

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

**MIA-55-11.83**  
CITY OF TROY  
MIAMI COUNTY

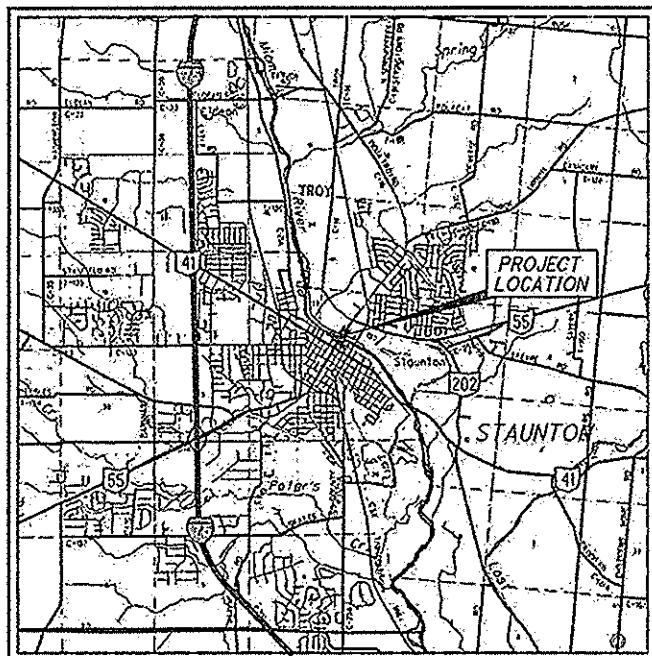
PROJECT DESCRIPTION

CONSTRUCTION OF A LATEX MODIFIED CONCRETE OVERLAY ON THE EXISTING BRIDGE DECK USING HYDRODEMOLITION ALONG WITH THE REPLACEMENT OF THE EXISTING EXPANSION JOINTS, SEALING THE LONGITUDINAL JOINT, AND PAINTING OF THE STRUCTURAL STEEL.

PROJECT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)  
NOTICE OF INTENT: EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)

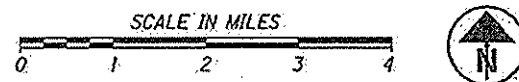
2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.



LOCATION MAP

LATITUDE: 40°02'29" LONGITUDE: -84°12'07"



|                         |       |
|-------------------------|-------|
| PORTION TO BE IMPROVED  | ----- |
| INTERSTATE HIGHWAY      | ===== |
| FEDERAL ROUTES          | ----- |
| STATE ROUTES            | ----- |
| COUNTY & TOWNSHIP ROADS | ----- |
| OTHER ROADS             | ----- |

DESIGN DESIGNATION

|                                   |       |        |
|-----------------------------------|-------|--------|
| CURRENT ADT (2016)                | ----- | 20,000 |
| DESIGN YEAR ADT (2036)            | ----- | 21,000 |
| DESIGN HOURLY VOLUME (2036)       | ----- | 2,100  |
| DIRECTIONAL DISTRIBUTION          | ----- | 53%    |
| TRUCKS (24 HOUR B&C)              | ----- | 2%     |
| DESIGN SPEED                      | ----- | 40     |
| LEGAL SPEED                       | ----- | 35     |
| DESIGN FUNCTIONAL CLASSIFICATION: |       |        |
| URBAN MINOR ARTERIAL              |       |        |
| NHS PROJECT                       | ----- | NO     |

DESIGN EXCEPTIONS

NONE

**UNDERGROUND UTILITIES**  
CONTACT BOTH SERVICES  
CALL TWO WORKING DAYS  
BEFORE YOU DIG.

CALL  
**1-800-362-2764**  
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY.

OIL & GAS PRODUCERS UNDERGROUND  
PROTECTION SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:  
**Stantec**  
11687 Lebanon Road  
Cincinnati OH 45241  
(513) 842-8200

**Rii**  
RESOURCE INTERNATIONAL INC.  
4480 LAKE FOREST DRIVE  
CINCINNATI, OHIO 45242  
(513) 769-6998

ENGINEERS SEAL:  
SHEETS 1, 4 THRU 14

SIGNED: *Eric D. Adkins*  
DATE: Oct. 2, 2015

ENGINEERS SEAL:  
SHEETS 2, 3, 15 THRU 17A

SIGNED: *Joseph L. Mellman*  
DATE: Oct. 2, 2015

ENGINEERS SEAL:  
SHEETS 18 THRU 35

SIGNED: *Michael R. Sturdevant*  
DATE: Oct. 2, 2015

INDEX OF SHEETS:

|                        |            |
|------------------------|------------|
| TITLE SHEET            | 1          |
| TYPICAL SECTIONS       | 2          |
| GENERAL NOTES          | 3          |
| MAINTENANCE OF TRAFFIC | 4-14       |
| GENERAL SUMMARY        | 15, 15A    |
| TRAFFIC CONTROL        | 16-17, 17A |
| STRUCTURES OVER 20'    | 18-35      |

SHEETS ADDED: 15A AND 17A

| STANDARD CONSTRUCTION DRAWINGS |         | SUPPLEMENTAL SPECIFICATIONS | SPECIAL PROVISIONS |     |          |  |
|--------------------------------|---------|-----------------------------|--------------------|-----|----------|--|
| EXJ-4-87                       | 7/19/02 | TC-71.10                    | 1/17/14            | 800 | 10/16/15 |  |
| GSD-1-96                       | 7/19/02 |                             |                    | 821 | 4/20/12  |  |
| RB-1-55                        | 7/19/13 |                             |                    | 848 | 7/17/15  |  |
|                                |         |                             |                    | 921 | 4/20/12  |  |
| BP-3.1                         | 7/18/14 |                             |                    |     |          |  |
| DM-4.4                         | 7/20/12 |                             |                    |     |          |  |
| RM-4.2                         | 4/18/14 |                             |                    |     |          |  |
| MT-95.31                       | 7/18/14 |                             |                    |     |          |  |
| MT-95.32                       | 7/18/14 |                             |                    |     |          |  |
| MT-95.41                       | 7/18/14 |                             |                    |     |          |  |
| MT-97.12                       | 7/18/14 |                             |                    |     |          |  |
| MT-101.60                      | 7/19/13 |                             |                    |     |          |  |
| MT-101.70                      | 1/17/14 |                             |                    |     |          |  |
| MT-105.10                      | 7/19/13 |                             |                    |     |          |  |
| MT-110.10                      | 7/19/13 |                             |                    |     |          |  |

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED *Randy Chevaley* PG PS/Asst  
DATE 10/20/15 DISTRICT DEPUTY DIRECTOR

APPROVED *Greg Whiff*  
DATE 11-10-15 DIRECTOR DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.  
E131(328)

PID NO.  
96435

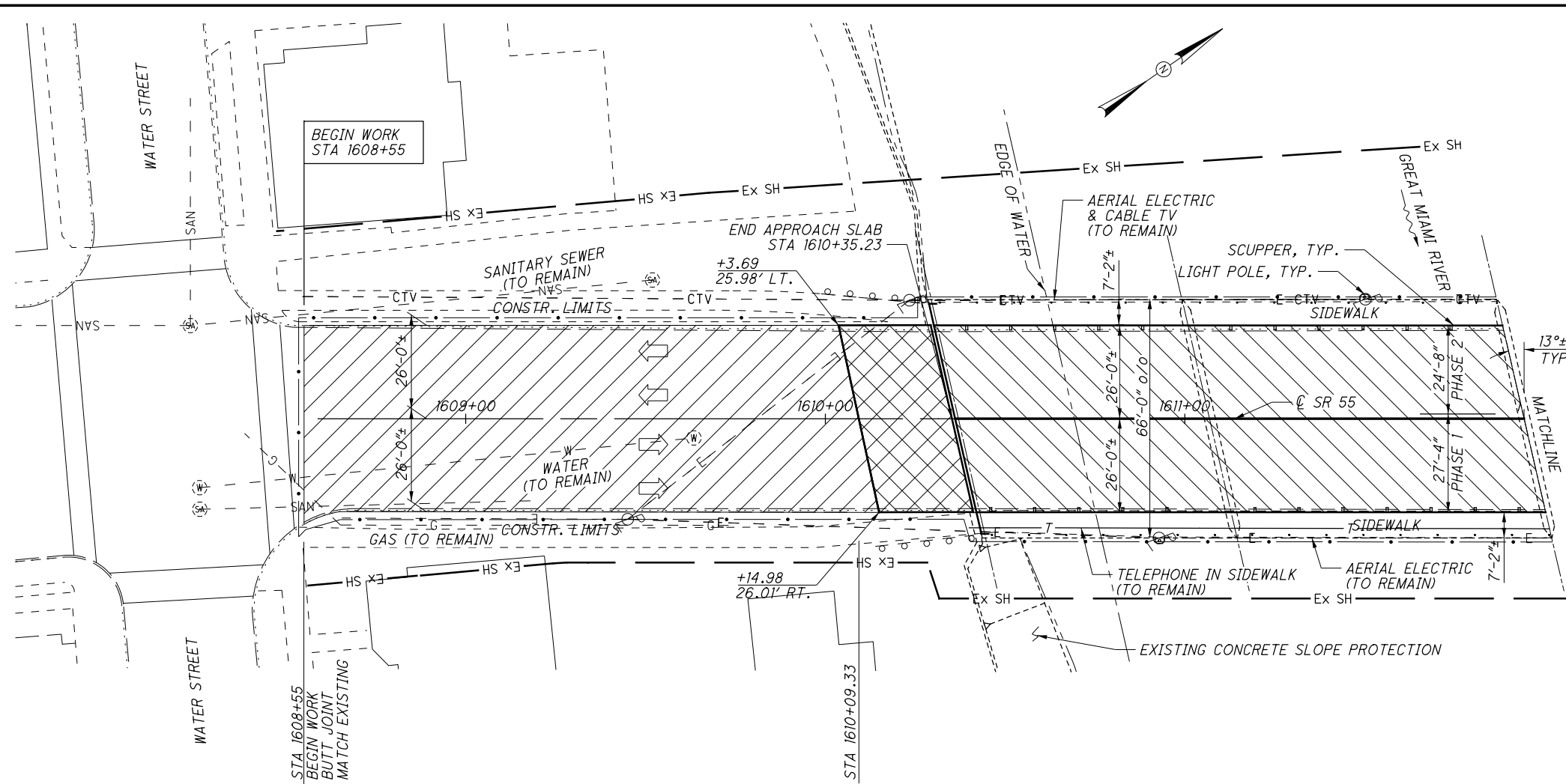
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT  
NONE

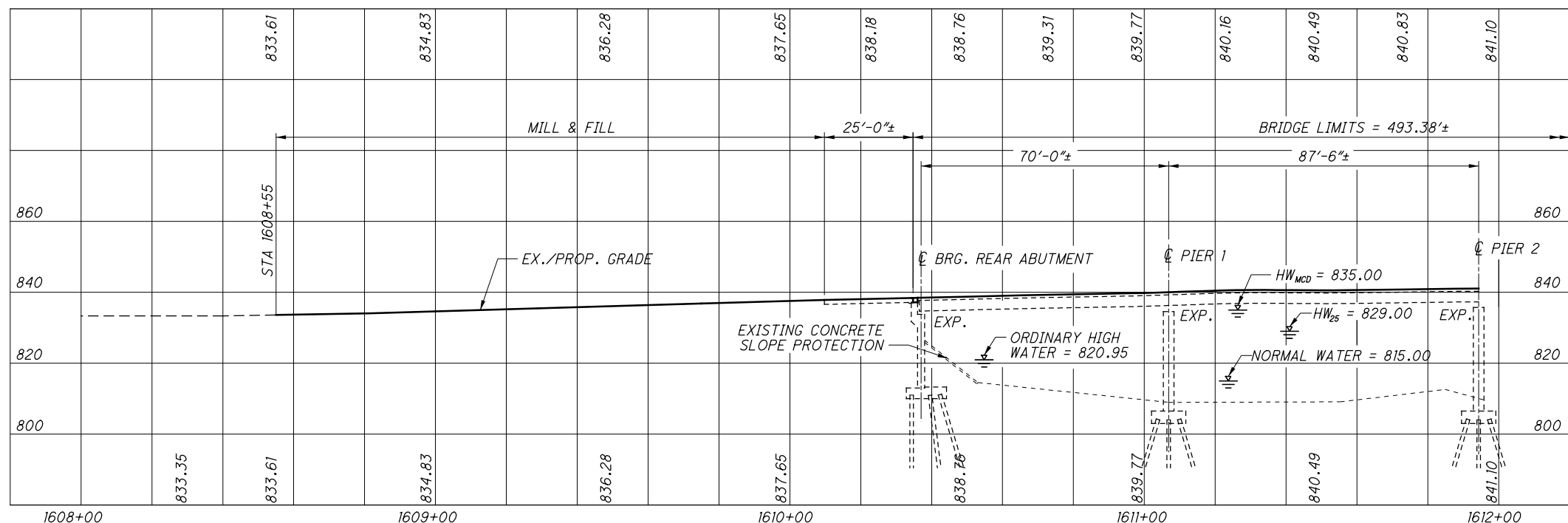
MIA-55-11.83

MIA - SR 55-11.83  
160063 PID - 96435  
Dist 7 1/28/2016  
Contract Proposal Available @ www.contracts.dot.state.oh.us/home

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**GENERAL PLAN**



**PROFILE**

NOTE:  
FOR A DETAILED LISTING OF THE PROPOSED WORK,  
SEE GENERAL NOTES SHEET 4/18.

| BENCHMARK DATA  |  |
|---|--|
| BM #1 STA. 1615+37.69, ELEV. 840.02, OFFSET 35.37', RT.   |  |
| BM #2 STA. 1615+97.50, ELEV. 838.74, OFFSET 207.09', RT.  |  |
| BM #1 CROSS NOTCH ON WINGWALL   |  |
| BM #2 CROSS CUT ON TOP N.W. CORNER OF CONC POST ON RAILING ON S.W. END OF CONC. STADIUM AT TOP. |  |

| LEGEND |  |
|--------|--|
|        | RESURFACE ROADWAY PAVEMENT PLANING               |
|        | RESURFACE APPROACH SLAB                          |
|        | OVERLAY BRIDGE DECK WITH LATEX MODIFIED CONCRETE |

SEE SHT NO. 19 FOR CONTINUATION

| EXISTING STRUCTURE      |   |
|-------------------------|---|
| TYPE:                   | CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE |
| WEARING SURFACE:        | 2" MICROSILICA MODIFIED CONCRETE                                      |
| SPANS:                  | 70'± - 87.5'± - 87.5'± - 87.5'± - 87.5'± - 70'±                       |
| ROADWAY:                | 52'-0"± F/F CURB  |
| LOADING:                | CF=400 (57)   |
| SKEW:                   | 13° 00' 00" RF  |
| APPROACH SLABS:         | AS-1-54 (25'± LONG)   |
| ALIGNMENT:              | TANGENT   |
| CROWN:                  | 3/16 "/FT   |
| STRUCTURAL FILE NUMBER: | 5501504   |
| DATE BUILT:             | 1961  |
| DISPOSITION:            | TO BE REHABILITATED   |

| PROPOSED STRUCTURE |  |
|--------------------|--|
| PROPOSED WORK:     | OVERLAY WEARING SURFACE, REPLACE LONGITUDINAL JOINT, REPLACE EXPANSION JOINTS, REPLACE ABUTMENT BEARINGS, PATCH CONCRETE, PAINT STEEL, & SEAL CONCRETE |
| SPANS:             | 70'± - 87.5'± - 87.5'± - 87.5'± - 87.5'± - 70'±  |
| ROADWAY:           | 52'-0"± F/F CURB   |
| LOADING:           | HS-20  |
| SKEW:              | 13° 00' 00" RF   |
| APPROACH SLABS:    | AS-1-54 (25'± LONG)  |
| ALIGNMENT:         | TANGENT 1613+00  |
| CROWN:             | 3/16 "/FT  |
| COORDINATES:       | LATITUDE 40° 02' 27.4"<br>LONGITUDE 84° 12' 08.2"  |

DESIGN AGENCY: **Stantec**  
 DATE: 06/2015  
 REVIEWED: JRC  
 DRAWN: ALH  
 DESIGNED: MRS  
 CHECKED: EDA  
 MIAMI COUNTY  
 STA. 1610+35.23  
 STA. 1615+28.61  
**GENERAL PLAN (1)**  
 BRIDGE NO. MIA-55-1183  
 OVER THE GREAT MIAMI RIVER  
**MIA-55-11.83**  
 PID No. 96435  
 1/18  
 18/35







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| PARTICIPATION |           | ESTIMATED QUANTITIES |           |       |        |  |       |        |      |             |  |
|---------------|-----------|----------------------|-----------|-------|--------|--|-------|--------|------|-------------|--|
| 01/SK2/BR     | 02/SK2/PV | ITEM                 | EXTENSION | TOTAL | UNIT   | DESCRIPTION  | ABUT. | SUPER. | GEN. | SHEET #     |  |
|               |           | LUMP                 | 202       | 11203 | LUMP   | PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN  |       |        | LUMP | 4/18        |  |
|               |           | 6598                 | 509       | 10000 | 6598   | POUND EPOXY COATED REINFORCING STEEL   | 619   | 5979   |      |             |  |
|               |           | 1000                 | 509       | 20001 | 1000   | POUND REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN                              | 200   | 800    |      | 4/18        |  |
|               |           | 61                   | 511       | 34411 | 61     | CU YD CLASS QC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN  | 12    | 49     |      | 14/18       |  |
|               |           | 1502                 | 512       | 10100 | 1502   | SQ YD SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)  | 242   | 1260   |      |             |  |
|               |           | 3400                 | 513       | 10201 | 3400   | POUND STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN  |       | 3400   |      | 4/18        |  |
|               |           | 54,588               | 514       | 00050 | 54,588 | SQ FT SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL   |       | 54,588 |      |             |  |
|               |           | 54,588               | 514       | 00056 | 54,588 | SQ FT FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT  |       | 54,588 |      |             |  |
|               |           | 54,588               | 514       | 00060 | 54,588 | SQ FT FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT   |       | 54,588 |      |             |  |
|               |           | 54,588               | 514       | 00066 | 54,588 | SQ FT FIELD PAINTING STRUCTURAL STEEL, FINISH COAT   |       | 54,588 |      |             |  |
|               |           | 82                   | 514       | 00504 | 82     | MAN HOUR GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL  |       | 82     |      |             |  |
|               |           | 33                   | 514       | 10000 | 33     | EACH FINAL INSPECTION REPAIR   |       | 33     |      |             |  |
|               |           | LUMP                 | 514       | 27800 | LUMP   | FIELD PAINTING, MISC.: WAYFARER SIGNS  |       | LUMP   |      | 4/18, 17/18 |  |
|               |           | 132                  | 516       | 11210 | 132    | FT STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL   |       | 132    |      |             |  |
|               |           | 491                  | 516       | 14600 | 491    | FT STRUCTURAL JOINT OR JOINT SEALER, MISC.: LONGITUDINAL JOINT ELASTOMERIC STRIP SEAL                        |       | 491    |      | 12-14/18    |  |
|               |           | 107                  | 516       | 31011 | 107    | FT 2" DEEP JOINT SEALER, AS PER PLAN   | 107   |        |      | 4/18        |  |
|               |           | 10                   | 516       | 44301 | 10     | EACH ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13" X 13" X 4.048") |       | 10     |      | 11/18       |  |
|               |           | 10                   | 516       | 46200 | 10     | EACH BEARING DEVICE, ROCKER  |       | 10     |      |             |  |
|               |           | LUMP                 | 516       | 47001 | LUMP   | JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN   |       | LUMP   |      | 5/18        |  |
|               |           | 4                    | 518       | 12500 | 4      | EACH SCUPPER, MISC.: PLUG SCUPPER  |       | 4      |      | 16/18       |  |
|               |           | 68                   | 518       | 12900 | 68     | EACH SCUPPER, LENGTHENING  |       | 68     |      |             |  |
|               |           | 407                  | 519       | 11101 | 407    | SQ FT PATCHING CONCRETE STRUCTURE, AS PER PLAN   | 17    | 390    |      | 5/18        |  |
|               |           | 3                    | 630       | 86311 | 3      | EACH REMOVAL OF STRUCTURE MOUNTED SIGN AND DISPOSAL, AS PER PLAN   |       | 3      |      | 5/18        |  |
|               |           | 2787                 | 848       | 10100 | 2787   | SQ YD LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (2 1/2" THICK)                                   |       | 2787   |      |             |  |
|               |           | 2787                 | 848       | 20001 | 2787   | SQ YD SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN   |       | 2787   |      | 5/18, 13/18 |  |
|               |           | 102                  | 848       | 30100 | 102    | CU YD LATEX MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY                                    |       | 102    |      |             |  |
|               |           | 211                  | 848       | 50000 | 211    | SQ YD HAND CHIPPING  |       | 211    |      |             |  |
|               |           | LUMP                 | 848       | 50100 | LUMP   | TEST SLAB  |       | LUMP   |      |             |  |
|               |           | 2                    | 848       | 50200 | 2      | CU YD FULL-DEPTH REPAIR  |       | 2      |      |             |  |
|               |           | 2620                 | 848       | 50320 | 2620   | SQ YD EXISTING CONCRETE OVERLAY REMOVED (2")   |       | 2620   |      |             |  |
|               |           | 211                  | 848       | 50340 | 211    | SQ YD REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY                       |       | 211    |      |             |  |

## GENERAL NOTES, CONTINUED

### ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPER-STRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

### ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

### ITEM 630, REMOVAL OF STRUCTURE MOUNTED SIGN AND DISPOSAL, AS PER PLAN

REMOVE EXISTING SIGNS AND CLAMPS LOCATED ON THE BOTTOM FLANGE OF RIGHT FASCIA STEEL MEMBER ABOVE MULTI-PURPOSE PATHS.

### ITEM 848, SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN

HYDRODEMOLITION SHALL BE USED TO REMOVE 1/2" OF CONCRETE FROM THE EXISTING CONCRETE SLAB, PER DETAIL 1 ON SHEET 13 / 18. HYDRODEMOLITION SHALL BE USED ON ALL NEW CONCRETE PLACED AROUND THE LONGITUDINAL JOINT AND THE EXPANSION JOINTS TO REMOVE CONCRETE TO THE SAME DEPTH AS THE EXISTING DECK.

DESIGN AGENCY  
  
 11837 Lebanon Road  
 Cincinnati, Ohio 45241  
 (513) 845-9200

DATE  
 06/2015  
 REVIEWED  
 JRC  
 STRUCTURE FILE NUMBER  
 5501504

DRAWN  
 ALH  
 REVISIONS

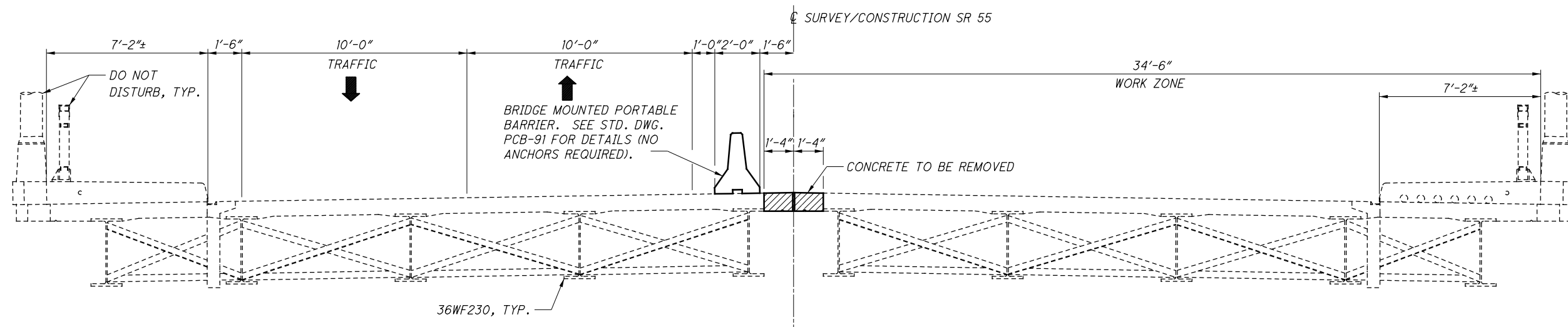
DESIGNED  
 MRS  
 CHECKED  
 EDA

**GENERAL NOTES AND ESTIMATED QUANTITIES**  
 BRIDGE NO. MIA-55-1183  
 OVER THE GREAT MIAMI RIVER

**MIA-55-11.83**  
 PID No. 96435

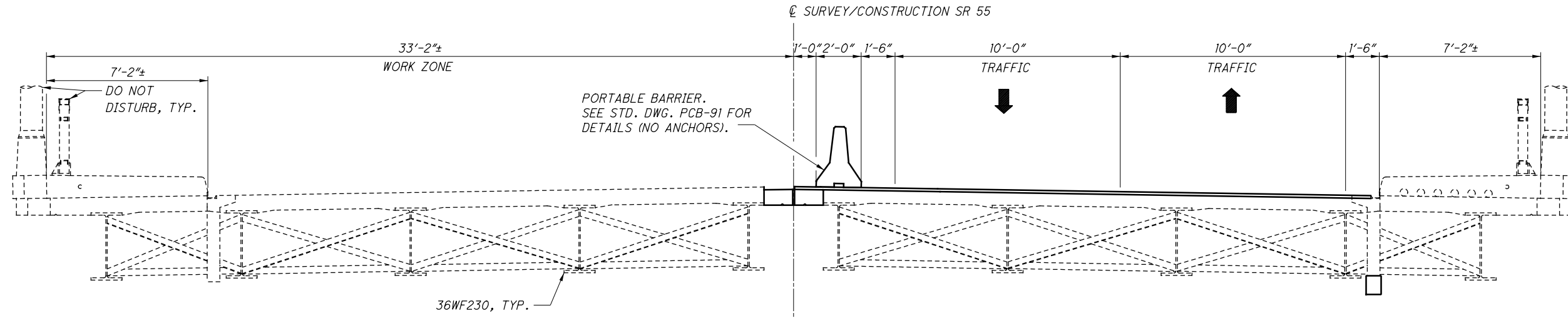
5 / 18  
 22 / 35

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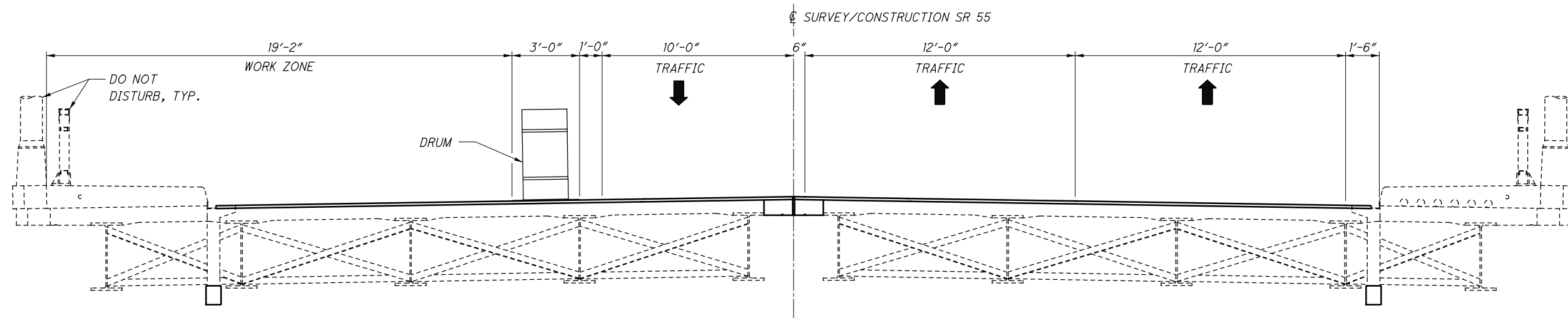
**PHASE 1**

- PHASE 1 CONSTRUCTION NOTES**
1. SET PORTABLE BARRIER (PB) IN PLACE.
  2. MOVE TRAFFIC TO LEFT SIDE OF THE BRIDGE.
  3. REMOVE EDGES OF DECK ALONG THE LONGITUDINAL JOINT.
  4. REMOVE TOPS OF ABUTMENT BACKWALLS AND ENDS OF SLAB ON RIGHT HALF OF BRIDGE.
  5. INSTALL LONGITUDINAL JOINT ARMOR.
  6. INSTALL EXPANSION JOINT ARMOR ON RIGHT HALF OF BRIDGE TO CENTERLINE OF SR 55.
  7. REPLACE ABUTMENT BEARINGS.
  8. PLACE NEW CONCRETE ALONG EDGES AND ENDS OF SLABS.
  9. PLACE LMC OVERLAY TO CENTERLINE OF SR 55.
  10. SHIFT PB TO RIGHT SIDE OF BRIDGE.



**PHASE 2**

- PHASE 2 CONSTRUCTION NOTES**
1. MOVE TRAFFIC TO RIGHT SIDE OF BRIDGE.
  2. REMOVE TOPS OF ABUTMENT BACKWALLS AND ENDS OF SLAB ON LEFT HALF OF BRIDGE.
  3. INSTALL EXPANSION JOINT ARMOR ON LEFT HALF OF BRIDGE TO CENTERLINE OF SR 55.
  4. REPLACE ABUTMENT BEARINGS.
  5. PLACE NEW CONCRETE ALONG ENDS OF SLABS.
  6. INSTALL LONGITUDINAL JOINT SEAL.
  7. INSTALL EXPANSION JOINT SEALS.
  8. PLACE LMC OVERLAY TO CENTERLINE OF SR 55.

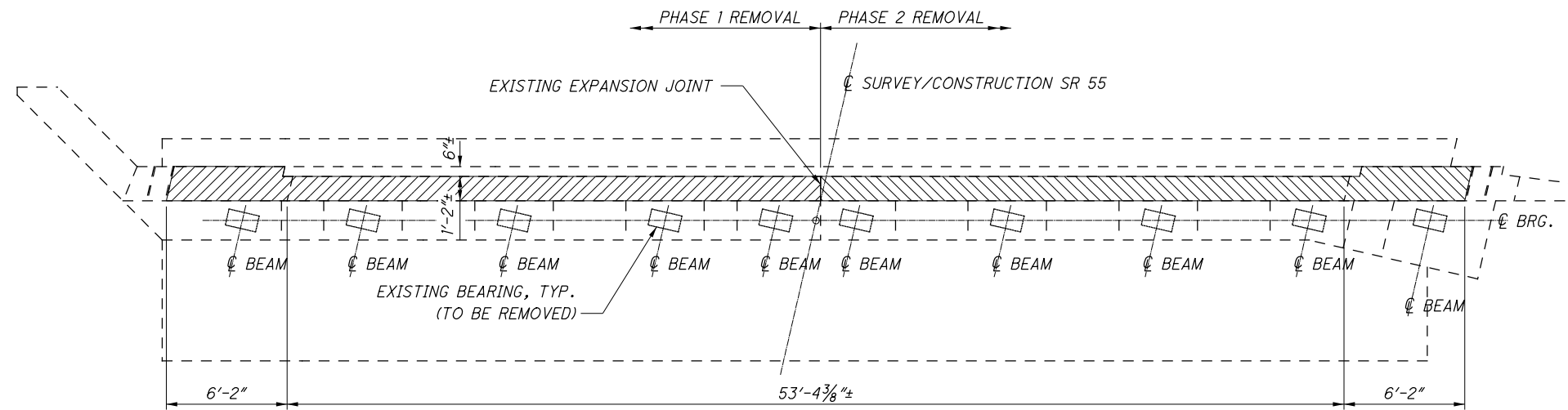


**PHASE 3**

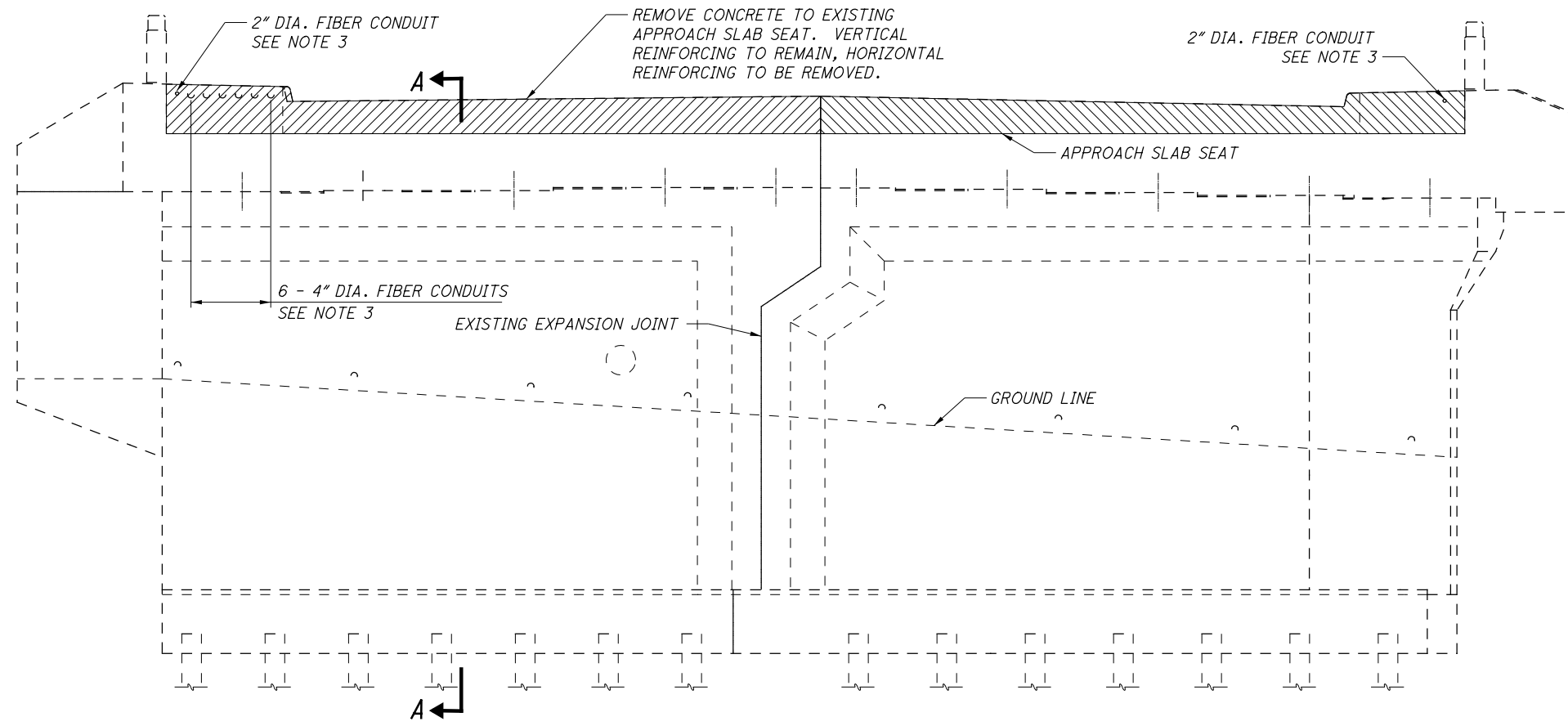
- PHASE 3 CONSTRUCTION NOTES**
1. CLOSE LEFT LANE TO TRAFFIC.
  2. PAINT STRUCTURAL STEEL.
  3. REMOVE PB AND OPEN BRIDGE TO TRAFFIC.

|                       |         |                            |             |
|-----------------------|---------|----------------------------|-------------|
| DESIGN AGENCY         |         | Stantec                    |             |
| DATE                  | 06/2015 | DESIGNED BY                | MRS         |
| REVIEWED              | JRC     | CHECKED                    | EDA         |
| DRAWN                 | ALH     | REVISOR                    |             |
| STRUCTURE FILE NUMBER | 5501504 | BRIDGE NO.                 | MIA-55-1183 |
|                       |         | OVER THE GREAT MIAMI RIVER |             |
| MIA-55-11.83          |         | PID No. 96435              |             |
| 6 / 18                |         | 23 / 35                    |             |

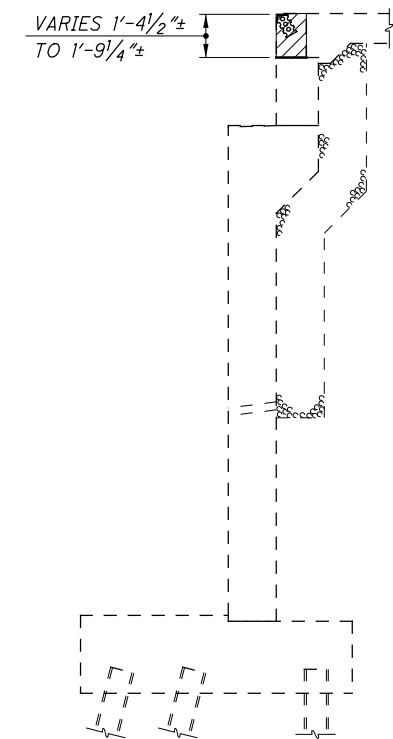
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PLAN

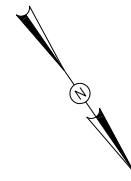


ELEVATION



SECTION A-A

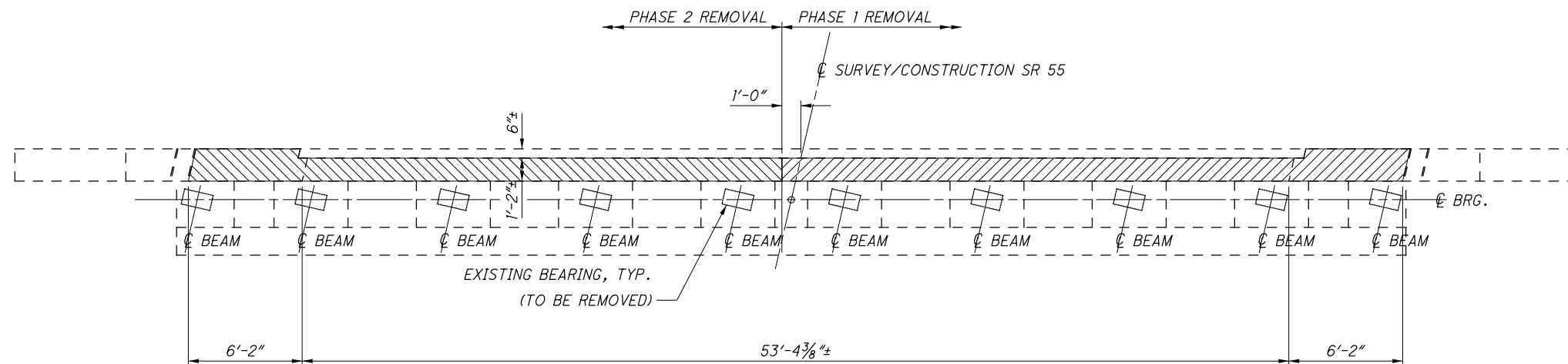
- NOTES:
1. [Hatched Pattern] DENOTES PORTION OF PHASE 1 CONCRETE TO BE REMOVED.
  2. [Hatched Pattern] DENOTES PORTION OF PHASE 2 CONCRETE TO BE REMOVED.
  3. CARE SHALL BE TAKEN TO AVOID DAMAGING CONDUITS DURING REMOVAL OF CONCRETE. ANY CONDUITS DAMAGED SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.



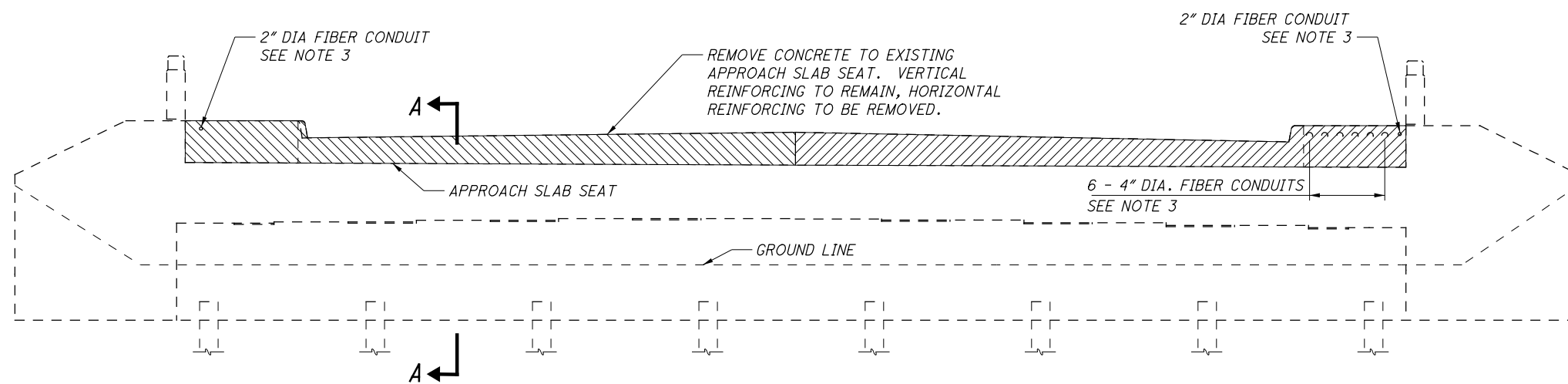
|  |     |                       |         |
|--|-----|-----------------------|---------|
| DESIGN AGENCY  |     | Stantec               |         |
| DATE   |     | 06/2015               |         |
| REVIEWED   | JRC | STRUCTURE FILE NUMBER | 5501504 |
| DRAWN  | ALH | REVISED               |         |
| DESIGNED   | MRS | CHECKED               | EDA     |
| <b>REAR ABUTMENT REMOVAL DETAILS</b><br>BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER |     |                       |         |
| MIA-55-11.83   |     | PID No. 96435         |         |
| 7 / 18   |     | 24 / 35               |         |



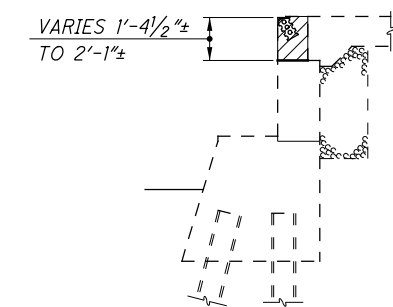
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PLAN



ELEVATION

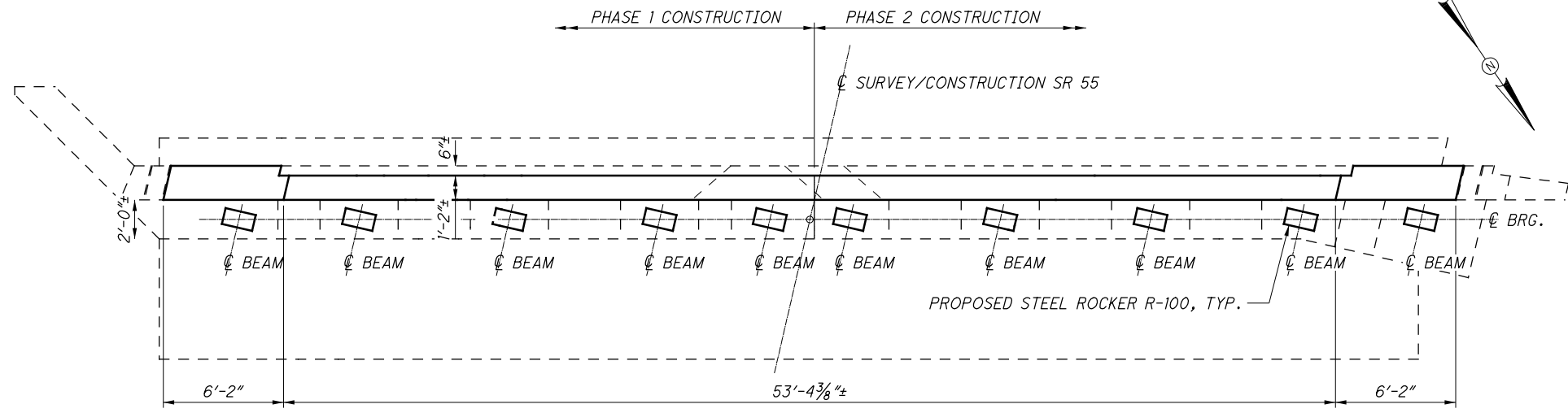


SECTION A-A

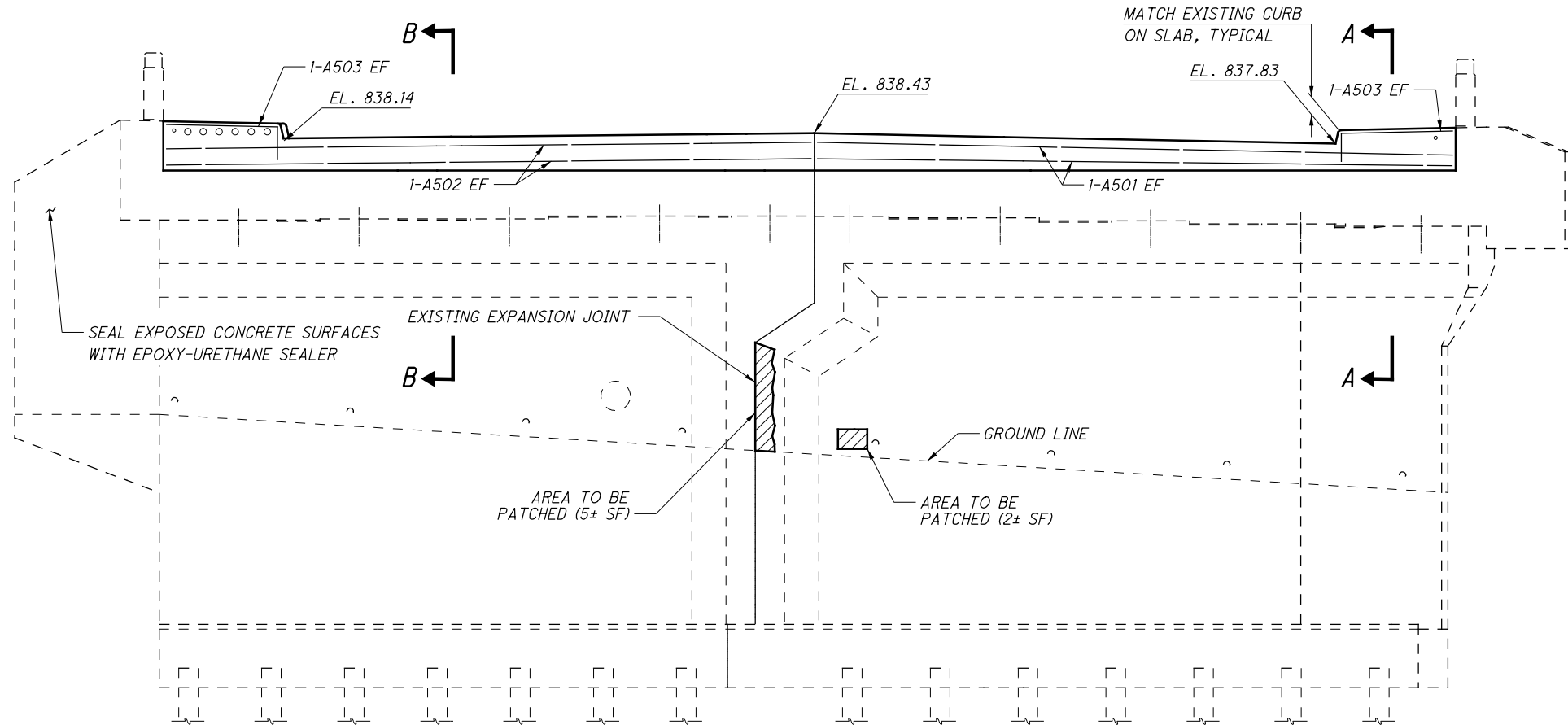
- NOTES:
1. DENOTES PORTION OF PHASE 1 CONCRETE TO BE REMOVED.
  2. DENOTES PORTION OF PHASE 2 CONCRETE TO BE REMOVED.
  3. CARE SHALL BE TAKEN TO AVOID DAMAGING CONDUITS DURING REMOVAL OF CONCRETE. ANY CONDUITS DAMAGED SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.

|  |  |              |                                  |                 |  |
|--|--|--------------|----------------------------------|-----------------|--|
| DESIGNED<br>MRS                                      |  | DRAWN<br>ALH | REVIEWED<br>JRC                  | DATE<br>06/2015 | DESIGN AGENCY<br><b>Stantec</b><br>11887 Lebanon Road<br>Channahon, Ohio 43241<br>(613) 845-8900 |
| CHECKED<br>EDA                                       |  | REVISED      | STRUCTURE FILE NUMBER<br>5501504 |                 |  |
| FORWARD ABUTMENT REMOVAL DETAILS                     |  |              |                                  |                 |  |
| BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER |  |              |                                  |                 |  |
| MIA-55-11.83<br>PID No. 96435                        |  |              |                                  |                 |  |
| 8 / 18   |  |              |                                  |                 |  |
| 25<br>35   |  |              |                                  |                 |  |

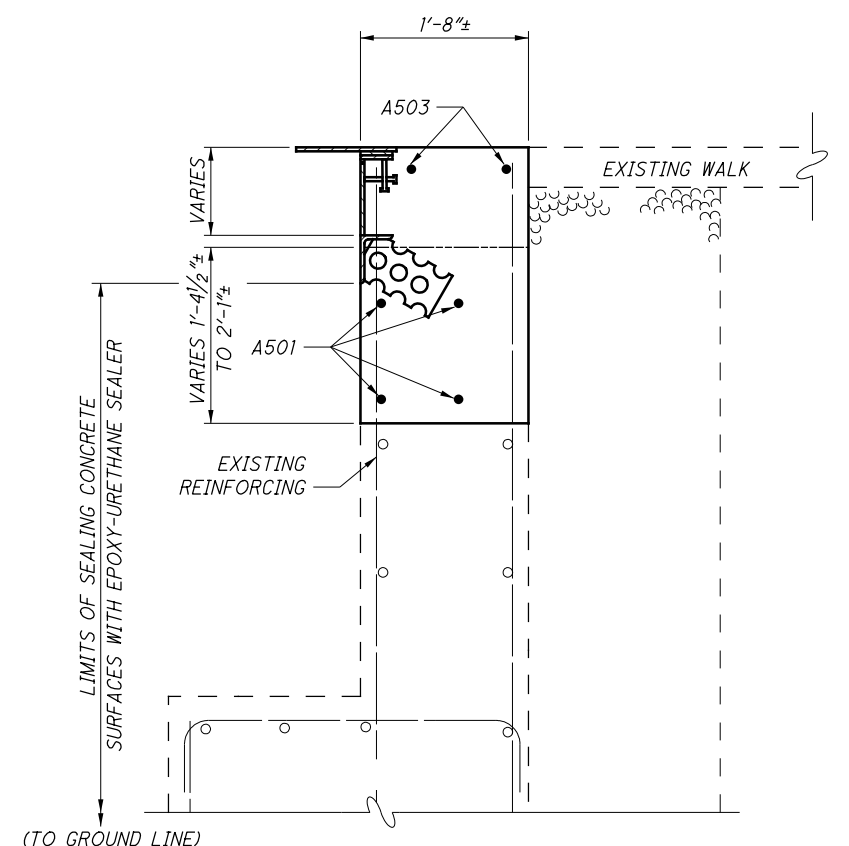
V:\1736\active\173620059\Design\96435\structures\1183C\1183CAR002.dgn 10/11/2015 10:34:22 AM msturdevant



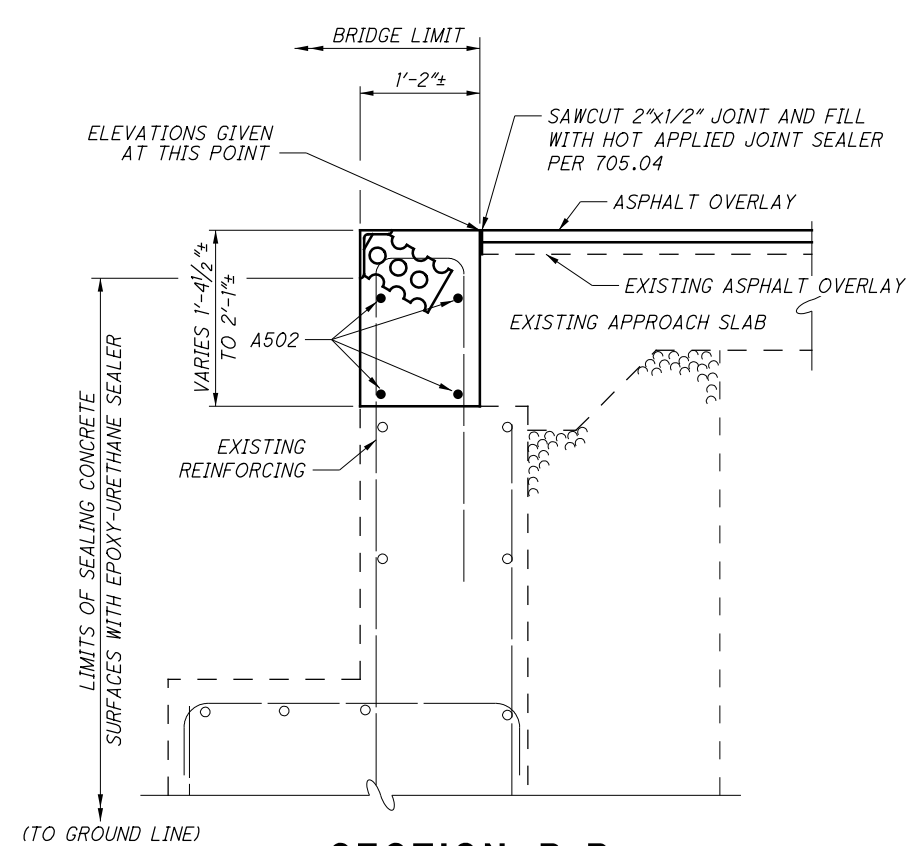
**PLAN**



**ELEVATION**



**SECTION A-A**

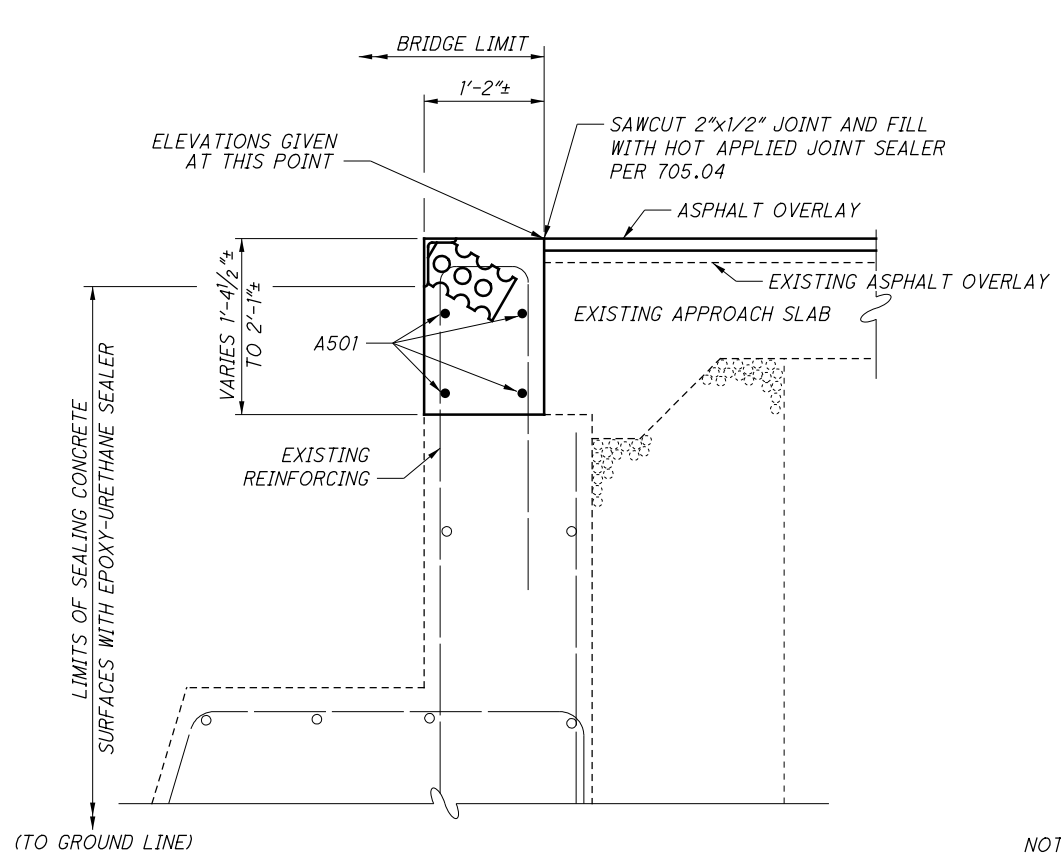
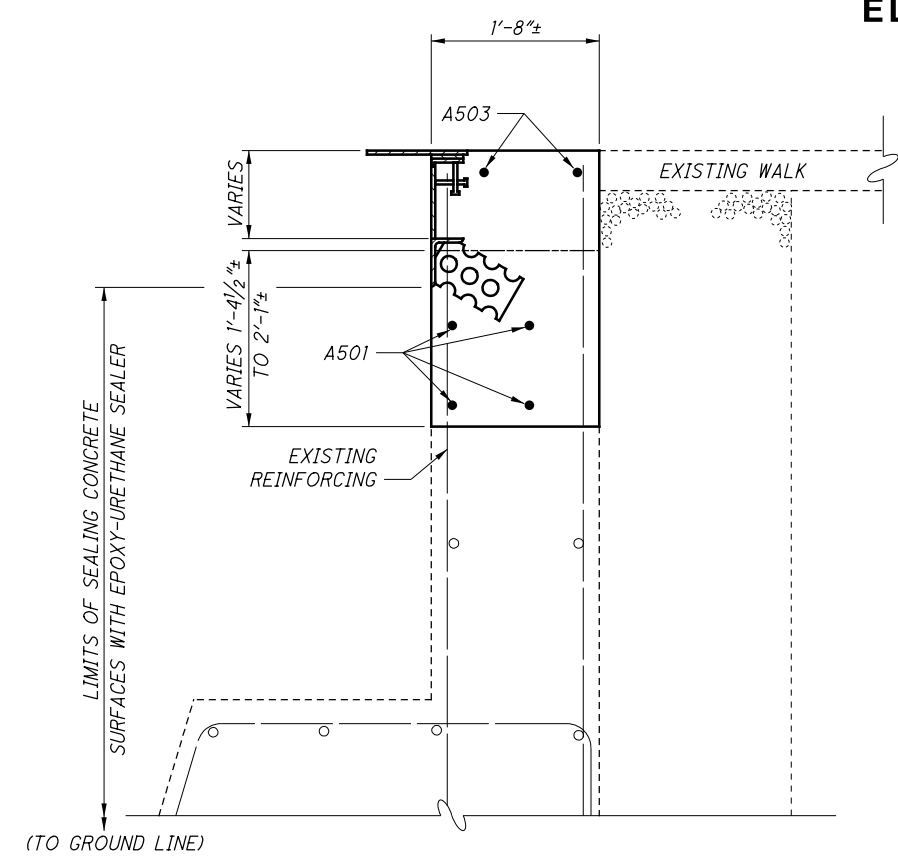
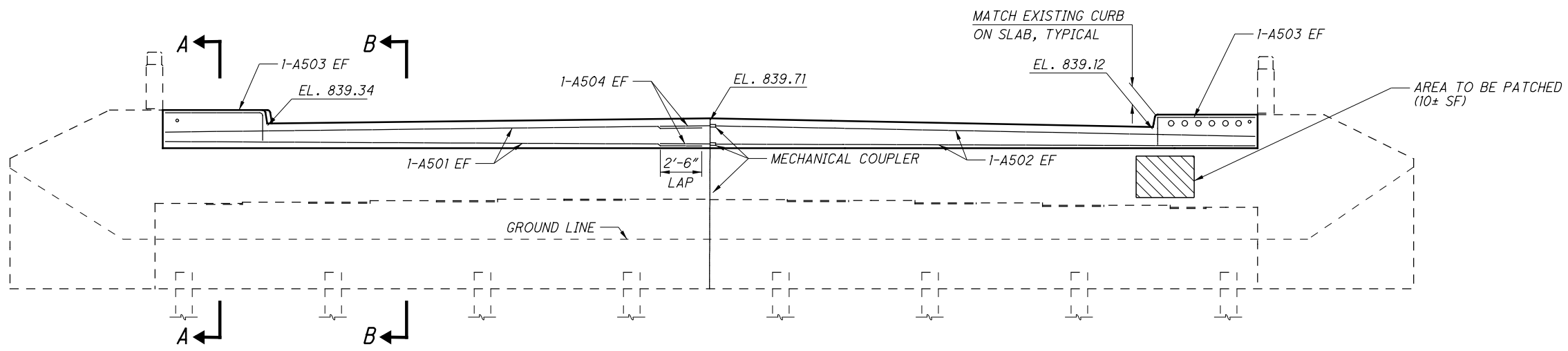
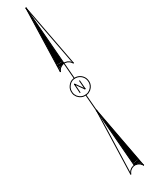
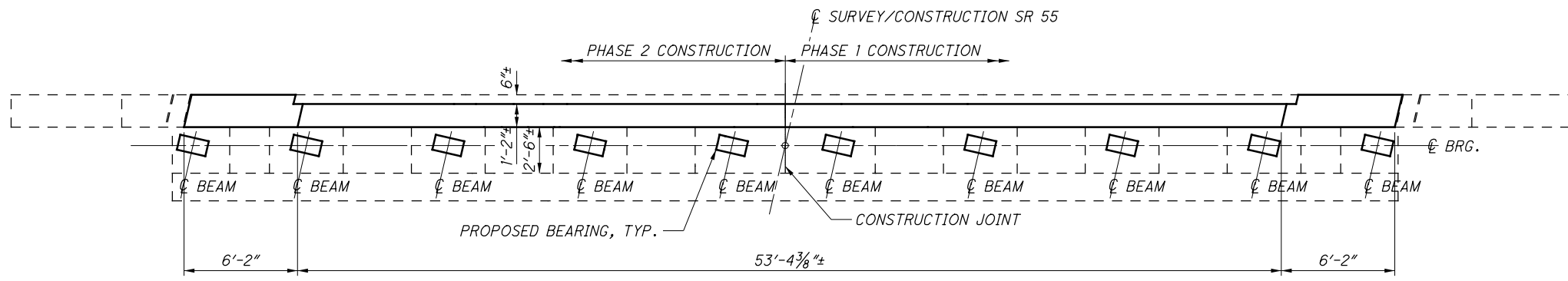


**SECTION B-B**

NOTE:  
CONCRETE IN BACKWALL SHALL BE CLASS OC2.

|  |   |
|--|---|
| <b>Stantec</b><br>11887 Lebanon Road<br>Cincinnati, Ohio 45241<br>(513) 845-8900 | DESIGN AGENCY   |
|  | DATE: 06/2015<br>REVIEWED: JRC<br>DRAWN: ALH<br>DESIGNED: MRS<br>CHECKED: EDA |
| STRUCTURE FILE NUMBER: 5501504<br>REVISIONS: 5501504                             | REAR ABUTMENT DETAILS<br>BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER |
| MIA-55-11.83<br>PID No. 96435  | 9 / 18<br>26 / 35   |

V:\1736\active\173620059\Design\964.35\structures\MI\A055\_1183C\sheets\055\_1183CAF002.dgn 10/11/2015 10:34:23 AM msturdevant



NOTE:  
CONCRETE IN BACKWALL SHALL BE CLASS OC2.

|                            |  |                       |  |          |  |         |  |               |  |
|----------------------------|--|-----------------------|--|----------|--|---------|--|---------------|--|
| DESIGNED BY                |  | DATE                  |  | REVIEWED |  | DRAWN   |  | DESIGNED BY   |  |
| MRS                        |  | 06/2015               |  | JRC      |  | ALH     |  | MIA-55-11.83  |  |
| CHECKED                    |  | STRUCTURE FILE NUMBER |  | 5501504  |  | REVISED |  | PID No. 96435 |  |
| EDA                        |  | 5501504               |  |          |  |         |  | 10 / 18       |  |
| FORWARD ABUTMENT DETAILS   |  |                       |  |          |  |         |  |               |  |
| BRIDGE NO. MIA-55-1183     |  |                       |  |          |  |         |  |               |  |
| OVER THE GREAT MIAMI RIVER |  |                       |  |          |  |         |  |               |  |
| 27                         |  |                       |  |          |  |         |  |               |  |
| 35                         |  |                       |  |          |  |         |  |               |  |



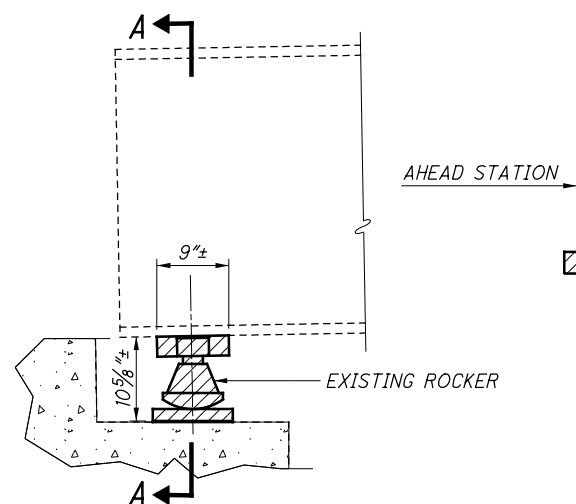
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**NOTES:**

**ELASTOMERIC BEARINGS:** THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

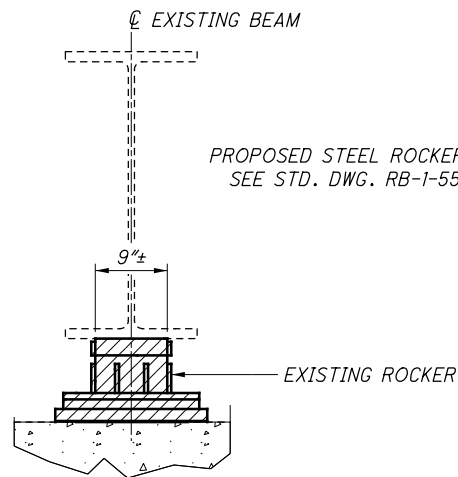
**STEEL LOAD PLATES:** LOAD PLATES SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.

**BASIS OF PAYMENT:** THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, TESTING, ANCHOR RODS, HP SECTION, PLATES, BEARING RETAINERS AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS AS DETAILED. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN.



**ELEVATION**

INDICATES EXISTING ROCKER TO BE REMOVED

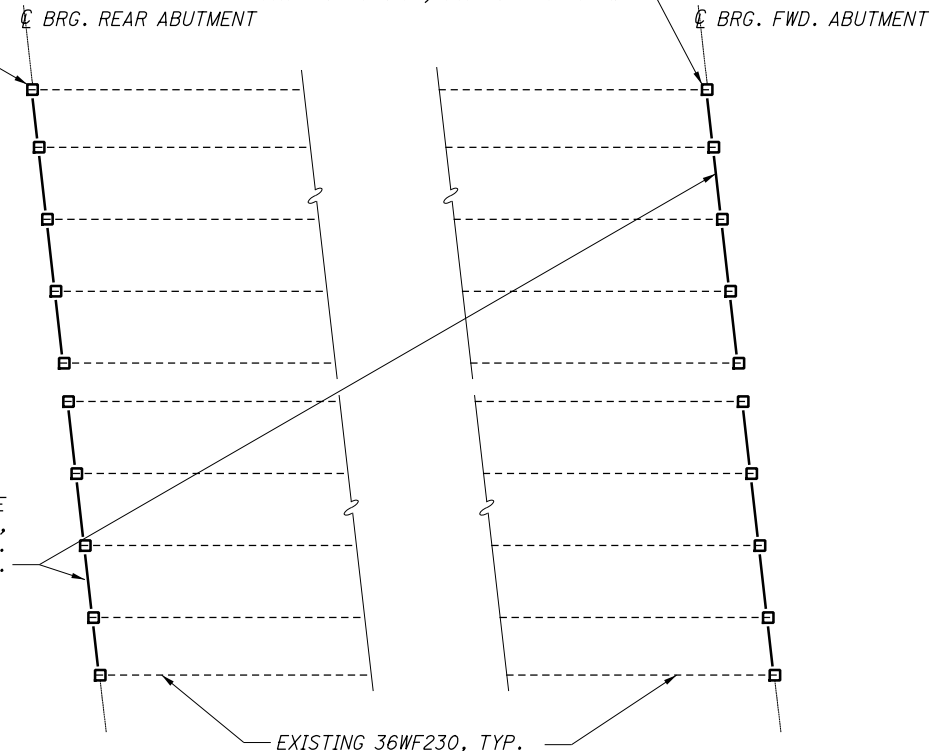


**SECTION A-A**

PROPOSED STEEL ROCKER R-100, TYP. SEE STD. DWG. RB-1-55 (SEE NOTE 1)

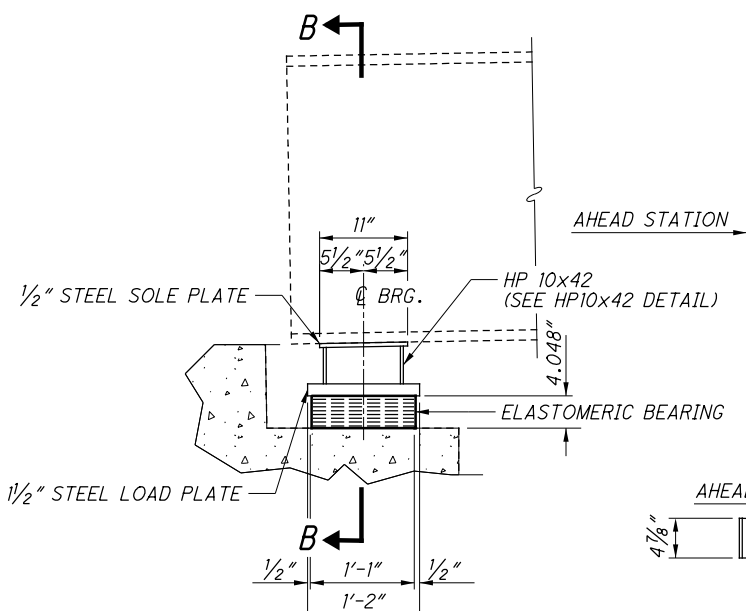
REMOVE AND REPLACE END CROSS FRAME, SEE STD. DWG. GSD-1-96, TYP.

PROPOSED LAMINATED ELASTOMERIC BEARING WITH LOAD PLATE, TYP. (SEE NOTE 1)



**PARTIAL FRAMING PLAN**

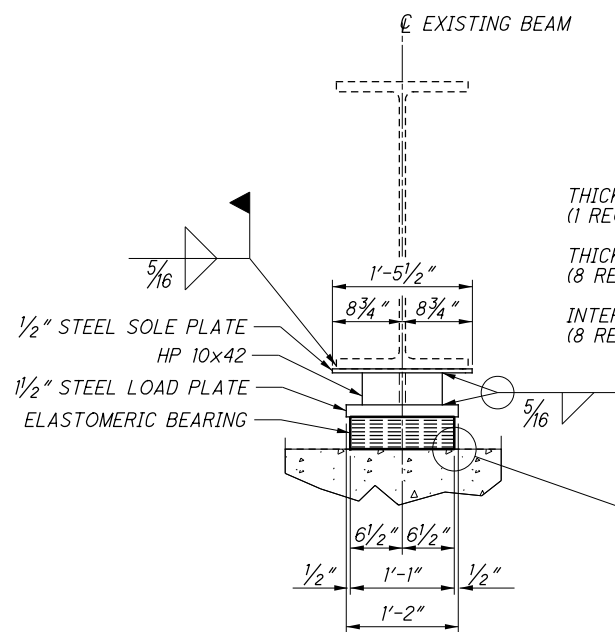
**EXISTING BEARINGS AT ABUTMENTS**  
(REAR ABUTMENT SHOWN)



**ELEVATION**



**HP 10x42  
DETAIL**

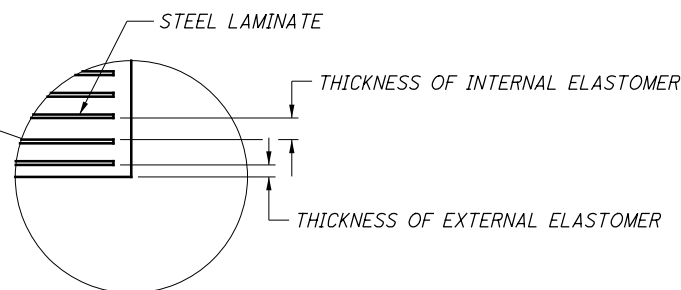


**SECTION B-B**

THICKNESS OF EXTERNAL ELASTOMER = 0.25" (1 REQUIRED)

THICKNESS OF INTERNAL ELASTOMER = 0.40" (8 REQUIRED)

INTERNAL STEEL LAMINATE THICKNESS = 0.0747 (14 GAGE) (8 REQUIRED)

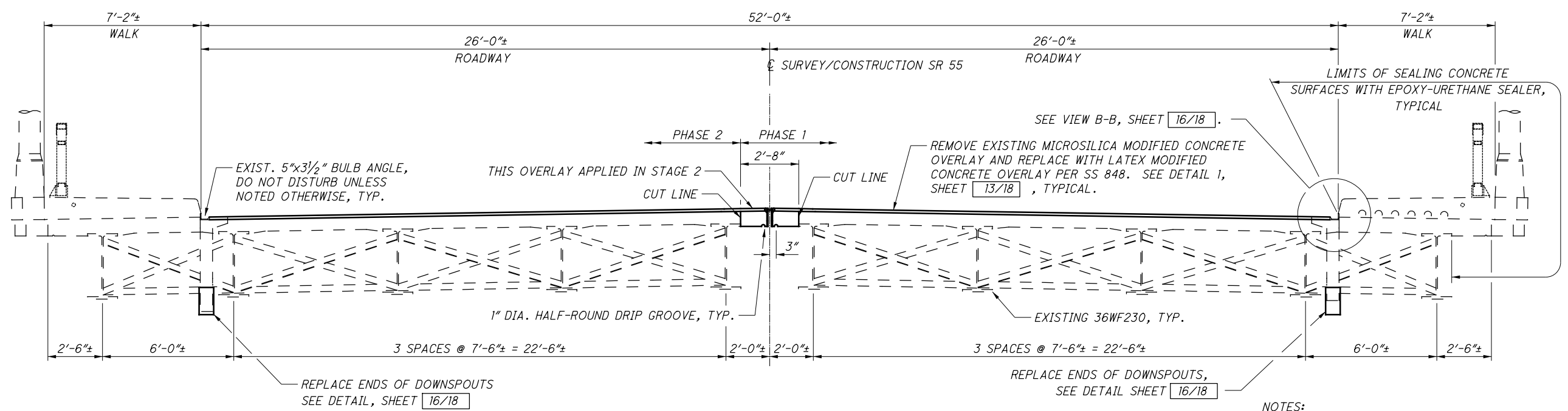
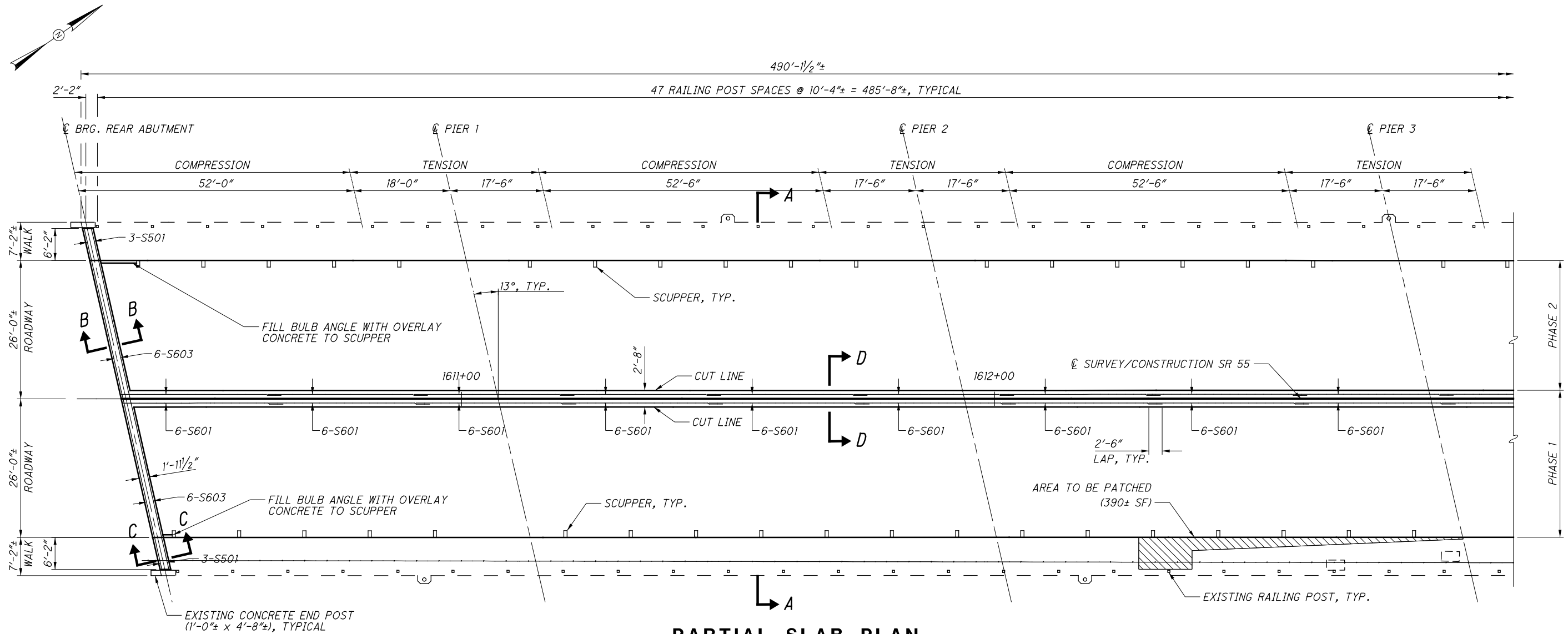


**PROPOSED BEARINGS AT FORWARD ABUTMENTS**

**NOTE 1:** EXISTING BEARINGS SHALL BE REMOVED. WELDS SHALL BE GROUND SMOOTH PRIOR TO INSTALLING NEW BEARINGS. THIS WORK SHALL BE INCLUDED WITH ITEM 202 FOR PAYMENT.

|   |   |
|---|---|
| <b>Stantec</b><br>1187 Lebanon Road<br>Cincinnati, Ohio 45241<br>(513) 845-9200 | DESIGN AGENCY   |
|   | DATE: 06/2015<br>REVIEWED: JRC<br>DRAWN: ALH<br>DESIGNED: MRS<br>CHECKED: EDA |
| STRUCTURE FILE NUMBER: 5501504  | BEARING DETAILS<br>BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER       |
| MIA-55-11.83<br>PID No. 96435   | 11 / 18<br>28<br>35   |

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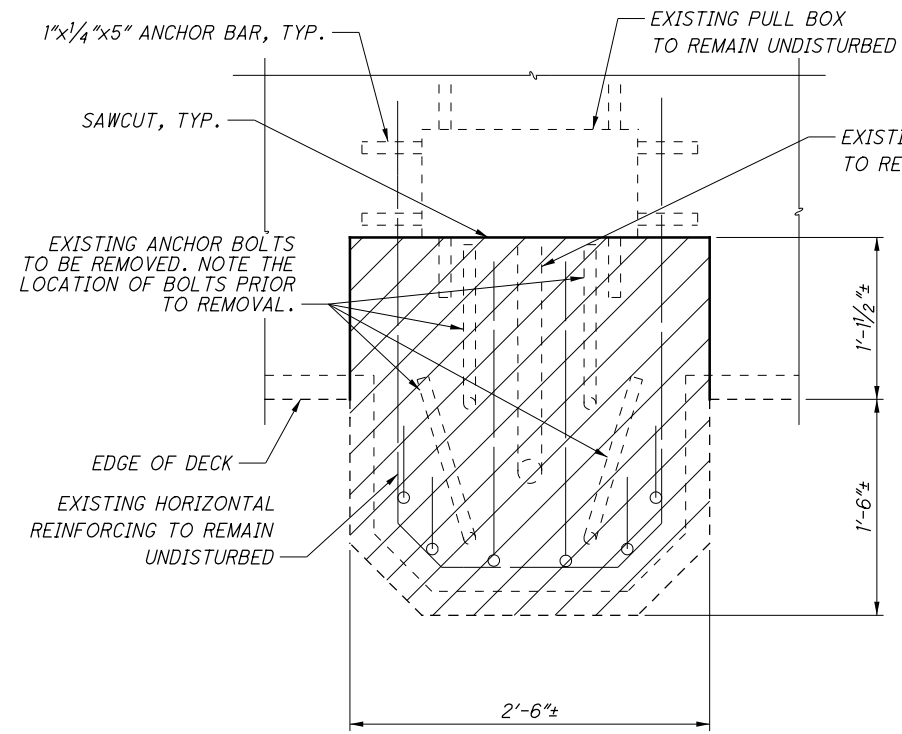


- NOTES:**
1. FOR SECTION B-B AND SECTION C-C, SEE SHEET 15/18.
  2. FOR SECTION D-D, SEE SHEET 14/18.
  3. FOR EXPLANATION OF COMPRESSION AND TENSION ZONES, SEE SHEET 13/18.

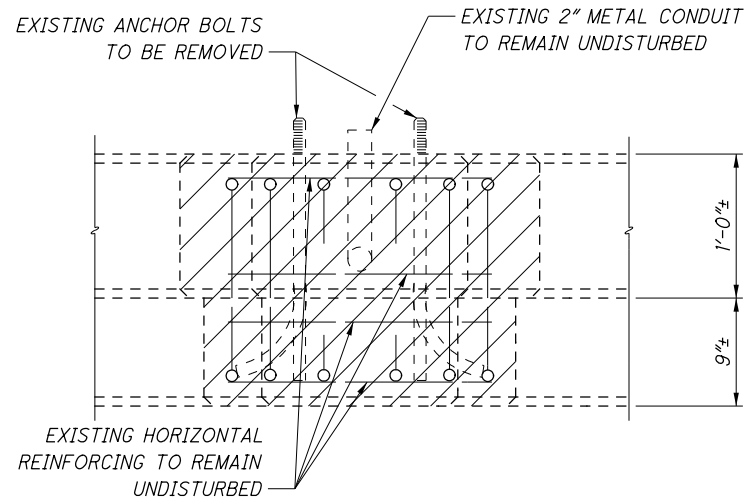
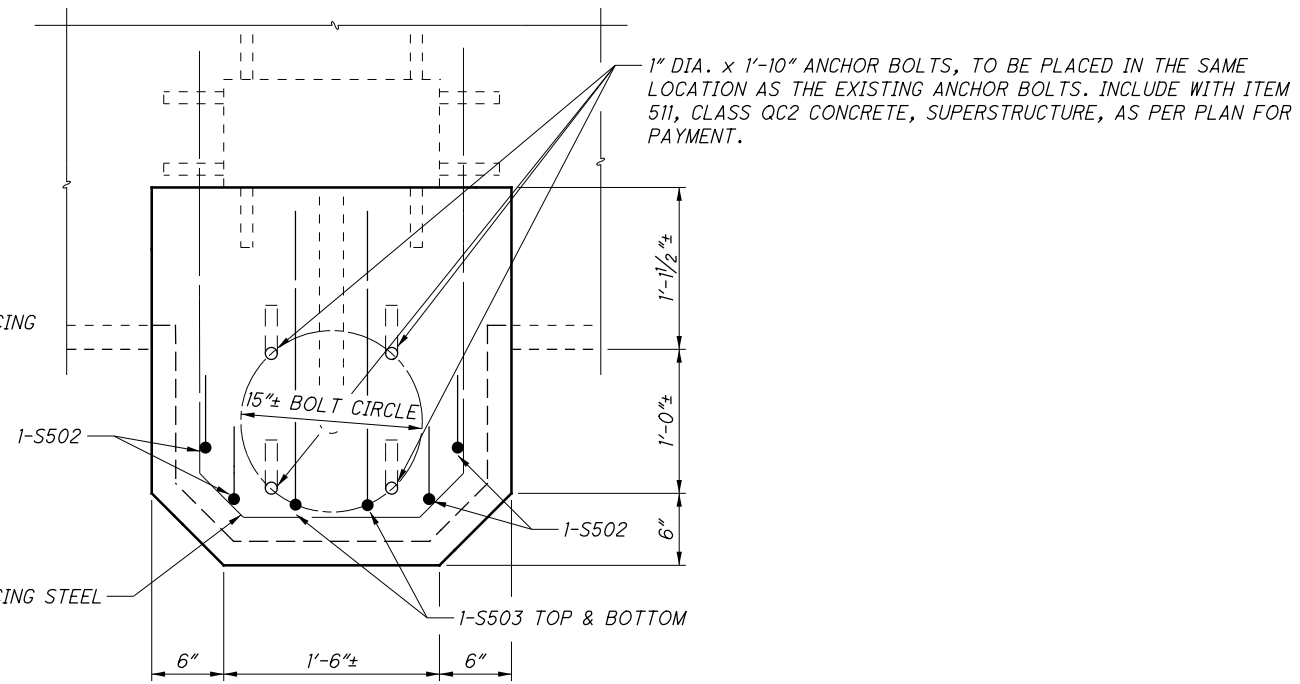
|              |   |         |          |       |          |  |
|--------------|---|---------|----------|-------|----------|--|
|              | DESIGN AGENCY   | DATE    | REVIEWED | DRAWN | DESIGNED | <b>SLAB PLAN (1)</b><br>BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER |
|              | 11837 Lebanon Road<br>Channahon, Ohio 43241<br>(613) 845-8900 | 06/2015 | JRC      | ALH   | MRS      |  |
|              | STRUCTURE FILE NUMBER   | 5501504 | REVIS    | REVIS | CHECKED  |  |
|              | ED  | EDA     |          |       |          |  |
| MIA-55-11.83 | PID No. 96435   | 12/18   | 29/35    |       |          |  |



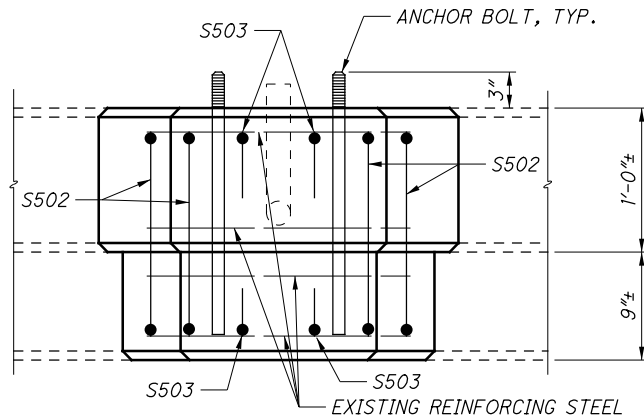
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NOTE:  
EXISTING LONGITUDINAL & TRANSVERSE REINFORCING IN SLAB AND WALK TO REMAIN UNDISTURBED.

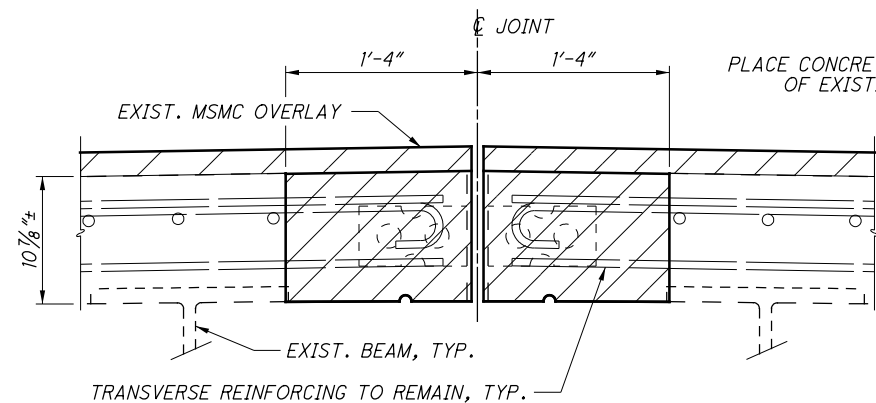


REMOVAL

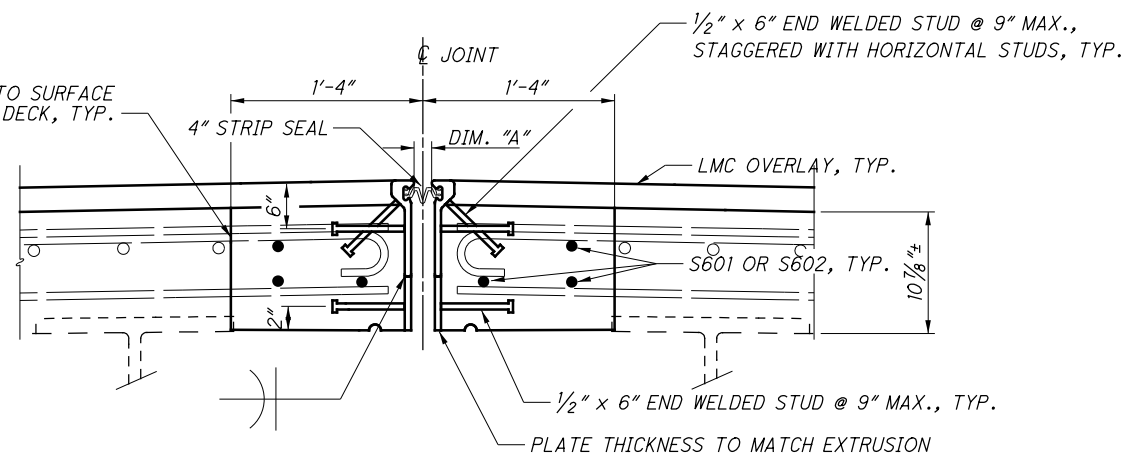


PROPOSED

DETAIL A



REMOVAL



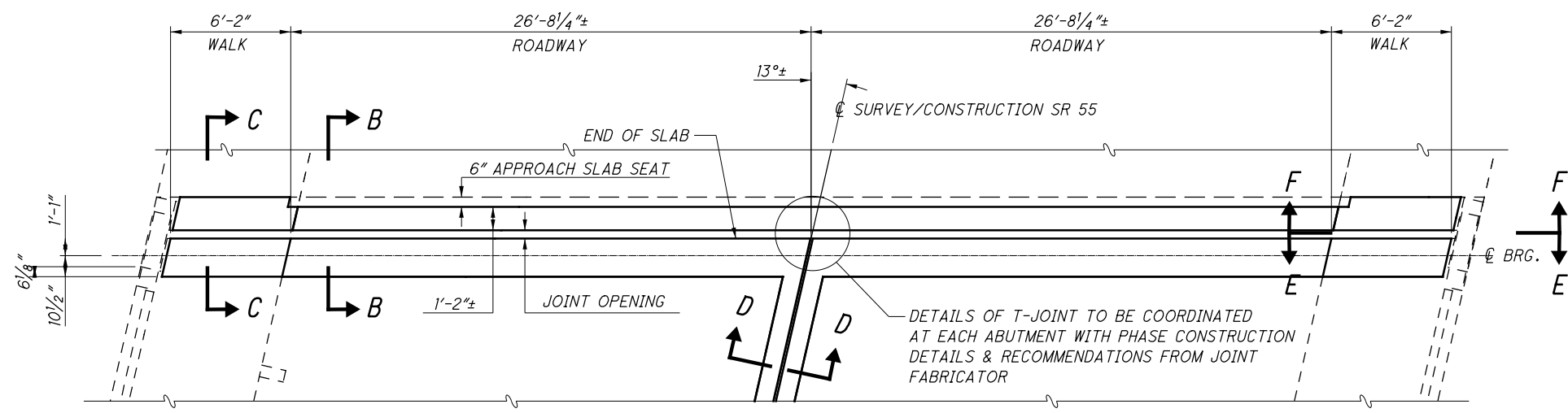
PROPOSED

SECTION D-D

| LONGITUDINAL JOINT DIMENSIONS FOR 4" STRIP SEAL GLAND |        |
|---|--------|
| TEMP.   | DIM A  |
| 30°   | 2 3/8" |
| 40°   | 2 3/8" |
| 50°   | 2 1/8" |
| 60°   | 2 1/8" |
| 70°   | 2"     |
| 80°   | 2"     |
| 90°   | 2"     |

NOTES:

1. DENOTES PORTION OF STRUCTURE TO BE REMOVED.

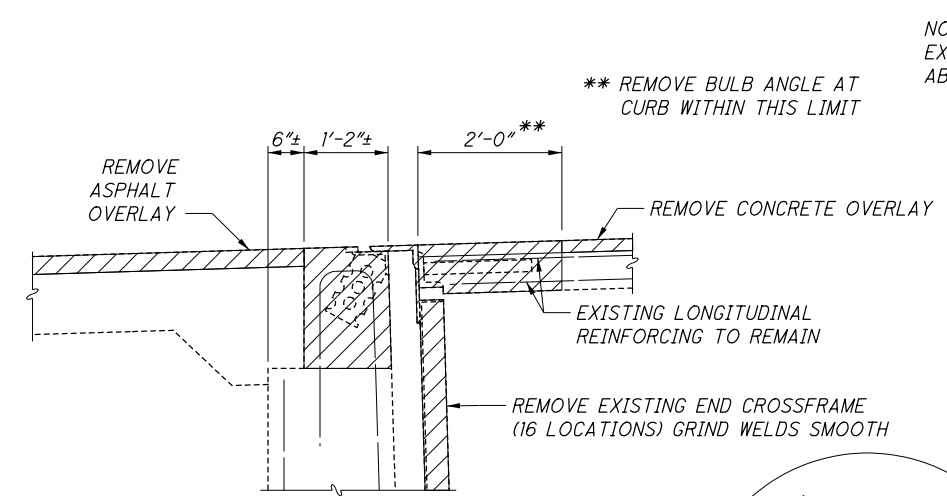


**EXPANSION JOINT PLAN**  
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT OPPOSITE HAND)

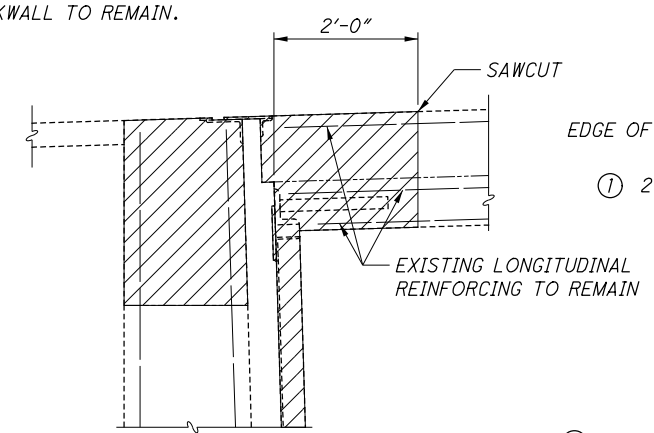
NOTE: OVERLAY NOT SHOWN FOR CLARITY.

| EXPANSION JOINT DIMENSIONS FOR 4" STRIP SEAL GLAND |        |
|--|--------|
| TEMP.  | DIM B  |
| 30°  | 2 1/2" |
| 40°  | 2 3/8" |
| 50°  | 2 1/8" |
| 60°  | 2"     |
| 70°  | 1 3/4" |
| 80°  | 1 5/8" |
| 90°  | 1 3/8" |

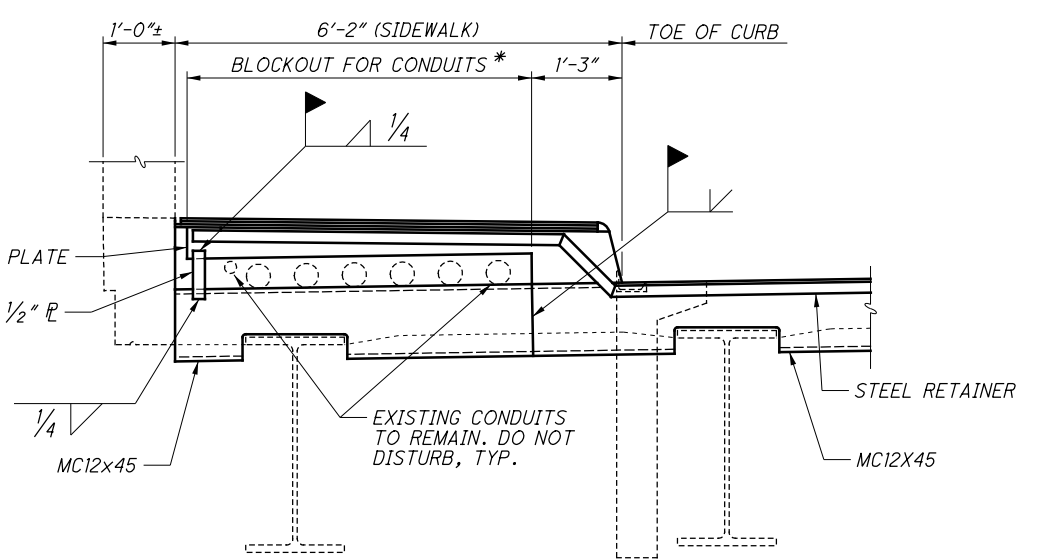
NOTE: MINIMUM JOINT OPENING AT TIME OF INSTALLATION SHALL BE 1/2".



**SECTION B-B**  
(REMOVAL)

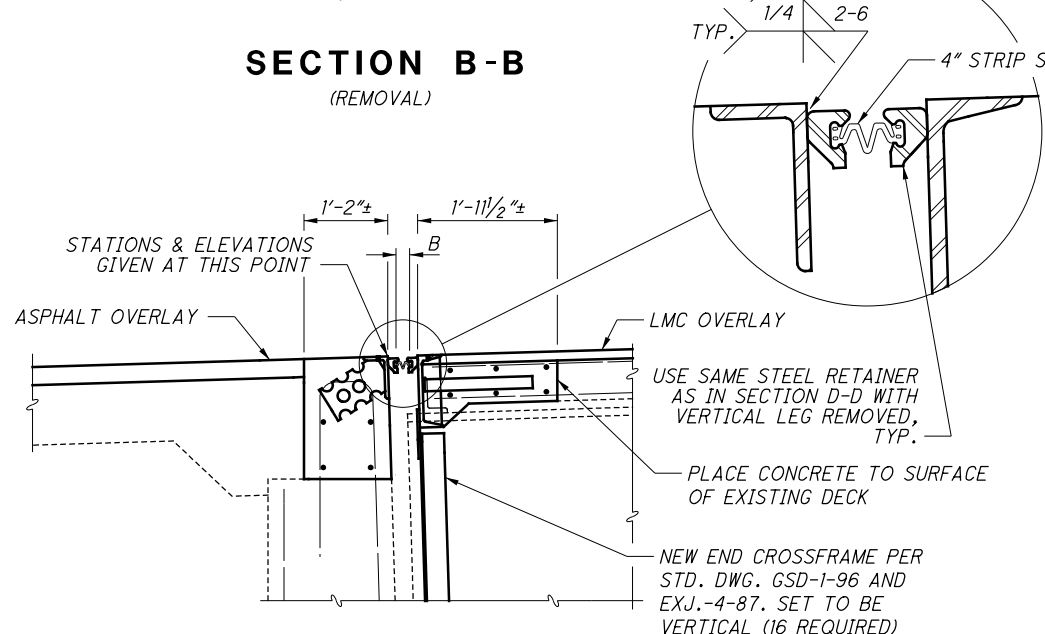


**SECTION C-C**  
(REMOVAL)

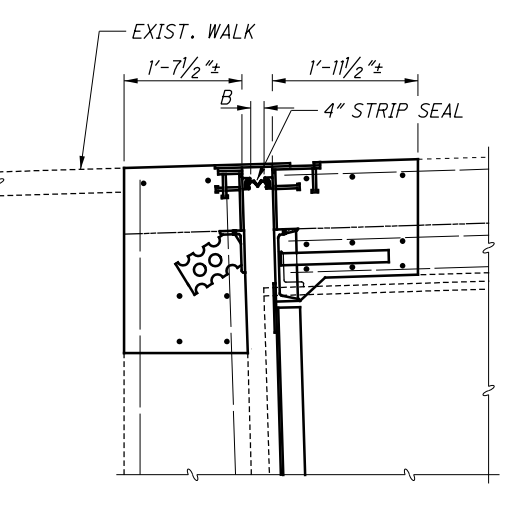


**SECTION E-E**

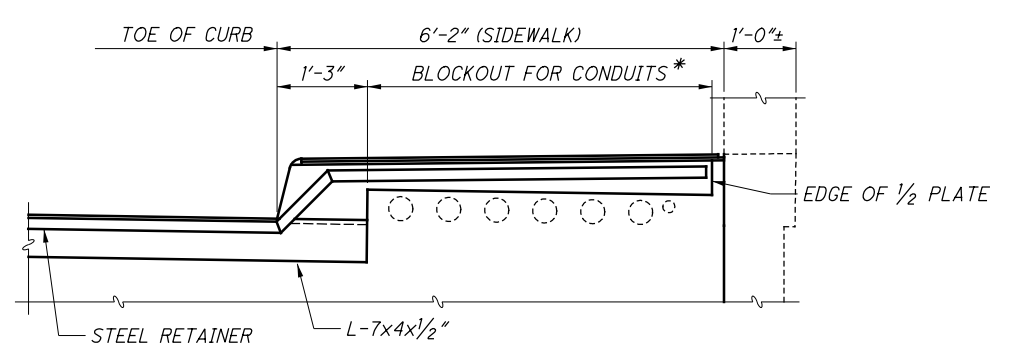
\* CONTRACTOR TO VERIFY LOCATION OF CONDUITS PRIOR TO FABRICATION OF EXPANSION JOINT.



**SECTION B-B**  
(PROPOSED)



**SECTION C-C**  
(PROPOSED)



**SECTION F-F**

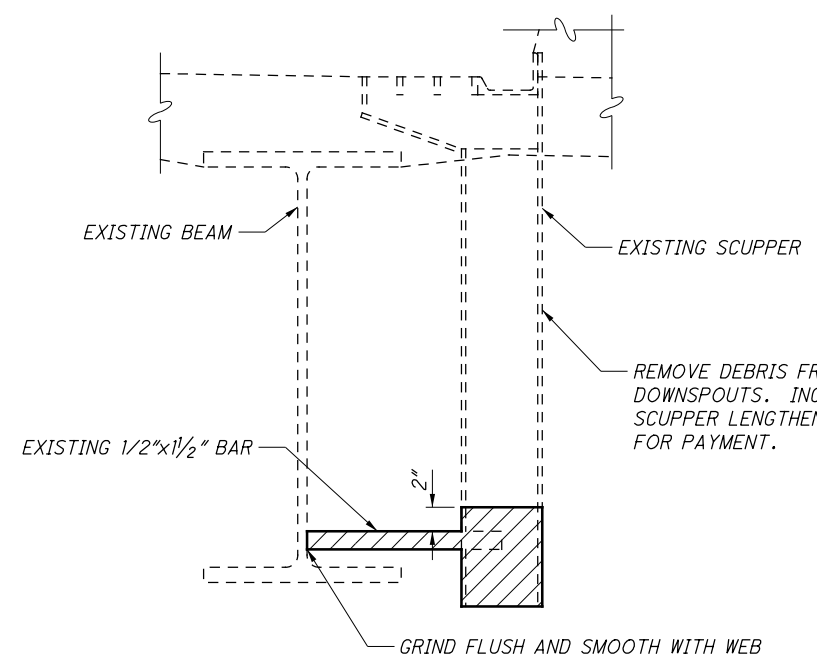
- NOTES:
- SEE STD. DWG. EXJ-4-87 FOR ADDITIONAL INFORMATION.
  - EACH EXPANSION JOINT 4" STRIP SEAL TO BE FURNISHED IN ONE PIECE AND FIELD SPLICED TO THE LONGITUDINAL JOINT 4" STRIP SEAL PER MANUFACTURER'S RECOMMENDED PROCEDURE. FIELD SPLICE TO BE WATERTIGHT UPON COMPLETION. LOCATION OF SPLICE TO BE DETERMINED BY MANUFACTURER.
  - FOR SECTION D-D, SEE SHEET 14/18.

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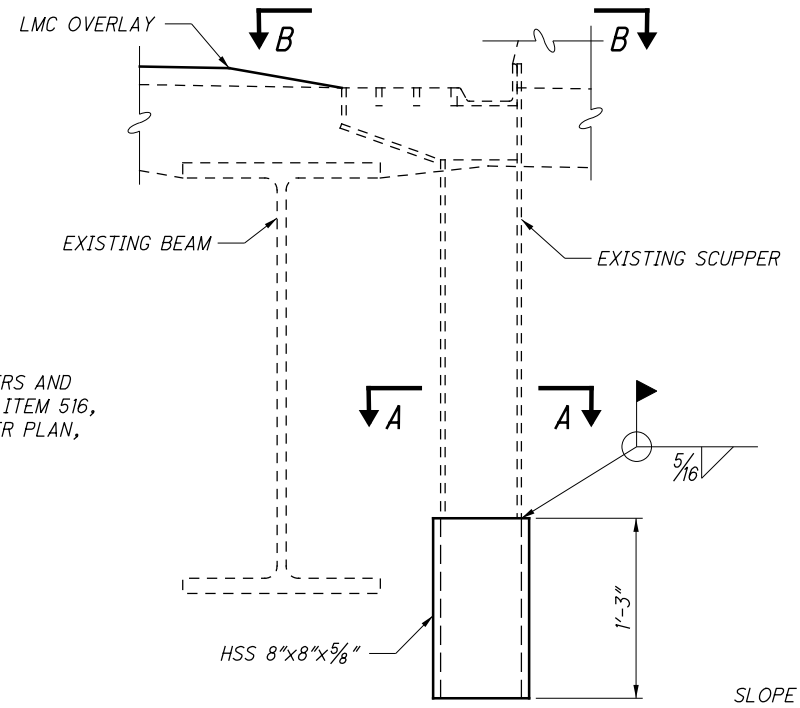
DESIGN AGENCY: **Stantec**  
 DATE: 06/2015  
 REVIEWED: JRC  
 DRAWN: ALH  
 DESIGNED: MRS  
 CHECKED: EDA  
 STRUCTURE FILE NUMBER: 5501504  
 BRIDGE NO. MIA-55-1183  
 OVER THE GREAT MIAMI RIVER  
 MIA-55-11.83  
 PID No. 96435  
 15/18  
 32/35



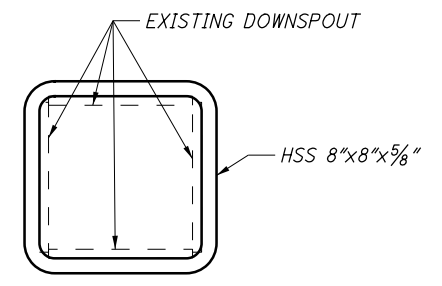
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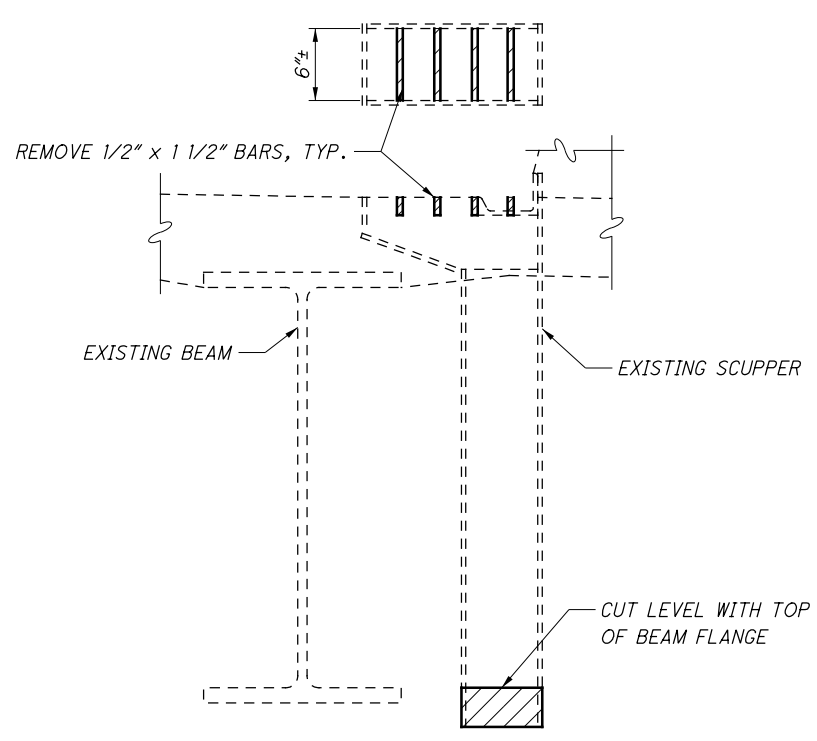
**EXISTING (SHOWING REMOVAL)**



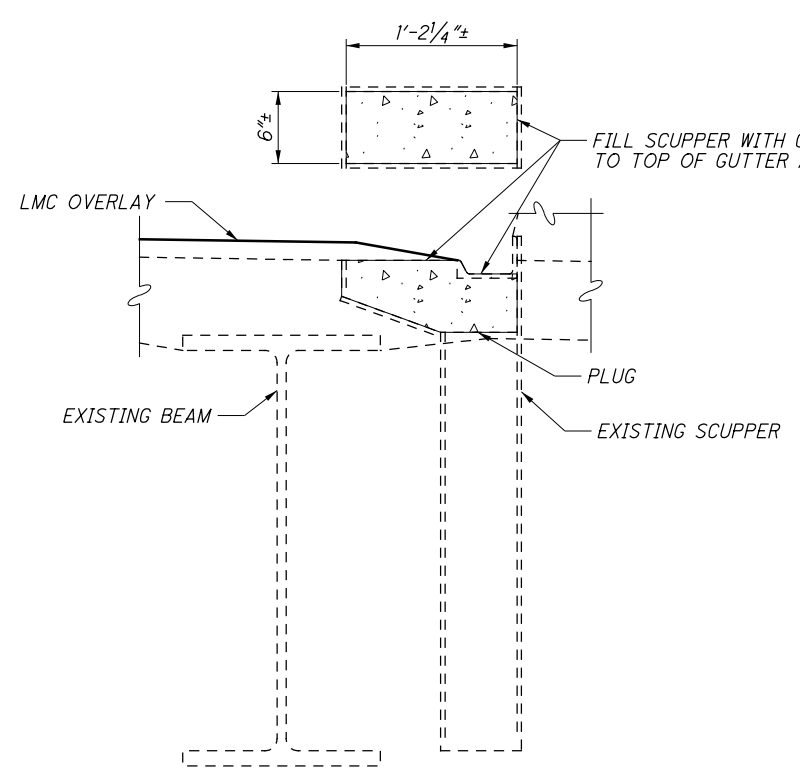
**PROPOSED**



**SECTION A-A**



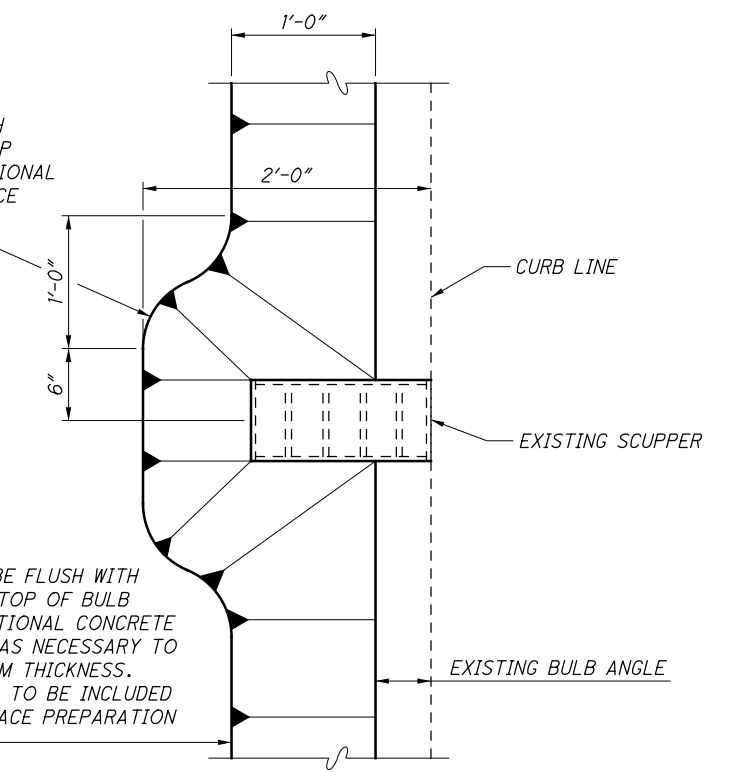
**EXISTING (SHOWING REMOVAL)**



**PROPOSED**

SLOPE OVERLAY TO BE FLUSH WITH OR SLIGHTLY ABOVE TOP OF SCUPPER. REMOVE ADDITIONAL CONCRETE FROM DECK SURFACE AS NECESSARY TO MAINTAIN 1/4\"/>

SLOPE OVERLAY TO BE FLUSH WITH OR SLIGHTLY ABOVE TOP OF BULB ANGLE. REMOVE ADDITIONAL CONCRETE FROM DECK SURFACE AS NECESSARY TO MAINTAIN 1/4\"/>

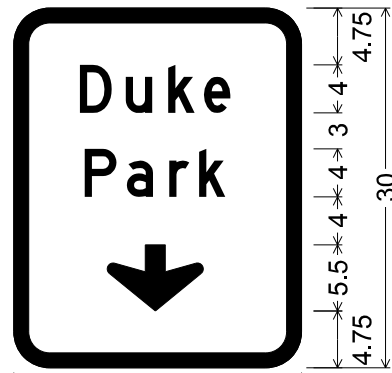


**VIEW B-B**

**SCUPPER PLUG DETAIL**

DENOTES PORTION OF SCUPPER TO BE REMOVED

|  |   |
|--|---|
|  | DESIGN AGENCY<br>11887 Lebanon Road<br>Cincinnati, Ohio 45241<br>(513) 845-8900 |
| DATE<br>06/2015  | STRUCTURE FILE NUMBER<br>5501504  |
| REVIEWED<br>JRC  | STRUCTURE FILE NUMBER<br>5501504  |
| DRAWN<br>ALH   | REVISIONS   |
| DESIGNED<br>MRS  | CHECKED<br>EDA  |
| <b>SCUPPER DETAILS</b><br>BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER |   |
| MIA-55-11.83<br>PID No. 96435  |   |
| 16 / 18  |   |
| 33<br>35   |   |



|      |       |      |
|------|-------|------|
| 5.52 | 12.56 | 5.92 |
| 5.92 | 11.75 | 6.33 |
| 7.8  | 8     | 8.2  |
| 24   |       |      |

3.00" RADIUS, 1.25" BORDER, BLACK ON WHITE;  
 [Duke] FHWA FONT D; [Park] FHWA FONT D;  
 DOWN ARROW CUSTOM - 5.50" 270°;  
 TABLE OF LETTER AND OBJECT LEFTS.

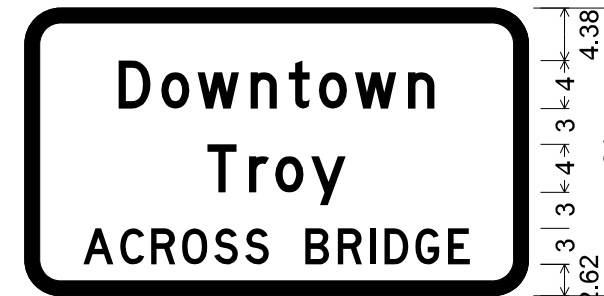
|      |      |       |       |
|------|------|-------|-------|
| D    | u    | k     | e     |
| 5.52 | 9.35 | 12.88 | 15.85 |
| P    | a    | r     | k     |
| 5.92 | 9.43 | 12.96 | 15.44 |
| ↓    |      |       |       |
| 7.80 |      |       |       |



|      |       |      |
|------|-------|------|
| 6.48 | 11.04 | 6.48 |
| 6.14 | 11.72 | 6.14 |
| 7.43 | 9.14  | 7.43 |
| 24   |       |      |

3.00" RADIUS, 1.25" BORDER, BLACK ON WHITE;  
 [Bike] FHWA FONT D; [Path] FHWA FONT D;  
 ARROW CUSTOM - 12.50" 50°;  
 TABLE OF LETTER AND OBJECT LEFTS.

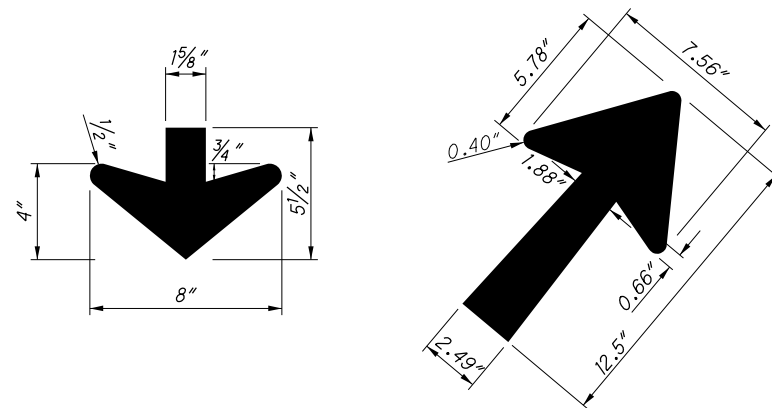
|      |       |       |       |
|------|-------|-------|-------|
| B    | i     | k     | e     |
| 6.48 | 10.39 | 12.32 | 15.29 |
| P    | a     | t     | h     |
| 6.14 | 9.64  | 12.82 | 15.63 |
| ↗    |       |       |       |
| 7.43 |       |       |       |



|       |       |       |
|-------|-------|-------|
| 7.82  | 26.36 | 7.82  |
| 15.23 | 11.54 | 15.23 |
| 15.49 | 3     | 13.73 |
| 4.89  | 42    | 4.89  |

3.00" RADIUS, 1.25" BORDER, BLACK ON WHITE;  
 [Downtown] FHWA FONT D; [Troy] FHWA FONT D;  
 [ACROSS] FHWA FONT D; [BRIDGE] FHWA FONT D;  
 TABLE OF LETTER AND OBJECT LEFTS.

|       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|
| D     | o     | w     | n     | t     | o     | w     | n     |
| 7.82  | 11.39 | 14.39 | 18.83 | 22.01 | 24.51 | 27.52 | 31.95 |
| T     | r     | o     | y     |       |       |       |       |
| 15.23 | 18.69 | 20.88 | 23.87 |       |       |       |       |
| A     | C     | R     | O     | S     | S     |       |       |
| 4.89  | 7.96  | 10.53 | 13.11 | 15.78 | 18.36 |       |       |
| B     | R     | I     | D     | G     | E     |       |       |
| 23.38 | 26.10 | 28.82 | 29.99 | 32.57 | 35.29 |       |       |



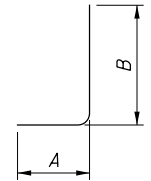
ARROW DETAILS  
 (N.T.S.)

NOTE:  
 SIGNS TO BE PAINTED ON BEAM WEB AFTER FINISH  
 COAT OF OZEU PAINT SYSTEM IS COMPLETE.

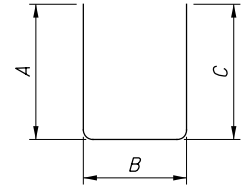
V:\1736\active\173620059\Design\96435\structures\MA055\_1183C\sheets\055\_1183CRL001.dgn 10/1/2015 10:34:28 AM msturdevant

| MARK             | NUMBER | LENGTH | WEIGHT | TYPE | DIMENSIONS |        |   |   |   |   |     |
|------------------|--------|--------|--------|------|------------|--------|---|---|---|---|-----|
|                  | TOTAL  |        |        |      | A          | B      | C | D | E | R | INC |
| <b>ABUTMENTS</b> |        |        |        |      |            |        |   |   |   |   |     |
| A501             | 8      | 32'-6" | 271    | STR. |            |        |   |   |   |   |     |
| A502             | 8      | 32'-9" | 273    | STR. |            |        |   |   |   |   |     |
| A503             | 8      | 7'-5"  | 62     | 1    | 1'-8"      | 5'-10" |   |   |   |   |     |
| A504             | 4      | 3'-0"  | 13     | STR. |            |        |   |   |   |   |     |
|                  |        | TOTAL  | 619    |      |            |        |   |   |   |   |     |

| MARK                  | NUMBER | LENGTH | WEIGHT | TYPE | DIMENSIONS |        |     |   |   |   |     |
|-----------------------|--------|--------|--------|------|------------|--------|-----|---|---|---|-----|
|                       | TOTAL  |        |        |      | A          | B      | C   | D | E | R | INC |
| <b>SUPERSTRUCTURE</b> |        |        |        |      |            |        |     |   |   |   |     |
| S601                  | 102    | 30'-0" | 4596   | STR. |            |        |     |   |   |   |     |
| S602                  | 6      | 22'-4" | 101    | STR. |            |        |     |   |   |   |     |
| S603                  | 24     | 32'-4" | 1166   | STR. |            |        |     |   |   |   |     |
| S501                  | 12     | 7'-5"  | 93     | 1    | 1'-8"      | 5'-10" |     |   |   |   |     |
| S502                  | 4      | 2'-10" | 12     | 2    | 10"        | 1'-5"  | 10" |   |   |   |     |
| S503                  | 4      | 2'-9"  | 11     | 1    | 10"        | 2'-0"  |     |   |   |   |     |
|                       |        | TOTAL  | 5979   |      |            |        |     |   |   |   |     |



TYPE-1



TYPE-2

|                     |  |                                 |  |
|---------------------|--|---------------------------------|--|
| <b>MIA-55-11.83</b> | <b>REINFORCING STEEL LIST</b>                        | DESIGN AGENCY<br><b>Stantec</b> | DESIGN AGENCY<br>11877 Lebanon Road<br>Channahon, Ohio 43241<br>(613) 845-8200 |
| PID No. 96435       | BRIDGE NO. MIA-55-1183<br>OVER THE GREAT MIAMI RIVER | DESIGNED<br>MRS                 | DATE<br>06/2015  |
| 18 / 18             | CHECKED<br>EDA                                       | DRAWN<br>ALH                    | REVIEWED<br>JRC  |
| 35 / 35             | STRUCTURE FILE NUMBER<br>5501504                     | REVISED                         | FILE NUMBER<br>5501504   |