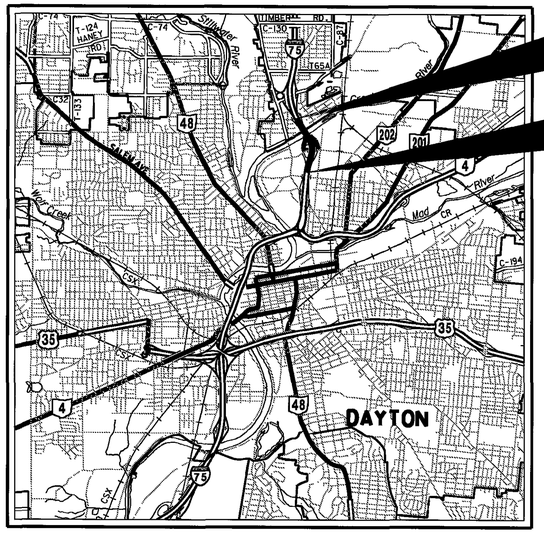


LOCATION MAP

LATITUDE: N 39°47'05" LONGITUDE: W 84°11'05"

SCALE IN MILES

0 1 2 3 4

N

PORTION TO BE IMPROVED

INTERSTATE & DIVIDED HIGHWAY

UNDIVIDED STATE & FEDERAL ROUTES

OTHER ROADS

| | |
|---|---|
| DESIGN DESIGNATION | IR-75 |
| CURRENT ADT (2006) | 105,700 |
| DESIGN YEAR ADT (2026) | 124,400 |
| DESIGN HOURLY VOLUME (2026) | 11,270 |
| DIRECTIONAL DISTRIBUTION | 51% |
| TRUCKS (24 HOUR B&C) | 26% |
| DESIGN SPEED | 60 MPH |
| LEGAL SPEED | 55 MPH |

DESIGN FUNCTIONAL CLASSIFICATION - URBAN INTERSTATE

DESIGN EXCEPTIONS - SEE SHEET 2

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

TranSystems
5747 PERIMETER DRIVE, SUITE 240, DUBLIN, OH 43017

ENGINEERS SEAL:
FOR ENTIRE PLAN EXCEPT STRUCTURES (SHEETS 1-235)
STATE OF OHIO HENRI JOSEPH FOUCHER E-66947 REGISTERED PROFESSIONAL ENGINEER
SIGNED:
DATE: 7/30/07

ENGINEERS SEAL:
FOR STRUCTURES (SHEETS 236-302)
STATE OF OHIO JONATHAN DAVID HREN 69952 REGISTERED PROFESSIONAL ENGINEER
SIGNED:
DATE: 7/31/2007

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

# MOT-75-14.60

## PRESTRESSED CONCRETE OPTION
## CITY OF DAYTON
## MONTGOMERY COUNTY

INDEX OF SHEETS:



### PROJECT DESCRIPTION

THE PROJECT CONSISTS OF COMPLETE REPLACEMENT OF THE EXISTING IR-75 STRUCTURE OVER THE GREAT MIAMI RIVER WITH A NEW 3 SPAN CONTINUOUS AND COMPOSITE HYBRID STEEL PLATE GIRDER STRUCTURE, RAMP MODIFICATIONS IN ALL FOUR QUADRANTS OF THE IR-75 AND STANLEY AVENUE INTERCHANGE, AND SEVERAL RAMP CLOSURES WITHIN THE PROJECT LIMITS.

| EARTH DISTURBED AREAS | |
|---|---|
| PROJECT EARTH DISTURBED AREA | 11.25 ACRES |
| ESTIMATED CONTRACTOR EARTH DISTURBED AREA | 0.60 ACRES |
| NOI EARTH DISTURBED AREA | 11.85 ACRES |

### LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

### 2005 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.

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

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (I) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.

APPROVED Rex Dickey, P.E., P.S. /mw
DATE 8-3-07 DISTRICT DEPUTY DIRECTOR

APPROVED James E. Beasley II
DATE 9-12-07 DIRECTOR, DEPARTMENT OF TRANSPORTATION

### STANDARD CONSTRUCTION DRAWINGS

| | | | | | | | | | | | | | | SUPPLEMENTAL SPECIFICATIONS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BP-2.1 | 07/16/04 | GR-5.2 | 1/16/04 | DM-1.4 | 04/21/06 | TC-52.10 | 01/19/07 | MT-95.32 | 09/05/06 | MT-105.11 | 10/18/02 | HL-60.11 | 01/19/07 | | |
| BP-2.2 | 07/16/04 | GR-5.3 | 1/16/04 | DM-4.1 | 07/19/02 | TC-52.20 | 01/19/07 | MT-95.40 | 10/20/06 | MT-110.20 | 10/18/02 | HL-60.12 | 01/19/07 | | |
| BP-2.3 | 07/16/04 | RM-3.1 | 04/18/03 | DM-4.3 | 07/19/02 | TC-61.10 | 01/19/01 | MT-98.12 | 04/19/02 | MT-120.00 | 03/01/00 | HL-60.21 | 01/19/07 | 800 | 10/19/07 |
| BP-2.4 | 07/16/04 | RM-4.2 | 10/20/06 | DM-4.4 | 07/19/02 | TC-65.10 | 01/21/05 | MT-98.13 | 04/19/02 | HL-10.11 | 01/16/04 | HL-60.31 | 01/19/07 | 802 | 04/15/05 |
| BP-3.1 | 07/16/04 | RM-4.3 | 01/19/07 | TC-9.10 | 01/19/01 | TC-65.11 | 01/21/05 | MT-98.14 | 04/19/02 | HL-10.12 | 01/19/07 | A-1-69 | 07/19/02 | 832 | 04/25/06 |
| BP-5.1 | 07/28/00 | RM-4.4 | 01/19/07 | TC-12.30 | 01/19/01 | TC-71.10 | 01/19/07 | MT-98.15 | 07/16/04 | HL-10.13 | 01/17/03 | AS-1-81 | 07/19/02 | 833 | 02/12/03 |
| BP-6.1 | 07/28/00 | RM-4.5 | 01/19/07 | TC-21.10 | 01/19/01 | TC-72.20 | 01/21/05 | MT-98.16 | 04/19/02 | HL-10.31 | 07/20/01 | EXJ-6-06 | 01/20/06 | 872 | 10/30/03 |
| F-1.1 | 07/16/04 | CB-1.1 | 07/15/05 | TC-21.20 | 01/19/01 | TC-73.10 | 01/19/01 | MT-98.17 | 10/18/02 | HL-20.11 | 04/19/02 | PCB-91 | 07/19/02 | 873 | 10/30/03 |
| F-3.1 | 07/28/00 | CB-2.1 | 07/15/05 | TC-22.10 | 01/19/01 | TC-81.10 | 05/01/00 | MT-98.18 | 10/18/02 | HL-20.13 | 01/21/05 | PSID-1-99 | 04/20/07 | 898 | 07/21/06 |
| F-3.3 | 07/28/00 | CB-2.2 | 07/15/05 | TC-22.20 | 01/19/01 | TC-82.10 | 04/19/02 | MT-98.19 | 10/18/02 | HL-20.21 | 01/19/07 | SBR-1-99 | 07/19/02 | | |
| GR-1.1 | 07/16/04 | HW-1.1 | 01/21/05 | TC-31.21 | 04/20/01 | TC-83.10 | 01/19/07 | MT-99.20M | 1/30/95 | HL-30.11 | 01/21/05 | | | | |
| GR-2.1 | 01/16/04 | HW-2.1 | 04/21/06 | TC-41.20 | 01/19/01 | TC-83.20 | 01/19/07 | MT-101.60 | 09/20/06 | HL-30.21 | 01/19/07 | | | | |
| GR-3.1 | 01/19/07 | HW-2.2 | 04/21/06 | TC-41.40 | 07/16/04 | TC-84.20 | 01/19/07 | MT-101.70 | 10/18/02 | HL-30.22 | 01/21/05 | | | | |
| GR-3.2 | 01/19/07 | MH-1.2 | 01/20/06 | TC-42.20 | 07/16/04 | TC-85.20 | 05/01/00 | MT-102.10 | 10/20/06 | HL-40.10 | 01/19/07 | | | | |
| GR-4.2 | 01/19/07 | DM-1.1 | 04/21/06 | TC-51.11 | 04/20/01 | MT-95.30 | 09/05/06 | MT-102.20 | 09/05/06 | HL-50.11 | 01/19/07 | | | | |
| GR-5.1 | 04/18/03 | DM-1.2 | 10/21/05 | TC-51.12 | 04/20/01 | MT-95.31 | 09/05/06 | MT-105.10 | 10/18/02 | HL-50.21 | 01/19/07 | | | | |

SPECIAL PROVISIONS

OEPA RENO DEMO
USACE AND EPA PERMIT

FEDERAL PROJECT NO. E033(774)

PID NO. 23828

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

PRESTRESSED CONCRETE OPTION
MOT-75-14.60

1/314

MOT - IR-75-14.60
070523 PID - 23828
DIST 07 12/19/2007

| BENCHMARK 1 | BENCHMARK 2 |
|---|---|
| SITE BM # 2<br>CROSS NOTCH ON TOP OF HEADWALL<br>(℄ IR 75) STA. 456+65.11<br>147.31' RT, EL. 745.33 | SITE BM # 3<br>MCD CONTROL, MONUMENT NO. 2<br>(℄ IR 75) STA. 460+86.44<br>287.01' RT, EL. 745.36 |

## TRAFFIC DATA

I.R. 75
CURRENT YEAR (2006) = 105,700 ADT
DESIGN YEAR (2026) = 124,400 ADT
CURRENT YEAR (2006) = 27,482 ADTT
DESIGN YEAR (2026) = 32,344 ADTT

## EXISTING STRUCTURE

TYPE: DUAL STRUCTURES - 5 SPAN CONTINUOUS STEEL RIVETED PLATE GIRDER WITH REINFORCED CONCRETE DECK SUPPORTED BY STUB ABUTMENTS ON PILES AND WALL TYPE PIERS
SPANS: 99'-6", 124'-4", 124'-4", 124'-4", 99'-6" c/c BEARINGS
ROADWAY: (2) - 40'-0" TOE TO TOE OF CURB
LOADING: CF2000
SKEW: NONE
ALIGNMENT: TANGENT
WEARING SURFACE: ASPHALT OVERLAY ON 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-72 (20'-0" LONG)
DATE BUILT: 1959
STRUCTURE FILE No.: 5708702

## PROPOSED STRUCTURE

TYPE: 5 SPAN CONTINUOUS, PRESTRESED CONCRETE I-BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK SUPPORTED BY REINFORCED CONCRETE SUBSTRUCTURES ON PILES.
SPANS: 136'-0", 136'-0", 103'-0", 103'-0", 94'-0" c/c BEARINGS
ROADWAY: NORTHBOUND = VARIES, 62'-1¼" MIN. TO 73'-7¼" MAX. F/F OF PARAPET
SOUTHBOUND = VARIES, 66'-5" MIN. TO 94'-6⅛" MAX. F/F OF PARAPET
LOADING: HS-25 AND ALTERNATE MILITARY LOADING, FWS = 60 LBS/FT²
SKEW: NONE
CROWN: VARIES (NORTHBOUND), VARIES (SOUTHBOUND)
ALIGNMENT: TANGENT
WEARING SURFACE: 1" MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25'-0" LONG)
LATITUDE: 39°47'29" N
LONGITUDE: 8°11'8" W

## BORING LOCATIONS

| BORING | STATION | OFFSET | BORING | STATION | OFFSET |
|---|---|---|---|---|---|
| #4 | 455+18.71 | 41.22' RT. | #8 | 460+37.90 | 60.28' LT. |
| #5 | 456+62.95 | 57.34' LT. | #9 | 461+72.30 | 42.06' RT. |
| #6 | 457+80.95 | 40.79' RT. | | | |
| #7 | 459+04.90 | 40.08' RT. | | | |

## EXISTING HYDRAULIC DATA

$V_{50}$ = 6.65 f/s  EL.$_{50}$ = 747.61
$V_{100}$ = 7.05 f/s  EL.$_{100}$ = 748.67

## HYDRAULIC DATA

DRAINAGE AREA = 1175 sq miles
$Q_{50}$ = 35000 cfs  $V_{50}$ = 6.64 f/s  EL.$_{50}$ = 747.63
$Q_{100}$ = 40000 cfs  $V_{100}$ = 7.04 f/s  EL.$_{100}$ = 748.70
MIN. CLEARANCE = 10.00' FOR 100 YEAR STORM
MIN. BOTTOM OF BEAM = EL. 758.70 AT STA 455+95.87

## NOTES:

1. ALL SHEETS WITH PLAN DIMENSIONS ARE SHOWN HORIZONTAL.
2. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
3. THE PROPOSED PROFILE GRADE IS WITHIN BRIDGE LIMITS. SEE ROADWAY PLANS FOR PAVEMENT ELEVATIONS BEYOND BRIDGE LIMITS.
4. ABBREVIATIONS:
   TYP. - TYPICAL  STA. - STATION  EXIST. - EXISTING
   BRG. - BEARING  FIX. - FIXED  FWD. - FORWARD
   ABUT. - ABUTMENT  PT. - POINT  EXP. - EXPANSION
   EL. - ELEVATION  APPR. - APPROACH
   MCD - MIAMI CONSERVANCY DISTRICT
   N.B. - NORTHBOUND
   S.B. - SOUTHBOUND
5. FOR PHASE CONSTRUCTION LIMITS, CURVE 2 CURVE DATA AND OTHER INFORMATION NOT SHOWN, SEE GENERAL PLAN AND ELEVATION SHEET 2/55.

## FOUNDATION DATA:

ALL PILES SHALL BE HP 14x73 STEEL FRICTION PILES.
ESTIMATED PAY LENGTH:
REAR ABUTMENT = 45 FEET
PIER 1 = 25 FEET  PIER 2 = 25 FEET
PIER 3 = 20 FEET  PIER 4 = 20 FEET
FORWARD ABUTMENT = 45 FEET

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 2000, CLEVELAND, OHIO 44113-2080
DATE: 5/26/05
REVIEWED: RER
STRUCTURE FILE NUMBER: 5708710
DRAWN: BTA
REVISED:
DESIGNED: NFF
CHECKED: MLR

MONTGOMERY COUNTY
STA. 455+74.69
STA. 461+52.53

SITE PLAN
BRIDGE NO. MOT-75-1523 (P.S. CONC. OPT.)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

1/55
236/314

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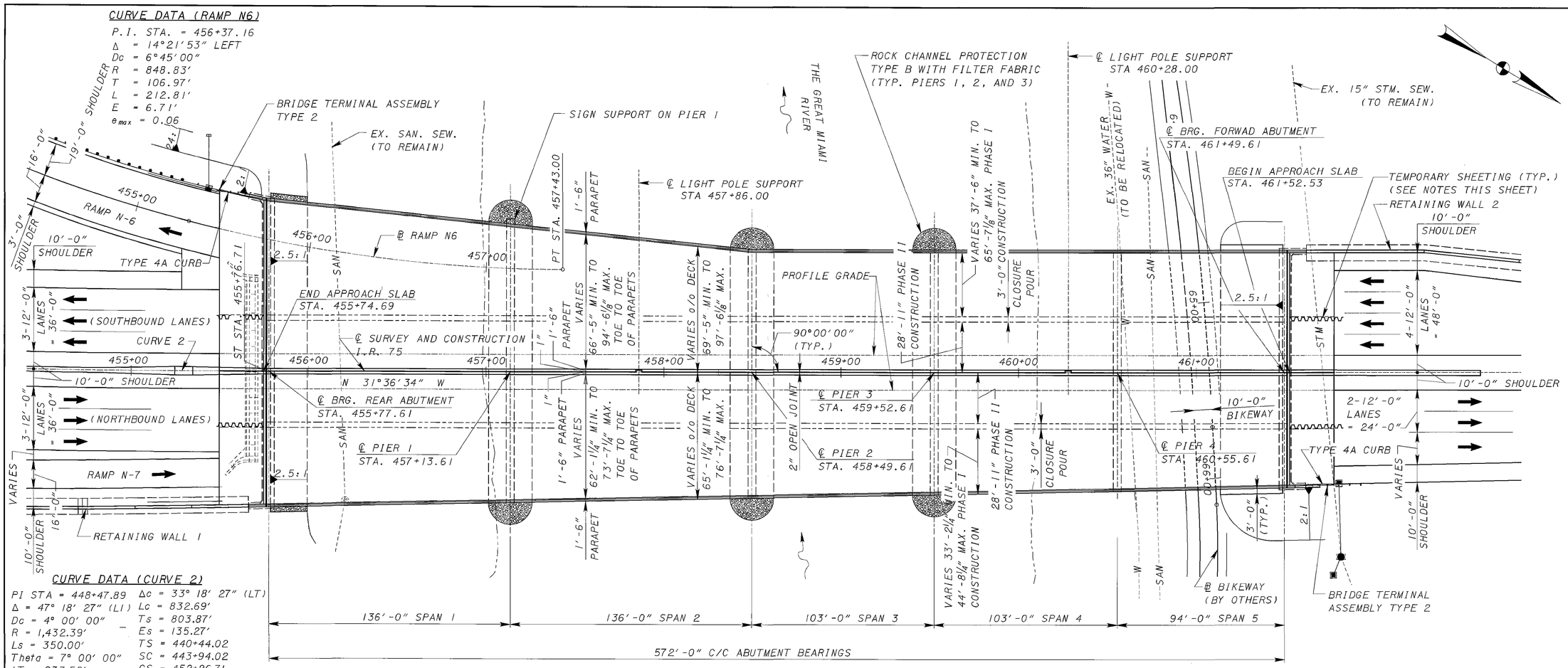


## CURVE DATA (CURVE 2)

PI STA = 448+47.89
Δ = 47° 18' 27" (LT)
Dc = 4° 00' 00"
R = 1,432.39'
Ls = 350.00'
Theta = 7° 00' 00"
LT = 233.52'
ST = 116.83'
x = 349.48'
y = 14.24'
k = 174.91'
p = 3.56'

Δc = 33° 18' 27" (LT)
Lc = 832.69'
Ts = 803.87'
Es = 135.27'
TS = 440+44.02
SC = 443+94.02
CS = 452+26.71
ST = 455+76.71
emax = EXIST

## GENERAL PLAN

## TEMPORARY SHEETING NOTES

1. THE STEEL SHEET PILING SHALL CONFORM TO ASTM A328 AND SHALL HAVE THE FOLLOWING PROPERTIES:

| TEMPORARY SHEETING DATA | | | | |
|---|---|---|---|---|
| LOCATION | SECTION MODULUS REQUIRED ($in^3$/Ft) | MINIMUM YIELD STRESS, Fy (KSI) | TOP OF SHEETING ELEVATION | BOTTOM OF SHEETING ELEVATION |
| REAR ABUTMENT | 47.0 | 38.5 | 769.0± | 725.0± |
| FORWARD ABUTMENT* | 32.2 | 38.5 | 771.0± | 735.0± |

* - THE CONTRACTOR IS TO FIELD LOCATE THE EXISTING 15" DIAMETER STORM SEWER UNDER THE PROPOSED APPROACH SLAB. THE SECTION OF TEMPORARY SHEETING ABOVE THE 15" STORM SEWER WILL NEED TO BE DRIVEN TO AN ELEVATION ABOVE THE BOTTOM OF WALL ELEVATION SHOWN IN THE TABLE IN ORDER NOT TO DAMAGE THE EXISTING STORM SEWER.

2. THE TEMPORARY SHEET PILING, INCLUDING INSTALLATION, SHALL BE PAID FOR UNDER ITEM 503 - COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN.

3. ALTERNATE SHEET PILING MEETING THE FOLLOWING PROPERTIES ARE PERMITTED:

| ALTERNATE SHEETING SECTION MODULUS ($in^3$/Ft) | | |
|---|---|---|
| MINIMUM YIELD STRESS, Fy (KSI) | 50 | 60 |
| SECTION MODULUS REQUIRED ($in^3$/Ft) AT REAR ABUTMENT | 36.2 | 30.2 |
| SECTION MODULUS REQUIRED ($in^3$/Ft) AT FORWARD ABUTMENT | 24.8 | 20.7 |

4. THE CONTRACTOR, AT HIS OWN EXPENSE, MAY PROVIDE AN ALTERNATE DESIGN FOR THE TEMPORARY SHEETING, PER CMS 501.05 (B).

5. THE CONTRACTOR SHALL PRESERVE AND PROTECT THE POROUS BACKFILL BEHIND THE ABUTMENT AND THE AGGREGATE BASE UNDER THE APPROACH SLAB AGAINST DISPLACEMENT DURING PHASED CONSTRUCTION OPERATIONS.

6. TEMPORARY SHEETING TO BE REMOVED IN THE VICINITY OF THE PROPOSED FORWARD ABUTMENT FOOTING TO FACILITATE PHASE II CONSTRUCTION OPERATIONS.


Plotted By: ecmack Date: 7/27/2007 Time: 3:41:42 PM
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DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| NFF | CAG | RER | 5/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |


GENERAL PLAN
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

# STRUCTURE GENERAL NOTES

## STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

| | | |
|---|---|---|
| A-1-69 | REVISED | 07-19-02 |
| AS-1-81 | REVISED | 07-19-02 |
| EXJ-6-06 | REVISED | 01-20-06 |
| PCB-91 | REVISED | 07-19-02 |
| PSID-1-99 | REVISED | 04-20-07 |
| SBR-1-99 | REVISED | 07-19-02 |

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

| | | |
|---|---|---|
| 832 | DATED | 04-25-06 |
| 898 | DATED | 07-21-06 |

## DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17th ADDITION, AND THE ODOT BRIDGE DESIGN MANUAL.

## DESIGN LOADING:

HS25 AND THE ALTERNATE MILITARY LOADING
FUTURE WEARING SURFACE (FWS) OF 60 LBS/SQ FT

## DESIGN DATA:

CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS QSC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60
MINIMUM YIELD STRENGTH 60,000 PSI

CONCRETE FOR PRESTRESSED BEAMS - COMPRESSIVE STRENGTH (FINAL) 7000 PSI
COMPRESSIVE STRENGTH (RELEASE) 5000 PSI

DIAPHRAGM CONCRETE - COMPRESSIVE STRENGTH 4500 PSI

PRESTRESSING STRAND - AREA = 0.167 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

STRUCTURAL STEEL - ASTM A709 GRADE 50 - YIELD STRENGTH 50,000 PSI

HP PILES - ASTM A709 GRADE 50 - YIELD STRENGTH 50,000 PSI

## DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" CONCRETE COVER

## MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

## ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

REMOVE ABUTMENTS AND PIERS TO THE ELEVATIONS SHOWN ON THE REMOVAL DETAILS SHEET.

## ITEM 203, EMBANKMENT, AS PER PLAN:

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 454+74.00 TO 462+53.00.

## FRICTION TYPE PILES:

THE PILES ESTIMATED LENGTHS, ORDER LENGTHS, ULTIMATE BEARING VALUES, AND NUMBER OF DYNAMIC LOAD TESTING ITEMS ARE AS LISTED BELOW. PILES AT PIERS 1 THRU 3 INCLUDE AN ADDITIONAL 8 TONS PER PILE OF ULTIMATE BEARING DUE TO THE POSSIBILITY OF LOSING FRICTIONAL RESISTANCE DUE TO SCOUR.

REAR ABUTMENT PILES:
48 HP14x73 PILES 50 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 184 TONS PER PILE
1 DYNAMIC LOAD TESTING ITEMS

PIER 1 PILES:
78 HP14x73 PILES 30 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 198 TONS PER PILE
1 DYNAMIC LOAD TESTING ITEMS
1 STATIC LOAD TESTING ITEMS, 3 RESTRIKES

PIER 2 PILES:
66 HP14x73 PILES 30 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 192 TONS PER PILE

PIER 3 PILES:
66 HP14x73 PILES 25 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 198 TONS PER PILE

PIER 4 PILES:
66 HP14x73 PILES 25 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 184 TONS PER PILE
1 DYNAMIC LOAD TESTING ITEMS

FORWARD ABUTMENT PILES:
39 HP14x73 PILES 50 FEET LONG ORDER LENGTH
ULTIMATE BEARING VALUE = 144 TONS PER PILE
1 DYNAMIC LOAD TESTING ITEMS

## PILE SPLICES:

IN LIEU OF USING FULL PENETRATION BUTT WELDS SPECIFIED IN CMS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER: ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BLVD., CLIFTON, NEW JERSEY 07014. INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

## BATTERED PILES:

THE BLOW COUNT FOR BATTERED PILES SHALL BE THE BLOW COUNT DETERMINED FOR VERTICAL PILES OF THE SAME ULTIMATE BEARING VALUE DIVIDED BY AN EFFICIENCY FACTOR (D). COMPUTE THE EFFICIENCY FACTOR (D) AS FOLLOWS:

$$D = \frac{1-UG}{\sqrt{(1+G^2)}}$$

U = COEFFICIENT OF FRICTION, WHICH IS ESTIMATED AT 0.05 FOR DOUBLE-ACTING AIR OPERATED OR DIESEL HAMMERS; 0.1 FOR SINGLE-ACTING AIR OPERATED OR DIESEL HAMMERS; AND 0.2 FOR DROP HAMMERS.

G = RATE OF BATTER (1/3, 1/4, ETC.)

## STATIC LOAD TEST:

PERFORM DYNAMIC TESTING ON THE FIRST TWO PRODUCTION PILES TO DETERMINE THE REQUIRED BLOW COUNT FOR THE SPECIFIED ULTIMATE BEARING VALUE. PERFORM THE STATIC LOAD TEST ON EITHER PILE. DO NOT OVER-DRIVE THE SELECTED PILE. DRIVE THE THIRD AND FOURTH PRODUCTION PILES TO 75% AND 85% OF THE DETERMINED BLOW COUNT, RESPECTIVELY. THE TEST PILES AND THE REDUCED CAPACITY PILES SHALL NOT BE BATTERED. AFTER INSTALLATION OF THE FIRST FOUR PRODUCTION PILES, CEASE ALL DRIVING OPERATIONS ON PILING REPRESENTED BY THE STATIC LOAD TESTING FOR A MINIMUM OF 7 DAYS. AFTER THE WAITING PERIOD, PERFORM PILE RESTRIKES ON THE STATIC LOAD TEST PILE AND EACH REDUCED CAPACITY PILE. THE ENGINEER WILL REVIEW THE RESULTS OF THE PILE RESTRIKES AND ESTABLISH THE DRIVING CRITERIA FOR THE REMAINING PILING REPRESENTED BY THE TESTING.

FOR SUBSEQUENT STATIC LOAD TESTS, UPON COMPLETION OF A 10,000 FOOT INCREMENT OF DRIVEN LENGTH, REPEAT THE ABOVE PROCEDURE FOR THE INITIAL STATIC LOAD TEST. IF NECESSARY, THE ENGINEER WILL REVISE THE DRIVING CRITERIA FOR THE REMAINING PILING ACCORDINGLY.

WHEN PERFORMING THE RESTRIKE, IF THE PILE HAS NOT REACHED THE BLOW COUNT DETERMINED FOR THE PLAN SPECIFIED ULTIMATE BEARING VALUE, CONTINUE DRIVING THE PILE UNTIL THIS CAPACITY IS ACHIEVED.

## MAINTENANCE OF TRAFFIC:

I.R. 75 TRAFFIC WILL BE MAINTAINED AT ALL TIMES. FOR MAINTENANCE OF TRAFFIC NOTES, PERMITTED LANE CLOSURE AND DETAILS, REFER TO ROADWAY PLANS AND STRUCTURE PHASE CONSTRUCTION DETAILS. NIGHTIME TEMPORARY CLOSURES MAY BE REQUIRED FOR GIRDER ERECTION.

## UTILITY LINES:

THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO MINIMUM.

## EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM THE FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

## ITEM 509, EPOXY-COATED REINFORCING STEEL, AS PER PLAN:

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

## MECHANICAL CONNECTORS

AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURER'S PROCEDURES. MECHANICAL CONNECTORS SHALL BE CAPABLE OF DEVELOPING 125% OF THE YIELD STRENGTH OF THE BARS CONNECTED. ALL MECHANICAL CONNECTORS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. CONNECTORS SHALL CONFORM WITH ITEM 509 AND SHALL BE CONSIDERED INCIDENTAL TO THE BID PRICE FOR ITEM 509-EPOXY COATED REINFORCING STEEL.

## ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

THE CONCRETE SEALING MATERIAL SHALL BE THE "LIGHT NEUTRAL" COLOR MEETING THE FEDERAL COLOR STANDARD NO. 17778 AS PER THE DETAILS ON THE PLANS.

## ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN:

FURNISH APPROACH SLABS CONFORMING TO CMS 526 EXCEPT CONCRETE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 898, QC/QA CONCRETE, CLASS QSC2. THE ACCEPTED QUANTITIES SHALL INCLUDE: CONCRETE, CURBS, PARAPET AND MEDIAN BARRIER CONCRETE, REINFORCING STEEL, JOINT FILLERS, JOINT SEALERS, JOINT SEALS, AND WATERPROOFING ON THE APPROACH SLABS AND ON THE BACKWALLS OF THE ABUTMENTS. THE DEPARTMENT WILL MEASURE APPROACH SLABS BY THE NUMBER OF SQUARE YARDS. THE DEPARTMENT WILL INITIALLY PAY THE FULL BID PRICE TO THE CONTRACTOR UPON COMPLETING THE WORK. THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

## ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN:

THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND PARAPET IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

## ITEM 898, QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN:

THE DEPARTMENT WILL CALCULATE THE FINAL ADJUSTED PAYMENT ACCORDING TO 898.17 AND INCLUDE APPROACH SLAB CONCRETE AND DECK CONCRETE IN THE SAME LOT TO DETERMINE FINAL PAY FACTORS.

## INDEX OF SHEETS:




DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901
DESIGNED NFF | DRAWN MLR | REVIEWED RER | DATE 05/26/05
CHECKED JDH | REVISED | STRUCTURE FILE NUMBER 5708710


GENERAL NOTES (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523 I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

3/55

238/314

MADE BY NFF DATE 04/25/05
CHECK'D BY ECM DATE 07/26/07

# ESTIMATED QUANTITIES

STRUCTURE FILE NUMBER: 5708710

| ITEM | EXTENSION | TOTAL* | UNIT | DESCRIPTION | REAR ABUTMENT | FORWARD ABUTMENT | PIERS | SUPERSTRUCTURE | GENERAL | AS PER PLAN REFERENCE SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|
| 202 | 11203 | LUMP | | PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN | | | | | LUMP | 3/55 |
| 202 | 22900 | 442 | SQ YD | APPROACH SLAB REMOVED | | | | | 442 | |
| 503 | 11101 | LUMP | | COFFERDAMS, CRIBS AND SHEETING, AS PER PLAN | | | | | LUMP | 3/55, 9-12/55 |
| 503 | 21300 | LUMP | | UNCLASSIFIED EXCAVATION | | | | | LUMP | |
| 505 | 11100 | LUMP | | PILE DRIVING EQUIPMENT MOBILIZATION | | | | | LUMP | |
| 506 | 11100 | LUMP | | STATIC LOAD TEST | | | | | LUMP | 3/55 |
| 507 | 00300 | 11970 | FT | STEEL PILES HP 14x73, FURNISHED | 2400 | 1950 | 7620 | | | |
| 507 | 00350 | 10155 | FT | STEEL PILES HP 14x73, DRIVEN | 2160 | 1755 | 6240 | | | |
| 509 | 10001 | 1447570 | POUND | EPOXY COATED REINFORCING STEEL, AS PER PLAN | 33011 | 24678 | 377248 | 1012633 | | 3/55 |
| 512 | 10100 | 8410 | SQ YD | SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) | 319 | 218 | 4458 | 3415 | | |
| 512 | 10300 | 896 | SQ YD | SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN | | | | 896 | | |
| 512 | 33000 | 25 | SQ YD | TYPE 2 WATERPROOFING | 14 | 11 | | | | |
| 515 | 15050 | 96 | EACH | DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE 4 MOD. (72") | | | | 96 | | |
| 515 | 20000 | 258 | EACH | INTERMEDIATE DIAPHRAGMS | | | | 258 | | |
| 516 | 11210 | 308 | FT | STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL | 174 | 134 | | | | |
| 516 | 13600 | 75 | SQ FT | 1" PREFORMED EXPANSION JOINT FILLER | 45 | 30 | | | | |
| 516 | 13900 | 331 | SQ FT | 2" PREFORMED EXPANSION JOINT FILLER | 8 | 8 | | | 315 | |
| 516 | 43200 | 38 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (10" x 22" x 2.12") | | | 38 | | | |
| 516 | 43300 | 36 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (12" x 18" x 3.62") | | | 36 | | | |
| 516 | 43400 | 36 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (13.5" x 18.5" x 4.46") | | | 36 | | | |
| 516 | 43400 | 42 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (14" x 22" x 4.51") | | | 42 | | | |
| 516 | 43400 | 22 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (13.5" x 22" x 4.51") | 22 | | | | | |
| 516 | 43400 | 18 | EACH | ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (15.5" x 15.5" x 4.89") | | 18 | | | | |
| 518 | 21200 | 332 | CU YD | POROUS BACKFILL WITH FILTER FABRIC | 201 | 131 | | | | |
| 518 | 40000 | 328 | FT | 6" PERFORATED CORRUGATED PLASTIC PIPE | 184 | 144 | | | | |
| 518 | 40010 | 170 | FT | 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS | 66 | 104 | | | | |
| 523 | 20000 | 4 | EACH | DYNAMIC LOAD TESTING | 1 | 1 | 2 | | | |
| 523 | 20500 | 3 | EACH | RESTRIKING | | | 3 | | | |
| 601 | 20000 | 6 | SQ YD | CRUSHED AGGREGATE SLOPE PROTECTION | 3 | 3 | | | | |
| 601 | 21000 | 631 | SQ YD | CONCRETE SLOPE PROTECTION | | 631 | | | | |
| 601 | 32100 | 371 | CU YD | ROCK CHANNEL PROTECTION, TYPE B WITH FILTER | 371 | | | | | |
| 601 | 32104 | 930 | CU YD | ROCK CHANNEL PROTECTION, TYPE B WITH FABRIC FILTER | | | 930 | | | |
| 898 | 10201 | 2844 | CU YD | QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK), AS PER PLAN | | | | 2844 | | 3/55 |
| 898 | 10705 | 851 | SQ YD | QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), T=15", AS PER PLAN | | | | | 851 | 3/55 & 15/55 |
| 898 | 11001 | 394 | CU YD | QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET), AS PER PLAN | | | | 394 | | 3/55 |
| 898 | 20100 | 2102 | CU YD | QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (PIER ABOVE FOOTING) | | | 2102 | | | |
| 898 | 20150 | 457 | CU YD | QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT) | 290 | 167 | | | | |
| 898 | 20300 | 1108 | CU YD | QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (FOOTING) | 147 | 117 | 844 | | | |

* - ALL STRUCTURAL ITEMS PAID FOR WITH FEDERAL AND STATE FUNDS

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1907
REVIEWED RER DATE 05/26/05
STRUCTURE FILE NUMBER 5708710
DRAWN MLR REVISED
DESIGNED NFF CHECKED MLR

ESTIMATED QUANTITIES (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523 I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

4 / 55

239 / 314

Plotted By: acscheiderer Date: 8/23/2007 Time: 3:03:59 PM
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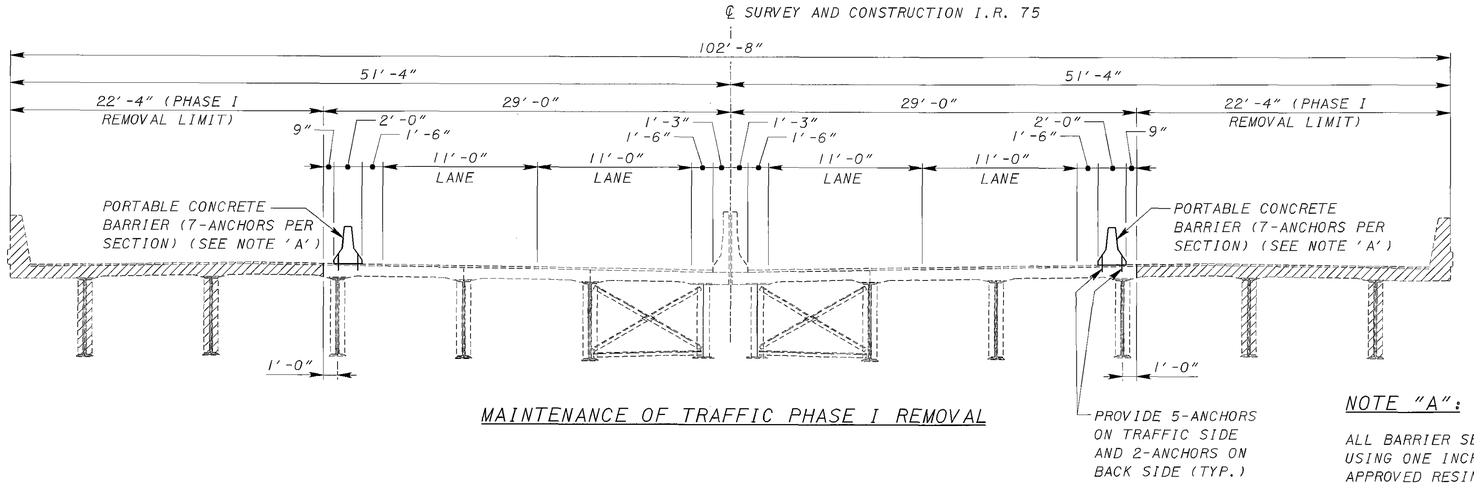
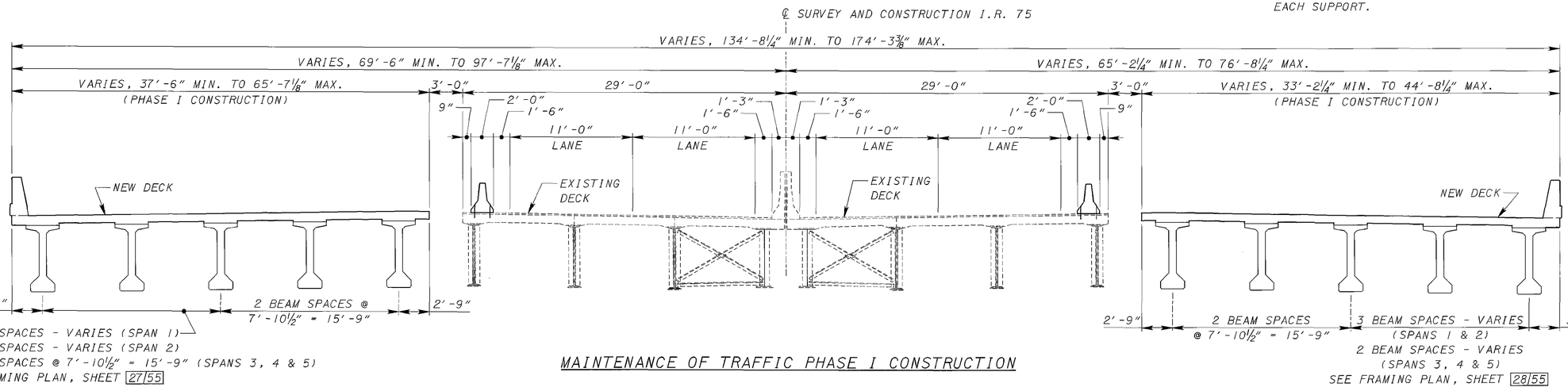



## MAINTENANCE OF TRAFFIC PHASE I REMOVAL

### NOTE "A":

ALL BARRIER SEGMENTS SHALL BE FASTENED TO THE BRIDGE DECK USING ONE INCH DIAMETER HIGH STRENGTH THROUGH BOLTS OR APPROVED RESIN ANCHORS. WHEN RESIN ANCHORS ARE USED THEY MUST BE EMBEDDED A MINIMUM OF 6½" INTO FIRM CONCRETE. ALL ANCHORS SHALL BE PLACED SYMMETRICAL ABOUT THE CENTER OF EACH SUPPORT.




5 BEAM SPACES - VARIES (SPAN 1)
3 BEAM SPACES - VARIES (SPAN 2)
2 BEAM SPACES @ 7'-10½" = 15'-9" (SPANS 3, 4 & 5)
SEE FRAMING PLAN, SHEET 27/55

SEE FRAMING PLAN, SHEET 28/55

## MAINTENANCE OF TRAFFIC PHASE I CONSTRUCTION

### SUGGESTED CONSTRUCTION SEQUENCE:

PHASE I

1. DIRECT I.R. 75 TRAFFIC TO OCCUPY THE TEMPORARY LANES SHOWN IN MAINTENANCE OF TRAFFIC PHASE I.
2. INSTALL PORTABLE CONCRETE BARRIER AS SHOWN ON THE PLANS.
3. REMOVE EXISTING DECK TO THE LIMIT SHOWN IN MAINTENANCE OF TRAFFIC PHASE I REMOVAL.
4. INSTALL TEMPORARY SHEETING AT ABUTMENTS.
5. REMOVE PART OF EXISTING SUBSTRUCTURE UNITS AS NECESSARY.
6. CONSTRUCT PART OF NEW SUBSTRUCTURE UNITS.
7. ERECT NEW BEAMS.
8. CONSTRUCT NEW DECK AND PARAPET AS SHOWN ON MAINTENANCE OF TRAFFIC PHASE I CONSTRUCTION.

PHASE II

1. INSTALL PORTABLE CONCRETE BARRIER AS SHOWN ON THE PLANS.
2. DIRECT I.R. 75 TRAFFIC TOWARD NEWLY CONSTRUCTED DECK.
3. REMOVE REMAINING EXISTING DECK TO THE LIMIT SHOWN IN MAINTENANCE OF TRAFFIC PHASE II REMOVAL.
4. REMOVE REMAINING PARTS OF EXISTING SUBSTRUCTURE UNITS AS NECESSARY.
5. CONSTRUCT REMAINING PARTS OF NEW SUBSTRUCTURE UNITS.
6. REMOVE TEMPORARY SHEETING AS NECESSARY.
7. ERECT REMAINING NEW BEAMS.
8. CONSTRUCT NEW DECK AND MEDIAN BARRIER AS SHOWN ON MAINTENANCE OF TRAFFIC PHASE II CONSTRUCTION.
9. PLACE CLOSURE DECK SECTION.
10. RESUME NORMAL TRAFFIC.

NOTES:

▨ - INDICATES REMOVAL

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
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| MFF | MLR | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

PHASE CONSTRUCTION DETAILS - PHASE I
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

5/55

240/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:04 PM
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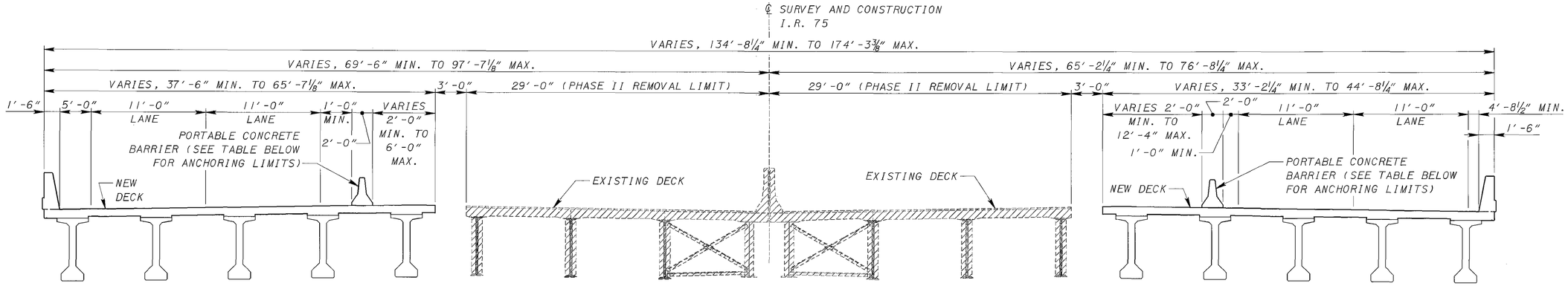
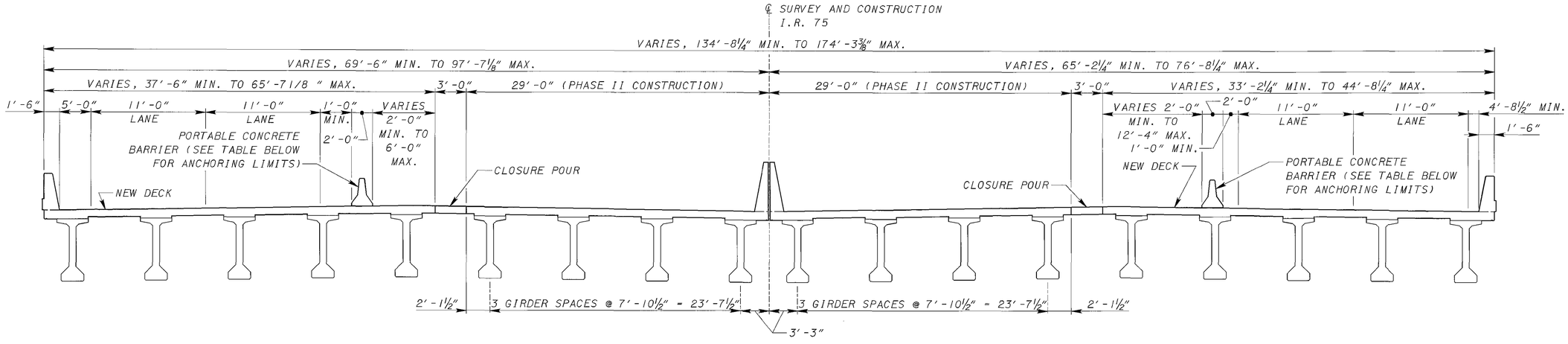



## MAINTENANCE OF TRAFFIC PHASE II REMOVAL




## MAINTENANCE OF TRAFFIC PHASE II CONSTRUCTION

| PORTABLE CONCRETE BARRIER - ANCHORING REQUIREMENTS | | | |
|---|---|---|---|
| SOUTHBOUND | | NORTHBOUND | |
| DISTANCE | NO. OF ANCHORS REQUIRED PER SEGMENT | DISTANCE | NO. OF ANCHORS REQUIRED PER SEGMENT |
| REAR ABUTMENT TO STA. 459+70.28 | NONE REQUIRED | REAR ABUTMENT TO STA. 459+50.42 | NONE REQUIRED |
| STA. 459+70.28 TO FORWARD ABUTMENT | 2* | STA. 459+50.42 TO FORWARD ABUTMENT | 2* |

* CONTRACTOR TO AVOID DRILLING THROUGH SLAB REINFORCEMENTS

**NOTES:**

- INDICATES REMOVAL

1. FOR SUGGESTED CONSTRUCTION SEQUENCE, SEE SHEET 5/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
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| MFF | MLR | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

PHASE CONSTRUCTION DETAILS - PHASE II
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

6/55

241/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:05 PM
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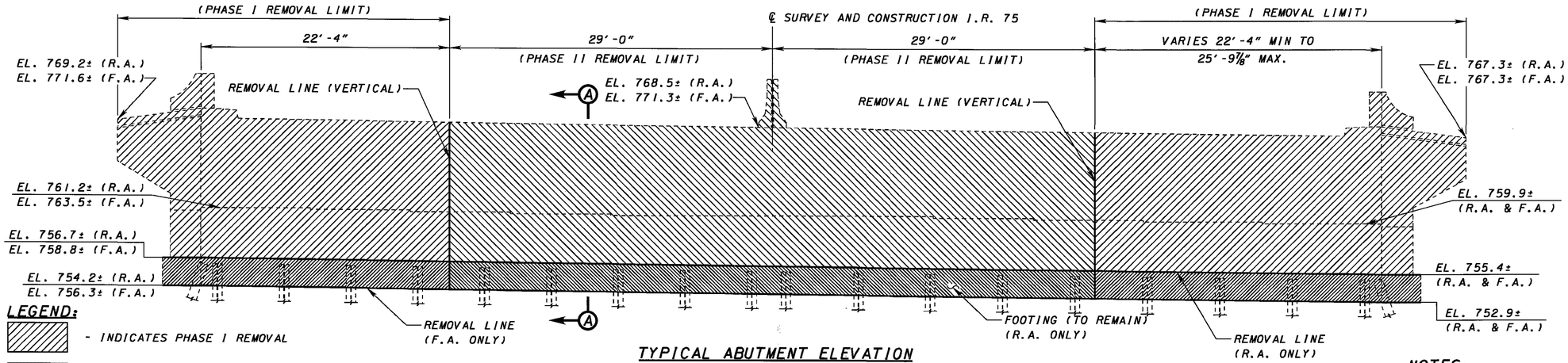
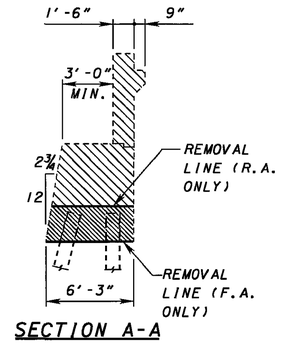



TYPICAL ABUTMENT ELEVATION

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR BUT OPPOSITE HAND)



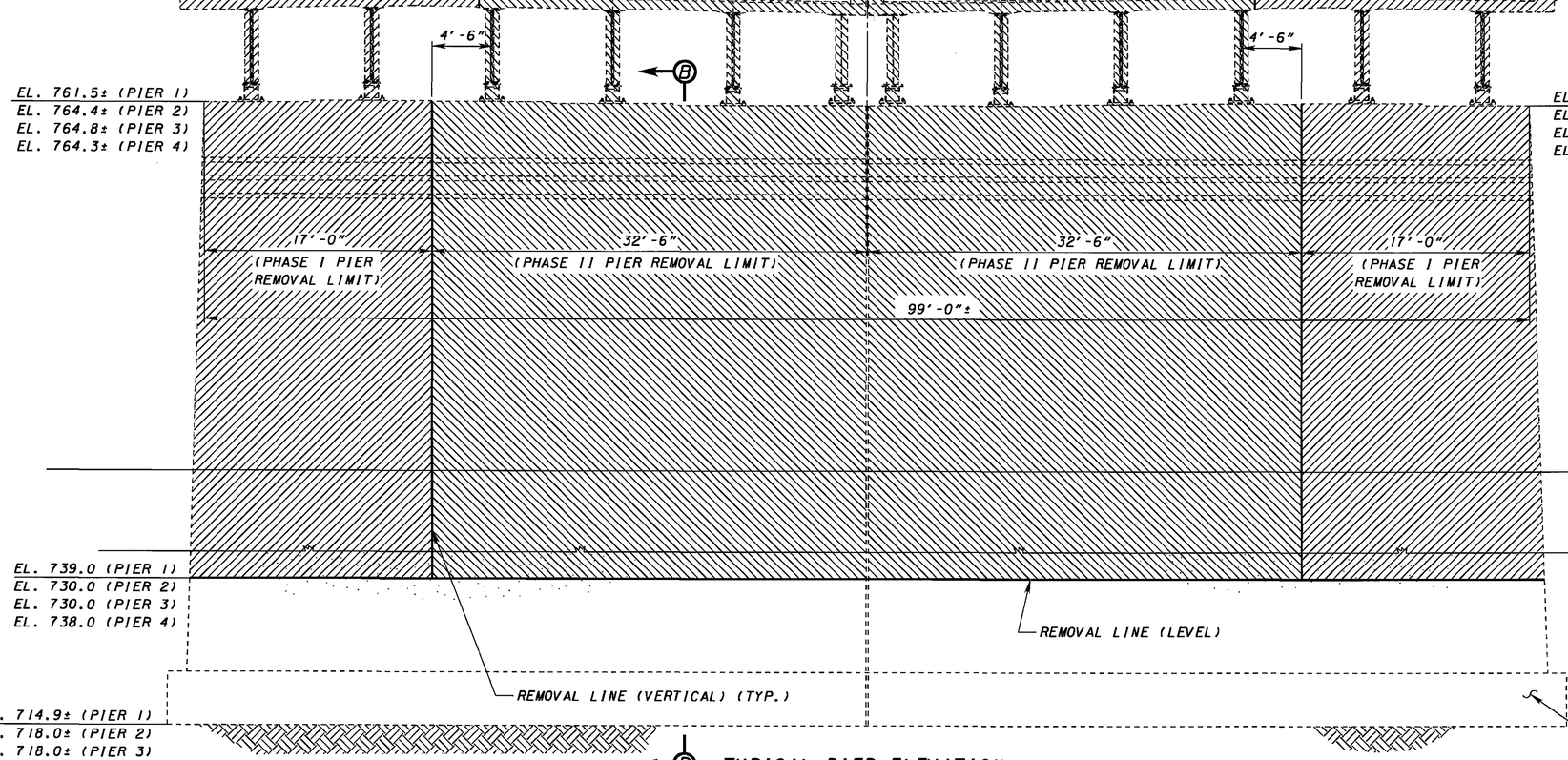

SECTION A-A

**LEGEND:**

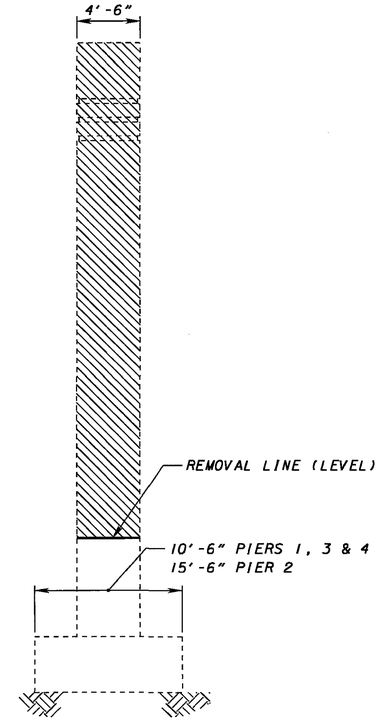
- INDICATES PHASE I REMOVAL
- INDICATES ADDITIONAL PHASE I REMOVAL FOR FORWARD ABUTMENT ONLY
- INDICATES PHASE II REMOVAL
- INDICATES ADDITIONAL PHASE II REMOVAL FOR FORWARD ABUTMENT ONLY

**NOTES:**

1. AREAS TO BE REMOVED SHALL BE PAID FOR UNDER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
2. FOR PHASE CONSTRUCTION DETAILS, SEE SHEETS 5/55 AND 6/55 .
3. ABBREVIATIONS:
   EL. - ELEVATION
   R.A. - REAR ABUTMENT
   F.A. - FORWARD ABUTMENT
   TYP. - TYPICAL




TYPICAL PIER ELEVATION




SECTION B-B

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE- SUITE 2000
CLEVELAND, OHIO 44113-1907

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 05/26/05 |
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| JDH | | 5708710 | |

REMOVAL DETAILS

BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

7 / 55

242 / 314

Plotted By: acschelderer Date: 8/23/2007 Time: 3:04:47 PM
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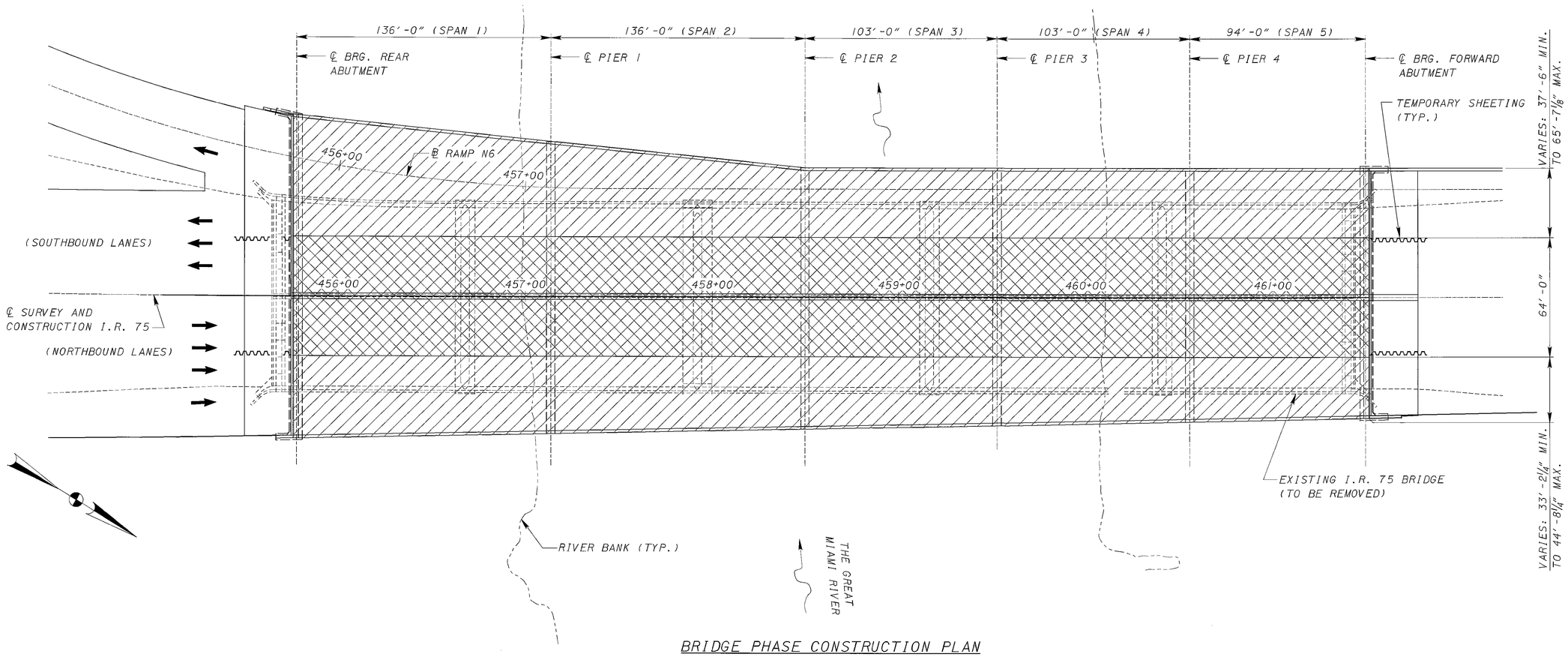


## BRIDGE PHASE CONSTRUCTION PLAN

### CONSTRUCTION SEQUENCE

THE PROPOSED WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING I.R. 75 BRIDGE OVER THE GREAT MIAMI RIVER AND THE CONSTRUCTION OF THE REPLACEMENT BRIDGE IN PHASES. REMOVAL AND CONSTRUCTION OPERATIONS ARE TO BE PERFORMED WHILE MAINTAINING TRAFFIC AND WATER FLOW. THE PERFORMANCE OF ALL PHASES OF WORK MUST BE COORDINATED TO SATISFY THE PROJECT MAINTENANCE OF TRAFFIC AND SAFETY REQUIREMENTS. SEE THE PROJECT MAINTENANCE OF TRAFFIC PLANS FOR ADDITIONAL MAINTENANCE OF TRAFFIC REQUIREMENTS.

### PHASE I CONSTRUCTION:

1. BUILD STAGE 1 OF THE TEMPORARY CONSTRUCTION ACCESS AS SHOWN ON SHEET 9/55 TO DEMOLISH AND CONSTRUCT THE EXTERIOR PORTIONS OF THE I.R. 75 BRIDGE IN SPANS 3 THROUGH 5.
2. CONSTRUCT THE EXTERIOR PORTIONS OF THE SUBSTRUCTURE FOR PIERS 2 THROUGH 4 AND THE FORWARD ABUTMENT.
3. SET THE SUPERSTRUCTURE BEAMS FOR THE EXTERIOR PORTIONS OF THE BRIDGE FOR SPANS 3 THROUGH 5.
4. REMOVE STAGE 1 AND BUILD STAGE 2 OF THE TEMPORARY CONSTRUCTION ACCESS AS SHOWN ON SHEET 10/55 TO DEMOLISH AND CONSTRUCT THE EXTERIOR PORTIONS OF THE I.R. 75 BRIDGE IN SPANS 1 AND 2.
5. CONSTRUCT THE EXTERIOR PORTIONS OF THE SUBSTRUCTURE FOR PIER 1 AND THE REAR ABUTMENT.
6. SET THE SUPERSTRUCTURE BEAMS FOR THE EXTERIOR PORTIONS OF THE BRIDGE FOR SPANS 1 AND 2.
7. CONSTRUCT THE BRIDGE DECK FOR THE EXTERIOR PORTIONS OF THE BRIDGE. REFER TO SLAB PLAN FOR SEQUENCE.
8. MOVE TRAFFIC FROM THE EXISTING I.R. 75 BRIDGE TO THE NEWLY FINISHED PORTIONS OF THE BRIDGE.

### PHASE II CONSTRUCTION:

1. REMOVE STAGE 2 AND BUILD STAGE 3 OF THE TEMPORARY CONSTRUCTION ACCESS AS SHOWN ON SHEET 11/55 TO DEMOLISH AND CONSTRUCT THE INTERIOR PORTION OF THE I.R. 75 BRIDGE IN SPANS 1 AND 2.
2. CONSTRUCT THE INTERIOR PORTION OF THE SUBSTRUCTURE FOR PIERS 1 AND 2 AND THE REAR ABUTMENT.
3. SET THE SUPERSTRUCTURE BEAMS FOR THE INTERIOR PORTION OF THE BRIDGE FOR SPANS 1 AND 2.
4. REMOVE STAGE 3 AND BUILD STAGE 4 OF THE TEMPORARY CONSTRUCTION ACCESS AS SHOWN ON SHEET 12/55 TO DEMOLISH AND CONSTRUCT THE INTERIOR PORTION OF THE I.R. 75 BRIDGE IN SPANS 3 THROUGH 5.
5. CONSTRUCT THE INTERIOR PORTION OF THE SUBSTRUCTURE FOR PIERS 3 AND 4 AND THE FORWARD ABUTMENT.
6. SET THE SUPERSTRUCTURE BEAMS FOR THE INTERIOR PORTION OF THE BRIDGE FOR SPANS 3 THROUGH 5.
7. CONSTRUCT THE BRIDGE DECK AND CLOSURE POURS FOR THE INTERIOR PORTION OF THE BRIDGE. REFER TO SLAB PLAN FOR SEQUENCE.
8. REMOVE STAGE 4 TEMPORARY CONSTRUCTION ACCESS.
9. OPEN NEW STRUCTURE TO TRAFFIC.

### NOTES:

1. FOR ADDITIONAL MAINTENANCE OF TRAFFIC STAGING DETAILS, SEE MAINTENANCE OF TRAFFIC SHEETS.
2. FOR TEMPORARY CONSTRUCTION ACCESS STAGE CONSTRUCTION DETAILS AND NOTES, SEE SHEET 9/55 THROUGH 12/55.

### LEGEND:

- PHASE I CONSTRUCTION
- PHASE II CONSTRUCTION

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
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| GHD | JLV | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

BRIDGE PHASE CONSTRUCTION AND NOTES
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

8 / 55

243 / 314

PLOTTED BY: ecmack DATE: 7/27/2007 TIME: 3:41:44 PM
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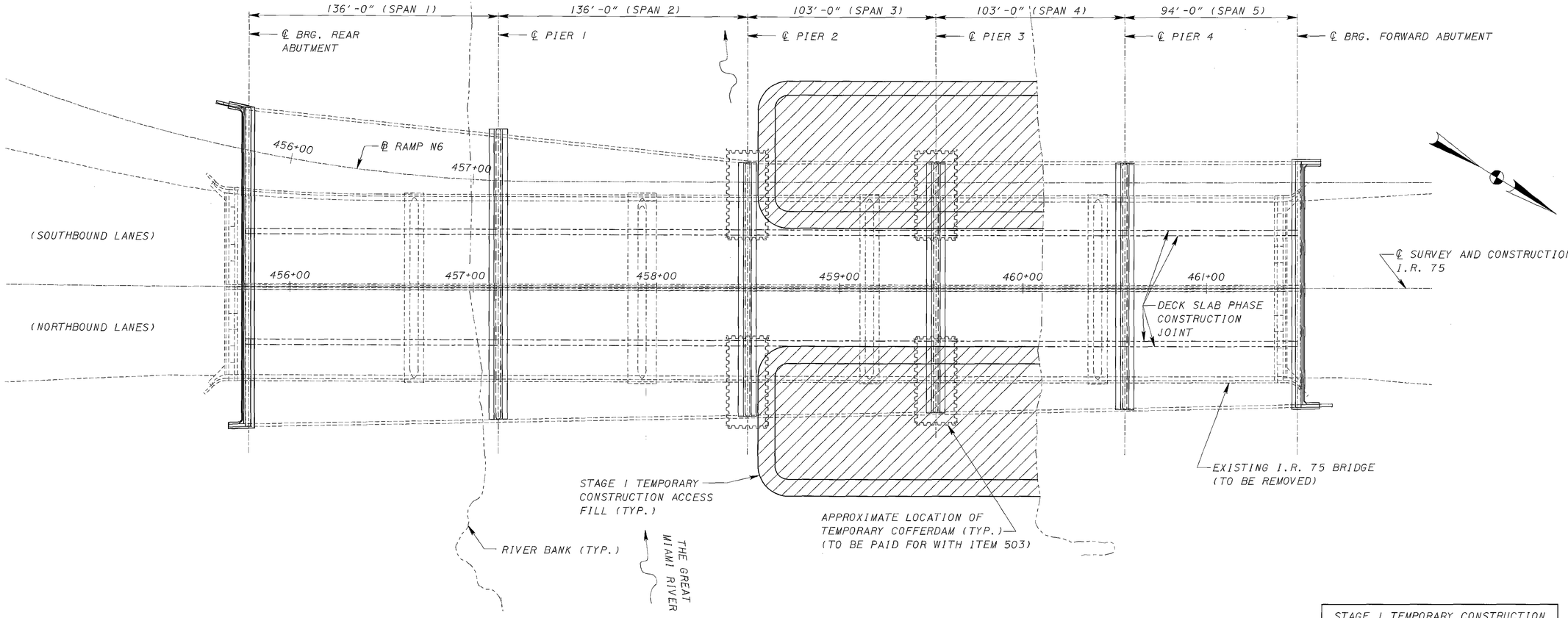
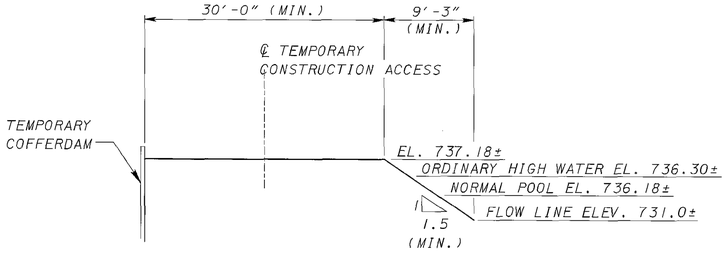



## TEMPORARY CONSTRUCTION ACCESS - STAGE 1 PLAN

| STAGE 1 TEMPORARY CONSTRUCTION ACCESS FILL |
|---|
| 0.57 ACRES |
| 4,900 CU.YD. |




TYPICAL STAGE 1 CONSTRUCTION ACCESS SECTION ADJACENT TO COFFERDAM

### NOTES:

1. FOR ADDITIONAL MAINTENANCE OF TRAFFIC STAGING DETAILS, SEE MAINTENANCE OF TRAFFIC SHEETS.
2. TEMPORARY CONSTRUCTION ACCESS SHOWN FOR REMOVAL OF EXISTING STRUCTURE AND CONSTRUCTION OF PROPOSED STRUCTURE. ANY MODIFICATIONS TO CONSTRUCTION ACCESS SHALL BE DIRECTED TO ODOT OFFICE OF ENVIRONMENTAL SERVICES FOR REVIEW. NO DELAYS WILL BE GRANTED FOR ANY REASON WITH RESPECT TO CONTRACTOR MODIFICATIONS TO CONSTRUCTION ACCESS.
3. THE PLACEMENT OF THE TEMPORARY CONSTRUCTION ACCESS MATERIALS SHALL BE PERFORMED BETWEEN JUNE 30 AND APRIL 15 OF THE FOLLOWING YEAR. CONSTRUCTION ACCESSES WHICH HAVE BEEN CONSTRUCTED TO THE ELEVATION SHOWN ON THE PLANS PRIOR TO APRIL 15 CAN BE ACCESSED AT ALL TIMES AND SHALL NOT BE CONSIDERED WORK WITHIN THE WATERWAY.
4. WORK WITHIN ANY CLOSED CELL COFFERDAMS SHALL NOT BE CONSIDERED WORK WITHIN THE RIVER DURING THE RESTRICTED DATES OF APRIL 15 THROUGH JUNE 30 AND SHALL BE SUBJECT TO THE DEWATERING SPECIFICATIONS OF CMS 107 AT ALL TIMES.
5. THE CONSTRUCTION ACCESSES SHALL BE CONSTRUCTED TO ODOT SUPPLEMENTAL SPECIFICATION 832 UNLESS OTHERWISE SPECIFIED ON THE PLANS AND STANDARD DRAWINGS.
6. AT NO TIME SHALL THE TEMPORARY CONSTRUCTION ACCESS AND COFFERDAMS BE BUILT TO IMPEDE NORMAL WATER FLOW.
7. TEMPORARY CULVERTS SHALL NOT BE REQUIRED. HOWEVER, NORMAL RIVER FLOW SHALL BE MAINTAINED AT ALL TIMES.
8. ALL TEMPORARY CONSTRUCTION ACCESS FILL MATERIAL SHALL BE REMOVED FROM THE RIVER AT THE COMPLETION OF THE PROJECT, AND THE RIVER BOTTOM RESTORED TO ITS ORIGINAL ELEVATIONS.
9. SEE PROJECT SPECIAL PROVISIONS FOR 404/401 PERMITS.
10. FOR PHASE CONSTRUCTION SEQUENCE NOTES, SEE SHEET 8/55.
11. ALL COSTS ASSOCIATED WITH CONSTRUCTING THE TEMPORARY CONSTRUCTION ACCESS FILLS SHALL BE PAID FOR BY THE CONTRACTOR IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 832.10.

### LEGEND:

TEMPORARY CONSTRUCTION ACCESS FILL

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1991
DESIGNED GHD | DRAWN JLV | REVIEWED RER | DATE 05/26/05
CHECKED JDH | REVISED | STRUCTURE FILE NUMBER 5708710

TEMPORARY CONSTRUCTION ACCESS - STAGE 1
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

9/55

244/314

PLOTTED BY: ecmack DATE: 7/27/2007 TIME: 3:41:48 PM
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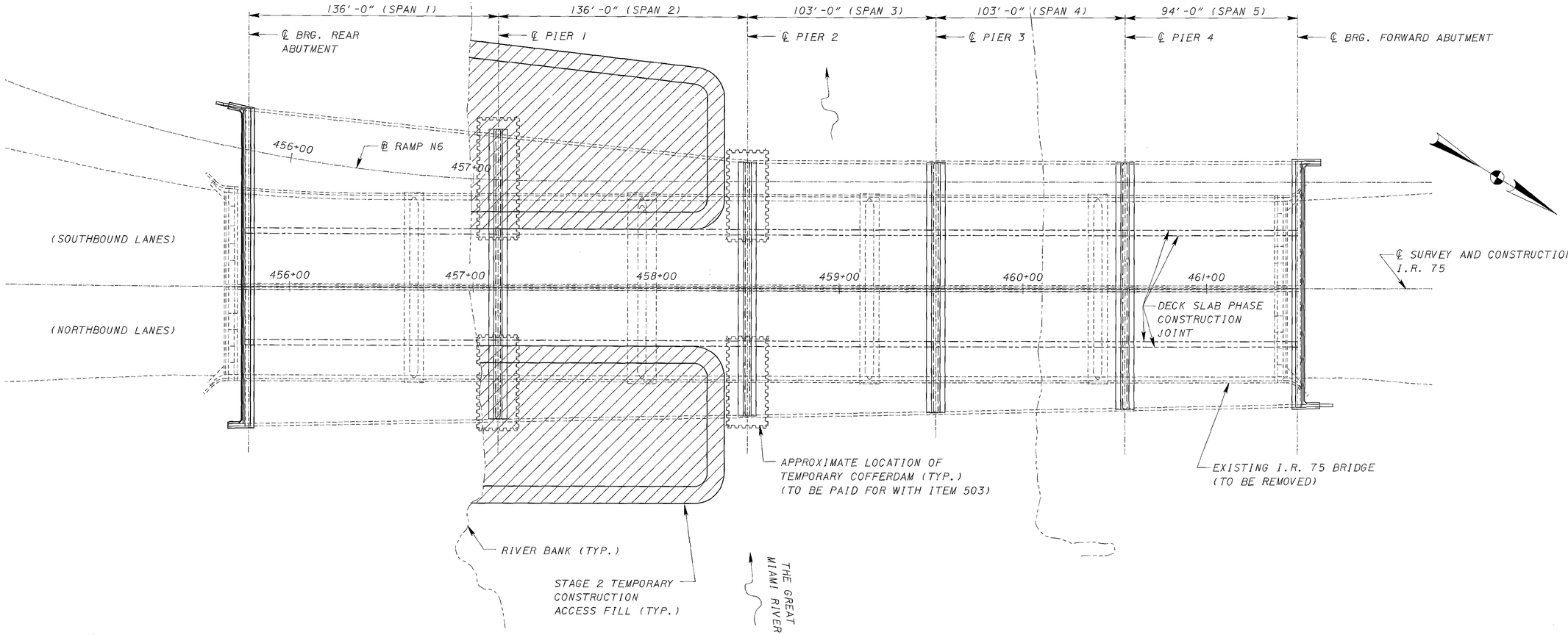
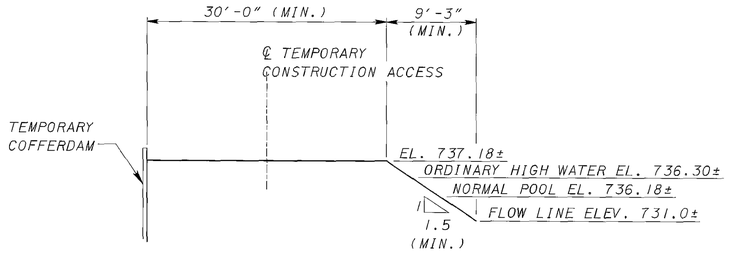



## TEMPORARY CONSTRUCTION ACCESS - STAGE 2 PLAN

| STAGE 2 TEMPORARY CONSTRUCTION ACCESS FILL |
|---|
| 0.56 ACRES |
| 4,875 CU.YD. |




## TYPICAL STAGE 2 CONSTRUCTION ACCESS SECTION ADJACENT TO COFFERDAM

**LEGEND:**

TEMPORARY CONSTRUCTION ACCESS FILL

**NOTE:**

1. FOR NOTES, SEE TEMPORARY CONSTRUCTION ACCESS - STAGE 1 SHEET.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| GHD | JLV | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

TEMPORARY CONSTRUCTION ACCESS - STAGE 2
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

10/55

245/314

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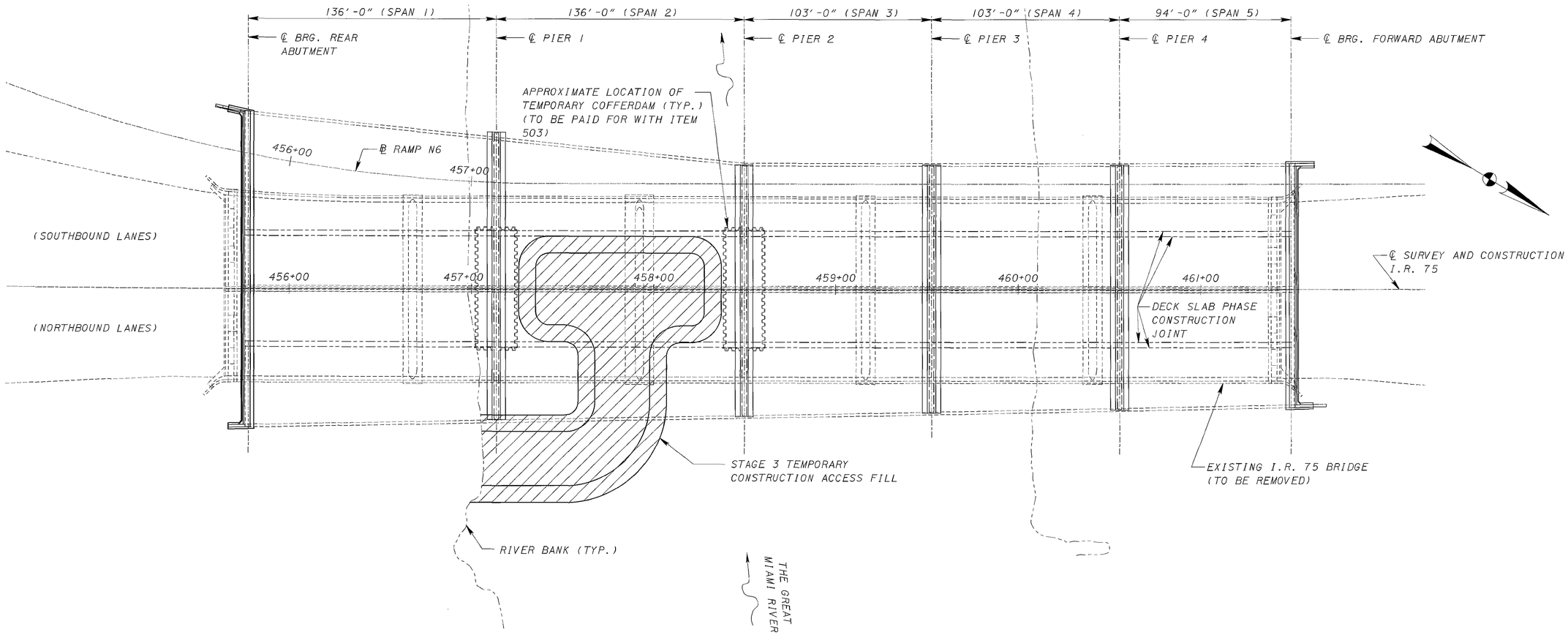
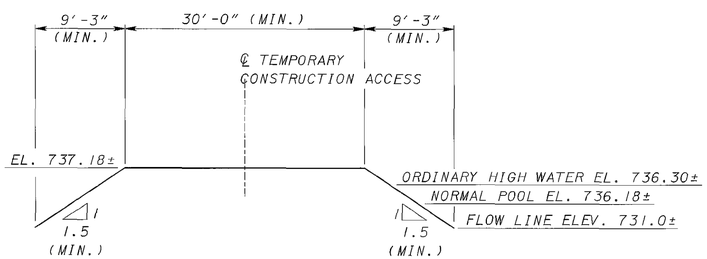



TEMPORARY CONSTRUCTION ACCESS - STAGE 3 PLAN

STAGE 3 TEMPORARY CONSTRUCTION ACCESS FILL
0.29 ACRES
2,325 CU. YD.




TYPICAL STAGE 3 CONSTRUCTION ACCESS SECTION

LEGEND:

TEMPORARY CONSTRUCTION ACCESS FILL

NOTE:

1. FOR NOTES, SEE TEMPORARY CONSTRUCTION ACCESS - STAGE 1 SHEET.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1909

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| GHD | JLV | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

TEMPORARY CONSTRUCTION ACCESS - STAGE 3
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

11/55

246/314

PLOTTED BY: ecmack DATE: 7/27/2007 TIME: 3:41:58 PM
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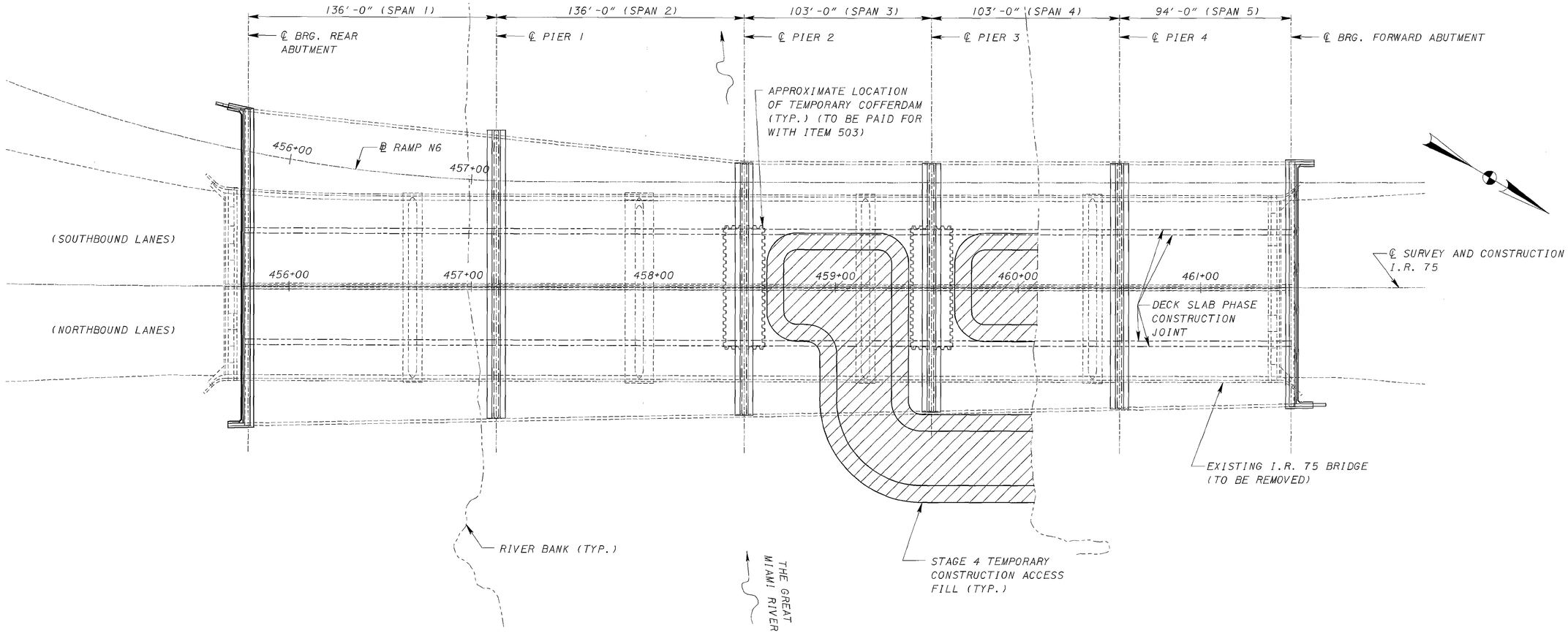
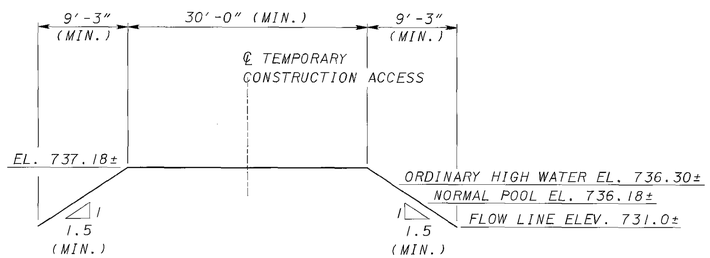



TEMPORARY CONSTRUCTION ACCESS - STAGE 4 PLAN




TYPICAL STAGE 4 CONSTRUCTION ACCESS SECTION

LEGEND:

TEMPORARY CONSTRUCTION ACCESS FILL

| STAGE 4 TEMPORARY CONSTRUCTION ACCESS FILL |
|---|
| 0.32 ACRES |
| 2,565 CU.YD. |

NOTE:

1. FOR NOTES, SEE TEMPORARY CONSTRUCTION ACCESS - STAGE 1 SHEET.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE - SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| GHD | JLV | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5706710 | |

TEMPORARY CONSTRUCTION ACCESS - STAGE 4
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

12/55

247/314

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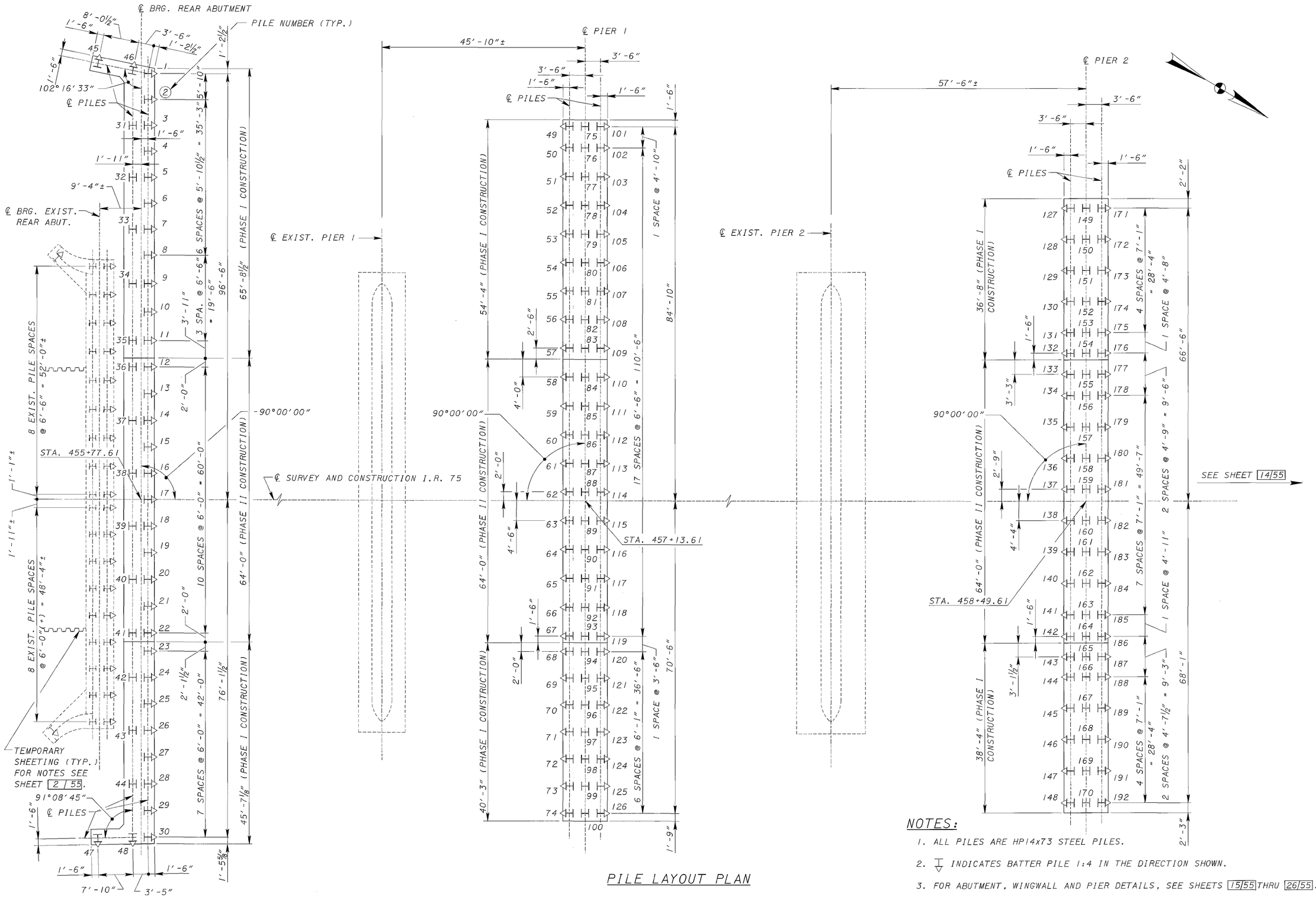


## PILE LAYOUT PLAN

### NOTES:

1. ALL PILES ARE HP14x73 STEEL PILES.
2. ▽ INDICATES BATTER PILE 1:4 IN THE DIRECTION SHOWN.
3. FOR ABUTMENT, WINGWALL AND PIER DETAILS, SEE SHEETS 15/55 THRU 26/55.
4. FOR PILING DATA, SEE SHEET 3/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

PILE LAYOUT PLAN
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

13/55

248/314

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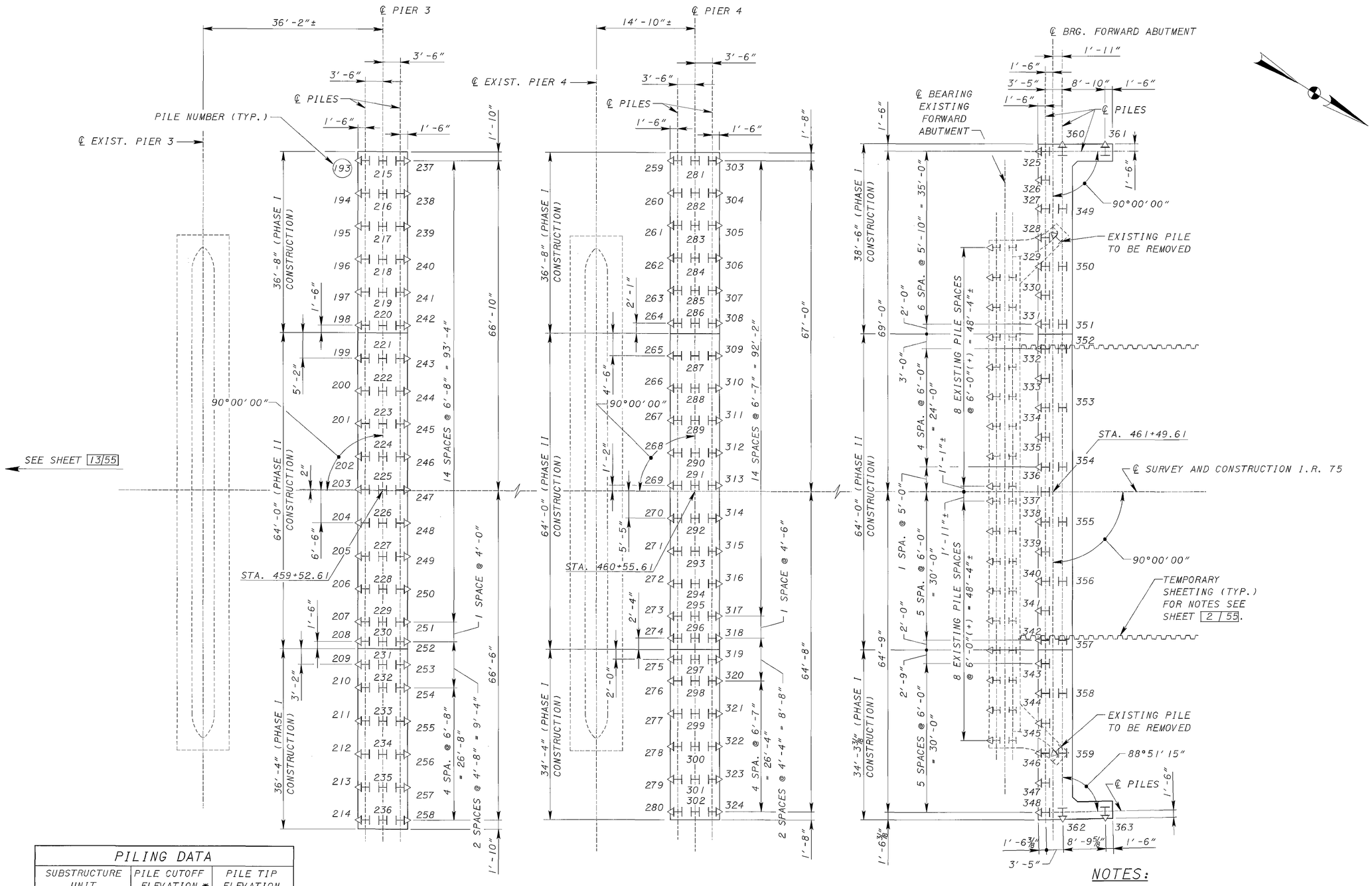


| PILING DATA | | |
|---|---|---|
| SUBSTRUCTURE UNIT | PILE CUTOFF ELEVATION * | PILE TIP ELEVATION |
| REAR ABUT. | 751.75 | - |
| PIER 1 | 730.50 | 708.00 ** |
| PIER 2 | 725.50 | 704.00 ** |
| PIER 3 | 725.50 | 708.00 ** |
| PIER 4 | 730.50 | 715.00 ** |
| FORWARD ABUT. | 757.50 | - |

* - PILE CUTOFF ELEVATION EQUALS BOTTOM OF FOOTING ELEVATION + 1'-0" FOR ABUTMENTS, AND BOTTOM OF FOOTING ELEVATION + 1'-6" FOR PIERS.

** - ALL PIER PILES MUST BE DRIVEN TO THE PILE TIP ELEVATION SHOWN DUE TO SCOUR DEPTH.

## PILE LAYOUT PLAN

## NOTES:

1. FOR NOTES, SEE SHEET 13/55.
2. THE REMOVAL OF 2-EXISTING PILES AT THE FORWARD ABUTMENT SHALL BE INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURES REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

PILE LAYOUT PLAN
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

14/55

249/314

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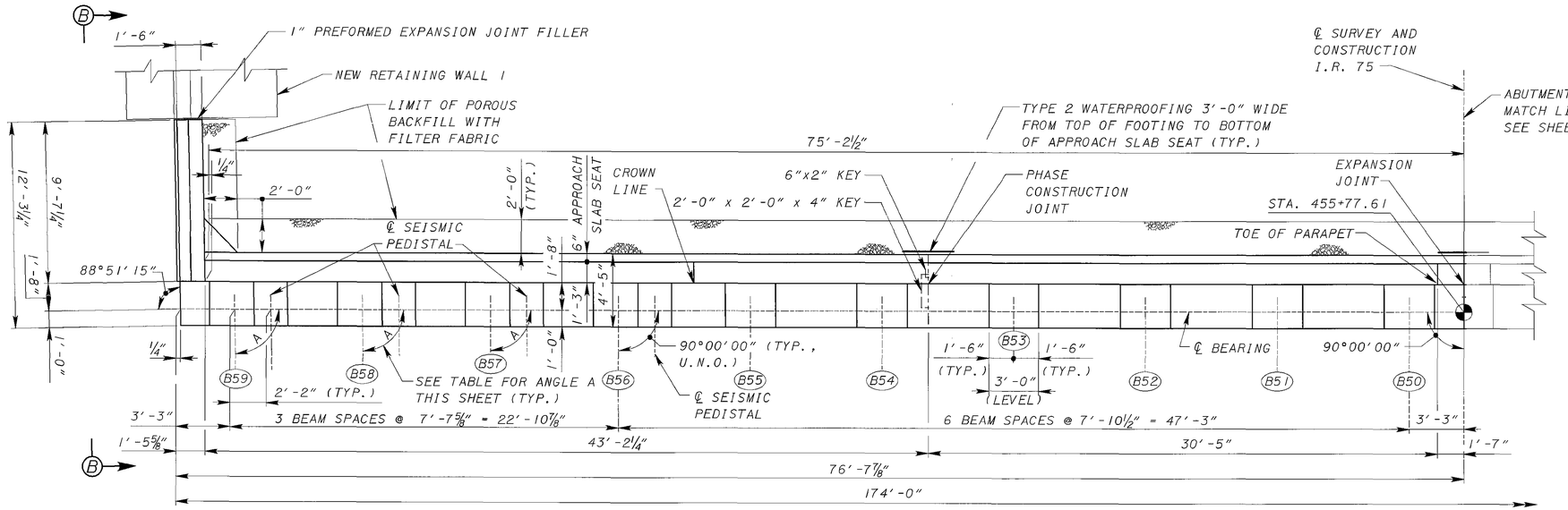


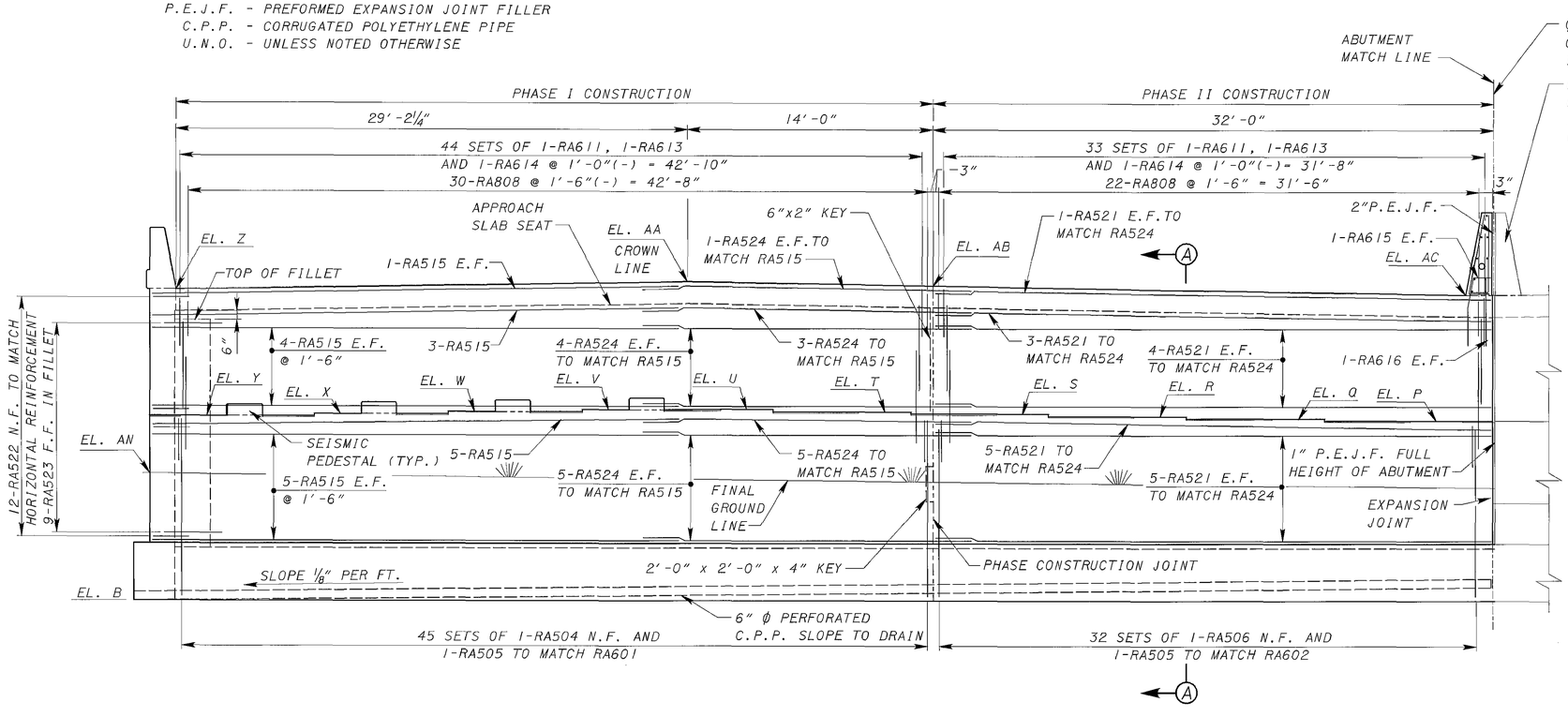

PART-PLAN

| TABLE OF BEAM ANGLES | |
|---|---|
| BEAM | ANGLE A |
| B57 | 89°37'07" |
| B58 | 89°14'15" |
| B59 | 88°51'15" |

| TABLE OF ELEVATIONS | |
|---|---|
| LOCATION | ELEVATION |
| B | 750.75 |
| P | 761.00 |
| Q | 761.13 |
| R | 761.25 |
| S | 761.38 |
| T | 761.51 |
| U | 761.64 |
| V | 761.62 |
| W | 761.50 |
| X | 761.37 |
| Y | 761.25 |
| Z | 768.53 |
| AA | 769.00 |
| AB | 768.77 |
| AC | 768.27 |
| AN | 758.25 |

LEGEND:

(BXX) = BEAM NUMBER
E.F. - EACH FACE
F.F. - FAR FACE
N.F. - NEAR FACE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
C.P.P. - CORRUGATED POLYETHYLENE PIPE
U.N.O. - UNLESS NOTED OTHERWISE




PART-ELEVATION
(PILES NOT SHOWN)

FOR MEDIAN BARRIER DETAIL SEE APPROACH SLAB PLAN. PAYMENT FOR MEDIAN BARRIER SHALL BE INCLUDED WITH ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN.

NOTES:

1. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
2. BACKWALL CONCRETE: IN ADDITION TO 511.10, DO NOT PLACE BACKWALL CONCRETE ABOVE THE OPTIONAL CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE ABUTMENT HAS BEEN PLACED.
3. SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.
4. FOR FOOTING PLAN AND SECTION A-A, SEE SHEET 17/55.
5. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 17/55.
6. FOR ELEVATION B-B, SEE SHEET 18/55.
7. FOR BEARING DEVICES, SEE SHEET 49/55.
8. FOR APPROACH SLAB DETAILS, SEE SHEET 51/55.
9. FOR REINFORCING STEEL LIST, SEE SHEET 52/55.
10. FOR LAP LENGTH TABLE, SEE SHEET 17/55.
11. FOR EXPANSION JOINT DETAILS, SEE SHEET 50/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

REAR ABUMENT PLAN AND ELEVATION
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

15/55

250/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:33 PM
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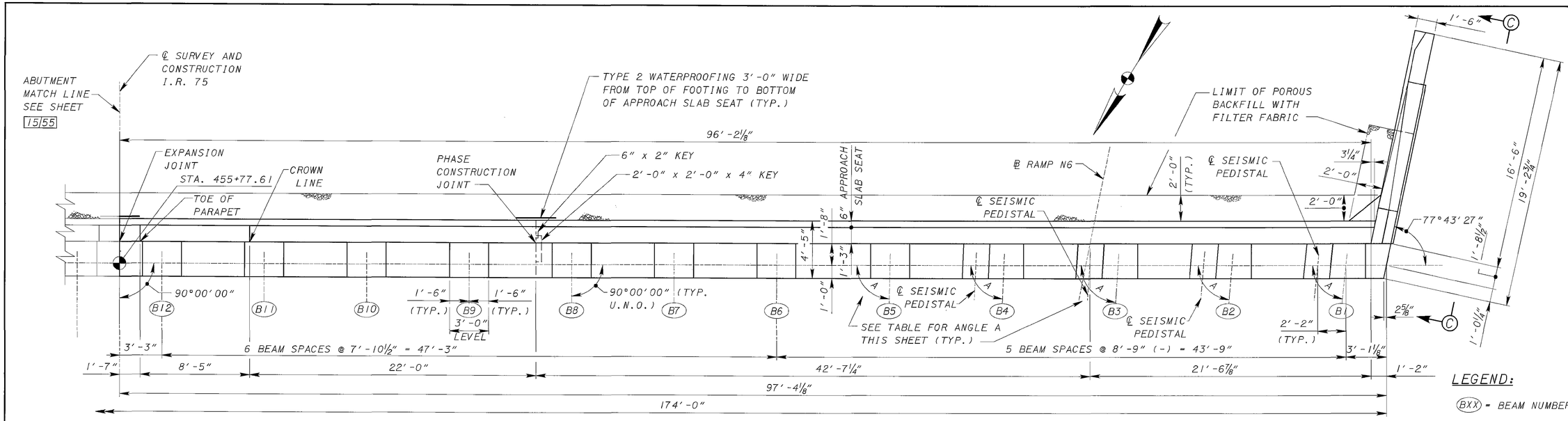
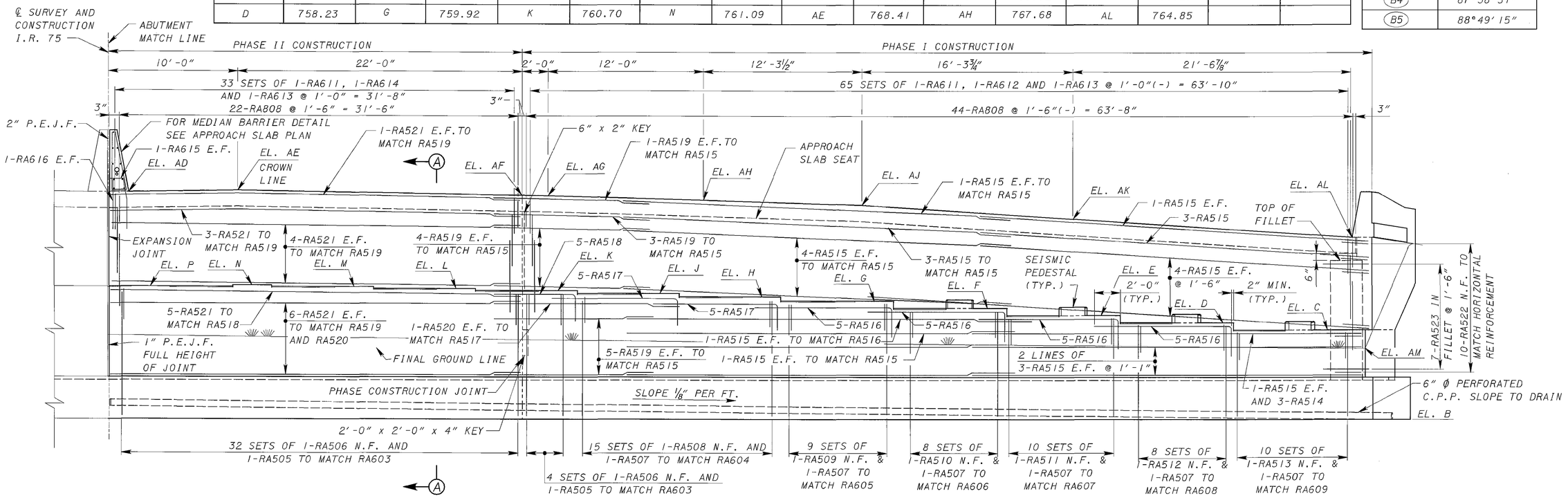



## PART-PLAN

| TABLE OF ELEVATIONS | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION | LOCATION | ELEVATION |
| B | 750.75 | E | 758.79 | H | 760.24 | L | 760.84 | P | 761.00 | AF | 768.05 | AJ | 767.31 | AM | 756.25 |
| C | 757.66 | F | 759.36 | J | 760.48 | M | 760.97 | AD | 768.28 | AG | 768.02 | AK | 766.25 | | |
| D | 758.23 | G | 759.92 | K | 760.70 | N | 761.09 | AE | 768.41 | AH | 767.68 | AL | 764.85 | | |

| BEAM | ANGLE A |
|---|---|
| B1 | 84°07'17" |
| B2 | 85°17'28" |
| B3 | 86°27'54" |
| B4 | 87°38'31" |
| B5 | 88°49'15" |




## PART-ELEVATION

(PILES NOT SHOWN)

### NOTES:

1. FOR ADDITIONAL NOTES SEE SHEET 15/55.
2. FOR ELEVATION C-C SEE SHEET 18/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708110 | |

# REAR ABUMENT PLAN AND ELEVATION

(PRESTRESSED CONCRETE OPTION)

BRIDGE NO. MOT-75-1523

I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

16/55

251/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:34 PM
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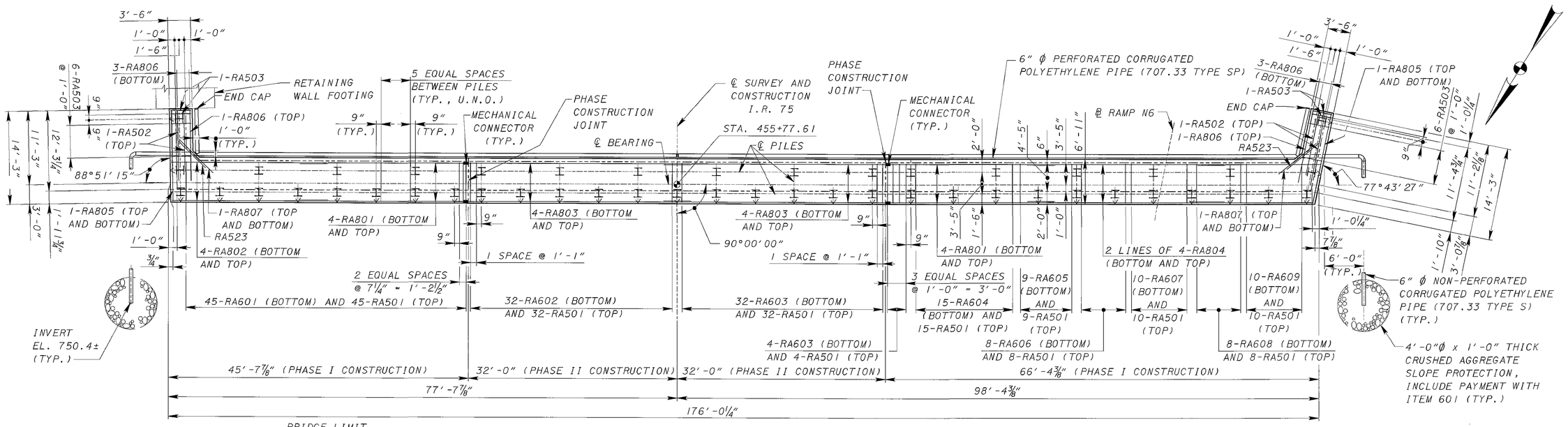
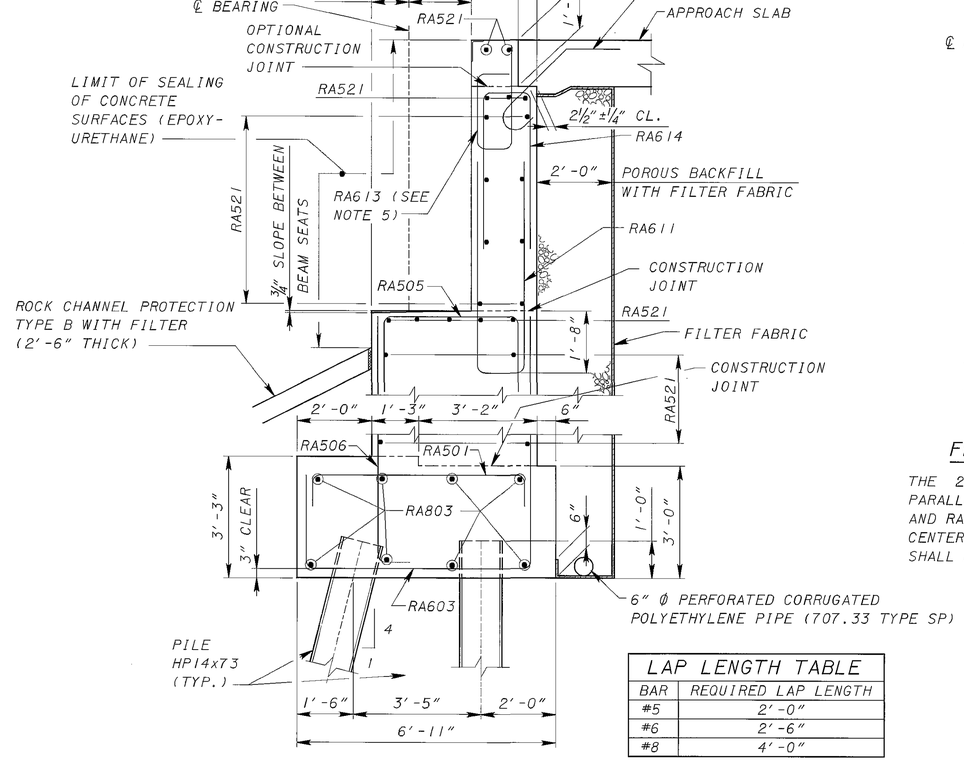


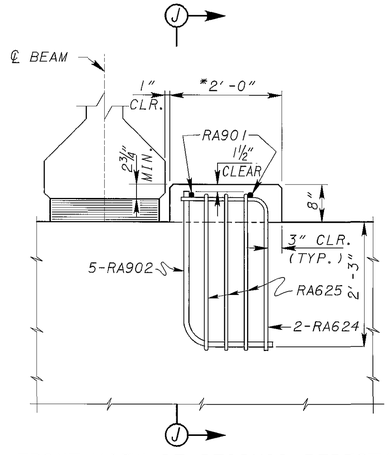

## FOOTING PLAN




## SECTION A-A

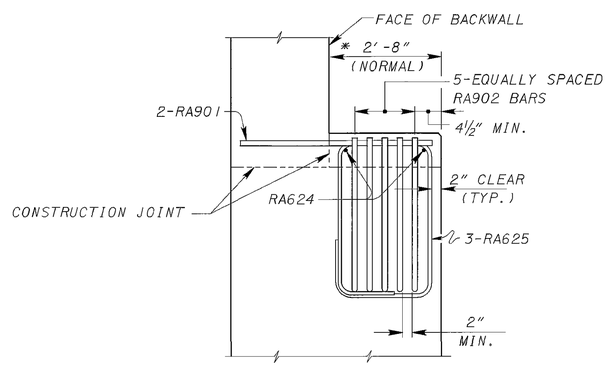
(EXPANSION JOINT ANCHOR NOT SHOWN)

| LAP LENGTH TABLE | |
|---|---|
| BAR | REQUIRED LAP LENGTH |
| #5 | 2'-0" |
| #6 | 2'-6" |
| #8 | 4'-0" |




## FRONT VIEW OF SEISMIC PEDESTAL

THE 2'-0" WIDTH OF THE PEDESTAL SHALL BE MEASURED PARALLEL TO THE CENTERLINE OF BEARING. THE RA902 AND RA624 BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF BEARING. THE RA901 AND RA625 BARS SHALL BE PLACED PARALLEL TO THE BEAMS OR GIRDERS.




## SECTION J-J

THE LOCATION OF THE MAIN REINFORCEMENT IN THE BEAM SEAT MAY BE ADJUSTED HORIZONTALLY ±1" TO ACCOMMODATE THE RA902 BARS.

* - THE SURFACE OF THE BEAM SEAT IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE ¼" DEEP MINIMUM.

## NOTE:

1. FOR ABUTMENT PLAN AND ELEVATION SEE SHEET 15/55.
2. FOR ADDITIONAL NOTES SEE SHEET 15/55.
3. FOR PILE LOCATIONS, SEE SHEETS 13/55 AND 14/55.
4. FOR LOCATIONS OF SEISMIC PEDESTALS, SEE SHEETS 15/55 AND 16/55.
5. FOR PLACEMENT OF RA613 BARS, SEE SHEET 50/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708110 | |

REAR ABUTMENT FOOTING PLAN AND DETAILS
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

17/55

252/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:32 PM
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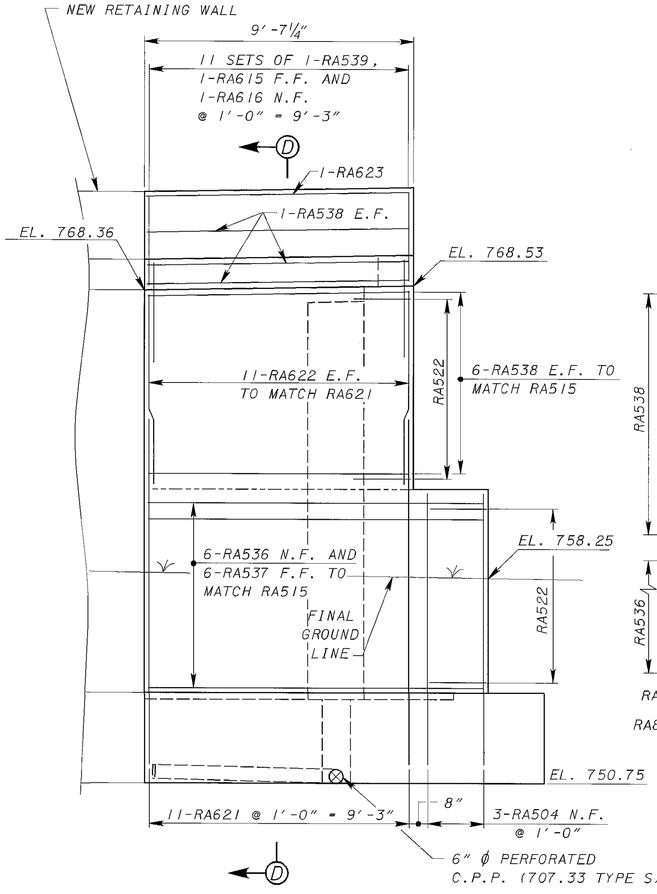
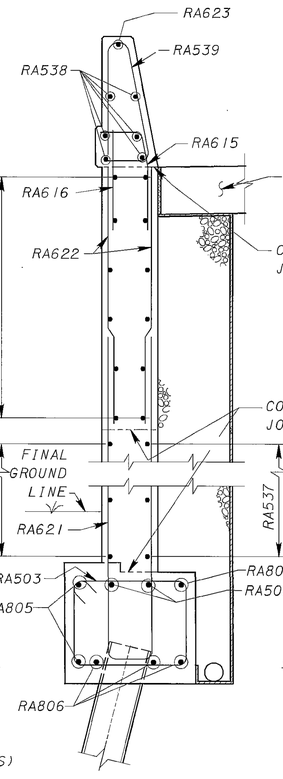
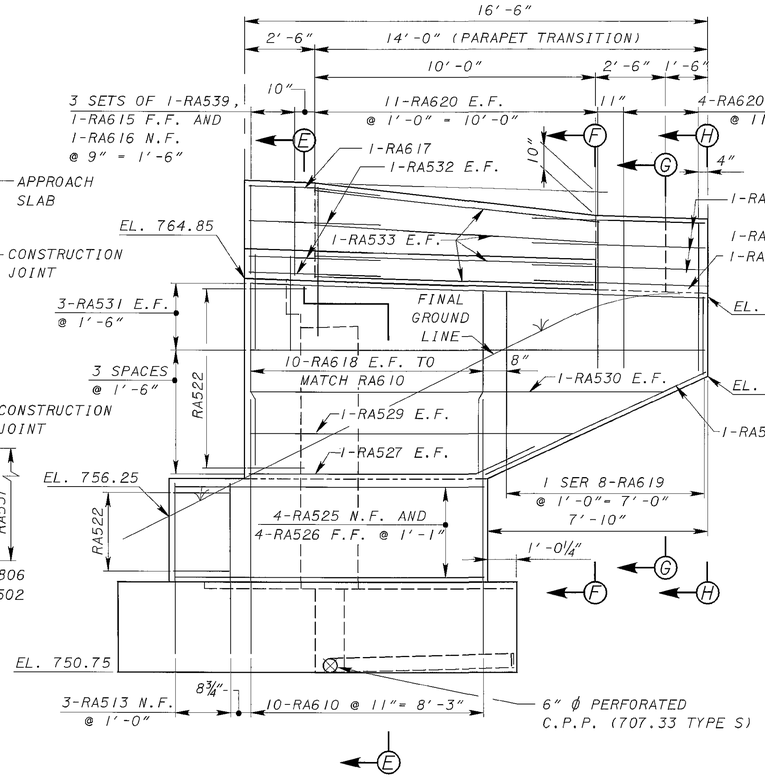


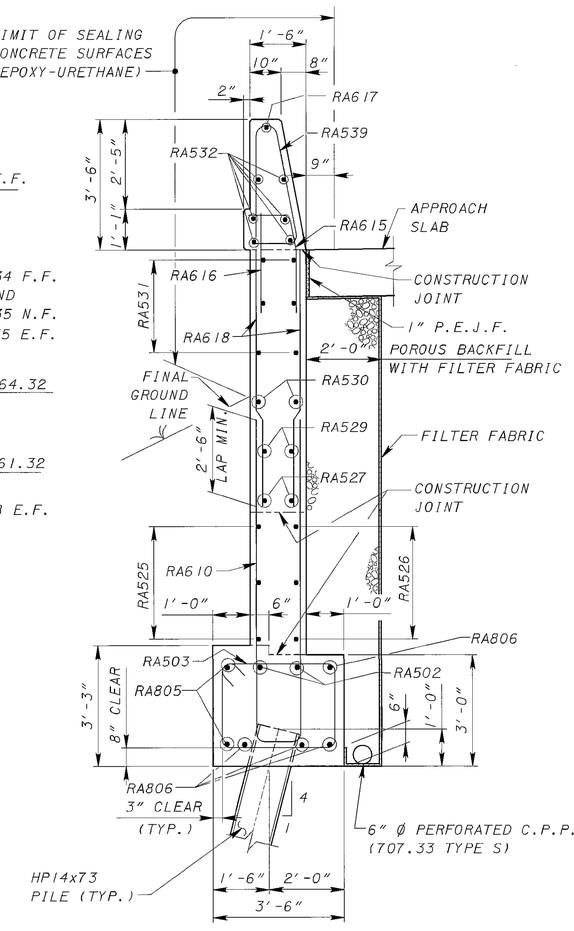

ELEVATION B-B
(PILES NOT SHOWN)



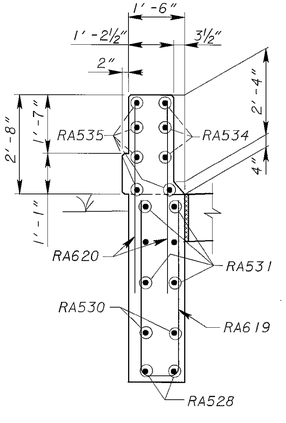

SECTION D-D
(FOR DETAILS NOT SHOWN SEE SECTION E-E)



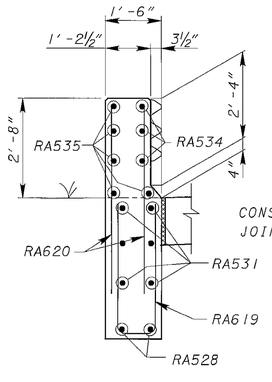

ELEVATION C-C
(PILES NOT SHOWN)



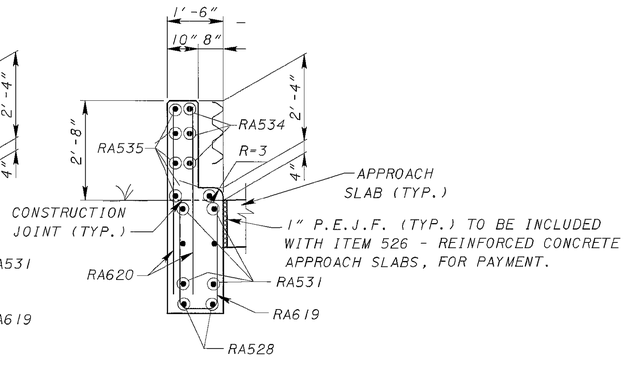

SECTION E-E




SECTION F-F




SECTION G-G




SECTION H-H

NOTES:

1. FOR ABUTMENT DETAILS, SEE SHEETS 15/55 AND 16/55.
2. FOR ADDITIONAL NOTES, SEE SHEET 15/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 2200, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

REAR ABUTMENT WINGWALL DETAILS
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

18/55

253/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:34 PM
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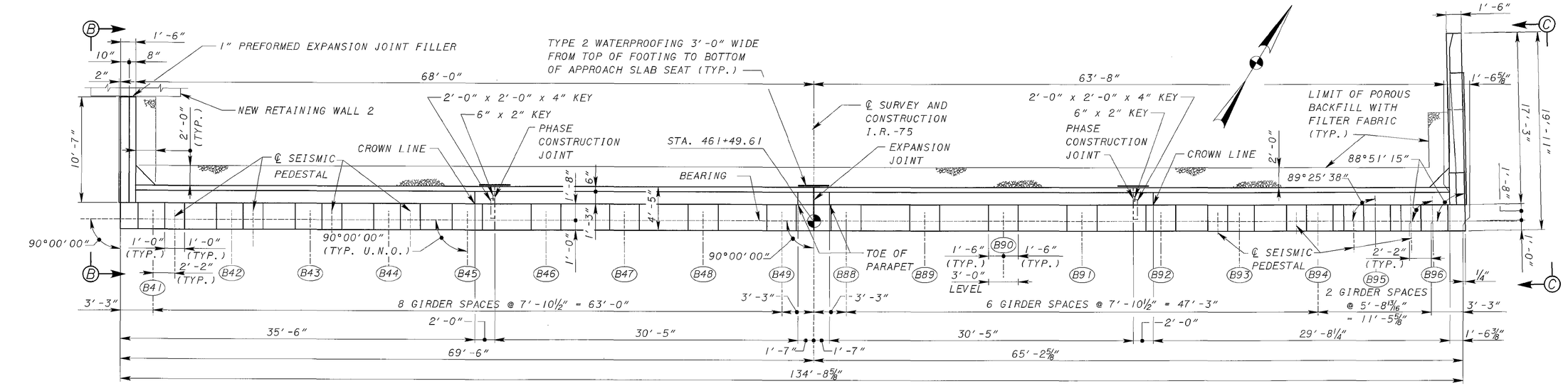


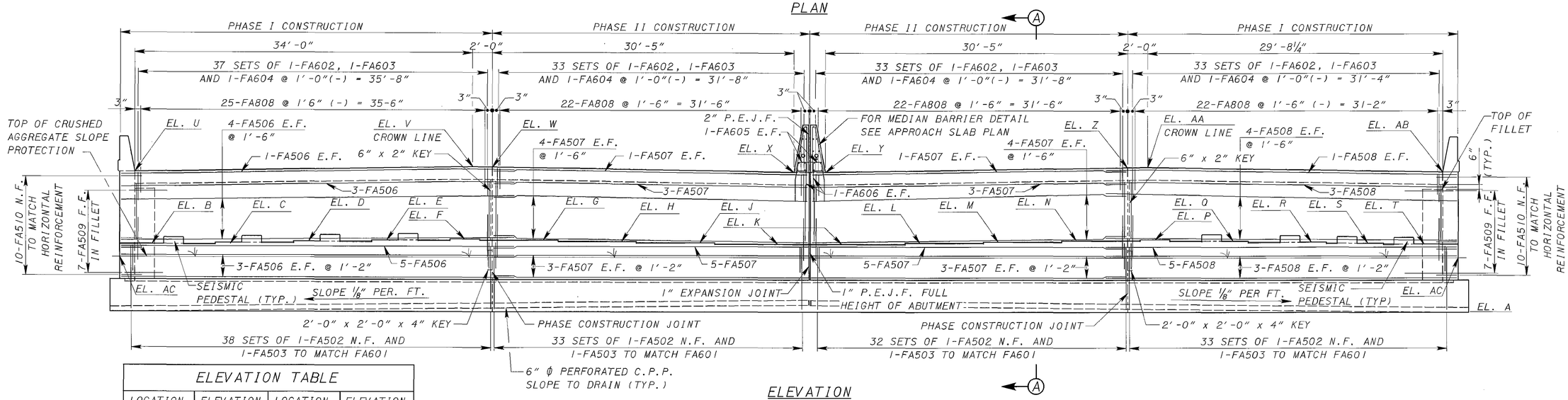


| ELEVATION TABLE | | | |
|---|---|---|---|
| LOCATION | ELEVATION | LOCATION | ELEVATION |
| A | 756.50 | P | 763.87 |
| B | 763.37 | Q | 763.75 |
| C | 763.49 | R | 763.62 |
| D | 763.62 | S | 763.53 |
| E | 763.75 | T | 763.44 |
| F | 763.87 | U | 770.62 |
| G | 763.77 | V | 771.16 |
| H | 763.64 | W | 771.13 |
| J | 763.52 | X | 770.65 |
| K | 763.39 | Y | 770.65 |
| L | 763.52 | Z | 771.13 |
| M | 763.64 | AA | 771.16 |
| N | 763.77 | AB | 770.69 |
| | | AC | 762.00 |

## LEGEND:

(BXX) = BEAM NUMBER
E.F. - EACH FACE
F.F. - FAR FACE
N.F. - NEAR FACE
P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
C.P.P - CORRUGATED POLYETHYLENE PIPE
U.N.O.- UNLESS NOTED OTHERWISE

## NOTES:

1. FOR ADDITIONAL DETAIL NOTES REFER TO SHEET 15/55.
2. FOR FOOTING PLAN AND SECTION A-A, SEE SHEET 20/55.
3. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 20/55.
4. FOR ELEVATION B-B AND C-C, SEE SHEET 21/55.
5. FOR BEARING DEVICES, SEE SHEET 49/55.
6. FOR APPROACH SLAB DETAILS, SEE SHEET 51/55.
7. FOR REINFORCING STEEL LIST, SEE SHEET 53/55.
8. FOR LAP LENGTH TABLE, SEE SHEET 17/55.
9. FOR EXPANSION JOINT DETAILS, SEE SHEET 50/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901
REVIEWED NFF DATE 05/26/05
DRAWN RCK REVISED
DESIGNED BTA CHECKED JDH
STRUCTURE FILE NUMBER 5708710

FORWARD ABUTMENT PLAN AND ELEVATION (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523 I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

19/55

254/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:43:31 PM
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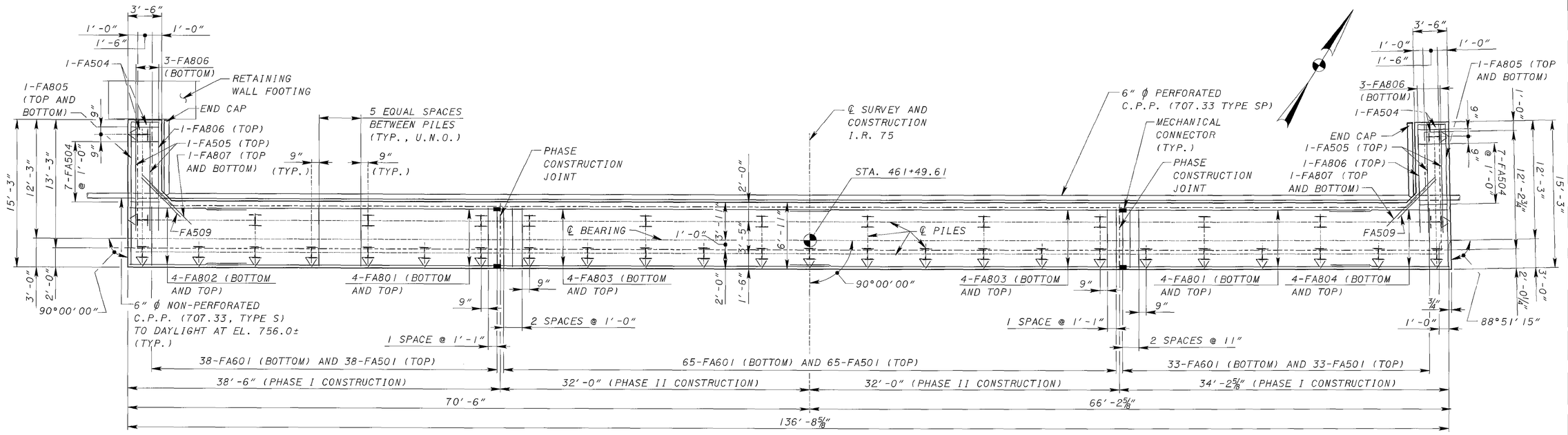
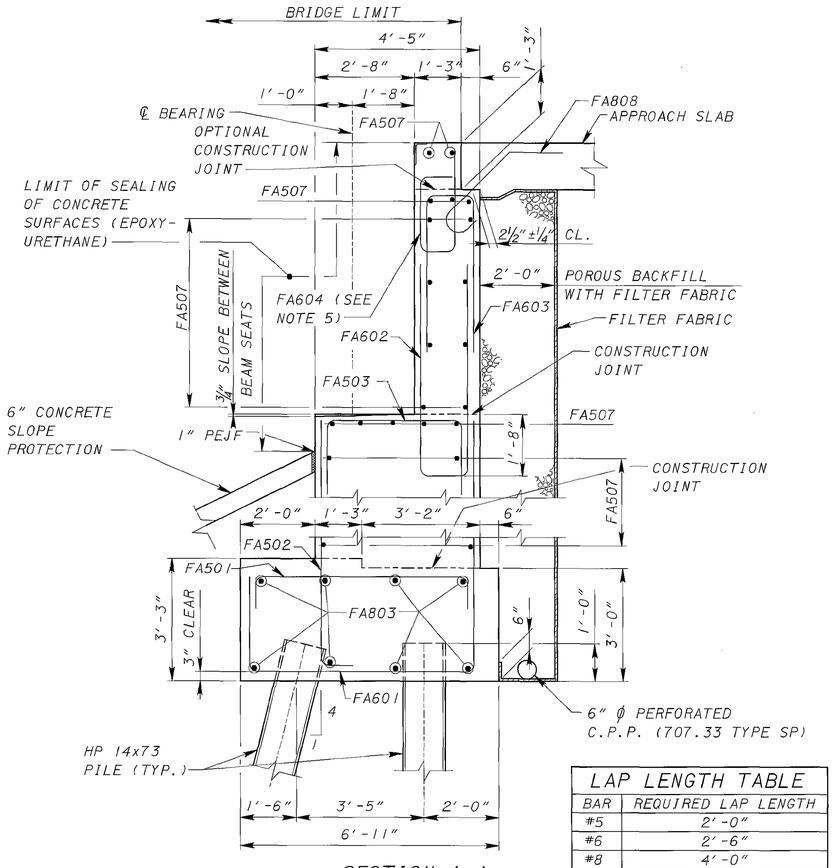


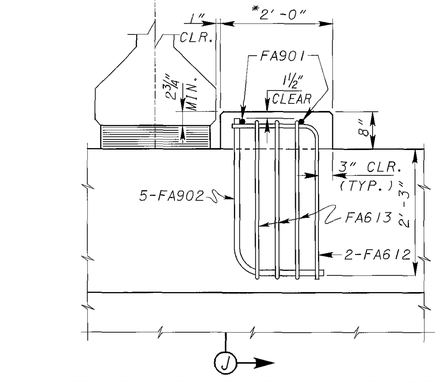

## FOOTING PLAN




## SECTION A-A

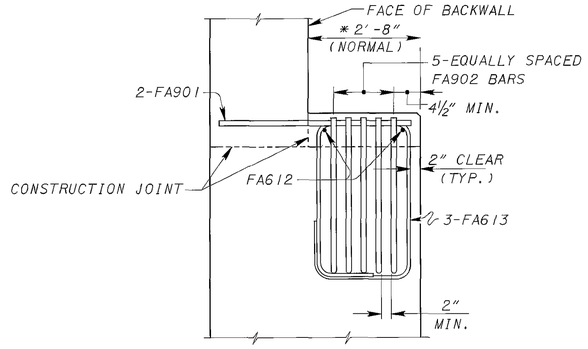
(EXPANSION JOINT ANCHOR NOT SHOWN)

| LAP LENGTH TABLE | |
|---|---|
| BAR | REQUIRED LAP LENGTH |
| #5 | 2'-0" |
| #6 | 2'-6" |
| #8 | 4'-0" |




## FRONT VIEW OF SEISMIC PEDESTAL

THE 2'-0" WIDTH OF THE PEDESTAL SHALL BE MEASURED PARALLEL TO THE CENTERLINE OF BEARING. THE FA902 AND FA612 BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF BEARING. THE FA901 AND FA613 BARS SHALL BE PLACED PARALLEL TO THE BEAMS OR GIRDERS.




## SECTION J-J

THE LOCATION OF THE MAIN REINFORCEMENT IN THE BEAM SEAT MAY BE ADJUSTED HORIZONTALLY ±1" TO ACCOMMODATE THE FA902 BARS.

* - THE SURFACE OF THE BEAM SEAT IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE ¼" DEEP MINIMUM.

## NOTES:

1. FOR ABUTMENT PLAN AND ELEVATION, SEE SHEET 19/55.
2. FOR ADDITIONAL NOTES AND LEGEND, SEE SHEET 19/55.
3. FOR PILE LOCATIONS, SEE SHEETS 13/55 AND 14/55.
4. FOR LOCATION OF SEISMIC PEDESTAL, SEE SHEET 19/55.
5. FOR PLACEMENT OF FA604 BARS, SEE SHEET 50/55.
6. FOR NON-PERFORATED PIPE TERMINATION IN SIDE SLOPE DETAIL, SEE STANDARD DRAWING A-1-69, SHEET 1/5.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

DESIGNED BTA | DRAWN RCK | REVIEWED NFF | DATE 05/26/05

CHECKED JDH | REVISED | STRUCTURE FILE NUMBER 570810

PLAN
CONCRETE OPTION)
FORWARD ABUTMENT FOOTING PLAN
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCR
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

20/55

255/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:30 PM
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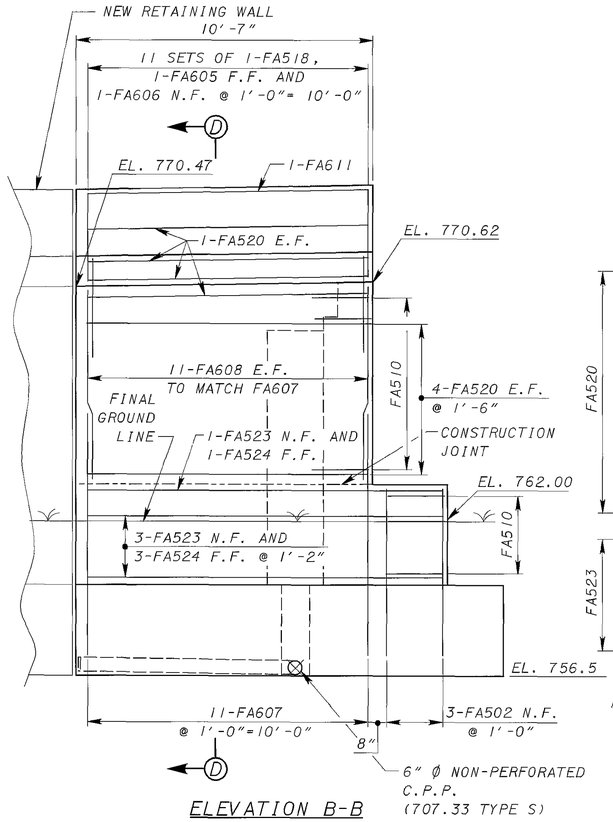
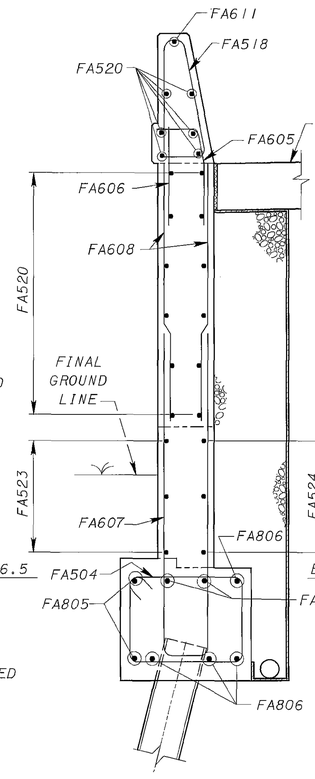
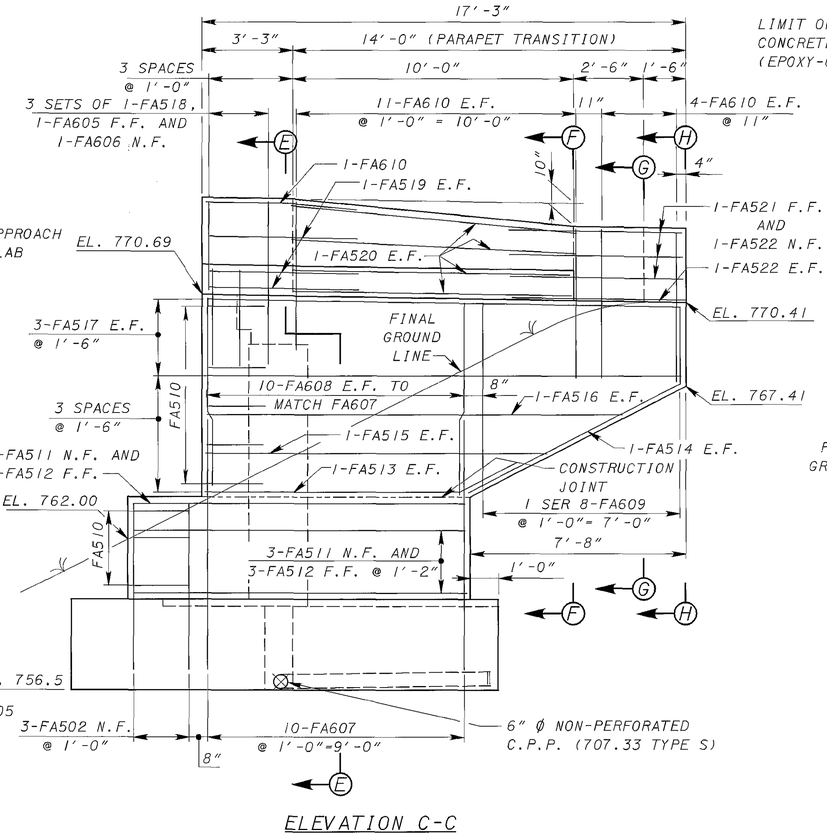


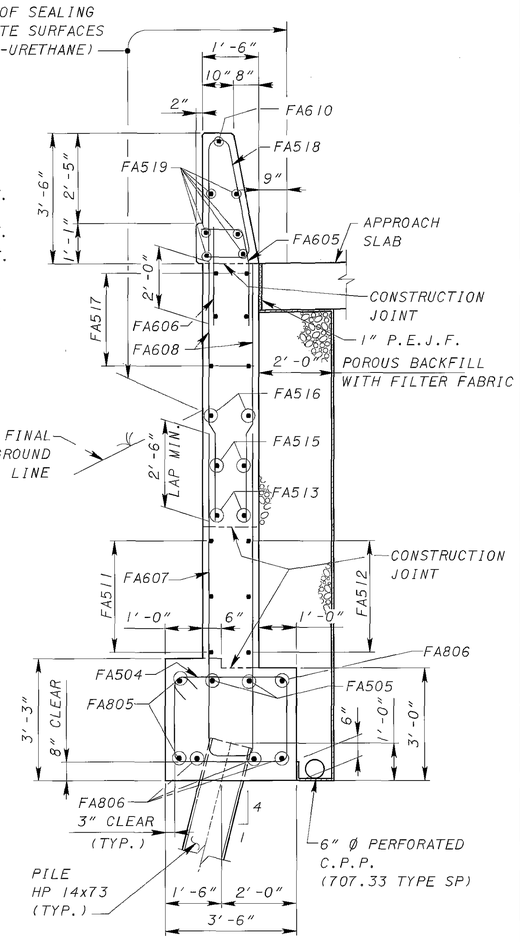

ELEVATION B-B
(PILES NOT SHOWN)



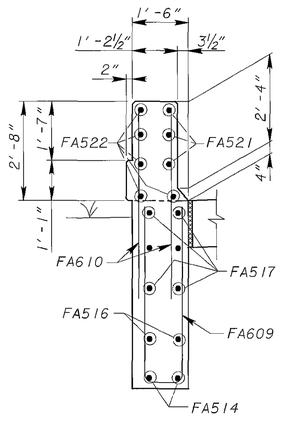

SECTION D-D
(FOR DETAILS NOT SHOWN, SEE SECTION E-E)



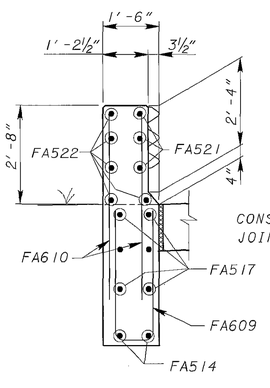

ELEVATION C-C
(PILES NOT SHOWN)



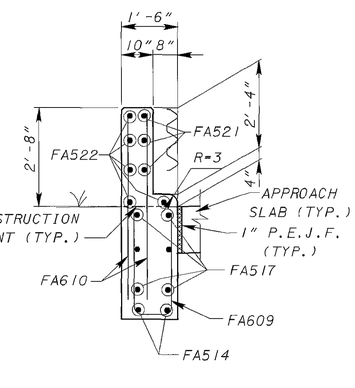

SECTION E-E




SECTION F-F




SECTION G-G




SECTION H-H

NOTES:

1. FOR ABUTMENT DETAILS, SEE SHEETS 19/55 AND 20/55.
2. FOR ADDITIONAL NOTES, SEE SHEET 15/55 AND 17/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 2000
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5709710 | |

FORWARD ABUTMENT WINGWALL DETAILS
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

21/55

256/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:41:32 PM
Filename: g:\co04\0066\bridge\concrete_alt\cadd\23828af03.dgn

℄ SURVEY AND CONSTRUCTION I.R. 75

158'-7"

54'-4" (PHASE I CONSTRUCTION) | 32'-0" (PHASE II CONSTRUCTION) | 32'-0" (PHASE II CONSTRUCTION) | 40'-3" (PHASE I CONSTRUCTION)

6'-2 7/16" | 3 SPA. @ 9'-10 1/2" = 29'-7 1/2" | 6 SPA. @ 7'-10 1/2" = 47'-3" | 3'-3" | 3'-3" | 6 SPA. @ 7'-10 1/2" = 47'-3" | 3 SPA. @ 6'-8 5/8"(+) = 20'-1 15/16" | 1'-7 1/16" BEAM SPACING

3'-2" | 10'-11" | 2 SPA. @ 9'-10 1/2" = 19'-9" | 2 SPA. @ 7'-10 1/2" = 15'-9" | 4'-9" | 22'-10 1/2" | 18'-3" | 2 SPA. @ 7'-10 1/2" = 15'-9" | 7'-1 1/2" | 12'-7 1/2" | 7'-10 1/2" | 2 SPA. @ 6'-9 1/8" = 13'-6 1/4" | 6'-2 3/4" | BEAM SEAT SPACING

B13 B14 B15 B16 B17 B18 B19 B20 B21 B22 B60 B61 B62 B63 B64 B65 B66 B67 B68 B69 — ℄ BEAM (TYP.)

84°07'17" | 86°04'21" | 88°01'59" | 2'-0" | ℄ BEARING | 2'-0" (TYP.) (U.N.O.) | 90°00'00" | 5'-1 1/2" | 89°37'07" | 89°14'15" | 88°51'15" | ℄ PIER I

2'-3" | 4'-6" | 2'-3" | 1'-2 1/2" | 1'-2 1/2" | 2'-9" | 2'-2" | 2'-2" | STA. 457+13.61 | 2'-2" | 2'-2" | 2'-9" | 90°00'00" (TYP.) (U.N.O.) | 89°37'07" | 89°14'15" | 88°51'15"

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B50 B51 B52 B53 B54 B55 B56 B57 B58 B59 — BEAM NUMBER (TYP.)

84°07'17" | 85°17'28" | 87°38'31" | 86°27'54" | 88°49'15" | ℄ SEISMIC PEDESTAL | ℄ SEISMIC PEDESTAL

3'-2" | 6'-9" | 4 SPA. @ 5'-11 3/4" = 23'-11" | 2 SPA. @ 7'-10 1/2" = 15'-9" | 4'-9" | 22'-10 1/2" | 18'-3" | 2 SPA. @ 7'-10 1/2" = 15'-9" | 7'-1 1/2" | 12'-7 1/2" | 7'-10 1/2" | 2 SPA. @ 6'-9 1/8" = 13'-6 1/4" | 6'-2 3/4" | BEAM SEAT SPACING

5'-11 1/2" | 5 SPA. @ 5'-11 3/4"(-) = 29'-10 1/2" | 6 SPA. @ 7'-10 1/2" = 47'-3" | 3'-3" | 3'-3" | 6 SPA. @ 7'-10 1/2" = 47'-3" | 3 SPA. @ 6'-8 7/8"(-) = 20'-2 9/16" | 1'-6 7/16" BEAM SPACING

## PLAN

| BAR | REQUIRED LAP LENGTH |
|---|---|
| #5 | 2'-0" |
| #8 | 4'-0" |
| #10 | 6'-3" |

54'-4" (PHASE I CONSTRUCTION) | 64'-0" (PHASE II CONSTRUCTION) | 40'-3" (PHASE I CONSTRUCTION)

67-P504 E.F. AND 67-P505 @ 10" TO MATCH P1003 | 77-P504 E.F. AND 77-P505 @ 10" TO MATCH P1003 | 50-P504 E.F. AND 50-P505 @ 10" TO MATCH P1003

SEE NOTE 6 | EL. 764.50 | 3'-0" x 1'-0" x 4" KEY (TYP.) | SEISMIC PEDESTAL (TYP.) | FOR BEAM SEAT ELEVATIONS, SEE TABLE OF BEAM SEAT ELEVATIONS, SHEET 26/55

6-P503 1-P503 E.F. | 6-P503 1-P503 E.F. | 6-P502 1-P502 E.F. | 6-P502 1-P502 E.F. | 6-P501 1-P501 E.F. | 6-P501 1-P501 E.F.

4-P503 @ 18" E.F. | 4-P503 @ 18" E.F. | 4-P502 @ 18" E.F. | 4-P502 @ 18" E.F. | 4-P501 @ 18" E.F. | 4-P501 @ 18" E.F.

EL. 754.61

16-P506 TO MATCH P503 BARS | 16-P503 @ 18"(-) E.F. | ** 16 SETS OF P402 @ 18"(-) | 67-P1003 @ 10" E.F. TO LAP P1002 | 16-P507 @ 18"(-) E.F. | CONSTRUCTION JOINT | 16-P502 @ 18"(-) E.F. | ** 16 SETS OF P402 @ 18"(-) | 77-P1003 @ 10" E.F. TO LAP P1002 | 16-P502 @ 18"(-) E.F. | CONSTRUCTION JOINT | 16-P501 @ 18"(-) E.F. | 50-P1003 @ 10" E.F. TO LAP P1002 | ** 16 SETS OF P402 @ 18"(-) | 16-P508 @ 18"(-) E.F. | 16-P506 TO MATCH P501 BARS | ROUNDED END (WALL ONLY, TYP. BOTH SIDES) SEE DETAIL D, SHEET 26/55 | APPROX. GROUND LINE EL. 735.6

** 34-P402 @ 20"(-) | NORMAL POOL EL. 736.18± | ** 39-P402 @ 20"(-) | ** 25-P402 @ 20"

67-P1002 @ 10" E.F. | 77-P1002 @ 10" E.F. | 50-P1002 @ 10" E.F.

EL. 729.00

10'-0" x 6" x 4" KEY (TYP.)

## ELEVATION

(PILES AND FOOTING REINFORCING NOT SHOWN)

** SEE DETAIL D, SHEET 26/55.

## LEGEND:

E.F. - EACH FACE
U.N.O. - UNLESS NOTED OTHERWISE

158'-7"

54'-4" (PHASE I CONSTRUCTION) | 64'-0" (PHASE II CONSTRUCTION) | 40'-3" (PHASE I CONSTRUCTION)

119-P1001 SPACED AS SHOWN BETWEEN PILES | 42-P1001 SPACED AS SHOWN BETWEEN PILES

4-P1001 @ 3 EQ. SPA. | 6 EQ. SPA. (TYP. U.N.O.) | ℄ SURVEY AND CONSTRUCTION I.R. 75 | 3-P1001 @ 2 EQ. SPA. | BATTER PILE (TYP.) | 9" (TYP.)

32'-0" | 32'-0"

P1001 | 8-P803* | 8-P804* | 8-P802* | 8-P802* | 8-P804* | 8-P801* | ℄ PIER 1, FOOTING AND PILE | P1001

3'-6" | 10'-0" | 3'-6" | 1'-6" | 1'-6" | 90°00'00"

℄ PILES | HP14x73 (TYP.) | MECHANICAL CONNECTOR (TYP.)

## FOOTING PLAN

* - SPACED AS SHOWN IN SECTION A-A

## NOTES:

1. FOR SECTION A-A, SEE SHEET 26/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 54/55.
3. FOR PILE SPACING, SEE SHEET 13/55.
4. FOR BEAM SEAT ELEVATIONS, SEE SHEET 26/55.
5. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 37/55.
6. LIMITS OF SEALING CONCRETE SURFACES, (EPOXY-URETHANE) AROUND SIGN POST FOUNDATION, SEE GENERAL NOTES 3/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/26/05 |
| CHECKED | REV'SED | STRUCTURE FILE NUMBER | |
| NFF | | 5708110 | |

PIER 1 DETAILS (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523 IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

22/55

257/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:06 PM
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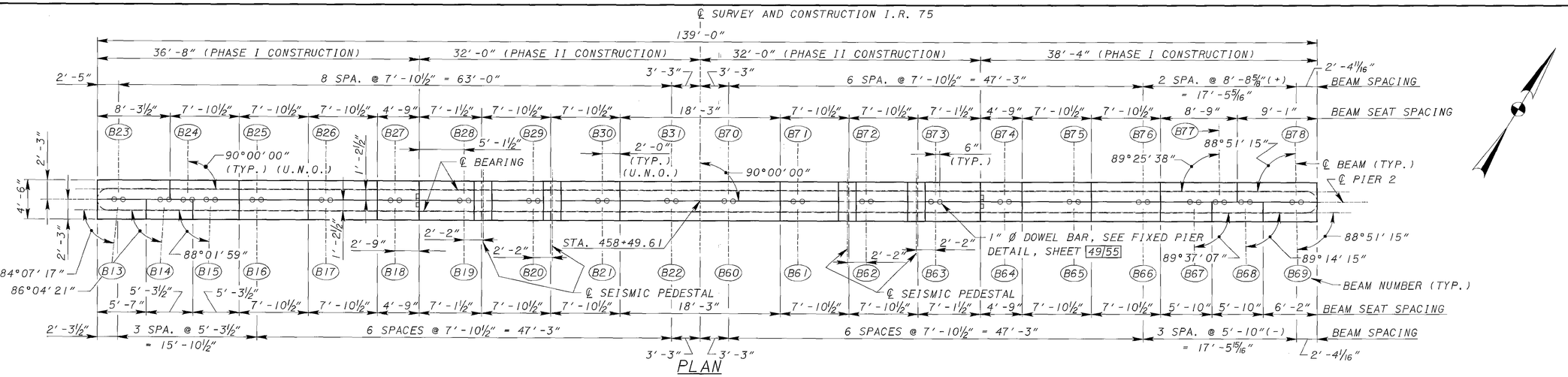


| BAR | REQUIRED LAP LENGTH |
|---|---|
| #5 | 2'-0" |
| #8 | 4'-0" |
| #10 | 6'-3" |

## LEGEND:

* - SPACED AS SHOWN IN SECTION A-A
E.F. - EACH FACE
U.N.O. - UNLESS NOTED OTHERWISE

## NOTES:

1. FOR SECTION A-A, SEE SHEET 26/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 54/55.
3. FOR PILE SPACING, SEE SHEET 13/55.
4. FOR BEAM SEAT ELEVATIONS, SEE SHEET 26/55.
5. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 37/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 2000, CLEVELAND, OHIO 44113-1901

DESIGNED JDH | DRAWN CAG | CHECKED NFF | REVIEWED RER | REV'SED | DATE 5/26/05

STRUCTURE FILE NUMBER 570810

PIER 2 DETAILS (PRESTRESSED CONCRETE OPTION)

BRIDGE NO. MOT-75-1523 IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

23/55

258/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:06 PM
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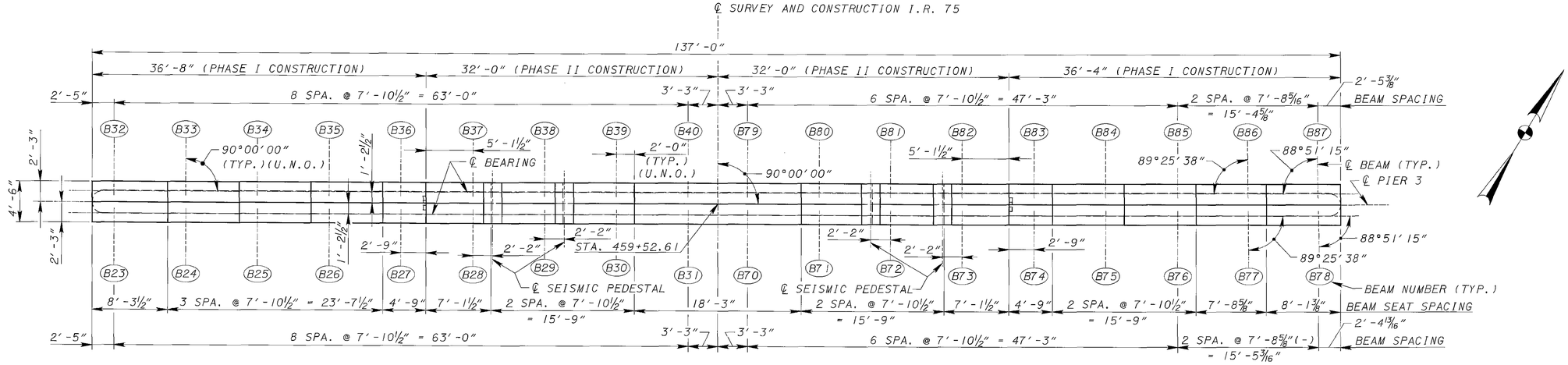
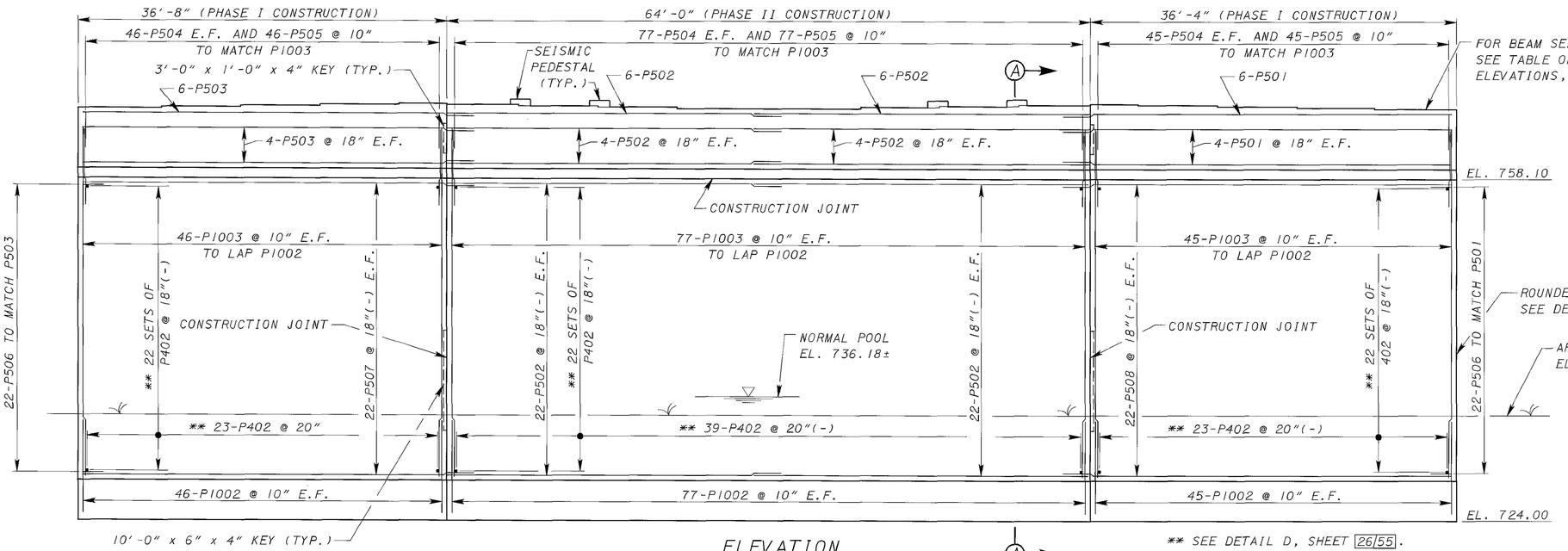


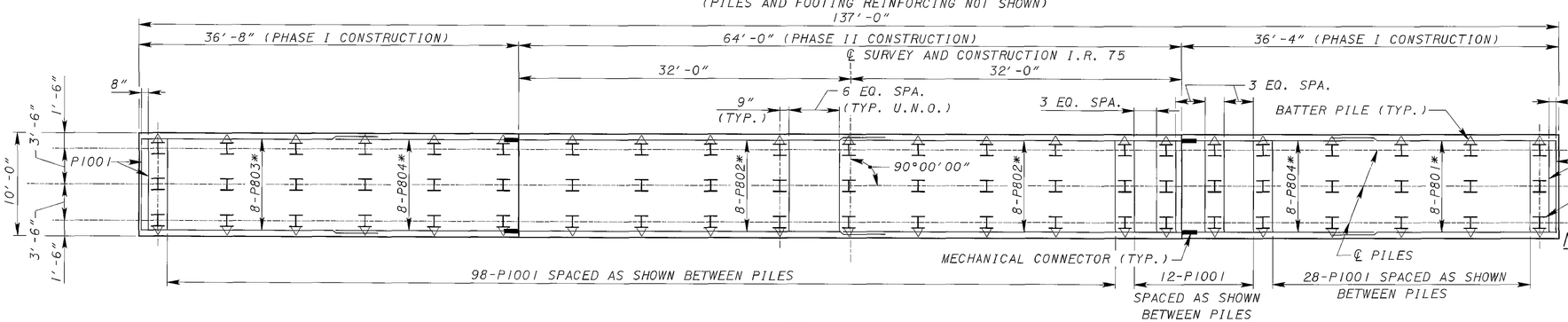

## PLAN




| BAR | REQUIRED LAP LENGTH |
|---|---|
| #5 | 2'-0" |
| #8 | 4'-0" |
| #10 | 6'-3" |

## ELEVATION

(PILES AND FOOTING REINFORCING NOT SHOWN)




## FOOTING PLAN

### LEGEND:

* - SPACED AS SHOWN IN SECTION A-A
E.F. - EACH FACE
U.N.O. - UNLESS NOTED OTHERWISE

### NOTES:

1. FOR SECTION A-A, SEE SHEET 26/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 54/55.
3. FOR PILE SPACING, SEE SHEET 14/55.
4. FOR BEAM SEAT ELEVATIONS, SEE SHEET 26/55.
5. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 37/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE SUITE 800 CLEVELAND, OHIO 44113-1901

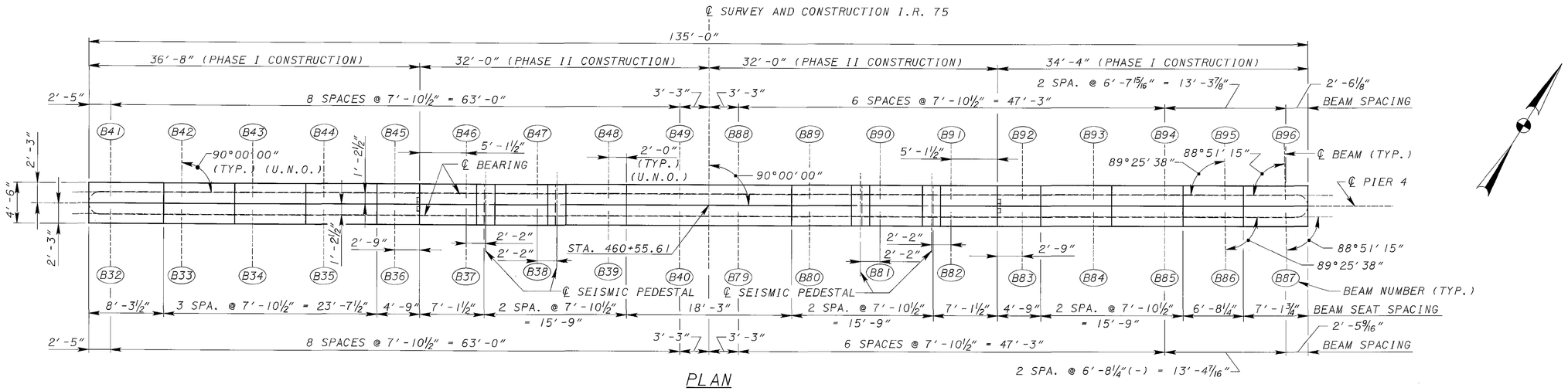
| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 570871 0 | |

# PIER 3 DETAILS

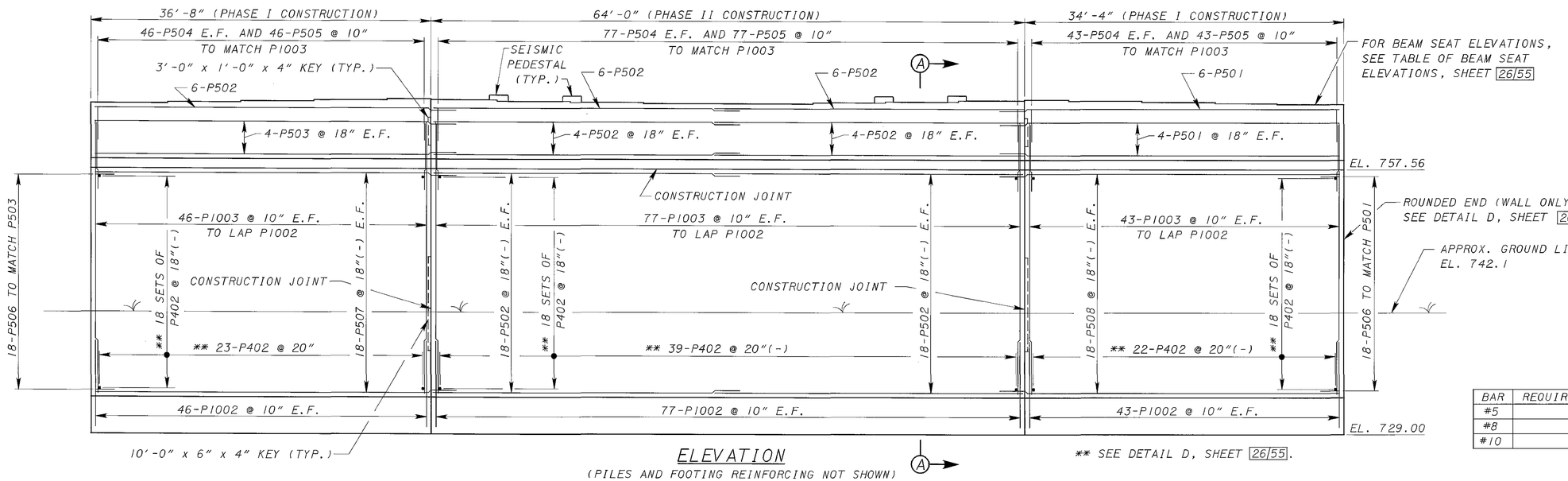
(PRESTRESSED CONCRETE OPTION)

BRIDGE NO. MOT-75-1523
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828



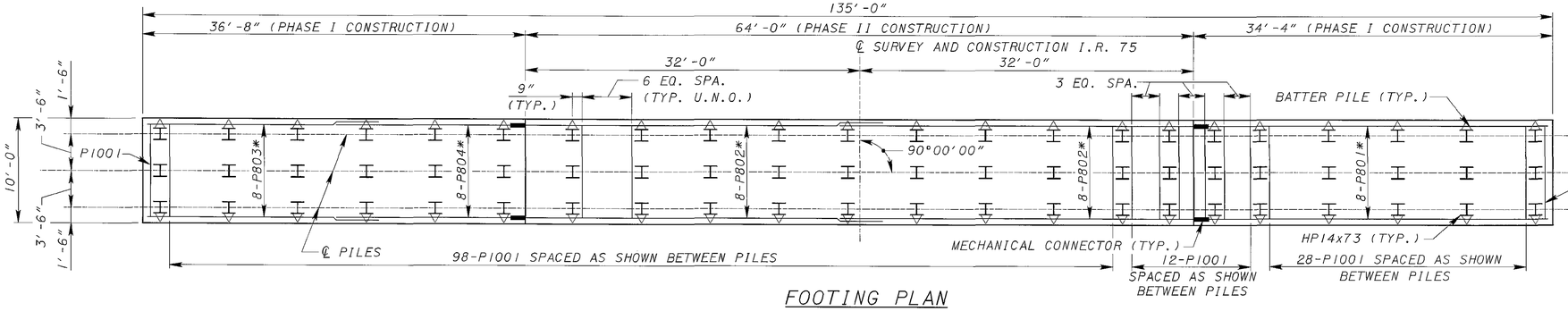

PLAN




ELEVATION

(PILES AND FOOTING REINFORCING NOT SHOWN)

| BAR | REQUIRED LAP LENGTH |
|---|---|
| #5 | 2′-0″ |
| #8 | 4′-0″ |
| #10 | 6′-3″ |




FOOTING PLAN

* - SPACED AS SHOWN IN SECTION A-A

## LEGEND:

E.F. - EACH FACE
U.N.O. - UNLESS NOTED OTHERWISE

## NOTES:

1. FOR SECTION A-A, SEE SHEET 26/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 54/55.
3. FOR PILE SPACING, SEE SHEET 14/55.
4. FOR BEAM SEAT ELEVATIONS, SEE SHEET 26/55.
5. FOR SEISMIC PEDESTAL DETAILS, SEE SHEET 37/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

PIER 4 DETAILS (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523 I-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

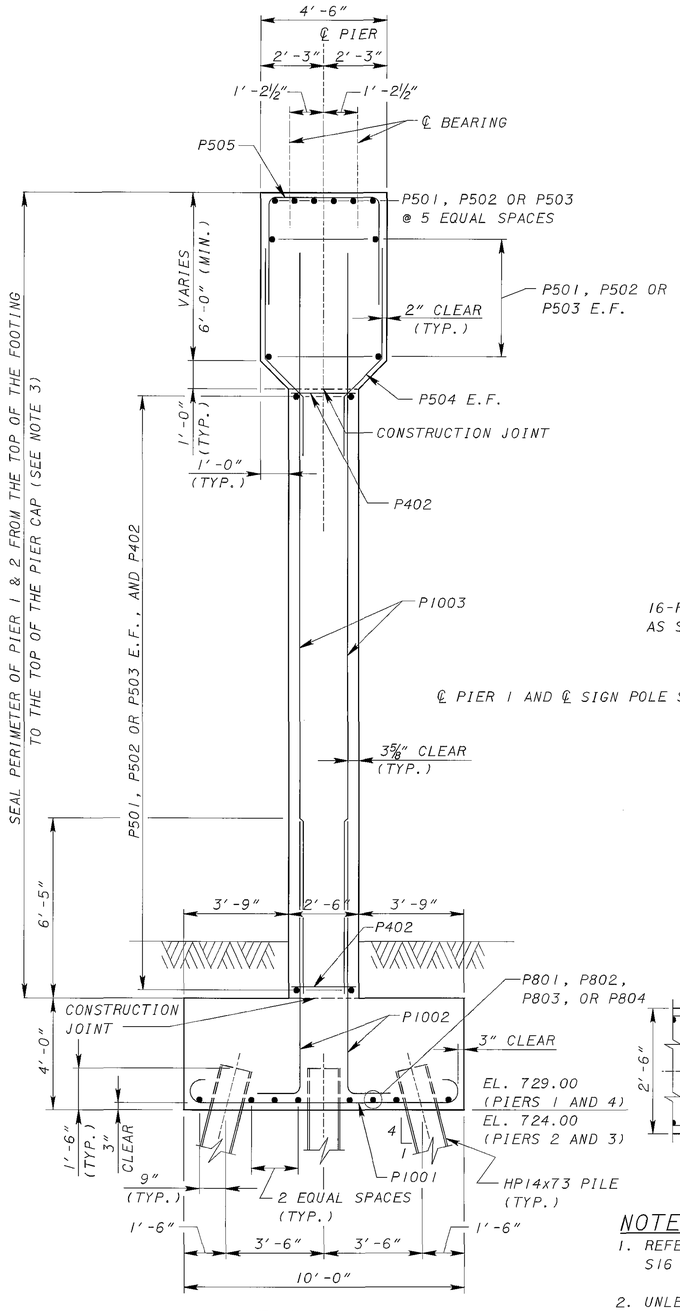
25/55

260/314

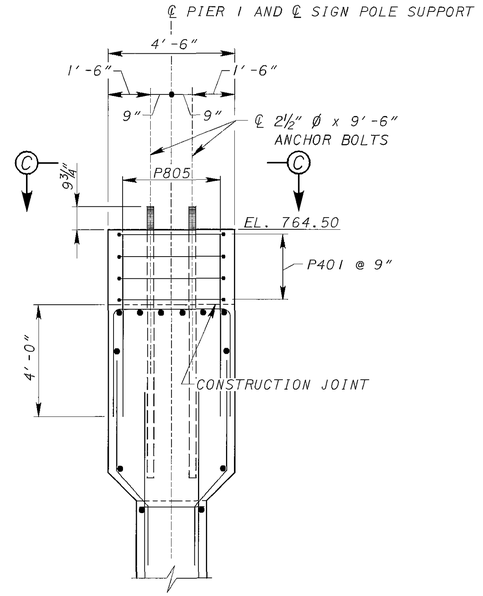
Plotted By: eamack Date: 7/27/2007 Time: 3:42:08 PM
Filename: g:\co04\0066\bridge\concrete_alt\cadd\23828p104.dgn

## TABLE OF BEAM SEAT ELEVATIONS

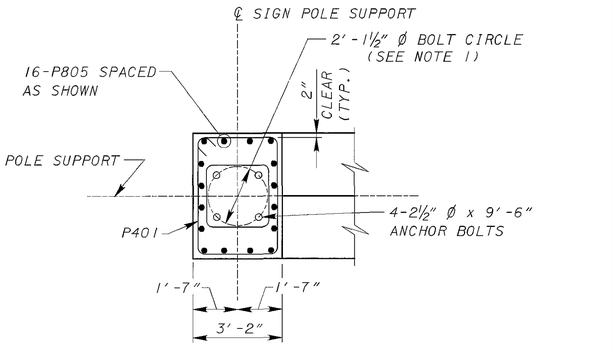
| LEFT BRIDGE | | | | | RIGHT BRIDGE | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SPAN 1 | | | | | SPAN 1 | | | | |
| BEAM NUMBER | ℄ BEARING LOCATION | BEAM SEAT ELEVATION | ℄ BEARING LOCATION | BEAM SEAT ELEVATION | BEAM NUMBER | ℄ BEARING LOCATION | BEAM SEAT ELEVATION | ℄ BEARING LOCATION | BEAM SEAT ELEVATION |
| B1 | REAR ABUTMENT | 757.66 | PIER 1 | 761.61 | B50 | REAR ABUTMENT | 761.00 | PIER 1 | 763.50 |
| B2 | | 758.23 | | 761.91 | B51 | | 761.13 | | 763.63 |
| B3 | | 758.79 | | 762.21 | B52 | | 761.25 | | 763.75 |
| B4 | | 759.36 | | 762.51 | B53 | | 761.38 | | 763.88 |
| B5 | | 759.92 | | 762.81 | B54 | | 761.51 | | 763.99 |
| B6 | | 760.24 | | 763.11 | B55 | | 761.64 | | 763.99 |
| B7 | | 760.48 | | 763.42 | B56 | | 761.62 | | 763.91 |
| B8 | | 760.70 | | 763.61 | B57 | | 761.50 | | 763.80 |
| B9 | | 760.84 | | 763.62 | B58 | | 761.37 | | 763.70 |
| B10 | | 760.97 | | 763.62 | B59 | | 761.25 | | 763.59 |
| B11 | | 761.09 | | 763.61 | | | | | |
| B12 | | 761.00 | | 763.50 | | | | | |
| SPAN 2 | | | | | SPAN 2 | | | | |
| B13 | PIER 1 | 761.68 | PIER 2 | 764.98 | B60 | PIER 1 | 763.53 | PIER 2 | 765.00 |
| B14 | | 762.18 | | 765.06 | B61 | | 763.66 | | 765.13 |
| B15 | | 762.67 | | 765.15 | B62 | | 763.78 | | 765.25 |
| B16 | | 763.16 | | 765.23 | B63 | | 763.91 | | 765.38 |
| B17 | | 763.46 | | 765.36 | B64 | | 764.02 | | 765.48 |
| B18 | | 763.65 | | 765.48 | B65 | | 764.01 | | 765.36 |
| B19 | | 763.66 | | 765.38 | B66 | | 763.94 | | 765.23 |
| B20 | | 763.65 | | 765.25 | B67 | | 763.83 | | 765.14 |
| B21 | | 763.64 | | 765.13 | B68 | | 763.72 | | 765.04 |
| B22 | | 763.53 | | 765.00 | B69 | | 763.61 | | 764.95 |
| SPAN 3 | | | | | SPAN 3 | | | | |
| B23 | PIER 2 | 765.08 | PIER 3 | 765.11 | B70 | PIER 2 | 765.10 | PIER 3 | 765.13 |
| B24 | | 765.20 | | 765.23 | B71 | | 765.23 | | 765.26 |
| B25 | | 765.33 | | 765.36 | B72 | | 765.35 | | 765.38 |
| B26 | | 765.46 | | 765.49 | B73 | | 765.48 | | 765.51 |
| B27 | | 765.58 | | 765.61 | B74 | | 765.58 | | 765.61 |
| B28 | | 765.48 | | 765.51 | B75 | | 765.46 | | 765.49 |
| B29 | | 765.35 | | 765.38 | B76 | | 765.33 | | 765.36 |
| B30 | | 765.23 | | 765.26 | B77 | | 765.19 | | 765.24 |
| B31 | | 765.10 | | 765.13 | B78 | | 765.05 | | 765.11 |
| SPAN 4 | | | | | SPAN 4 | | | | |
| B32 | PIER 3 | 765.10 | PIER 4 | 764.58 | B79 | PIER 3 | 765.12 | PIER 4 | 764.60 |
| B33 | | 765.22 | | 764.70 | B80 | | 765.25 | | 764.73 |
| B34 | | 765.35 | | 764.83 | B81 | | 765.37 | | 764.85 |
| B35 | | 765.48 | | 764.96 | B82 | | 765.50 | | 764.98 |
| B36 | | 765.60 | | 765.08 | B83 | | 765.60 | | 765.08 |
| B37 | | 765.50 | | 764.98 | B84 | | 765.48 | | 764.96 |
| B38 | | 765.37 | | 764.85 | B85 | | 765.35 | | 764.83 |
| B39 | | 765.25 | | 764.73 | B86 | | 765.23 | | 764.72 |
| B40 | | 765.12 | | 764.60 | B87 | | 765.10 | | 764.62 |
| SPAN 5 | | | | | SPAN 5 | | | | |
| B41 | PIER 4 | 764.56 | FORWARD ABUTMENT | 763.37 | B88 | PIER 4 | 764.58 | FORWARD ABUTMENT | 763.39 |
| B42 | | 764.68 | | 763.49 | B89 | | 764.71 | | 763.52 |
| B43 | | 764.81 | | 763.62 | B90 | | 764.83 | | 763.64 |
| B44 | | 764.94 | | 763.75 | B91 | | 764.96 | | 763.77 |
| B45 | | 765.06 | | 763.87 | B92 | | 765.06 | | 763.87 |
| B46 | | 764.96 | | 763.77 | B93 | | 764.94 | | 763.75 |
| B47 | | 764.83 | | 763.64 | B94 | | 764.81 | | 763.62 |
| B48 | | 764.71 | | 763.52 | B95 | | 764.70 | | 763.53 |
| B49 | | 764.58 | | 763.39 | B96 | | 764.60 | | 763.44 |



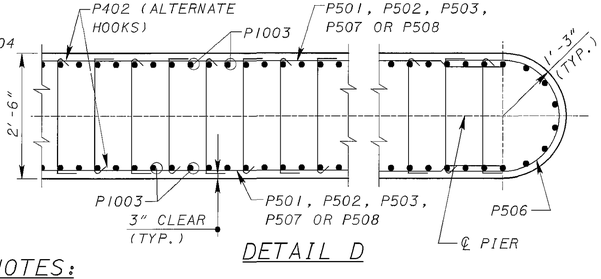

SECTION A-A




SECTION B-B




VIEW C-C




DETAIL D

### NOTES:

1. REFER TO TRAFFIC DRAWING SIGN ELEVATIONS S16 AND S18 FOR MORE INFORMATION.
2. UNLESS OTHERWISE NOTED, BAR MARKS SHALL BE PREFIXED WITH "1" FOR PIER 1 AND "2" FOR PIER 2.
3. FOR SEALING OF CONCRETE SURFACES (EPOXY URETHANE) REQUIREMENTS, SEE GENERAL NOTES SHEET 3/55.
4. FOR PILE LAYOUT, SEE PILE LAYOUT PLAN, SHEETS 13/55 AND 14/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 2900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/26/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

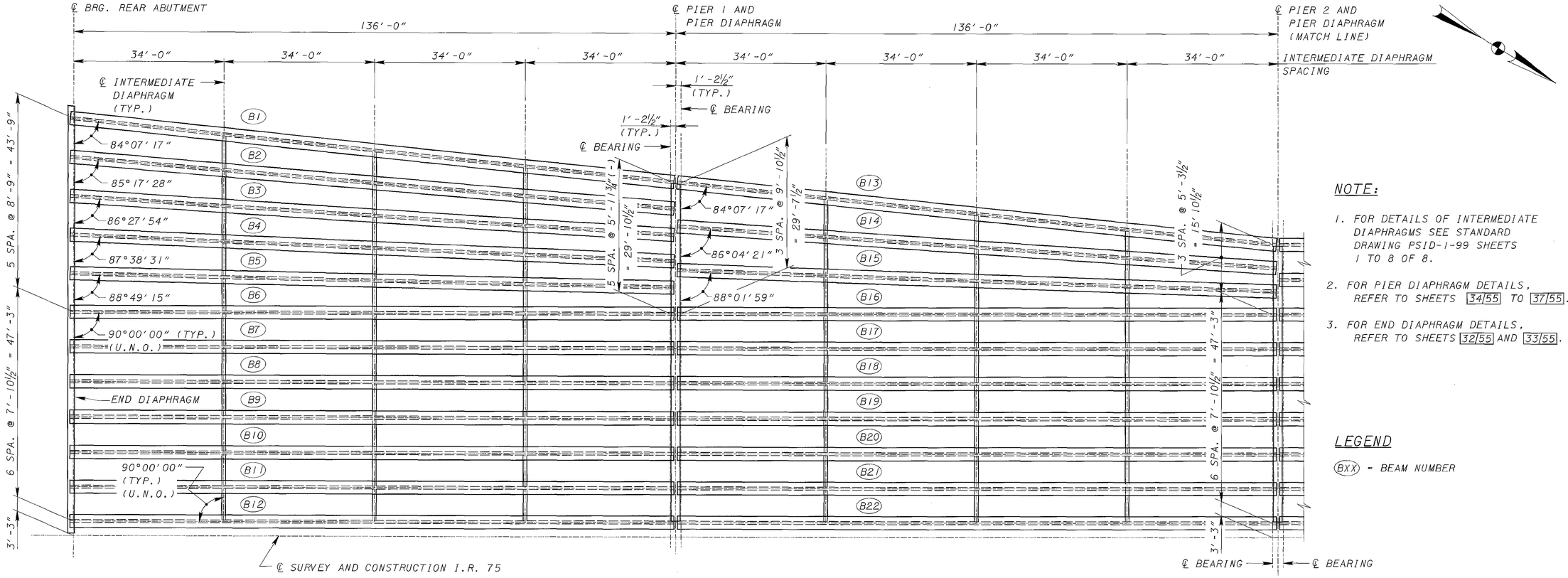
PIER SECTIONS AND DETAILS (PRESTRESSED CONCRETE OPTION)

BRIDGE NO. MOT-75-1523 IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

26/55

261/314



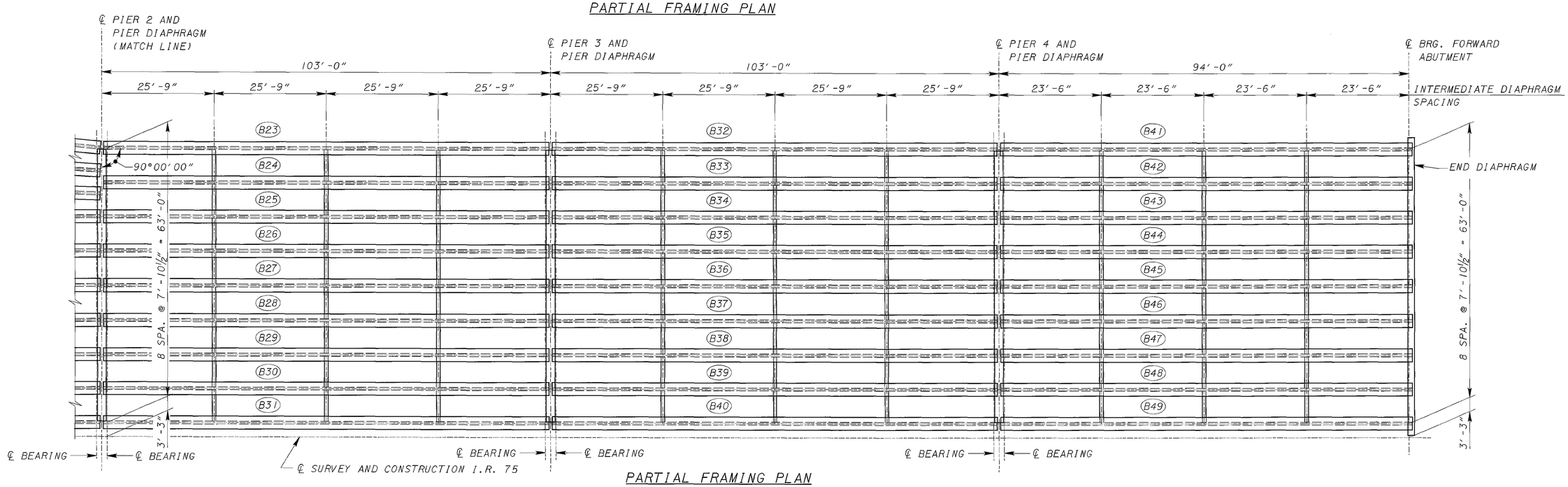

NOTE:

1. FOR DETAILS OF INTERMEDIATE DIAPHRAGMS SEE STANDARD DRAWING PSID-1-99 SHEETS 1 TO 8 OF 8.
2. FOR PIER DIAPHRAGM DETAILS, REFER TO SHEETS 34/55 TO 37/55.
3. FOR END DIAPHRAGM DETAILS, REFER TO SHEETS 32/55 AND 33/55.

LEGEND

(BXX) = BEAM NUMBER

PARTIAL FRAMING PLAN




PARTIAL FRAMING PLAN

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

FRAMING PLAN - LEFT BRIDGE
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

27/55

262/314

Plotted By: eomack Date: 7/27/2007 Time: 3:42:21PM
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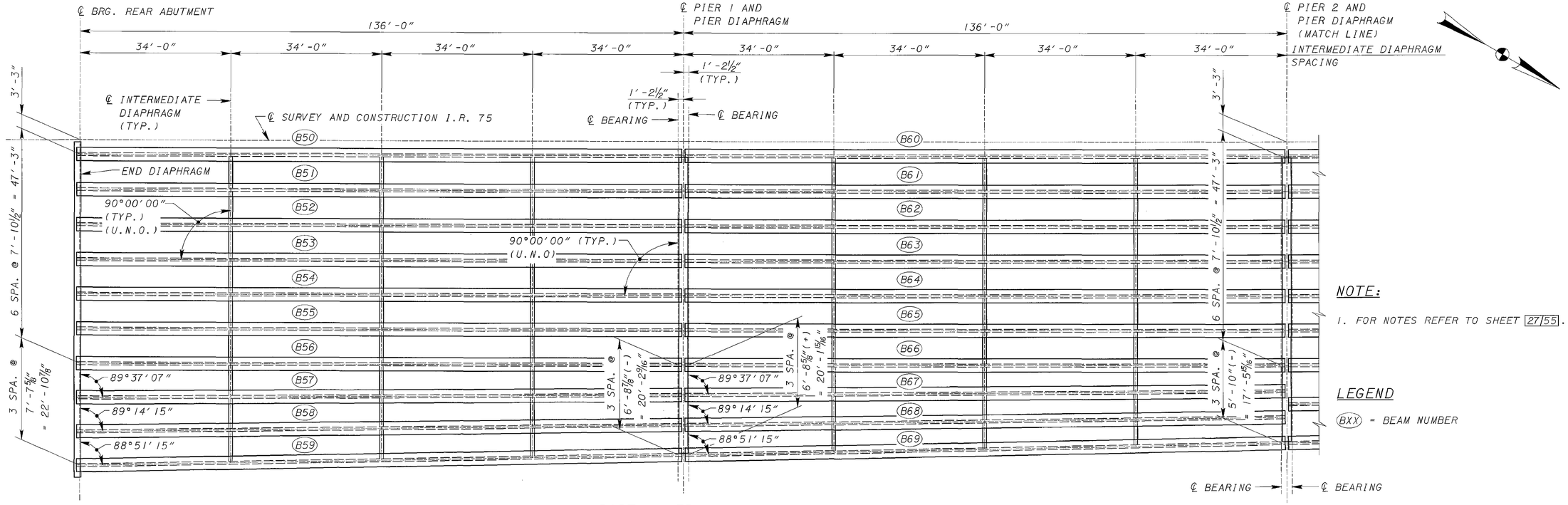
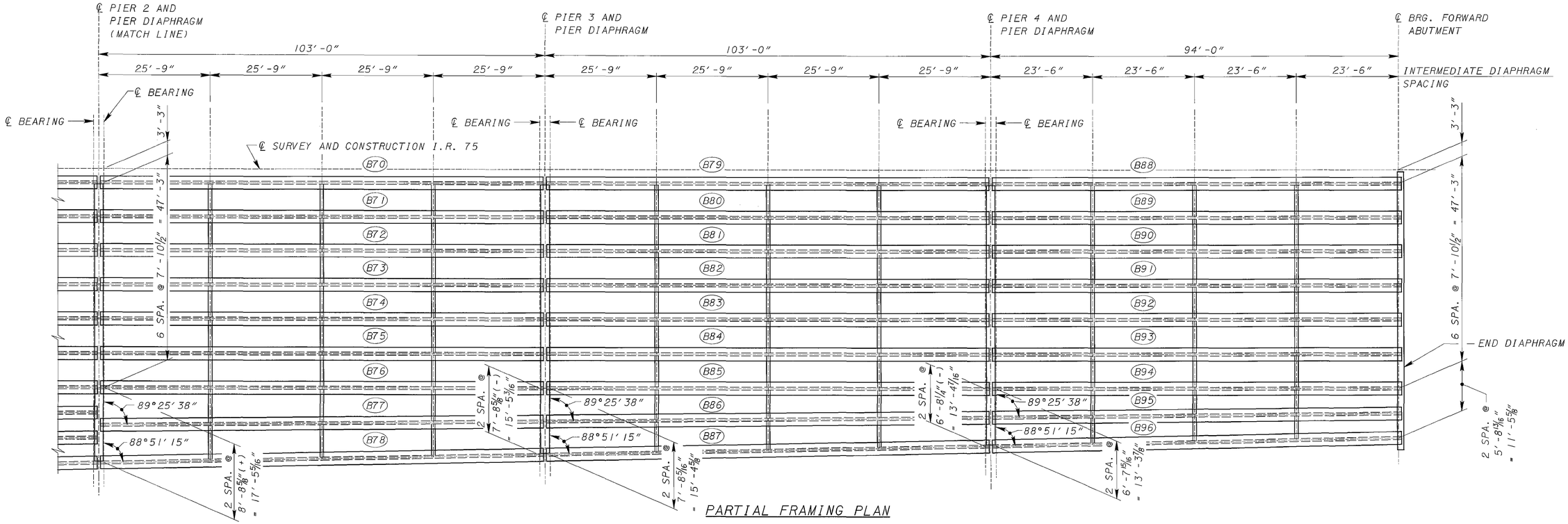



PARTIAL FRAMING PLAN




PARTIAL FRAMING PLAN

## NOTE:

1. FOR NOTES REFER TO SHEET 27/55.

## LEGEND

(BXX) = BEAM NUMBER

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 2000
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 57087 10 | |

FRAMING PLAN - RIGHT BRIDGE
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

28/55

263/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:22 PM
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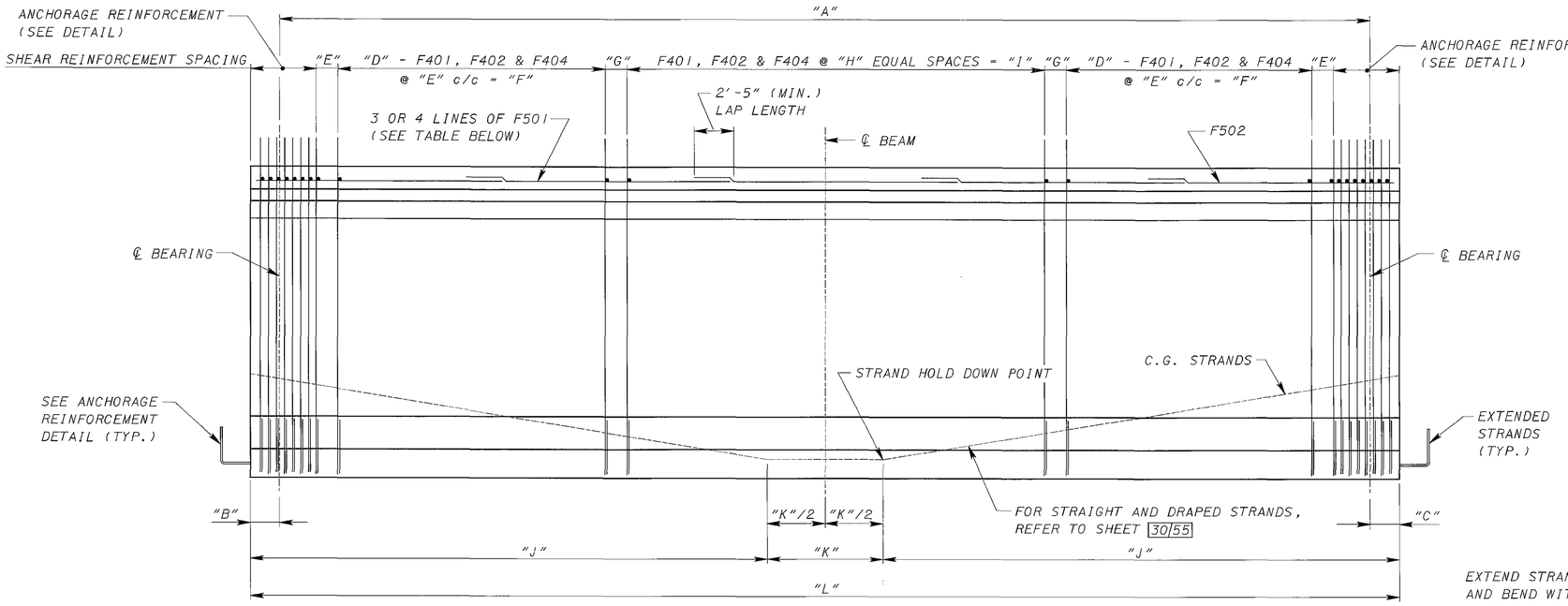
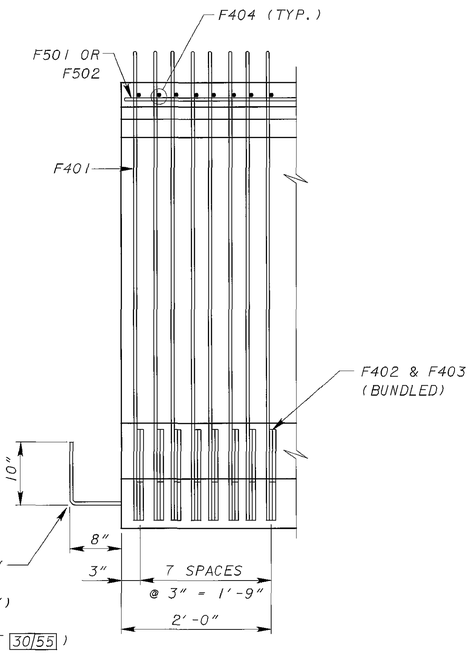



## TYPICAL BEAM ELEVATION

(THREADED INSERTS AND 1¼" Ø SLEEVES FOR DIAPHRAGMS NOT SHOWN FOR CLARITY, REFER TO DIAPHRAGM DETAIL SHEETS 32/55 THRU 37/55 FOR LOCATIONS AND DETAILS)




## ANCHORAGE REINFORCEMENT DETAIL

## TABLE OF BEAM DIMENSIONS AND REINFORCEMENT

| | BEAM NUMBER | NUMBER REQUIRED | DIMENSIONS "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "I" | "J" | "K" | "L" | APPROXIMATE WEIGHT (LBS.) | F401 BARS REQ'D | F402 BARS REQ'D | F403 BARS REQ'D | F404 BARS REQ'D | NO. F501 LINES REQ'D | NO. F502 LINES REQ'D | F502 BARS LENGTH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEFT BRIDGE | B1 | 1 | 135'-6 1/16" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 75 | 112'-0 7/8" | 61'-8 3/16" | 13'-8 1/2" | 137'-0 7/8" | 136,525 | 134 | 134 | 16 | 134 | 4 | 1 | 26'-6" |
| | B2 | 1 | 135'-3" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 75 | 111'-9 3/4" | 61'-7" | 13'-8 3/16" | 136'-9 3/4" | 136,265 | 134 | 134 | 16 | 134 | 4 | 1 | 26'-6" |
| | B3 | 1 | 135'-0 9/16" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 111'-7 5/16" | 61'-5 11/16" | 13'-7 5/16" | 136'-7 5/16" | 136,063 | 133 | 133 | 16 | 133 | 4 | 1 | 26'-6" |
| | B4 | 1 | 134'-10 7/8" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 111'-5 5/8" | 61'-5" | 13'-7 3/4" | 136'-5 5/8" | 135,923 | 133 | 133 | 16 | 133 | 4 | 1 | 26'-6" |
| | B5 | 1 | 134'-9 13/16" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 111'-4 9/16" | 61'-4 7/16" | 13'-7 5/8" | 136'-4 9/16" | 135,835 | 133 | 133 | 16 | 133 | 4 | 1 | 26'-6" |
| | B6 THRU B12 | 7 | 134'-9 1/2" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 111'-4 3/16" | 61'-4 5/16" | 13'-7 5/8" | 136'-4 1/4" | 135,809 | 133 | 133 | 16 | 133 | 4 | 1 | 26'-6" |
| | B13 | 1 | 134'-3 1/2" | 10" | 10" | 41 | 1'-0" | 40'-0" | 1'-6" | 33 | 49'-11 1/2" | 61'-2 1/4" | 13'-7 1/8" | 135'-11 1/2" | 135,414 | 132 | 132 | 16 | 132 | 4 | 1 | 26'-6" |
| | B14 | 1 | 133'-10 3/4" | 10" | 10" | 41 | 1'-0" | 40'-0" | 1'-6" | 33 | 49'-6 3/4" | 61'-0" | 13'-6 3/4" | 135'-6 3/4" | 135,020 | 132 | 132 | 16 | 132 | 4 | 1 | 26'-6" |
| | B15 | 1 | 133'-7 15/16" | 10" | 10" | 41 | 1'-0" | 40'-0" | 1'-6" | 33 | 49'-4" | 60'-10 3/4" | 13'-6 7/8" | 135'-4" | 134,792 | 132 | 132 | 16 | 132 | 4 | 1 | 26'-6" |
| | B16 THRU B22 | 7 | 133'-7" | 10" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 110-3" | 60'-10 3/8" | 13'-6 5/16" | 135'-3" | 134,709 | 133 | 133 | 16 | 133 | 4 | 1 | 26'-6" |
| | B23 THRU B40 | 18 | 100'-7" | 10" | 10" | 7 | 1'-0" | 6'-0" | 1'-6" | 56 | 84'-3" | 46'-0 1/8" | 10'-2 11/16" | 102'-3" | 101,841 | 87 | 87 | 16 | 87 | 3 | 1 | 19'-2" |
| | B41 THRU B49 | 9 | 92'-9 1/2" | 10" | 9" | 7 | 1'-0" | 6'-0" | 1'-6" | 51 | 76'-4 1/2" | 42'-5 5/8" | 9'-5 1/4" | 94'-4 1/2" | 93,998 | 82 | 82 | 16 | 82 | 3 | 1 | 11'-4" |
| RIGHT BRIDGE | B50 THRU B59 | 10 | 134'-9 1/2" | 8 3/4" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 111'-4 3/16" | 61'-4 5/16" | 13'-7 5/8" | 136'-4 1/4" | 135,809 | 133 | 133 | 16 | 133 | 4 | 1 | 25'-9" |
| | B60 THRU B69 | 10 | 133'-7" | 10" | 10" | 21 | 6" | 10'-0" | 1'-6" | 74 | 110-3" | 60'-10 3/8" | 13'-6 5/16" | 135'-3" | 134,709 | 133 | 133 | 16 | 133 | 4 | 1 | 25'-9" |
| | B70 THRU B87 | 18 | 100'-7" | 10" | 10" | 7 | 1'-0" | 6'-0" | 1'-6" | 56 | 84'-3" | 46'-0 1/8" | 10'-2 11/16" | 102'-3" | 101,841 | 87 | 87 | 16 | 87 | 3 | 1 | 19'-2" |
| | B88 THRU B96 | 9 | 92'-9 1/2" | 10" | 9" | 7 | 1'-0" | 6'-0" | 1'-6" | 51 | 76'-4 1/2" | 42'-5 5/8" | 9'-5 1/4" | 94'-4 1/2" | 93,998 | 82 | 82 | 16 | 82 | 3 | 1 | 11'-4" |

## NOTES:

1. FOR SECTION AT BEAM ENDS AND AT MIDSPAN, SEE SHEET 30/55.
2. FOR NUMBER OF STRANDS PER ROW, SEE SHEET 30/55.
3. FOR DETAILS NOT SHOWN, REFER TO O.D.O.T. STANDARD DRAWING PISD-1-99.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/30/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

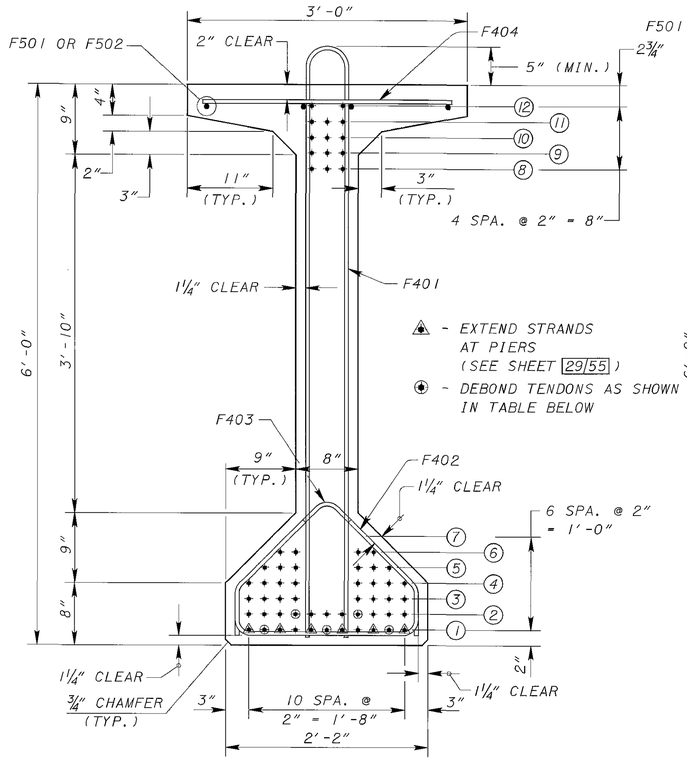
BEAM DETAILS (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

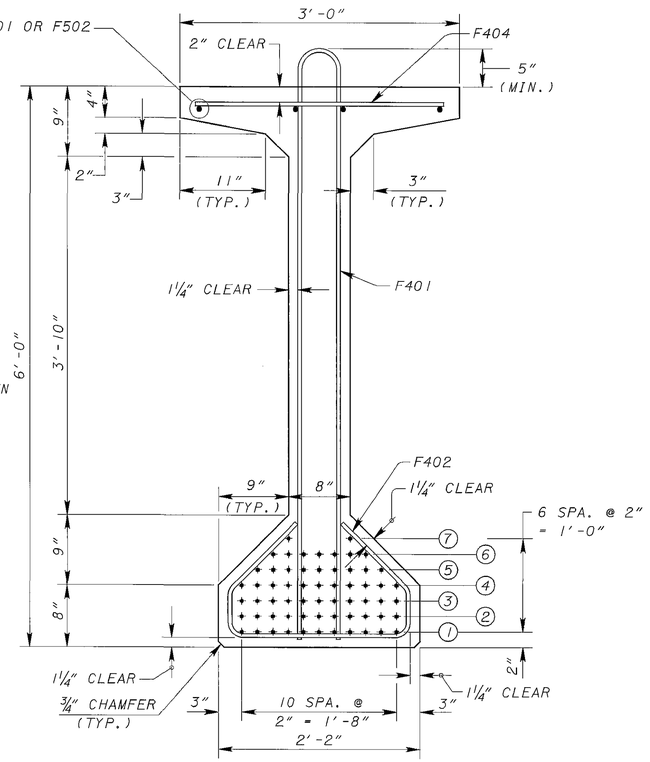
29/55

264/314

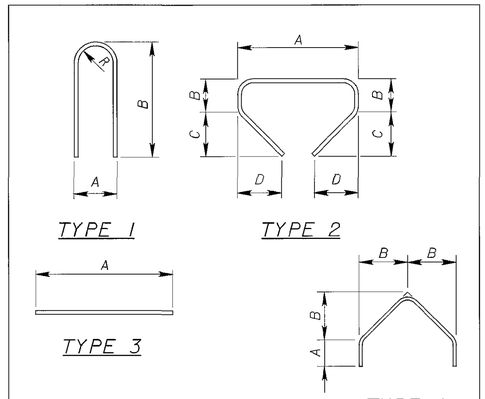
Plotted By: ecmack Date: 7/27/2007 Time: 3:42:28 PM
Filename: g:\co04\0066\bridge\concrete\e.dit\cadd\23828sdl1.dgn




MODIFIED AASHTO TYPE 4 (72")
(AT BEAM ENDS)




MODIFIED AASHTO TYPE 4 (72")
(AT MID-SPAN)




BENDING DIAGRAMS
(ALL DIMENSIONS ARE OUT-TO-OUT)

| MARK | TYPE | DIMENSIONS | | | | |
|---|---|---|---|---|---|---|
| | | A | B | C | D | R |
| F401 | 1 | 5½" | 6'-4" | | | 2¼" |
| F402 | 2 | 1'-11½" | 6¼" | 8½" | 8½" | |
| F403 | 4 | 6¼" | 11¾" | | | |
| F404 | 3 | 2'-8" | | | | |
| F501 | 3 | 30'-0" | | | | |
| F502 | 3 | * | | | | |

* - SEE TABLE OF BEAM DIMENSIONS AND REINFORCEMENT FOR BAR LENGTH, SHEET 29/55

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES THE BAR LOCATION, THE NEXT DIGIT INDICATES THE INCH-POUND BAR SIZE AND THE REMAINING DIGITS ITS SEQUENCE NUMBER. ALL STEEL SHALL BE EPOXY COATED.

NUMBER OF STRANDS PER ROW

| | SPAN | BEAM NUMBER | END OF BEAM: ROW NUMBER (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | TOTAL NUMBER OF STRANDS | DEBONDING: LENGTH | DEBONDING: NUMBER | MIDSPAN: ROW NUMBER (1) | (2) | (3) | (4) | (5) | (6) | (7) | TOTAL NUMBER OF STRANDS | CONCRETE STRENGTH (PSI): f'ci | f'c |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEFT BRIDGE | 1 | B1 THRU B5 | 11 | 11 | 8 | 8 | 6 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 65 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 7 | 5 | 65 | 5000 | 7000 |
| | 1 | B6 THRU B12 | 11 | 11 | 8 | 8 | 6 | - | - | 3 | 3 | 3 | 3 | 2 | 58 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 3 | 2 | 58 | 5000 | 7000 |
| | 2 | B13 THRU B15 | 11 | 11 | 8 | 8 | 6 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 65 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 7 | 5 | 65 | 5000 | 7000 |
| | 2 | B16 THRU B22 | 11 | 11 | 8 | 8 | 6 | - | - | 3 | 3 | 3 | 3 | 2 | 58 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 3 | 2 | 58 | 5000 | 7000 |
| | 3 | B23 THRU B31 | 11 | 8 | 4 | - | - | - | - | - | - | - | 3 | 3 | 29 | - | - | 11 | 11 | 7 | - | - | - | - | 29 | 5000 | 7000 |
| | 4 | B32 THRU B40 | 11 | 8 | 4 | - | - | - | - | - | - | - | 3 | 3 | 29 | - | - | 11 | 11 | 7 | - | - | - | - | 29 | 5000 | 7000 |
| | 5 | B41 THRU B49 | 11 | 11 | - | - | - | - | - | - | - | - | - | 3 | 25 | - | - | 11 | 11 | 3 | - | - | - | - | 25 | 5000 | 7000 |
| RIGHT BRIDGE | 1 | B50 THRU B59 | 11 | 11 | 8 | 8 | 6 | - | - | 3 | 3 | 3 | 3 | 2 | 58 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 3 | 2 | 58 | 5000 | 7000 |
| | 2 | B60 THRU B66 | 11 | 11 | 8 | 8 | 6 | - | - | 3 | 3 | 3 | 3 | 2 | 58 | 18'-0" | 5 | 11 | 11 | 11 | 11 | 9 | 3 | 2 | 58 | 5000 | 7000 |
| | 2 | B67 THRU B69 | 11 | 8 | 8 | 8 | - | - | - | - | 3 | 3 | 3 | 3 | 47 | - | - | 11 | 11 | 11 | 11 | 3 | - | - | 47 | 5000 | 7000 |
| | 3 | B70 THRU B78 | 11 | 8 | 4 | - | - | - | - | - | - | - | 3 | 3 | 29 | - | - | 11 | 11 | 7 | - | - | - | - | 29 | 5000 | 7000 |
| | 4 | B79 THRU B87 | 11 | 8 | 4 | - | - | - | - | - | - | - | 3 | 3 | 29 | - | - | 11 | 11 | 7 | - | - | - | - | 29 | 5000 | 7000 |
| | 5 | B88 THRU B96 | 11 | 11 | - | - | - | - | - | - | - | - | - | 3 | 25 | - | - | 11 | 11 | 3 | - | - | - | - | 25 | 5000 | 7000 |

NOTES:

1. FOR BEAM ELEVATION AND BEAM DIMENSIONS, SEE SHEET 29/55.
2. BEAM AGE AT PLACEMENT OF PIER DIAPHRAGMS SHALL BE A MINIMUM OF 90 DAYS.
3. INITIAL PRESTRESSING LOAD PER STRAND = 33,318 LBS
4. SHIPPING STRANDS: THE FABRICATOR MAY ADD SHIPPING STRANDS AT THE LOCATIONS SHOWN ON SHEET 1 OF 8 OF ODOT STANDARD DRAWING PSID 1-99. THESE SHIPPING STRANDS OR ANY ADDITIONAL SHIPPING STRANDS SHALL BE DEBONDED FOR THE ENTIRE LENGTH OF THE BEAM EXCEPT FOR THE LAST 10'-0" AT EACH END. THE STRANDS SHALL BE CUT AFTER HANDLING OPERATIONS ARE COMPLETE.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/30/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

BEAM DETAILS (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

30/55

265/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:28 PM
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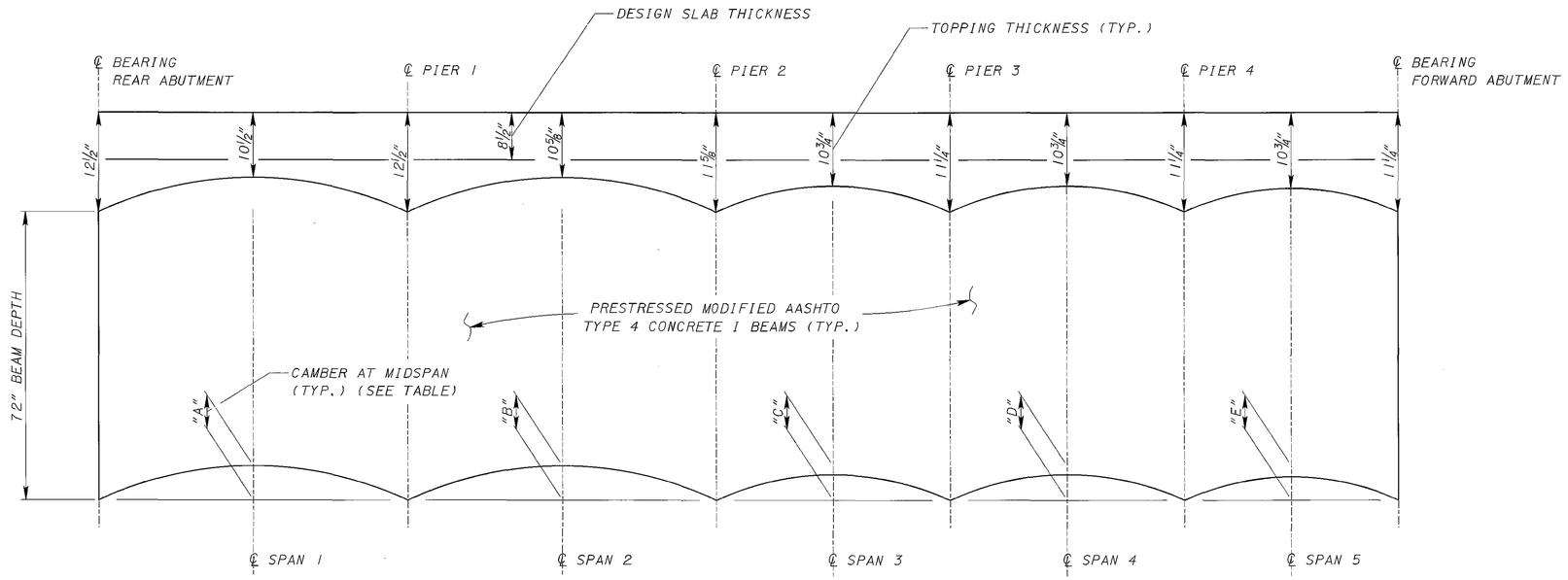



BEAM CAMBER AND DECK THICKNESS DIAGRAM

## BEAM CAMBERS AT MIDSPAN

| | SPAN 1 "A" | | | SPAN 2 "B" | | | | SPAN 3 "C" | | SPAN 4 "D" | | SPAN 5 "E" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (B1) THRU (B5) | (B6) THRU (B12) | (B50) THRU (B59) | (B13) THRU (B15) | (B16) THRU (B22) | (B60) THRU (B66) | (B67) THRU (B69) | (B23) THRU (B31) | (B70) THRU (B78) | (B32) THRU (B40) | (B79) THRU (B87) | (B41) THRU (B49) | (B88) THRU (B96) |
| CAMBER AT TIME OF RELEASE DUE TO PRESTRESSING | 5 15/16" | 5 9/16" | 5 3/8" | 5 3/4" | 5 7/16" | 5 7/16" | 4 9/16" | 1 13/16" | 1 13/16" | 1 13/16" | 1 13/16" | 1 7/16" | 1 7/16" |
| DEFLECTION DUE TO SELF WEIGHT | 2 15/16" | 2 15/16" | 2 15/16" | 2 7/8" | 2 13/16" | 2 13/16" | 2 13/16" | 15/16" | 15/16" | 15/16" | 15/16" | 11/16" | 11/16" |
| CAMBER AT TIME OF RELEASE (NET) | 3" | 2 5/8" | 2 7/16" | 2 7/8" | 2 5/8" | 2 5/8" | 1 11/16" | 3/4" | 3/4" | 3/4" | 3/4" | 3/4" | 3/4" |
| CAMBER AT TIME OF ERECTION | 5 1/4" | 4 9/16" | 4 1/4" | 5 1/16" | 4 9/16" | 4 9/16" | 2 15/16" | 1 9/16" | 1 9/16" | 1 9/16" | 1 9/16" | 1 5/16" | 1 5/16" |
| LONG TERM CAMBER | 7 1/2" | 6 9/16" | 6 1/8" | 7 1/4" | 6 9/16" | 6 9/16" | 4 5/16" | 2 1/4" | 2 1/4" | 2 1/4" | 2 1/4" | 1 7/8" | 1 7/8" |

NOTES:

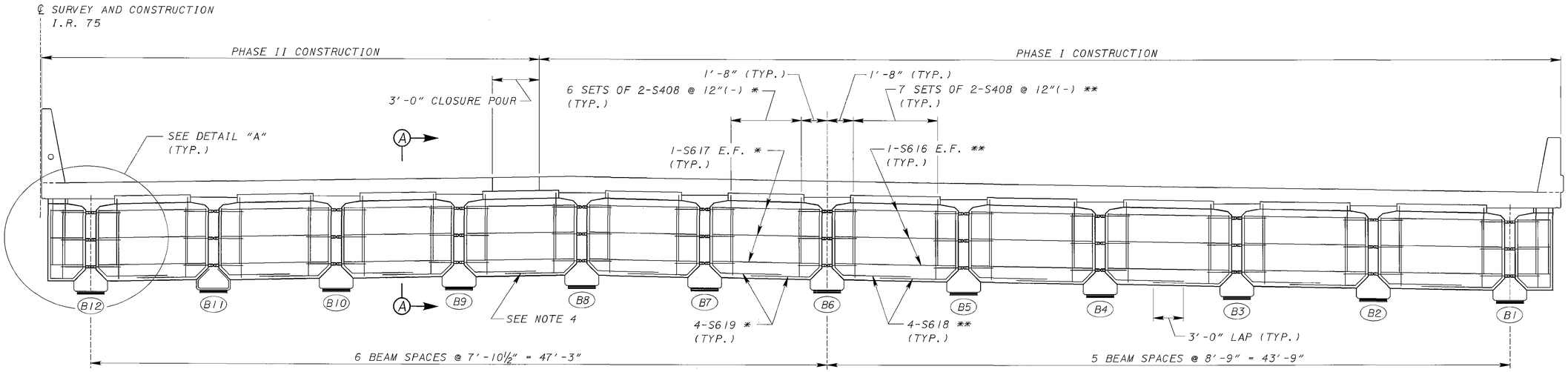
1. DECK SLAB THICKNESS FOR CONCRETE QUANTITIY:
   THE TOPPING THICKNESSES SHOWN FROM THE TOP OF THE DECK SLAB TO THE TOP OF THE TOP FLANGE ALONG THE CENTERLINE OF THE I-BEAM ARE THEORETICAL DIMENSIONS. THE HAUNCH DEPTH IS THE TOPPING THICKNESS MINUS THE DESIGN SLAB THICKNESS. THE DEPARTMENT WILL PAY FOR SUPERSTRUCTURE CONCRETE BASED ON THE DESIGN SLAB THICKNESS AND THE AVERAGE OF THE THEORETICAL HAUNCH DEPTHS AT MID-SPAN AND AT EACH BEAM BEARING EVEN THOUGH THE DEVIATION FROM THE DIMENSIONS SHOWN MAY BE NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. ONCE ALL THE BEAMS ARE SET IN THEIR FINAL POSITION, THE ACTUAL CAMBER FOR EACH MEMBER WILL BE THE TOP OF THE BEAM ELEVATION AT MID-SPAN MINUS THE AVERAGE TOP OF BEAM ELEVATION AT EACH BEARING. THE ACTUAL TOPPING THICKNESS AT MID-SPAN WILL BE THE THEROETICAL DIMESION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
2. FOR SCREED ELEVATIONS, SEE SHEETS 40/55 THRU 46/55.
3. FOR BEAM DETAILS, SEE SHEETS 29/55 AND 30/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

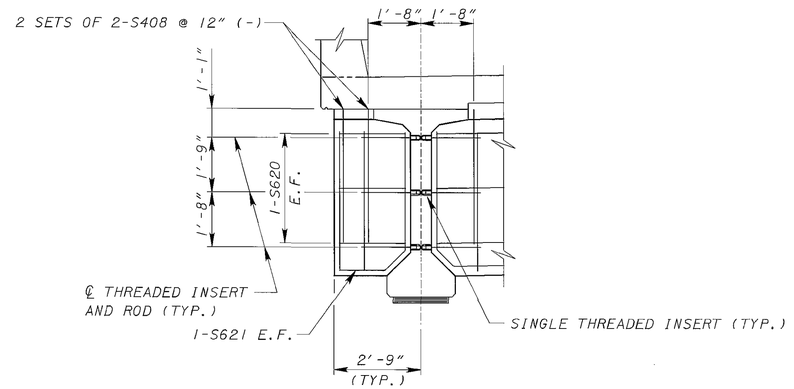
| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | RER | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

BEAM CAMBER AND DECK THICKNESS
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I-75 OVER THE GREAT MIAMI RIVER

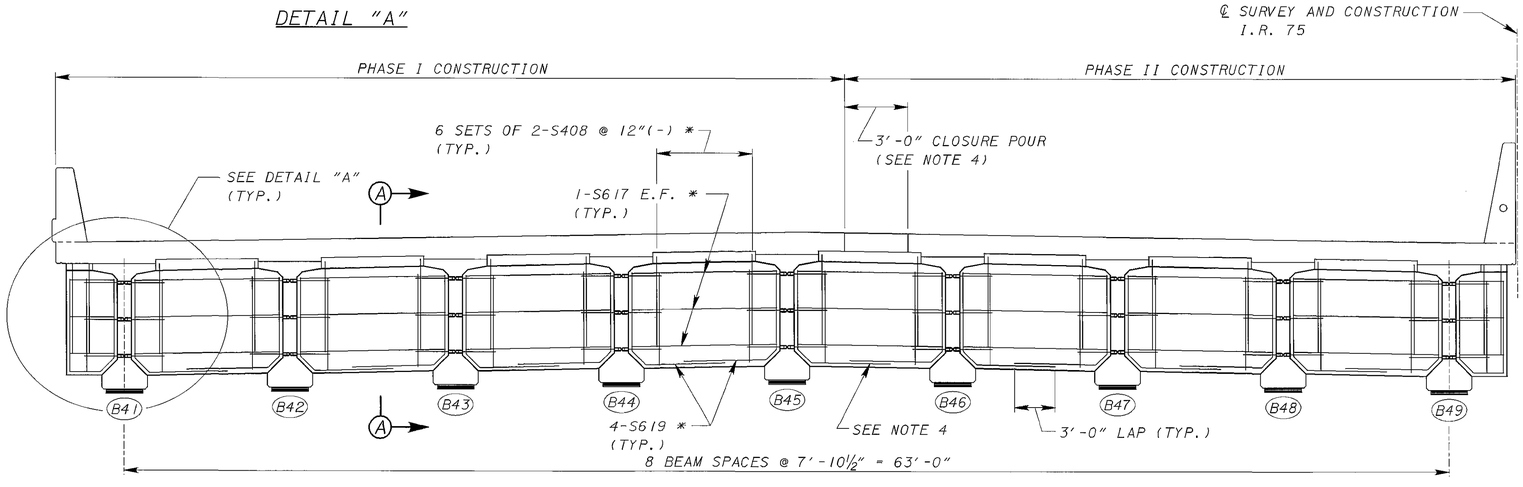
MOT-75-14.60
PID 23828



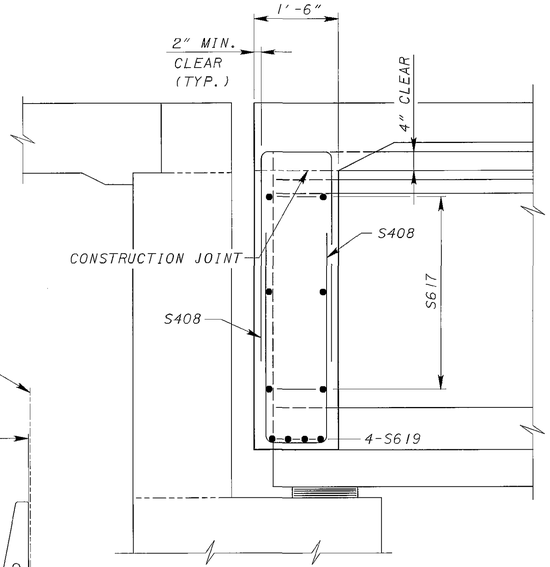

## ELEVATION
## REAR ABUTMENT




## DETAIL "A"




## ELEVATION
## FORWARD ABUTMENT




## SECTION A-A
(EXPANSION JOINT NOT SHOWN)

**LEGEND:**

* - TYPICAL BETWEEN BEAMS (B6) THRU (B12) AND BEAMS (B41) THRU (B49)

** - TYPICAL BETWEEN BEAMS (B1) THRU (B6)

(BXX) - BEAM NUMBER

E.F. - EACH FACE

**NOTES:**

1. FOR BEAM SPACING SEE FRAMING PLAN, SHEET 27/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. FOR DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING PISD-1-99.
4. DIAPHRAGMS AT CLOSURE POUR TO BE CAST DURING PHASE II CONSTRUCTION.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

# END DIAPHRAGM DETAILS - LEFT BRIDGE

BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

32/55

267/314

Plotted By: ecmack Date: 7/21/2007 Time: 3:42:26 PM
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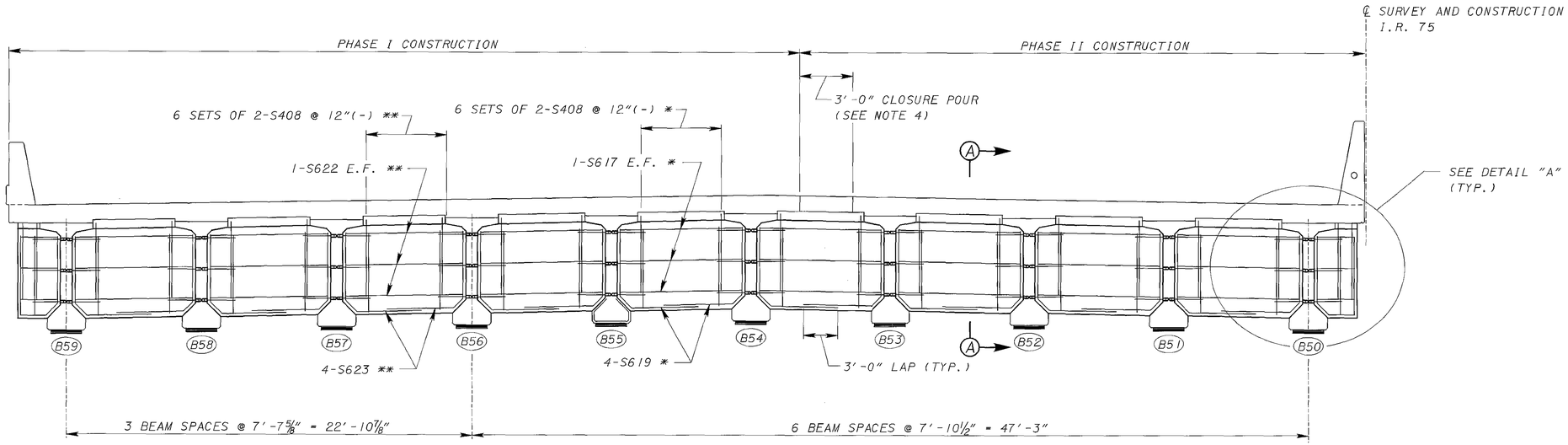
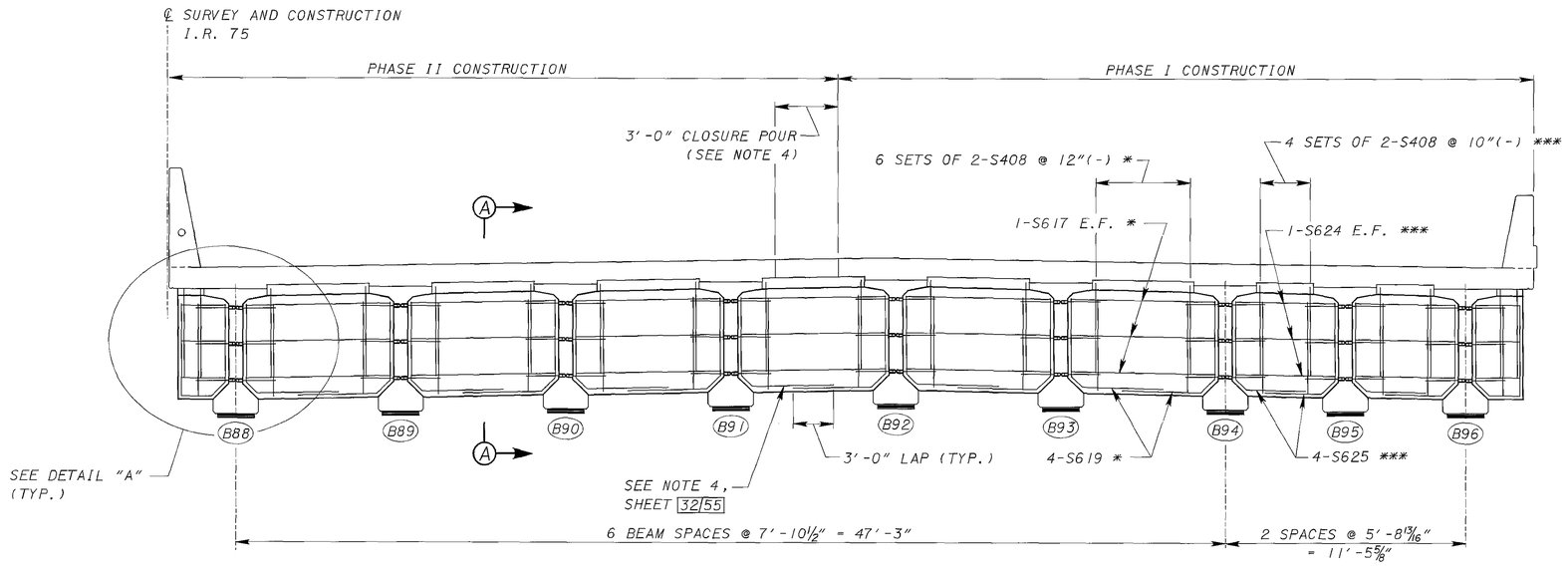



ELEVATION
REAR ABUTMENT




ELEVATION
FORWARD ABUTMENT

LEGEND:

* - TYPICAL BETWEEN BEAMS (B50) THRU (B56) AND BEAMS (B88) THRU (B94)

** - TYPICAL BETWEEN BEAMS (B56) THRU (B59)

*** - TYPICAL BETWEEN BEAMS (B94) THRU (B96)

(BXX) - BEAM NUMBER

NOTES:

1. FOR BEAM SPACING SEE FRAMING PLAN SHEET 32/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 32/55.
3. FOR DETAILS NOT SHOWN, REFER TO STANDARD DRAWING PSID-1-99.
4. DIAPHRAGMS AT CLOSURE POUR TO BE CAST DURING PHASE II CONSTRUCTION
5. FOR SECTION A-A AND DETAIL A, SEE SHEET 32/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 5/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

END DIAPHRAGM DETAILS - RIGHT BRIDGE
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

33/55

268/314

Plotted By: emack Date: 7/27/2007 Time: 3:42:27 PM
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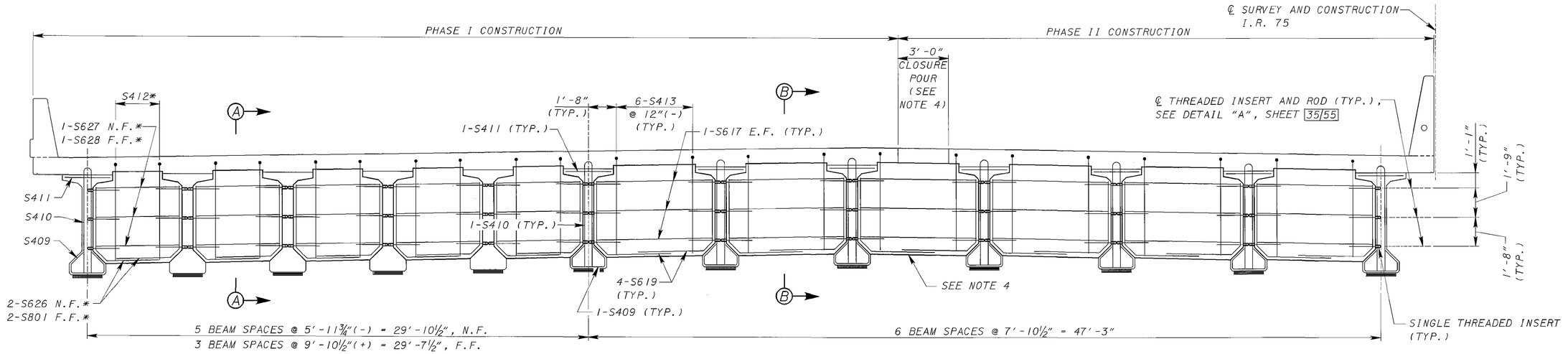
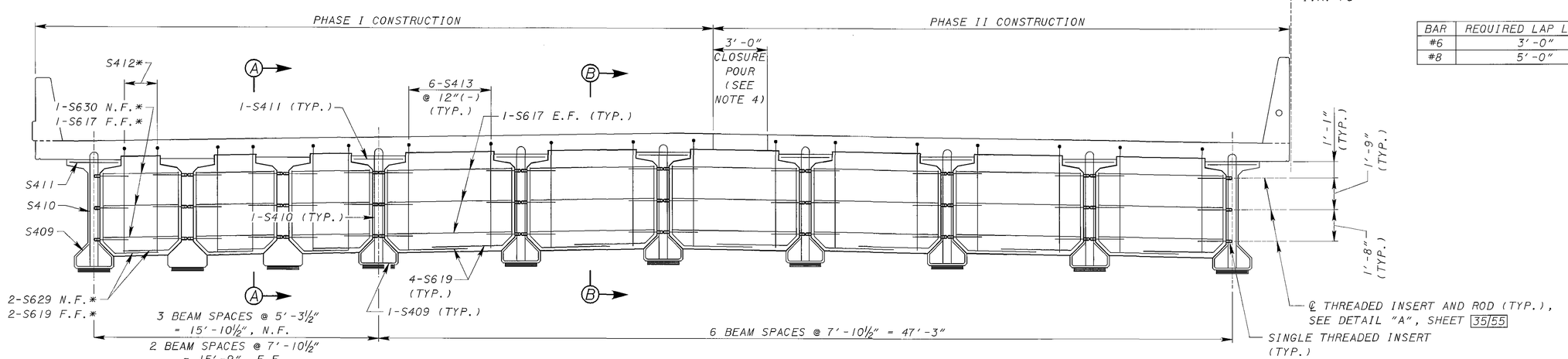



* - FOR PLACEMENT OF REINFORCING STEEL WITHIN VARIABLE SPACED DIAPHRAGMS, SEE PARTIAL PLAN, SHEET 35/55

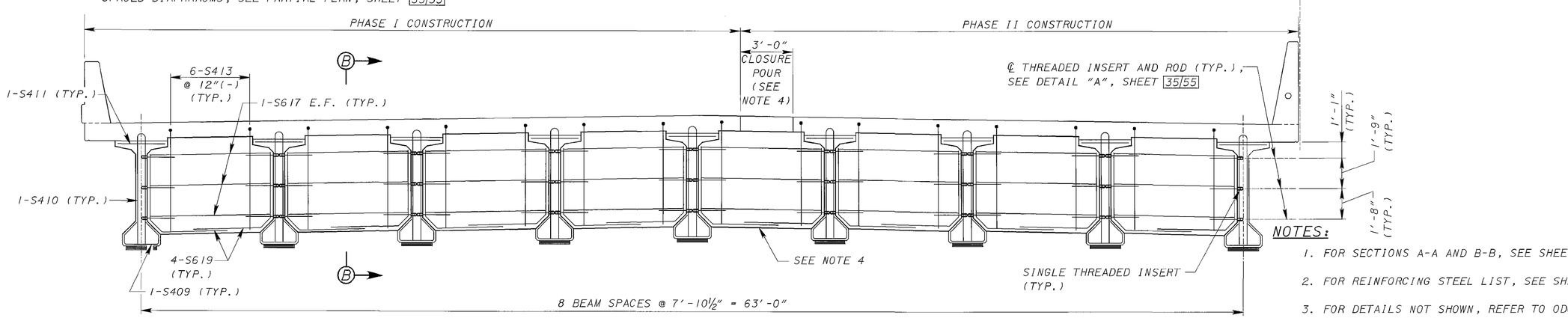
## ELEVATION - PIER 1




| BAR | REQUIRED LAP LENGTH |
|---|---|
| #6 | 3'-0" |
| #8 | 5'-0" |

## ELEVATION - PIER 2

* - FOR PLACEMENT OF REINFORCING STEEL WITHIN VARIABLE SPACED DIAPHRAGMS, SEE PARTIAL PLAN, SHEET 35/55




## ELEVATION - PIERS 3 AND 4

### NOTES:

1. FOR SECTIONS A-A AND B-B, SEE SHEET 35/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. FOR DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING PISD-1-99.
4. DIAPHRAGMS AT CLOSURE POUR TO BE CAST DURING PHASE II CONSTRUCTION.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 2000, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

# PIER DIAPHRAGM DETAILS - LEFT BRIDGE

BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

34/55

269/314

Plotted By: eamack Date: 7/27/2007 Time: 3:42:22 PM
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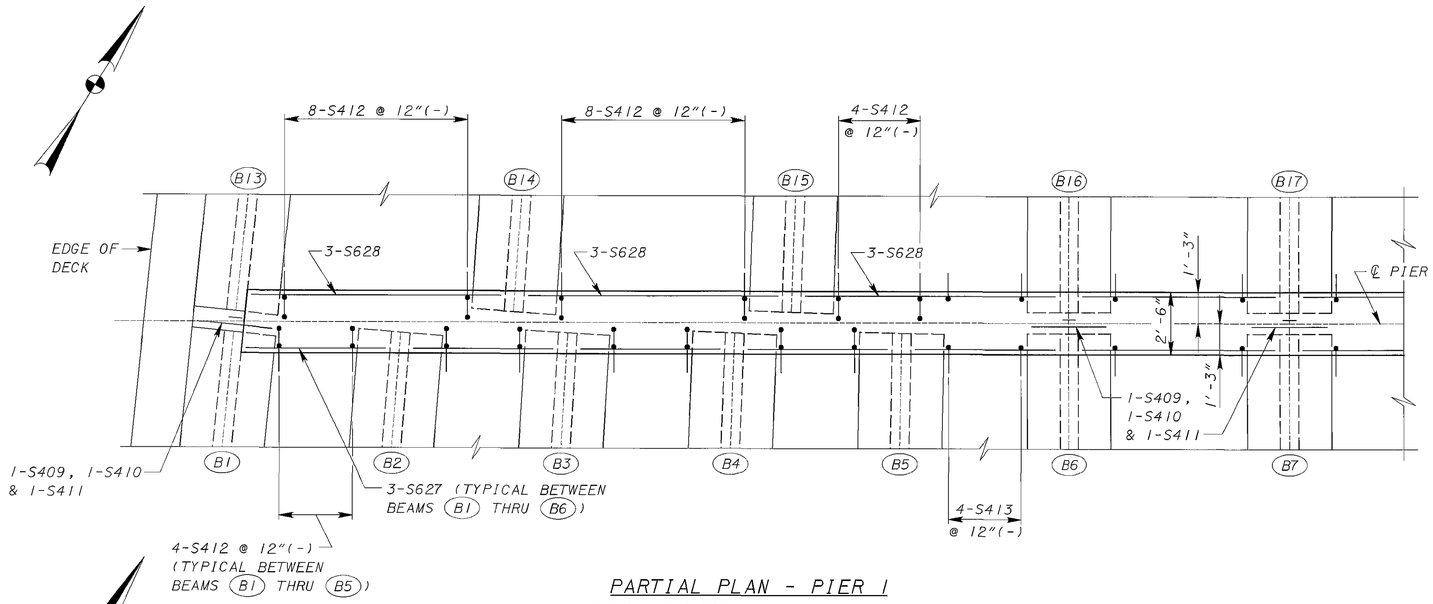
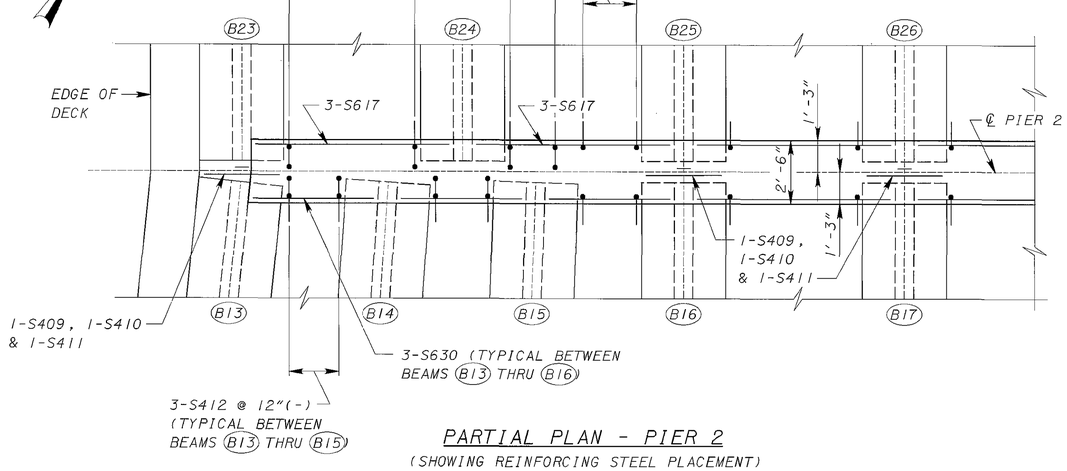


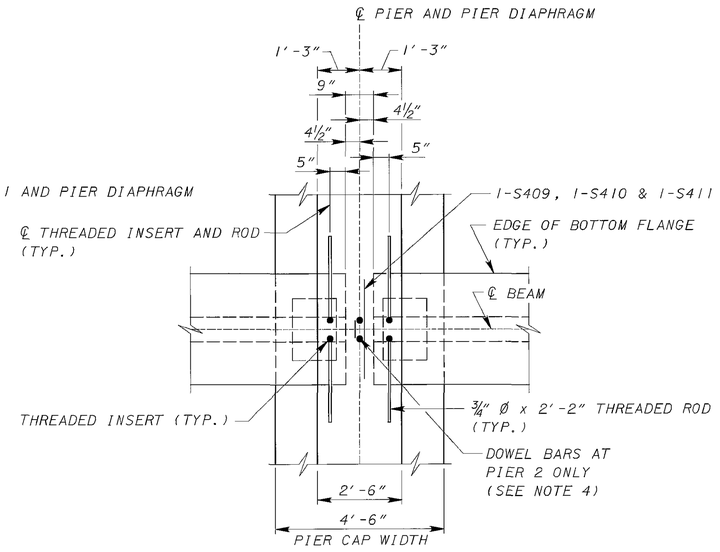

## PARTIAL PLAN - PIER 1

(SHOWING REINFORCING STEEL PLACEMENT)

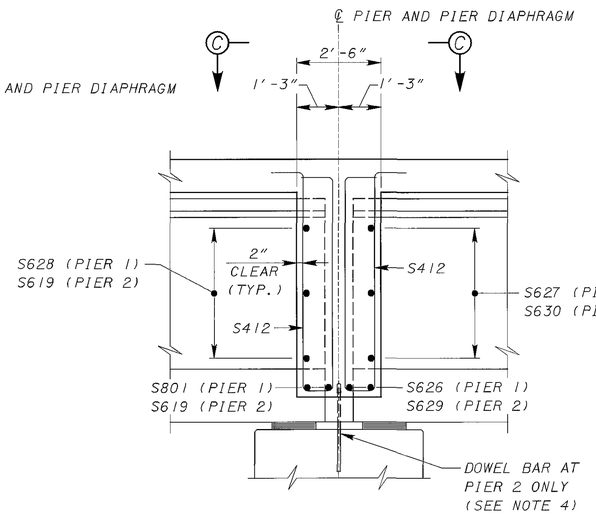



## PARTIAL PLAN - PIER 2

(SHOWING REINFORCING STEEL PLACEMENT)

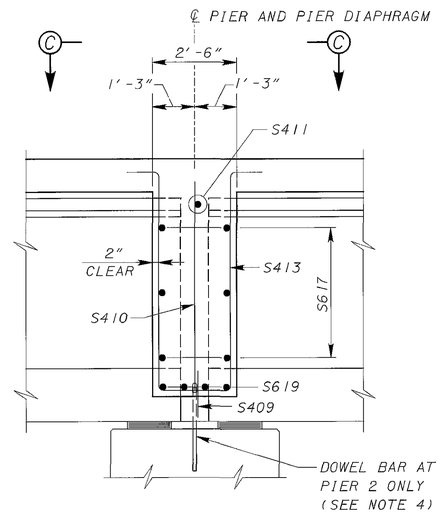



## VIEW C-C




## SECTION A-A

(PIERS 1 & 2 ONLY)




## SECTION B-B

### NOTES:

1. FOR PIER DIAPHRAGM ELEVATIONS, SHEET 34/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. FOR DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING PISD-1-99.
4. FOR DOWEL BAR DETAILS, SEE BEARING DETAILS SHEET 49/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

PIER DIAPHRAGM DETAILS - LEFT BRIDGE
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

35/55

270/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:23 PM
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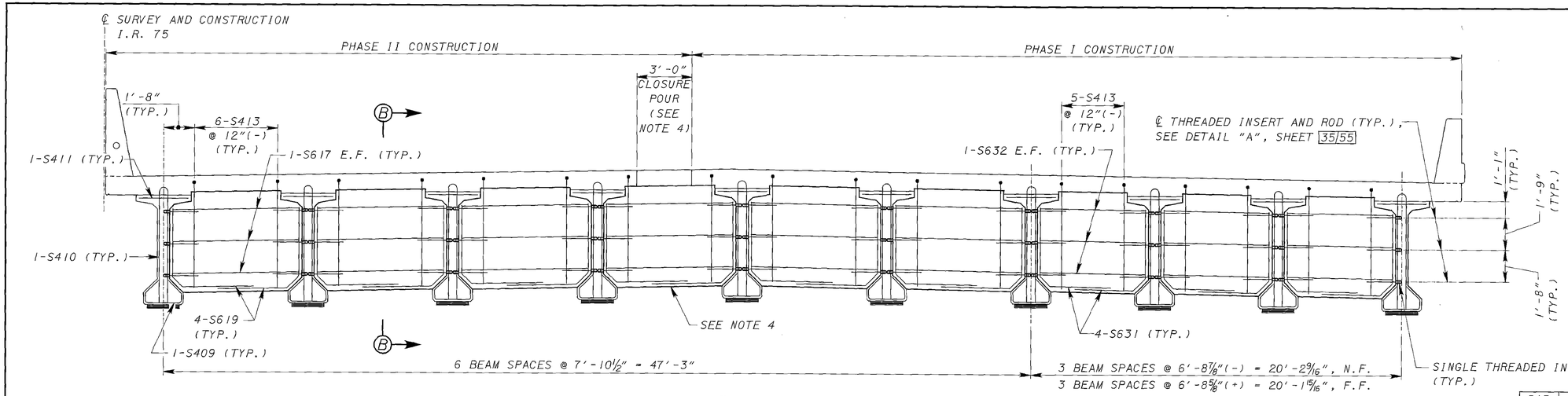
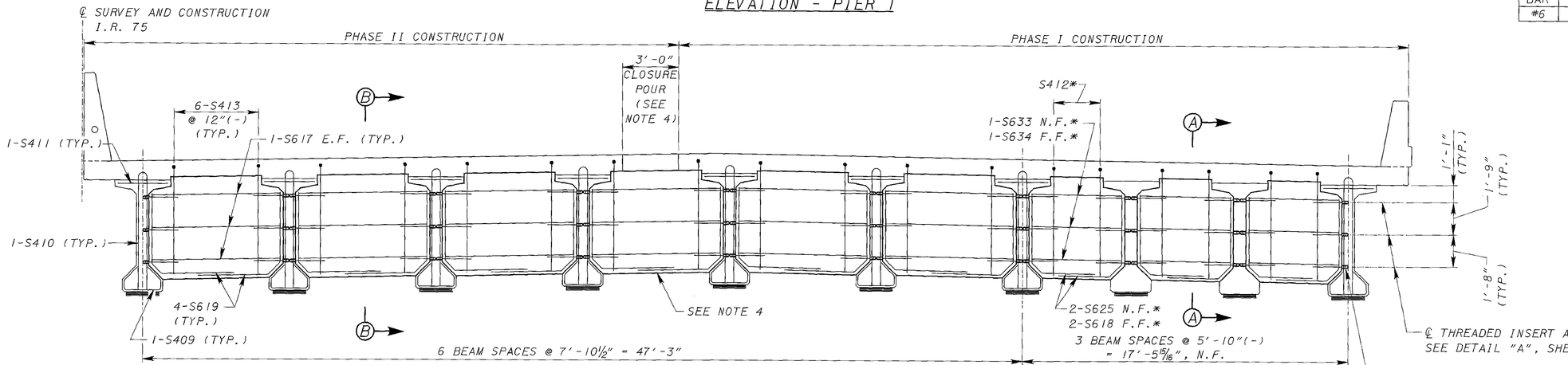


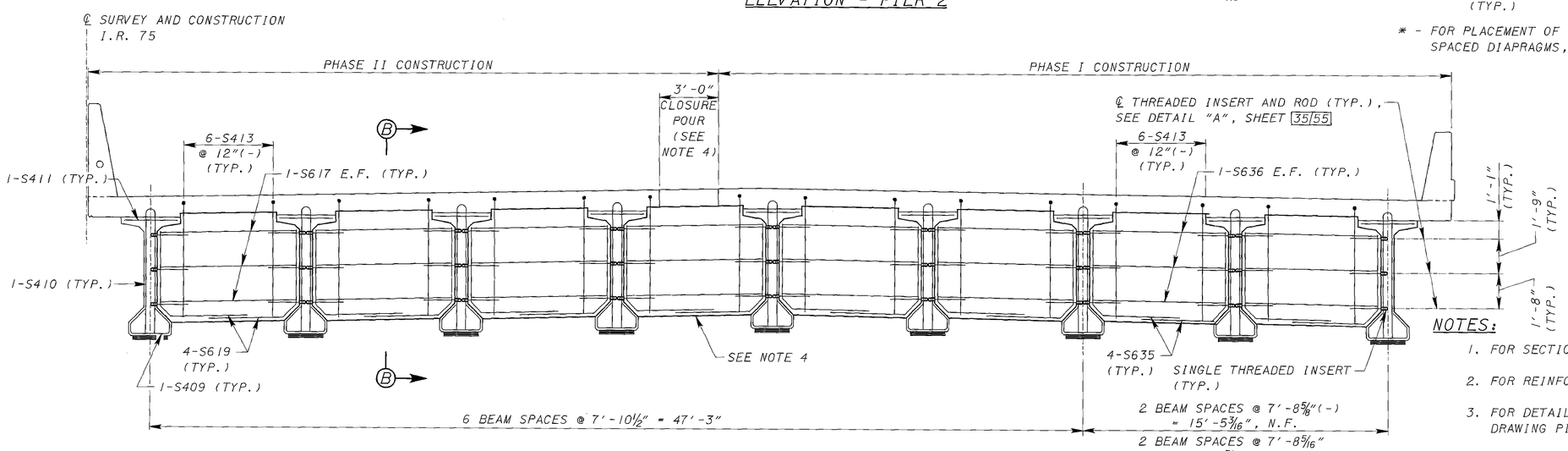

ELEVATION - PIER 1

| BAR | REQUIRED LAP LENGTH |
|---|---|
| #6 | 3'-0" |




ELEVATION - PIER 2

* - FOR PLACEMENT OF REINFORCING STEEL WITHIN VARIABLE SPACED DIAPRAGMS, SEE PARTIAL PLAN, SHEET 37/55




ELEVATION - PIER 3

NOTES:

1. FOR SECTIONS A-A AND B-B, SEE SHEET 37/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. FOR DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING PISD-1-99.
4. DIAPHRAGMS AT CLOSURE POUR TO BE CAST DURING PHASE II CONSTRUCTION.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| REVIEWED | DATE |
|---|---|
| RER | 05/27/05 |
| STRUCTURE FILE NUMBER | |
| 57087.10 | |
| DRAWN | REVISED |
| CAG | |
| DESIGNED | CHECKED |
| JDH | NFF |

PIER DIAPHRAGM DETAILS - RIGHT BRIDGE
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

36/55

271/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:24 PM
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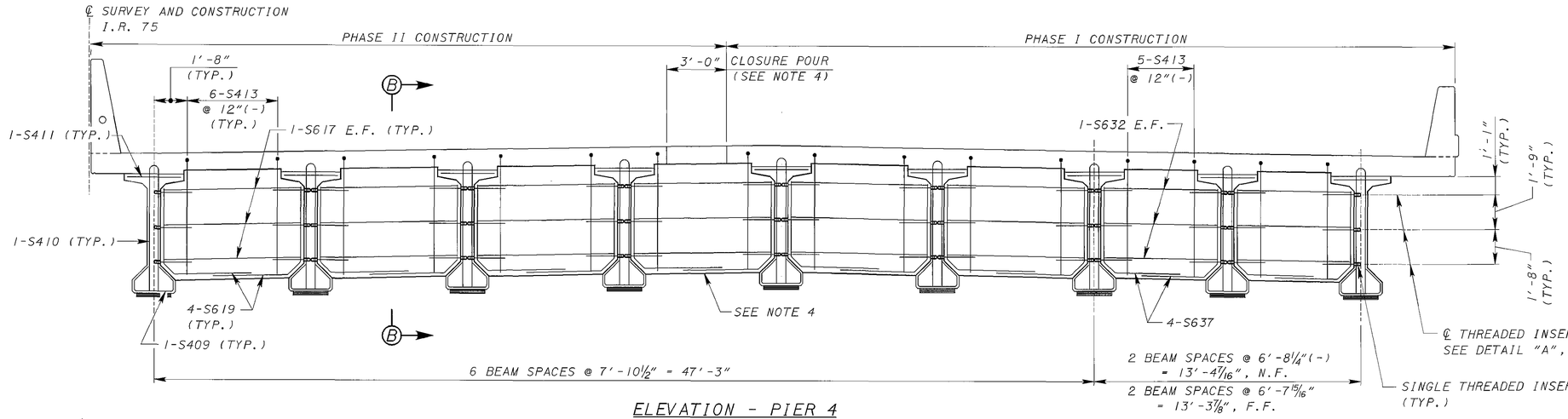
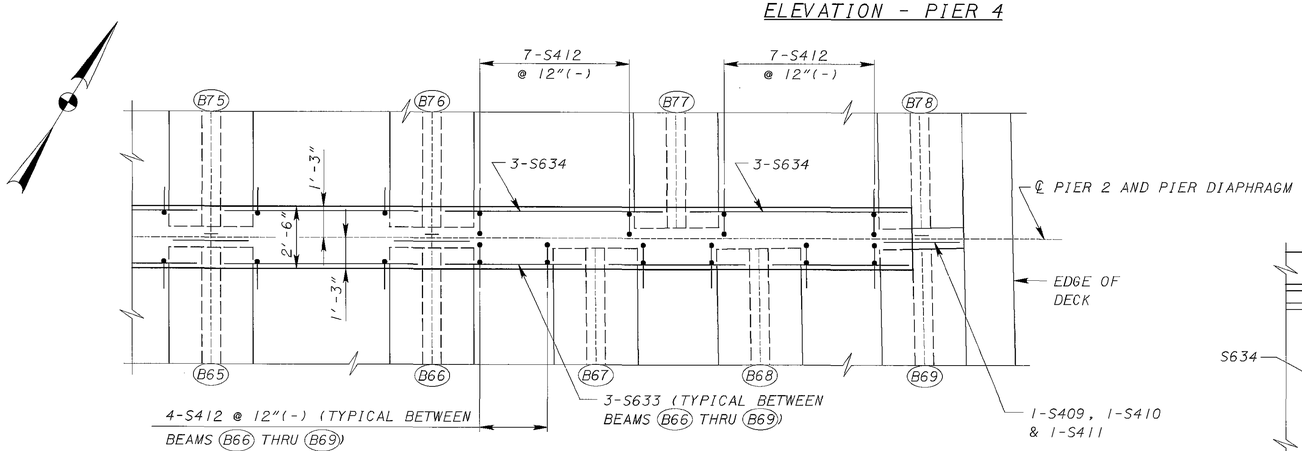


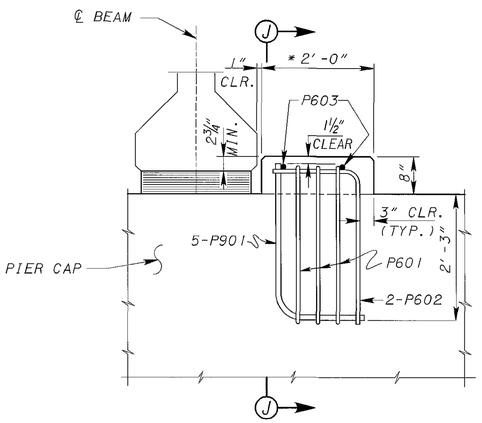

| BAR | REQUIRED LAP LENGTH |
|---|---|
| #6 | 3'-0" |

## ELEVATION - PIER 4



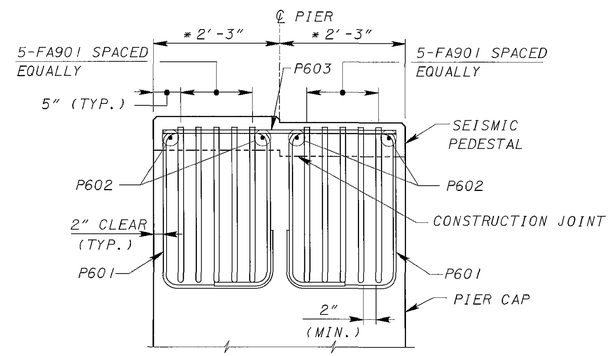

## PARTIAL PLAN - PIER 2

(SHOWING REINFORCING STEEL PLACEMENT)




## FRONT VIEW OF SEISMIC PEDESTAL AT PIER

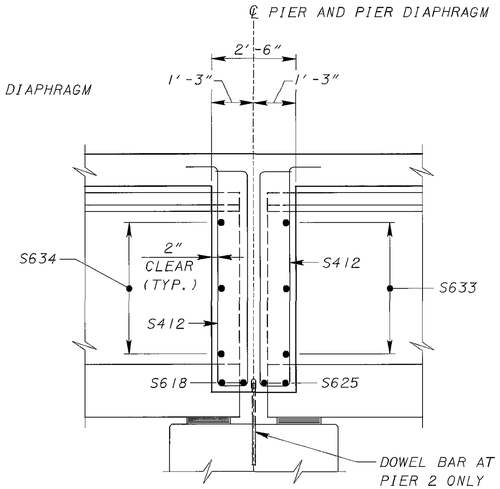
THE 2'-0" WIDTH OF THE PEDESTAL SHALL BE MEASURED PARALLEL TO THE CENTERLINE OF BEARING. THE FA901 AND FA602 BARS SHALL BE PLACED PARALLEL TO THE CENTERLINE OF BEARING. THE FA601 AND FA603 BARS SHALL BE PLACED PARALLEL TO THE BEAMS OR GIRDERS.




## SECTION J-J

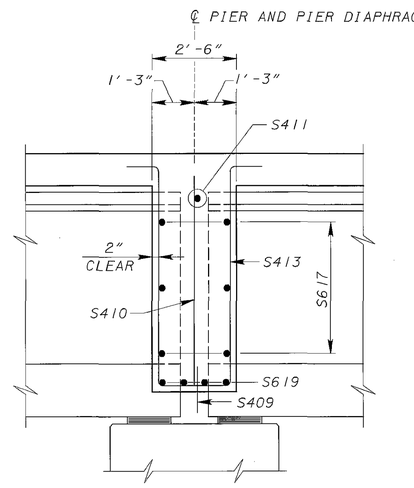
THE LOCATION OF THE MAIN REINFORCEMENT IN THE BEAM SEAT MAY BE ADJUSTED HORIZONTALLY ±1" TO ACCOMMODATE THE FA901 BARS.

* - THE SURFACE OF THE BEAM SEAT IN THIS AREA SHALL BE FINISHED WITH A SERRATED TROWEL. THE SERRATIONS SHALL BE ¼" DEEP MINIMUM.




## SECTION A-A

(PIER 2 ONLY)




## SECTION B-B

## NOTES:

1. FOR PIER DIAPHRAGM ELEVATIONS, SHEET 36/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. FOR DETAILS NOT SHOWN, REFER TO ODOT STANDARD DRAWING PISD-1-99.
4. DIAPHRAGMS AT CLOSURE POUR TO BE CAST DURING PHASE II CONSTRUCTION.
5. FOR DOWEL BAR DETAILS, SEE BEARING DETAILS SHEET 49/55.
6. FOR PIER DETAILS SEE SHEETS 22-25/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708710 | |

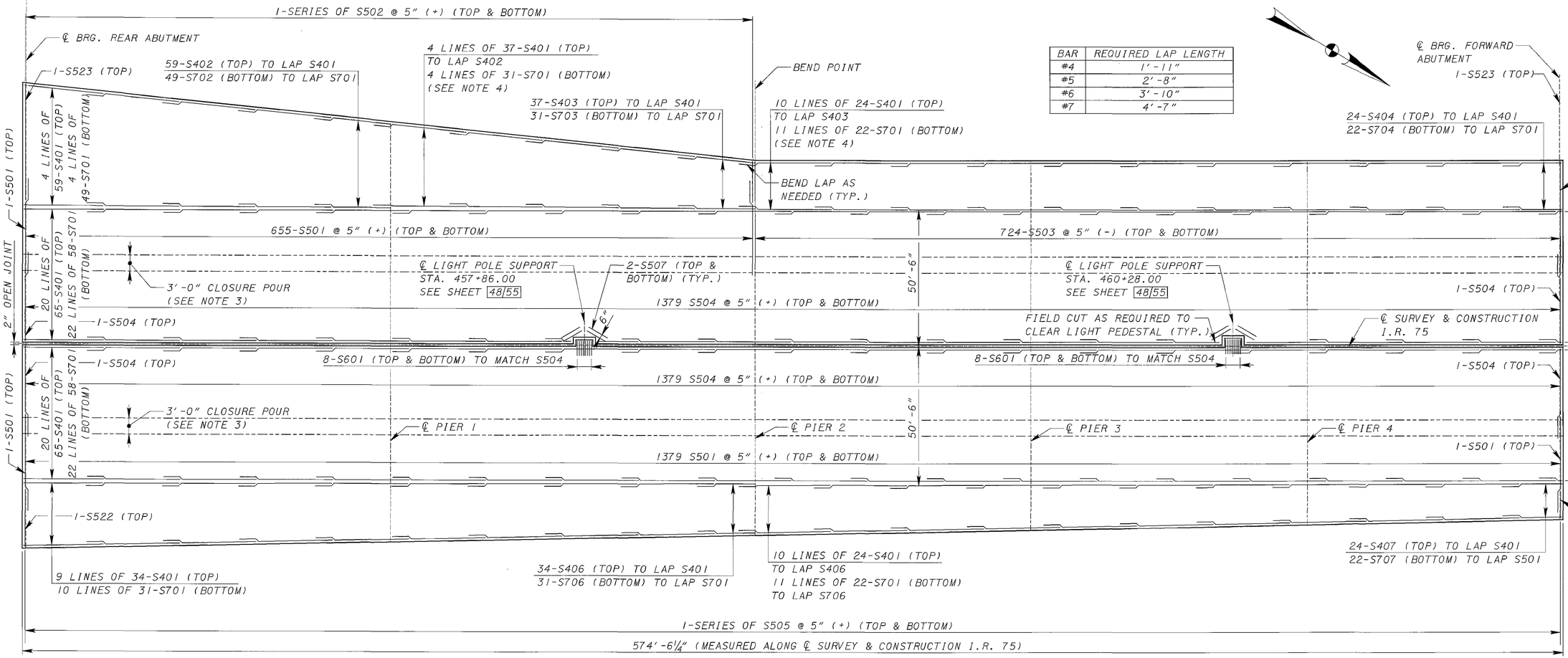
PIER DIAPHRAGM DETAILS - RIGHT BRIDGE
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

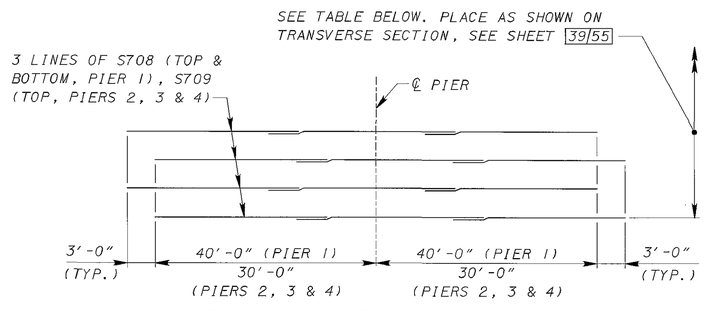
MOT-75-14.60
PID 23828

37/55

272/314

Plotted By: eomack Date: 7/27/2007 Time: 3:42:25 PM
Filename: g:\co04\0066\bridge\concrete.dir\cadd\23828sd06.dgn

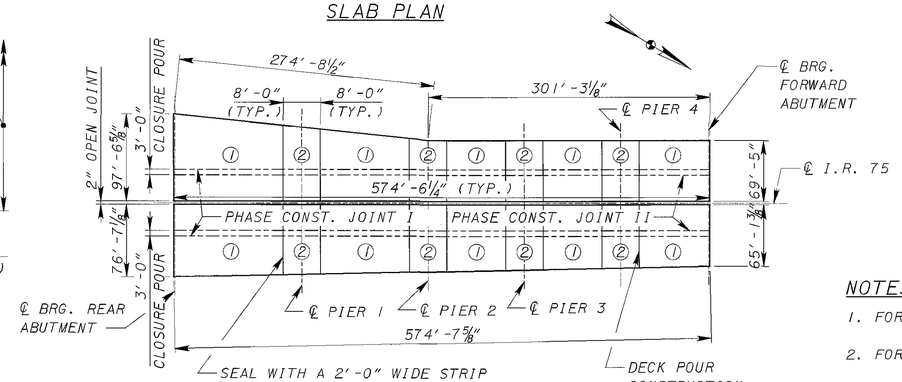



## ADDITIONAL REINFORCEMENT OVER PIERS

| NO. OF LINES OF ADDITIONAL REINFORCEMENT | | | |
|---|---|---|---|
| PIER | BRIDGE | TOP LAYER | BOTTOM LAYER |
| 1 | LEFT | 123 | 94 |
| | RIGHT | 98 | 78 |
| 2 | LEFT | 101 | - |
| | RIGHT | 98 | - |
| 3 | LEFT | 88 | - |
| | RIGHT | 88 | - |
| 4 | LEFT | 88 | - |
| | RIGHT | 88 | - |

## SLAB PLAN




## DECK POURING SEQUENCE *

① POUR 1 - DECK POUR TO BE COMPLETED FIRST.
② POUR 2 - DECK AND PIER DIAPHRAGM POUR TO BE PLACED MONOLITHICALLY AFTER ADJACENT DECK POURS.

* END DIAPHRAGMS TO BE PLACED BEFORE ADJACENT DECK POURS.

## NOTES:

1. FOR PARAPET DETAILS, SEE SHEETS 47/55 AND 48/55.
2. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
3. PLACE LONGITUDINAL REINFORCING STEEL ON EITHER SIDE OF CLOSURE POUR TO PROVIDE 2" CLEARANCE TO REINFORCEMENT DURING ALL CONSTRUCTION PHASES.
4. AT PIERS 1 & 2 IN THE TAPERED SPANS, LAP A LIMITED NUMBER OF BOTTOM LONGITUDINAL REINFORCING BARS. THE NUMBER OF LAPS SHALL MATCH THE NUMBER OF BARS IN ADJACENT SPAN.
5. FOR ADDITIONAL DECK POUR NOTES, SEE ODOT STANDARD DRAWING PSID-1-99.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

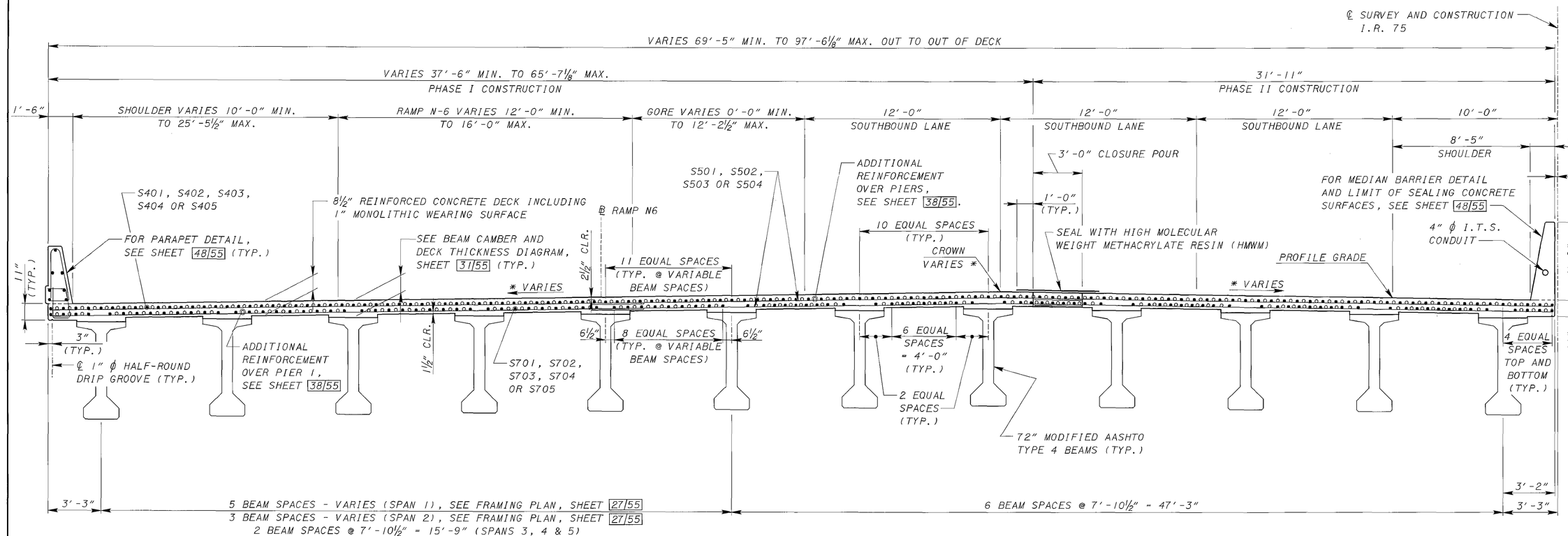
| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | MLR | NFF | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

SLAB PLAN
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

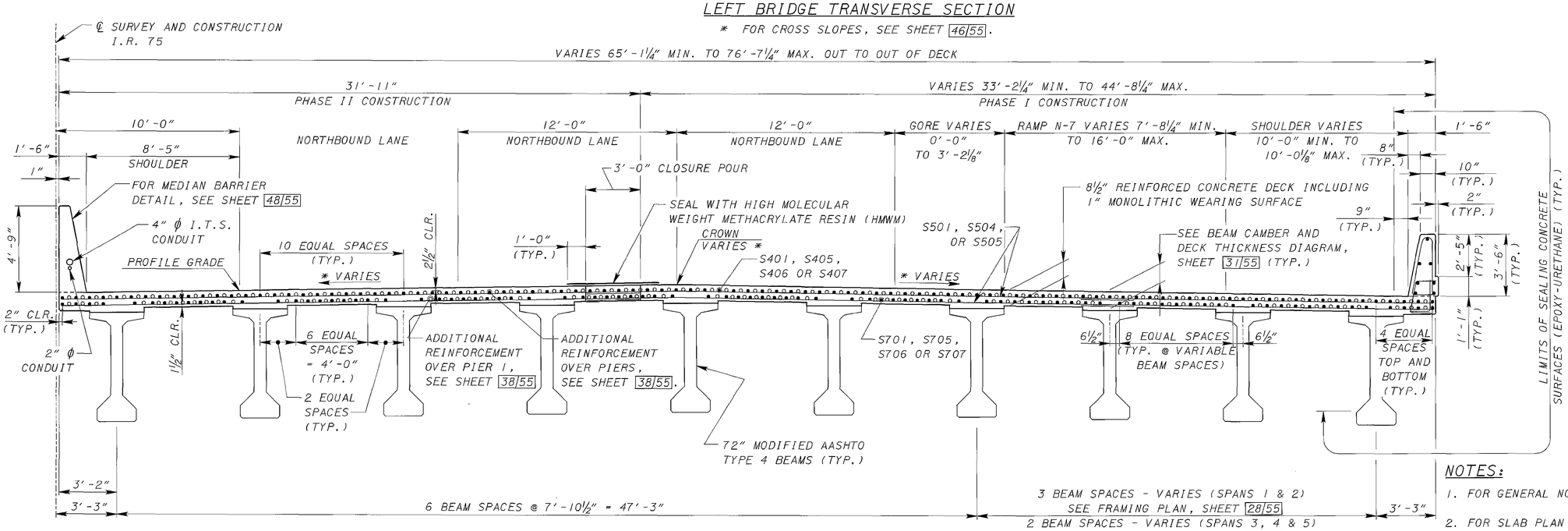
38/55

273/314




## LEFT BRIDGE TRANSVERSE SECTION

* FOR CROSS SLOPES, SEE SHEET 46/55.




## RIGHT BRIDGE TRANSVERSE SECTION

* FOR CROSS SLOPES, SEE SHEET 46/55.

### LEGEND:

* - SEE SHEET 46/55

### NOTES:

1. FOR GENERAL NOTES, SEE SHEET 3/55.
2. FOR SLAB PLAN, SEE SHEET 38/55.
3. COST OF THE 4" ϕ I.T.S. CONDUITS AND 2" ϕ CONDUIT SHALL BE INCLUDED WITH ITEM 898, QC/QA CONCRETE, CLASS QSQC, SUPERSTRUCTURE (PARAPET)

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 2900
CLEVELAND, OHIO 44113-1920

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | CAG | NFF | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

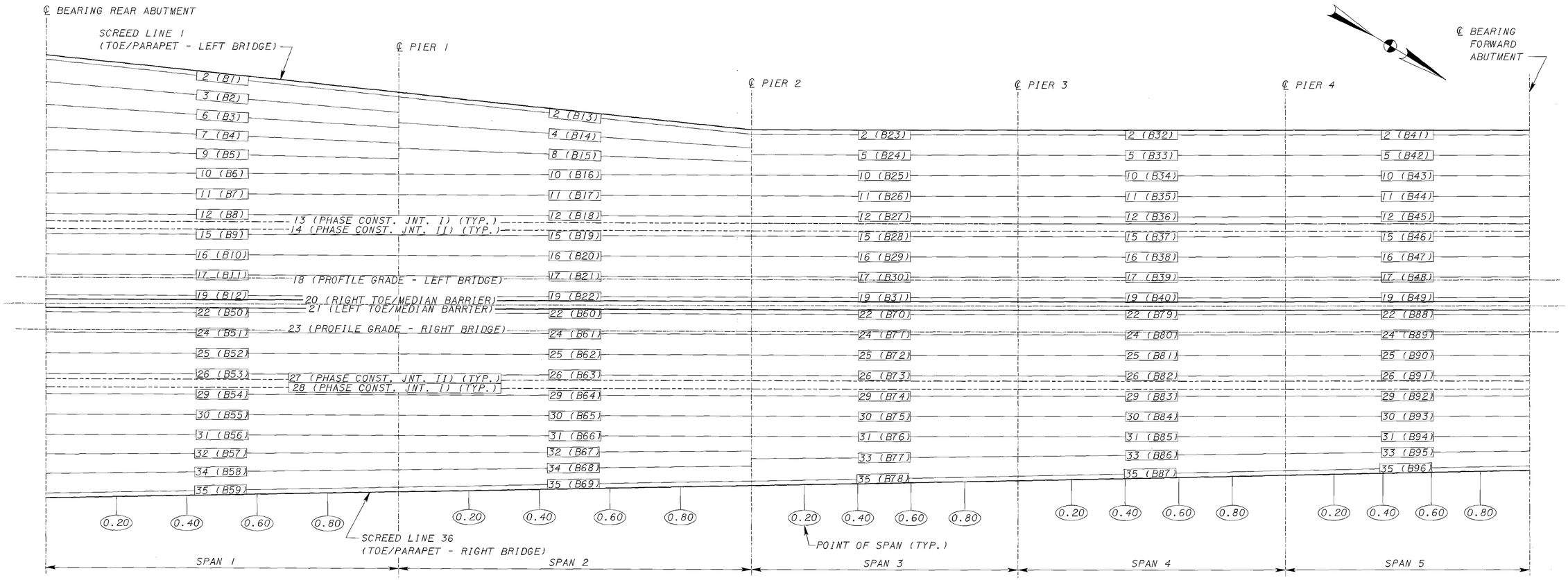
TRANSVERSE SECTION
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

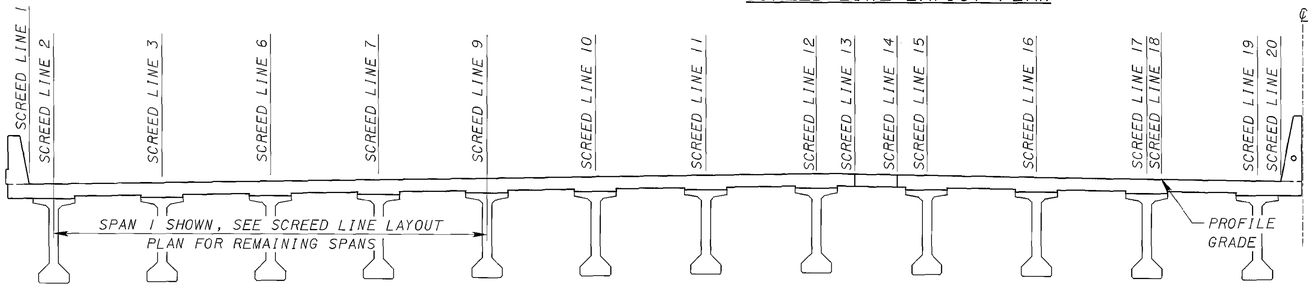
39/55

274/314

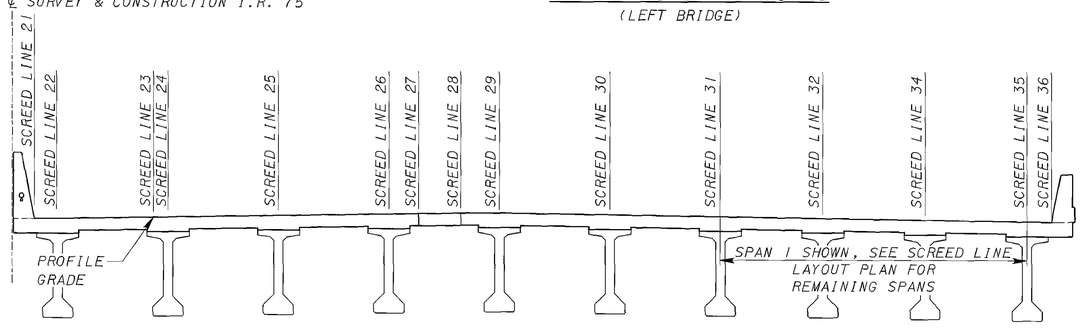
Plotted By: ecmack Date: 7/27/2007 Time: 3:42:38 PM
Filename: g:\co04\0066\bridge\concrete.dir\cadd\23828ts01.dgn




## SCREED LINE LAYOUT PLAN




## SCREED LINE LOCATIONS
(LEFT BRIDGE)




## SCREED LINE LOCATIONS
(RIGHT BRIDGE)

### NOTES:

SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT. ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1800
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | CAG | NFF | 05/27/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 570871O | |

SCREED ELEVATIONS
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828



Plotted By: ecmack Date: 7/27/2007 Time: 3:42:29 PM
Filename: g:\co04\0066\bridge\concrete.alt\cadd\23828sdl3.dgn

## SCREED ELEVATIONS - LEFT BRIDGE SPANS 1 AND 2

| LOCATION | | ℄ BEARING REAR ABUT. | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 1 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 455+77.61 | 456+04.81 | 456+32.01 | 456+45.61 | 456+59.21 | 456+86.41 | 457+13.61 | 457+40.81 | 457+68.01 | 457+81.61 | 457+95.21 | 458+22.41 | 458+49.61 |
| LINE 1 TOE OF PARAPET (LEFT) | FINAL DECK ELEVATION | 764.89 | 765.55 | 766.26 | 766.64 | 767.03 | 767.87 | 768.91 | 769.84 | 770.72 | 771.11 | 771.47 | 771.87 | 772.11 |
| | SCREED ELEVATION | 764.89 | 765.66 | 766.43 | 766.82 | 767.20 | 767.98 | 768.91 | 769.94 | 770.89 | 771.28 | 771.64 | 771.97 | 772.11 |
| LINE 2 | FINAL DECK ELEVATION | 765.01 | 765.67 | 766.38 | 766.75 | 767.14 | 767.98 | 769.00 | 769.91 | 770.77 | 771.15 | 771.50 | 771.89 | 772.14 |
| | SCREED ELEVATION | 765.01 | 765.78 | 766.55 | 766.93 | 767.31 | 768.09 | 769.00 | 770.01 | 770.94 | 771.32 | 771.67 | 771.99 | 772.14 |
| LINE 3 | FINAL DECK ELEVATION | 765.58 | 766.19 | 766.86 | 767.21 | 767.58 | 767.38 | 769.30 | - | - | - | - | - | - |
| | SCREED ELEVATION | 765.58 | 766.30 | 767.03 | 767.39 | 767.75 | 767.49 | 769.30 | - | - | - | - | - | - |
| LINE 4 | FINAL DECK ELEVATION | - | - | - | - | - | - | 769.50 | 770.28 | 771.01 | 771.34 | 771.63 | 771.99 | 772.22 |
| | SCREED ELEVATION | - | - | - | - | - | - | 769.50 | 770.38 | 771.18 | 771.51 | 771.80 | 772.09 | 772.22 |
| LINE 5 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | 772.26 |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | 772.26 |
| LINE 6 | FINAL DECK ELEVATION | 766.14 | 766.71 | 767.34 | 767.68 | 768.02 | 768.76 | 769.60 | - | - | - | - | - | - |
| | SCREED ELEVATION | 766.14 | 766.82 | 767.51 | 767.86 | 768.19 | 768.87 | 769.60 | - | - | - | - | - | - |
| LINE 7 | FINAL DECK ELEVATION | 766.70 | 767.23 | 767.82 | 768.14 | 768.46 | 769.15 | 769.90 | - | - | - | - | - | - |
| | SCREED ELEVATION | 766.70 | 767.34 | 767.99 | 768.32 | 768.63 | 769.26 | 769.90 | - | - | - | - | - | - |
| LINE 8 | FINAL DECK ELEVATION | - | - | - | - | - | - | 770.00 | 770.64 | 771.25 | 771.52 | 771.76 | 772.09 | 772.30 |
| | SCREED ELEVATION | - | - | - | - | - | - | 770.00 | 770.74 | 771.42 | 771.69 | 771.93 | 772.19 | 772.30 |
| LINE 9 | FINAL DECK ELEVATION | 767.27 | 767.76 | 768.30 | 768.60 | 768.91 | 769.54 | 770.20 | - | - | - | - | - | - |
| | SCREED ELEVATION | 767.27 | 767.87 | 768.47 | 768.78 | 769.08 | 769.65 | 770.20 | - | - | - | - | - | - |
| LINE 10 | FINAL DECK ELEVATION | 767.58 | 768.21 | 768.79 | 769.06 | 769.35 | 769.92 | 770.49 | 771.01 | 771.49 | 771.70 | 771.89 | 772.19 | 772.39 |
| | SCREED ELEVATION | 767.58 | 768.32 | 768.96 | 769.24 | 769.52 | 770.03 | 770.49 | 771.11 | 771.66 | 771.87 | 772.06 | 772.29 | 772.39 |
| LINE 11 | FINAL DECK ELEVATION | 767.82 | 768.51 | 769.14 | 769.44 | 769.73 | 770.27 | 770.79 | 771.26 | 771.68 | 771.86 | 772.02 | 772.32 | 772.51 |
| | SCREED ELEVATION | 767.82 | 768.62 | 769.31 | 769.62 | 769.90 | 770.38 | 770.79 | 771.36 | 771.85 | 772.03 | 772.19 | 772.42 | 772.51 |
| LINE 12 | FINAL DECK ELEVATION | 768.04 | 768.73 | 769.36 | 769.67 | 769.95 | 770.48 | 770.97 | 771.42 | 771.81 | 771.99 | 772.15 | 772.44 | 772.64 |
| | SCREED ELEVATION | 768.04 | 768.84 | 769.53 | 769.85 | 770.12 | 770.59 | 770.97 | 771.52 | 771.98 | 772.16 | 772.32 | 772.54 | 772.64 |
| LINE 13 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 768.10 | 768.77 | 769.40 | 769.70 | 769.98 | 770.51 | 770.99 | 771.42 | 771.81 | 771.98 | 772.14 | 772.43 | 772.62 |
| | SCREED ELEVATION | 768.10 | 768.88 | 769.57 | 769.88 | 770.15 | 770.62 | 770.99 | 771.52 | 771.98 | 772.15 | 772.31 | 772.53 | 772.62 |
| LINE 14 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 768.14 | 768.81 | 769.43 | 769.72 | 770.00 | 770.52 | 770.99 | 771.41 | 771.78 | 771.95 | 772.11 | 772.38 | 772.57 |
| | SCREED ELEVATION | 768.14 | 768.92 | 769.60 | 769.90 | 770.17 | 770.63 | 770.99 | 771.51 | 771.95 | 772.12 | 772.28 | 772.48 | 772.57 |
| LINE 15 | FINAL DECK ELEVATION | 768.18 | 768.84 | 769.45 | 769.73 | 770.01 | 770.52 | 770.99 | 771.40 | 771.77 | 771.93 | 772.08 | 772.35 | 772.54 |
| | SCREED ELEVATION | 768.18 | 768.95 | 769.62 | 769.91 | 770.18 | 770.63 | 770.99 | 771.50 | 771.94 | 772.10 | 772.25 | 772.45 | 772.54 |
| LINE 16 | FINAL DECK ELEVATION | 768.30 | 768.94 | 769.52 | 769.79 | 770.06 | 770.54 | 770.98 | 771.37 | 771.70 | 771.86 | 772.00 | 772.24 | 772.41 |
| | SCREED ELEVATION | 768.30 | 769.05 | 769.69 | 769.97 | 770.23 | 770.65 | 770.98 | 771.47 | 771.87 | 772.03 | 772.17 | 772.34 | 772.41 |
| LINE 17 | FINAL DECK ELEVATION | 768.43 | 769.04 | 769.59 | 769.85 | 770.10 | 770.56 | 770.97 | 771.33 | 771.64 | 771.78 | 771.91 | 772.12 | 772.29 |
| | SCREED ELEVATION | 768.43 | 769.15 | 769.76 | 770.03 | 770.27 | 770.67 | 770.97 | 771.43 | 771.81 | 771.95 | 772.08 | 772.22 | 772.29 |
| LINE 18 PROFILE GRADE (SOUTHBOUND) | FINAL DECK ELEVATION | 768.45 | 769.05 | 769.60 | 769.86 | 770.11 | 770.56 | 770.97 | 771.33 | 771.64 | 771.77 | 771.89 | 772.11 | 772.27 |
| | SCREED ELEVATION | 768.45 | 769.16 | 769.77 | 770.04 | 770.28 | 770.67 | 770.97 | 771.43 | 771.81 | 771.94 | 772.06 | 772.21 | 772.27 |
| LINE 19 | FINAL DECK ELEVATION | 768.34 | 768.94 | 769.50 | 769.75 | 770.00 | 770.46 | 770.86 | 771.22 | 771.53 | 771.66 | 771.79 | 772.00 | 772.16 |
| | SCREED ELEVATION | 768.34 | 769.05 | 769.67 | 769.93 | 770.17 | 770.57 | 770.86 | 771.32 | 771.70 | 771.83 | 771.96 | 772.10 | 772.16 |
| LINE 20 TOE OF MEDIAN BARRIER (RIGHT) | FINAL DECK ELEVATION | 768.31 | 768.92 | 769.47 | 769.73 | 769.97 | 770.43 | 770.83 | 771.19 | 771.50 | 771.63 | 771.76 | 771.97 | 772.13 |
| | SCREED ELEVATION | 768.31 | 769.03 | 769.64 | 769.91 | 770.14 | 770.54 | 770.83 | 771.29 | 771.67 | 771.80 | 771.93 | 772.07 | 772.13 |

**NOTES:**

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 3, 4 AND 5, SEE SHEETS 42/55 AND 43/55.
3. FOR TABLE OF ANTICIPATED DEAD LOAD DEFLECTIONS, SEE SHEET 43/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE: SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 57087.10 | |

SCREED ELEVATIONS - LEFT BRIDGE SPANS 1 AND 2
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

41/55

276/314

Plotted By: eamack Date: 7/27/2007 Time: 3:42:29 PM
Filename: g:\co04\0066\bridge\concrete_dif\cadd\23828sd14.dgn

## SCREED ELEVATIONS - LEFT BRIDGE SPANS 3 AND 4

| LOCATION | | ℄ PIER 2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 3 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 458+49.61 | 458+70.21 | 458+90.81 | 459+01.11 | 459+11.41 | 459+32.01 | 459+52.61 | 459+73.21 | 459+93.81 | 460+04.11 | 460+14.41 | 460+35.01 | 460+55.61 |
| LINE 1 TOE OF PARAPET (LEFT) | FINAL DECK ELEVATION | 772.11 | 772.20 | 772.26 | 772.28 | 772.29 | 772.30 | 772.28 | 772.23 | 772.15 | 772.10 | 772.04 | 771.91 | 771.74 |
| | SCREED ELEVATION | 772.11 | 772.23 | 772.31 | 772.34 | 772.34 | 772.33 | 772.28 | 772.26 | 772.20 | 772.16 | 772.09 | 771.94 | 771.74 |
| LINE 2 | FINAL DECK ELEVATION | 772.14 | 772.23 | 772.29 | 772.31 | 772.32 | 772.33 | 772.30 | 772.25 | 772.18 | 772.13 | 772.07 | 771.94 | 771.77 |
| | SCREED ELEVATION | 772.14 | 772.26 | 772.34 | 772.37 | 772.37 | 772.36 | 772.30 | 772.28 | 772.23 | 772.19 | 772.12 | 771.97 | 771.77 |
| LINE 3 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 4 | FINAL DECK ELEVATION | 772.22 | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | 772.22 | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 5 | FINAL DECK ELEVATION | 772.26 | 772.35 | 772.41 | 772.43 | 772.45 | 772.45 | 772.43 | 772.38 | 772.30 | 772.25 | 772.20 | 772.06 | 771.90 |
| | SCREED ELEVATION | 772.26 | 772.38 | 772.46 | 772.49 | 772.50 | 772.48 | 772.43 | 772.41 | 772.35 | 772.31 | 772.25 | 772.09 | 771.90 |
| LINE 6 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 7 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 8 | FINAL DECK ELEVATION | 772.30 | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | 772.30 | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 9 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 10 | FINAL DECK ELEVATION | 772.39 | 772.48 | 772.54 | 772.56 | 772.57 | 772.58 | 772.66 | 772.51 | 772.43 | 772.38 | 772.32 | 772.19 | 772.02 |
| | SCREED ELEVATION | 772.39 | 772.51 | 772.59 | 772.62 | 772.62 | 772.61 | 772.66 | 772.54 | 772.48 | 772.44 | 772.37 | 772.22 | 772.02 |
| LINE 11 | FINAL DECK ELEVATION | 772.51 | 772.60 | 772.67 | 772.69 | 772.70 | 772.70 | 772.68 | 772.63 | 772.55 | 772.50 | 772.45 | 772.31 | 772.15 |
| | SCREED ELEVATION | 772.51 | 772.63 | 772.72 | 772.75 | 772.75 | 772.73 | 772.68 | 772.66 | 772.60 | 772.56 | 772.50 | 772.34 | 772.15 |
| LINE 12 | FINAL DECK ELEVATION | 772.64 | 772.73 | 772.79 | 772.81 | 772.82 | 772.83 | 772.81 | 772.76 | 772.68 | 772.63 | 772.57 | 772.44 | 772.28 |
| | SCREED ELEVATION | 772.64 | 772.76 | 772.84 | 772.87 | 772.87 | 772.86 | 772.81 | 772.79 | 772.73 | 772.69 | 772.62 | 772.47 | 772.28 |
| LINE 13 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 772.62 | 772.71 | 772.77 | 772.79 | 772.80 | 772.81 | 772.79 | 772.74 | 772.66 | 772.61 | 772.55 | 772.42 | 772.26 |
| | SCREED ELEVATION | 772.62 | 772.74 | 772.82 | 772.85 | 772.85 | 772.84 | 772.79 | 772.77 | 772.71 | 772.67 | 772.60 | 772.45 | 772.26 |
| LINE 14 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 772.57 | 772.66 | 772.72 | 772.74 | 772.76 | 772.76 | 772.74 | 772.69 | 772.61 | 772.56 | 772.51 | 772.37 | 772.21 |
| | SCREED ELEVATION | 772.57 | 772.69 | 772.77 | 772.80 | 772.81 | 772.79 | 772.74 | 772.72 | 772.66 | 772.62 | 772.56 | 772.40 | 772.21 |
| LINE 15 | FINAL DECK ELEVATION | 772.54 | 772.63 | 772.69 | 772.71 | 772.72 | 772.73 | 772.71 | 772.66 | 772.58 | 772.53 | 772.47 | 772.34 | 772.17 |
| | SCREED ELEVATION | 772.54 | 772.66 | 772.74 | 772.77 | 772.77 | 772.76 | 772.71 | 772.69 | 772.63 | 772.59 | 772.52 | 772.37 | 772.17 |
| LINE 16 | FINAL DECK ELEVATION | 772.41 | 772.50 | 772.56 | 772.58 | 772.60 | 772.60 | 772.58 | 772.53 | 772.45 | 772.40 | 772.35 | 772.21 | 772.05 |
| | SCREED ELEVATION | 772.41 | 772.53 | 772.61 | 772.64 | 772.65 | 772.63 | 772.58 | 772.56 | 772.50 | 772.46 | 772.40 | 772.24 | 772.05 |
| LINE 17 | FINAL DECK ELEVATION | 772.29 | 772.38 | 772.44 | 772.46 | 772.47 | 772.48 | 772.45 | 772.40 | 772.33 | 772.28 | 772.22 | 772.09 | 771.92 |
| | SCREED ELEVATION | 772.29 | 772.41 | 772.49 | 772.52 | 772.52 | 772.51 | 772.45 | 772.43 | 772.38 | 772.34 | 772.27 | 772.12 | 771.92 |
| LINE 18 PROFILE GRADE (SOUTHBOUND) | FINAL DECK ELEVATION | 772.27 | 772.36 | 772.42 | 772.44 | 772.45 | 772.46 | 772.44 | 772.39 | 772.31 | 772.26 | 772.20 | 772.07 | 771.90 |
| | SCREED ELEVATION | 772.27 | 772.39 | 772.47 | 772.50 | 772.50 | 772.49 | 772.44 | 772.42 | 772.36 | 772.32 | 772.25 | 772.10 | 771.90 |
| LINE 19 | FINAL DECK ELEVATION | 772.16 | 772.25 | 772.31 | 772.33 | 772.34 | 772.35 | 772.33 | 772.28 | 772.20 | 772.15 | 772.09 | 771.96 | 771.80 |
| | SCREED ELEVATION | 772.16 | 772.28 | 772.36 | 772.39 | 772.39 | 772.38 | 772.33 | 772.31 | 772.25 | 772.21 | 772.14 | 771.99 | 771.80 |
| LINE 20 TOE OF MEDIAN BARRIER (RIGHT) | FINAL DECK ELEVATION | 772.13 | 772.22 | 772.28 | 772.31 | 772.32 | 772.32 | 772.30 | 772.25 | 772.17 | 772.13 | 772.07 | 771.93 | 771.77 |
| | SCREED ELEVATION | 772.13 | 772.25 | 772.33 | 772.37 | 772.37 | 772.35 | 772.30 | 772.28 | 772.22 | 772.19 | 772.12 | 771.96 | 771.77 |

**NOTES:**

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 1, 2 AND 5, SEE SHEETS 41/55 AND 43/55.
3. FOR TABLE OF ANTICIPATED DEAD LOAD DEFLECTIONS, SEE SHEET 43/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE - SUITE 2000
CLEVELAND, OHIO 44113-2001

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5706710 | |

SCREED ELEVATIONS - LEFT BRIDGE SPANS 3 AND 4
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

42/55

277/314

Plotted By: eomack Date: 7/27/2007 Time: 3:42:30 PM
Filename: g:\co04\0066\bridge\concrete_dt\cadd\23828sdl5.dgn

## SCREED ELEVATIONS - LEFT BRIDGE SPAN 5

| LOCATION | | ℄ PIER 4 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ BEARING FWD. ABUT. |
|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 460+55.61 | 460+74.41 | 460+93.21 | 461+02.61 | 461+12.01 | 461+30.81 | 461+49.61 |
| LINE 1 TOE OF PARAPET (LEFT) | FINAL DECK ELEVATION | 771.74 | 771.57 | 771.38 | 771.27 | 771.16 | 770.91 | 770.65 |
| | SCREED ELEVATION | 771.74 | 771.59 | 771.42 | 771.31 | 771.20 | 770.93 | 770.65 |
| LINE 2 | FINAL DECK ELEVATION | 771.77 | 771.60 | 771.40 | 771.29 | 771.18 | 770.94 | 770.68 |
| | SCREED ELEVATION | 771.77 | 771.62 | 771.44 | 771.33 | 771.22 | 770.96 | 770.68 |
| LINE 3 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 4 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 5 | FINAL DECK ELEVATION | 771.90 | 771.73 | 771.53 | 771.42 | 771.31 | 771.07 | 770.80 |
| | SCREED ELEVATION | 771.90 | 771.75 | 771.57 | 771.46 | 771.35 | 771.09 | 770.80 |
| LINE 6 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 7 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 8 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 9 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 10 | FINAL DECK ELEVATION | 772.02 | 771.85 | 771.66 | 771.55 | 771.44 | 771.19 | 770.93 |
| | SCREED ELEVATION | 772.02 | 771.87 | 771.70 | 771.59 | 771.48 | 771.21 | 770.93 |
| LINE 11 | FINAL DECK ELEVATION | 772.15 | 771.98 | 771.78 | 771.67 | 771.56 | 771.32 | 771.05 |
| | SCREED ELEVATION | 772.15 | 772.00 | 771.82 | 771.71 | 771.60 | 771.34 | 771.05 |
| LINE 12 | FINAL DECK ELEVATION | 772.28 | 772.10 | 771.91 | 771.80 | 771.69 | 771.45 | 771.18 |
| | SCREED ELEVATION | 772.28 | 772.12 | 771.95 | 771.84 | 771.73 | 771.47 | 771.18 |
| LINE 13 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 772.26 | 772.08 | 771.89 | 771.78 | 771.67 | 771.43 | 771.16 |
| | SCREED ELEVATION | 772.26 | 772.10 | 771.93 | 771.82 | 771.71 | 771.45 | 771.16 |
| LINE 14 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 772.21 | 772.04 | 771.84 | 771.73 | 771.62 | 771.38 | 771.11 |
| | SCREED ELEVATION | 772.21 | 772.06 | 771.88 | 771.77 | 771.66 | 771.40 | 771.11 |
| LINE 15 | FINAL DECK ELEVATION | 772.17 | 772.00 | 771.81 | 771.70 | 771.59 | 771.34 | 771.08 |
| | SCREED ELEVATION | 772.17 | 772.02 | 771.85 | 771.74 | 771.63 | 771.36 | 771.08 |
| LINE 16 | FINAL DECK ELEVATION | 772.05 | 771.88 | 771.68 | 771.57 | 771.46 | 771.22 | 770.95 |
| | SCREED ELEVATION | 772.05 | 771.90 | 771.72 | 771.61 | 771.50 | 771.24 | 770.95 |
| LINE 17 | FINAL DECK ELEVATION | 771.92 | 771.75 | 771.55 | 771.45 | 771.33 | 771.09 | 770.83 |
| | SCREED ELEVATION | 771.92 | 771.77 | 771.59 | 771.49 | 771.37 | 771.11 | 770.83 |
| LINE 18 PROFILE GRADE (SOUTHBOUND) | FINAL DECK ELEVATION | 771.90 | 771.73 | 771.54 | 771.43 | 771.32 | 771.07 | 770.81 |
| | SCREED ELEVATION | 771.90 | 771.75 | 771.58 | 771.47 | 771.36 | 771.09 | 770.81 |
| LINE 19 | FINAL DECK ELEVATION | 771.80 | 771.62 | 771.43 | 771.32 | 771.21 | 770.97 | 770.70 |
| | SCREED ELEVATION | 771.80 | 771.64 | 771.47 | 771.36 | 771.25 | 770.99 | 770.70 |
| LINE 20 TOE OF MEDIAN BARRIER (RIGHT) | FINAL DECK ELEVATION | 771.77 | 771.60 | 771.40 | 771.29 | 771.18 | 770.94 | 770.67 |
| | SCREED ELEVATION | 771.77 | 771.62 | 771.44 | 771.33 | 771.22 | 770.96 | 770.67 |

## TABLE OF ANTICIPATED DEAD LOAD DEFLECTION
(INCHES)

| | 0.0 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 |
|---|---|---|---|---|---|---|---|
| SPAN 1 (℄ BEARING REAR ABUT. TO ℄ PIER 1) | 0.000 | 1.268 | 2.062 | 2.167 | 2.062 | 1.268 | 0.000 |
| SPAN 2 (℄ PIER 1 TO ℄ PIER 2) | 0.000 | 1.221 | 1.989 | 2.091 | 1.989 | 1.221 | 0.000 |
| SPAN 3 (℄ PIER 2 TO ℄ PIER 3) | 0.000 | 0.390 | 0.639 | 0.672 | 0.639 | 0.390 | 0.000 |
| SPAN 4 (℄ PIER 3 TO ℄ PIER 4) | 0.000 | 0.390 | 0.639 | 0.672 | 0.639 | 0.390 | 0.000 |
| SPAN 5 (℄ PIER 4 TO ℄ BEARING FWD. ABUT.) | 0.000 | 0.282 | 0.463 | 0.487 | 0.463 | 0.282 | 0.000 |

**NOTES:**

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 1, 2, 3 AND 4, SEE SHEETS 41/55 AND 42/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

SCREED ELEVATIONS - LEFT BRIDGE SPAN 5
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

43/55

278/314

## SCREED ELEVATIONS - RIGHT BRIDGE SPANS 1 AND 2

| LOCATION | | ℄ BEARING REAR ABUT. | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 1 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 455+77.61 | 456+04.81 | 456+32.01 | 456+45.61 | 456+59.21 | 456+86.41 | 457+13.61 | 457+40.81 | 457+68.01 | 457+81.61 | 457+95.21 | 458+22.41 | 458+49.61 |
| LINE 21 TOE OF MEDIAN BARRIER (LEFT) | FINAL DECK ELEVATION | 768.31 | 768.92 | 769.47 | 769.73 | 769.97 | 770.43 | 770.83 | 771.19 | 771.50 | 771.63 | 771.76 | 771.97 | 772.13 |
| | SCREED ELEVATION | 768.31 | 769.03 | 769.64 | 769.91 | 770.14 | 770.54 | 770.83 | 771.29 | 771.67 | 771.80 | 771.93 | 772.07 | 772.13 |
| LINE 22 | FINAL DECK ELEVATION | 768.34 | 768.94 | 769.50 | 769.75 | 770.00 | 770.46 | 770.86 | 771.22 | 771.53 | 771.66 | 771.79 | 772.00 | 772.16 |
| | SCREED ELEVATION | 768.34 | 769.05 | 769.67 | 769.93 | 770.17 | 770.57 | 770.86 | 771.32 | 771.70 | 771.83 | 771.96 | 772.10 | 772.16 |
| LINE 23 PROFILE GRADE (NORTHBOUND) | FINAL DECK ELEVATION | 768.45 | 769.05 | 769.60 | 769.86 | 770.11 | 770.56 | 770.97 | 771.33 | 771.64 | 771.77 | 771.89 | 772.11 | 772.27 |
| | SCREED ELEVATION | 768.45 | 769.16 | 769.77 | 770.04 | 770.28 | 770.67 | 770.97 | 771.43 | 771.81 | 771.94 | 772.06 | 772.21 | 772.27 |
| LINE 24 | FINAL DECK ELEVATION | 768.47 | 769.07 | 769.62 | 769.88 | 770.13 | 770.58 | 770.99 | 771.34 | 771.65 | 771.79 | 771.91 | 772.12 | 772.29 |
| | SCREED ELEVATION | 768.47 | 769.18 | 769.79 | 770.06 | 770.30 | 770.69 | 770.99 | 771.44 | 771.82 | 771.96 | 772.08 | 772.22 | 772.29 |
| LINE 25 | FINAL DECK ELEVATION | 768.59 | 769.20 | 769.75 | 770.01 | 770.25 | 770.71 | 771.11 | 771.47 | 771.78 | 771.92 | 772.04 | 772.25 | 772.41 |
| | SCREED ELEVATION | 768.59 | 769.31 | 769.92 | 770.19 | 770.42 | 770.82 | 771.11 | 771.57 | 771.95 | 772.09 | 772.21 | 772.35 | 772.41 |
| LINE 26 | FINAL DECK ELEVATION | 768.72 | 769.32 | 769.87 | 770.13 | 770.38 | 770.83 | 771.24 | 771.60 | 771.91 | 772.04 | 772.16 | 772.38 | 772.54 |
| | SCREED ELEVATION | 768.72 | 769.43 | 770.04 | 770.31 | 770.55 | 770.94 | 771.24 | 771.70 | 772.08 | 772.21 | 772.33 | 772.48 | 772.54 |
| LINE 27 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 768.76 | 769.36 | 769.91 | 770.17 | 770.41 | 770.87 | 771.27 | 771.63 | 771.94 | 772.08 | 772.20 | 772.41 | 772.57 |
| | SCREED ELEVATION | 768.76 | 769.47 | 770.08 | 770.35 | 770.58 | 770.98 | 771.27 | 771.73 | 772.11 | 772.25 | 772.37 | 772.51 | 772.57 |
| LINE 28 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 768.80 | 769.40 | 769.96 | 770.21 | 770.46 | 770.92 | 771.32 | 771.68 | 771.99 | 772.13 | 772.25 | 772.46 | 772.62 |
| | SCREED ELEVATION | 768.80 | 769.51 | 770.13 | 770.39 | 770.63 | 771.03 | 771.32 | 771.78 | 772.16 | 772.30 | 772.42 | 772.56 | 772.62 |
| LINE 29 | FINAL DECK ELEVATION | 768.85 | 769.44 | 770.00 | 770.25 | 770.50 | 770.95 | 771.35 | 771.71 | 772.01 | 772.15 | 772.27 | 772.48 | 772.64 |
| | SCREED ELEVATION | 768.85 | 769.55 | 770.17 | 770.43 | 770.67 | 771.06 | 771.35 | 771.81 | 772.18 | 772.32 | 772.44 | 772.58 | 772.64 |
| LINE 30 | FINAL DECK ELEVATION | 768.97 | 769.54 | 770.07 | 770.31 | 770.54 | 770.97 | 771.35 | 771.67 | 771.95 | 772.07 | 772.18 | 772.36 | 772.51 |
| | SCREED ELEVATION | 768.97 | 769.65 | 770.24 | 770.49 | 770.71 | 771.08 | 771.35 | 771.77 | 772.12 | 772.24 | 772.35 | 772.46 | 772.51 |
| LINE 31 | FINAL DECK ELEVATION | 768.96 | 769.52 | 770.03 | 770.27 | 770.49 | 770.91 | 771.27 | 771.59 | 771.85 | 771.97 | 772.07 | 772.24 | 772.39 |
| | SCREED ELEVATION | 768.96 | 769.63 | 770.20 | 770.45 | 770.66 | 771.02 | 771.27 | 771.69 | 772.02 | 772.14 | 772.24 | 772.34 | 772.39 |
| LINE 32 | FINAL DECK ELEVATION | 768.84 | 769.40 | 769.91 | 770.15 | 770.38 | 770.79 | 771.16 | 771.48 | 771.75 | 771.87 | 771.97 | 772.15 | 772.29 |
| | SCREED ELEVATION | 768.84 | 769.51 | 770.08 | 770.33 | 770.55 | 770.90 | 771.16 | 771.58 | 771.92 | 772.04 | 772.14 | 772.25 | 772.29 |
| LINE 33 | FINAL DECK ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | 772.25 |
| | SCREED ELEVATION | - | - | - | - | - | - | - | - | - | - | - | - | 772.25 |
| LINE 34 | FINAL DECK ELEVATION | 768.71 | 769.28 | 769.79 | 770.04 | 770.26 | 770.68 | 771.06 | 771.38 | 771.65 | 771.77 | 771.88 | 772.05 | 772.20 |
| | SCREED ELEVATION | 768.71 | 769.39 | 769.96 | 770.22 | 770.43 | 770.79 | 771.06 | 771.48 | 771.82 | 771.94 | 772.05 | 772.15 | 772.20 |
| LINE 35 | FINAL DECK ELEVATION | 768.59 | 769.16 | 769.68 | 769.92 | 770.15 | 770.57 | 770.95 | 771.27 | 771.55 | 771.67 | 771.78 | 771.95 | 772.11 |
| | SCREED ELEVATION | 768.59 | 769.27 | 769.85 | 770.10 | 770.32 | 770.68 | 770.95 | 771.37 | 771.72 | 771.84 | 771.95 | 772.05 | 772.11 |
| LINE 36 TOE OF PARAPET (RIGHT) | FINAL DECK ELEVATION | 768.56 | 769.13 | 769.65 | 769.89 | 770.12 | 770.55 | 770.92 | 771.24 | 771.52 | 771.64 | 771.75 | 771.93 | 772.08 |
| | SCREED ELEVATION | 768.56 | 769.24 | 769.82 | 770.07 | 770.29 | 770.66 | 770.92 | 771.34 | 771.69 | 771.81 | 771.92 | 772.03 | 772.08 |

**NOTES:**

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 3, 4 AND 5, SEE SHEETS 45/55 AND 46/55.
3. FOR TABLE OF ANTICIPATED DEAD LOAD DEFLECTIONS, SEE SHEET 43/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE - SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

SCREED ELEVATIONS - RIGHT BRIDGE SPANS 1 AND 2
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

44/55

279/314

## SCREED ELEVATIONS - RIGHT BRIDGE SPANS 3 AND 4

| LOCATION | | ℄ PIER 2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 3 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ PIER 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 458+49.61 | 458+70.21 | 458+90.81 | 459+01.11 | 459+11.41 | 459+32.01 | 459+52.61 | 459+73.21 | 459+93.81 | 460+04.11 | 460+14.41 | 460+35.01 | 460+55.61 |
| LINE 21 TOE OF MEDIAN BARRIER (LEFT) | FINAL DECK ELEVATION | 772.13 | 772.22 | 772.28 | 772.31 | 772.32 | 772.32 | 772.30 | 772.25 | 772.17 | 772.13 | 772.07 | 771.93 | 771.77 |
| | SCREED ELEVATION | 772.13 | 772.25 | 772.33 | 772.37 | 772.37 | 772.35 | 772.30 | 772.28 | 772.22 | 772.19 | 772.12 | 771.96 | 771.77 |
| LINE 22 | FINAL DECK ELEVATION | 772.16 | 772.25 | 772.31 | 772.33 | 772.34 | 772.35 | 772.33 | 772.28 | 772.20 | 772.15 | 772.09 | 771.96 | 771.80 |
| | SCREED ELEVATION | 772.16 | 772.28 | 772.36 | 772.39 | 772.39 | 772.38 | 772.33 | 772.31 | 772.25 | 772.21 | 772.14 | 771.99 | 771.80 |
| LINE 23 PROFILE GRADE (NORTHBOUND) | FINAL DECK ELEVATION | 772.27 | 772.36 | 772.42 | 772.44 | 772.45 | 772.46 | 772.44 | 772.39 | 772.31 | 772.26 | 772.20 | 772.07 | 771.90 |
| | SCREED ELEVATION | 772.27 | 772.39 | 772.47 | 772.50 | 772.50 | 772.49 | 772.44 | 772.42 | 772.36 | 772.32 | 772.25 | 772.10 | 771.90 |
| LINE 24 | FINAL DECK ELEVATION | 772.29 | 772.38 | 772.44 | 772.46 | 772.47 | 772.48 | 772.45 | 772.40 | 772.33 | 772.28 | 772.22 | 772.09 | 771.92 |
| | SCREED ELEVATION | 772.29 | 772.41 | 772.49 | 772.52 | 772.52 | 772.51 | 772.45 | 772.43 | 772.38 | 772.34 | 772.27 | 772.12 | 771.92 |
| LINE 25 | FINAL DECK ELEVATION | 772.41 | 772.50 | 772.56 | 772.58 | 772.60 | 772.60 | 772.58 | 772.53 | 772.45 | 772.40 | 772.35 | 772.21 | 772.05 |
| | SCREED ELEVATION | 772.41 | 772.53 | 772.61 | 772.64 | 772.65 | 772.63 | 772.58 | 772.56 | 772.50 | 772.46 | 772.40 | 772.24 | 772.05 |
| LINE 26 | FINAL DECK ELEVATION | 772.54 | 772.63 | 772.69 | 772.71 | 772.72 | 772.73 | 772.71 | 772.66 | 772.58 | 772.53 | 772.47 | 772.34 | 772.17 |
| | SCREED ELEVATION | 772.54 | 772.66 | 772.74 | 772.77 | 772.77 | 772.76 | 772.71 | 772.69 | 772.63 | 772.59 | 772.52 | 772.37 | 772.17 |
| LINE 27 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 772.57 | 772.66 | 772.72 | 772.74 | 772.76 | 772.76 | 772.74 | 772.69 | 772.61 | 772.56 | 772.51 | 772.37 | 772.21 |
| | SCREED ELEVATION | 772.57 | 772.69 | 772.77 | 772.80 | 772.81 | 772.79 | 772.74 | 772.72 | 772.66 | 772.62 | 772.56 | 772.40 | 772.21 |
| LINE 28 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 772.62 | 772.71 | 772.77 | 772.79 | 772.80 | 772.81 | 772.79 | 772.74 | 772.66 | 772.61 | 772.55 | 772.42 | 772.26 |
| | SCREED ELEVATION | 772.62 | 772.74 | 772.82 | 772.85 | 772.85 | 772.84 | 772.79 | 772.77 | 772.71 | 772.67 | 772.60 | 772.45 | 772.26 |
| LINE 29 | FINAL DECK ELEVATION | 772.64 | 772.73 | 772.79 | 772.81 | 772.82 | 772.83 | 772.81 | 772.76 | 772.68 | 772.63 | 772.57 | 772.44 | 772.28 |
| | SCREED ELEVATION | 772.64 | 772.76 | 772.84 | 772.87 | 772.87 | 772.86 | 772.81 | 772.79 | 772.73 | 772.69 | 772.62 | 772.47 | 772.28 |
| LINE 30 | FINAL DECK ELEVATION | 772.51 | 772.60 | 772.67 | 772.69 | 772.70 | 772.70 | 772.68 | 772.63 | 772.55 | 772.50 | 772.45 | 772.31 | 772.15 |
| | SCREED ELEVATION | 772.51 | 772.63 | 772.72 | 772.75 | 772.75 | 772.73 | 772.68 | 772.66 | 772.60 | 772.56 | 772.50 | 772.34 | 772.15 |
| LINE 31 | FINAL DECK ELEVATION | 772.39 | 772.48 | 772.54 | 772.56 | 772.57 | 772.58 | 772.56 | 772.51 | 772.43 | 772.38 | 772.32 | 772.19 | 772.02 |
| | SCREED ELEVATION | 772.39 | 772.51 | 772.59 | 772.62 | 772.62 | 772.61 | 772.56 | 772.54 | 772.48 | 772.44 | 772.37 | 772.22 | 772.02 |
| LINE 32 | FINAL DECK ELEVATION | 772.29 | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | 772.29 | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 33 | FINAL DECK ELEVATION | 772.25 | 772.34 | 772.41 | 772.43 | 772.44 | 772.45 | 772.43 | 772.39 | 772.31 | 772.26 | 772.21 | 772.08 | 771.92 |
| | SCREED ELEVATION | 772.25 | 772.37 | 772.46 | 772.49 | 772.49 | 772.48 | 772.43 | 772.42 | 772.36 | 772.32 | 772.26 | 772.11 | 771.92 |
| LINE 34 | FINAL DECK ELEVATION | 772.20 | - | - | - | - | - | - | - | - | - | - | - | - |
| | SCREED ELEVATION | 772.20 | - | - | - | - | - | - | - | - | - | - | - | - |
| LINE 35 | FINAL DECK ELEVATION | 772.11 | 772.20 | 772.27 | 772.30 | 772.31 | 772.33 | 772.31 | 772.27 | 772.19 | 772.15 | 772.09 | 771.97 | 771.81 |
| | SCREED ELEVATION | 772.11 | 772.23 | 772.32 | 772.36 | 772.36 | 772.36 | 772.31 | 772.30 | 772.24 | 772.21 | 772.14 | 772.00 | 771.81 |
| LINE 36 TOE OF PARAPET (RIGHT) | FINAL DECK ELEVATION | 772.08 | 772.18 | 772.24 | 772.27 | 772.29 | 772.30 | 772.28 | 772.24 | 772.17 | 772.12 | 772.07 | 771.94 | 771.78 |
| | SCREED ELEVATION | 772.08 | 772.21 | 772.29 | 772.33 | 772.34 | 772.33 | 772.28 | 772.27 | 772.22 | 772.18 | 772.12 | 771.97 | 771.78 |

**NOTES:**

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 1, 2 AND 5, SEE SHEETS 44/55 AND 46/55.
3. FOR TABLE OF ANTICIPATED DEAD LOAD DEFLECTIONS, SEE SHEET 43/55.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

SCREED ELEVATIONS - RIGHT BRIDGE SPANS 3 AND 4
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

45/55

280/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:31 PM
Filename: g:\co04\0066\bridge\concrete.dir\cadd\23828sdl8.dgn

## SCREED ELEVATIONS - RIGHT BRIDGE SPAN 5

| LOCATION | | ℄ PIER 4 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | ℄ BEARING FWD. ABUT. |
|---|---|---|---|---|---|---|---|---|
| SCREED LINE | STATION | 460+55.61 | 460+74.41 | 460+93.21 | 461+02.61 | 461+12.01 | 461+30.81 | 461+49.61 |
| LINE 21 TOE OF MEDIAN BARRIER (LEFT) | FINAL DECK ELEVATION | 771.77 | 771.60 | 771.40 | 771.29 | 771.18 | 770.94 | 770.67 |
| | SCREED ELEVATION | 771.77 | 771.62 | 771.44 | 771.33 | 771.22 | 770.96 | 770.67 |
| LINE 22 | FINAL DECK ELEVATION | 771.80 | 771.62 | 771.43 | 771.32 | 771.21 | 770.97 | 770.70 |
| | SCREED ELEVATION | 771.80 | 771.64 | 771.47 | 771.36 | 771.25 | 770.99 | 770.70 |
| LINE 23 PROFILE GRADE (NORTHBOUND) | FINAL DECK ELEVATION | 771.90 | 771.73 | 771.54 | 771.43 | 771.32 | 771.07 | 770.81 |
| | SCREED ELEVATION | 771.90 | 771.75 | 771.58 | 771.47 | 771.36 | 771.09 | 770.81 |
| LINE 24 | FINAL DECK ELEVATION | 771.92 | 771.75 | 771.55 | 771.45 | 771.33 | 771.09 | 770.83 |
| | SCREED ELEVATION | 771.92 | 771.77 | 771.59 | 771.49 | 771.37 | 771.11 | 770.83 |
| LINE 25 | FINAL DECK ELEVATION | 772.05 | 771.88 | 771.68 | 771.58 | 771.46 | 771.22 | 770.95 |
| | SCREED ELEVATION | 772.05 | 771.90 | 771.72 | 771.62 | 771.50 | 771.24 | 770.95 |
| LINE 26 | FINAL DECK ELEVATION | 772.17 | 772.00 | 771.81 | 771.70 | 771.59 | 771.34 | 771.08 |
| | SCREED ELEVATION | 772.17 | 772.02 | 771.85 | 771.74 | 771.63 | 771.36 | 771.08 |
| LINE 27 (PHASE CONST. JOINT II) | FINAL DECK ELEVATION | 772.21 | 772.04 | 771.84 | 771.73 | 771.62 | 771.38 | 771.11 |
| | SCREED ELEVATION | 772.21 | 772.06 | 771.88 | 771.77 | 771.66 | 771.40 | 771.11 |
| LINE 28 (PHASE CONST. JOINT I) | FINAL DECK ELEVATION | 772.26 | 772.08 | 771.89 | 771.78 | 771.67 | 771.43 | 771.16 |
| | SCREED ELEVATION | 772.26 | 772.10 | 771.93 | 771.82 | 771.71 | 771.45 | 771.16 |
| LINE 29 | FINAL DECK ELEVATION | 772.28 | 772.10 | 771.91 | 771.80 | 771.69 | 771.45 | 771.18 |
| | SCREED ELEVATION | 772.28 | 772.12 | 771.95 | 771.84 | 771.73 | 771.47 | 771.18 |
| LINE 30 | FINAL DECK ELEVATION | 772.15 | 771.98 | 771.78 | 771.67 | 771.56 | 771.32 | 771.05 |
| | SCREED ELEVATION | 772.15 | 772.00 | 771.82 | 771.71 | 771.60 | 771.34 | 771.05 |
| LINE 31 | FINAL DECK ELEVATION | 772.02 | 771.85 | 771.66 | 771.55 | 771.44 | 771.19 | 770.93 |
| | SCREED ELEVATION | 772.02 | 771.87 | 771.70 | 771.59 | 771.48 | 771.21 | 770.93 |
| LINE 32 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 33 | FINAL DECK ELEVATION | 771.92 | 771.75 | 771.55 | 771.45 | 771.34 | 771.10 | 770.84 |
| | SCREED ELEVATION | 771.92 | 771.77 | 771.59 | 771.49 | 771.38 | 771.12 | 770.84 |
| LINE 34 | FINAL DECK ELEVATION | - | - | - | - | - | - | - |
| | SCREED ELEVATION | - | - | - | - | - | - | - |
| LINE 35 | FINAL DECK ELEVATION | 771.81 | 771.64 | 771.45 | 771.35 | 771.24 | 771.00 | 770.74 |
| | SCREED ELEVATION | 771.81 | 771.66 | 771.49 | 771.39 | 771.28 | 771.02 | 770.74 |
| LINE 36 TOE OF PARAPET (RIGHT) | FINAL DECK ELEVATION | 771.78 | 771.62 | 771.43 | 771.32 | 771.21 | 770.98 | 770.72 |
| | SCREED ELEVATION | 771.78 | 771.64 | 771.47 | 771.36 | 771.25 | 771.00 | 770.72 |

NOTES:

1. FOR ADDITIONAL NOTES, TYPICAL CROSS SECTION AND SCREED DETAILS, SEE SHEET 40/55.
2. FOR SCREED ELEVATIONS, SPANS 1, 2, 3 AND 4, SEE SHEETS 44/55 AND 45/55.
3. FOR TABLE OF ANTICIPATED DEAD LOAD DEFLECTIONS, SEE SHEET 43/55.

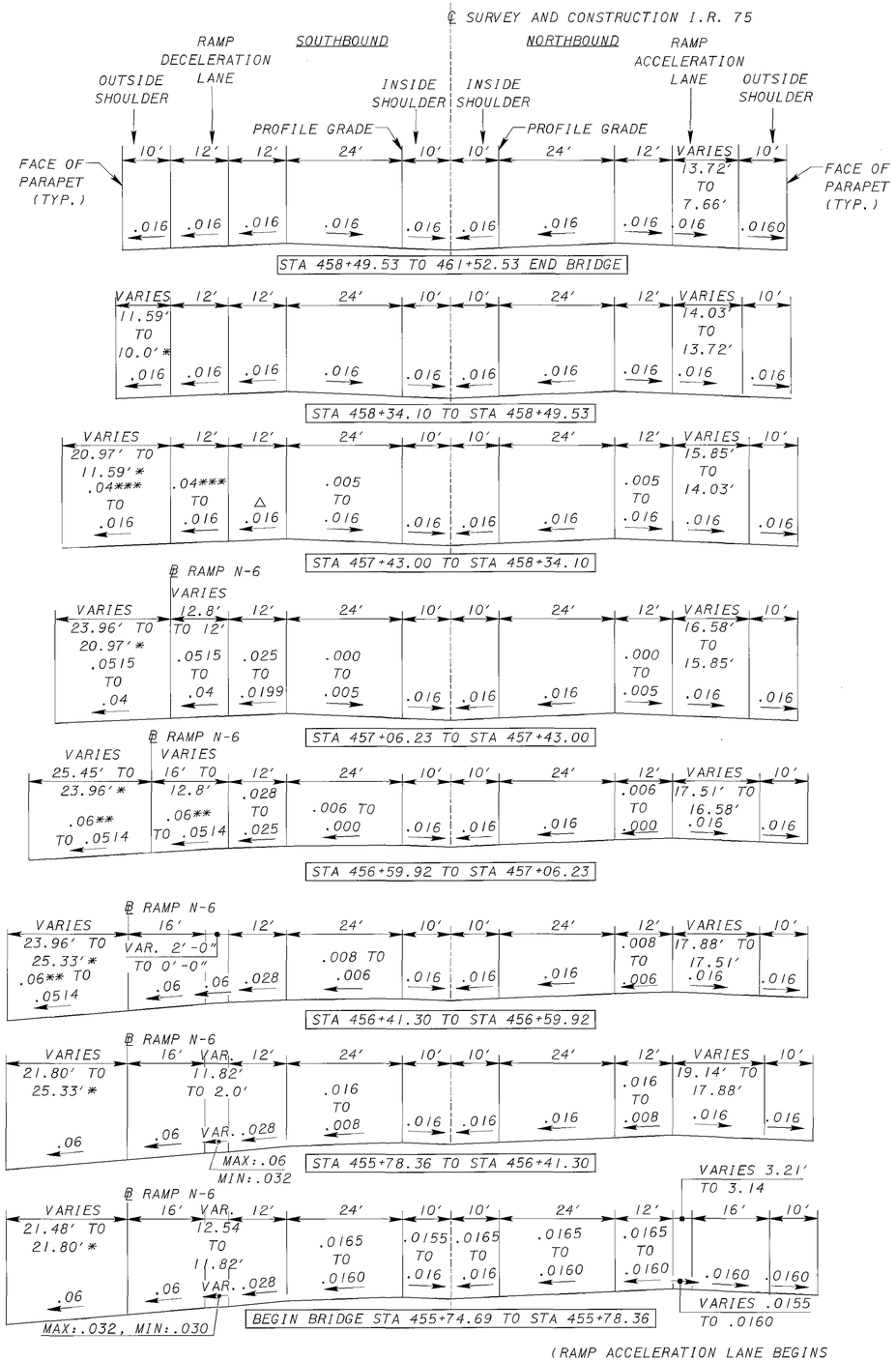
LEGEND:

* FACE OF BARRIER TAPERS FROM 96.4' LEFT OF ℄ AT STA 455+74.69 TO 68' LEFT OF ℄ AT STA 458+49.67

** SUPERELEVATION TRANSITION BEGINS AT STA. 456+79.00, RAMP N-6

*** TRANSITION ENDS AT STA. 458+19.80, I.R. 75

△ VARIES .0199 TO .016, STA. 457+43.00 TO 457+73.88




(RAMP ACCELERATION LANE BEGINS TAPER AT STA 452+85.40 FROM 25' TO 0' AT A RATE OF 50:1)

CROSS SLOPE TRANSITION DIAGRAM

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | BTA | NFF | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

SCREED ELEVATIONS - RIGHT BRIDGE SPAN 5
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

46/55

281/314

Plotted By: eamack Date: 7/27/2007 Time: 3:42:32 PM
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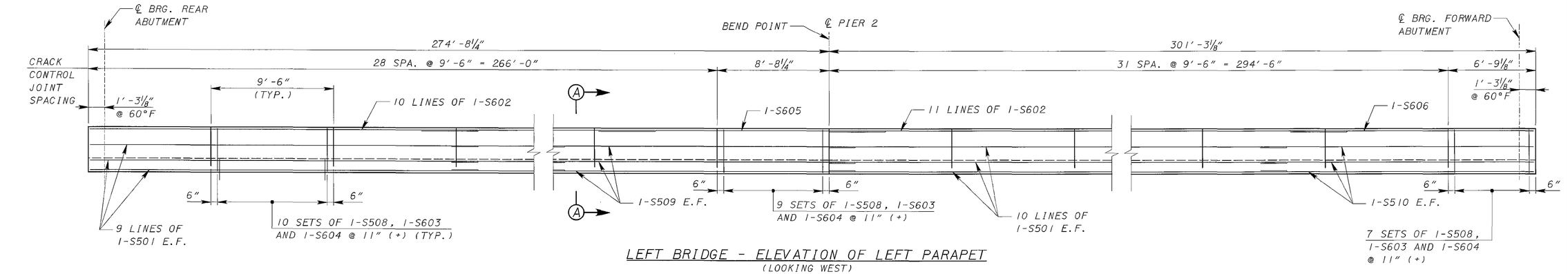
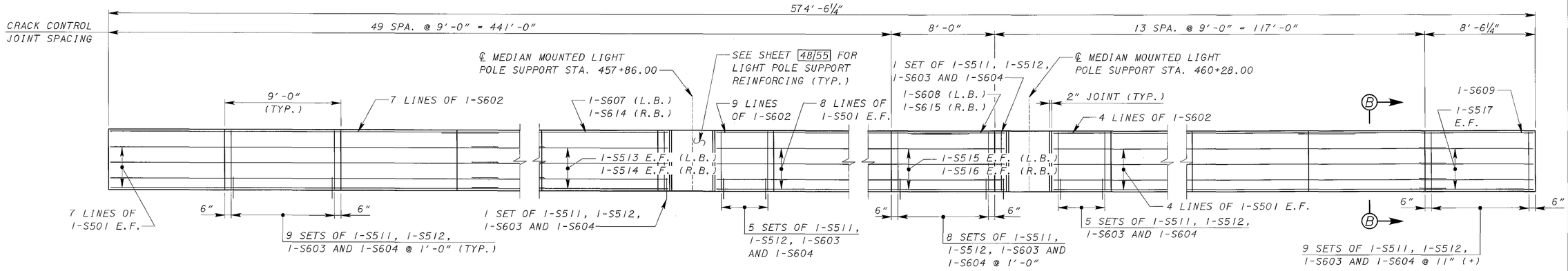
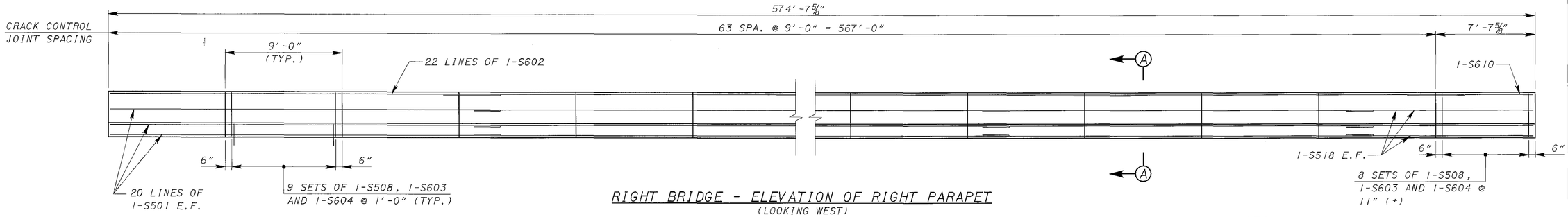



## LEFT BRIDGE - ELEVATION OF LEFT PARAPET
(LOOKING WEST)




## RIGHT BRIDGE - ELEVATION OF MEDIAN BARRIER
(LOOKING WEST)
(MEDIAN BARRIER ON LEFT BRIDGE SIMILAR, EXCEPT AS NOTED)




## RIGHT BRIDGE - ELEVATION OF RIGHT PARAPET
(LOOKING WEST)

| BAR | REQUIRED LAP LENGTH |
|---|---|
| #5 | 2'-0" |
| #6 | 4'-4" |

**LEGEND:**

R.B. = RIGHT BRIDGE
L.B. = LEFT BRIDGE

**NOTES:**

1. FOR SLAB PLAN, SEE SHEET 39/55.
2. FOR PARAPET SECTIONS AND DETAILS, SEE SHEET 48/55.
3. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
4. FOR ADDITIONAL PARAPET DETAILS AND NOTES, SEE ODOT DRAWING SBR-1-99.
5. FOR CONTROL JOINTS FOR MEDIAN BARRIER, REFER TO DETAIL AND NOTES ON ODOT DRAWING SBR-1-99.

DESIGN AGENT: TranSystems, 55 PUBLIC SQUARE, SUITE 2000, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | MLR | NFF | 05/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

PARAPET DETAILS
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

47/55

282/314

Plotted By: ecmack Date: 7/27/2007 Time: 3:42:25 PM
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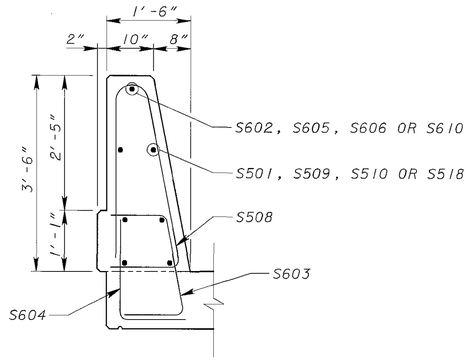
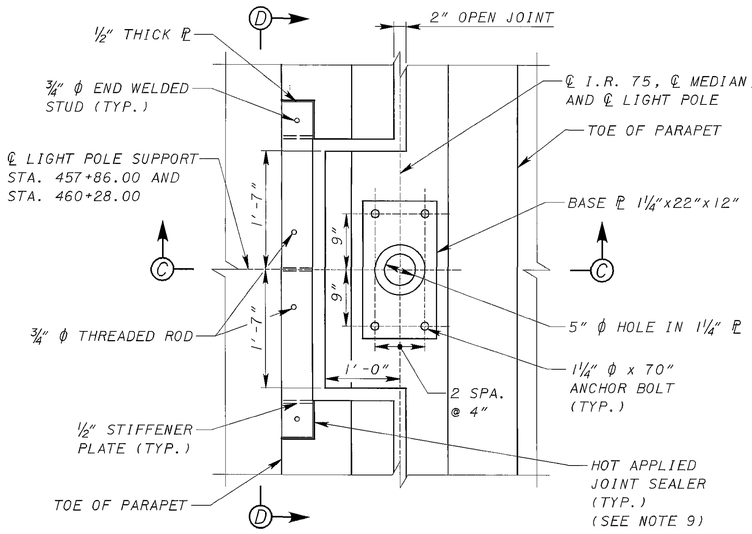
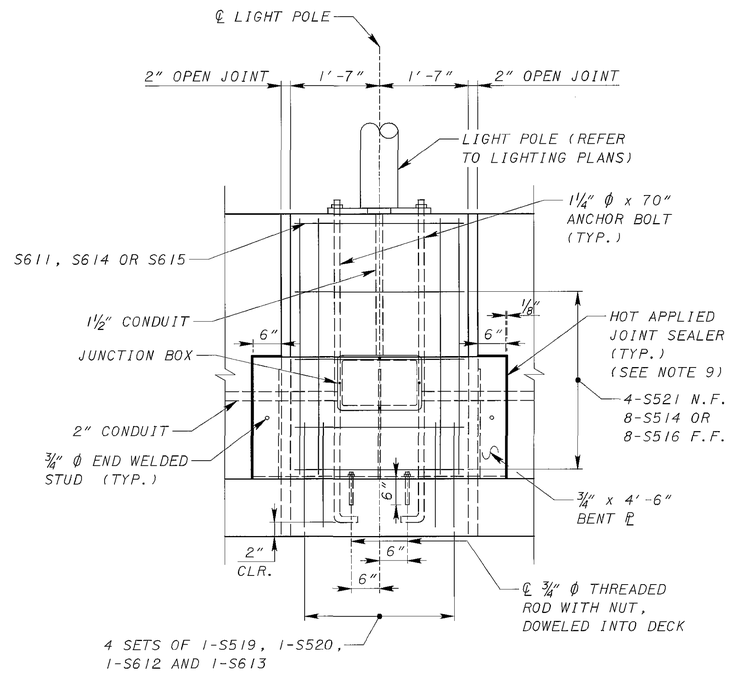


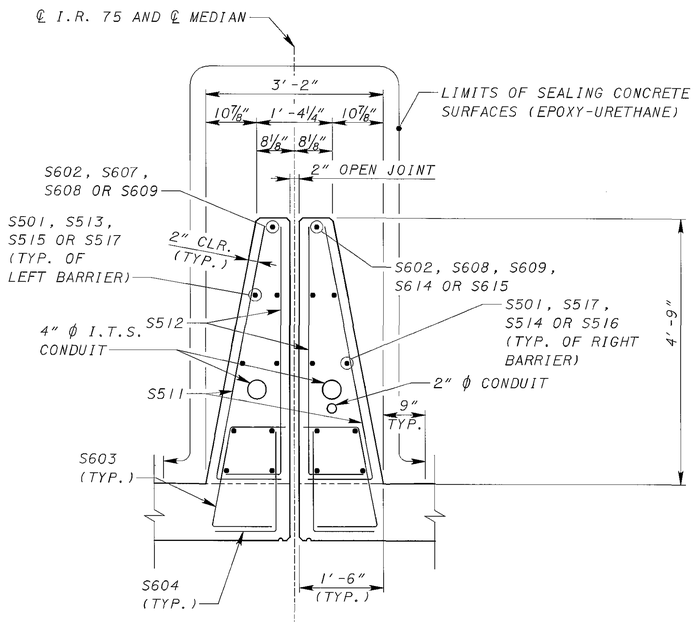

SECTION A-A



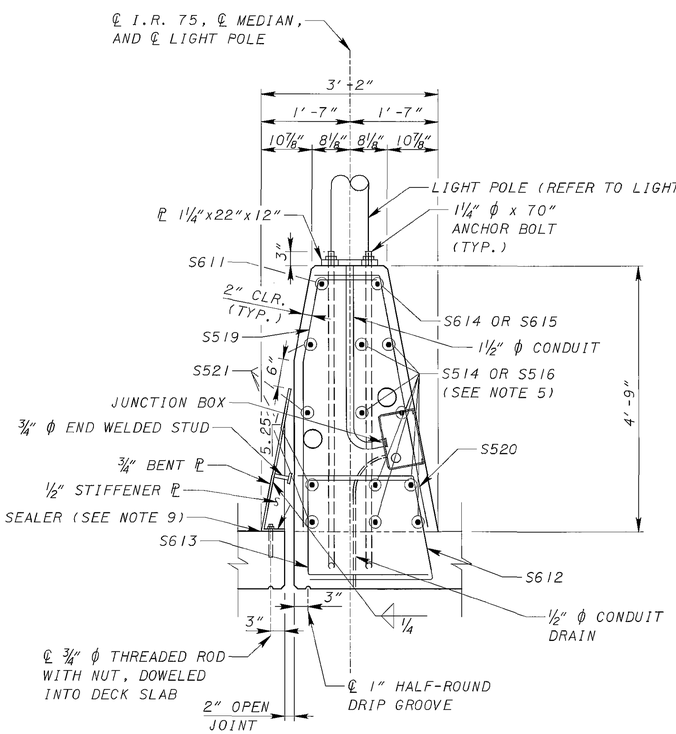

MEDIAN BARRIER DETAIL
AT LIGHT POLE SUPPORT PLAN




VIEW D-D
(DECK REINFORCEMENT NOT SHOWN)




SECTION B-B
(DECK REINFORCEMENT NOT SHOWN)




SECTION C-C
(DECK REINFORCEMENT NOT SHOWN)

## NOTES:

1. FOR PARAPET DETAILS, SEE SHEET 47/55.
2. FOR SLAB PLAN, SEE SHEET 38/55.
3. FOR REINFORCING STEEL LIST, SEE SHEET 55/55.
4. FOR ADDITIONAL PARAPET DETAILS AND NOTES, SEE ODOT STANDARD DRAWING SBR-1-99.
5. FIELD CUTTING OF LONGITUDINAL REINFORCING BAR AT THE JUNCTION BOX SHALL BE INCLUDED WITH ITEM 509, REINFORCING STEEL, FOR PAYMENT.
6. THE 1¼" ϕ x 70" ANCHOR BOLTS, NUTS, BASE PLATE AND JUNCTION BOX SHALL BE INCLUDED WITH ITEM 625 FOR PAYMENT. (SEE LIGHTING PLAN)
7. ALL STRUCTURAL STEEL SHALL BE GALVANIZED ACCORDING TO 711.02. GALVANIZING OF STEEL, BASE PLATE, 1¼" ϕ ANCHOR BOLTS AND JUNCTION BOX SHALL BE INCLUDED WITH ITEM 625 FOR PAYMENT (SEE LIGHTING PLAN).
8. DECK SLAB CONCRETE REQUIRED AT THE LIGHT POLE SUPPORT SHALL BE INCLUDED WITH ITEM 898, CLASS QSC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN, FOR PAYMENT.
9. HOT APPLIED JOINT SEALER SHALL CONFORM TO 705.04 AND SHALL BE INCLUDED WITH ITEM 898, CLASS QSC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN, FOR PAYMENT.
10. FOR ADDITIONAL NOTES AND DETAILS, SEE ODOT STANDARD DRAWINGS HL-10.13 AND HL-20.14.
11. FOR CONDUIT TRANSITION FROM BRIDGE MEDIAN BARRIER TO ROADWAY BARRIER, REFER TO ODOT STANDARD DRAWING HL-30.33


DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

REVIEWED NFF DATE 05/31/05
DRAWN MLR REVISED
DESIGNED BTA CHECKED JDH
STRUCTURE FILE NUMBER 5708710


# PARAPET SECTIONS AND DETAILS

(PRESTRESSED CONCRETE OPTION)

BRIDGE NO. MOT-75-1523 I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828




Plotted By: ecmack Date: 7/27/2007 Time: 3:42:27 PM
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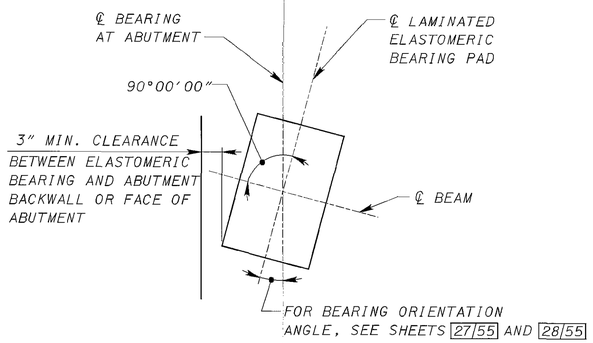
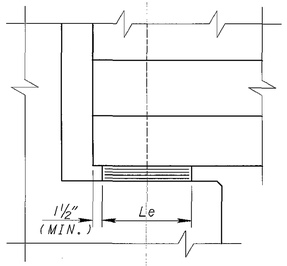
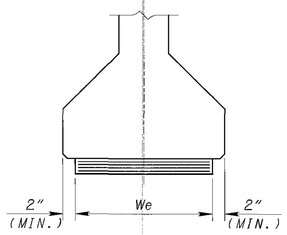


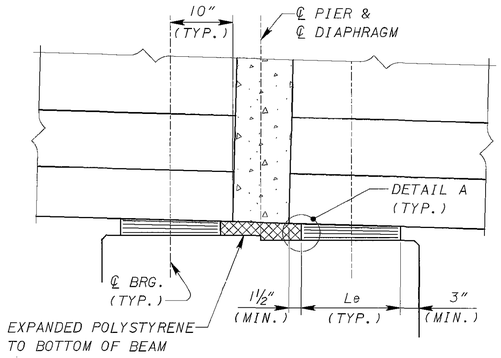

ABUTMENT BEARING ORIENTATION PLAN



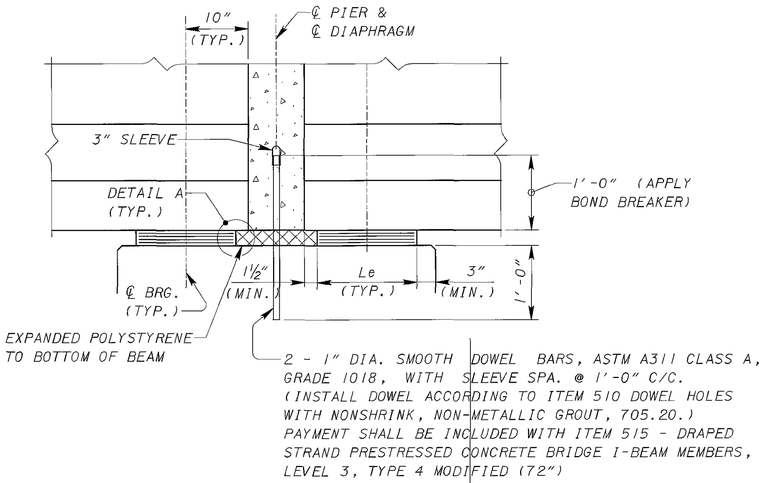

EXPANSION ABUTMENT DETAIL



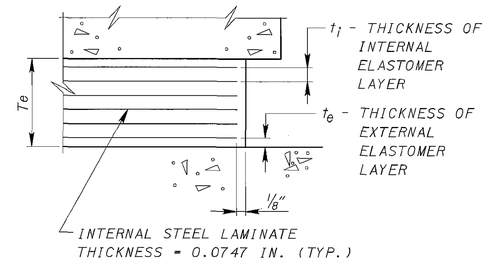

TYPICAL END VIEW



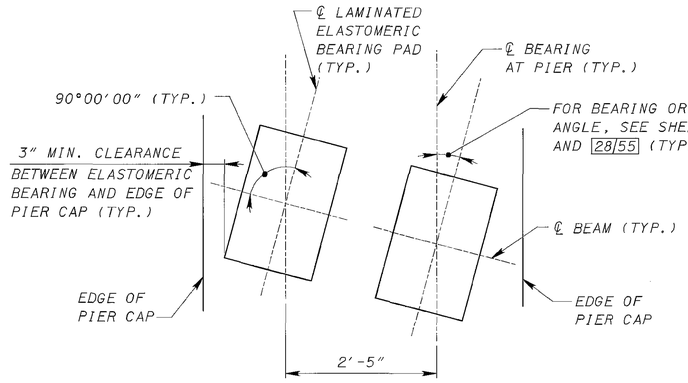

EXPANSION PIER DETAIL
(SEE NOTE 4)




FIXED PIER DETAIL
(SEE NOTE 4)




DETAIL A




PIER BEARING ORIENTATION PLAN

| ELASTOMERIC BEARING DATA | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | TYPE | NO. REQ'D | DL (KIP) | LL (KIP) WITHOUT IMPACT | TOTAL LOAD (DL+LL) | Le (in.) | We (in.) | $t_i$ (in.) | $t_e$ (in.) | NO. OF $t_i$'s | NO. OF $t_e$'s | NO. INTERNAL LAMINATES | Te (in.) |
| REAR ABUT. | EXP | 22 | 166 | 69 | 235 | 13.5 | 22 | 0.66 | 0.38 | 5 | 2 | 6 | 4.508 |
| PIER No.1 | EXP | 42 | 185 | 85 | 270 | 14 | 22 | 0.66 | 0.38 | 5 | 2 | 6 | 4.508 |
| PIER No.2 | FIXED | 38 | 170 | 77 | 247 | 10 | 22 | 0.42 | 0.28 | 3 | 2 | 4 | 2.119 |
| PIER No.3 | EXP | 36 | 130 | 69 | 199 | 12 | 18 | 0.36 | 0.25 | 7 | 2 | 8 | 3.618 |
| PIER No.4 | EXP | 36 | 134 | 67 | 201 | 13.5 | 18.5 | 0.56 | 0.29 | 6 | 2 | 7 | 4.463 |
| FWD. ABUT. | EXP | 18 | 115 | 64 | 179 | 15.5 | 15.5 | 0.70 | 0.42 | 5 | 2 | 6 | 4.888 |

NOTES:

1. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 60 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
2. BEARING REPOSITIONING: IF THE CONCRETE IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60°F ± 10°F, RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F ± 10°F.
3. BASIS OF PAYMENT - THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS LABOR, TESTING, PAINTING AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES (NEOPRENE).
4. REINFORCMENT IN DIAPHRAGM NOT SHOWN FOR CLARITY.

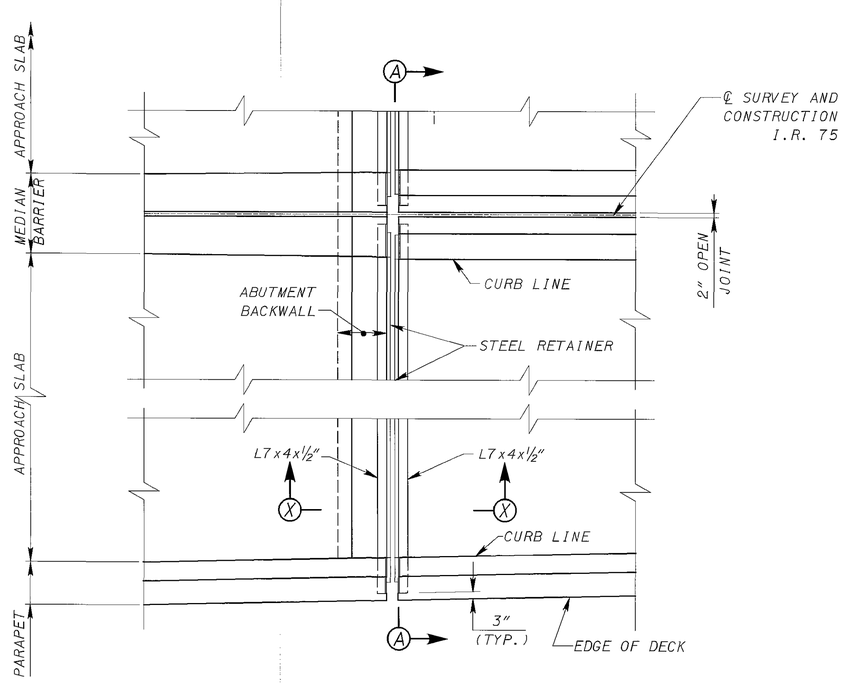
DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

DESIGNED JDH | DRAWN RCK | REVIEWED RER | DATE 5/31/05

CHECKED NFF | REVISED | STRUCTURE FILE NUMBER 5708710

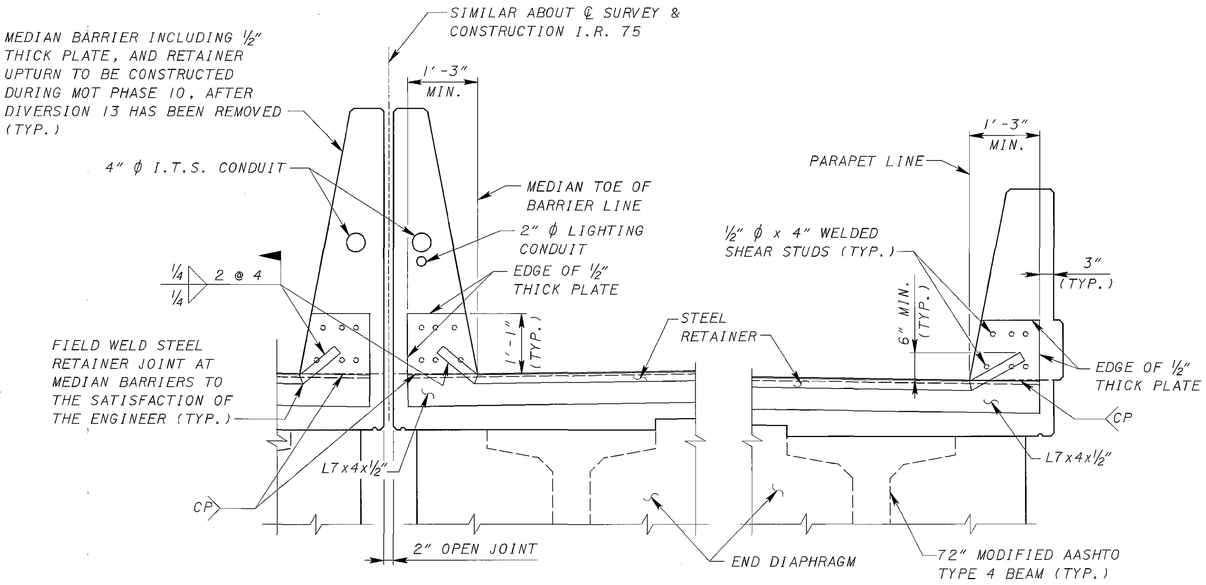
BEARING DETAILS
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

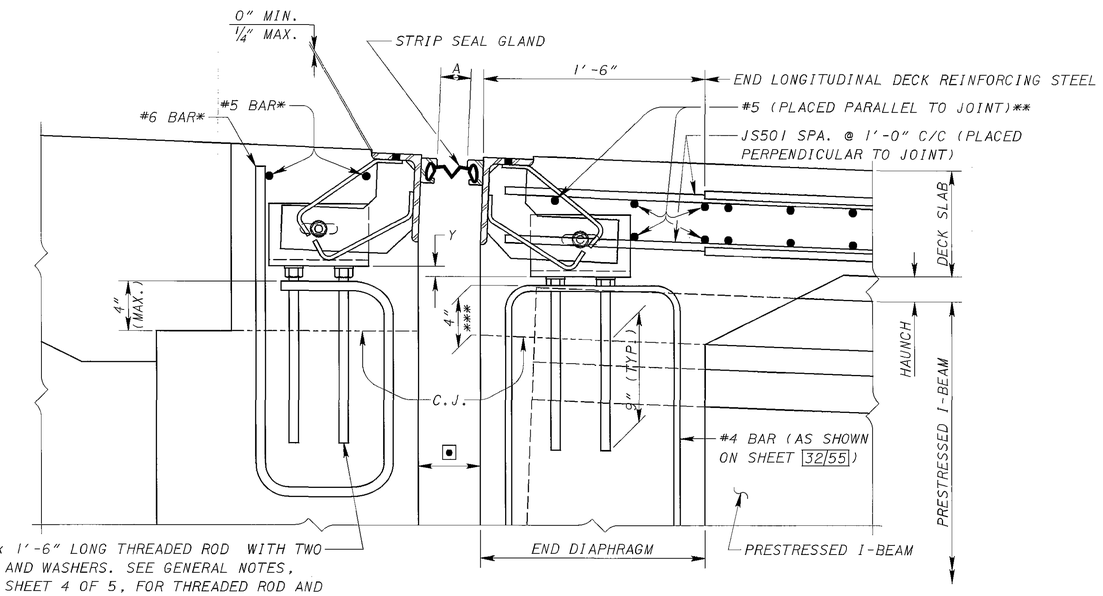



## PART PLAN AT ABUTMENT

(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)




## SECTION A-A




## SECTION X-X

▣ - THIS DIMENSION IS THE SUM OF (2xSTEEL RETAINER WIDTH + DIM. A)
*** - MEASURED TO THE HIGHEST SIDE OF THE DIAPHRAGM
Y - %GRADE x (DIM. A + 18½")
%GRADE - INSTANTANEOUS PROFILE GRADE AT THE CENTERLINE OF THE JOINT

* SEE REAR ABUTMENT SHEET 17/55 AND FORWARD ABUTMENT SHEET 20/55

** SEE SLAB PLAN SHEET 38/55

| 4" STRIP SEAL JOINT WIDTH REAR ABUTMENT | | |
|---|---|---|
| AMBIENT TEMP. | DIMENSION A | DIMENSION Y |
| 90° F | 1 5/16" | +7/16" |
| 80° F | 1 1/2" | +7/16" |
| 70° F | 1 11/16" | +7/16" |
| 60° F | 1 7/8" | +1/2" |
| 50° F | 2 1/8" | +1/2" |
| 40° F | 2 5/16" | +1/2" |
| 30° F | 2 1/2" | +1/2" |

| 4" STRIP SEAL JOINT WIDTH FORWARD ABUTMENT | | |
|---|---|---|
| AMBIENT TEMP. | DIMENSION A | DIMENSION Y |
| 90° F | 1 1/4" | -5/16" |
| 80° F | 1 7/16" | -5/16" |
| 70° F | 1 11/16" | -5/16" |
| 60° F | 1 7/8" | -5/16" |
| 50° F | 2 1/8" | -5/16" |
| 40° F | 2 5/16" | -5/16" |
| 30° F | 2 9/16" | -5/16" |

NOTES:
MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1½". IF THE JOINT OPENING IS LESS, INSTALLATION SHALL BE POSTPONED UNTIL THE TEMPERATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE MINIMUM 1½" OPENING.

A POSITIVE VALUE FOR DIMENSION Y INDICATES A POSITIVE INSTANTANEOUS PROFILE GRADE LOOKING UPSTATION. A NEGATIVE VALUE FOR DIMENSION Y INDICATES A NEGATIVE INSTANTANEOUS PROFILE GRADE LOOKING UPSTATION.

## NOTES:

1. FOR ADDITIONAL DETAILS NOT SHOWN, REFER TO ODOT STANDARD BRIDGE DRAWING EXJ-6-06.
2. THE INSTALLATION SEQUENCE OF THE EXPANSION JOINT SHALL FOLLOW THE CONSTRUCTION PROCEDURE ON ODOT STANDARD DRAWING EXJ-6-06, SHEET 4 of 5 AND AS MODIFIED HEREIN.
3. NO JOINTS IN STRIP SEALS ARE ALLOWED UNLESS APPROVED BY THE DIRECTOR.
4. FOR JOINT TREATMENTS IN RETAINERS AND IN ARMOR STEEL, REFER TO ODOT STANDARD DRAWING EXJ-6-06, SHEET 4 of 5.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | RRC | RER | 5/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| GHD | | 5708710 | |

# STRIP SEAL EXPANSION JOINT DETAILS

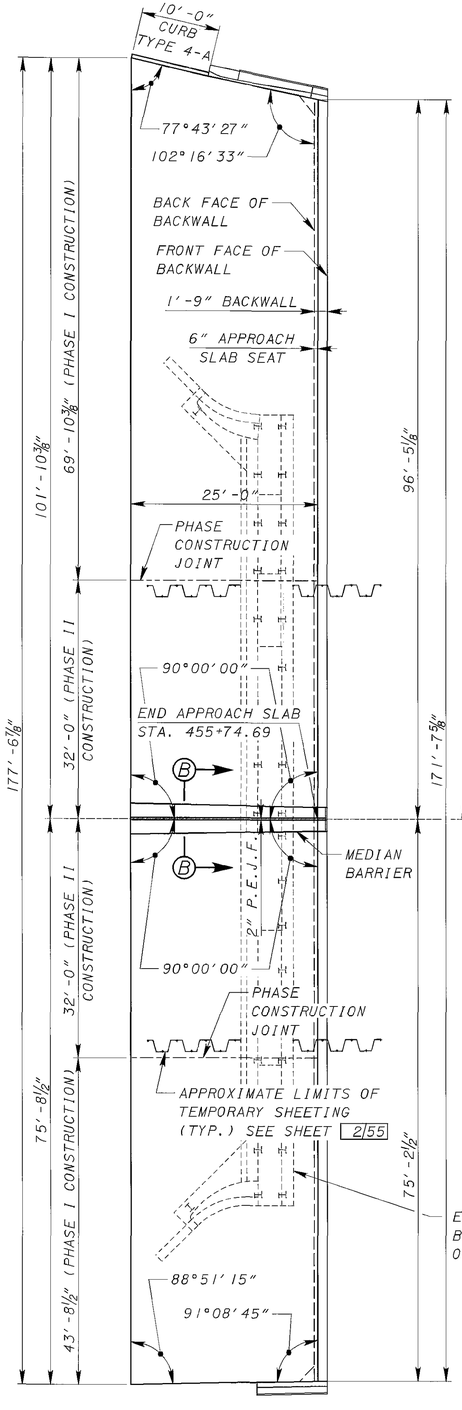
BRIDGE NO. MOT-75-1523 (PRESTRESSED CONCRETE OPTION)
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

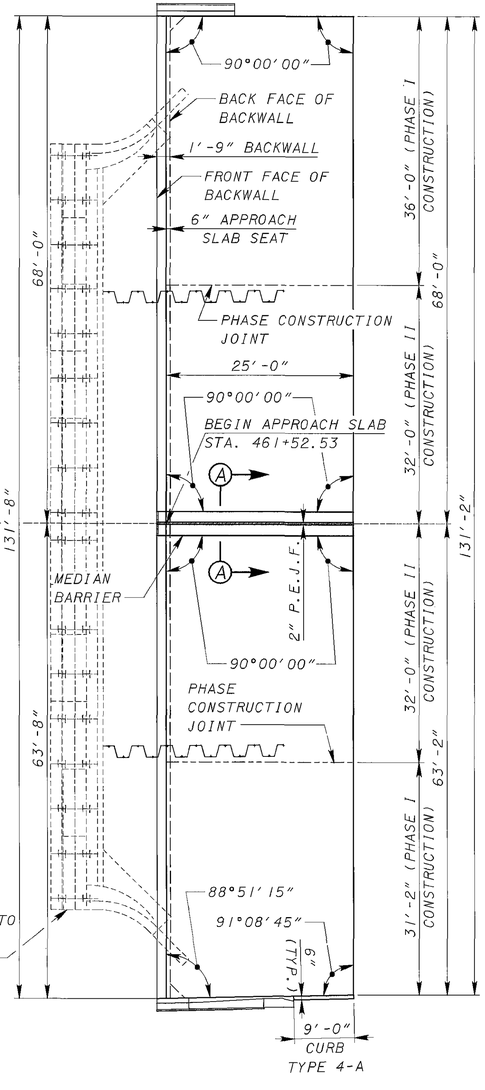
50/55

285/314

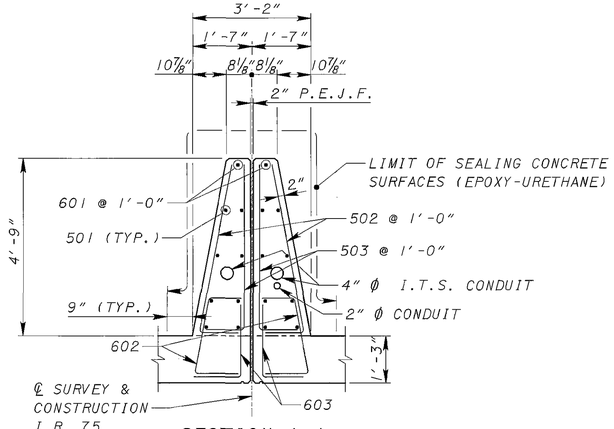
Plotted By: ecmack Date: 7/27/2007 Time: 3:41:36 PM
Filename: g:\co04\0066\bridge\concrete.dir\cadd\23828ex01.dgn



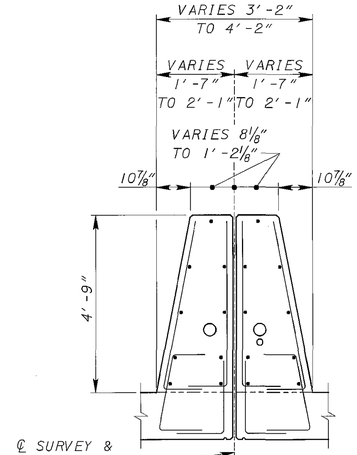

PLAN
REAR APPROACH SLAB




PLAN
FORWARD APPROACH SLAB




SECTION A-A




SECTION B-B

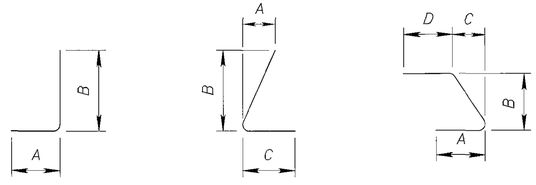
FOR REINFORCING STEEL AND CALLOUTS, SEE SECTION A-A

**BAR SCHEDULE**

| MARK | NUMBER | LENGTH | WEIGHT | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MEDIAN BARRIER | | | | | | | | | | | |
| 501 | 32 | 25'-11" | 866 | STR | | | | | | | |
| 502 | 108 | 5'-6" | 620 | 11 | 10 1/4" | 4'-5" | 1'-1" | | | | |
| 503 | 108 | 5'-5" | 610 | 1 | 1'-1" | 4'-5" | | | | | |
| | | | | | | | | | | | |
| 601 | 4 | 25'-11" | 156 | STR | | | | | | | |
| 602 | 108 | 4'-3" | 689 | 29 | 1'-4" | 2'-1" | 4 1/2" | 1'-1" | | | |
| 603 | 108 | 3'-3" | 528 | 1 | 1'-4" | 2'-1" | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

TOTAL WEIGHT OF REINFORCING = 3469 LBS

**BAR BENDING DIAGRAM**




NOTES:

1. FOR ADDITIONAL NOTES, DETAILS, SECTIONS, AND REINFORCING BARS NOT SHOWN HERE, SEE ODOT STANDARD DRAWING AS-1-81.
2. FOR CURB TYPE 4-A, REFER TO ODOT STANDARD DRAWING BP-5.1.
3. SEALING OF CONCRETE SURFACES ON MEDIAN PARAPETS IS INCLUDED WITH ITEM 512.
4. FOR TEMPORARY SHEETING NOTES, SEE GENERAL PLAN SHEET 2/55.
5. SEE ROADWAY SHEETS FOR ADDITIONAL MEDIAN BARRIER TRANSITION DETAILS.
6. FOR ITEMS INCLUDED WITH ITEM 898 - QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (APPROACH SLAB), 15", AS PER PLAN., SEE STRUCTURE GENERAL NOTES.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| MLR | MLR | NFF | 05/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

APPROACH SLAB PLAN (PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

51/55

286/314

Plotted By: eamack Date: 1/27/2007 Time: 3:41:35 PM
Filename: g:\cco04\0066\bridge\concrete_dt\cadd\23828as01.dgn

## BAR SCHEDULE

REAR ABUTMENT

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RA501 | 109 | 64 | 9'-10" | 1118 | 656 | 2 | 2'-0" | 6'-1" | 2'-0" | | | | |
| RA502 | 4 | | 9'-4" | 39 | | STR. | | | | | | | |
| RA503 | 16 | | 10'-11" | 182 | | 3 | 3'-0" | 2'-2" | | | | | |
| RA504 | 45 | | 10'-9" | 505 | | 1 | 10" | 10'-0" | | | | | |
| RA505 | 49 | 64 | 9'-2" | 468 | 612 | 2 | 2'-8" | 4'-1" | 2'-8" | | | | |
| RA506 | | 68 | 10'-4" | | 733 | 1 | 10" | 9'-5" | | | | | |
| RA507 | 60 | | 8'-4" | 522 | | 2 | 2'-3" | 4'-1" | 2'-3" | | | | |
| RA508 | 15 | | 9'-9" | 153 | | 1 | 10" | 9'-0" | | | | | |
| RA509 | 9 | | 9'-5" | 88 | | 1 | 10" | 8'-8" | | | | | |
| RA510 | 8 | | 8'-11" | 74 | | 1 | 10" | 8'-2" | | | | | |
| RA511 | 10 | | 8'-3" | 86 | | 1 | 10" | 7'-6" | | | | | |
| RA512 | 8 | | 7'-9" | 65 | | 1 | 10" | 7'-0" | | | | | |
| RA513 | 10 | | 7'-2" | 75 | | 1 | 10" | 6'-5" | | | | | |
| RA514 | 3 | | 12'-10" | 40 | | STR. | | | | | | | |
| RA515 | 72 | | 30'-0" | 2253 | | STR. | | | | | | | |
| RA516 | 20 | | 12'-11" | 269 | | 1 | 2'-5" | 10'-7" | | | | | |
| RA517 | 10 | | 11'-10" | 123 | | 1 | 2'-2" | 9'-9" | | | | | |
| RA518 | 5 | | 8'-4" | 43 | | 1 | 2'-2" | 6'-3" | | | | | |
| RA519 | 23 | | 12'-0" | 288 | | STR. | | | | | | | |
| RA520 | 2 | | 13'-5" | 28 | | STR. | | | | | | | |
| RA521 | | 58 | 31'-7" | | 1911 | STR. | | | | | | | |
| RA522 | 22 | | 3'-11" | 90 | | 1 | 2'-0" | 2'-0" | | | | | |
| RA523 | 16 | | 6'-4" | 106 | | STR. | | | | | | | |
| RA524 | 28 | | 18'-8" | 545 | | STR. | | | | | | | |
| RA525 | 4 | | 11'-0" | 46 | | STR. | | | | | | | |
| RA526 | 4 | | 6'-3" | 26 | | STR. | | | | | | | |
| RA527 | 2 | | 10'-3" | 21 | | 19 | 8'-4" | 1'-9 5/8" | 10 1/8" | | | | |
| RA528 | 2 | | 8'-3" | 17 | | STR. | | | | | | | |
| RA529 | 2 | | 11'-6" | 24 | | STR. | | | | | | | |
| RA530 | 2 | | 14'-8" | 31 | | STR. | | | | | | | |
| RA531 | 6 | | 16'-2" | 101 | | STR. | | | | | | | |
| RA532 | 6 | | 4'-6" | 28 | | STR. | | | | | | | |
| RA533 | 8 | | 10'-0" | 83 | | STR. | | | | | | | |
| RA534 | 3 | | 5'-6" | 17 | | 25 | 1'-8" | 2'-5" | 1'-5" | 1 1/2" | 5" | | |
| RA535 | 5 | | 5'-6" | 29 | | STR. | | | | | | | |
| RA536 | 6 | | 11'-11 | 75 | | STR. | | | | | | | |
| RA537 | 6 | | 7'-0" | 44 | | STR. | | | | | | | |
| RA538 | 18 | | 9'-3" | 174 | | STR. | | | | | | | |
| RA539 | 14 | | 7'-5" | 108 | | 23 | 1'-1" | 3'-2" | 3'-0" | | | 3" | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| RA601 | 45 | | 18'-4" | 1239 | | 2 | 2'-7" | 6'-1" | 10'-0" | | | | |
| RA602 | | 32 | 18'-1" | | 869 | 2 | 2'-7" | 6'-1" | 9'-9" | | | | |
| RA603 | 4 | 32 | 17'-9" | 107 | 853 | 2 | 2'-7" | 6'-1" | 9'-5" | | | | |
| RA604 | 15 | | 17'-4" | 391 | | 2 | 2'-7" | 6'-1" | 9'-0" | | | | |
| RA605 | 9 | | 17'-0" | 230 | | 2 | 2'-7" | 6'-1" | 8'-8" | | | | |
| RA606 | 8 | | 16'-6" | 198 | | 2 | 2'-7" | 6'-1" | 8'-2" | | | | |
| RA607 | 10 | | 15'-10" | 238 | | 2 | 2'-7" | 6'-1" | 7'-6" | | | | |
| RA608 | 8 | | 15'-4" | 184 | | 2 | 2'-7" | 6'-1" | 7'-0" | | | | |
| RA609 | 10 | | 14'-9" | 222 | | 2 | 2'-7" | 6'-1" | 6'-5" | | | | |
| RA610 | 10 | | 18'-6" | 278 | | 2 | 8'-10" | 1'-2" | 8'-10" | | | | |
| RA611 | 109 | 66 | 10'-7" | 1733 | 1049 | 2 | 4'-9" | 1'-5" | 4'-9" | | | | |
| RA612 | 65 | | 12'-3" | 1196 | | 2 | 5'-7" | 1'-5" | 5'-7" | | | | |
| RA613 | 109 | 66 | 6'-0" | 982 | 595 | 7 | 2'-9" | 11" | 2'-0" | 10" | | | |
| RA614 | 44 | 66 | 11'-7" | 766 | 1148 | 2 | 5'-3" | 1'-5" | 5'-3" | | | | |
| RA615 | 14 | 4 | 3'-10" | 81 | 23 | 13 | 2'-0" | 11" | 2" | 1'-1" | | | |

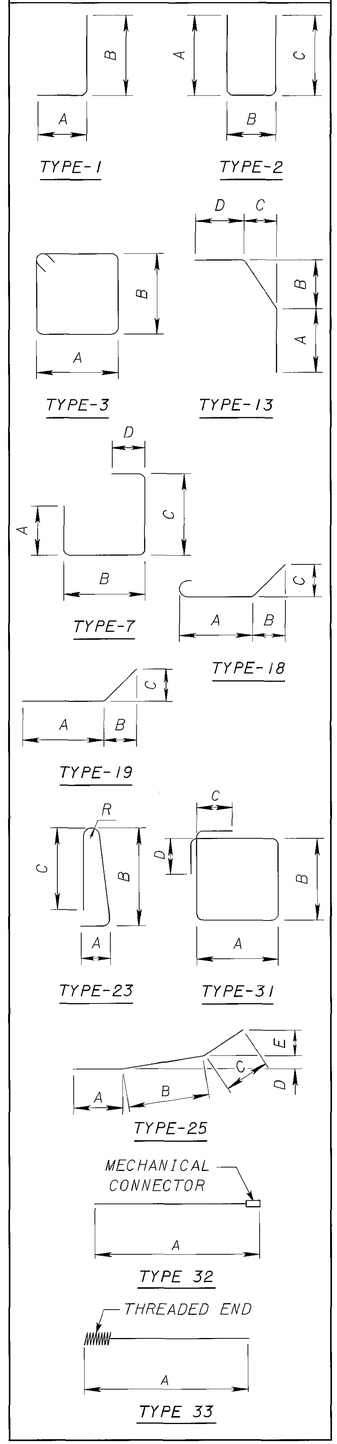
## BAR SCHEDULE

REAR ABUTMENT

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RA616 | 14 | 4 | 2'-11" | 61 | 18 | STR. | | | | | | | |
| RA617 | 1 | | 4'-10" | 7 | | STR. | | | | | | | |
| RA618 | 20 | | 6'-7" | 198 | | STR. | | | | | | | |
| | 1 SERIES | | 13'-4" | | | | 6'-3" | | 6'-3" | | | | |
| RA619 | 0F | | | 118 | | 2 | | 1'-2" | | | | | 6 1/8" |
| | 8 | | 6'-4" | | | | 2'-9" | | 2'-9" | | | | |
| RA620 | 30 | | 5'-7" | 252 | | STR. | | | | | | | |
| RA621 | 11 | | 25'-10" | 427 | | 2 | 12'-6" | 1'-2" | 12'-6" | | | | |
| RA622 | 22 | | 6'-9" | 223 | | STR. | | | | | | | |
| RA623 | 1 | | 9'-3" | 14 | | STR. | | | | | | | |
| RA624 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| RA625 | 24 | | 11'-6" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| | | | | | | | | | | | | | |
| RA801 | 16 | | 24'-9" | 1057 | | 32 | 24'-9" | | | | | | |
| RA802 | 8 | | 24'-9" | 529 | | STR. | | | | | | | |
| RA803 | | 16 | 34'-0" | | 1452 | 33 | 34'-0" | | | | | | |
| RA804 | 16 | | 25'-2" | 1075 | | STR. | | | | | | | |
| RA805 | 4 | | 13'-11" | 149 | | STR. | | | | | | | |
| RA806 | 8 | | 10'-5" | 223 | | STR. | | | | | | | |
| RA807 | 4 | | 7'-5" | 79 | | STR. | | | | | | | |
| RA808 | 74 | 44 | 4'-11 | 971 | 578 | 18 | 2'-7" | 1'-0" | 1'-0" | | | | |
| | | | | | | | | | | | | | |
| RA901 | 16 | | 4'-1" | 222 | | STR. | | | | | | | |
| RA902 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |

TOTAL WEIGHT FOR REAR ABUTMENT = 33,011 LBS (PHASE I = 22,514 LBS, PHASE II = 10,497 LBS)

## BAR BENDING DIAGRAMS




NOTE:

FOR NOTES SEE SHEET 53/55.

DESIGN AGENCY
TranSystems
55 PUBLIC SQUARE, SUITE 1900
CLEVELAND, OHIO 44113-1980

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| BTA | RCK | NFF | 05/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | JDH | 570810 | |

REINFORCING STEEL LIST
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828



Plotted By: ecmack Date: 7/27/2007 Time: 3:42:10 PM
Filename: g:\co04\0066\bridge\concrete alt\cadd\23828r10.dgn

## BAR SCHEDULE

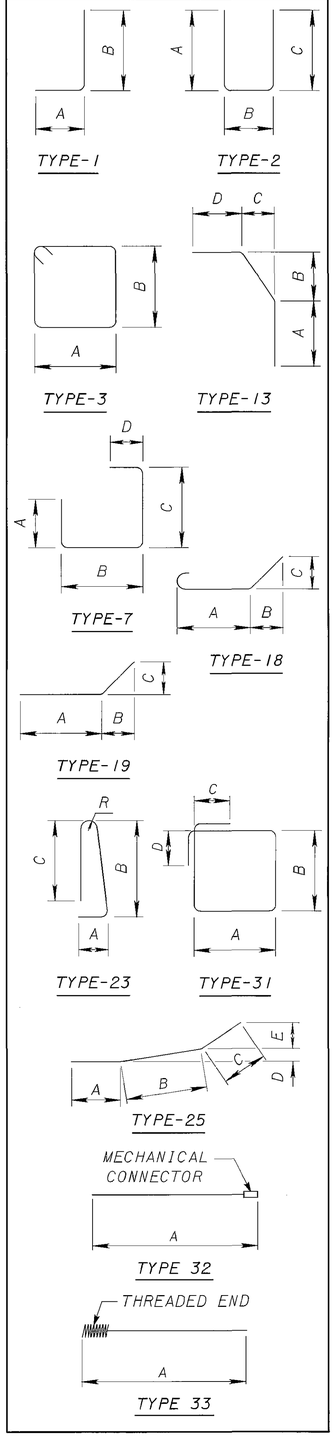
| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FORWARD ABUTMENT | | | | | | | | | | | | | |
| FA501 | 71 | 65 | 7'-10" | 580 | 531 | 2 | 1'-0" | 6'-1" | 1'-0" | | | | |
| FA502 | 77 | 65 | 7'-0" | 562 | 475 | 1 | 10" | 6'-4" | | | | | |
| FA503 | 77 | 65 | 8'-10" | 709 | 599 | 2 | 2'-6" | 4'-1" | 2'-6" | | | | |
| FA504 | 18 | | 10'-11" | 205 | | 3 | 3'-0" | 2'-2" | | | | | |
| FA505 | 4 | | 10'-10" | 45 | | STR. | | | | | | | |
| FA506 | 24 | | 39'-6" | 989 | | STR. | | | | | | | |
| FA507 | | 48 | 31'-8" | | 1585 | STR. | | | | | | | |
| FA508 | 24 | | 35'-3" | 882 | | STR. | | | | | | | |
| FA509 | 14 | | 5'-9" | 84 | | STR. | | | | | | | |
| FA510 | 20 | | 3'-10" | 80 | | 1 | 2'-0" | 2'-0" | | | | | |
| FA511 | 4 | | 11'-11" | 50 | | STR. | | | | | | | |
| FA512 | 4 | | 6'-9" | 28 | | STR. | | | | | | | |
| FA513 | 2 | | 11'-3" | 23 | | 19 | 9'-3" | 1'-9" | 11" | | | | |
| FA514 | 2 | | 8'-3" | 17 | | STR. | | | | | | | |
| FA515 | 2 | | 12'-1" | 25 | | STR. | | | | | | | |
| FA516 | 2 | | 14'-11" | 31 | | STR. | | | | | | | |
| FA517 | 6 | | 16'-11" | 106 | | STR. | | | | | | | |
| FA518 | 14 | | 7'-5" | 108 | | 23 | 1'-1" | 3'-2" | 3'-0" | | | 3" | |
| FA519 | 6 | | 5'-3" | 33 | | STR. | | | | | | | |
| FA520 | 24 | | 10'-0" | 250 | | STR. | | | | | | | |
| FA521 | 3 | | 5'-6" | 17 | | 25 | 1'-8" | 2'-5" | 1'-5" | 1½" | 5" | | |
| FA522 | 5 | | 5'-6" | 29 | | STR. | | | | | | | |
| FA523 | 4 | | 12'-8" | 53 | | STR. | | | | | | | |
| FA524 | 4 | | 7'-8" | 32 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| FA601 | 71 | 65 | 14'-8" | 1564 | 1432 | 2 | 2'-7" | 6'-1" | 6'-4" | | | | |
| FA602 | 69 | 66 | 13'-1" | 1356 | 1297 | 2 | 6'-0" | 1'-5" | 6'-0" | | | | |
| FA603 | 69 | 66 | 9'-7" | 993 | 950 | 2 | 4'-3" | 1'-5" | 4'-3" | | | | |
| FA604 | 69 | 66 | 6'-0" | 622 | 595 | 7 | 2'-9" | 11" | 2'-0" | 10" | | | |
| FA605 | 14 | 4 | 3'-10" | 81 | 23 | 13 | 2'-0" | 11" | 2" | 1'-1" | | | |
| FA606 | 14 | 4 | 2'-11" | 61 | 18 | STR. | | | | | | | |
| FA607 | 21 | | 18'-8" | 589 | | 2 | 8'-11" | 1'-2" | 8'-11" | | | | |
| FA608 | 42 | | 6'-9" | 426 | | STR. | | | | | | | |
| | 1 SER | | 13'-10" | | | | 6'-6" | | 6'-6" | | | | |
| FA609 | OF | | | 121 | | 2 | | 1'-2" | | | | | 6 7/16" |
| | 8 BARS | | 6'-4" | | | | 2'-9" | | 2'-9" | | | | |
| FA610 | 31 | | 5'-7" | 260 | | STR. | | | | | | | |
| FA611 | 1 | | 10'-0" | 15 | | STR. | | | | | | | |
| FA612 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| FA613 | 24 | | 11'-5" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| | | | | | | | | | | | | | |
| FA801 | 16 | | 26'-0" | 1111 | | 32 | | | | | | | |
| FA802 | 8 | | 16'-5" | 351 | | STR. | | | | | | | |
| FA803 | | 16 | 34'-0" | | 1452 | 33 | | | | | | | |
| FA804 | 8 | | 12'-3" | 262 | | STR. | | | | | | | |
| FA805 | 4 | | 14'-11" | 159 | | STR. | | | | | | | |
| FA806 | 8 | | 11'-3" | 240 | | STR. | | | | | | | |
| FA807 | 4 | | 7'-2" | 77 | | STR. | | | | | | | |
| FA808 | 47 | 44 | 4'-11" | 617 | 578 | 18 | 2'-7" | 1'-0" | 1'-0" | | | | |
| | | | | | | | | | | | | | |
| FA901 | 16 | | 4'-1" | 222 | | STR. | | | | | | | |
| FA902 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

TOTAL WEIGHT FOR FORWARD ABUTMENT= 24,678 LBS (PHASE I = 15,143 LBS, PHASE II = 9535 LBS)

## BAR SCHEDULE

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

## BAR BENDING DIAGRAMS




NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, RA601:
   RA: LOCATION OF THE BAR IN THE STRUCTURE (REAR ABUTMENT)
   6: BAR SIZE DESIGNATION NO. 6
   01: SEQUENCE NUMBER

   BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BAR BEND AT THE END OF THE BAR. ALL REINFORCING STEEL IS TO BE EPOXY COATED. STRAIGHT BARS ARE INDICATED BY "STR".

*2. REINFORCING BAR UTILIZING A MECHANICAL CONNECTOR. BAR LENGTH ADJUSTMENT AND/OR END PREPARATION MAY BE NECESSARY DEPENDING UPON THE TYPE OF CONNECTOR USED.

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE: SUITE 2000, CLEVELAND, OHIO 44113-1901

DESIGNED BTA | DRAWN RCK | REVIEWED NFF | DATE 05/31/05
CHECKED JDH | REVISED JDH | STRUCTURE FILE NUMBER 5708170

REINFORCING STEEL LIST
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
IR-75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

53/55

288/314

Plotted By: eamack Date: 7/27/2007 Time: 3:42:10 PM
Filename: g:\co04\0066\bridge\concrete.dir\cadd\23828r102.dgn

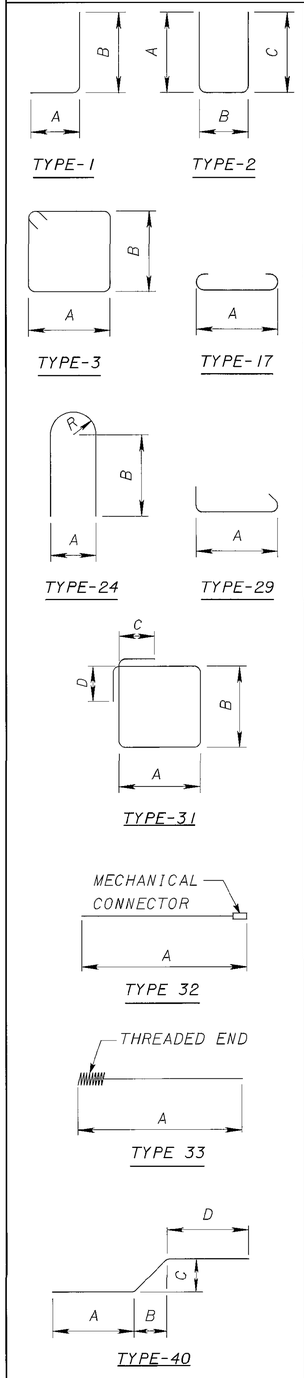
## BAR SCHEDULE

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PIER 1** | | | | | | | | | | | | | |
| P401 | 4 | | 14'-6" | 39 | | 3 | 2'-10" | 4'-2" | | | | | |
| P402 | 944 | 624 | 3'-0" | 1892 | 1250 | 29 | 2'-0" | | | | | | |
| | | | | | | | | | | | | | |
| P501 | 64 | | 22'-1" | 1474 | | STR. | | | | | | | |
| P502 | | 96 | 33'-0" | | 3304 | STR. | | | | | | | |
| P503 | 64 | | 29'-1" | 1941 | | STR. | | | | | | | |
| P504 | 234 | 154 | 9'-0" | 2197 | 1446 | 40 | 5'-2" | 1'-2" | 1'-2" | 2'-3" | | | |
| P505 | 117 | 77 | 14'-3" | 1739 | 1144 | 2 | 5'-2" | 4'-2" | 5'-2" | | | | |
| P506 | 32 | | 7'-1" | 236 | | 24 | 2'-0" | 2'-0" | | | | 12" | |
| P507 | 32 | | 28'-0" | 935 | | STR. | | | | | | | |
| P508 | 32 | | 21'-0" | 701 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P601 | 24 | | 11'-6" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| P602 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| P603 | 8 | | 4'-2" | 50 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P801 | 8 | | 14'-11" | 319 | | STR. | | | | | | | |
| *P802 | | 16 | 34'-0" | | 1452 | 33 | | | | | | | |
| P803 | 8 | | 29'-0" | 619 | | STR. | | | | | | | |
| *P804 | 16 | | 29'-2" | 1246 | | 32 | | | | | | | |
| P805 | 16 | | 6'-6" | 278 | | STR. | | | | | | | |
| P901 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |
| | | | | | | | | | | | | | |
| P1001 | 102 | 68 | 12'-4" | 5413 | 3609 | 17 | 9'-6" | | | | | | |
| P1002 | 234 | 154 | 11'-8" | 11747 | 7731 | 1 | 1'-10" | 10'-2" | | | | | |
| P1003 | 234 | 154 | 26'-9" | 26935 | 17726 | STR. | | | | | | | |
| TOTAL WEIGHT PIER 1 = 96,504 LBS (PHASE I = 58,842 LBS, PHASE II = 37,662 LBS) | | | | | | | | | | | | | |
| **PIER 2** | | | | | | | | | | | | | |
| P402 | 987 | 819 | 3'-0" | 1978 | 1641 | 29 | 2'-0" | | | | | | |
| | | | | | | | | | | | | | |
| P501 | 70 | | 21'-1" | 1539 | | STR. | | | | | | | |
| P502 | | 112 | 33'-0" | | 3855 | STR. | | | | | | | |
| P503 | 14 | | 38'-6" | 562 | | STR. | | | | | | | |
| P504 | 188 | 154 | 8'-1" | 1585 | 1298 | 40 | 4'-2" | 1'-2" | 1'-2" | 2'-3" | | | |
| P505 | 94 | 77 | 12'-4" | 1209 | 991 | 2 | 4'-2" | 4'-2" | 4'-2" | | | | |
| P506 | 42 | | 7'-1" | 310 | | 24 | 2'-0" | 2'-0" | | | | 12" | |
| P507 | 42 | | 37'-5" | 1639 | | STR. | | | | | | | |
| P508 | 42 | | 20'-0" | 876 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P601 | 24 | | 11'-6" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| P602 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| P603 | 8 | | 4'-2" | 50 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P801 | 8 | | 21'-2" | 452 | | STR. | | | | | | | |
| *P802 | | 16 | 34'-0" | | 1452 | 33 | | | | | | | |
| P803 | 8 | | 19'-6" | 417 | | STR. | | | | | | | |
| *P804 | 16 | | 21'-0" | 897 | | 32 | | | | | | | |
| P901 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |
| | | | | | | | | | | | | | |
| P1001 | 72 | 61 | 12'-4" | 3821 | 3237 | 17 | 9'-6" | | | | | | |
| P1002 | 188 | 154 | 11'-8" | 9438 | 7731 | 1 | 1'-10" | 10'-2" | | | | | |
| P1003 | 188 | 154 | 35'-0" | 28314 | 23193 | STR. | | | | | | | |
| TOTAL WEIGHT PIER 2 = 97,566 LBS (PHASE I = 54,168 LBS, PHASE II = 43,398 LBS) | | | | | | | | | | | | | |

## BAR SCHEDULE

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PIER 3** | | | | | | | | | | | | | |
| P402 | 1012 | 858 | 3'-0" | 2028 | 1719 | 29 | 2'-0" | | | | | | |
| | | | | | | | | | | | | | |
| P501 | 14 | | 38'-2" | 557 | | STR. | | | | | | | |
| P502 | | 116 | 33'-0" | | 3993 | STR. | | | | | | | |
| P503 | 14 | | 38'-6" | 562 | | STR. | | | | | | | |
| P504 | 182 | 154 | 8'-1" | 1534 | 1298 | 40 | 4'-2" | 1'-2" | 1'-2" | 2'-3" | | | |
| P505 | 91 | 77 | 12'-4" | 1171 | 991 | 2 | 4'-2" | 4'-2" | 4'-2" | | | | |
| P506 | 44 | | 7'-1" | 325 | | 24 | 2'-0" | 2'-0" | | | | 12" | |
| P507 | 44 | | 37'-5" | 1717 | | STR. | | | | | | | |
| P508 | 44 | | 37'-1" | 1702 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P601 | 24 | | 11'-6" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| P602 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| P603 | 8 | | 4'-2" | 50 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P801 | 8 | | 19'-2" | 409 | | STR. | | | | | | | |
| *P802 | | 16 | 34'-0" | | 1452 | 33 | | | | | | | |
| P803 | 8 | | 19'-6" | 417 | | STR. | | | | | | | |
| *P804 | 16 | | 21'-0" | 897 | | 32 | | | | | | | |
| P901 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |
| | | | | | | | | | | | | | |
| P1001 | 75 | 67 | 12'-4" | 3980 | 3556 | 17 | 9'-6" | | | | | | |
| P1002 | 182 | 154 | 11'-8" | 9137 | 7731 | 1 | 1'-10" | 10'-2" | | | | | |
| P1003 | 182 | 154 | 35'-2" | 27541 | 23304 | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| TOTAL WEIGHT PIER 3 = 97,152 LBS (PHASE I = 53,108 LBS, PHASE II = 44,044 LBS) | | | | | | | | | | | | | |
| **PIER 4** | | | | | | | | | | | | | |
| P402 | 810 | 702 | 3'-0" | 1623 | 1407 | 29 | 2'-0" | | | | | | |
| | | | | | | | | | | | | | |
| P501 | 14 | | 36'-2" | 528 | | STR. | | | | | | | |
| P502 | | 100 | 33'-0" | | 3442 | STR. | | | | | | | |
| P503 | 14 | | 38'-6" | 562 | | STR. | | | | | | | |
| P504 | 178 | 154 | 8'-1" | 1501 | 1298 | 40 | 4'-2" | 1'-2" | 1'-2" | 2'-3" | | | |
| P505 | 89 | 77 | 12'-4" | 1145 | 991 | 2 | 4'-2" | 4'-2" | 4'-2" | | | | |
| P506 | 36 | | 7'-1" | 266 | | 24 | 2'-0" | 2'-0" | | | | 12" | |
| P507 | 36 | | 37'-5" | 1405 | | STR. | | | | | | | |
| P508 | 36 | | 35'-1" | 1317 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| P601 | 24 | | 11'-6" | 412 | | 31 | 2'-4" | 2'-10" | 1'-0" | 1'-0" | | | |
| P602 | 16 | | 4'-3" | 102 | | 1 | 1'-7" | 2'-10" | | | | | |
| P603 | 8 | | 4'-2" | 50 | | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| *P801 | 8 | | 34'-2" | 730 | | 32 | | | | | | | |
| *P802 | | 16 | 34'-0" | | 1452 | 33 | | | | | | | |
| P803 | 8 | | 22'-3" | 475 | | STR. | | | | | | | |
| *P804 | 8 | | 18'-5" | 393 | | 32 | | | | | | | |
| P901 | 40 | | 4'-2" | 567 | | 1 | 1'-7" | 2'-10" | | | | | |
| | | | | | | | | | | | | | |
| P1001 | 72 | 68 | 12'-4" | 3821 | 3609 | 17 | 9'-6" | | | | | | |
| P1002 | 178 | 154 | 11'-8" | 8936 | 7731 | 1 | 1'-10" | 10'-2" | | | | | |
| P1003 | 178 | 154 | 29'-7" | 22659 | 19604 | STR. | | | | | | | |
| | | | | | | | | | | | | | |
| TOTAL WEIGHT PIER 4 = 86,026 LBS (PHASE I = 46,492 LBS, PHASE II = 39,534 LBS) | | | | | | | | | | | | | |

## BAR BENDING DIAGRAMS




NOTES:

1. FOR NOTES, SEE SHEET 53/55.

* SEE SHEET 53/55

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1901

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| JDH | CAG | RER | 05/30/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| NFF | | 5708110 | |

REINFORCING STEEL LIST
(PRESTRESSED CONCRETE OPTION)
IR-75 OVER THE GREAT MIAMI RIVER
BRIDGE NO. MOT-75-1523

MOT-75-14.60
PID 23828

54/55

289/314

## BAR SCHEDULE

| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SUPERSTRUCTURE | | | | | | | | | |
| S401 | 2130 | 1640 | 30'-0" | 42685 | 32866 | STR | | | | | | | |
| S402 | 59 | | 25'-6" | 1005 | | STR | | | | | | | |
| S403 | 37 | | 26'-4" | 651 | | STR | | | | | | | |
| S404 | 24 | | 22'-2" | 355 | | STR | | | | | | | |
| S405 | 48 | 82 | 12'-6" | 401 | 685 | STR | | | | | | | |
| S406 | 34 | | 20'-5" | 464 | | STR | | | | | | | |
| S407 | 24 | | 22'-3" | 357 | | STR | | | | | | | |
| S408 | 258 | 208 | 8'-6" | 1465 | 1181 | 2 | 3'-9" | 1'-2" | 3'-9" | | | | |
| S409 | 38 | 32 | 4'-10" | 123 | 103 | 30 | 1'-11½" | 6¼" | 8½" | 8½" | | | |
| S410 | 38 | 32 | 12'-11" | 328 | 276 | 24 | 5½" | 6'-4" | | | | | 2½" |
| S411 | 38 | 32 | 2'-8" | 68 | 57 | STR | | | | | | | |
| S412 | 77 | | 13'-7" | 699 | | 28 | 5'-10" | 8" | 5'-10" | 11" | | | |
| S413 | 164 | 192 | 14'-10" | 1625 | 1902 | 6 | 2'-2" | 5'-10" | 8" | | | | |
| | | | | | | | | | | | | | |
| S501 | 4305 | 304 | 30'-0" | 134703 | 9512 | STR | | | | | | | |
| | 2 SERIES | | 12'-10" | | | | | | | | | | |
| S502 | OF | | TO | 36720 | | STR | | | | | | | 1/4" |
| | 655 | | 40'-11" | | | | | | | | | | |
| S503 | 1448 | | 40'-2" | 60662 | | STR | | | | | | | |
| S504 | | 5520 | 31'-7" | | 181837 | STR | | | | | | | |
| | 2 SERIES | | 8'-4" | | | | | | | | | | |
| S505 | OF | | TO | 40512 | | STR | | | | | | | 1/16" |
| | 1379 | | 19'-10" | | | | | | | | | | |
| S506 | 1 | | 8'-4" | 9 | | STR | | | | | | | |
| S507 | 16 | | 4'-0" | 67 | | STR | | | | | | | |
| S508 | 1181 | | 7'-5" | 9136 | | 23 | 1'-1" | 3'-2" | 3'-0" | | | | 2¾" |
| S509 | 6 | | 24'-7" | 154 | | 19 | 22'-7" | 2'-0" | 2½" | | | | |
| S510 | 6 | | 21'-1" | 132 | | STR | | | | | | | |
| S511 | | 1138 | 5'-6" | | 6528 | 11 | 10¼" | 4'-5" | 1'-1" | | | | |
| S512 | | 1138 | 5'-5" | | 6429 | 1 | 1'-1" | 4'-5" | | | | | |
| S513 | | 8 | 11'-7" | | 97 | STR | | | | | | | |
| S514 | | 8 | 17'-5" | | 145 | STR | | | | | | | |
| S515 | | 8 | 14'-2" | | 118 | STR | | | | | | | |
| S516 | | 8 | 20'-0" | | 167 | STR | | | | | | | |
| S517 | | 16 | 8'-10" | | 147 | STR | | | | | | | |
| S518 | 6 | | 14'-4" | 90 | | STR | | | | | | | |
| S519 | | 8 | 5'-6" | | 46 | 13 | 2'-11" | 1'-6½" | 3½" | 1'-1" | | | |
| S520 | | 8 | 6'-3" | | 52 | 19 | 4'-5" | 2½" | 1'-1" | | | | |
| S521 | | 8 | 2'-10" | | 24 | STR | | | | | | | |
| S522 | 1 | | 19'-10" | 21 | | STR | | | | | | | |
| S523 | 1 | | 40'-11" | 43 | | STR | | | | | | | |
| | | | | | | | | | | | | | |
| S601 | | 32 | 5'-0" | | 240 | STR | | | | | | | |
| S602 | 43 | 40 | 30'-0" | 1938 | 1802 | STR | | | | | | | |
| S603 | 1181 | 1138 | 3'-9" | 6652 | 6410 | 29 | 1'-1" | 1'-9" | 4" | 1'-1" | | | |
| S604 | 1181 | 1138 | 2'-8" | 4730 | 4558 | 1 | 1'-1" | 1'-9" | | | | | |
| S605 | 1 | | 22'-3" | 33 | | 19 | 17'-11" | 4'-4" | 5½" | | | | |
| S606 | 1 | | 18'-9" | 28 | | STR | | | | | | | |
| S607 | | 1 | 29'-8" | | 45 | STR | | | | | | | |
| S608 | | 1 | 7'-2" | | 11 | STR | | | | | | | |
| S609 | | 2 | 18'-2" | | 55 | STR | | | | | | | |
| S610 | 1 | | 9'-8" | 15 | | STR | | | | | | | |
| S611 | | 2 | 2'-10" | | 9 | STR | | | | | | | |
| S612 | | 8 | 6'-3" | | 75 | 29 | 2'-7" | 1'-9" | 4" | 2'-1" | | | |
| S613 | | 8 | 6'-1" | | 73 | 2 | 2'-1" | 1'-9" | 2'-7" | | | | |
| S614 | | 1 | 37'-10" | | 57 | STR | | | | | | | |

## BAR SCHEDULE

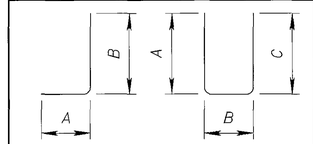
| MARK | NUMBER PHASE I | NUMBER PHASE II | LENGTH | WEIGHT PHASE I | WEIGHT PHASE II | TYPE | DIMENSIONS A | B | C | D | E | R | INC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S615 | | 1 | 15'-4" | | 23 | STR | | | | | | | |
| S616 | 30 | | 7'-9" | 349 | | STR | | | | | | | |
| S617 | 189 | 288 | 6'-11" | 1963 | 2992 | STR | | | | | | | |
| S618 | 24 | | 9'-6" | 342 | | 13 | 3'-10" | 7" | 7" | 4'-10" | | | |
| S619 | 252 | 384 | 9'-1" | 3438 | 5239 | 13 | 3'-10" | 7" | 7" | 4'-5" | | | |
| S620 | 24 | 24 | 2'-1" | 75 | 75 | STR | | | | | | | |
| S621 | 8 | 8 | 10'-4" | 124 | 124 | 14 | 4'-5" | 1'-6" | 7" | 7" | 3'-10" | | |
| S622 | 18 | | 6'-8" | 180 | | STR | | | | | | | |
| S623 | 24 | | 8'-11" | 321 | | 13 | 3'-10" | 7" | 7" | 4'-3" | | | |
| S624 | 12 | | 4'-9" | 86 | | STR | | | | | | | |
| S625 | 28 | | 8'-0" | 336 | | 13 | 3'-10" | 7" | 7" | 3'-4" | | | |
| S626 | 20 | | 8'-1" | 243 | | 13 | 3'-10" | 7" | 7" | 3'-5" | | | |
| S627 | 15 | | 5'-0" | 113 | | STR | | | | | | | |
| S628 | 9 | | 8'-11" | 121 | | STR | | | | | | | |
| S629 | 12 | | 7'-9" | 140 | | 13 | 3'-10" | 7" | 7" | 3'-1" | | | |
| S630 | 9 | | 4'-4" | 59 | | STR | | | | | | | |
| S631 | 24 | | 8'-6" | 306 | | 13 | 3'-10" | 7" | 7" | 3'-10" | | | |
| S632 | 30 | | 5'-8" | 255 | | STR | | | | | | | |
| S633 | 9 | | 4'-10" | 65 | | STR | | | | | | | |
| S634 | 6 | | 7'-8" | 69 | | STR | | | | | | | |
| S635 | 16 | | 9'-0" | 216 | | 13 | 3'-10" | 7" | 7" | 4'-4" | | | |
| S636 | 12 | | 6'-8" | 120 | | STR | | | | | | | |
| S637 | 16 | | 8'-5" | 202 | | 13 | 3'-10" | 7" | 7" | 3'-9" | | | |
| | | | | | | | | | | | | | |
| S701 | 2038 | 1628 | 30'-0" | 124970 | 99829 | STR | | | | | | | |
| S702 | 49 | | 36'-2" | 3622 | | STR | | | | | | | |
| S703 | 31 | | 39'-8" | 2513 | | STR | | | | | | | |
| S704 | 22 | | 26'-1" | 1173 | | STR | | | | | | | |
| S705 | 42 | 74 | 15'-1" | 1295 | 2281 | STR | | | | | | | |
| S706 | 31 | | 19'-0" | 1204 | | STR | | | | | | | |
| S707 | 22 | | 21'-6" | 967 | | STR | | | | | | | |
| S708 | 741 | 438 | 30'-9" | 46574 | 27530 | STR | | | | | | | |
| S709 | 933 | 720 | 24'-1" | 45928 | 35443 | STR | | | | | | | |
| | | | | | | | | | | | | | |
| S801 | 12 | | 10'-11" | 350 | | 13 | 3'-10" | 7" | 7" | 6'-4" | | | |
| | | | | | | | | | | | | | |

TOTAL WEIGHT SUPERSTRUCTURE = 1,012,633 LBS (PHASE I = 583,590 LBS, PHASE II = 429,043 LBS)

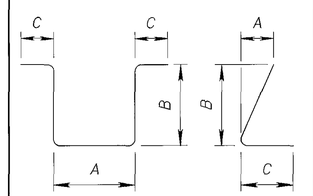
**NOTES:**

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, RA601:
   - RA: LOCATION OF THE BAR IN THE STRUCTURE (REAR ABUTMENT)
   - 6: BAR SIZE DESIGNATION NO. 6
   - 01: SEQUENCE NUMBER
2. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BAR BEND AT THE END OF THE BAR. ALL REINFORCING STEEL IS TO BE EPOXY COATED. STRAIGHT BARS ARE INDICATED BY "STR".

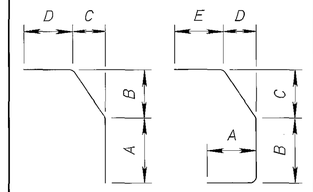
## BAR BENDING DIAGRAMS



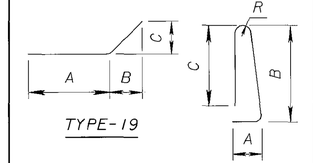
TYPE-1 TYPE-2



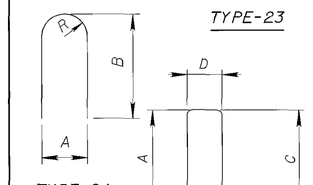
TYPE-6 TYPE-11



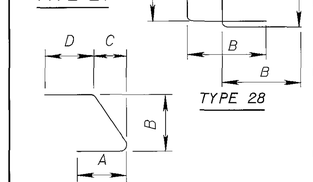
TYPE-13 TYPE-14



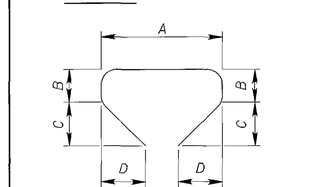
TYPE-19



TYPE-23 TYPE-24 TYPE 28



TYPE-29



TYPE-30

DESIGN AGENCY: TranSystems, 55 PUBLIC SQUARE, SUITE 1900, CLEVELAND, OHIO 44113-1900

| DESIGNED | DRAWN | REVIEWED | DATE |
|---|---|---|---|
| MLR | MLR | NFF | 05/31/05 |
| CHECKED | REVISED | STRUCTURE FILE NUMBER | |
| JDH | | 5708710 | |

REINFORCING STEEL LIST
(PRESTRESSED CONCRETE OPTION)
BRIDGE NO. MOT-75-1523
I.R. 75 OVER THE GREAT MIAMI RIVER

MOT-75-14.60
PID 23828

55/55

290/314