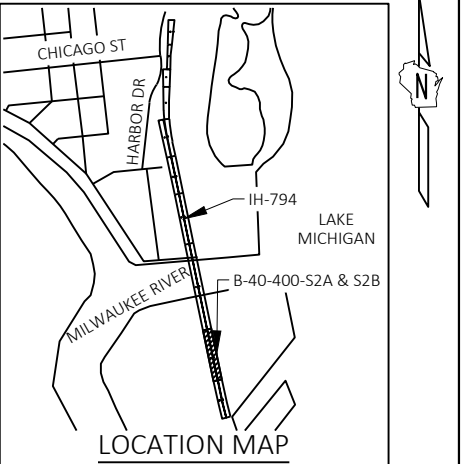
- GENERAL PLAN & ELEVATION
- CROSS SECTIONS
- PARAPET DETAILS
- FENCE DETAILS
- MODULAR JOINT DETAILS

PLAN (UNITS S2A & S2B)

FENCE LIMITS (S2A) = 678'-2"
FENCE LIMITS (S2B) = 680'-8"



ELEVATION
LOOKING WEST

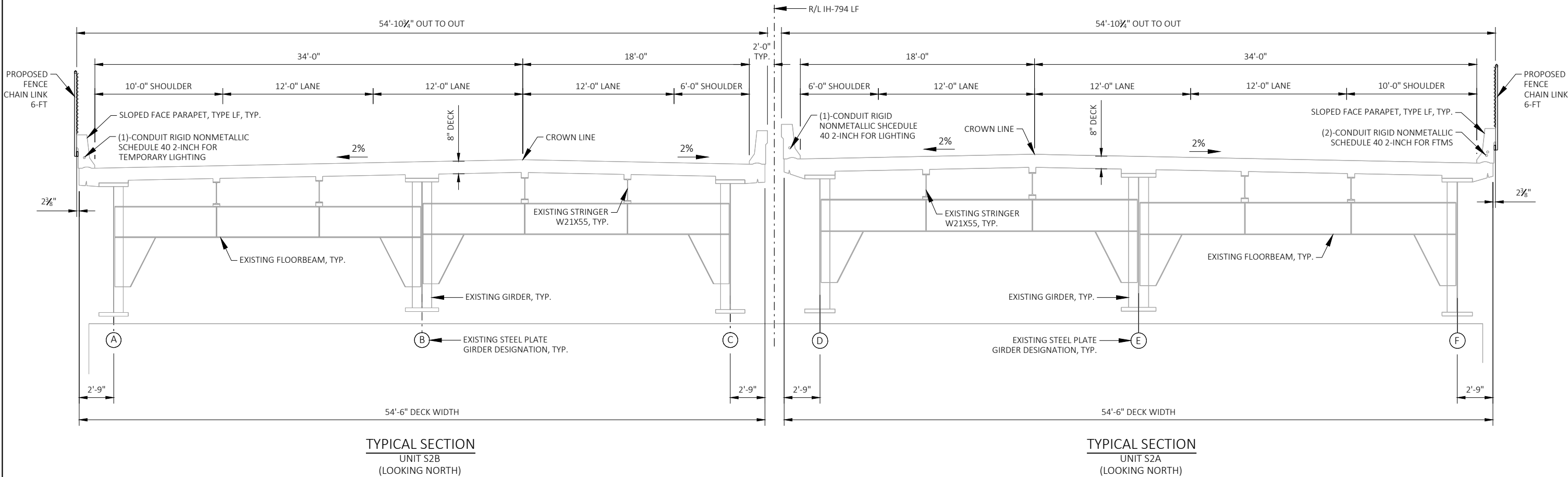


| NO. | DATE | REVISION | BY |
|---|----------------|----------------------------------|--------------|
| <div>COLLINS ENGINEERS</div> <div>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</div> | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-S2A & S2B | | | |
| IH 794-LAKE FREEWAY OVER LAND | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | DESIGN | CONSTRUCTION |
| DESIGNED BY | JCG | DESIGN CHECKED BY | MDG |
| PLANS CK'D. | JCG | SHEET 1 OF 5 | |
| GENERAL PLAN & ELEVATION | | | |

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905

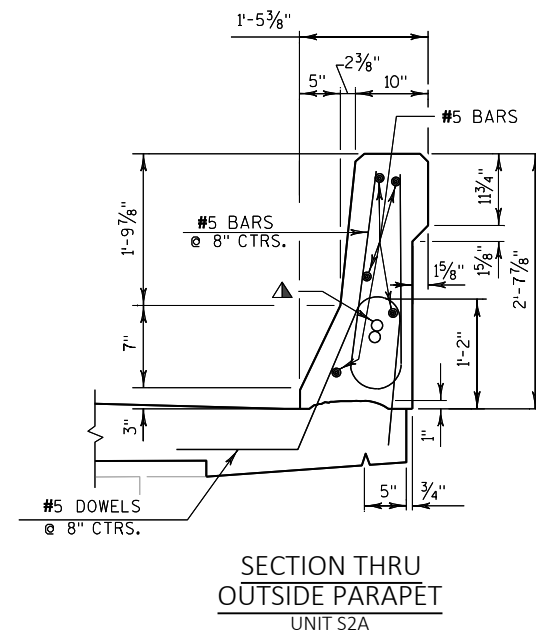




ESTIMATE OF QUANTITIES

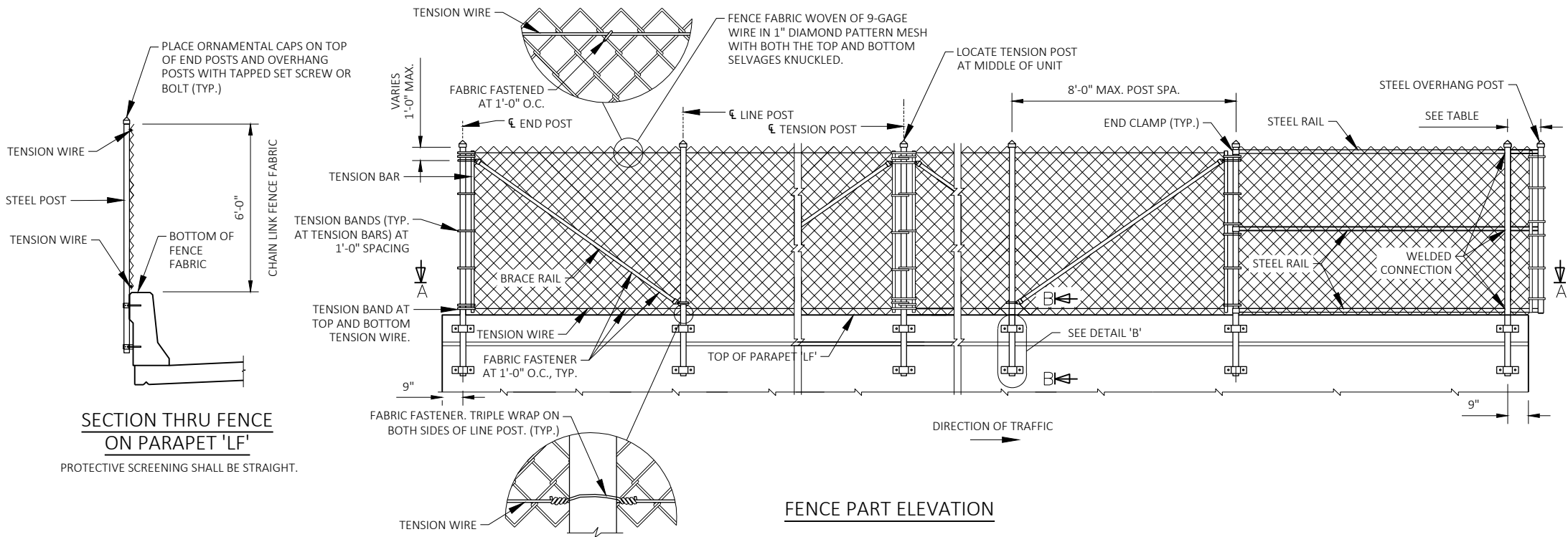
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
|-------------|-----------------------|------|------|
| 616.0206 | FENCE CHAIN LINK 6-FT | 1360 | LF |

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40-400-S2A & S2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTIONS | | SHEET 2 OF 5 | |



- ⊗ (1) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR TEMPORARY ROADWAY LIGHTING.
- ▲ (2) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR FTMS COMMUNICATIONS.

| | | | | |
|---|------|----------|--------------|-----|
| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | | |
| STRUCTURE R-404-0-S2A & S2B | | | | |
| DRAWN BY | | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | | SHEET 3 OF 5 | |



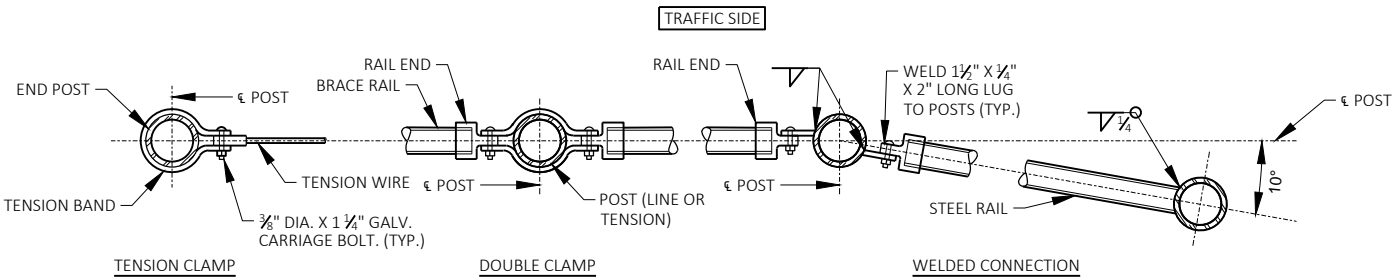
SECTION THRU FENCE
ON PARAPET 'LF'

PROTECTIVE SCREENING SHALL BE STRAIGHT.

FENCE PART ELEVATION

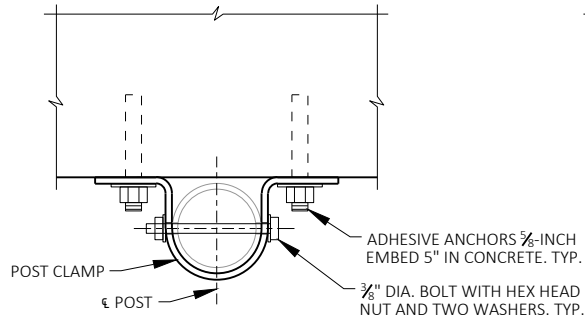
FENCE MEMBER
SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

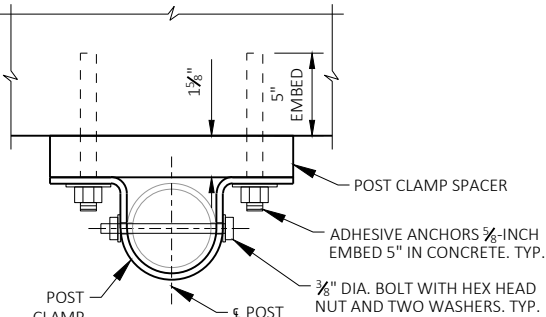


SECTION A-A

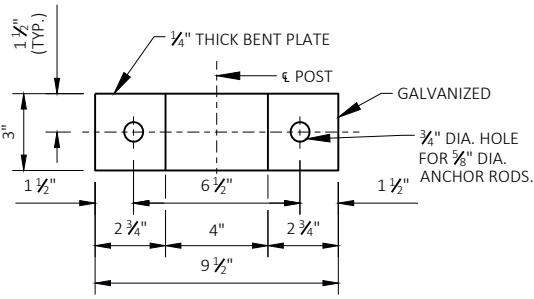
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



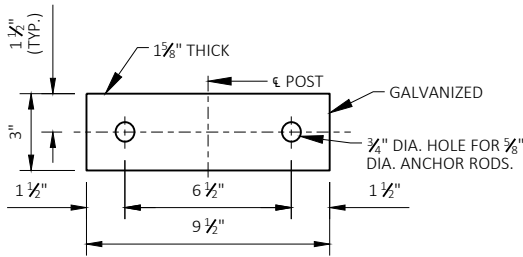
SECTION C-C



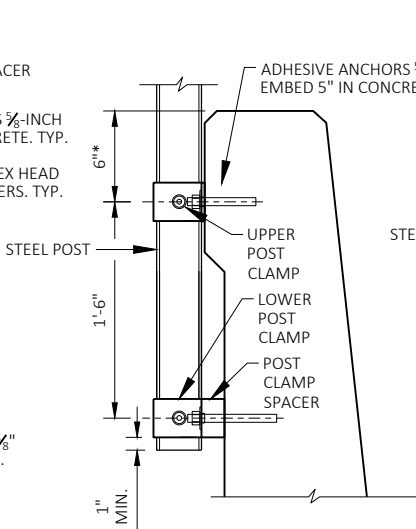
SECTION D-D



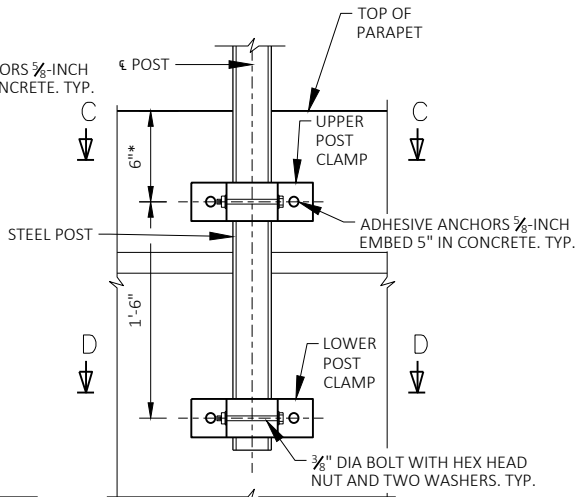
POST CLAMP DETAIL



POST CLAMP SPACER DETAIL



SECTION B-B



DETAIL 'B'

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6'- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 5/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

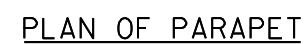
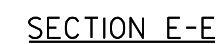
PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

CONDUIT ANCHOR CONFLICT

| SPAN | STATION OF CONFLICT | LENGTH | LOCATION |
|------|---------------------|--------|--------------|
| S2A | 130+61 TO 130+90 | 29 | UPPER ANCHOR |
| S2A | 131+73 TO 132+57 | 84 | UPPER ANCHOR |
| S2A | 133+11 TO 133+43 | 32 | UPPER ANCHOR |

* REVISE DIMENSION TO 4.5" AT LOCATIONS NOTED TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET.

| NO. | DATE | REVISION | BY |
|---|-------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-410-S2A & S2B | | | |
| DRN | MDG | PLNS | JCG |
| BY | CK'D. | | |
| FENCE DETAILS | | SHEET 4 OF 5 | |



| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| SB | S2B TO S3B | 12 | 30 |
| SB | S2B TO 1B | 28 | 50 |
| NB | S2A TO 1A | 27.0 | 50 |

| | | | |
|---|------|--------------|-----------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-40-39A & S2B | | | |
| DRAWN BY | | MDG | PLANS CK'D. JCM |
| MODULAR JOINT DETAILS | | SHEET 5 OF 5 | |

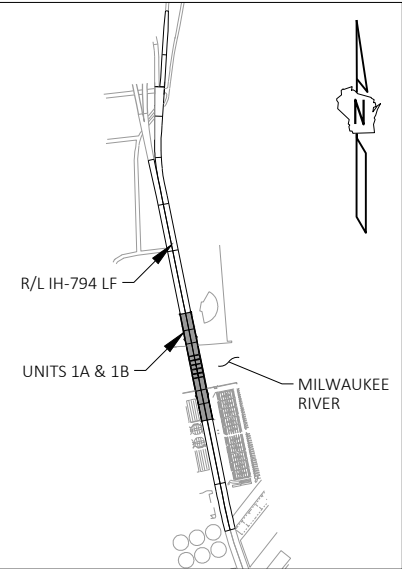
NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

LIVE LOAD:
INVENTORY RATING: HS-18
OPERATING RATING: HS-31
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

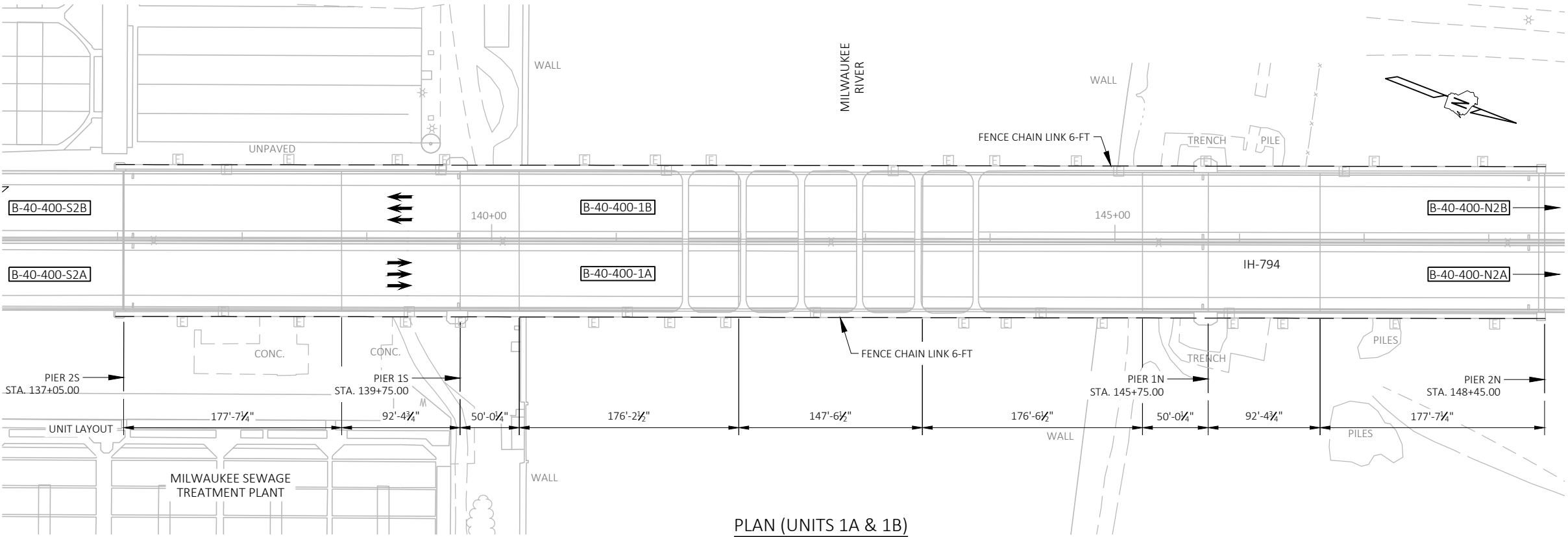
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

- LIST OF DRAWINGS
1. GENERAL PLAN & ELEVATION
 2. CROSS SECTIONS
 3. DECK LAYOUT-1
 4. DECK LAYOUT-2
 5. DECK LAYOUT-3
 6. DECK LAYOUT-4
 7. PARAPET DETAILS
 8. FENCE DETAILS
 9. FENCE GATE DETAILS
 10. LIGHTING DETAILS
 11. PLATFORM DETAILS

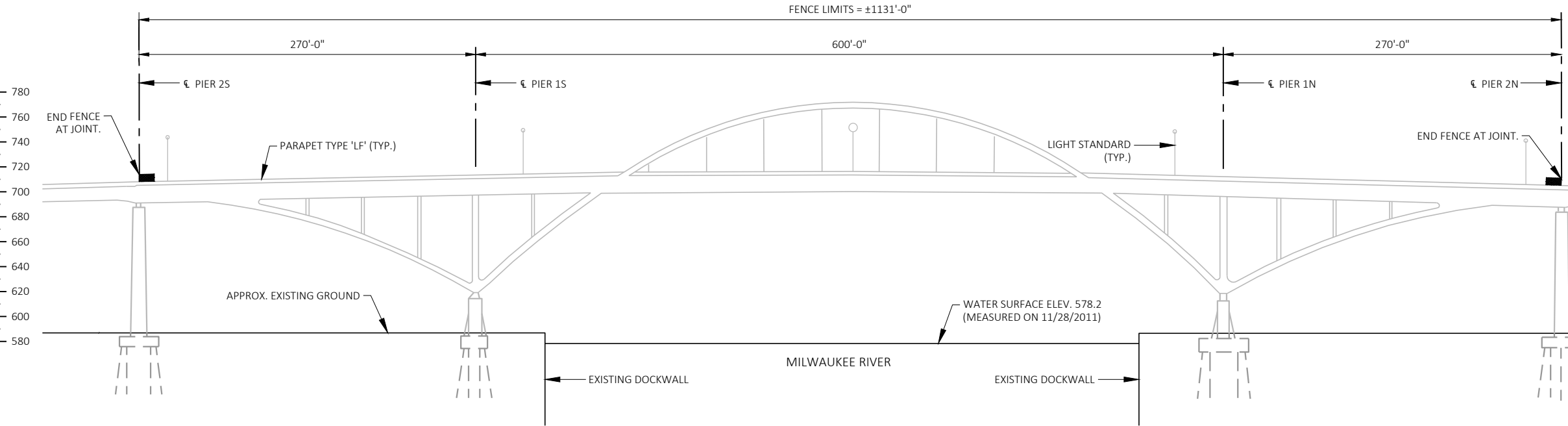


LOCATION MAP

| NO. | DATE | REVISION | BY |
|--|------------------------|----------------------------------|---------------|
| COLLINS ENGINEERS | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED _____ | | CHIEF STRUCTURES DESIGN ENGINEER | DATE _____ |
| STRUCTURE B-40-400-1A & 1B | | | |
| IH 794 WB-LAKE FREEWAY OVER MILWAUKEE RIVER | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION PROJECT | | |
| DESIGNED BY | JCG | DESIGN CHECKED BY | MDG |
| DRAWN BY | JCG | PLANS CK'D. | JCG |
| GENERAL PLAN & ELEVATION | | | SHEET 1 OF 11 |



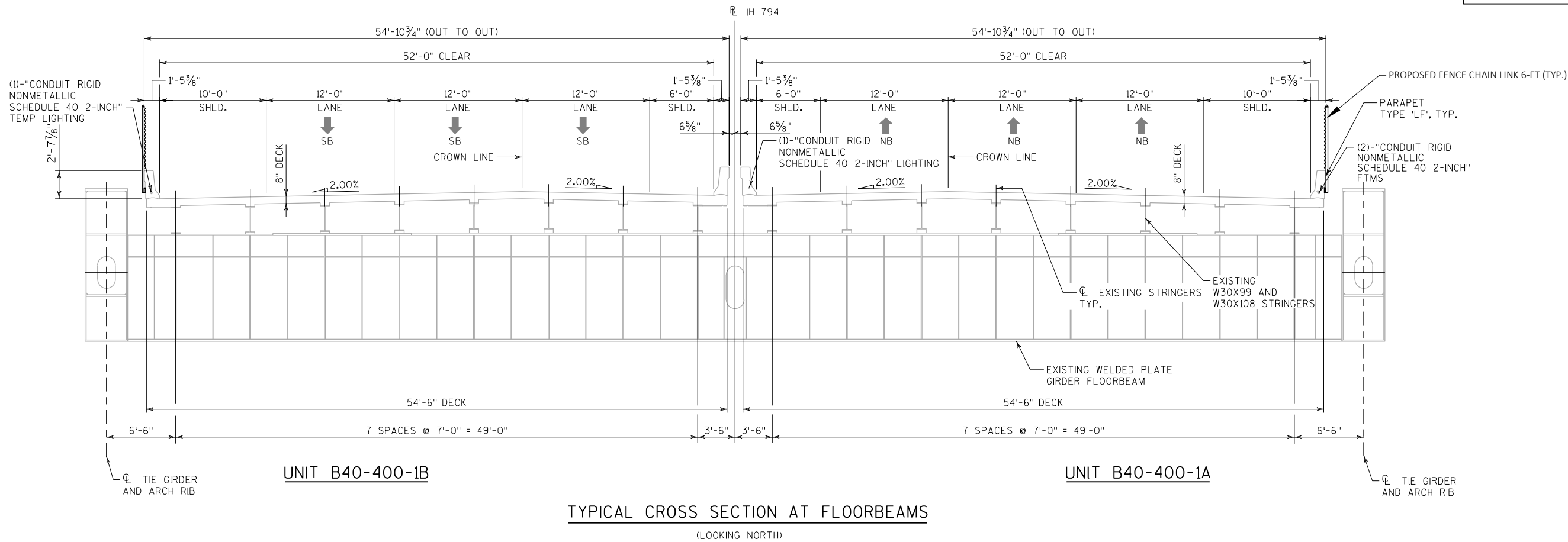
PLAN (UNITS 1A & 1B)



ELEVATION
LOOKING WEST



STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905

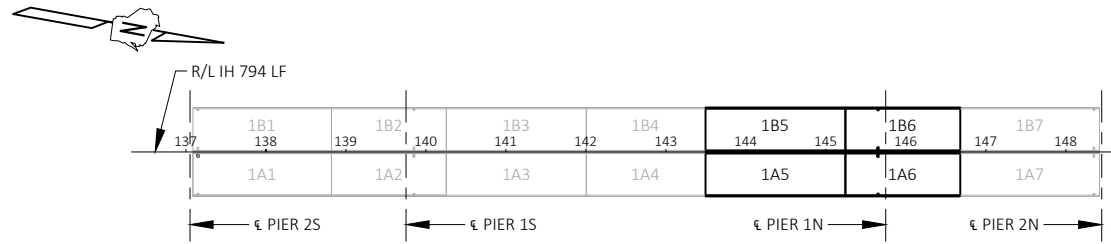
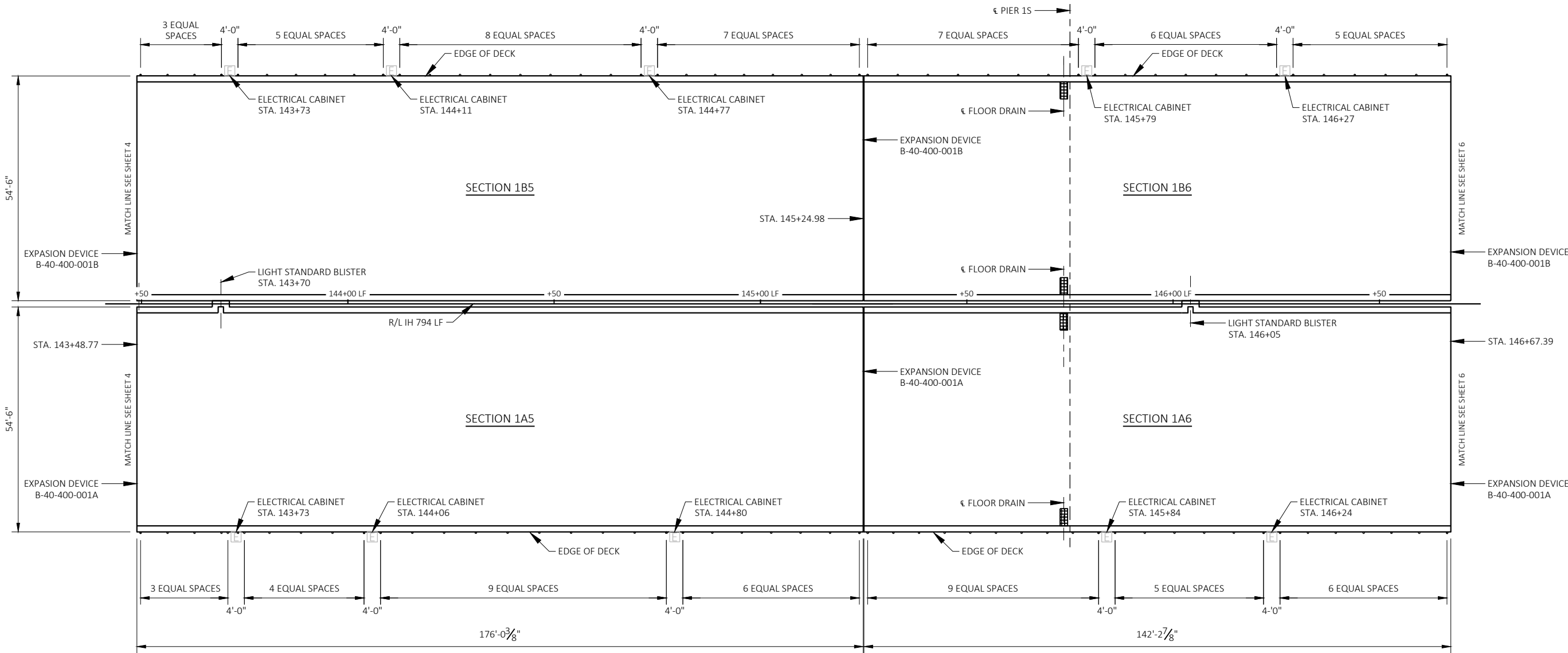


| ESTIMATE OF QUANTITIES | | | |
|------------------------|-----------------------|------|------|
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
| 616.0206 | FENCE CHAIN LINK 6-FT | 2126 | LF |
| 616.0329 | GATES CHAIN LINK 4-FT | 34 | EA |
| SPV.0060.01 | UNIT 1A/1B PLATFORM | 4 | EA |

| NO. | DATE | REVISION | BY |
|---|------|---------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-400-1A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTION | | SHEET 2 OF 11 | |

NOTES:
FENCE POST SPACING FOR REFERENCE ONLY
CONTRACTOR TO DETERMINE ACTUAL POST
LOCATIONS.

LOCATE POSTS TO AVOID EXISTING MOUNTED
LIGHTING INFRASTRUCTURE.

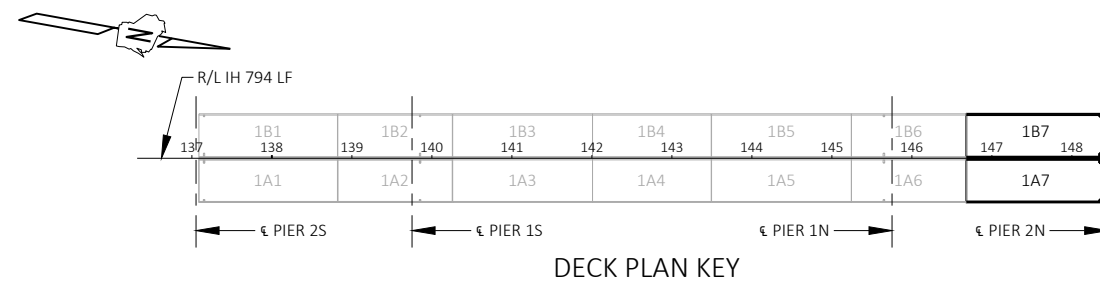
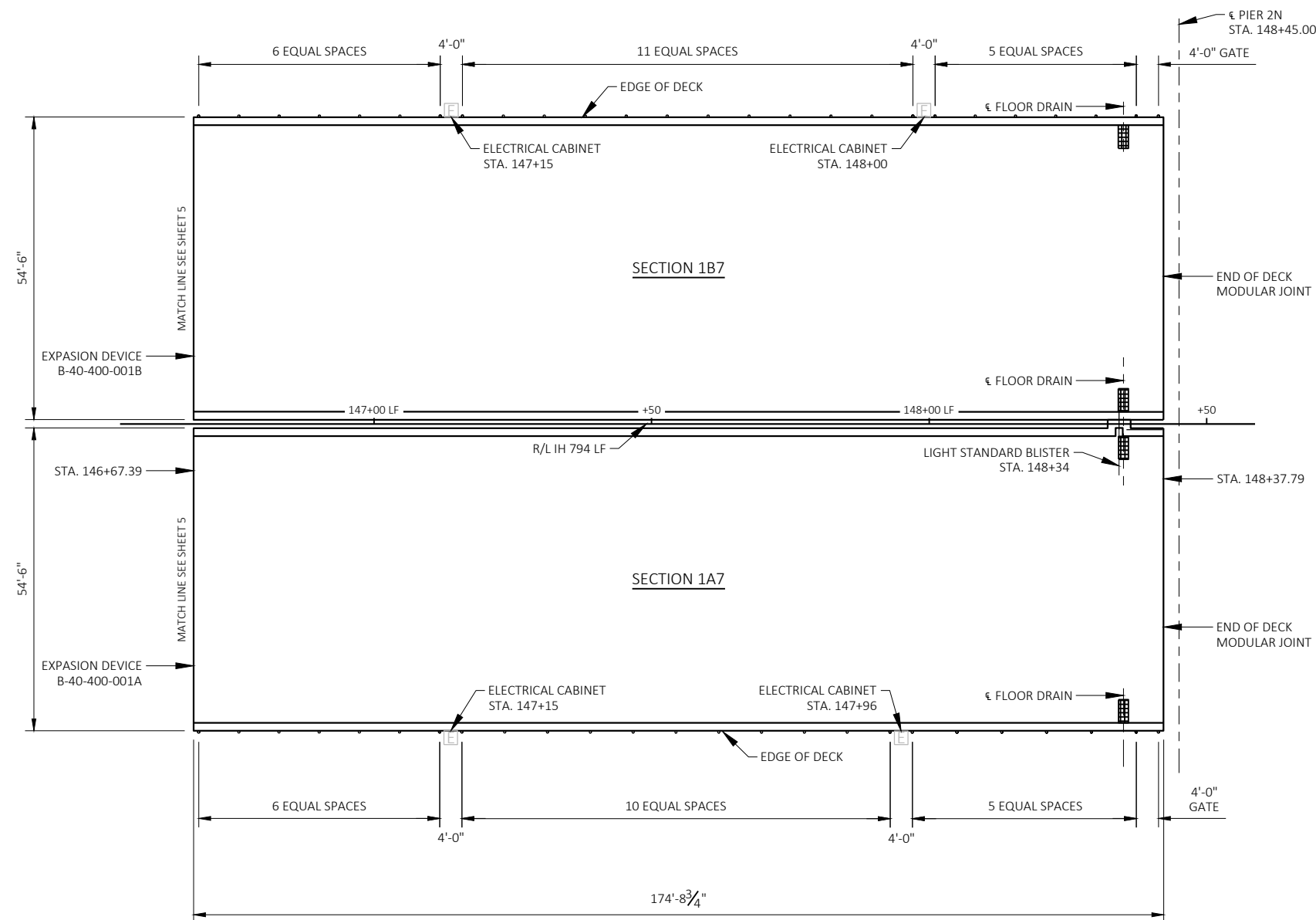


DECK PLAN KEY

| NO. | DATE | REVISION | BY |
|---|------|-------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-400-001A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| SHEET 5 OF 11 | | | |

FENCE POST SPACING FOR REFERENCE ONLY
CONTRACTOR TO DETERMINE ACTUAL POST
LOCATIONS.

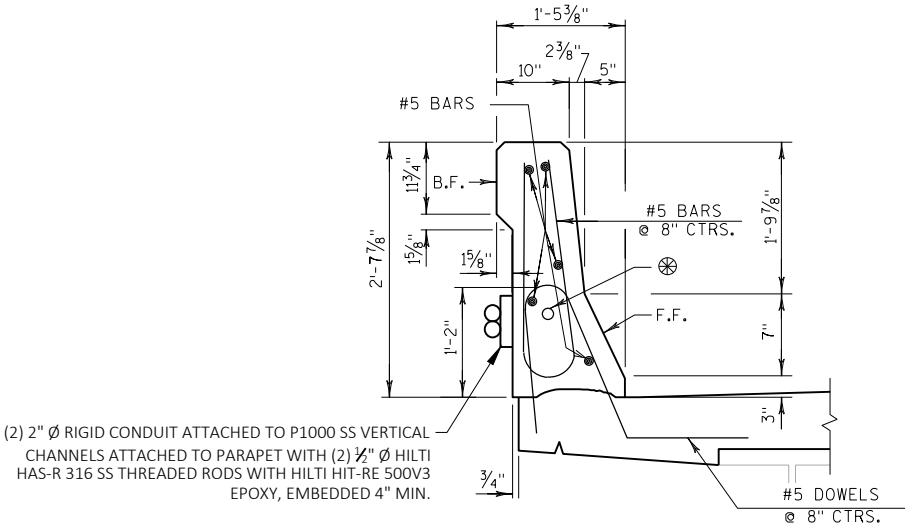
LOCATE POSTS TO AVOID EXISTING MOUNTED LIGHTING INFRASTRUCTURE.



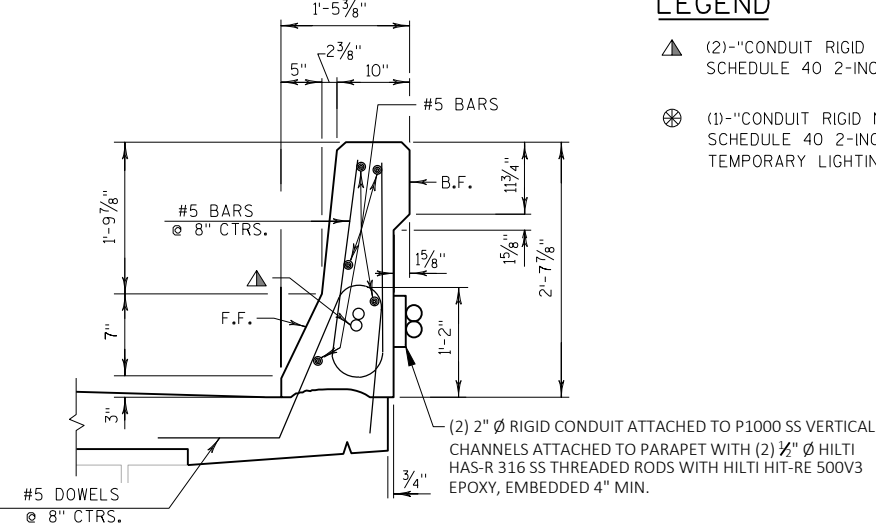
| | | | | |
|---|------|----------|-------------|----|
| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | | |
| STRUCTURE B-40-0001A & 1B | | | | |
| DRAWN BY | | MDG | PLANS CK'D. | |
| DICK LAYOUT-4 | | | SHEET 6 OF | |

LEGEND

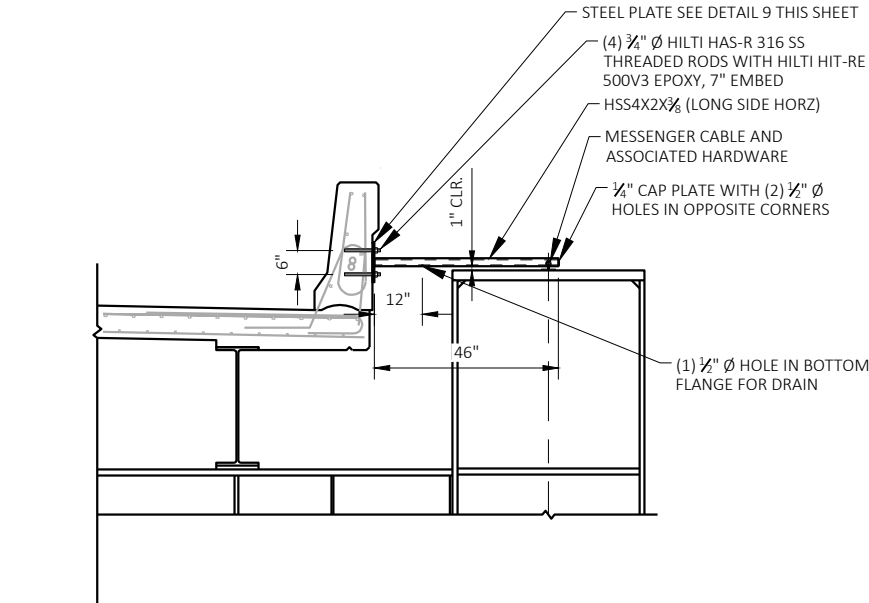
- ▲ (2) 2"-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FTMS
- ⊗ (1) 1"-CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR TEMPORARY LIGHTING



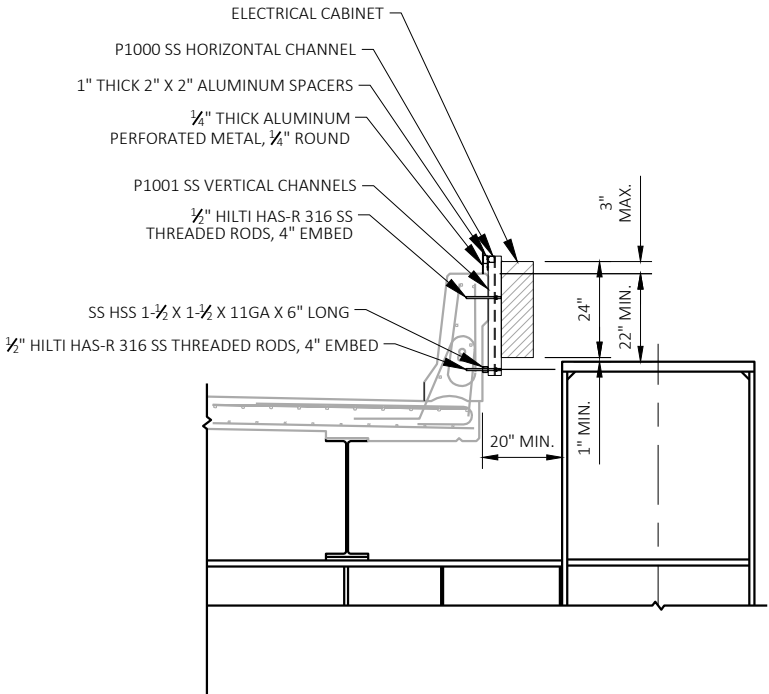
SECTION THRU
OUTSIDE PARAPET
UNIT 1B



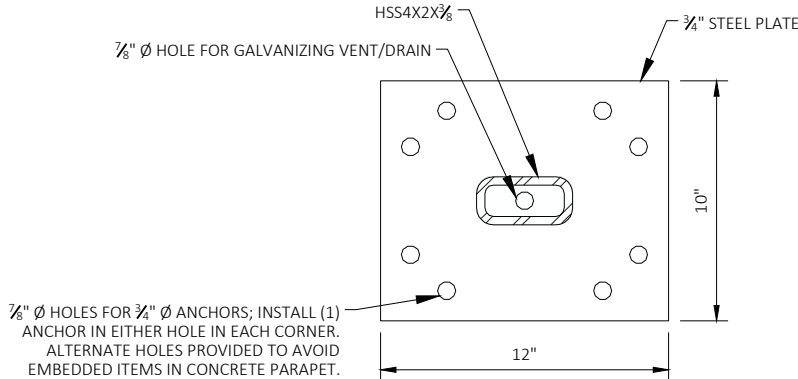
SECTION THRU
OUTSIDE PARAPET
UNIT 1A



EXISTING LIGHTING
INFRASTRUCTURE CABLE ARM



EXISTING LIGHTING INFRASTRUCTURE
ELECTRICAL CABINETS



DETAIL 9

| NO. | DATE | REVISION | BY |
|---|------|---------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-0001A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 7 OF 11 | |

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6-FT"

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 3/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

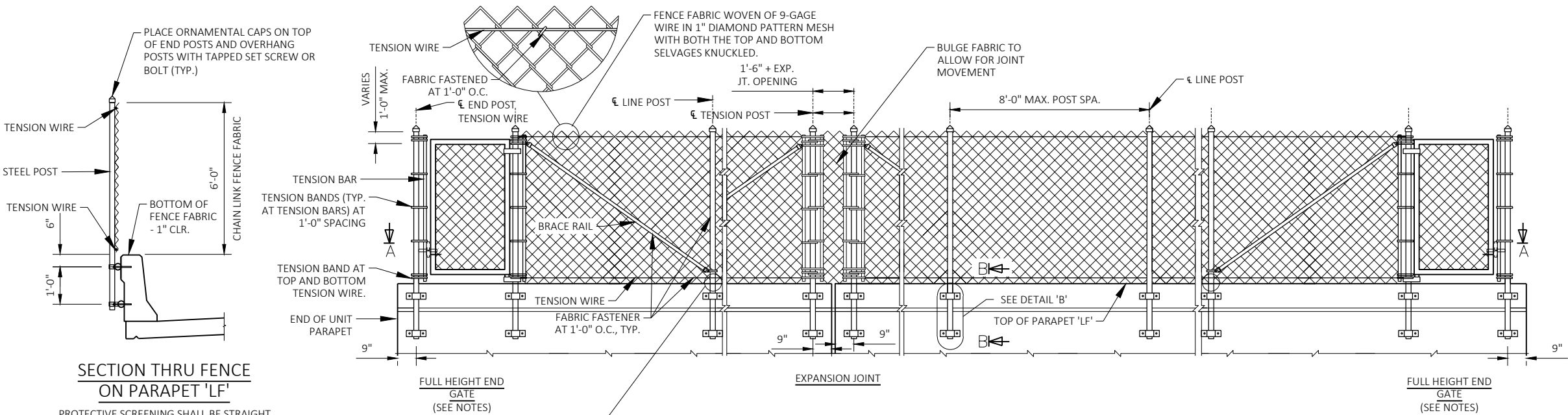
STRUCTURAL TUBING SHALL BE ASTM A500.

CONDUIT ANCHOR CONFLICT

| SPAN | STATION OF CONFLICT | LENGTH | LOCATION |
|------|---------------------|--------|--------------|
| 1A | 147+55 TO 148+55 | 100 | UPPER ANCHOR |

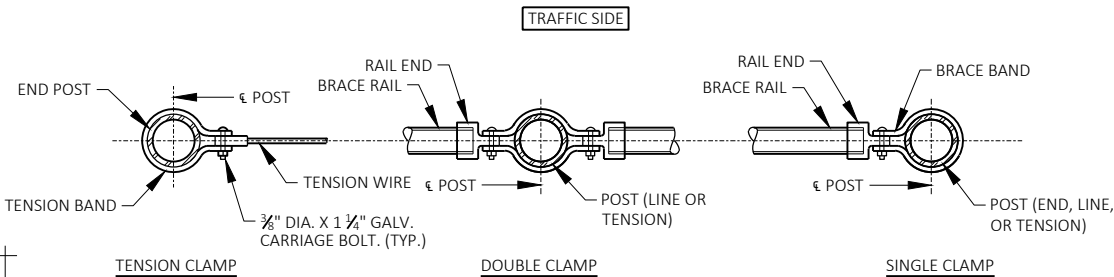
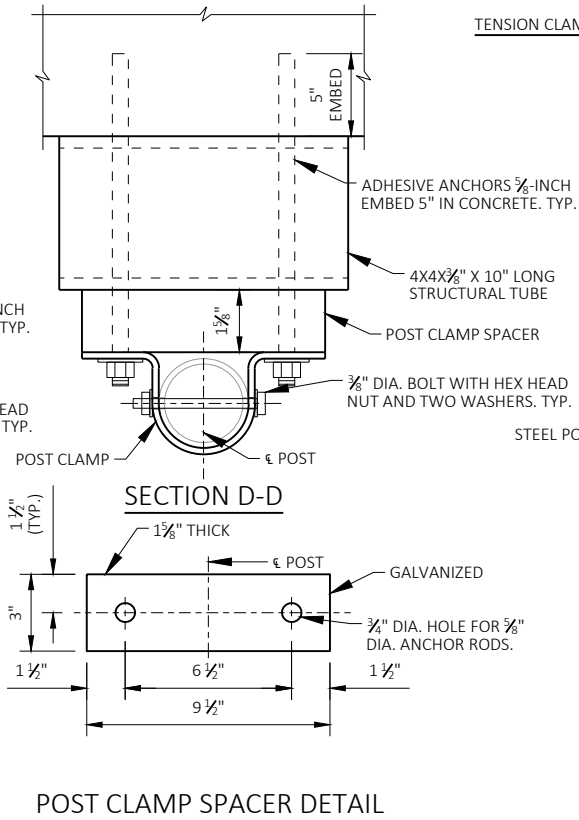
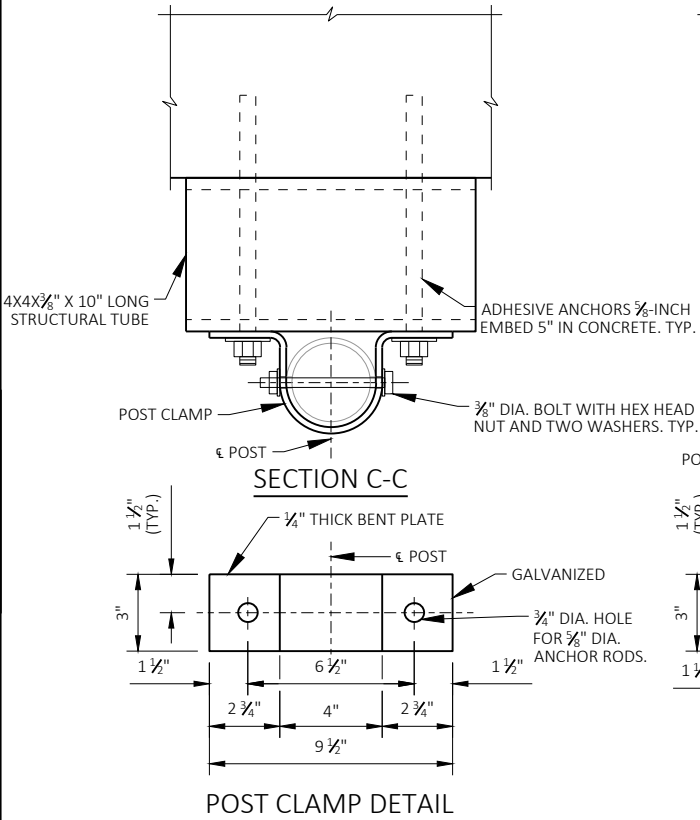
* REVISE DIMENSION TO 4.5" AT LOCATIONS NOTED TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET.

| NO. | DATE | REVISION | BY |
|---|------|----------|-----------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-0001A & 1B | | | |
| DRG | BY | MDG | PLANS CK'D. JCG |
| FENCE DETAILS | | | SHEET 8 OF 11 |



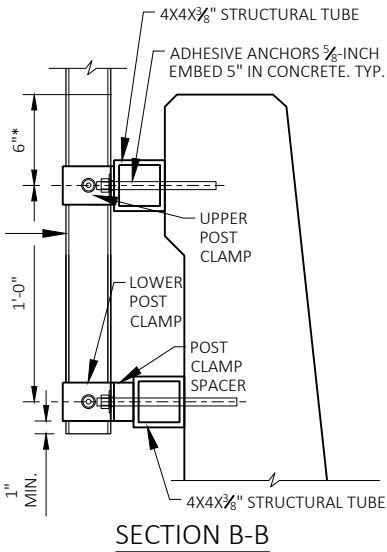
FENCE MEMBER SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

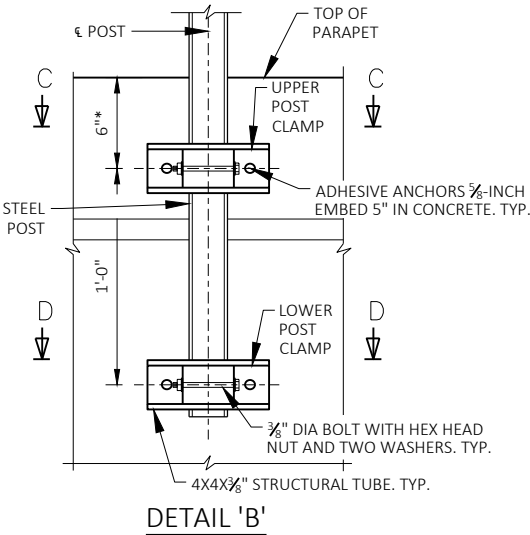


SECTION A-A

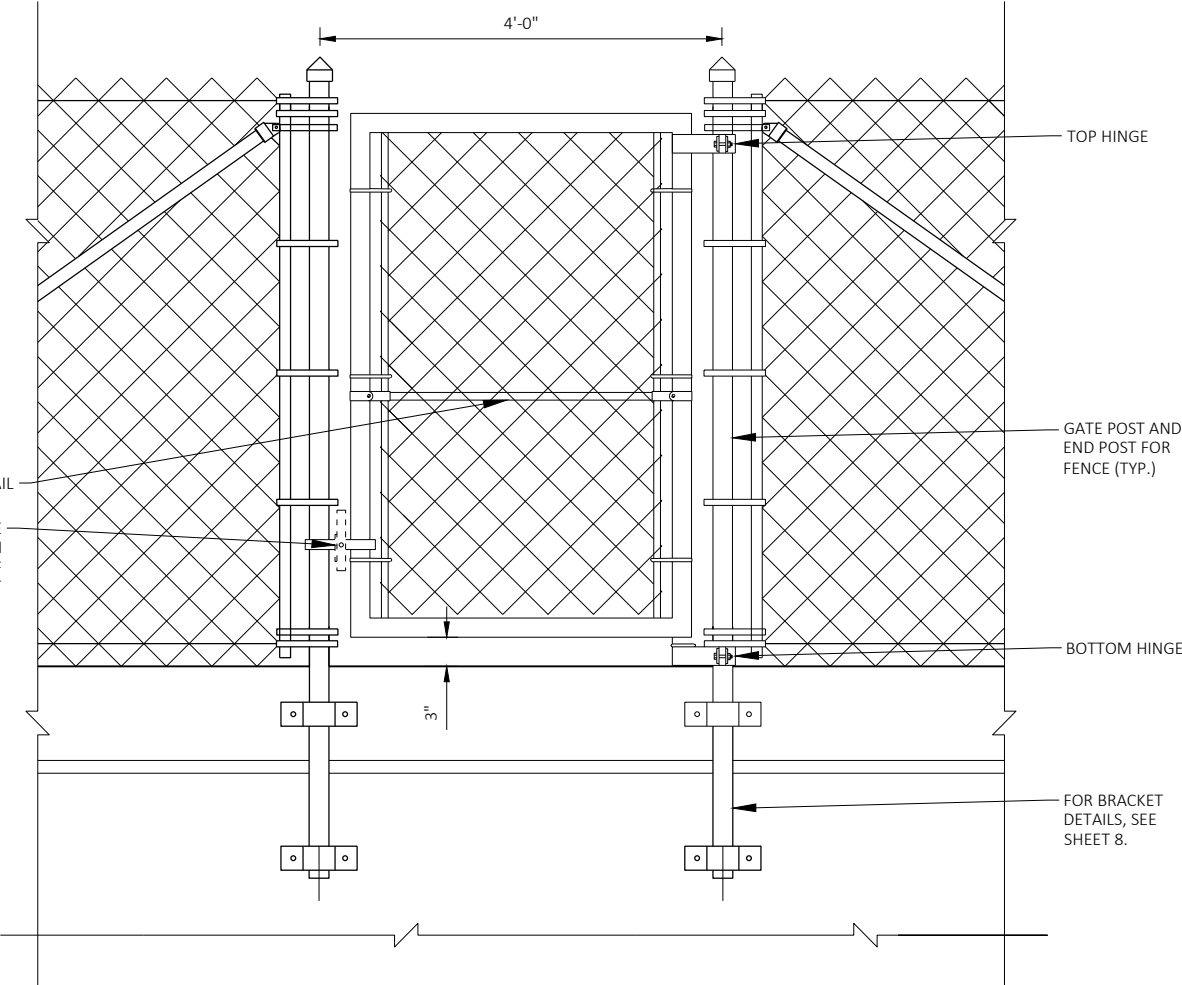
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



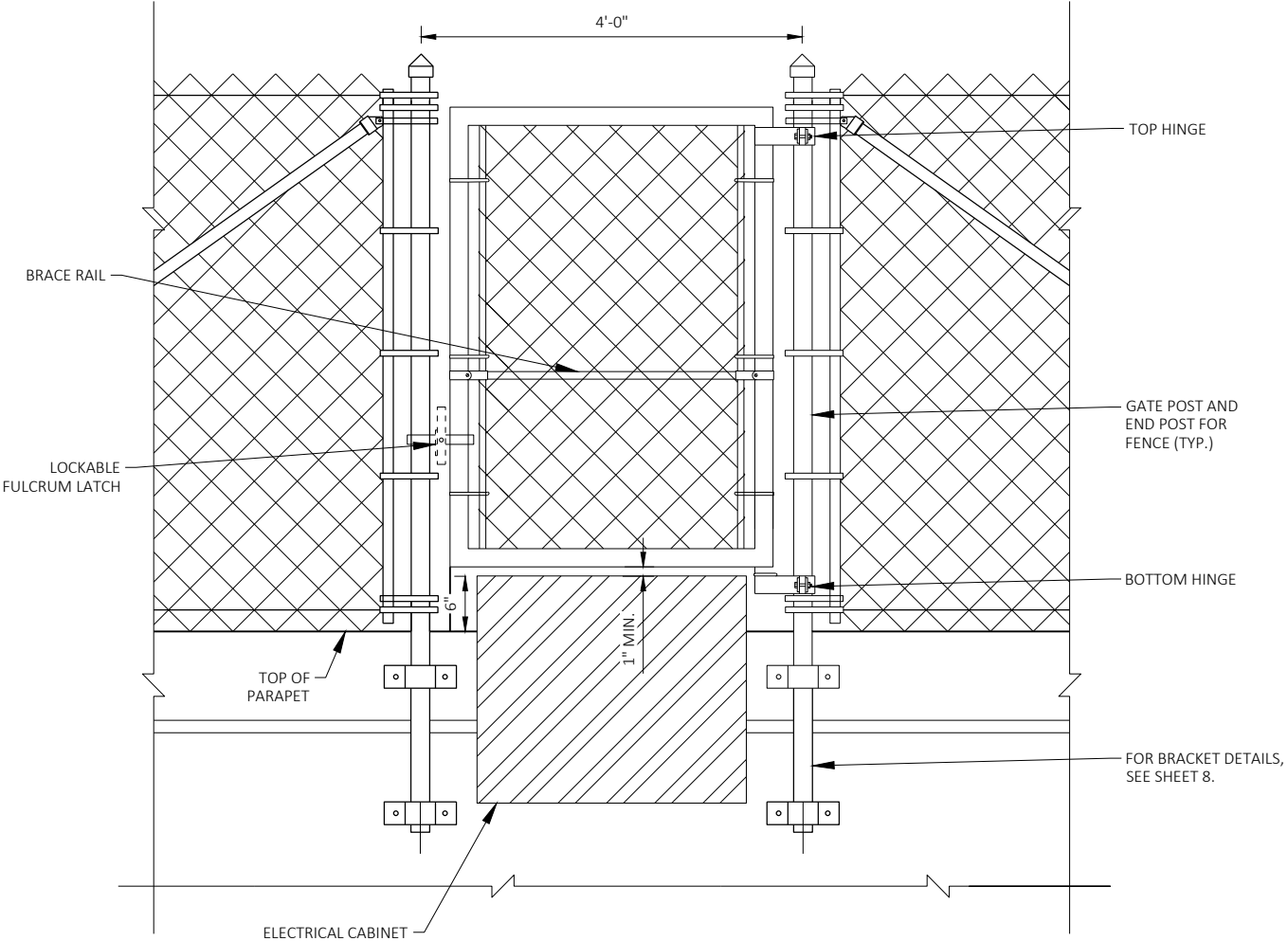
SECTION B-B



DETAIL 'B'

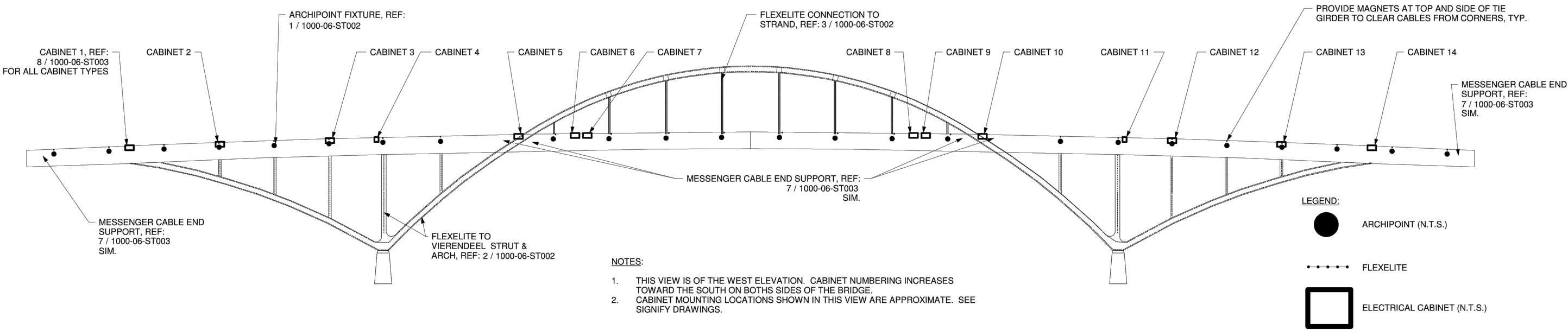


FULL HEIGHT GATE DETAIL
(6 EA)



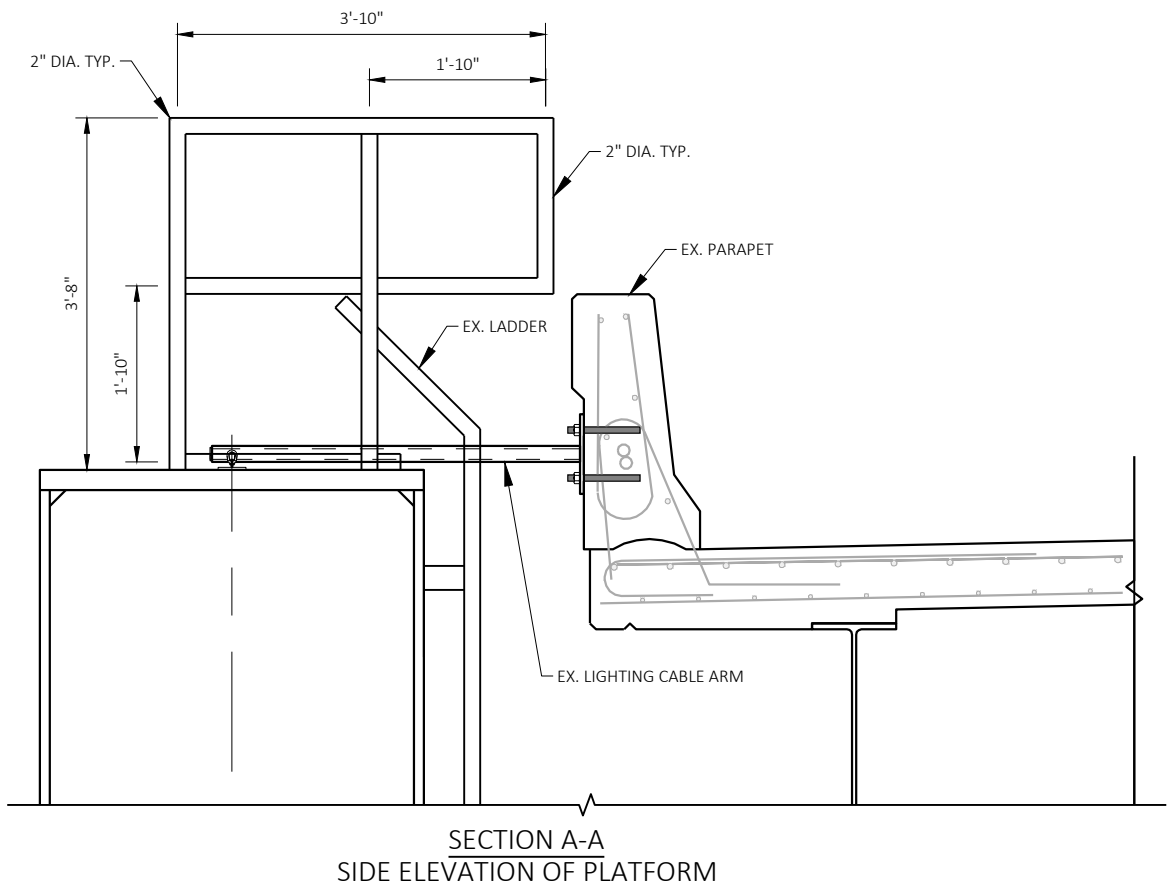
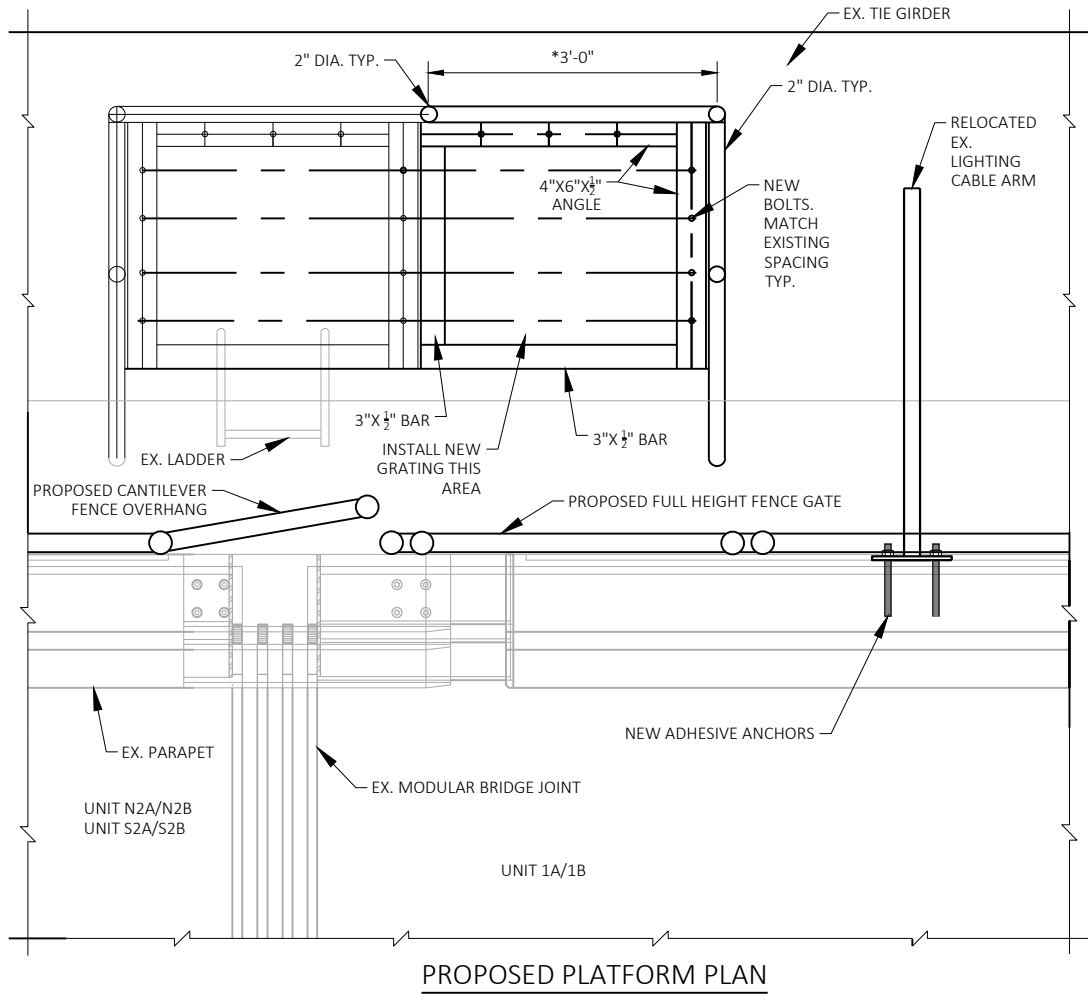
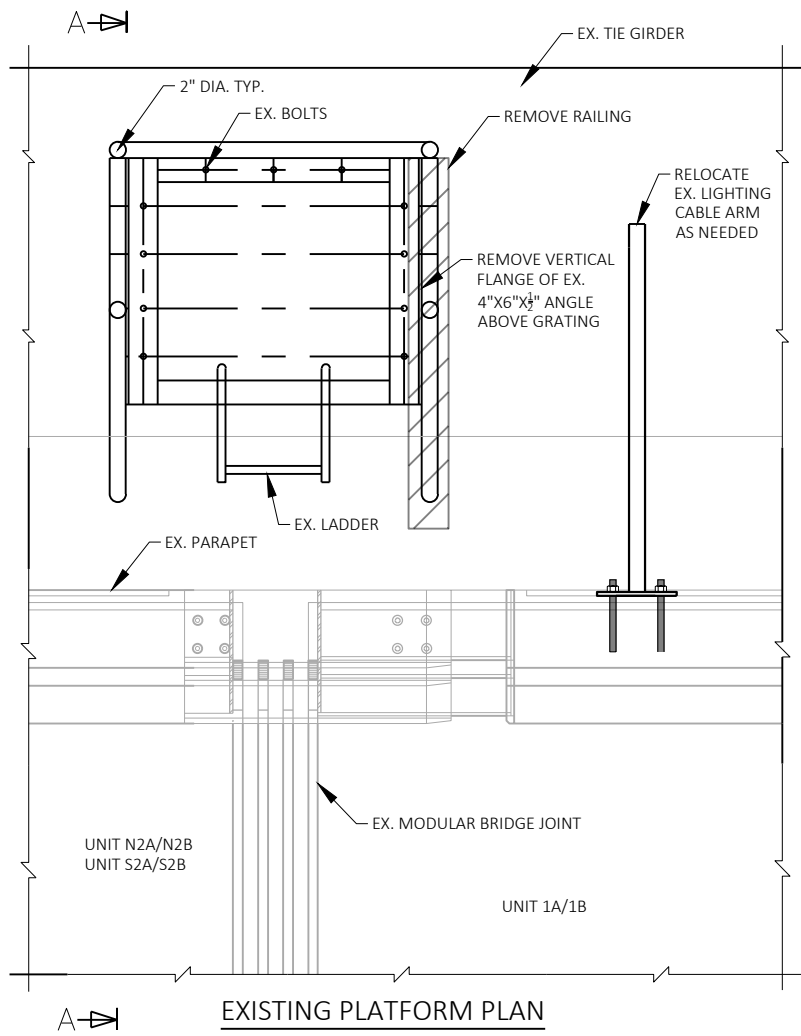
PART. HEIGHT GATE DETAIL
(28 EA)

| NO. | DATE | REVISION | BY |
|---|------|-------------|---------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-0001A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| FENCE GATE DETAILS | | | SHEET 9 OF 11 |



EXISTING DECORATIVE LIGHTING LAYOUT

| NO. | DATE | REVISION | BY |
|---|------|-------------|----------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-0001A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| LIGHTING DETAILS | | SHEET | 10 OF 11 |



NOTES:
WALKING GRATES NOT SHOWN FOR CLARITY

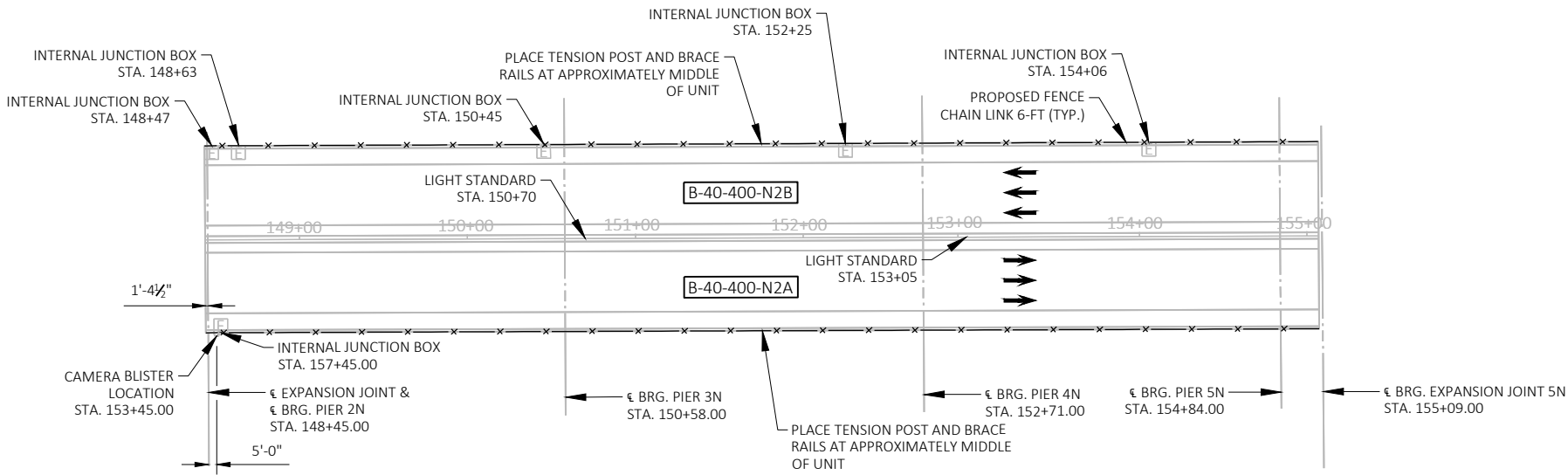
WELD GRATE TO ANGLES

WELD DETAILS NOT SHOWN FOR CLARITY. FILLET
WELDS ANTICIPATED CONNECTING ALL
MEMBERS.

GRATING 4"x 1½" SPACING, 1" TALL

*PLATFORM IS 3 FEET WIDE AT N2A SB. ALL
OTHER LOCATIONS, PLATFORM IS 4 FEET WIDE.

| NO. | DATE | REVISION | BY |
|---|------|-------------|----------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-40-0001A & 1B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PLATFORM DETAILS | | SHEET | 11 OF 11 |



PLAN (UNITS N2A & N2B)

NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

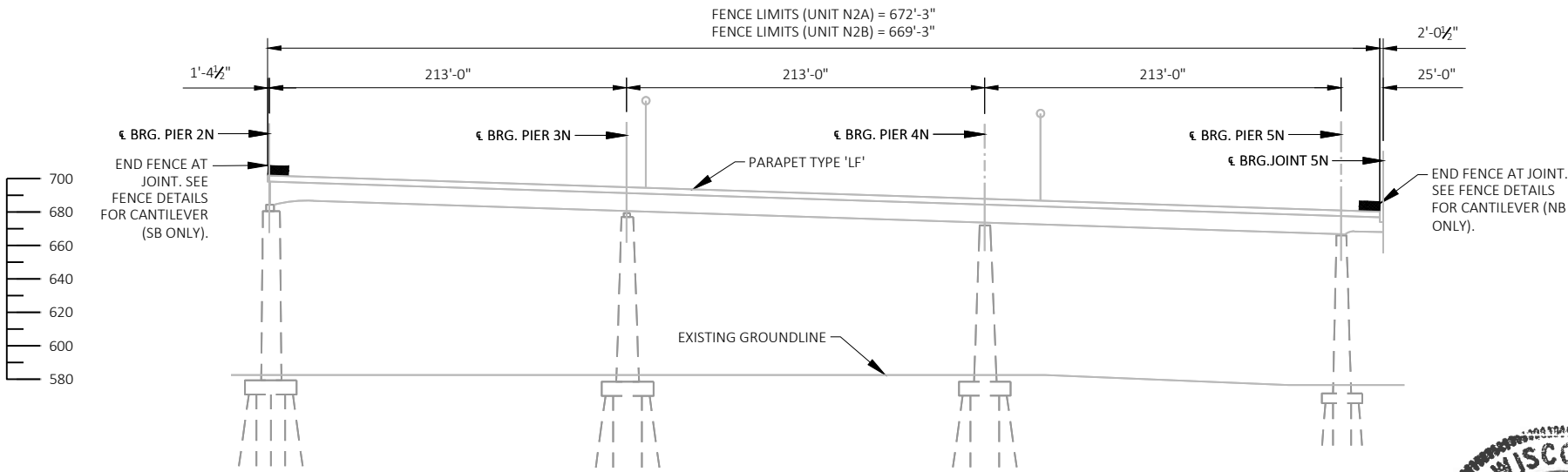
LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

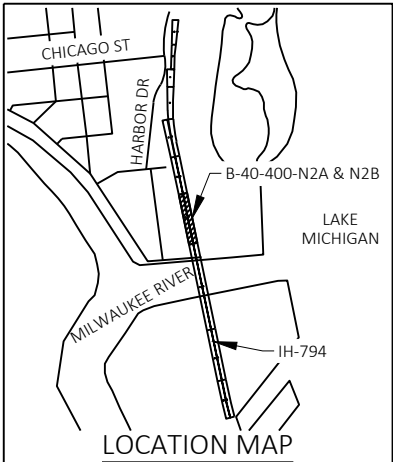
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTIONS
3. PARAPET DETAILS
4. CAMERA BLISTER DETAILS
5. FENCE DETAILS
6. MODULAR JOINT DETAILS



ELEVATION
LOOKING WEST



| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
|-----|------|----------|----|

COLLINS ENGINEERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ DATE _____
CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-40-400-N2A & N2B

IH 794-LAKE FREEWAY OVER LAND

COUNTY MILWAUKEE TOWN/CITY/VILLAGE MILWAUKEE

DESIGN SPEC. REHABILITATION N

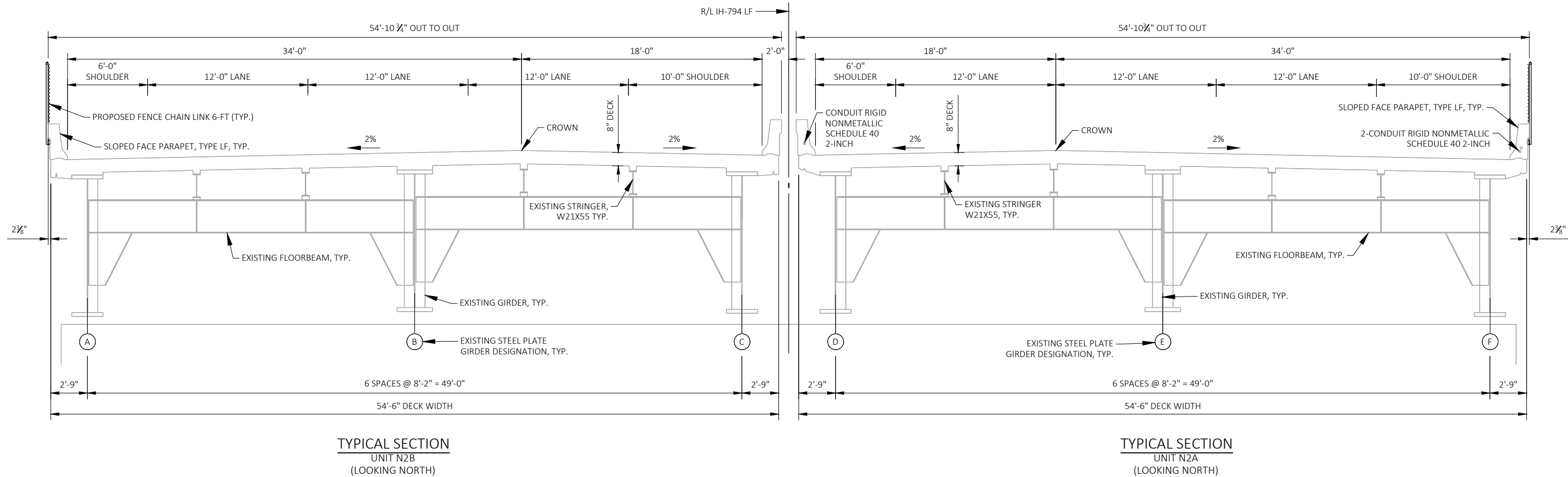
DESIGNED BY JCG DESIGNER JCG DRAWN MDG PLANS CK'D. JCG

GENERAL PLAN
& ELEVATION

SHEET 1 OF 6

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

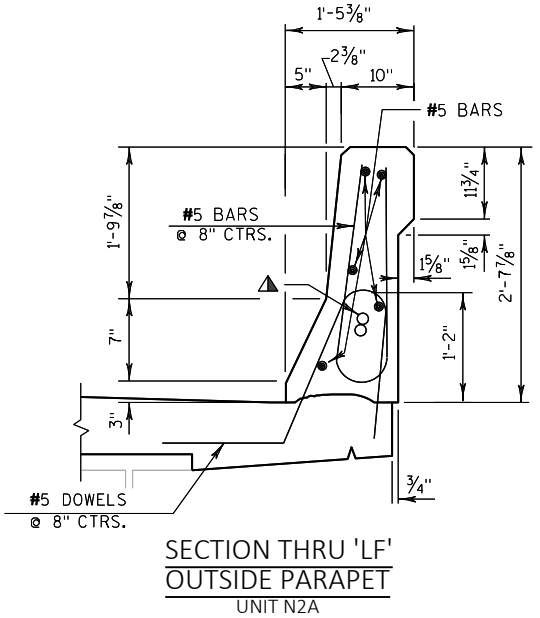
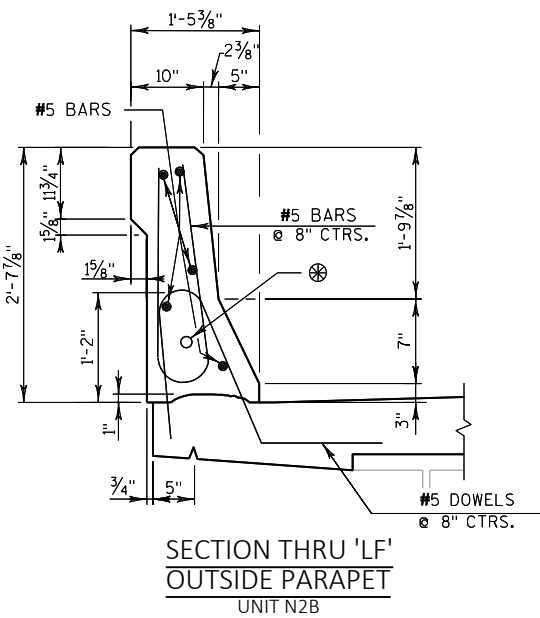
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905



ESTIMATE OF QUANTITIES

| ITEM NUMBER | BID ITEMS | QTY | UNIT |
|-------------|-----------------------|------|------|
| SPV.0090.XX | FENCE CHAIN LINK 6-FT | 1343 | LF |

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-4040-N2A & N2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTIONS | | SHEET 2 OF 6 | |



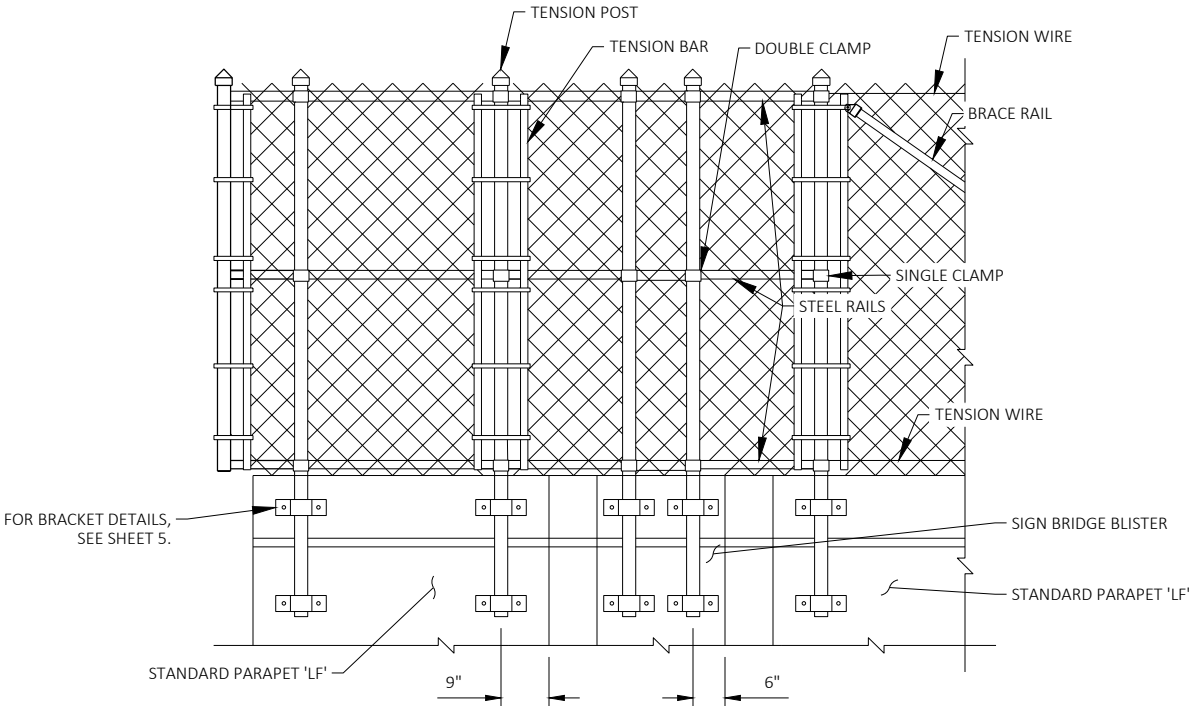
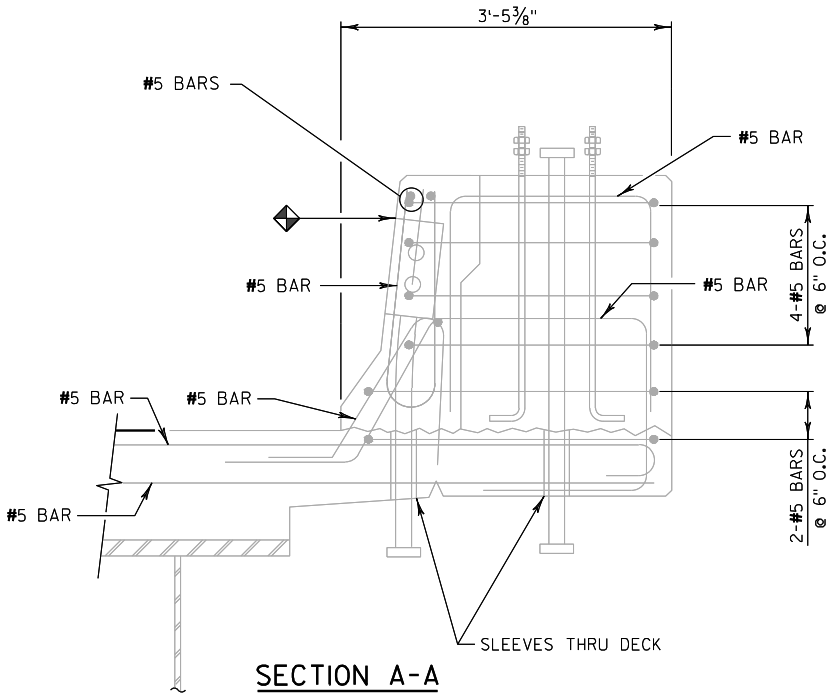
LEGEND

- ⊗ (1) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" LIGHTING CONDUIT, MEDIAN PARAPET
- ▲ (2) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR FTMS COMMUNICATIONS.

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40-400-N2A & N2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 6 | |

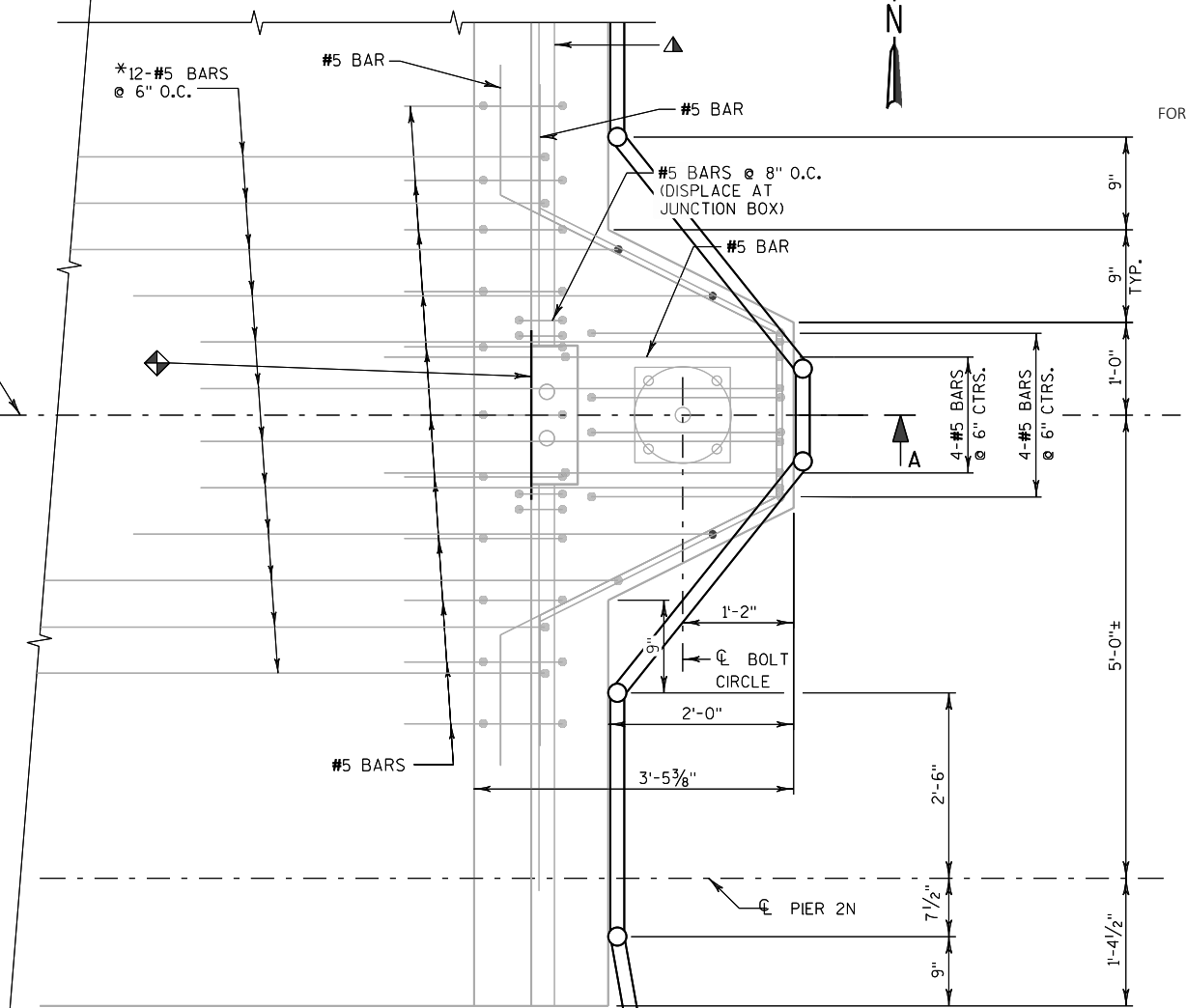
LEGEND

"JUNCTION BOXES 18X12X6-INCH SPECIAL"

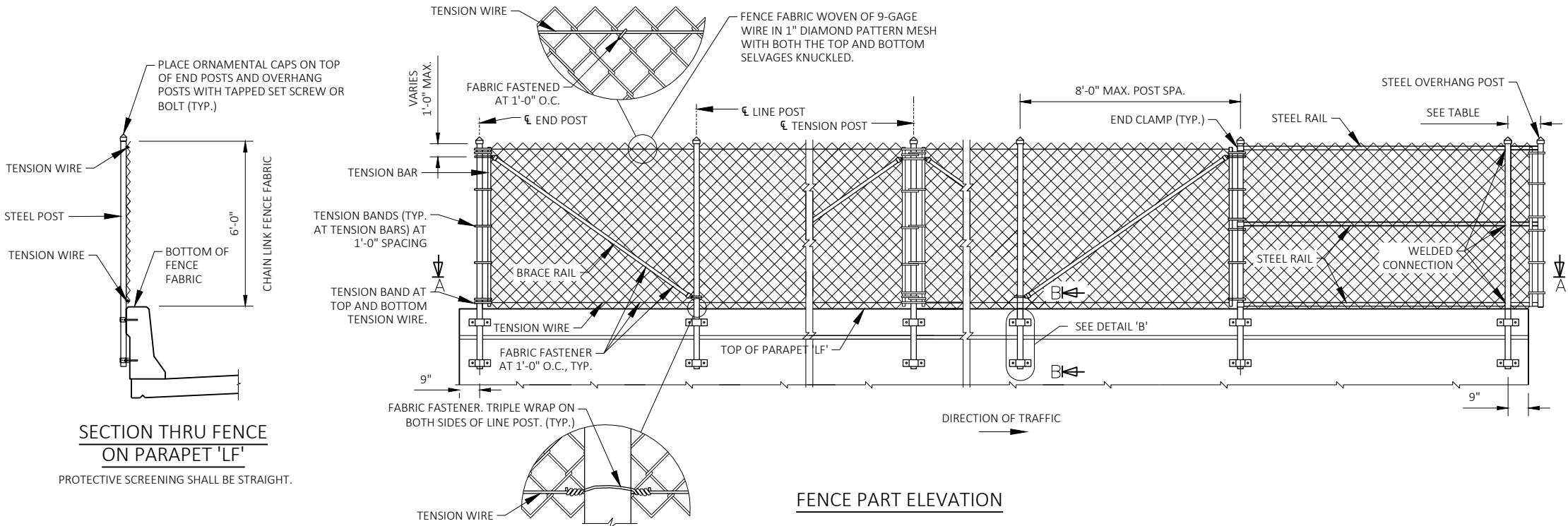


CL CAMERA POLE & JUNCTION BOX

A



| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40419-N2A & N2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CAMERA BLISTER DETAIL | | SHEET 4 OF 6 | |



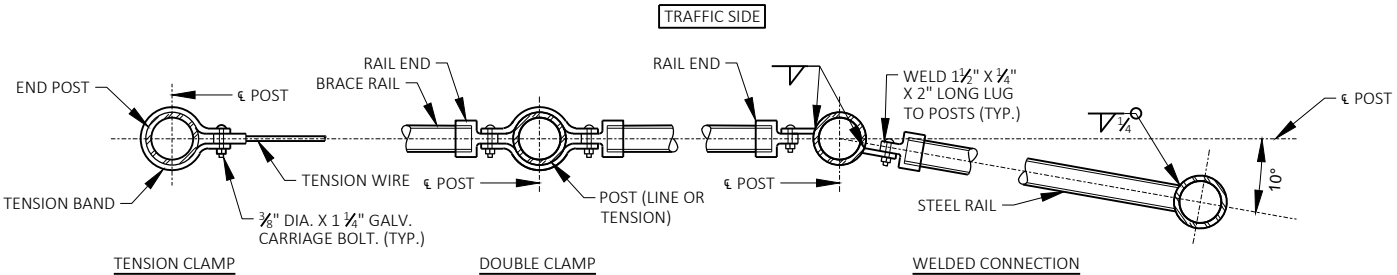
SECTION THRU FENCE ON PARAPET 'LF'

PROTECTIVE SCREENING SHALL BE STRAIGHT.

FENCE PART ELEVATION

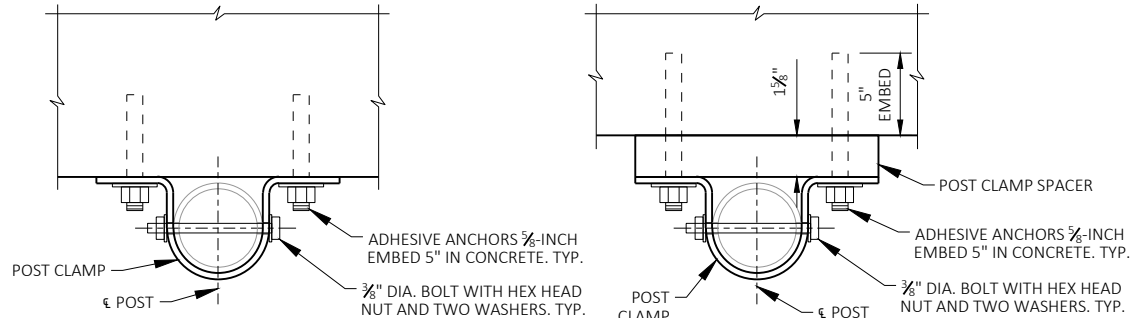
FENCE MEMBER SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |



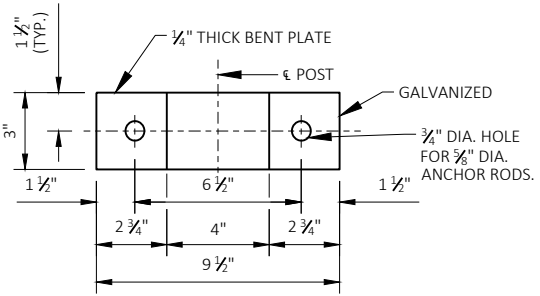
SECTION A-A

NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE

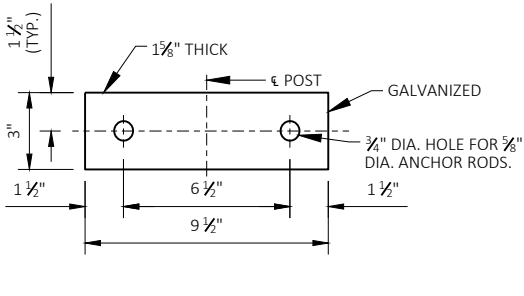


SECTION C-C

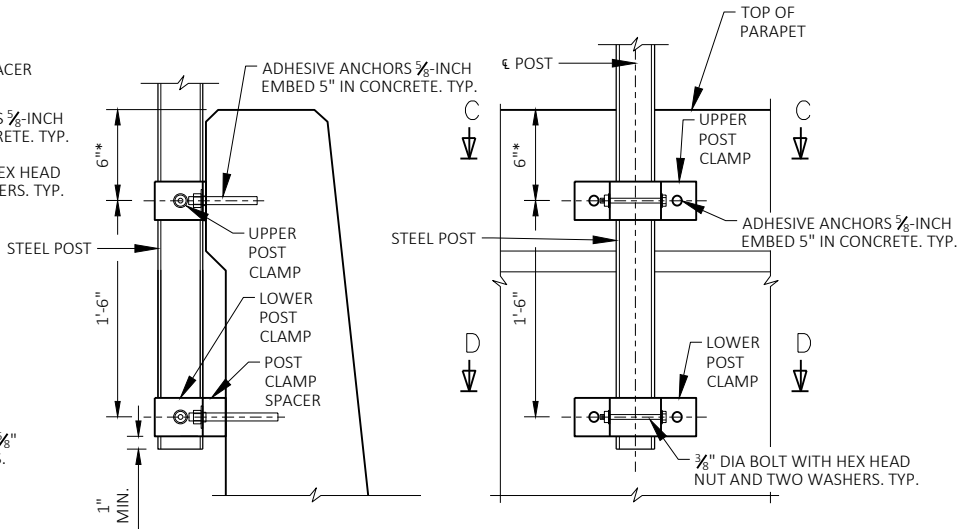
SECTION D-D



POST CLAMP DETAIL



POST CLAMP SPACER DETAIL



SECTION B-B

DETAIL 'B'

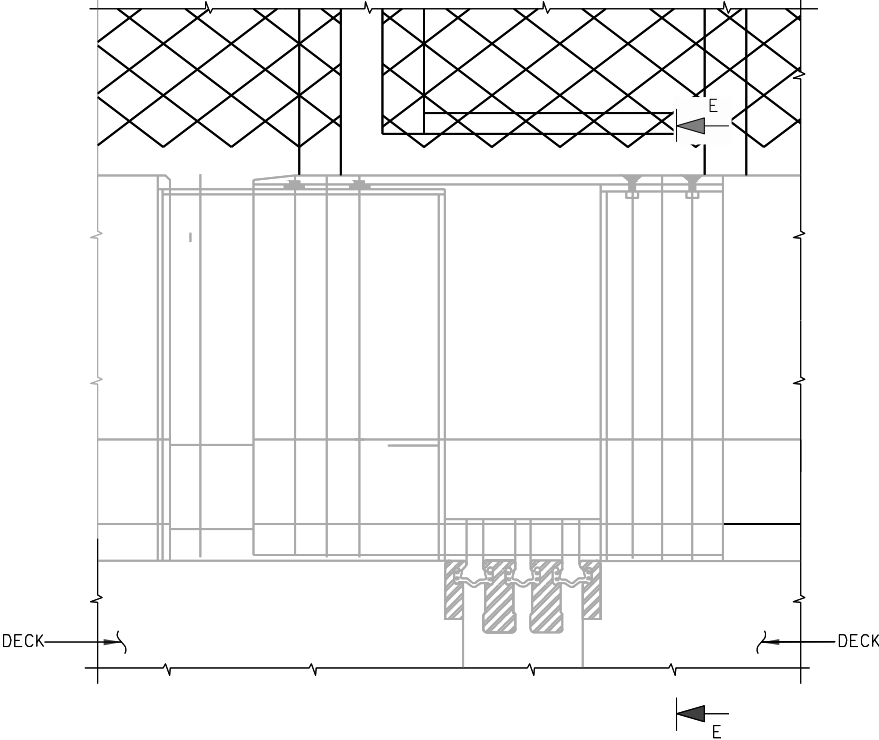
NOTES:

- POSTS ARE TO BE SET VERTICAL.
- METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.
- FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.
- THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."
- COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.
- POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.
- TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).
- ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.
- ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.
- CONCRETE ADHESIVE ANCHORS 5/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.
- ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".
- PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.
- PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

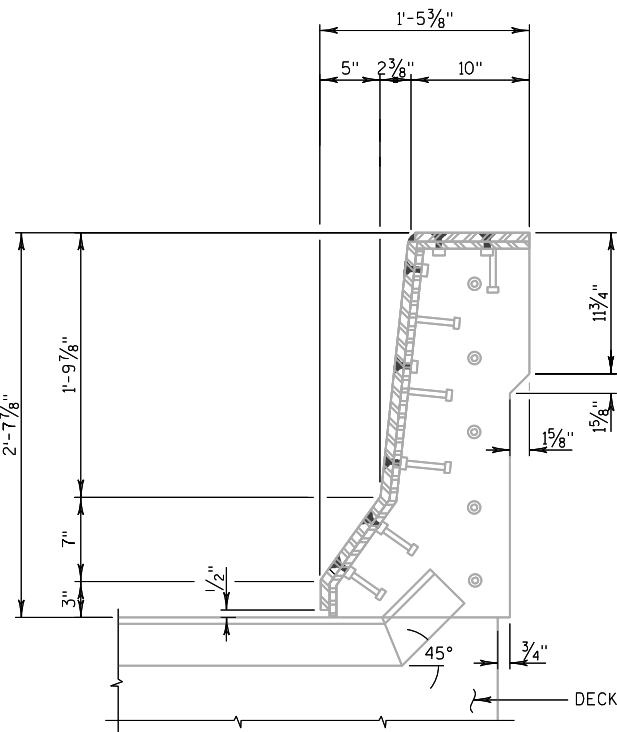
| CONDUIT ANCHOR CONFLICT | | | |
|-------------------------|---------------------|--------|--------------|
| SPAN | STATION OF CONFLICT | LENGTH | LOCATION |
| N2A | 148+55 TO 151+75 | 320 | UPPER ANCHOR |
| N2A | 152+64 TO 153+02 | 38.00 | UPPER ANCHOR |
| N2A | 153+45 TO 154+33 | 88.0 | UPPER ANCHOR |

* REVISE DIMENSION TO 4.5" AT LOCATIONS NOTED TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET. REVISE DIMENSION TO 7" AT APPROXIMATELY STA 150+45 TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET

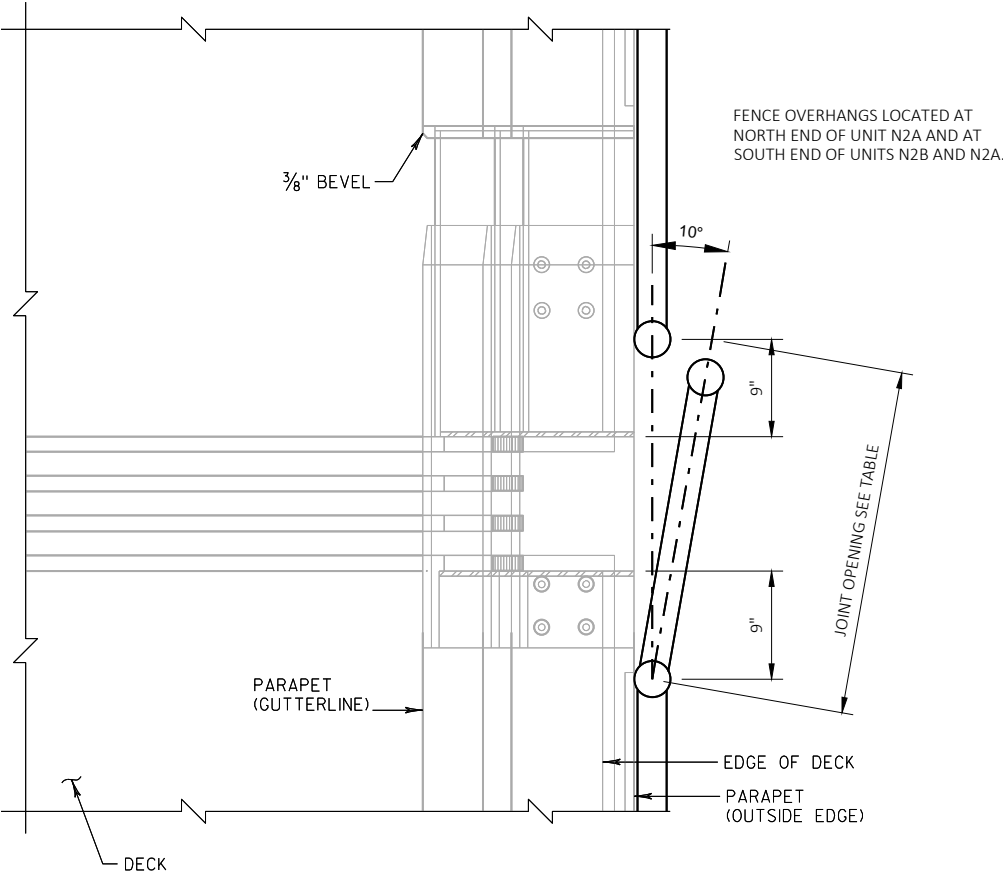
| NO. | DATE | REVISION | BY |
|---|------|-------------|--------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-4040-N2A & N2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| FENCE DETAILS | | | SHEET 5 OF 6 |



ELEVATION OF PARAPET



SECTION E-E



PLAN OF PARAPET

| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| SB | N2B TO 1B | 19.25 | 40 |
| NB | N2A TO 1A | 18.5 | 40 |
| NB | N2A TO N3A | 16 | 36 |

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40419-N2A & N2B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| MODULAR JOINT DETAILS | | SHEET 6 OF 6 | |

NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

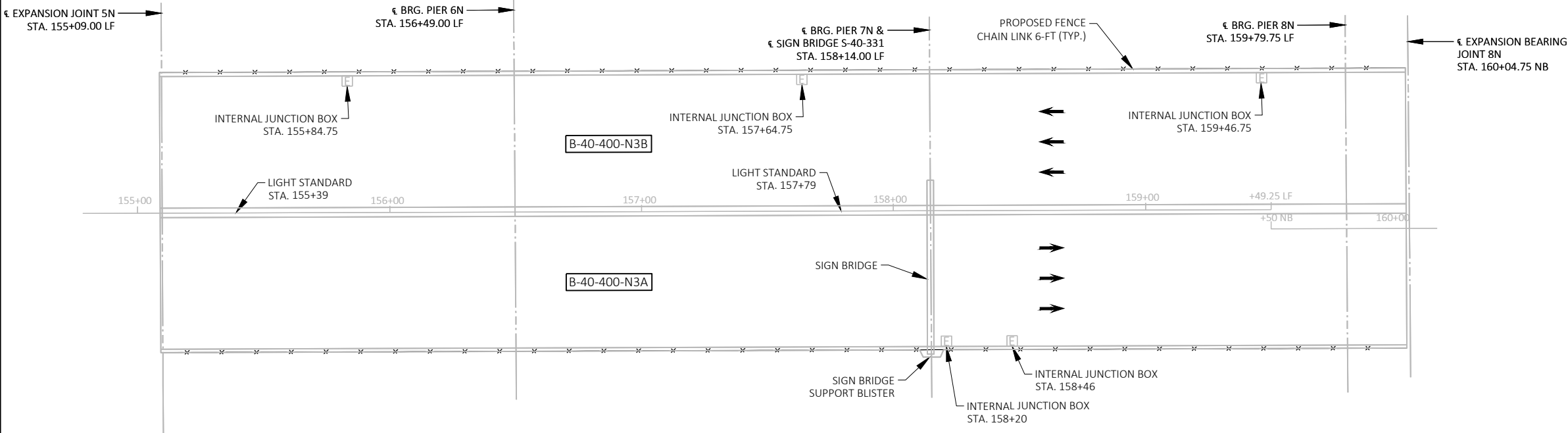
LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

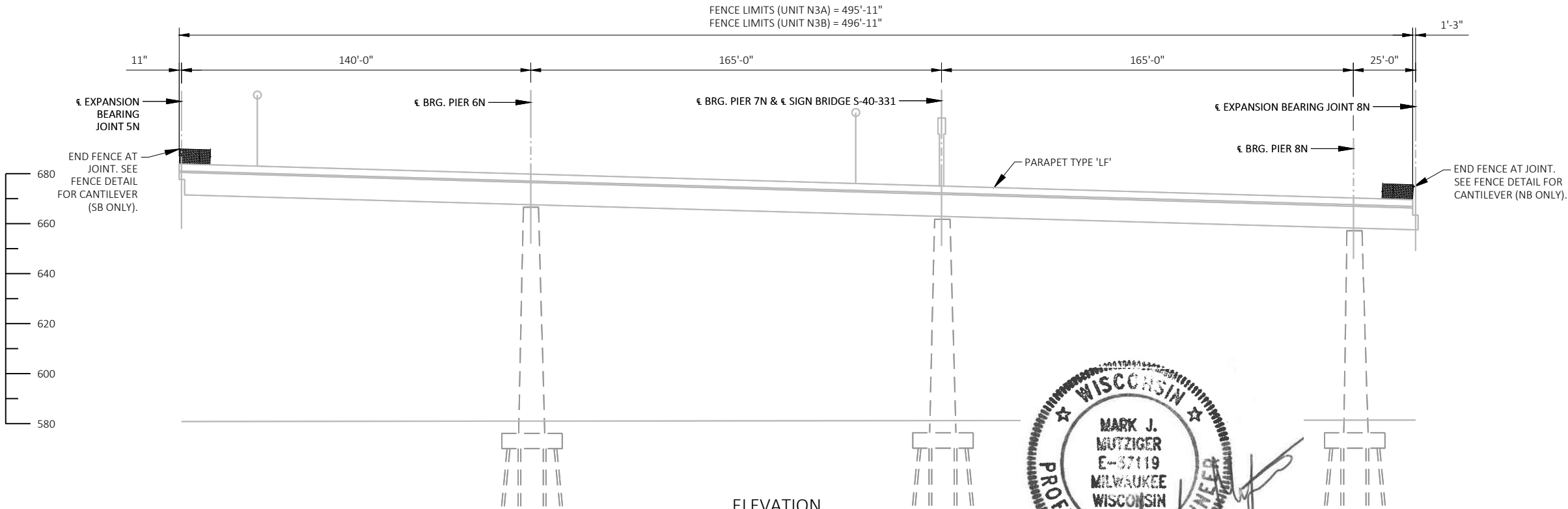
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

LIST OF DRAWINGS

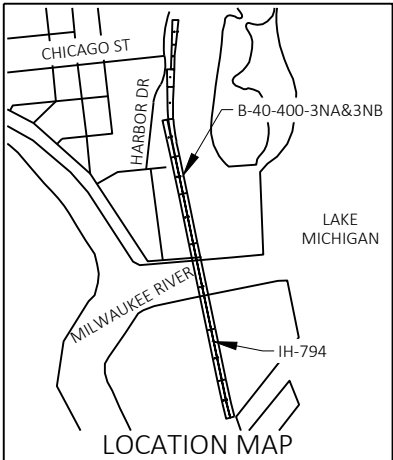
1. GENERAL PLAN & ELEVATION
2. CROSS SECTIONS
3. PARAPET DETAILS
4. SIGN BRIDGE BLISTER DETAILS
5. FENCE DETAILS
6. MODULAR JOINT DETAILS



PLAN (UNITS N3A & N3B)



ELEVATION
LOOKING WEST

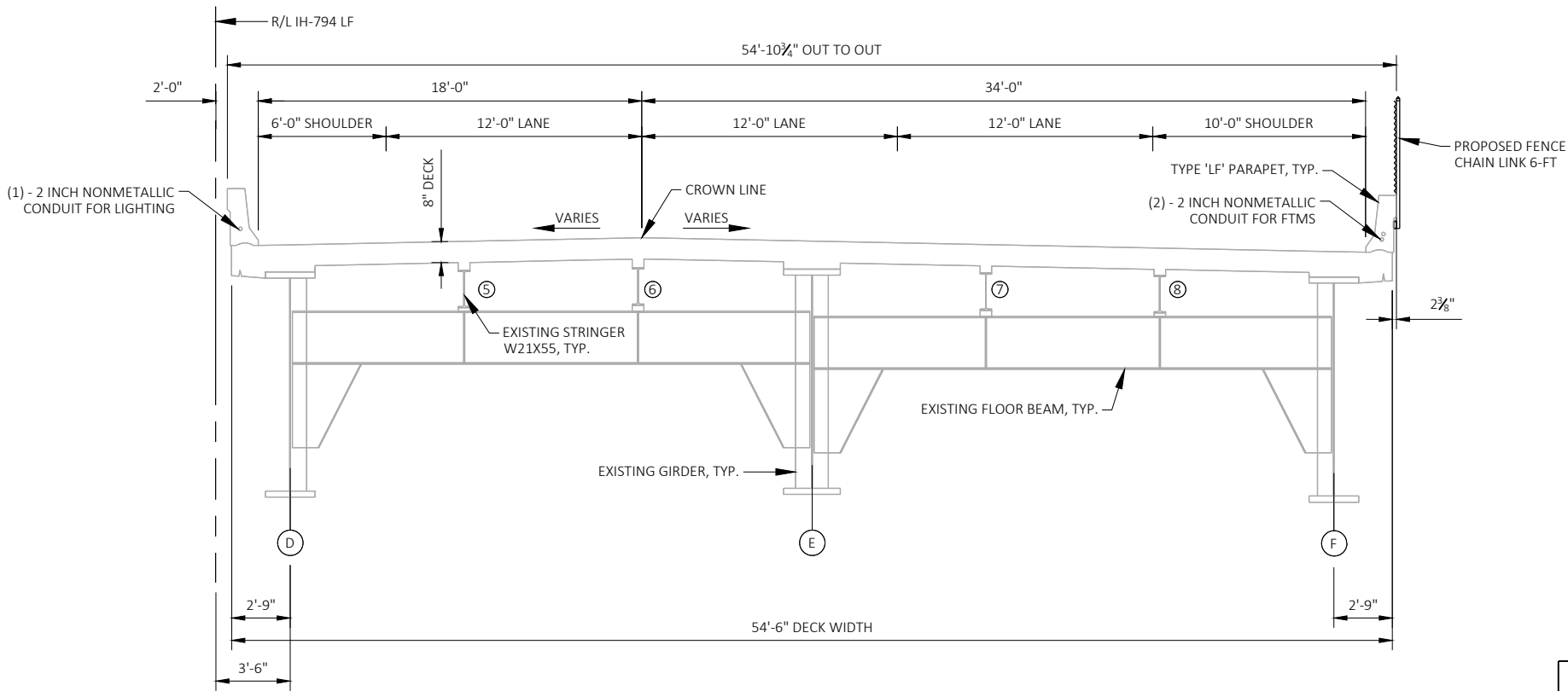


| NO. | DATE | REVISION | BY |
|--|----------------|----------------------------------|--------------|
| COLLINS ENGINEERS | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-N3A & N3B | | | |
| IH 794-LAKE FREEWAY OVER LAND | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | | |
| DESIGNED BY | JCG | DESIGN CHECKED BY | MDG |
| DRAWN BY | MDG | PLANS CK'D BY | JCG |
| GENERAL PLAN & ELEVATION | | | SHEET 1 OF 6 |

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905





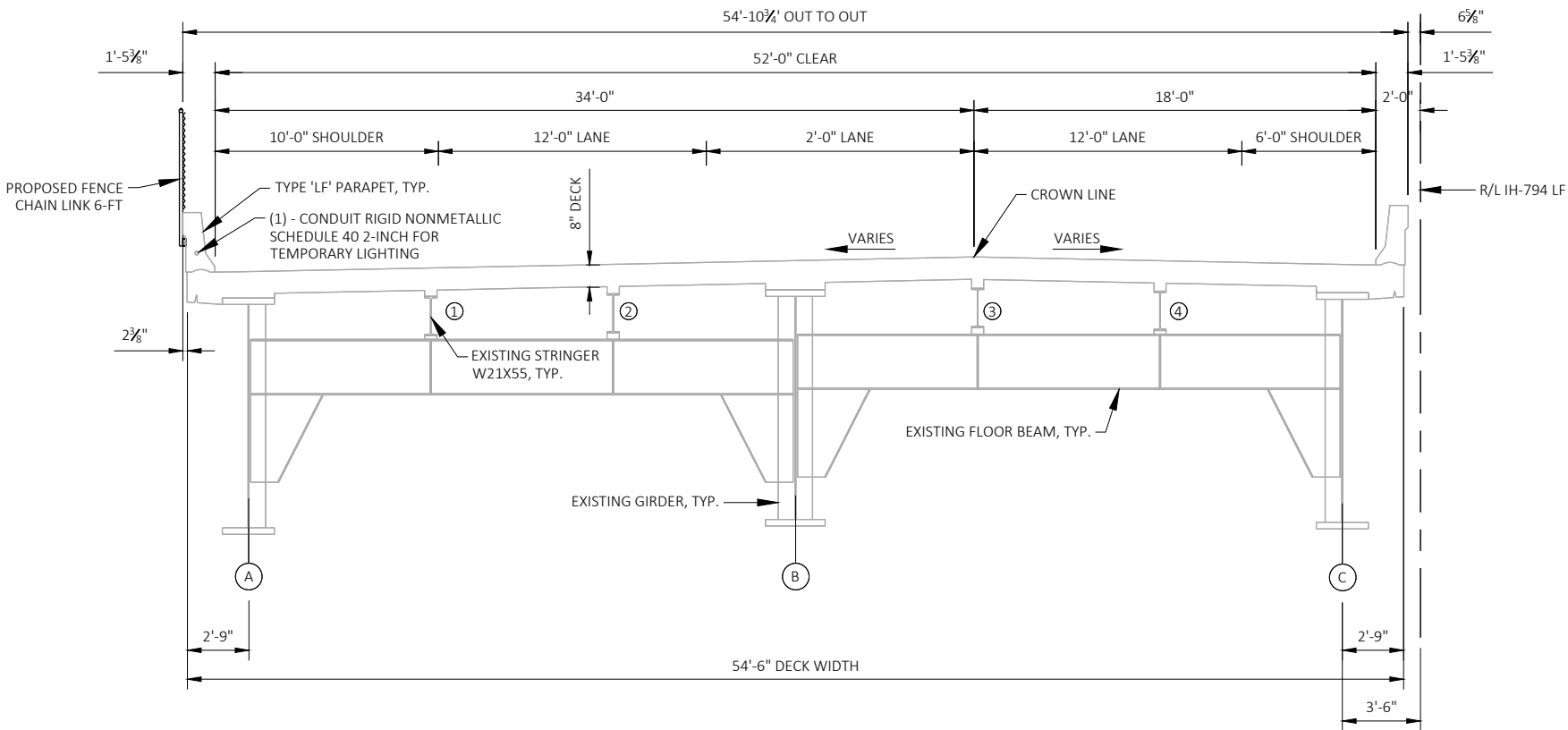
TYPICAL SECTION

UNIT N3A

SECTION ALONG STA. 155+09.00 LF TO STA. 159+49.25 LF SHOWN
SECTION ALONG STA. 159+50.00 NB TO STA. 160+04.75 NB SIMILAR
(LOOKING NORTH)

ESTIMATE OF QUANTITIES

| ITEM NUMBER | BID ITEMS | QTY | UNIT |
|-------------|-----------------------|-----|------|
| 616.0206 | FENCE CHAIN LINK 6-FT | 993 | LF |

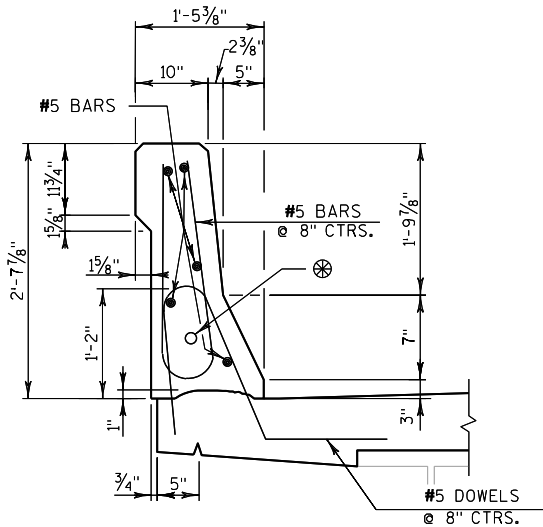


TYPICAL SECTION

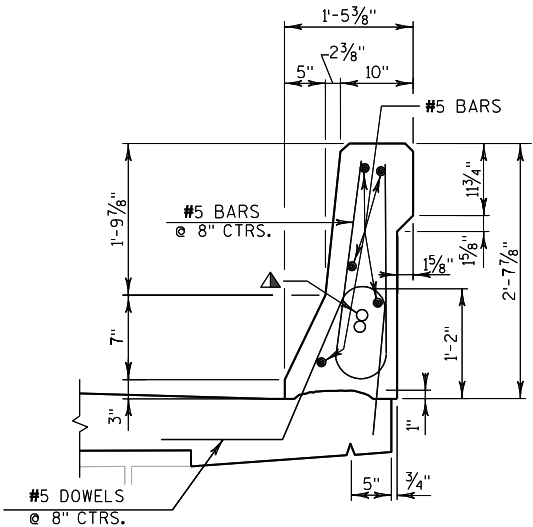
UNIT N3B

SECTION ALONG STA. 155+09.00 LF TO STA. 159+49.25 LF SHOWN
SECTION ALONG STA. 159+50.00 SB TO STA. 160+04.75 SB SIMILAR
(LOOKING NORTH)

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-404-N3A & N3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTIONS | | SHEET 2 OF 6 | |



SECTION THRU 'LF'
OUTSIDE PARAPET
UNIT N3B



SECTION THRU 'LF'
OUTSIDE PARAPET
UNIT N3A

LEGEND

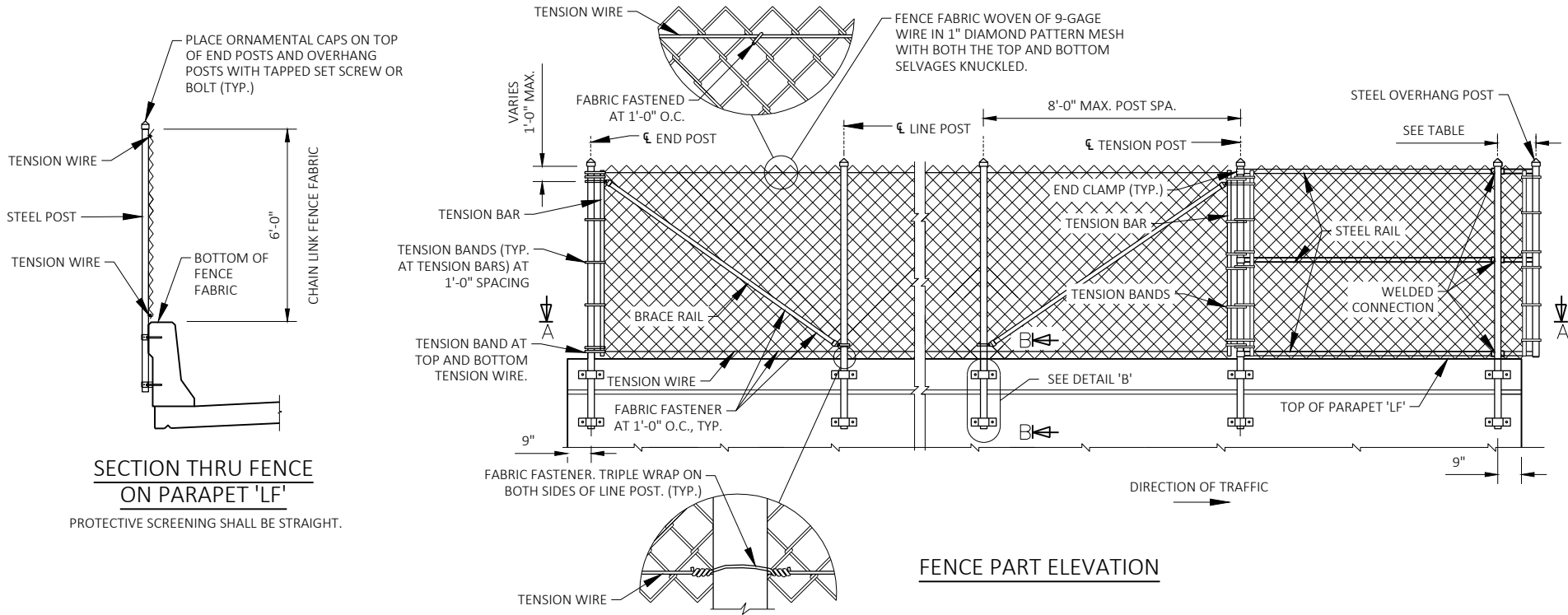
- ⊗ (1) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH FOR TEMPORARY LIGHTING.
- ▲ (2) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR FTMS.

| | | | | |
|---|------|----------|--------------|-----|
| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | | |
| STRUCTURE R-40 400-N3A & N3B | | | | |
| DRAWN BY | | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | | SHEET 3 OF 6 | |



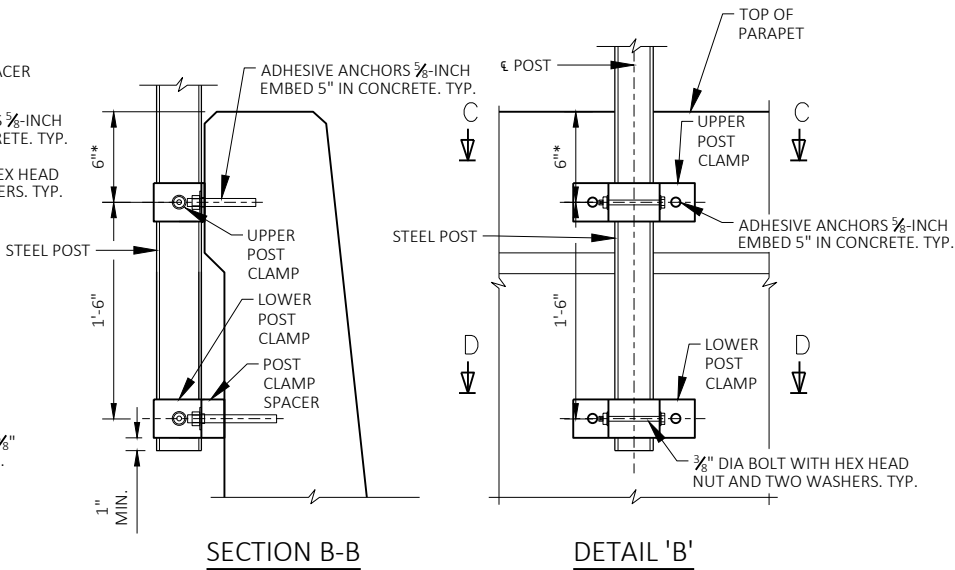
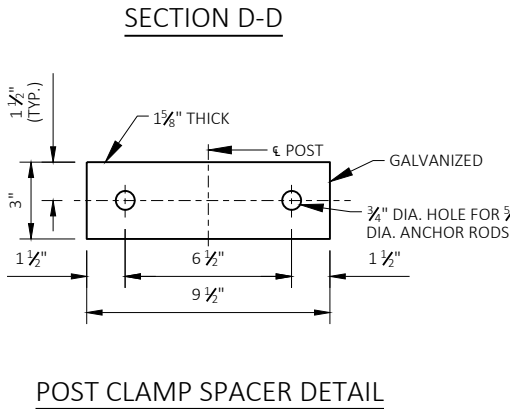
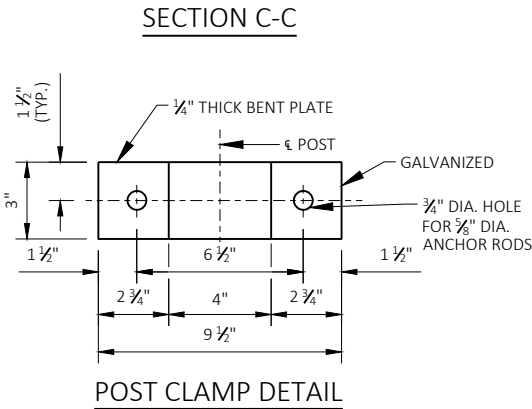
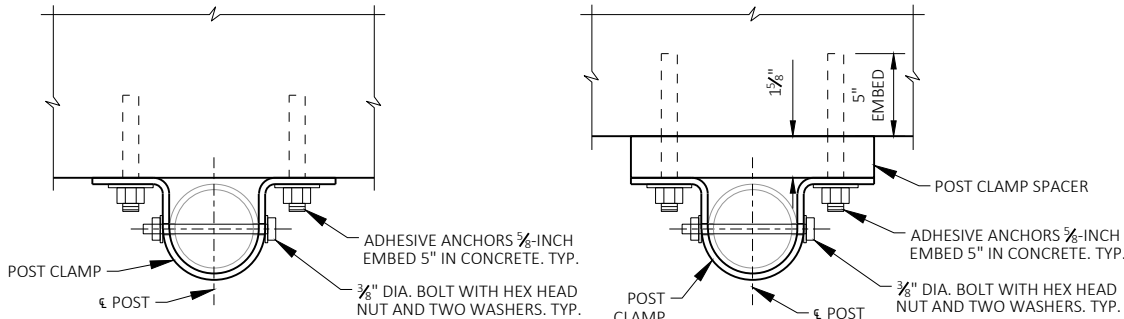
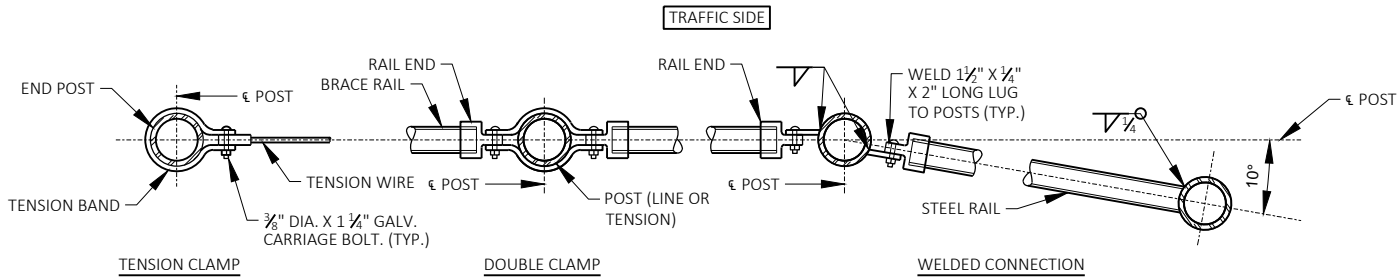
▲ "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR FTMS COMMUNICATIONS AT EAST EXTERIOR PARAPET ONLY.

| | | | | |
|---|------|----------|-------------|----|
| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | | |
| STRUCTURE B-40402-N3A & N3B | | | | |
| DRAWN BY | | MDG | PLANS CK'D. | J |
| SIGN BRIDGE BLISTER DETAILS | | | SHEET 4 OF | |



FENCE MEMBER
SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |



NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 3/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

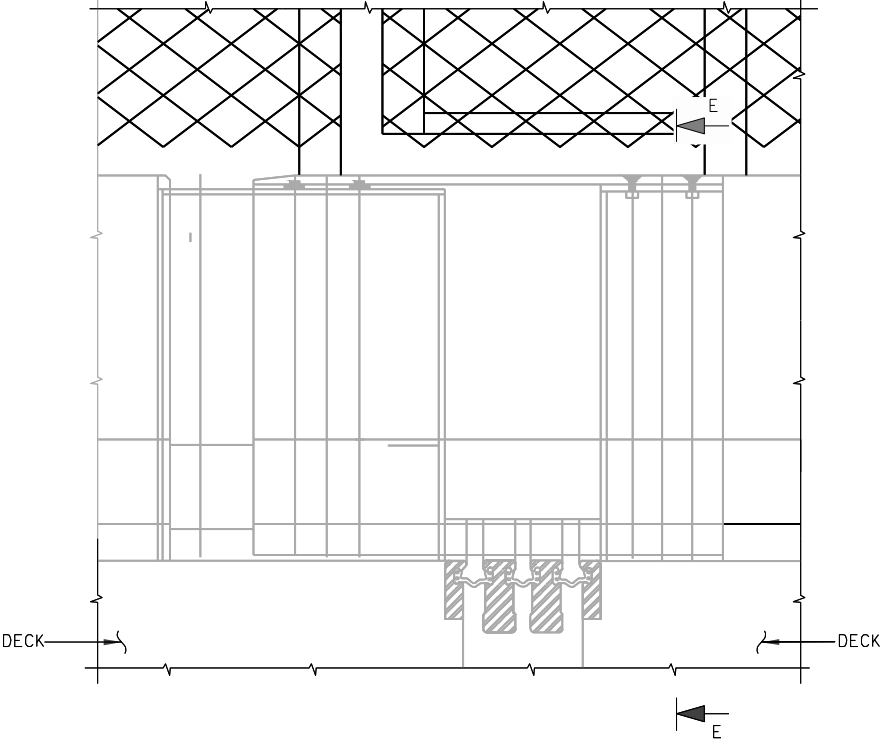
PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

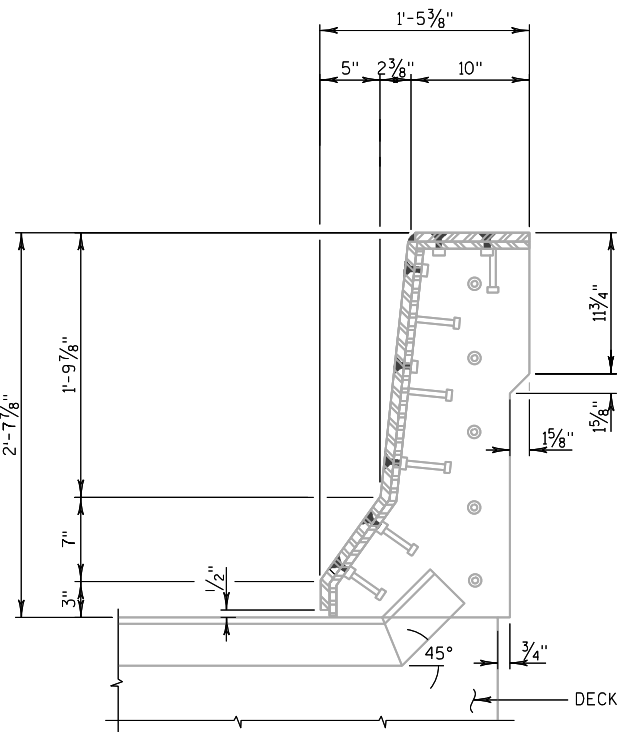
| CONDUIT ANCHOR CONFLICT | | | |
|-------------------------|---------------------|--------|--------------|
| SPAN | STATION OF CONFLICT | LENGTH | LOCATION |
| N3A | 155+89 TO 157+19 | 130 | UPPER ANCHOR |
| N3A | 158+47 TO 159+09 | 62 | UPPER ANCHOR |

* REVISE DIMENSION TO 4.5" AT LOCATIONS NOTED TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET.

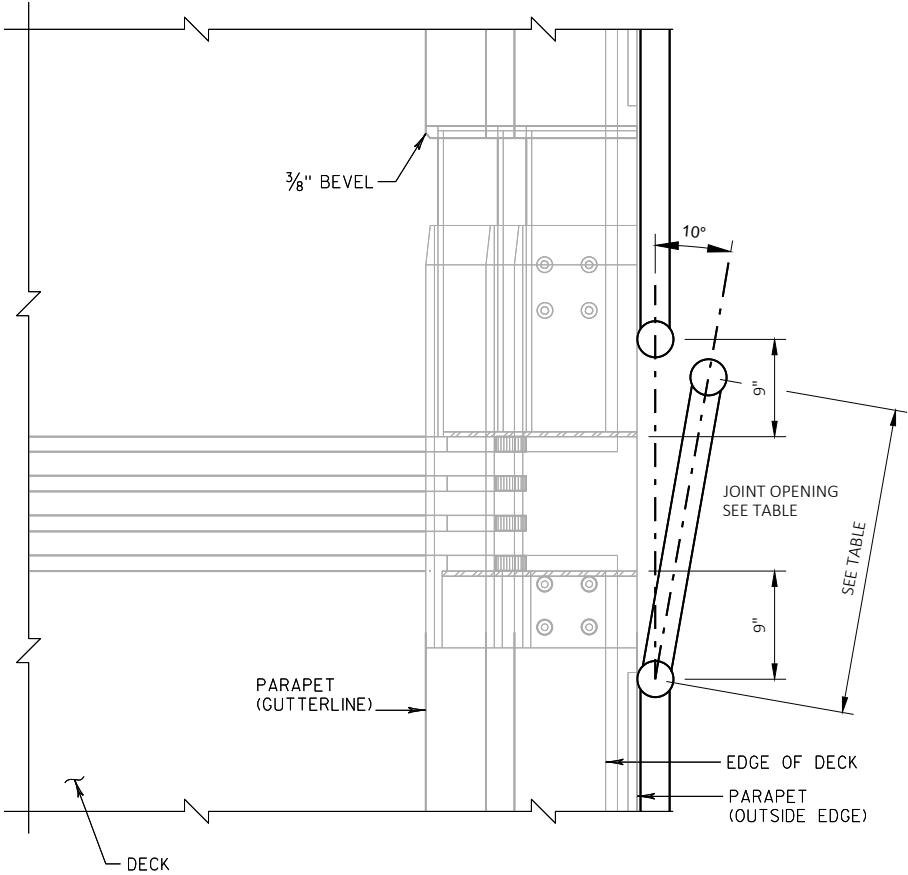
| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE P-4040-N3A & N3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| FENCE DETAILS | | SHEET 5 OF 6 | |



ELEVATION OF PARAPET



SECTION E-E



PLAN OF PARAPET

| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| SB | N3B TO N2B | 15 | 36 |
| NB | N3A TO N4A | 7.5 | 24 |

| NO. | DATE | REVISION | BY |
|---|------|-------------|--------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-404-N3A & N3B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| MODULAR JOINT DETAILS | | SHEET | 6 OF 6 |

NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL
STRUCTURE PLANS.

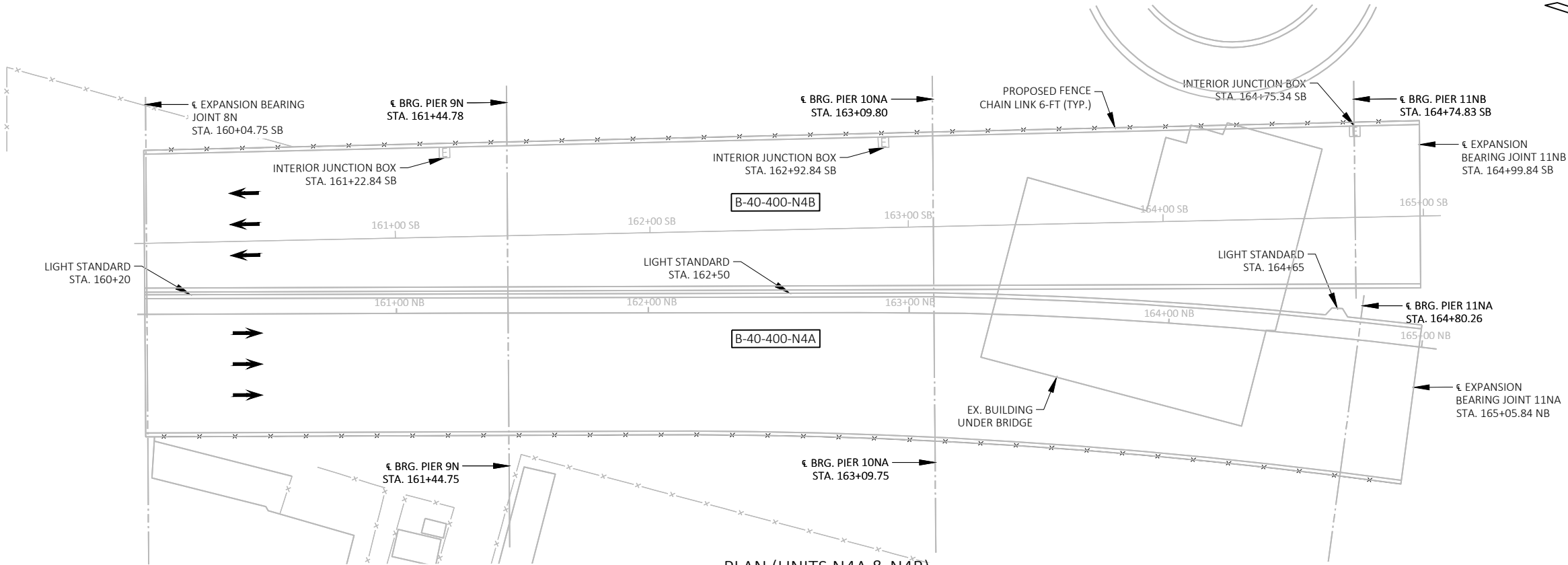
LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

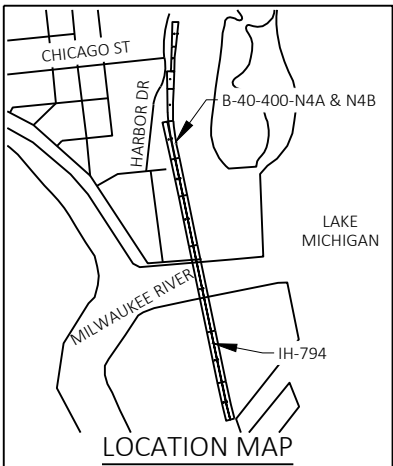
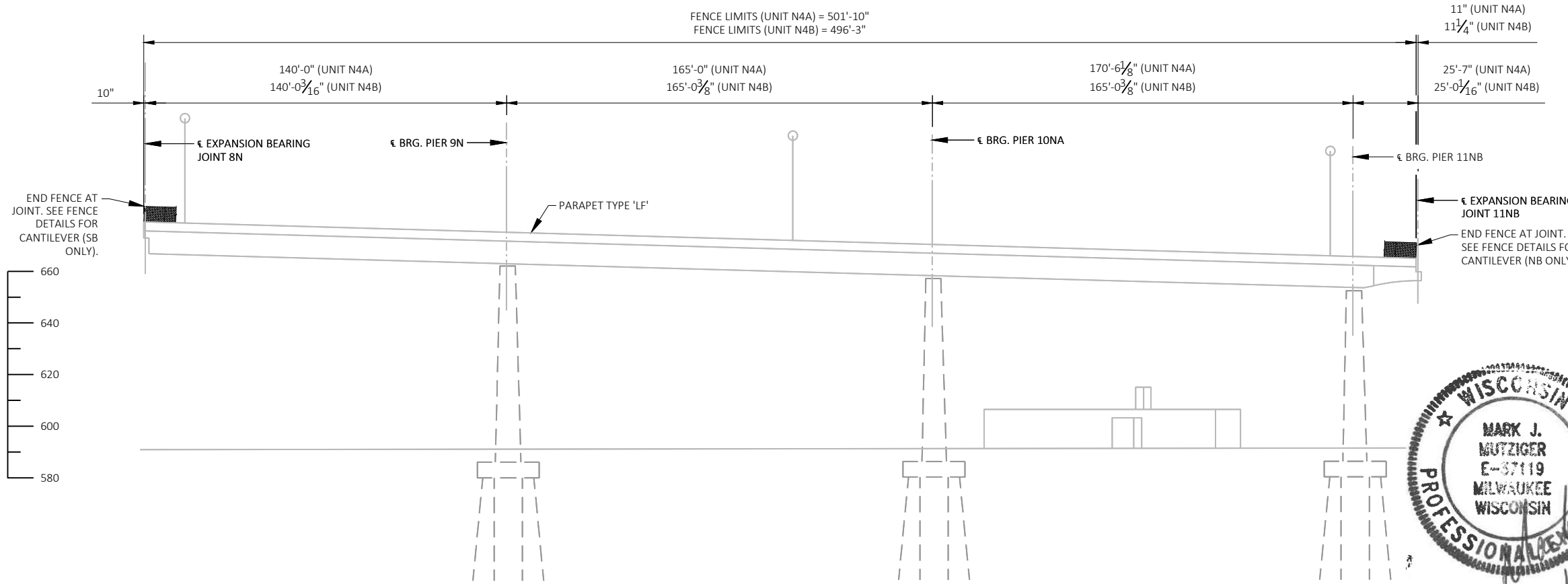
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTIONS
3. PARAPET DETAILS
4. FENCE DETAILS
5. MODULAR JOINT DETAILS



FENCE LIMITS (UNIT N4A) = 501'-10"
FENCE LIMITS (UNIT N4B) = 496'-3"



| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
|-----|------|----------|----|

COLLINS ENGINEERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ DATE _____
CHIEF STRUCTURES DESIGN ENGINEER

STRUCTURE B-40-400-N4A & N4B

IH 794-LAKE FREEWAY OVER LAND

COUNTY MILWAUKEE TOWN/CITY/VILLAGE MILWAUKEE

DESIGN SPEC. REHABILITATION

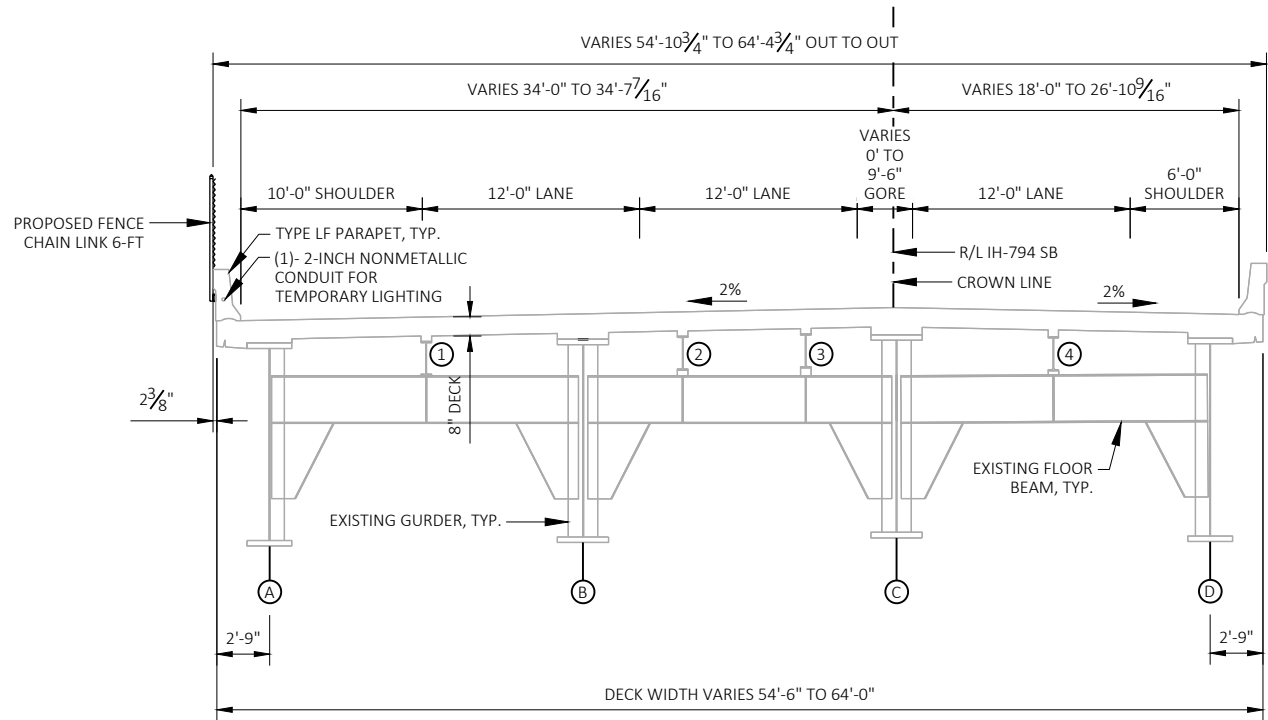
DESIGNED BY JCG CK'D BY JCG DRAWN BY MDG PLANS CK'D BY JCG

**GENERAL PLAN
& ELEVATION**

SHEET 1 OF 5

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

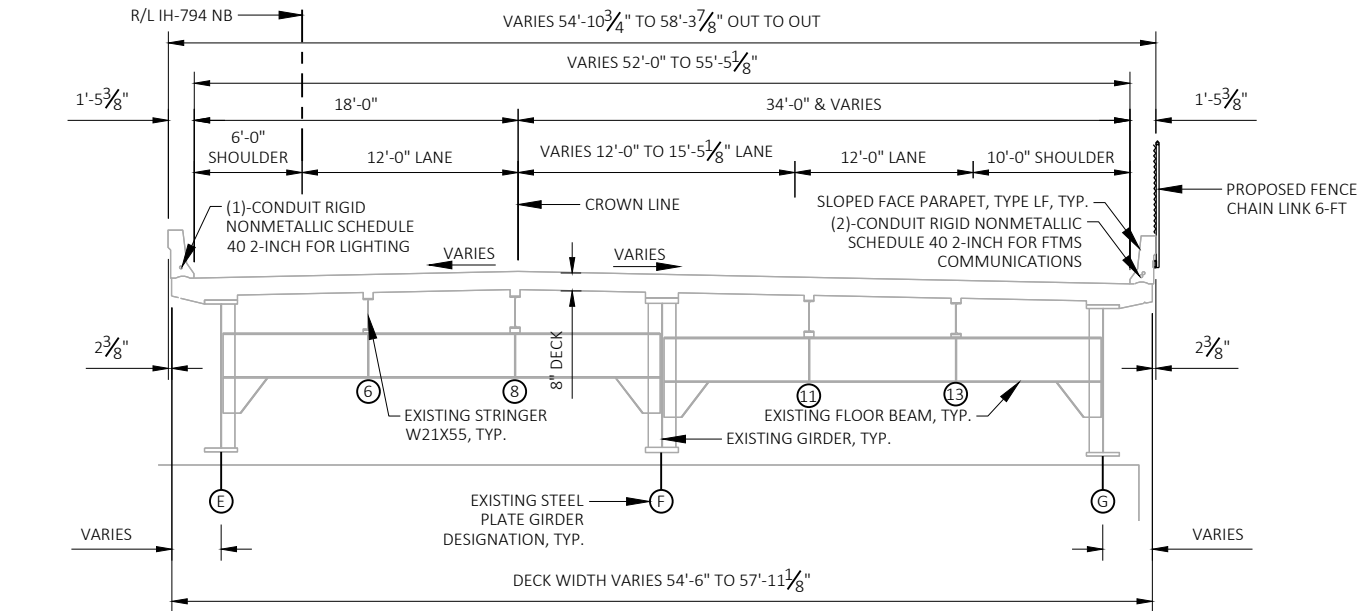
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905



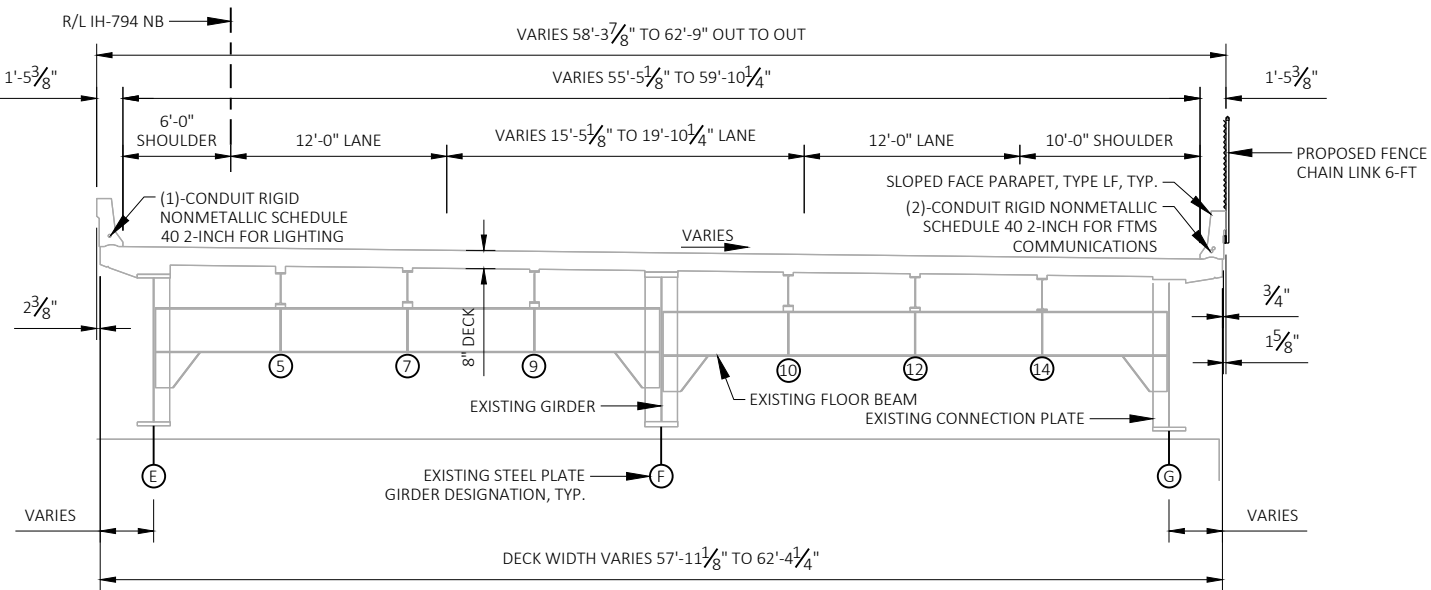
TYPICAL SECTION
UNIT N4B
(LOOKING NORTH)

ESTIMATE OF QUANTITIES

| ITEM NUMBER | BID ITEMS | QTY | UNIT |
|-------------|-----------------------|-----|------|
| SPV.0090.XX | FENCE CHAIN LINK 6-FT | 999 | LF |

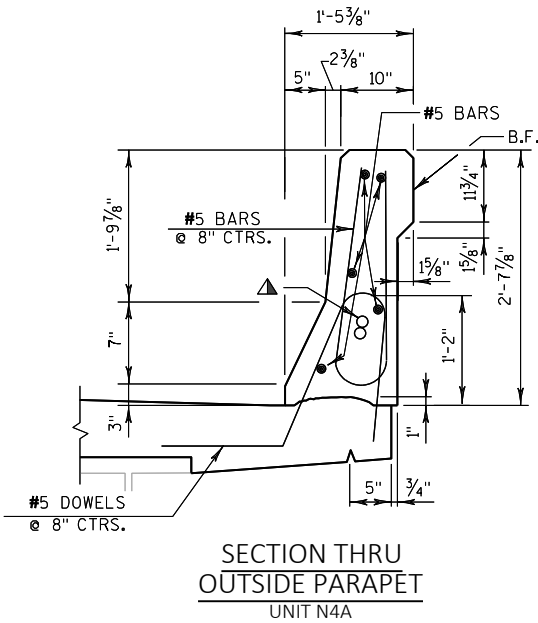
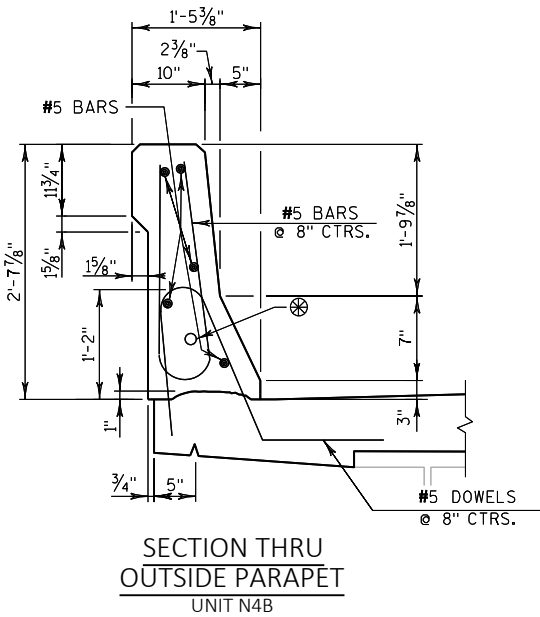


TYPICAL SECTION
UNIT N4A
(LOOKING NORTH) STA. 160+04.75 NB TO 162+11.91 NB



TYPICAL SECTION
UNIT N4A
(LOOKING NORTH) STA. 162+11.91 NB TO 165+05.84 NB

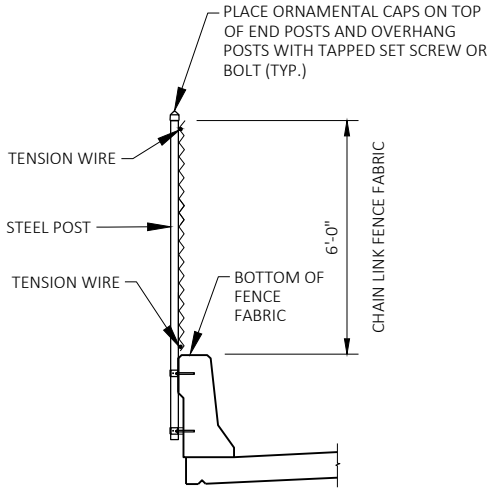
| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE P-4040-N4A & N4B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTIONS | | SHEET 2 OF 5 | |



LEGEND

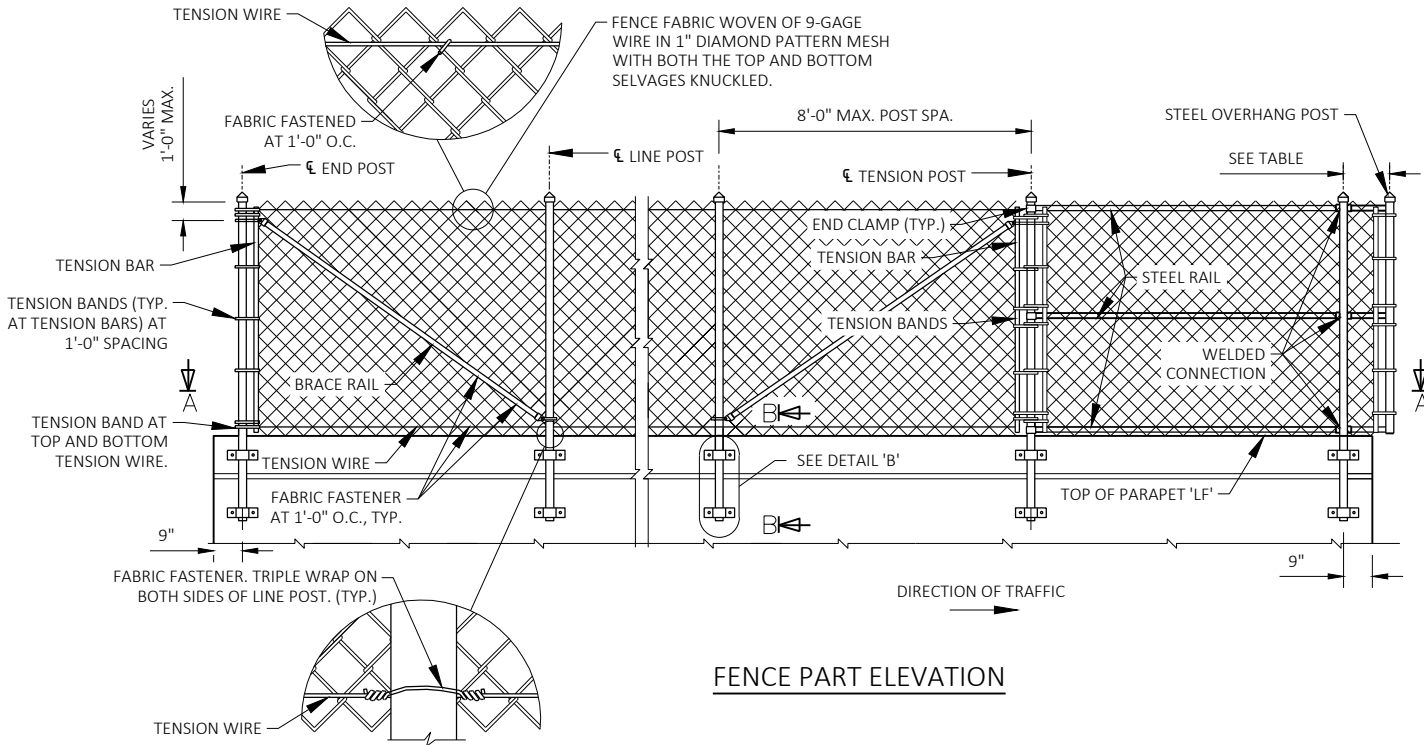
- (2) - "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" (FTMS COMMUNICATION)
- (1) "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR TEMPORARY LIGHTING.

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE R-40-40-N4A & N4B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 5 | |



SECTION THRU FENCE
ON PARAPET 'LF'

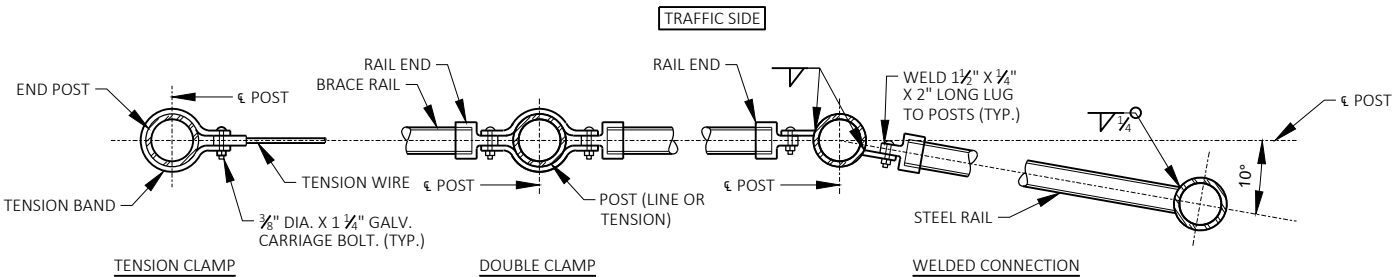
PROTECTIVE SCREENING SHALL BE STRAIGHT.



FENCE PART ELEVATION

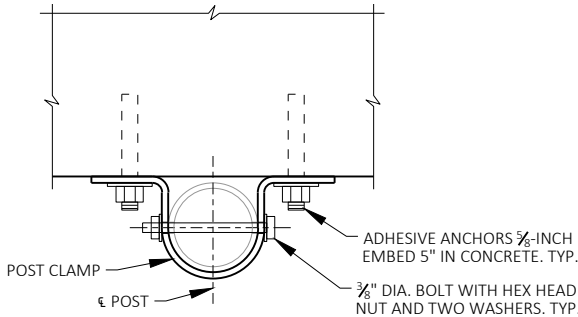
FENCE MEMBER
SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

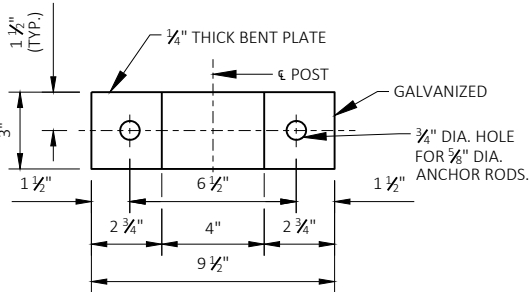


SECTION A-A

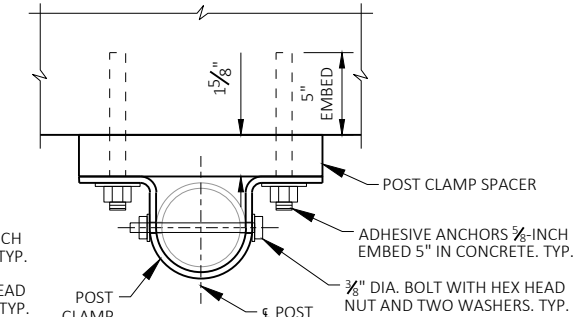
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



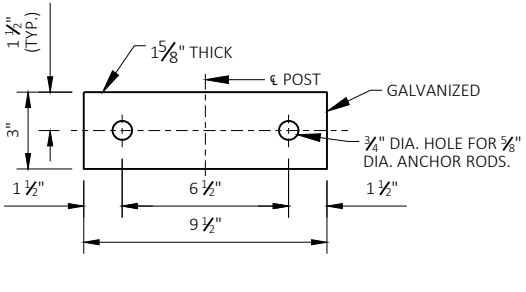
SECTION C-C



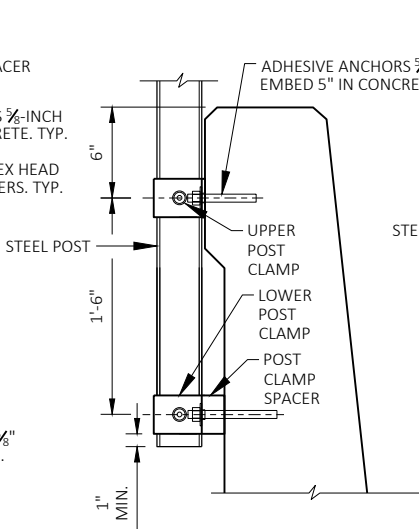
POST CLAMP DETAIL



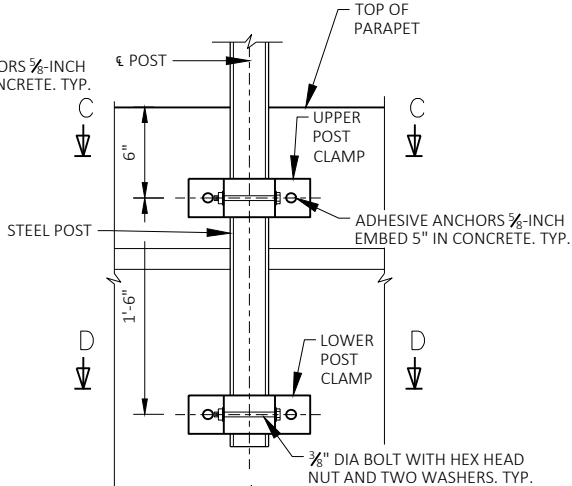
SECTION D-D



POST CLAMP SPACER DETAIL



SECTION B-B



DETAIL 'B'

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 3/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE B-4040-N4A & N4B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| FENCE DETAILS | | SHEET 4 OF 5 | |

NOTES:

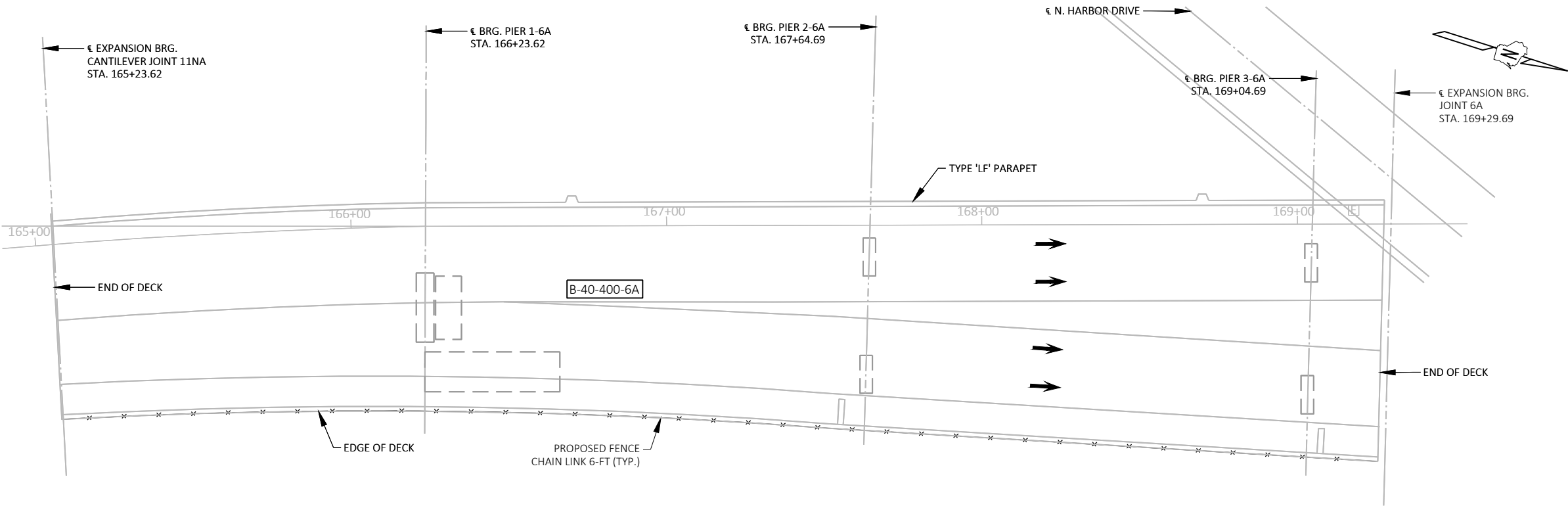
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

LIVE LOAD:
INVENTORY RATING: HS-27
OPERATING RATING: HS-46
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

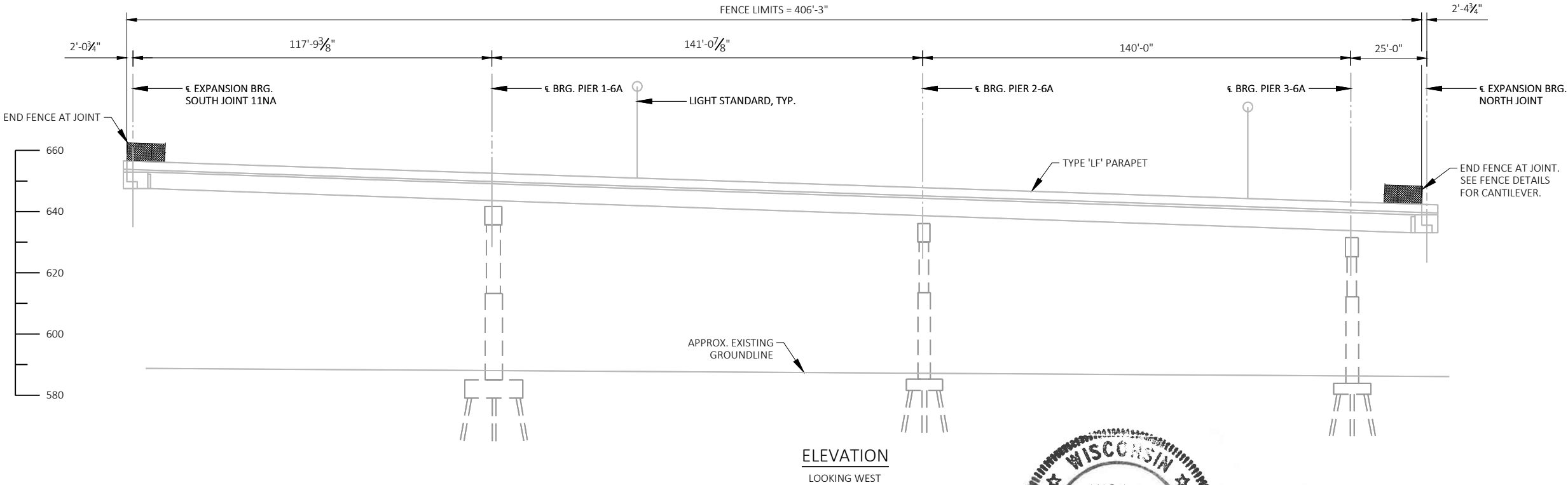
TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

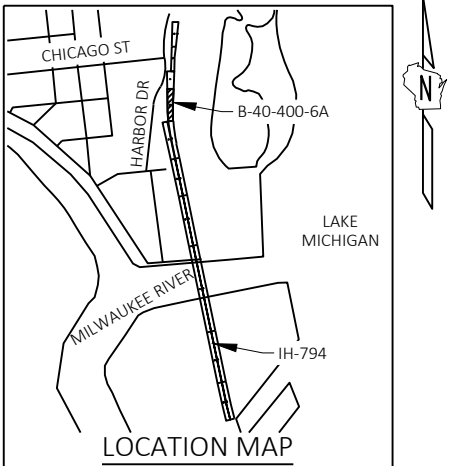
- LIST OF DRAWINGS
- GENERAL PLAN & ELEVATION
 - CROSS SECTION
 - PARAPET DETAILS
 - FENCE DETAILS
 - MODULAR JOINT DETAILS



PLAN (UNIT 6A)



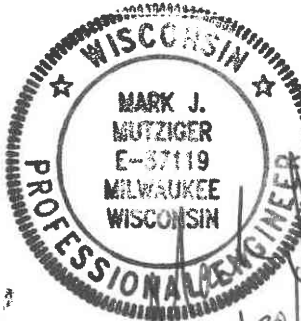
ELEVATION
LOOKING WEST

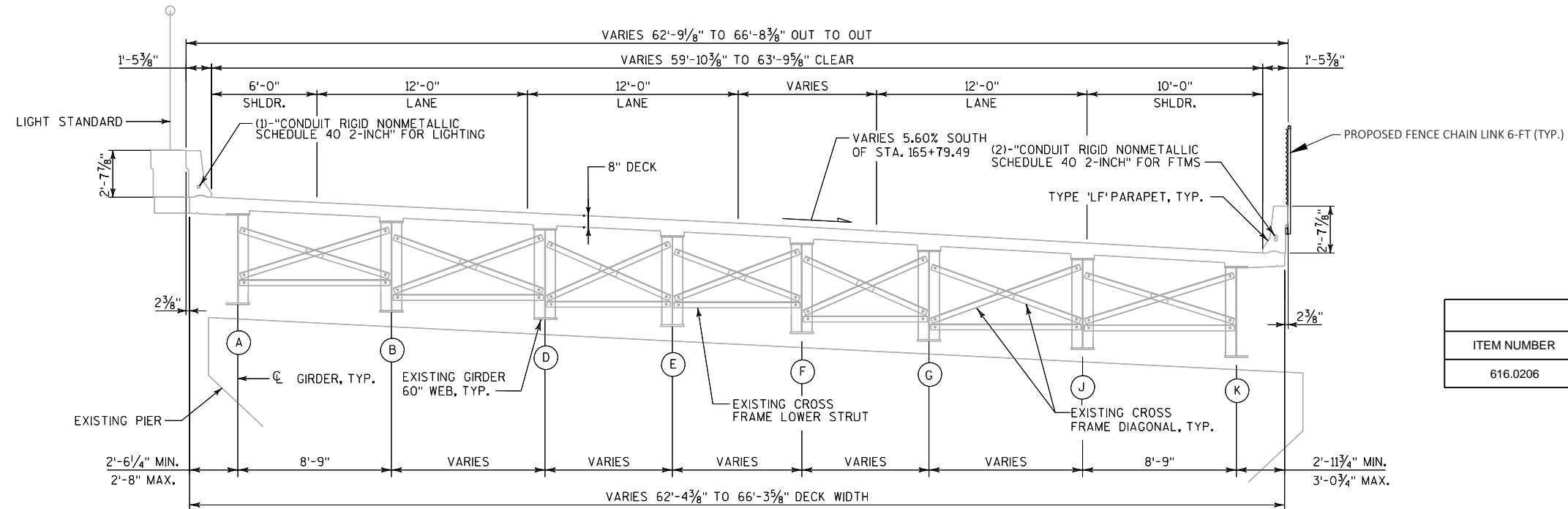


| NO. | DATE | REVISION | BY |
|---|----------------|----------------------------------|--------------|
| <div>COLLINS ENGINEERS</div> <div>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</div> | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-6A | | | |
| IH 794 WB-LAKE FREEWAY OVER HARBOR DRIVE | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | | |
| DESIGNED BY | JCG | DRAWN | MDG |
| CK'D | MDG | PLANS CK'D | JCG |
| GENERAL PLAN & ELEVATION | | | SHEET 1 OF 5 |

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

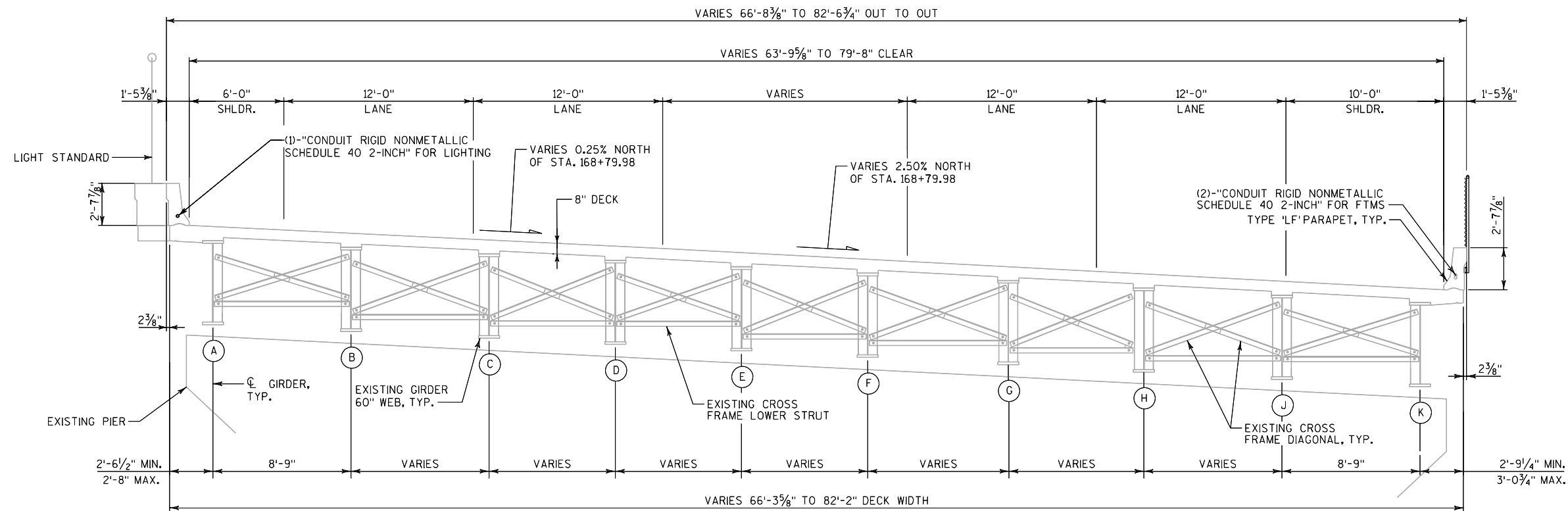
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905





| ESTIMATE OF QUANTITIES | | | |
|------------------------|-----------------------|-----|------|
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
| 616.0206 | FENCE CHAIN LINK 6-FT | 407 | LF |

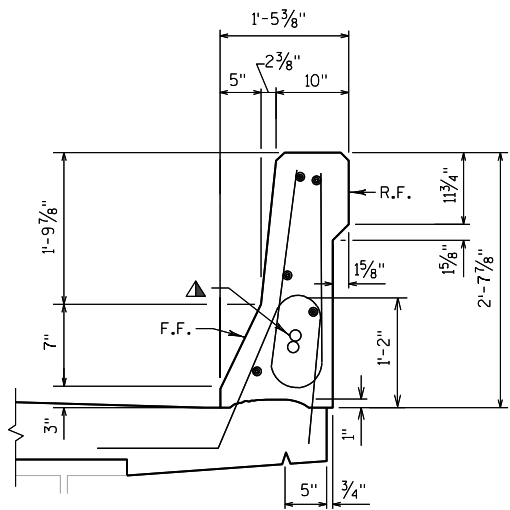
TYPICAL CROSS SECTION UNIT 6A (SOUTH END)
(SOUTH OF STA. 166+48.48 LOOKING NORTH)



LEGEND
Ⓐ GIRDER OR STRINGER DESIGNATION

TYPICAL CROSS SECTION UNIT 6A (NORTH END)
(NORTH OF STA. 166+48.48 LOOKING NORTH)

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-40-400-6A | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTION | | SHEET 2 OF 5 | |



SECTION THRU 'LF' PARAPET

LEGEND

▲ (2)-"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" (EAST PARAPET)

| NO. | DATE | REVISION | BY |
|---|------|----------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-40-400-6A | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 5 | |

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6'- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

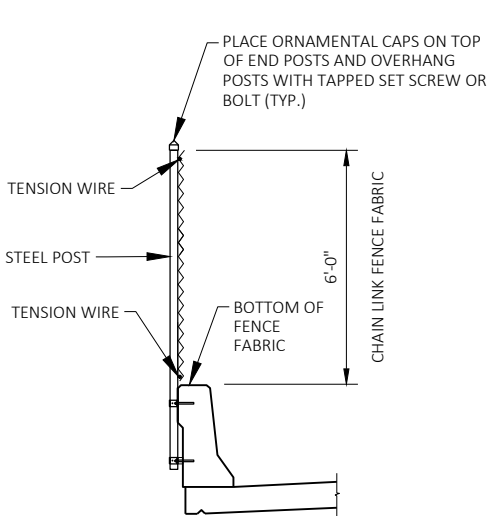
ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 5/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

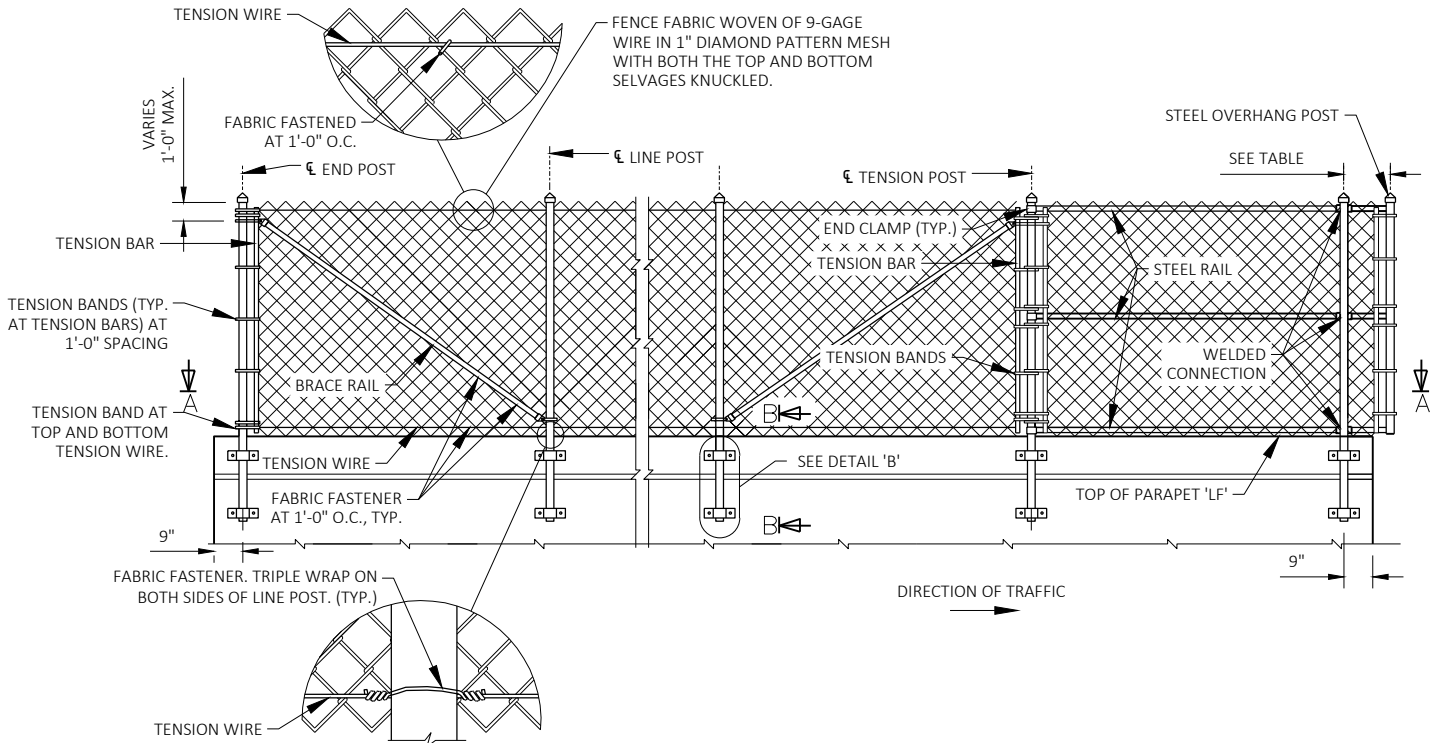
PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.



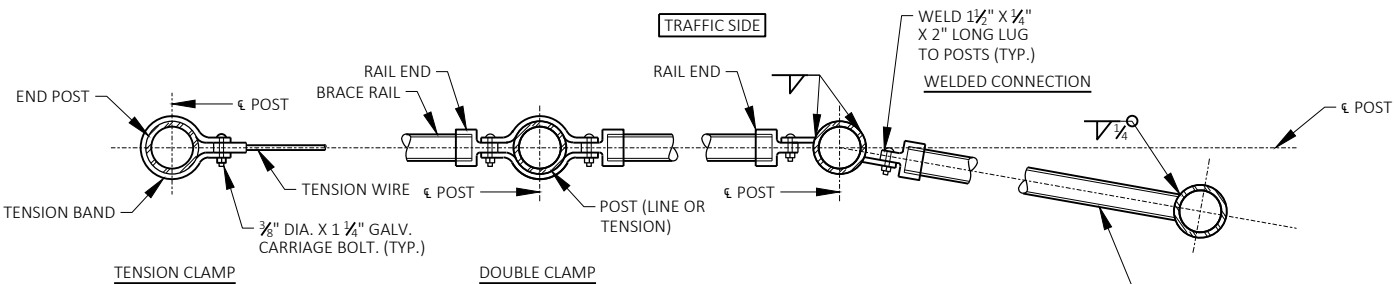
SECTION THRU FENCE ON PARAPET 'LF'

PROTECTIVE SCREENING SHALL BE STRAIGHT.



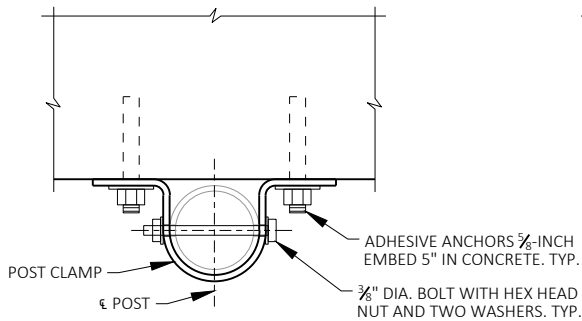
FENCE MEMBER SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

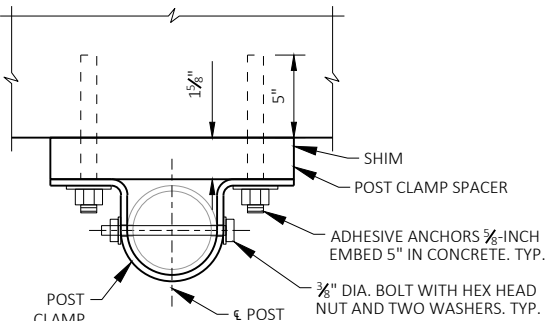


SECTION A-A

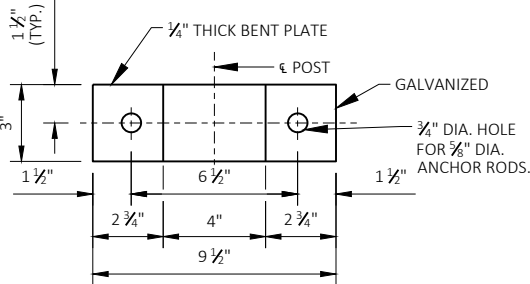
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



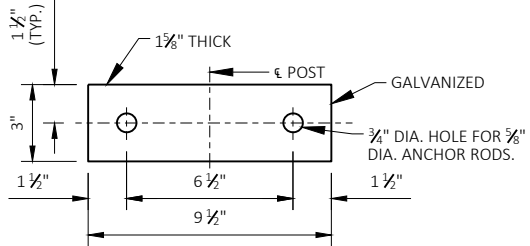
SECTION C-C



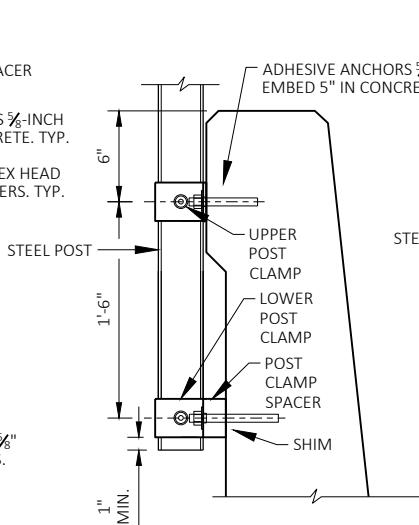
SECTION D-D



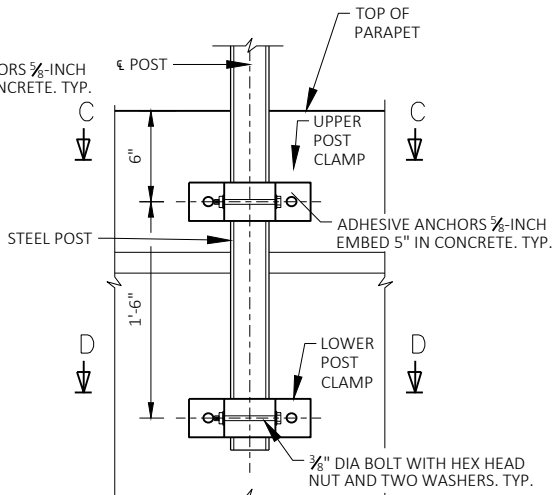
POST CLAMP DETAIL



POST CLAMP SPACER DETAIL

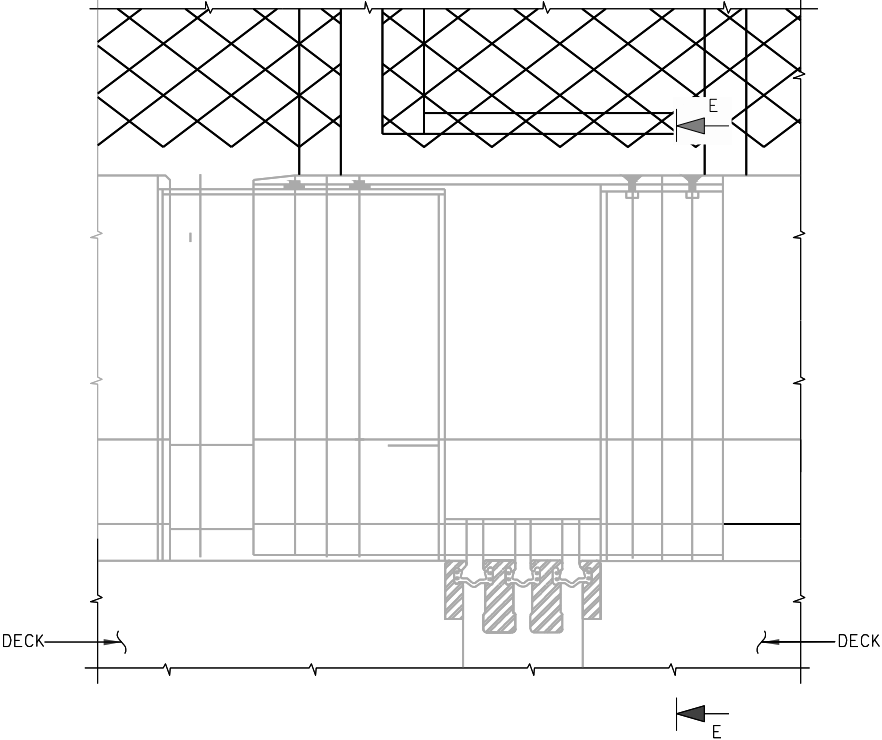


SECTION B-B

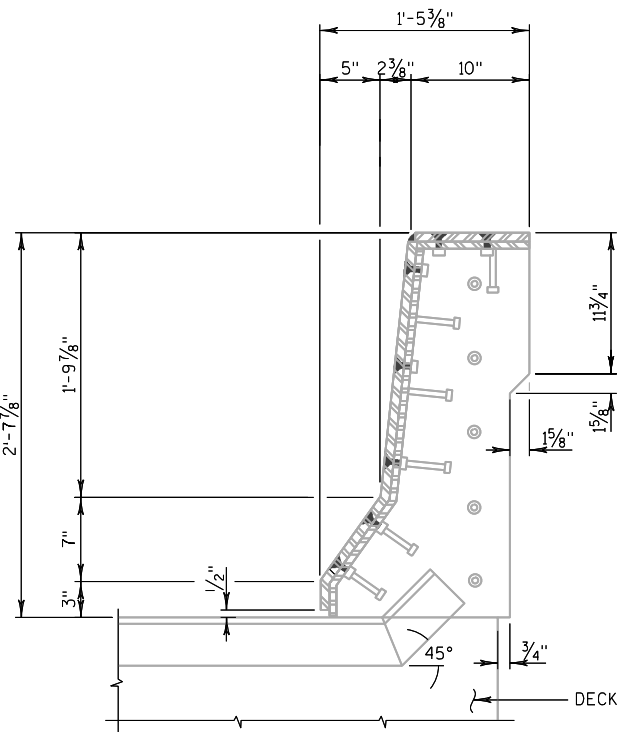


DETAIL 'B'

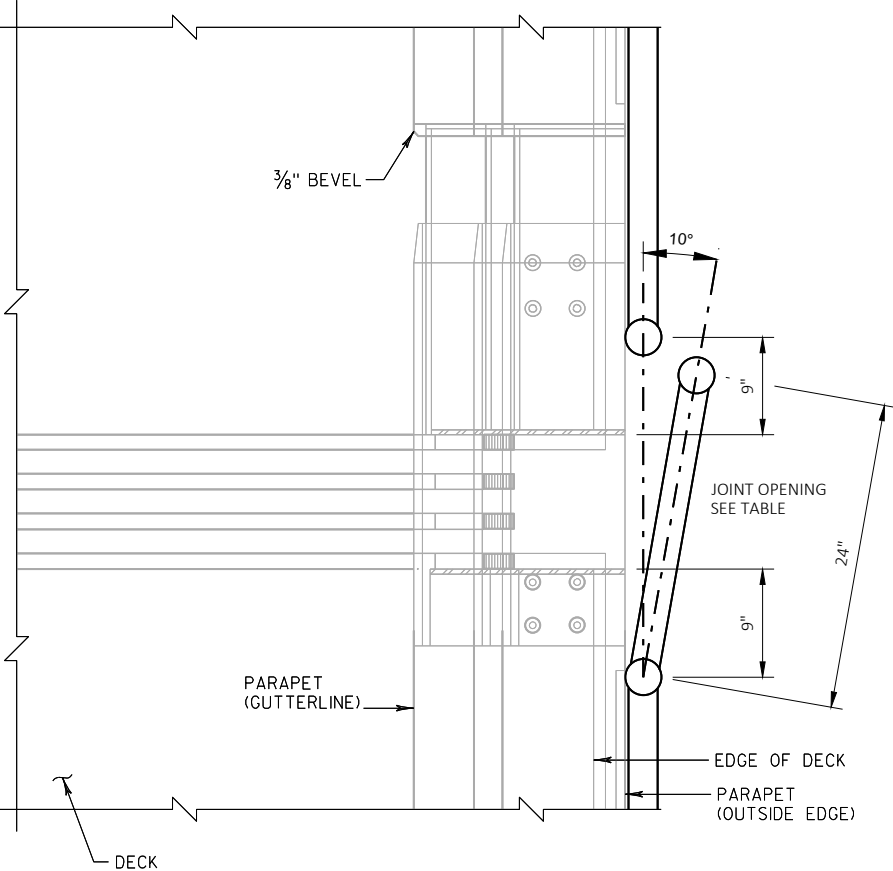
| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-20-400-6A | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| FENCE DETAILS | | SHEET 4 OF 5 | |



ELEVATION OF PARAPET



SECTION E-E

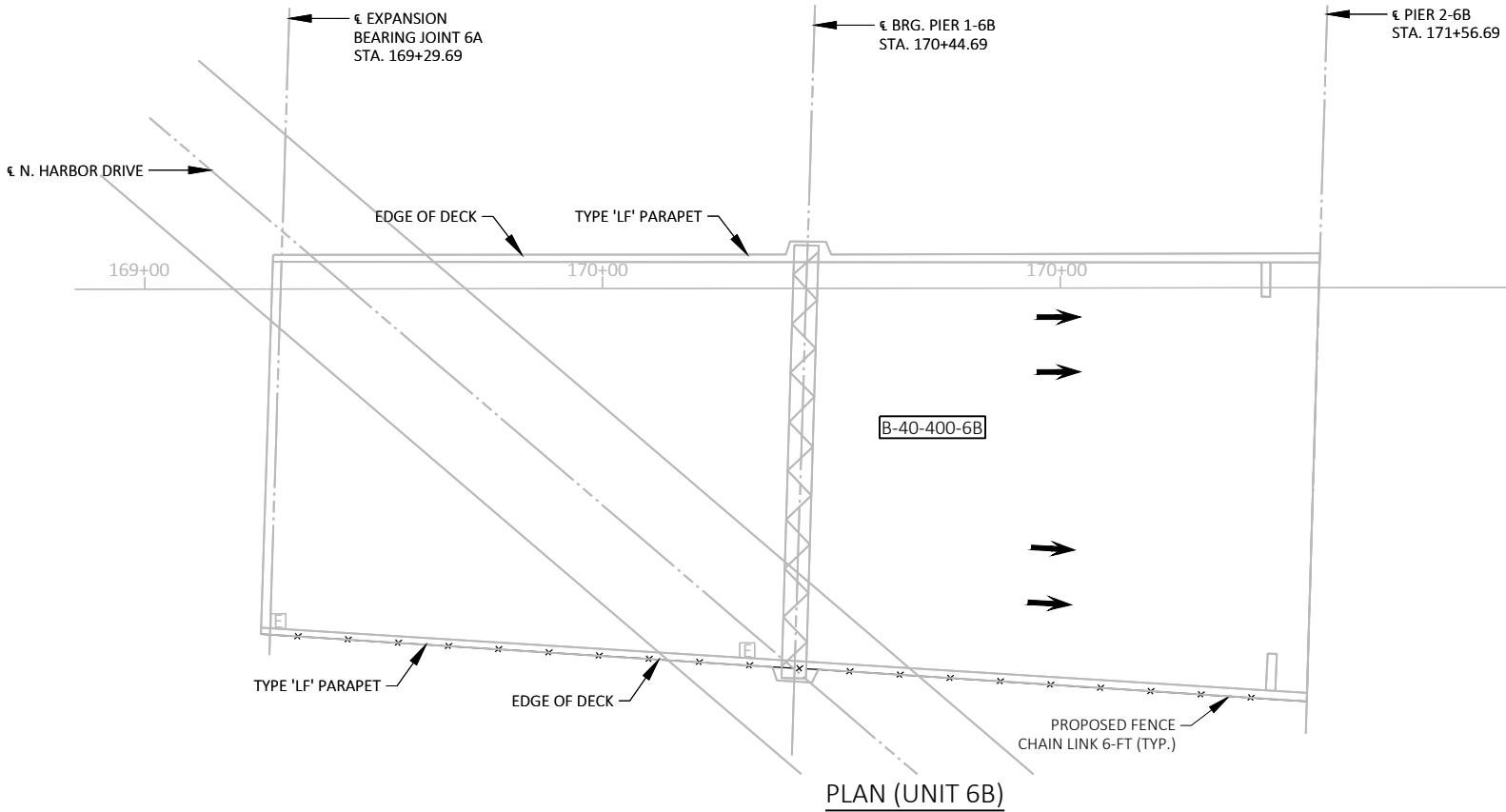


PLAN OF PARAPET

| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| NB | 6A TO 6B | 8 | 24 |

| |
|----------------------|
| STATE PROJECT NUMBER |
| 1300-15-70 |

| | | | |
|---|------|--------------|-----|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-40-400-6A | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| MODULAR JOINT DETAILS | | SHEET 5 OF 5 | |



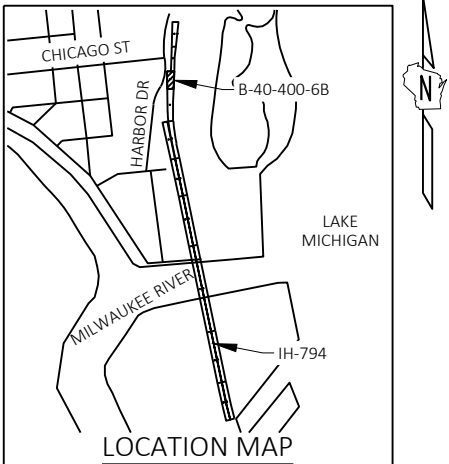
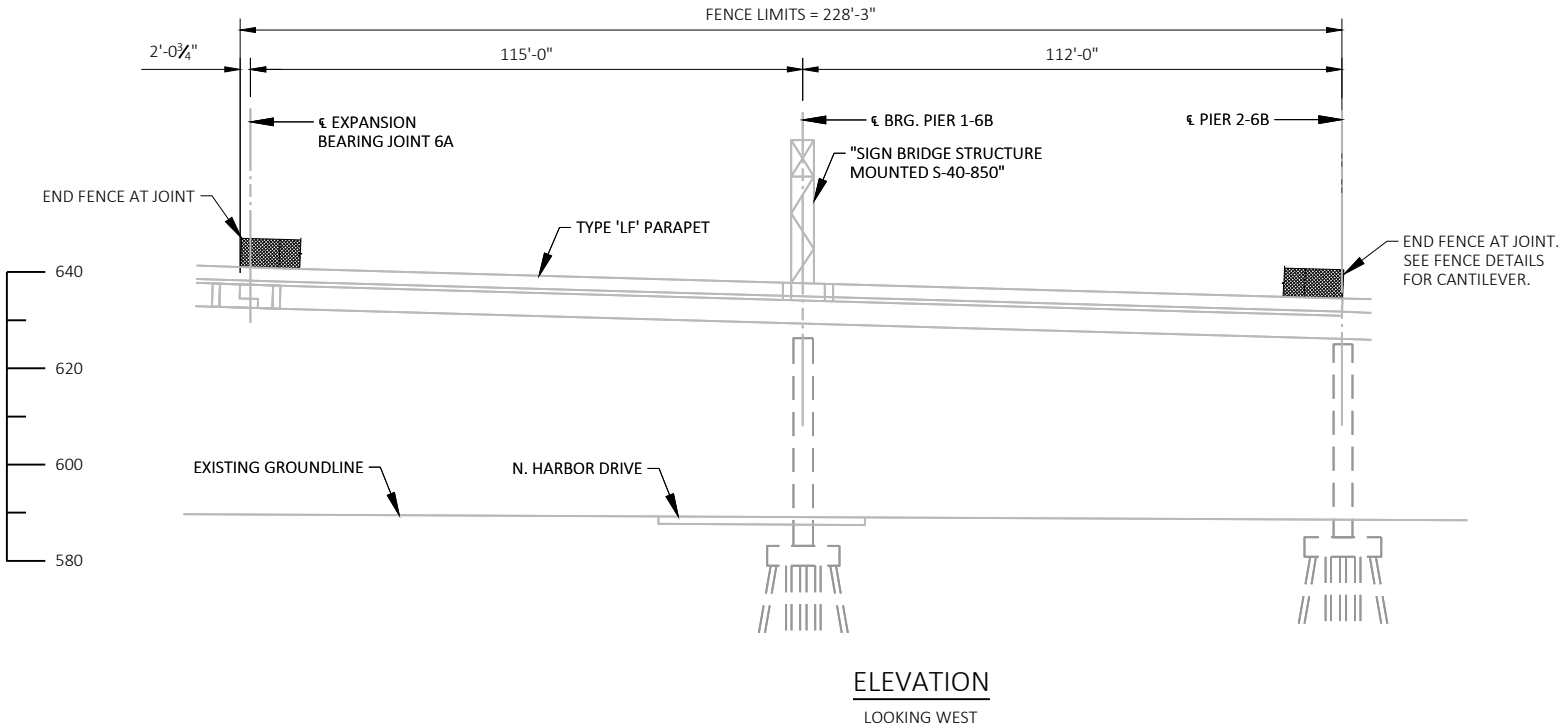
NOTES:
1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

LIVE LOAD:
INVENTORY RATING: HS-28
OPERATING RATING: HS-46
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE

- LIST OF DRAWINGS
- GENERAL PLAN & ELEVATION
 - CROSS SECTION
 - PARAPET DETAILS
 - SIGN SUPPORT BLISTER DETAILS
 - FENCE DETAILS
 - MODULAR JOINT DETAILS



| NO. | DATE | REVISION | BY |
|--|----------------|----------------------------------|-----------|
| COLLINS ENGINEERS | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-6B | | | |
| IH 794 WB-LAKE INTERCHANGE OVER LAND | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | | |
| DESIGNED BY | JCG | DRAWN BY | MDG |
| PLANS CK'D. | JCG | SHEET 1 OF 6 | |
| GENERAL PLAN & ELEVATION | | | |

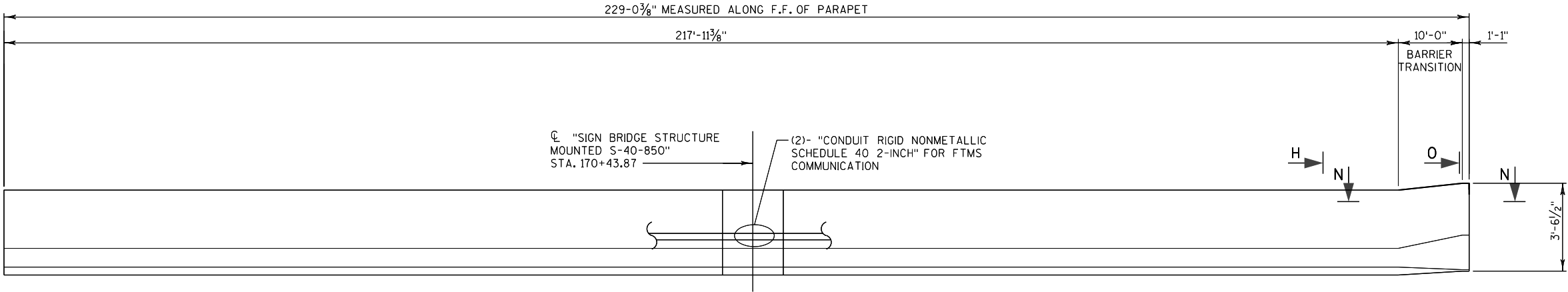


STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

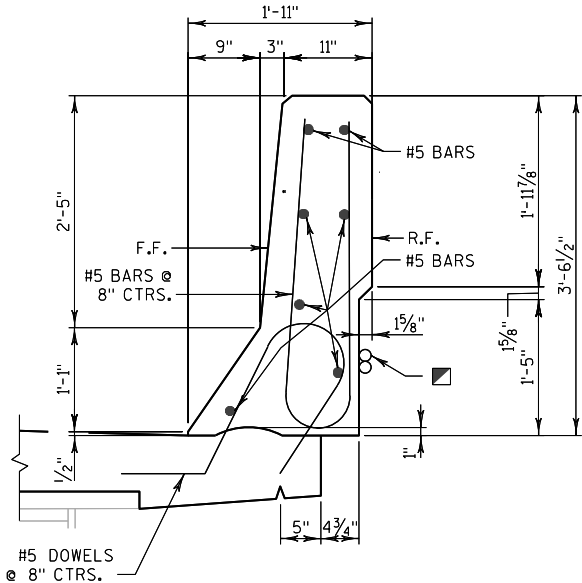
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905



| ESTIMATE OF QUANTITIES | | | |
|------------------------|-----------------------|-----|------|
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
| 616.0206 | FENCE CHAIN LINK 6-FT | 229 | LF |



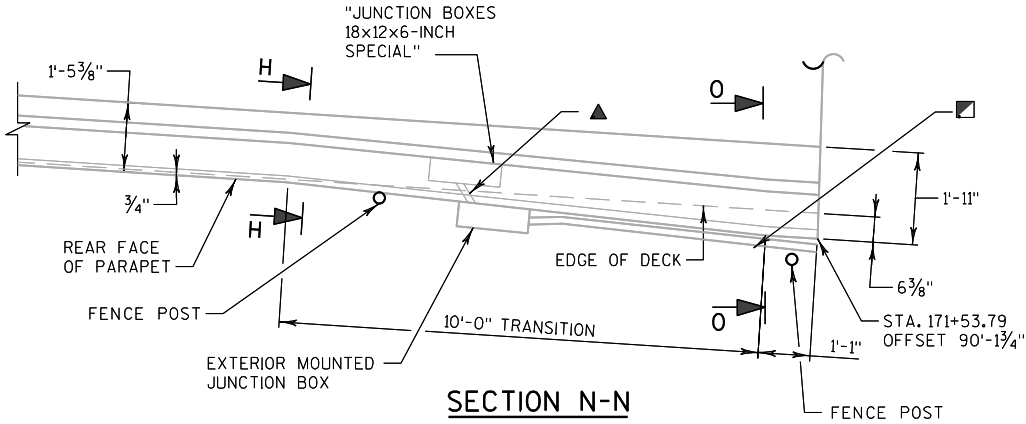
SECTION G-G PARAPET 'LF' REINFORCING ELEVATION
(LOOKING AT THE REAR FACE)



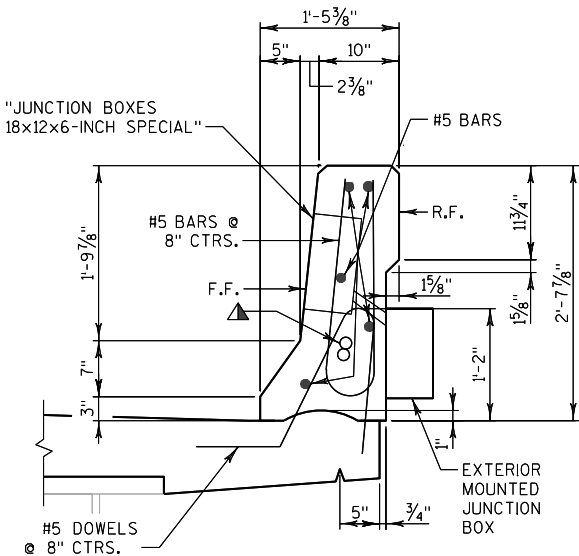
SECTION O-O THRU 'LF' PARAPET TRANSITION

H

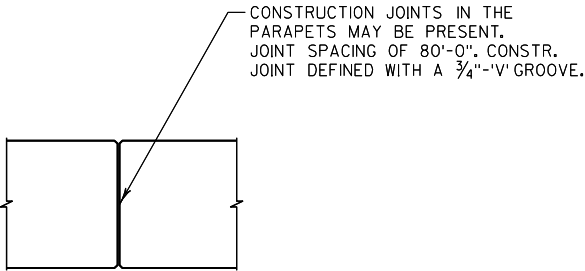
O



SECTION N-N



SECTION H-H THRU 'LF' PARAPET



CONSTRUCTION JOINT
IN PARAPET DETAIL

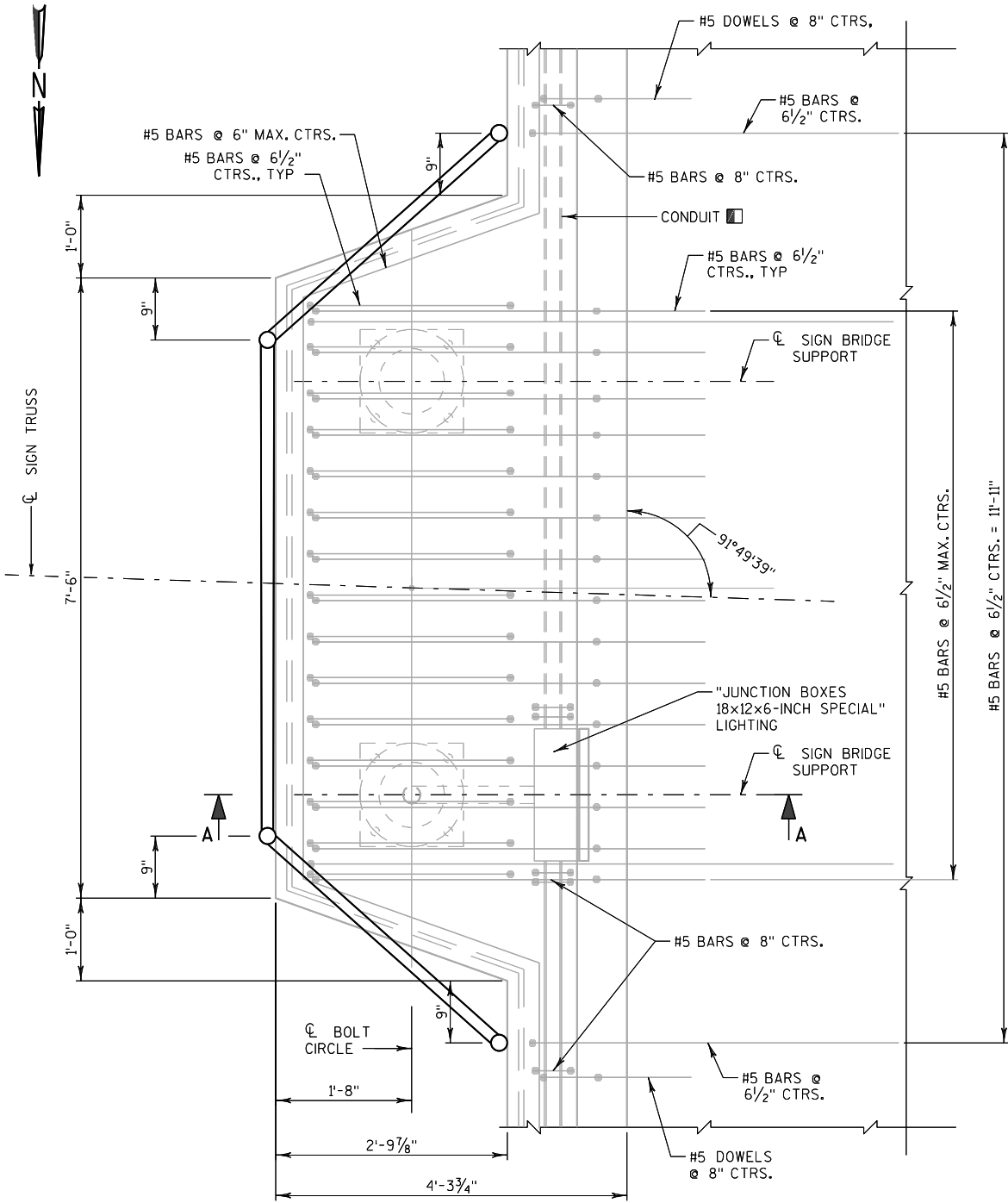
LEGEND

- ▲ "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" FOR FTMS COMMUNICATION, EAST PARAPET
- ▲ (1) 3" METALLIC CONDUIT FOR FTMS
- (2) 2" DIAM. CONDUIT MOUNTED ON EXTERIOR OF PARAPET

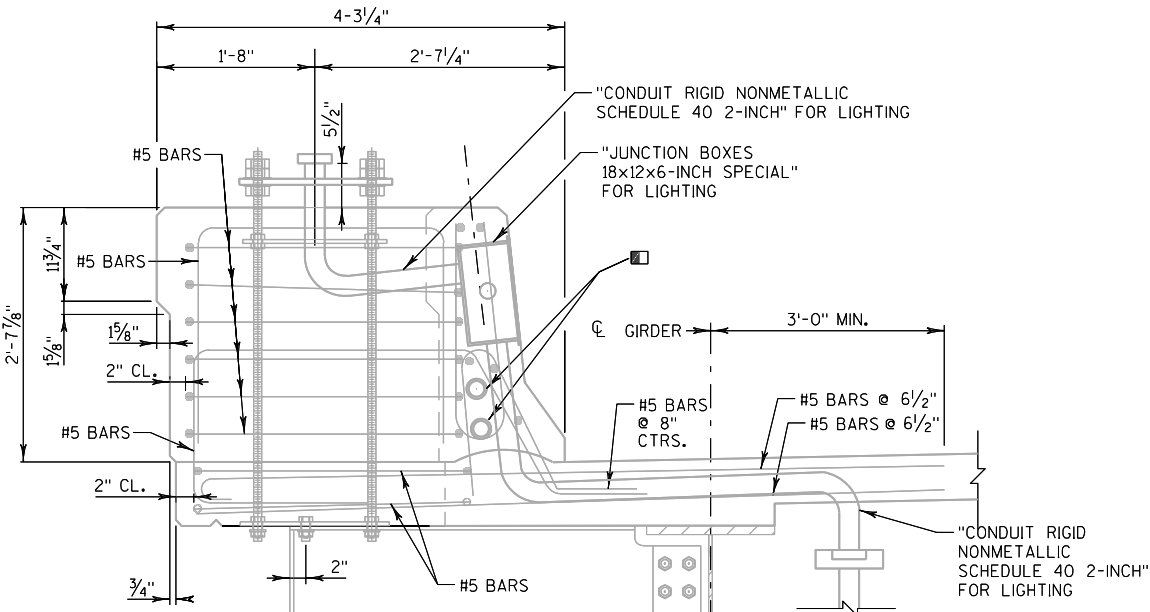
| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE S-40-400-6B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 6 | |

LEGEND

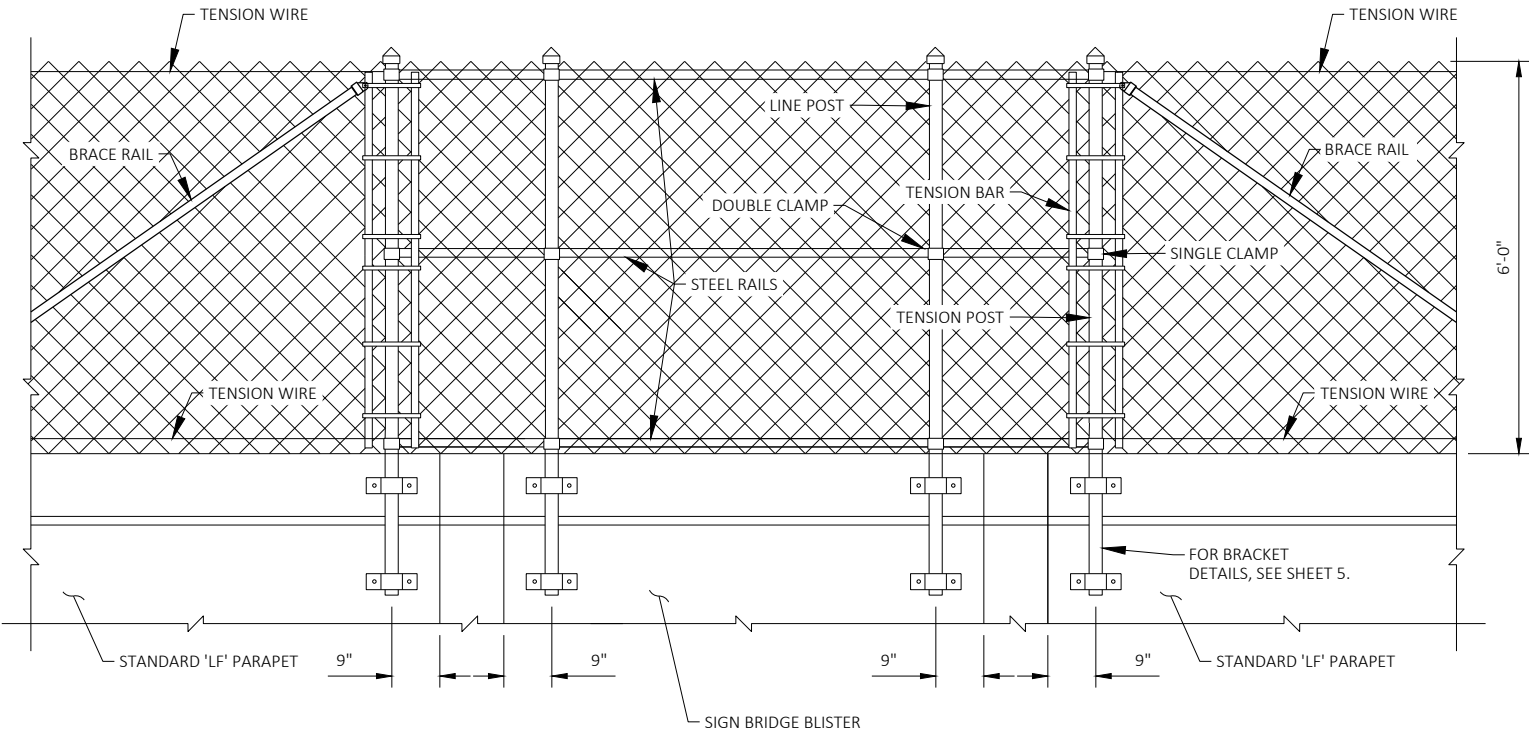
- (2) "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH" EAST PARAPET FOR FTMS COMMUNICATION.



PLAN AT SIGN BRIDGE BASE



SECTION A-A



FENCE ELEVATION AT SIGN BRIDGE BLISTER

| NO. | DATE | REVISION | BY |
|---|------|-------------|--------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-20-400-6B | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| SIGN SUPPORT BLISTER DETAILS | | | SHEET 4 OF 6 |

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS $\frac{3}{8}$ "-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

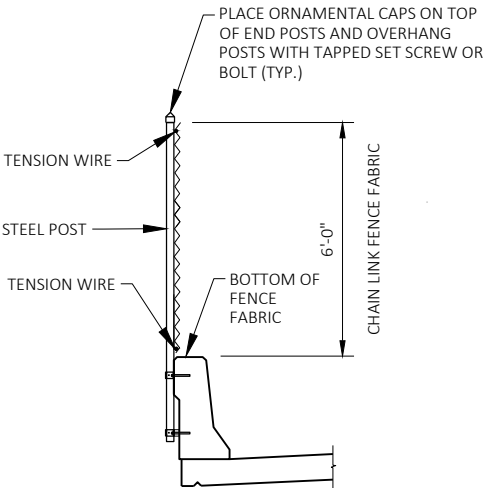
PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

CONDUIT ANCHOR CONFLICT

| SPAN | STATION OF CONFLICT | LENGTH | LOCATION |
|------|---------------------|--------|--------------|
| 6B | 2+12 TO 2+32 | 20 | UPPER ANCHOR |

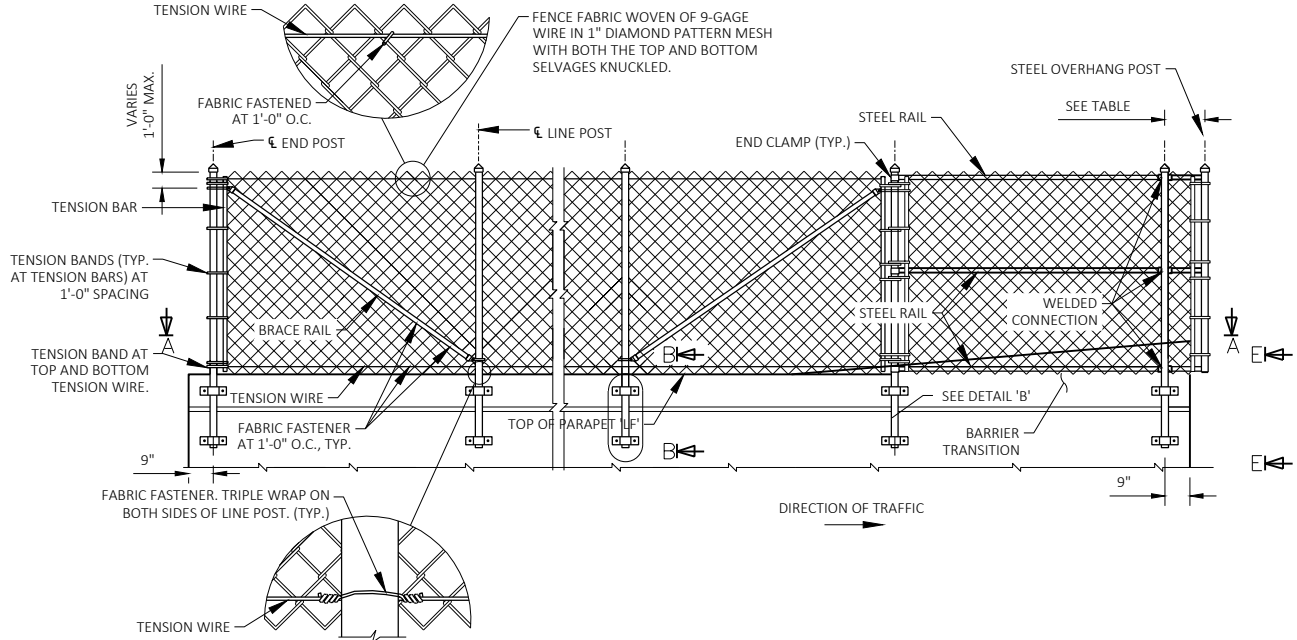
* REVISE DIMENSION TO 4.5" AT LOCATIONS NOTED TO AVOID POTENTIAL CONFLICT WITH CONDUIT INTERNAL TO PARAPET.

| NO. | DATE | REVISION | BY |
|---|------|-----------------|----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-20-400-6B | | | |
| DRAWN BY MDG | | PLANS CK'D. JCG | |
| FENCE DETAILS | | SHEET 5 OF 6 | |



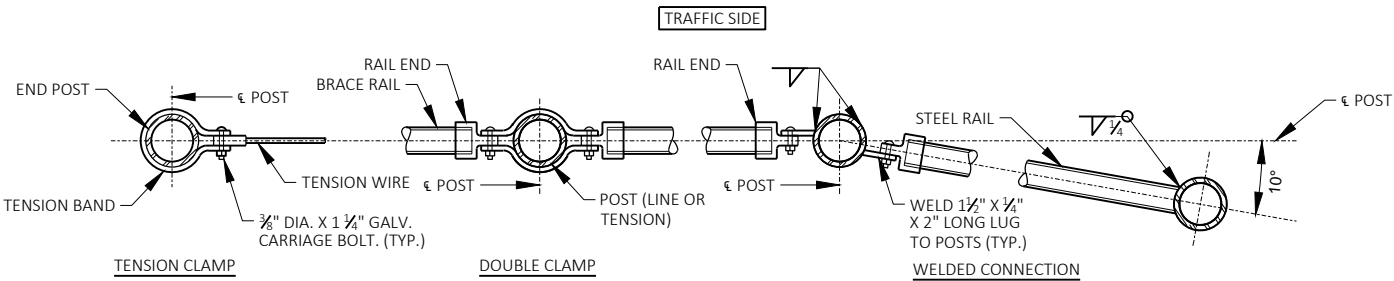
SECTION THRU FENCE
ON PARAPET 'LF'

PROTECTIVE SCREENING SHALL BE STRAIGHT.



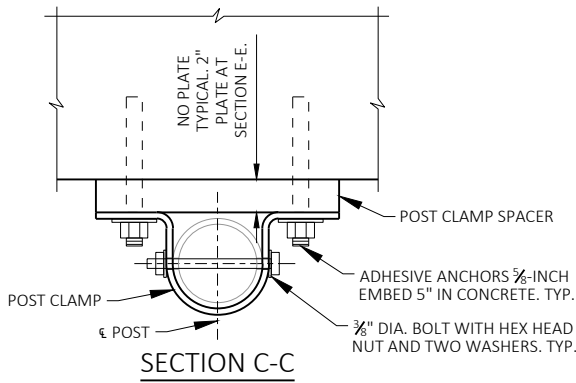
FENCE MEMBER
SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

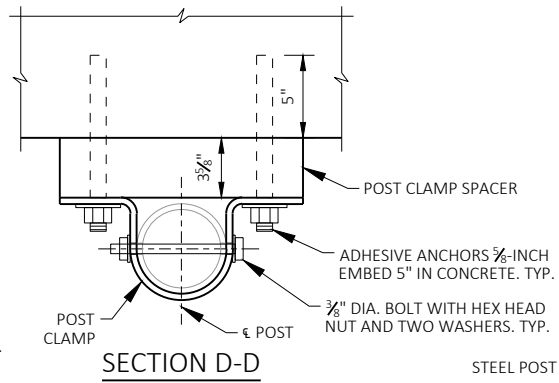


SECTION A-A

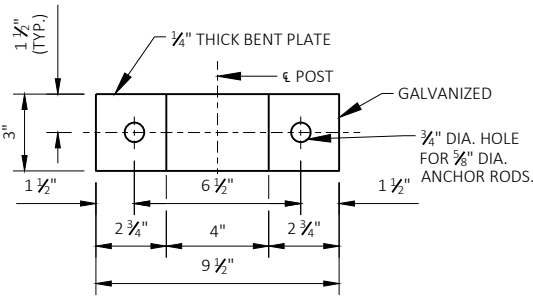
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



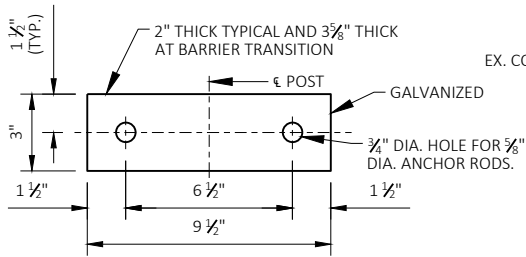
SECTION C-C



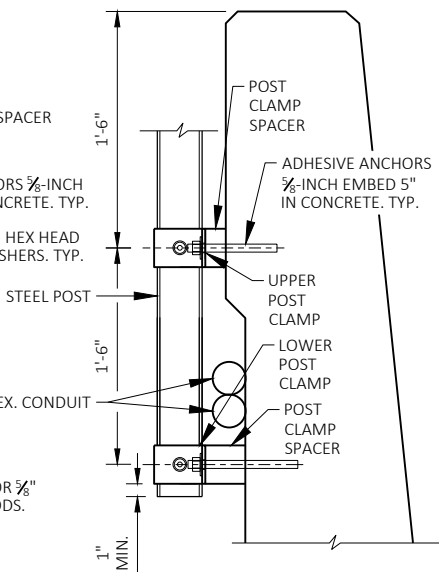
SECTION D-D



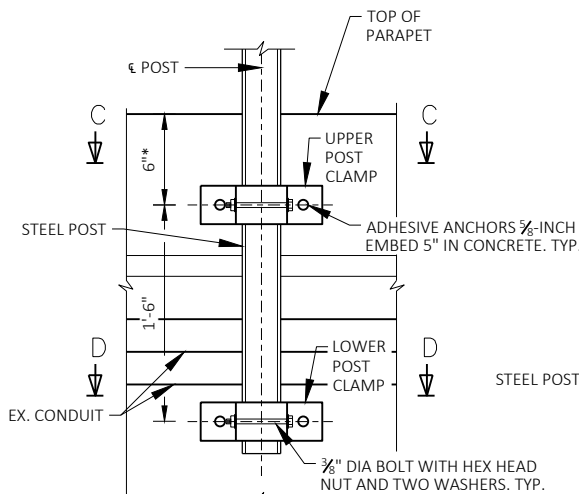
POST CLAMP DETAIL



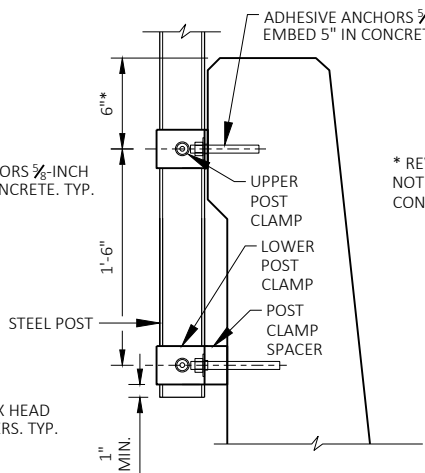
POST CLAMP SPACER DETAIL



SECTION E-E



DETAIL 'B'



SECTION B-B

- NOTES:
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
 - ALL CONCRETE REMOVAL SHALL BE DEFINED BY A ½ INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE.
 - UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.
 - ENGINEER TO VERIFY CONCRETE SURFACE REPAIR AREAS. CONCRETE SURFACE REPAIRS SHALL BE MADE ONLY AS DIRECTED BY THE ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE.

LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-33
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

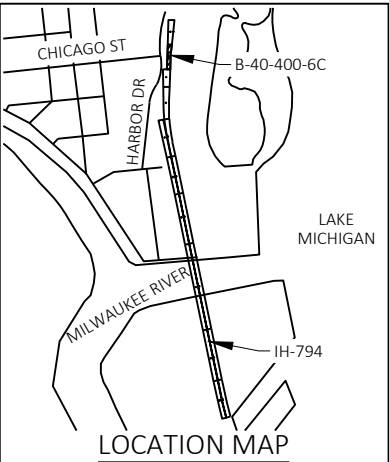
TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

MATERIAL PROPERTIES
CONCRETE MASONRY - SURFACE REPAIR $f'_c = 4,000$ P.S.I.

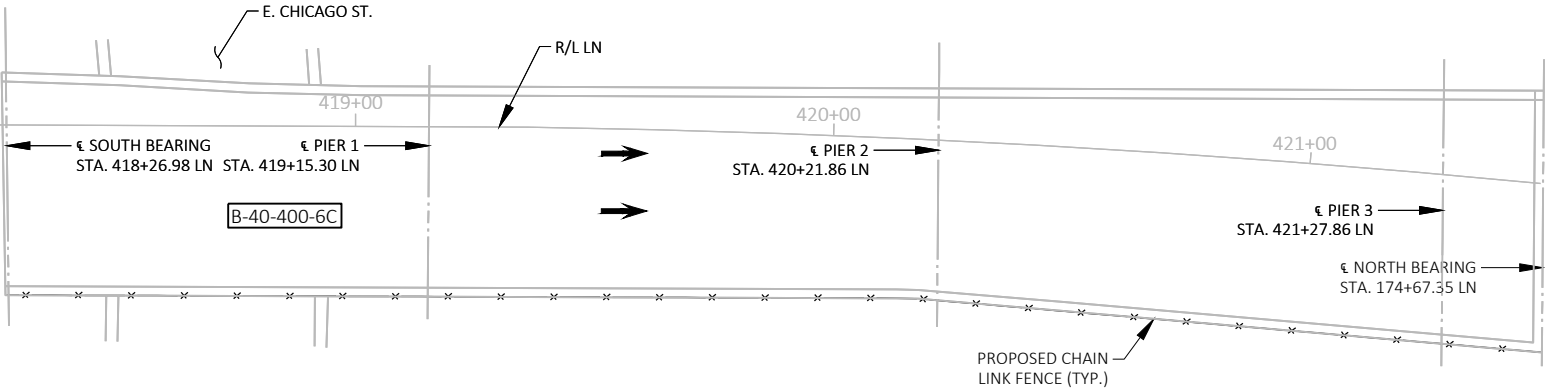
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE
CONCRETE SURFACE REPAIR TO PARAPET

LIST OF DRAWINGS

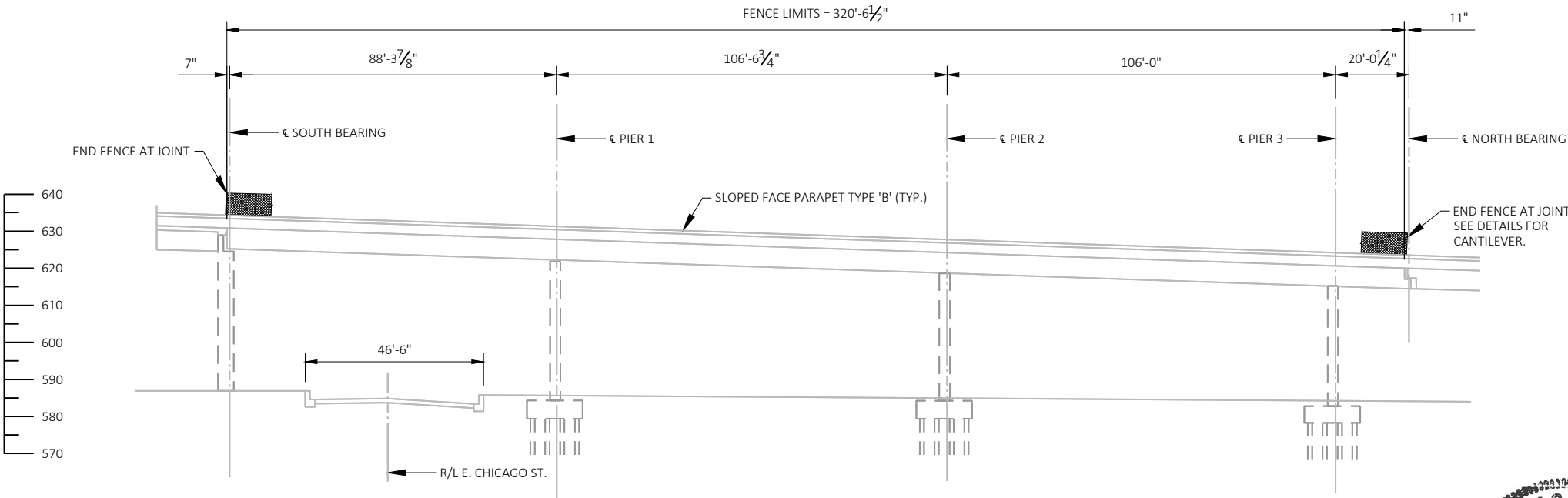
- GENERAL PLAN & ELEVATION
- CROSS SECTION
- PARAPET DETAILS
- FENCE DETAILS
- MODULAR JOINT DETAILS



| | | | |
|--|----------------|----------------------------------|--------------|
| NO. | DATE | REVISION | BY |
| COLLINS ENGINEERS | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-6C | | | |
| RAMP IH 794 WB-LAKE FREEWAY OVER PARKING LOT | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | | |
| DESIGNED BY | JCG | DRAWN BY | MDG |
| CK'D. | | CK'D. | JCG |
| GENERAL PLAN & ELEVATION | | | SHEET 1 OF 5 |



PLAN (UNIT 6C)

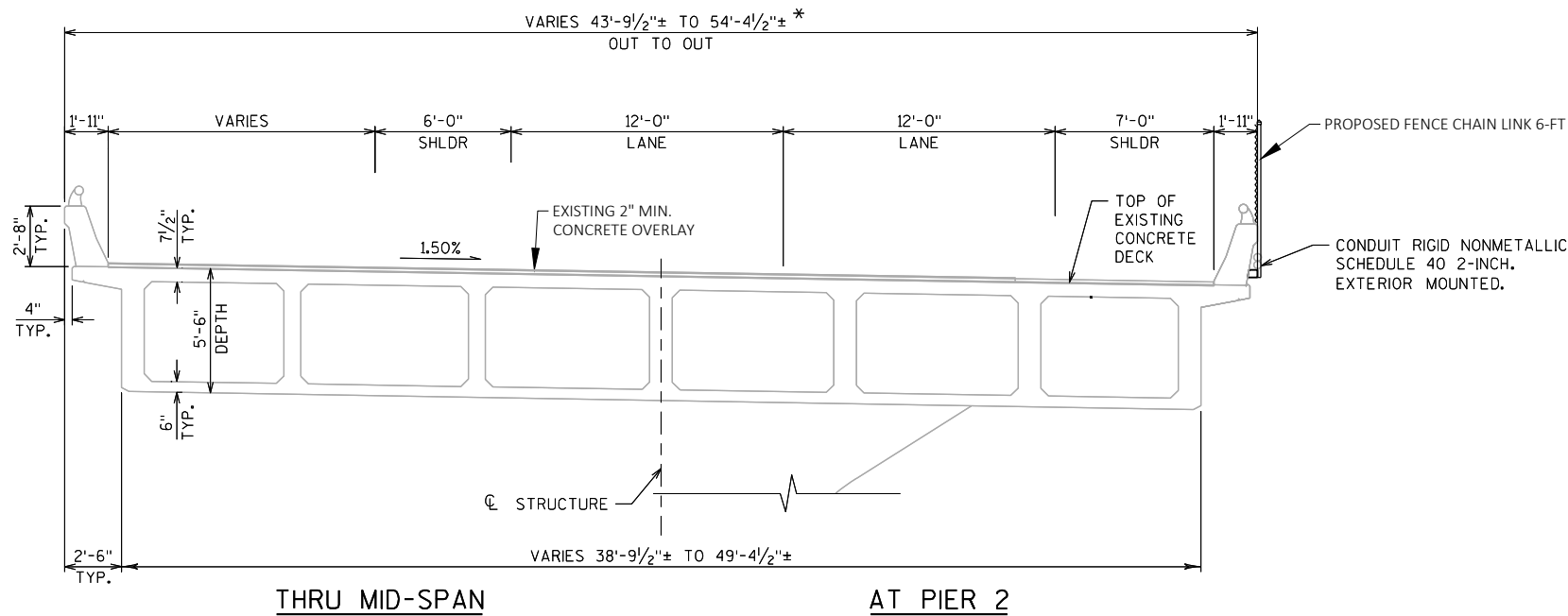


ELEVATION
LOOKING WEST



STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905



CROSS SECTION

(STATION 419+90.29 LN TO 421+47.04 LN)
(LOOKING NORTH)

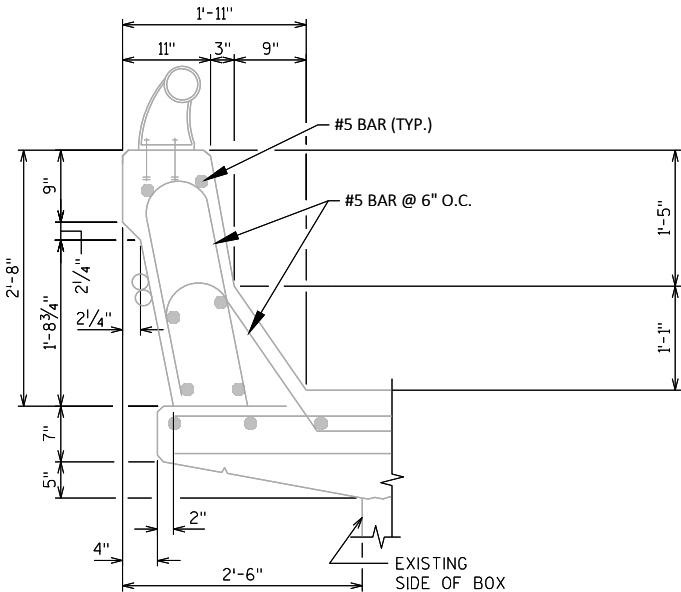
ESTIMATE OF QUANTITIES

| ITEM NUMBER | BID ITEMS | QTY | UNIT |
|-------------|-----------------------|-----|------|
| 616.0206 | FENCE CHAIN LINK 6-FT | 321 | LF |

LEGEND

* DIMENSIONS MEASURED ALONG SOUTH END OF
OVERLAY OR NORTH END OF DECK

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 3-40-400-6C | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| CROSS SECTION | | SHEET 2 OF 5 | |



PARAPET SECTION

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-20-400-6C | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 5 | |

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

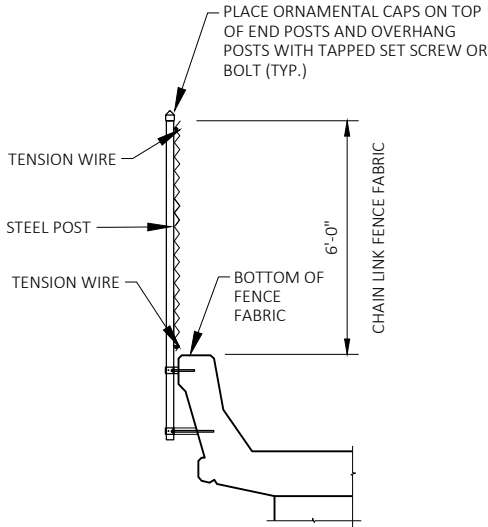
ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 5/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

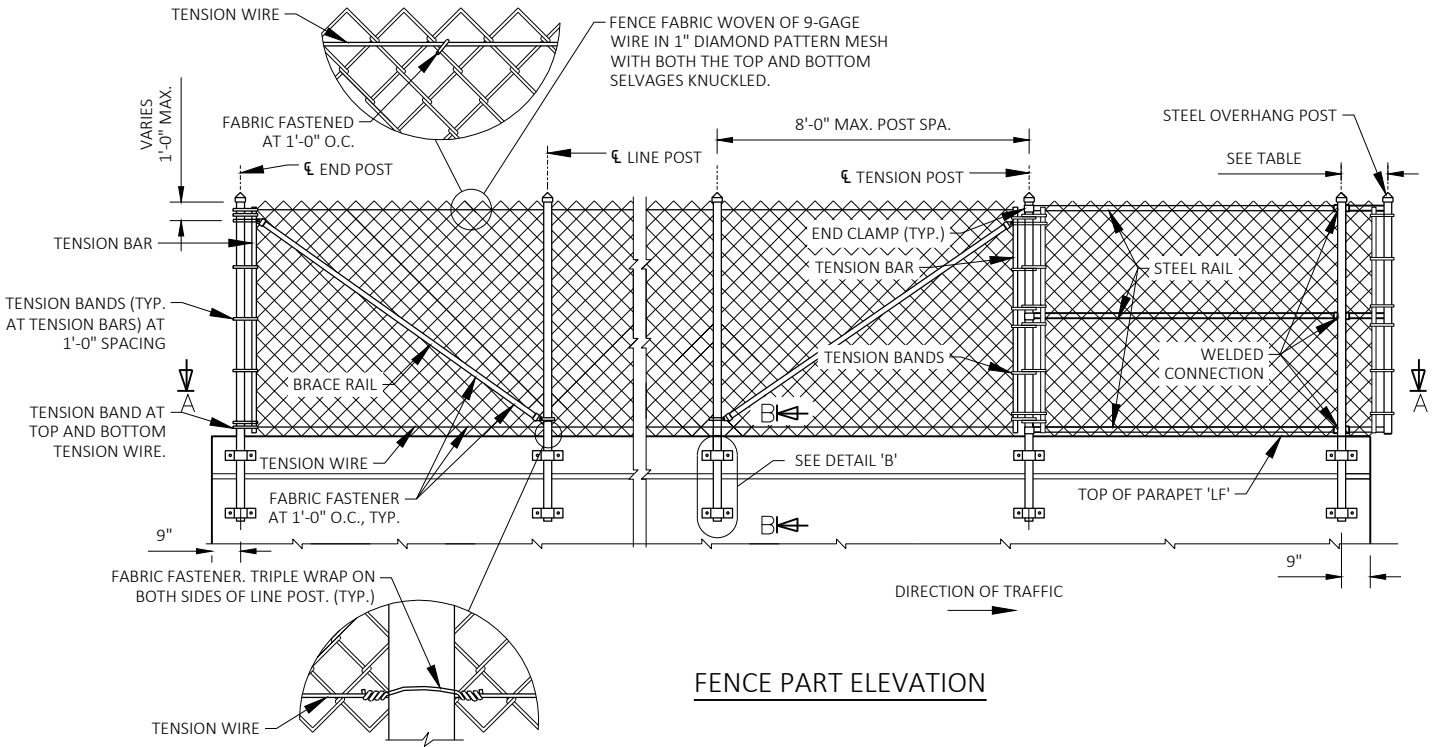


SECTION THRU FENCE ON PARAPET 'B'

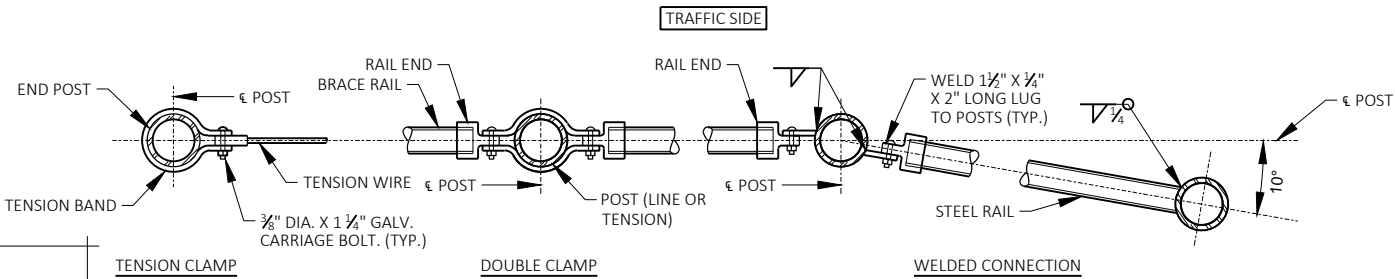
PROTECTIVE SCREENING SHALL BE STRAIGHT.

FENCE MEMBER SIZE & WEIGHT

| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |

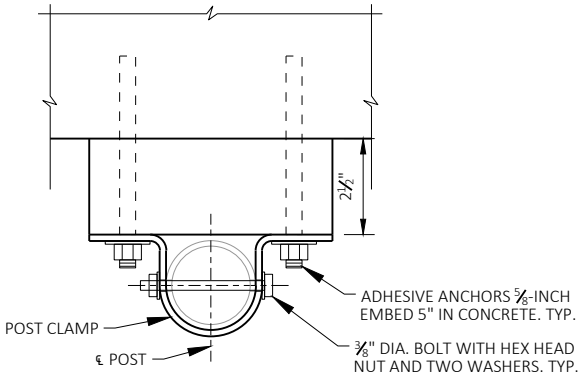


FENCE PART ELEVATION

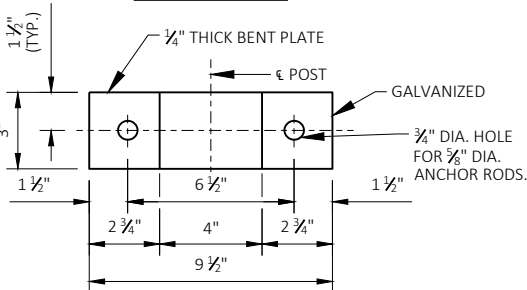


SECTION A-A

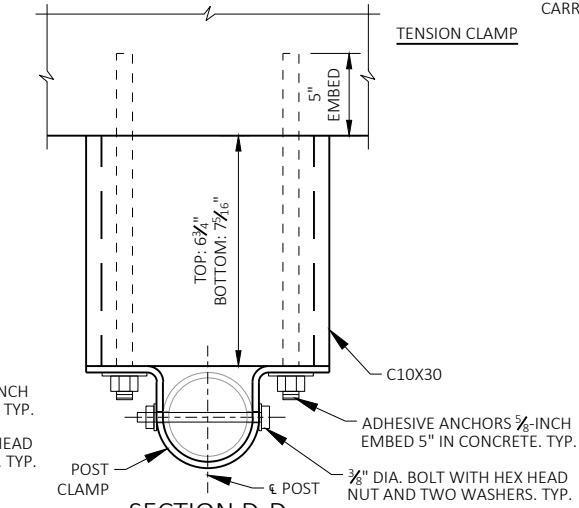
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



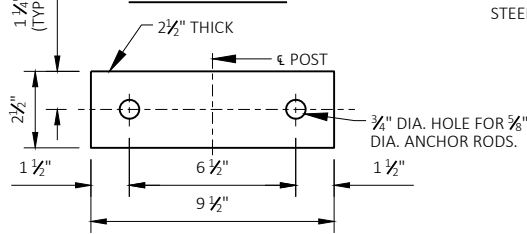
SECTION C-C



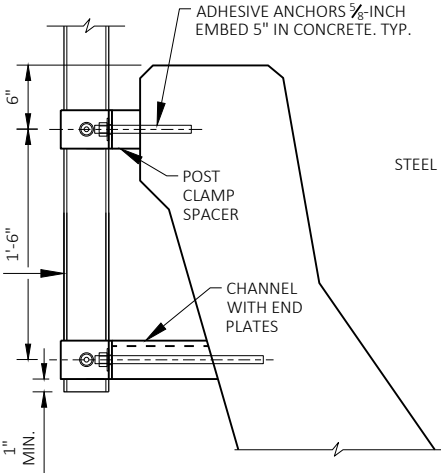
POST CLAMP DETAIL



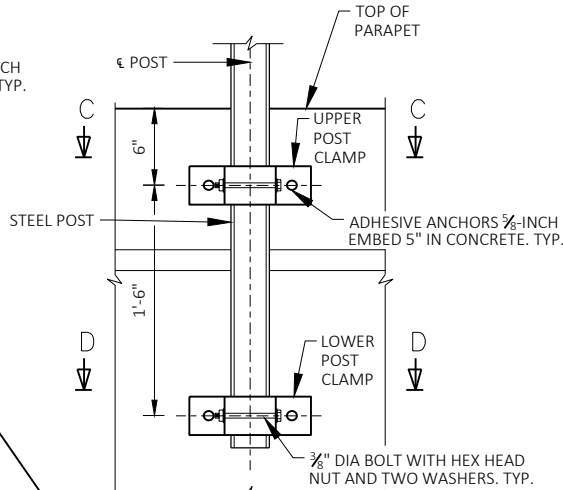
SECTION D-D



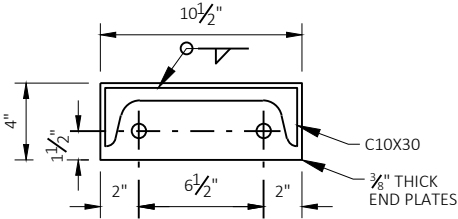
POST CLAMP SPACER TUBE DETAIL



SECTION B-B

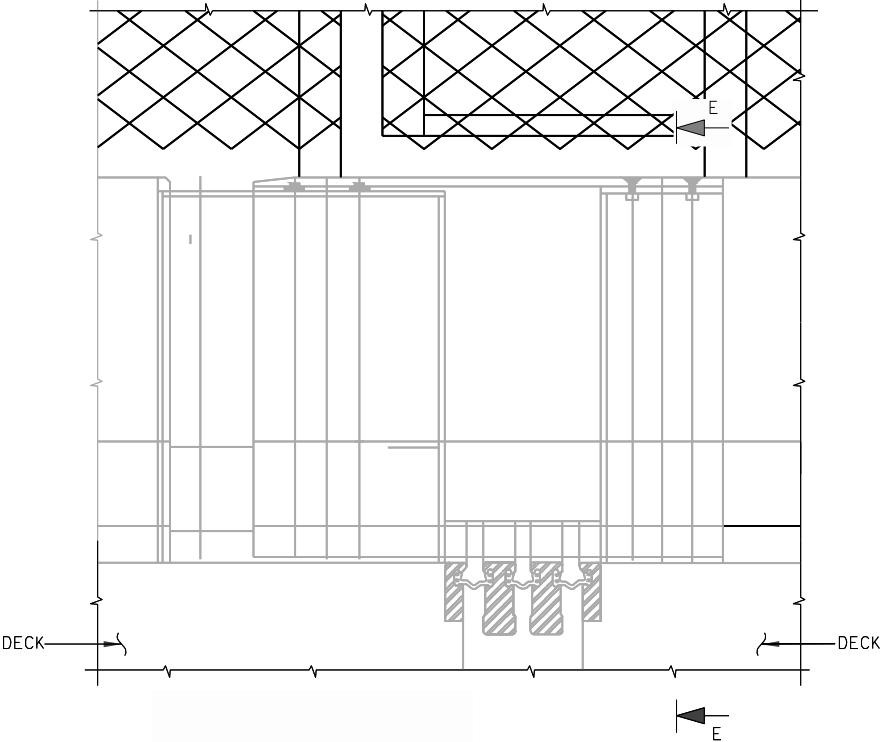


DETAIL 'B'

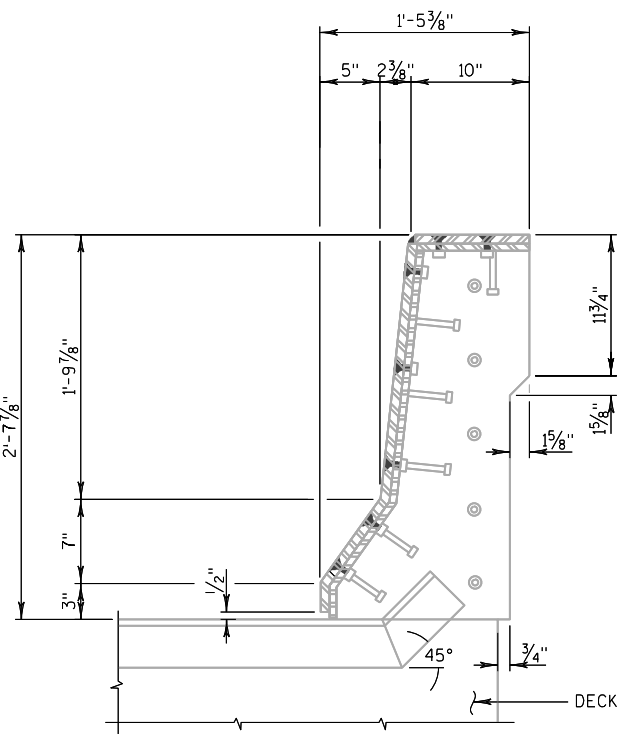


CHANNEL DETAIL

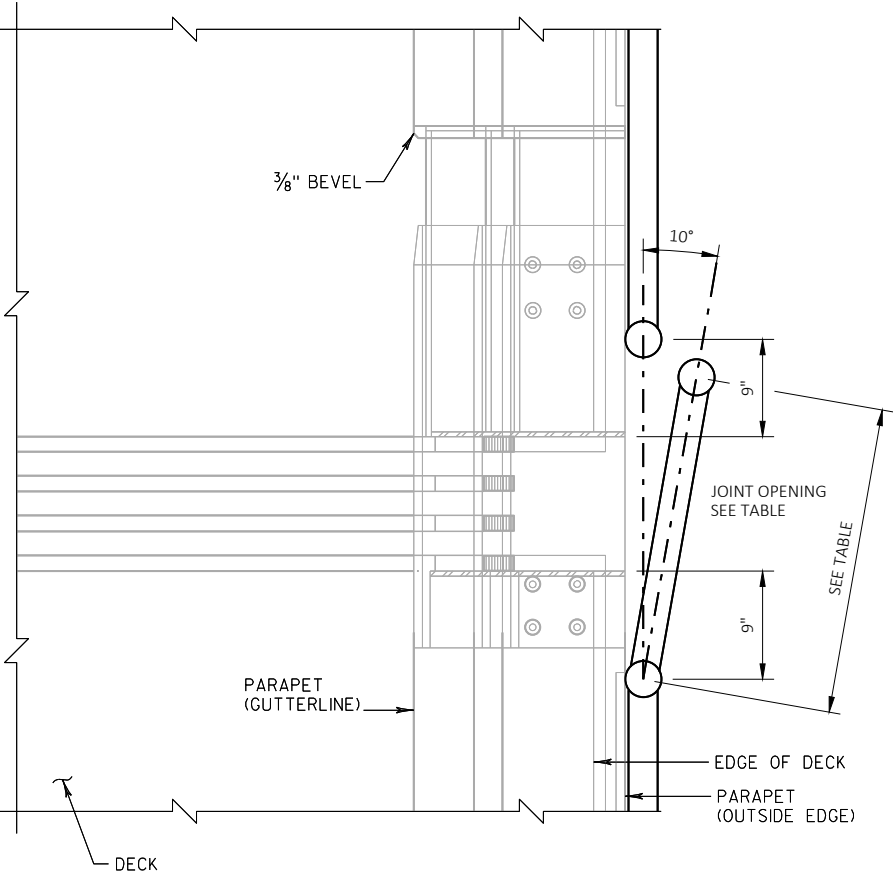
| NO. | DATE | REVISION | BY |
|---|------|-----------------|--------------|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 13-20-400-6C | | | |
| DRAWN BY: MDG | | PLANS CK'D: JCG | |
| FENCE DETAILS | | | SHEET 4 OF 5 |



ELEVATION OF PARAPET



SECTION E-E



PLAN OF PARAPET

| CANTILEVER LENGTHS | | | |
|--------------------|------------------|--------------------|---------------------------------|
| TRAFFIC DIRECTION | UNIT W/ OVERHANG | JOINT OPENING (IN) | REQUIRED OVERHANG DISTANCE (IN) |
| NB | 6C TO 6D | 3.5 | 20 |

| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 3-40-400-6C | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| MODULAR JOINT DETAILS | | SHEET 5 OF 5 | |

NOTES:

1. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
2. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE.
3. UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.
4. ENGINEER TO VERIFY CONCRETE SURFACE REPAIR AREAS. CONCRETE SURFACE REPAIRS SHALL BE MADE ONLY AS DIRECTED BY THE ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE.

LIVE LOAD:
INVENTORY RATING: HS-20
OPERATING RATING: HS-34
MAXIMUM WISCONSIN STANDARD
PERMIT VEHICLE (WIS-SPV) LOAD = 250 KIPS

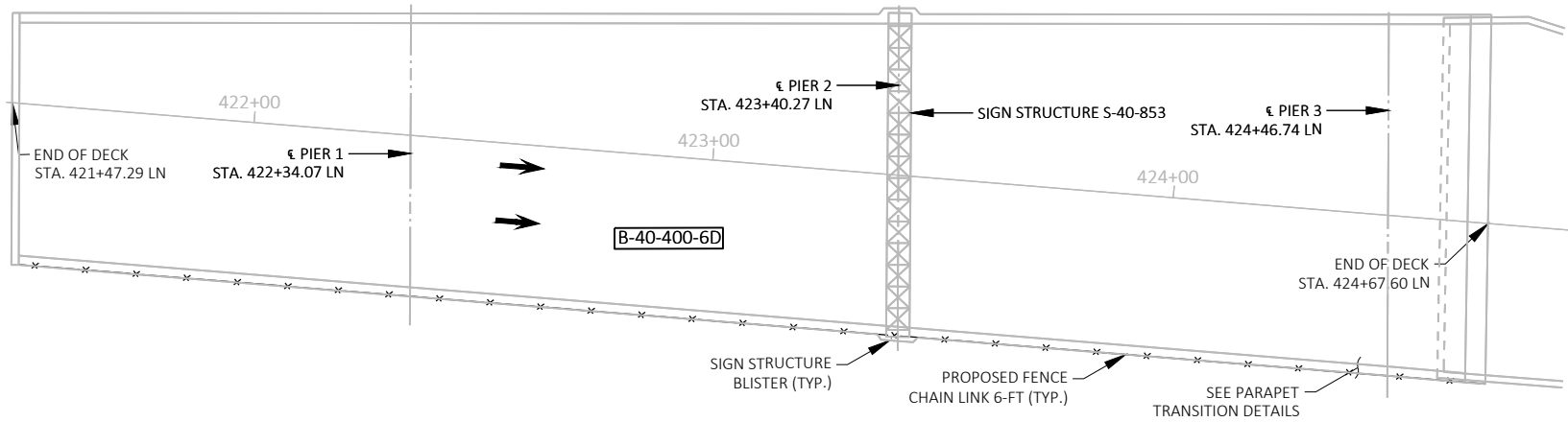
TRAFFIC DATA
AADT (2035) = 29,250 (ONE DIRECTION)
DESIGN SPEED = 55 MPH

MATERIAL PROPERTIES
CONCRETE MASONRY - SURFACE REPAIR $f_c = 4,000$ P.S.I.

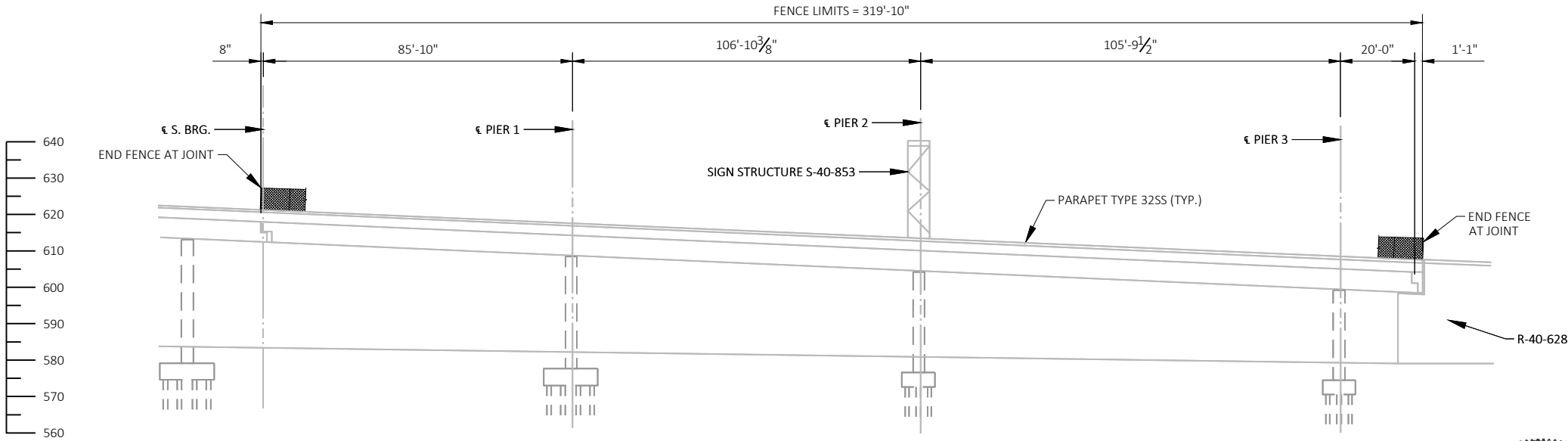
SCOPE OF WORK
INSTALL NEW PARAPET MOUNTED CHAIN LINK FENCE
CONCRETE SURFACE REPAIR TO PARAPET

LIST OF DRAWINGS

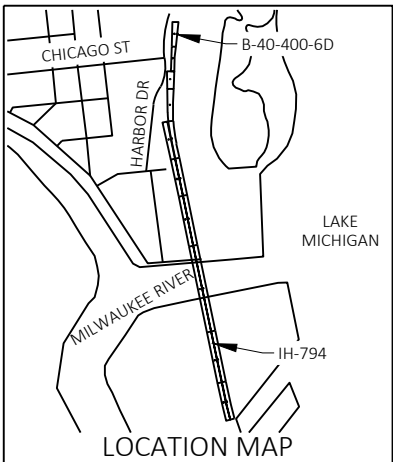
1. GENERAL PLAN & ELEVATION
2. CROSS SECTION
3. PARAPET DETAILS
4. FENCE DETAILS
5. SIGN BRIDGE BLISTER DETAIL



PLAN (UNIT 6D)



ELEVATION
LOOKING WEST



| NO. | DATE | REVISION | BY |
|--|----------------|----------------------------------|--------------|
| COLLINS ENGINEERS | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | | CHIEF STRUCTURES DESIGN ENGINEER | DATE |
| STRUCTURE B-40-400-6D | | | |
| RAMP IH 794 WB-LAKE FREEWAY OVER N. HARBOR DRIVE | | | |
| COUNTY | MILWAUKEE | TOWN/CITY/VILLAGE | MILWAUKEE |
| DESIGN SPEC. | REHABILITATION | | |
| DESIGNED BY | JCG | DRAWN BY | MDG |
| CK'D. | JCG | PLANS CK'D. | JCG |
| GENERAL PLAN & ELEVATION | | | SHEET 1 OF 5 |

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261

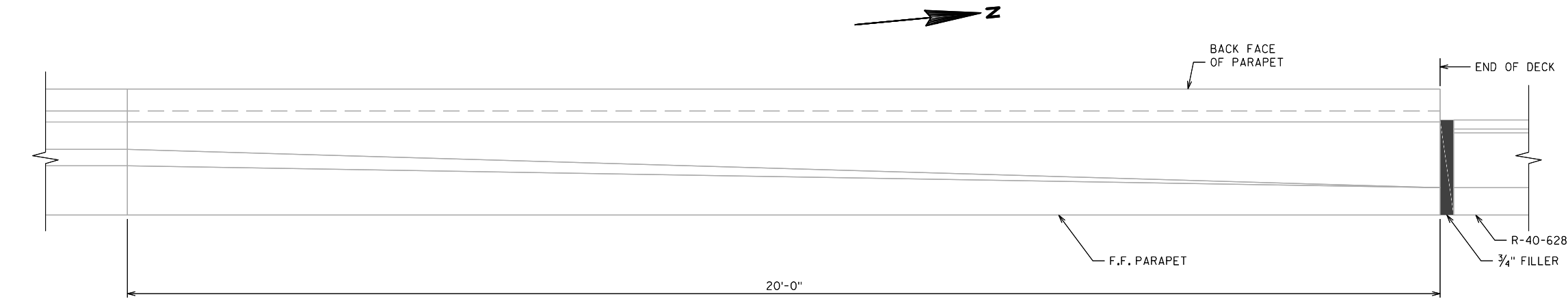
CONSULTANT CONTACT:
MARK MUTZIGER (414) 282-6905



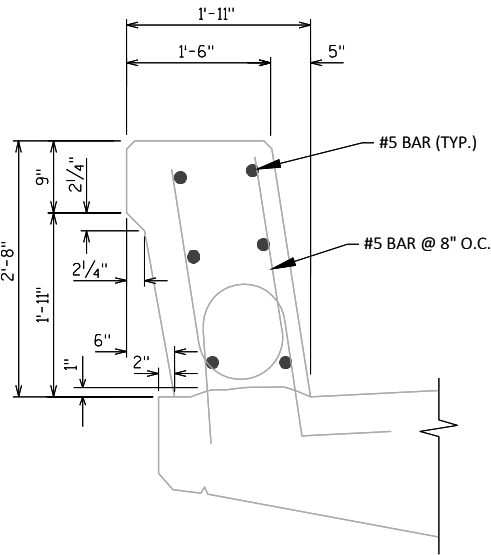
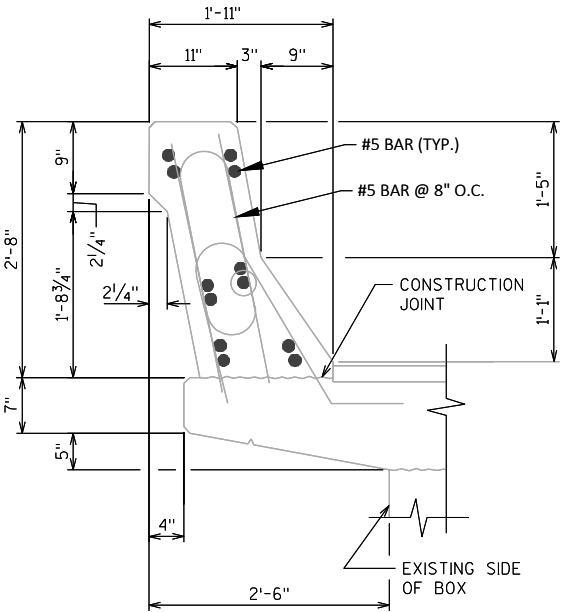
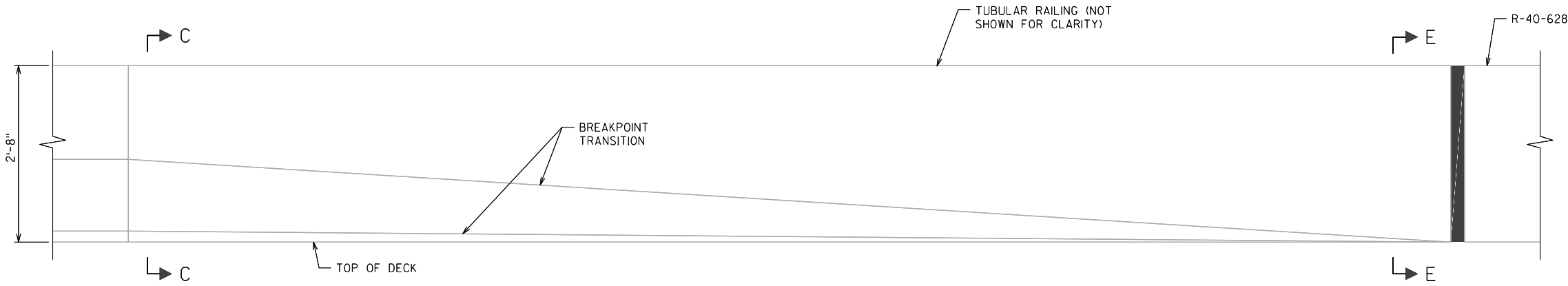
| ESTIMATE OF QUANTITIES | | | |
|------------------------|-----------------------|-----|------|
| ITEM NUMBER | BID ITEMS | QTY | UNIT |
| SPV.0090.XX | FENCE CHAIN LINK 6-FT | 320 | LF |

* DIMENSIONS MEASURED NORMAL TO THE WEST
DECK EDGE

| | | | |
|---|------|--------------|-----------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 1-42-400-6D | | | |
| DRAWN BY | | MDG | PLANS CK'D. JCG |
| CROSS SECTION | | SHEET 2 OF 5 | |



WEST PARAPET SHOWN, EAST PARAPET SIMILAR



| NO. | DATE | REVISION | BY |
|---|------|--------------|-----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 1300-40-6D | | | |
| DRAWN BY | MDG | PLANS CK'D. | JCG |
| PARAPET DETAILS | | SHEET 3 OF 5 | |

NOTES:

POSTS ARE TO BE SET VERTICAL.

METALLIC-COATED FENCE SYSTEM:
ALL FENCE COMPONENTS SHALL BE GALVANIZED STEEL, EXCEPT THE FENCE FABRIC WHICH MAY BE ALUMINUM-COATED SHEET OR GALVANIZED STEEL.

FABRIC SHALL CONFORM TO ASTM A491 OR A392, CLASS 2. STEEL RAILS, POSTS AND POST SLEEVES SHALL CONFORM TO ASTM F1083, STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM F626.

THE BID ITEM SHALL BE "FENCE CHAIN LINK 6- FT."

COMPLETE ANY REQUIRED WELDING OF COMPONENTS BEFORE GALVANIZING.

POST CLAMPS AND POST CLAMP SPACERS SHALL BE ASTM A709, GRADE 36.

TENSION WIRE SHALL BE 7 GAGE STEEL WIRE COATED IN ACCORDANCE WITH ASTM A824 AND A817 AS EITHER TYPE I (ALUMINUMIZED) OR TYPE II, CLASS 4 (GALVANIZED).

ALL POST SPACINGS ARE MEASURED HORIZONTALLY ALONG THE C/L OF THE POST.

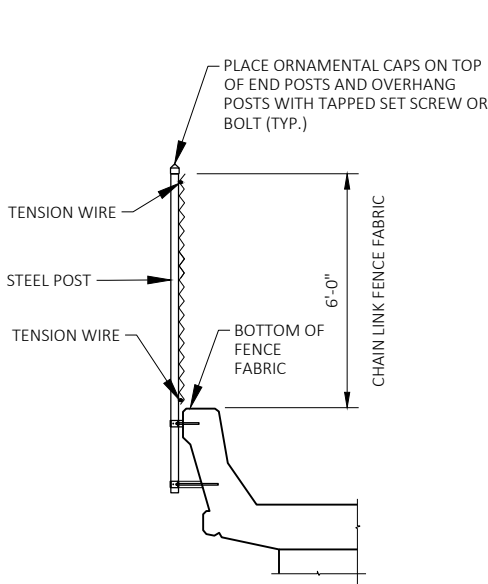
ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

CONCRETE ADHESIVE ANCHORS 5/8"-INCH. EMBED 5" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

ATTACH FABRIC TO RAILS, AND TO POSTS WITHOUT TENSION BANDS, WITH TIE WIRES (ROUND, 9-GAGE) SPACED AT 1'-0".

PROVIDE TENSION POST AND BRACE RAILS TO LIMIT TENSION WIRE RUNS TO LESS THAN 500 FEET.

PARAPET HAS CONDUIT. INSPECT ALL ANCHOR HOLES BEFORE ADHESIVE INSTALLATION. NOTIFY ENGINEER IF CONDUIT IS ENCOUNTERED DURING ADHESIVE ANCHOR INSTALLATION.

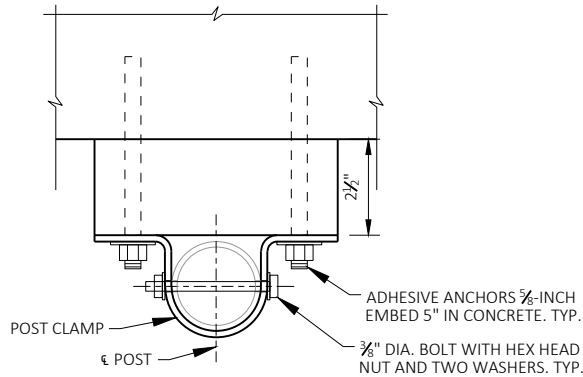


SECTION THRU FENCE ON PARAPET 'B'

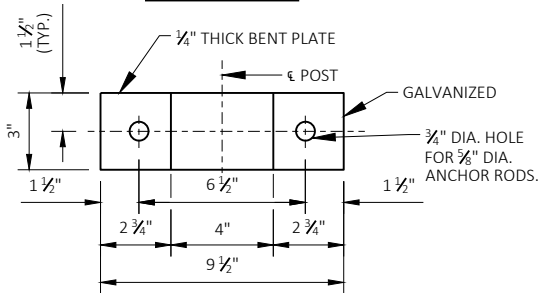
PROTECTIVE SCREENING SHALL BE STRAIGHT.

FENCE MEMBER SIZE & WEIGHT

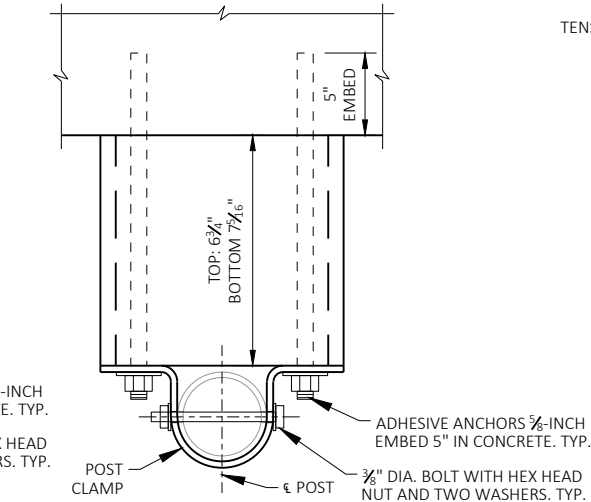
| STEEL FENCE MEMBER | OUTSIDE DIAMETER (INCHES) | WEIGHT (LB/FT) |
|------------------------------|---------------------------|----------------|
| POST (END, LINE, OR TENSION) | 3.50 | 7.576 |
| BRACE RAIL | 1.66 | 2.273 |



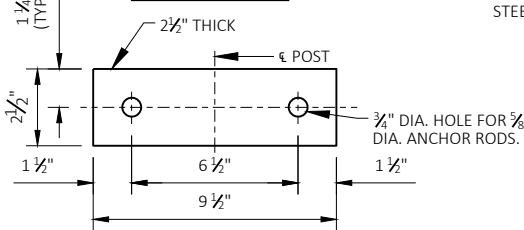
SECTION C-C



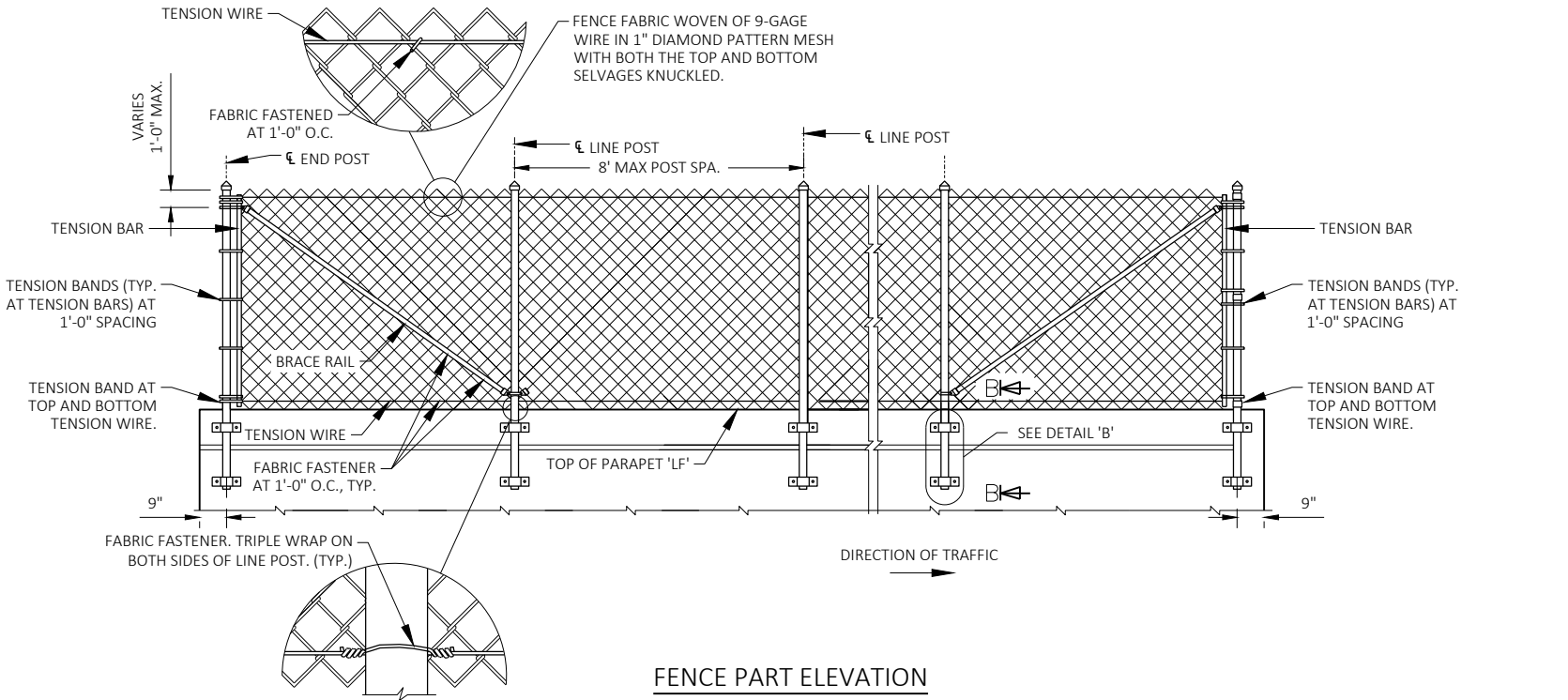
POST CLAMP DETAIL



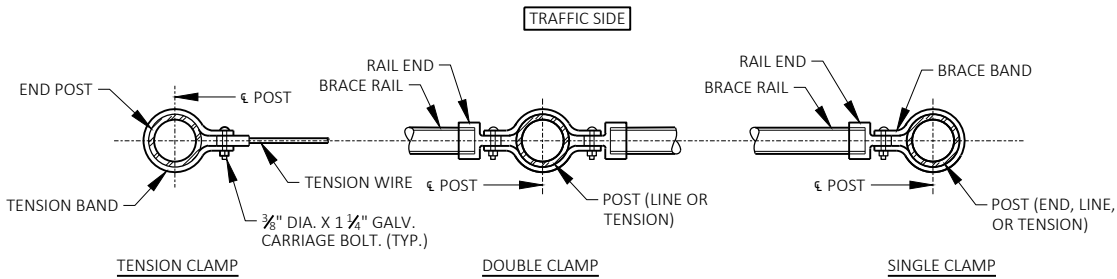
SECTION D-D



POST CLAMP SPACER TUBE DETAIL

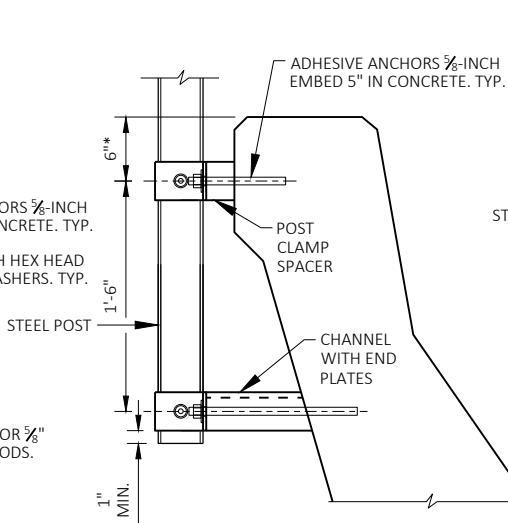


FENCE PART ELEVATION

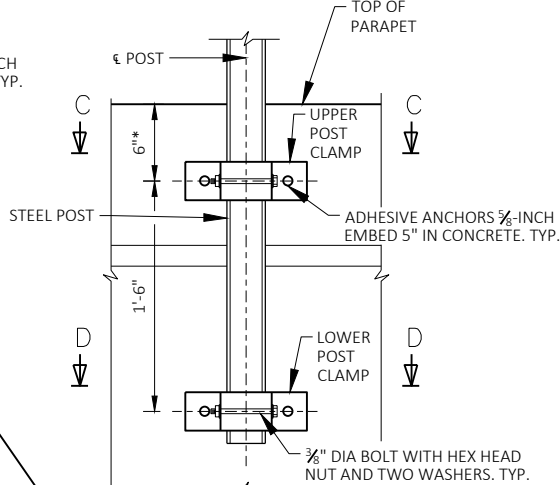


SECTION A-A

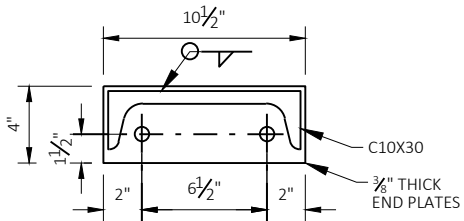
NOTE: PLACE ALL BOLT HEADS ON THE TRAFFIC SIDE



SECTION B-B



DETAIL 'B'



CHANNEL DETAIL

| NO. | DATE | REVISION | BY |
|---|------|-----------------|----|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | |
| STRUCTURE 1300-40-6D | | | |
| DRAWN BY MDG | | PLANS CK'D. JCG | |
| FENCE DETAILS | | SHEET 4 OF 5 | |



| | | | | |
|---|------|----------|--------------|----|
| NO. | DATE | REVISION | | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION | | | | |
| STRUCTURE 1-40-400-6D | | | | |
| DRAWN BY | | MDG | PLANS CK'D. | JO |
| SIGN BRIDGE BLISTER DETAILS | | | SHEET 5 OF 5 | |

EPlans Preliminary Sheet Numbering Tool

This sheet: ftp://ftp.dot.state.wi.us/transp/roads/eplans/prelim_sheet_numbers.pdf

Notes

- Acrobat 5 or higher is required to use this tool.
- The Bureau of Highway Construction places sheet numbers in the final plan.
- This sheet is for placing preliminary sheet numbers with a "PRE_" prefix.
- If a plan contains multiple projects, number each plan individually.
- Leave this sheet in the plan.

TO ADD PRELIMINARY SHEET NUMBERS

1. Insert this sheet at the end of the plan

- a. With the plan open in Acrobat, select Document > Insert Pages.
- b. In the Select File to Insert dialog box, select this file (prelim_sheet_numbers.pdf)
- c. In the Insert dialog box, choose After for Location and Last page for Page.
- d. Click OK.

2. Click the Place Preliminary Sheet Numbers button

- a. Go to the last sheet of the plan.
- b. Click the Place Preliminary Sheet Numbers button once.
(The preliminary sheet number appears in the bottom right corner of the sheets.
The number should match the page number in the Acrobat Status bar).

3. Re-Save the PDF

- a. Select File > Save As and save the PDF.

TO REMOVE PRELIMINARY SHEET NUMBERS

DRAFT