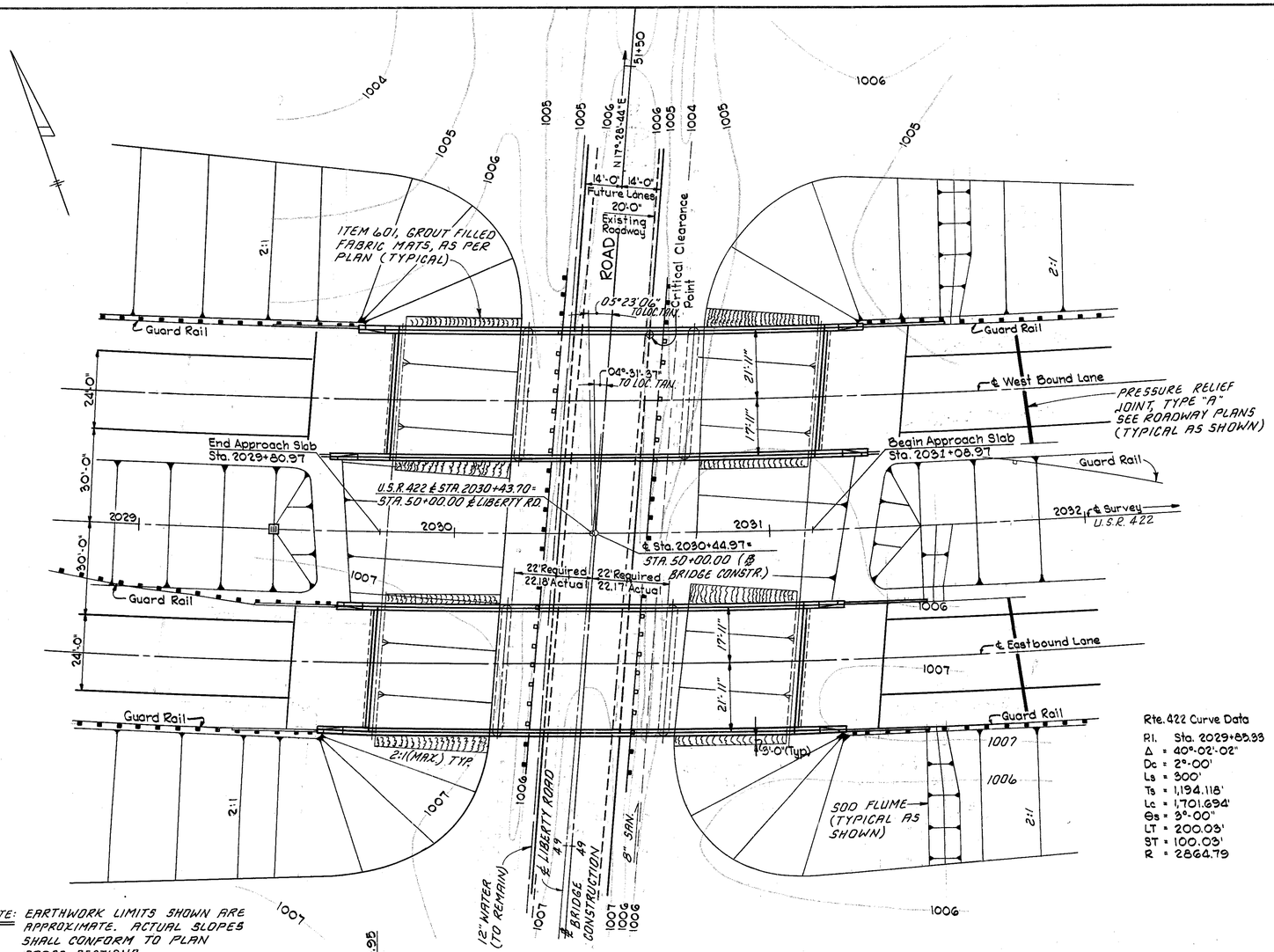
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | F-U 468 (10) | |

CUY-422-18.40 GEA-422-0.00

227
321




NOTE: EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

Rte. 422 Curve Data

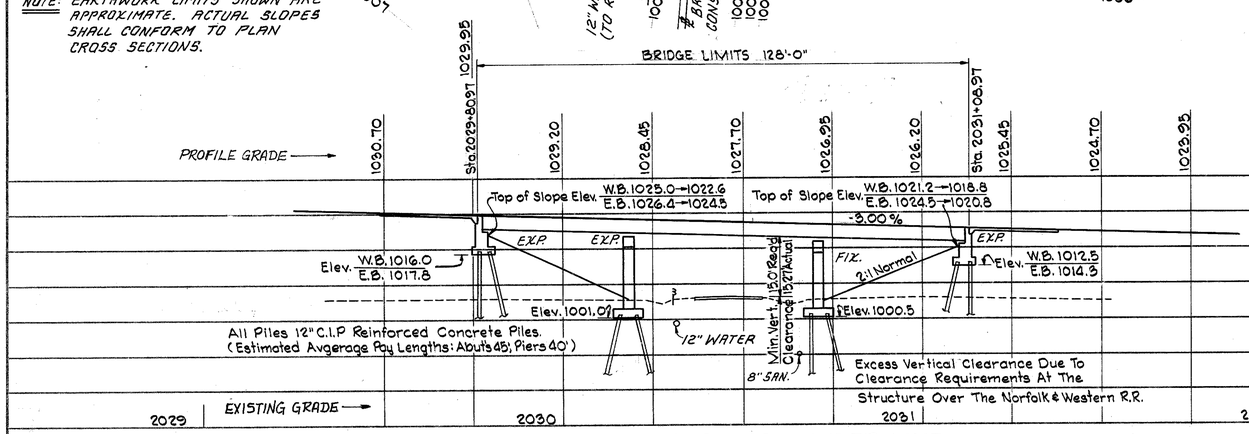
| | |
|---|---|
| P.I. | Sta. 2029+85.93 |
| Δ | = 40°-02'-02" |
| Dc | = 2°-00' |
| Ls | = 300' |
| Ts | = 1,194.118' |
| Lc | = 1,701.694' |
| θs | = 3°-00" |
| LT | = 200.03' |
| ST | = 100.03' |
| R | = 2864.79 |

ORIGINAL JOSEPH K. KNOERLE PLANS REVISED BY ROACHE-CIUNI-LYNN ASSOCIATES TO REFLECT CURRENT SPECIFICATIONS AND REQUIREMENTS.

JAN. 1986

NOTE: DESIGNATION 226N DENOTES REFERENCE TO DRAWING 226N/321.

| DESIGN TRAFFIC | |
|---|---|
| A.D.T. (2007) | 32,750 |
| A.D.T.T. (2007) | 1,310 |




PROFILE ON PROPOSED CENTER LINE

## PROPOSED STRUCTURE

TYPE: Continuous Steel Beam With Reinforced Concrete Deck And Substructure.
SPANS: 38'-0", 47'-6", 38'-0" c/c Brgs.
ROADWAY: 2 @ 39'-10" t/t Parapets, 41'-8" OUT/OUT SLAB
LOADING: HS20-44 (CASE II) AND THE ALTERNATE MILITARY LOADING
SKEW: 04°-31'-37" L.F. (TO LOCAL TANGENT)
WEARING SURFACE: Monolithic Concrete
APPROACH SLABS: AS-1-81 (25' LONG)
ALIGNMENT: 2°-00' Curve Left
SUPERELEVATION: 0.064 ft/ft
SLOPE PROTECTION: GROUT FILLED FABRIC MATS

1/15

JOSEPH K. KNOERLE
CONSULTING ENGINEER
CLEVELAND, OHIO

## SITE PLAN

BRIDGE NO. CUY 422-1907 L&R
OVER LIBERTY ROAD
CUYAHOGA CO. US. ROUTE 422

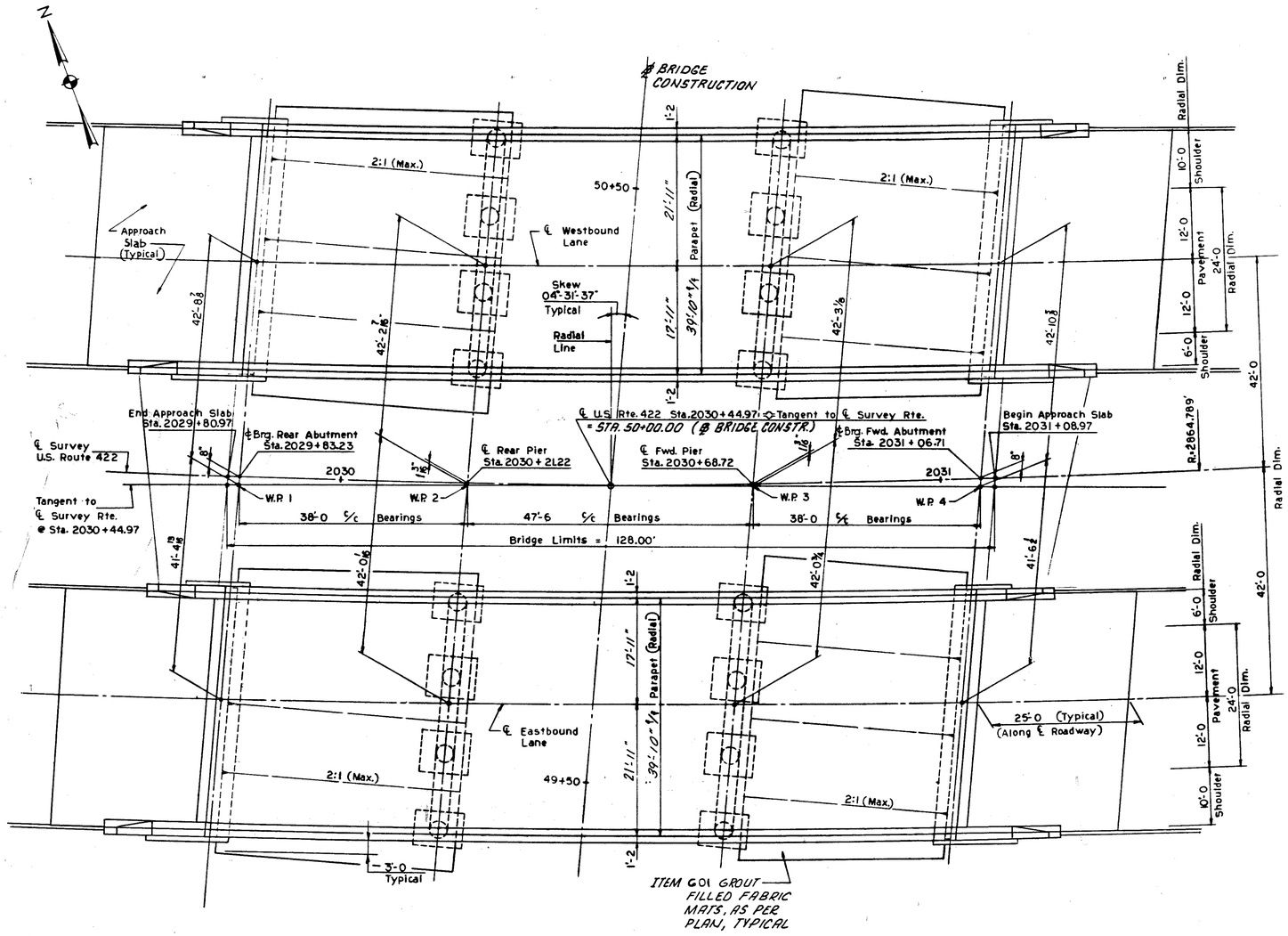
SEC. CUY-422-18.40 STA. 2029+80.97 2031+08.97
SCALE 1" = 20'

| PRESENT TOPOGRAPHY | | PROPOSED WORK | | | |
|---|---|---|---|---|---|
| SURVEYED | DRAWN | DESIGNED | DRAWN | CHECKED | REVIEWED |
| R.N. | T.L.J. | R.E.S. | J.H. | C.H.I. | C.S.M. 4-28-87 |

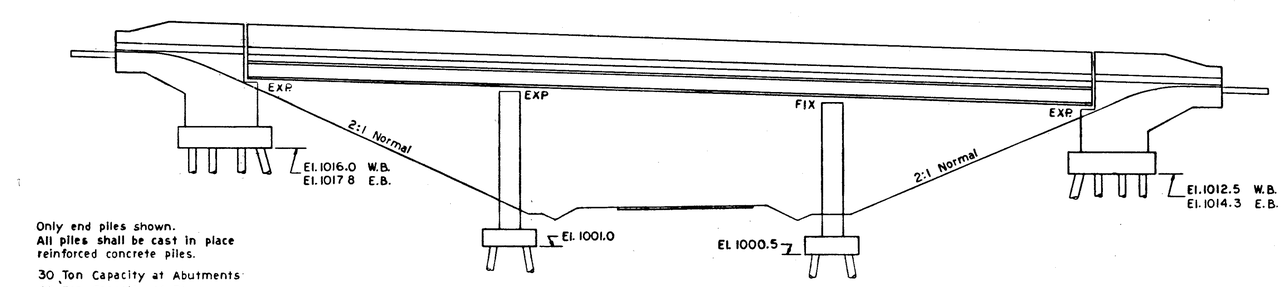
| FED. RD. DIVISION | STATE | PROJECT | |
|---|---|---|---|
| 2 | OHIO | | |

CUY-422-18.40 GEA-422-0.00

228
321




GENERAL PLAN




Only end piles shown.
All piles shall be cast in place reinforced concrete piles.

30 Ton Capacity at Abutments
40 Ton Capacity at Piers

ELEVATION

# GENERAL NOTE

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

| | | |
|---|---|---|
| SUPERSTRUCTURE DETAILS | SD-1-69 (1 TO 4 OF 4) | DATED 6/12/69 |
| APPROACH SLAB DETAILS | AS-1-81 (1 TO 3 OF 3) | DATED 11/27/81 |
| COMPRESSION SEAL EXPANSION JOINTS AT ABUTMENTS FOR STEEL STRINGER STRUCTURES | EXJ-2-81 (1 AND 2 OF 2) | REVISED 4/2/84 |
| INTEGRAL CONSTRUCTION DETAILS STEEL STRINGER STRUCTURES ON FLEXIBLE ABUTMENTS | ICD-1-82 (2 OF 5) | REVISED 8/1/84 |

AND TO SUPPLEMENTAL SPECIFICATIONS:

| | | |
|---|---|---|
| 824 | EPOXY COATED REINFORCING STEEL | DATED 10/8/82 |
| 836 | CONCRETE CURING AND PROTECTIVE MEMBRANE | DATED 11/12/85 |
| 849 | ELASTOMERIC COMPRESSION SEALS FOR STRUCTURAL STEEL JOINTS | DATED 12/24/85 |
| 949 | | DATED 12/24/85 |

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1983, INCLUDING THE 1984 INTERIM SPECIFICATIONS AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

| | |
|---|---|
| DESIGN LOADING | HS20-44 CASE II AND THE ALTERNATE MILITARY LOADING. |
| CONCRETE CLASS S | COMPRESSIVE STRENGTH 4500 P.S.I. |
| CONCRETE CLASS C | UNIT STRESS 1333 P.S.I. (SUBSTRUCTURE) |
| REINFORCING STEEL | ASTM A615, A616, OR A617 |
| | GRADE 60 - UNIT STRESS 24,000 P.S.I. |
| | MINIMUM YIELD STRENGTH 60,000 P.S.I. |
| | SPIRAL REINFORCEMENT MAY BE PLAIN BARS, ASTM A82 OR A615 |
| STRUCTURAL STEEL | ASTM A-36 - UNIT STRESS 20,000 P.S.I. |
| DECK PROTECTION METHOD: | EPOXY COATED REINFORCING STEEL, TOP AND BOTTOM MATS. |

MONOLITHIC WEARING SURFACE:

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

EMBANKMENT CONSTRUCTION:

THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE LEVEL OF THE SUBGRADE FOR A MINIMUM DISTANCE OF 200 FEET BACK OF THE ABUTMENTS. EXCAVATION MAY THEN BE MADE FOR THE ABUTMENTS AND FOR THE PIERS.

PILE DESIGN LOADS:

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 40 TONS PER PILE AND THE DESIGN LOAD FOR THE PIER PILES IS 40 TONS PER PILE.

12 INCH PRECAST PRESTRESSED CONCRETE PILES

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATION FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER 507.

MAINTENANCE OF TRAFFIC:

TWO LANES OF TRAFFIC WITH A MINIMUM HORIZONTAL WIDTH OF 26'-0" AND A MINIMUM VERTICAL CLEARANCE OF 13'-8" SHALL BE MAINTAINED ON LIBERTY ROAD AT ALL TIMES.

UTILITY LINES:

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

2/15

JOSEPH K. KNOERLE
CONSULTING ENGINEER
CLEVELAND, OHIO

GENERAL PLAN & ELEVATION
GENERAL NOTES
BRIDGE NO. CUY.422-1907 L&R
OVER LIBERTY ROAD
CUYAHOGA COUNTY STA. 2029+80.97
STA. 2031+08.97

| DESIGNED | DRAWN | TRACED | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|---|
| RES | JH | | CHI | CSM | 4-28-87 | |

CUY-422-1907 L&R OVER LIBERTY ROAD — ESTIMATED QUANTITIES

| ITEM | EASTBOUND | WESTBOUND | TOTAL | UNIT | DESCRIPTION | ABUTMENTS E.B. | ABUTMENTS W.B. | PIERS E.B. | PIERS W.B. | SUPERSTRUCTURE E.B. | SUPERSTRUCTURE W.B. | GENERAL E.B. | GENERAL W.B. | AS-BUILTS E.B. | AS-BUILTS W.B. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 503 | 353 | 353 | 706 | C.Y. | UNCLASSIFIED EXCAVATION | 227 | 227 | 126 | 126 | | | | | | |
| 505 | | | LUMP SUM | LUMP | PILE DRIVING EQUIPMENT MOBILIZATION | | | | | | | LUMP SUM | LUMP SUM | | |
| 507 | 2970 | 2970 | 5940 | L.F. | 12" CAST-IN-PLACE REINFORCED CONCRETE PILES AS PER PLAN | 1530 | 1530 | 1440 | 1440 | | | | | | |
| 509 | 19364 | 19530 | 38894 | LB. | REINFORCING STEEL, GRADE 60 | 12402 | 12550 | 6962 | 6980 | | | | | | |
| 511 | 115 | 114 | 229 | C.Y. | CLASS C CONCRETE, ABUTMENTS ABOVE FOOTINGS | 115 | 114 | | | | | | | | |
| 511 | 72 | 68 | 140 | C.Y. | CLASS C CONCRETE, PIER CAPS AND COLUMNS | | | 72 | 68 | | | | | | |
| 511 | 110 | 110 | 220 | C.Y. | CLASS C CONCRETE, FOOTINGS | 72 | 72 | 38 | 38 | | | | | | |
| 511 | | 183 | 183 | C.Y. | CLASS S CONCRETE, SUPERSTRUCTURE * As Per Plan | | | | | | 183 | | | | |
| 513 | 87000 | 87000 | 174000 | LB. | STRUCTURAL STEEL (AISC CATEGORY I) * | | | | | 87000 | 87000 | | | | |
| 514 | 87000 | 87000 | 174000 | LB. | FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM A | | | | | 87000 | 87000 | | | | |
| 516 | 85 | 85 | 170 | L.F. | STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC | | | | | 85 | 85 | | | | |
| | | | | | COMPRESSION SEAL | | | | | | | | | | |
| 516 | 16 | 16 | 32 | L.F. | P.V.C. WATERSTOP, AS PER PLAN | 16 | 16 | | | | | | | | |
| 516 | 5 | 5 | 10 | EA. | LAMINATED ELASTOMERIC BEARINGS (7" X 11" X 1.875" | | | | | 5 | 5 | | | | |
| | | | | | PAD WITH 8" X 12-1/2" X 1-1/4" STEEL LOAD PLATE) | | | | | | | | | | |
| 516 | 5 | 5 | 10 | EA. | LAMINATED ELASTOMERIC BEARINGS (9-1/2" X 16" X | | | | | 5 | 5 | | | | |
| | | | | | 1.090" PAD WITH 10-1/2" X 17" X 1-1/4" STEEL | | | | | | | | | | |
| | | | | | LOAD PLATE) | | | | | | | | | | |
| 516 | 5 | 5 | 10 | EA. | LAMINATED ELASTOMERIC BEARINGS (9-1/2" X 16" X | | | | | 5 | 5 | | | | |
| | | | | | 1.625" PAD WITH 10-1/2" X 22" X 1-1/4" STEEL | | | | | | | | | | |
| | | | | | LOAD PLATE) | | | | | | | | | | |
| 516 | 5 | 5 | 10 | EA. | LAMINATED ELASTOMERIC BEARINGS (7" X 11" X 0.8485" | | | | | 5 | 5 | | | | |
| | | | | | PAD WITH 8" X 12-1/2" X 1-1/4" STEEL LOAD PLATE) | | | | | | | | | | |
| 518 | 56 | 56 | 112 | C.Y. | POROUS BACKFILL | 56 | 56 | | | | | | | | |
| 518 | 78 | 86 | 164 | L.F. | 6" PERFORATED HELICAL, C.S.P. 707.01 | 78 | 86 | | | | | | | | |
| 518 | 72 | 72 | 144 | L.F. | 6" NON-PERFORATED HELICAL, C.S.P. 707.01, INCL. SPECIALS | 72 | 72 | | | | | | | | |
| 511 | 183 | | 183 | C.Y. | Class S Concrete, Superstructure — using Shrinkage Compensating Cement * | | | | | 183 | | | | | |
| 523 | 3 | 3 | 6 | HR. | DYNAMIC LOAD TEST | | | | | | | 3 | 3 | | |
| 601 | 445 | 450 | 895 | S.Y. | GROUT FILLED FABRIC MATS, AS PER PLAN | 445 | 450 | | | | | | | | |
| 625 | 0 | 0 | | | SEE SHEET 281A FOR LIGHTING SUMMARY | | | | | | | | | | |
| 824 | 59275 | 58372 | 117647 | LB. | EPOXY COATED REINFORCING STEEL, GRADE 60 | 2812 | 2838 | 13113 | 12184 | 43350 | 43350 | | | | |
| SPEC. | 358 | 358 | 716 | S.Y. | SEALING OF CONCRETE SURFACES * | 66 | 66 | | | 292 | 292 | | | | |

* SEE PROPOSAL NOTE

## GENERAL NOTES CONTINUED

ITEM 601 GROUT FILLED FABRIC MATS, AS PER PLAN

EMBANKMENT SLOPE PROTECTION EXTENDING FROM THE FACE OF THE ABUTMENT DOWN TO THE TOE OF SLOPE SHALL BE AS SPECIFIED IN ITEM 601.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION EXCEPT AS MODIFIED HEREIN. THE FOLLOWING SHALL BE CONSIDERED AS SUPPLEMENTAL TO THE PROVISIONS SET FORTH THEREIN.

MATERIALS: THE MATERIAL USED FOR EMBANKMENT SLOPE PROTECTION SHALL CONSIST OF SPECIALLY-WOVEN MULTIPLE PANELS OF DOUBLE LAYER, OPEN SELVAGE FABRIC, JOINED IN A MAT CONFIGURATION SIMILAR TO "FABRIFORM". THIS MAT SHALL BE FILLED WITH A GROUT CONSISTING OF A MIXTURE OF PORTLAND CEMENT, FINE AGGREGATE AND WATER SO PROPORTIONED AND MIXED AS TO PROVIDE A PUMPABLE SLURRY. POZZOLAN AND GROUT FLUIDIFIER MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE MIX SHALL EXHIBIT A COMPRESSIVE STRENGTH OF 2000 P.S.I. AT TWENTY-EIGHT DAYS WHEN MADE AND TESTED IN ACCORDANCE WITH A.S.T.M. C-31 AND C-39.

MEASUREMENT FOR PAYMENT: GROUT FILLED FABRIC MATS, AS PER PLAN WILL BE MEASURED BY THE SQUARE YARD OF FINISHED SURFACE COMPLETE IN PLACE.

BASIS OF PAYMENT: PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

| ITEM | UNIT | DESCRIPTION |
|---|---|---|
| 601 | SQ.YD. | GROUT-FILLED FABRIC MATS, AS PER PLAN |

THIS PRICE SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM AS SPECIFIED.



adache - ciuni - lynn associates
CONSULTING ENGINEERS CLEVELAND, OHIO 44131

ESTIMATED QUANTITIES AND GENERAL NOTES
BRIDGE NO. CUY-422-1907 L&R
OVER LIBERTY ROAD

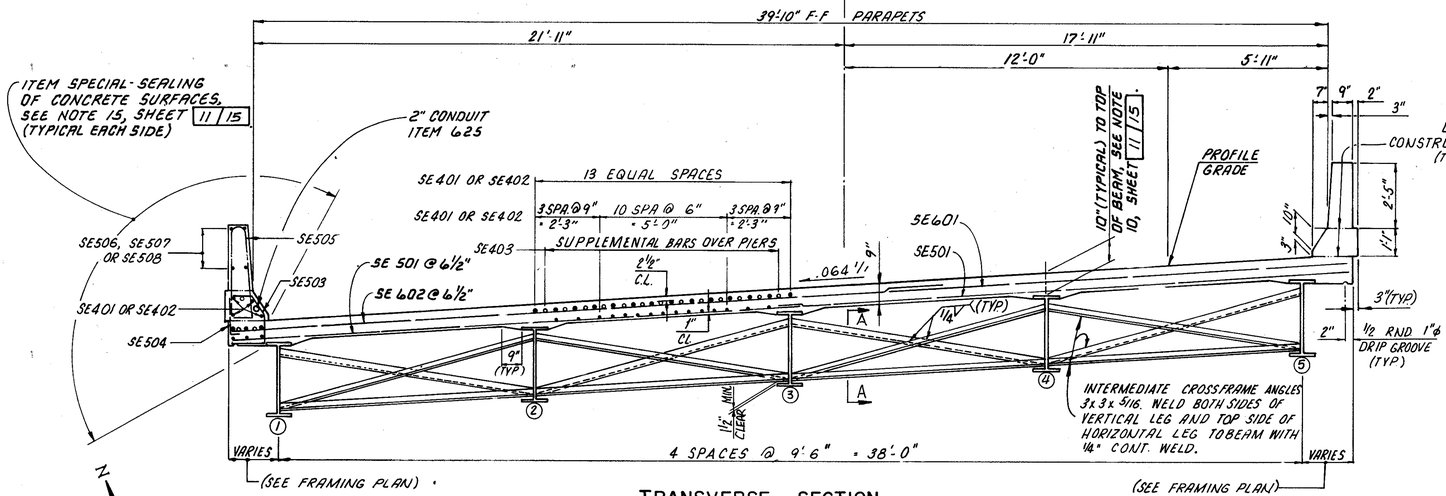
CUYAHOGA COUNTY STA. 2029+80.97
STA 2031+08.97

| DESIGNED | DRAWN | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|
| T.M.J. | E.R | J.R.C. | E.A.F. | 1-24-86 | 10-30-86 |

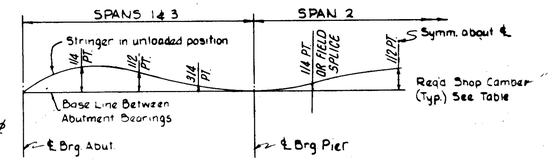
BRUNING 4413267195
A-C-L form no. B-1

| CALC. DATE | CUY - 422 - 18.40 | OHIO |
|---|---|---|
| CHKD. DATE | GEA - 422 - 0.00 | F.H.W.A. REGION 5 |

236 / 321




TRANSVERSE SECTION




LAYOUT DIAGRAM

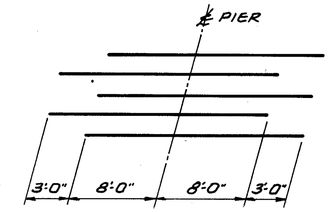
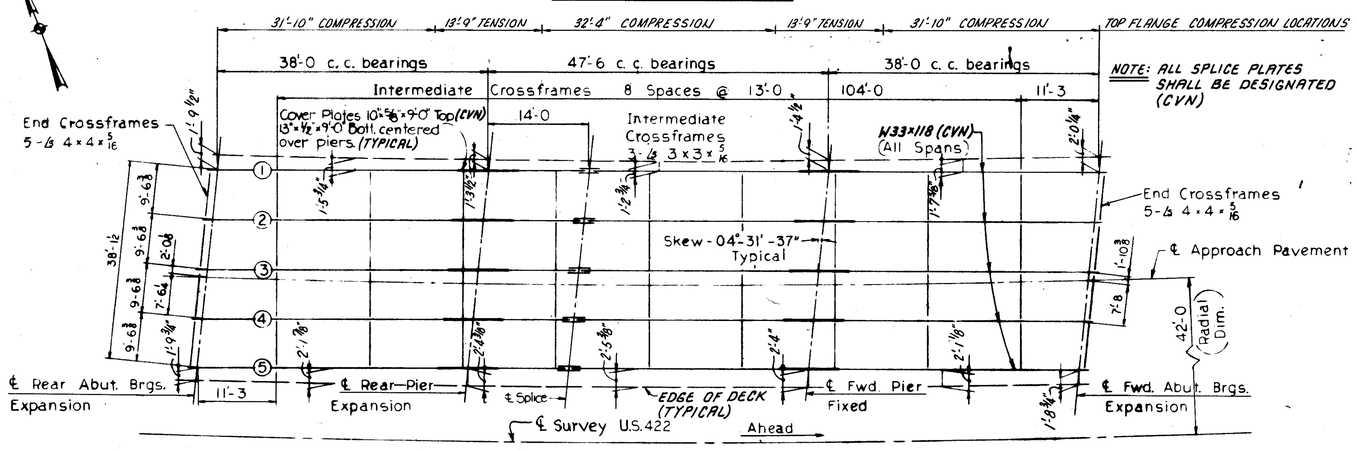



DIAGRAM SHOWING STAGGER OF SE403 BARS, TOP OVER PIERS

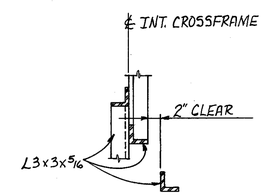



NOTE: ALL SPLICE PLATES SHALL BE DESIGNATED (CVN)

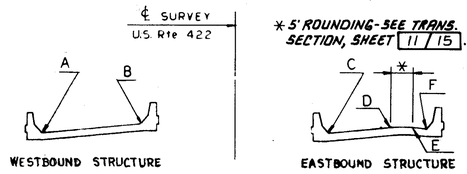
STEEL FRAMING PLAN
WESTBOUND STRUCTURE

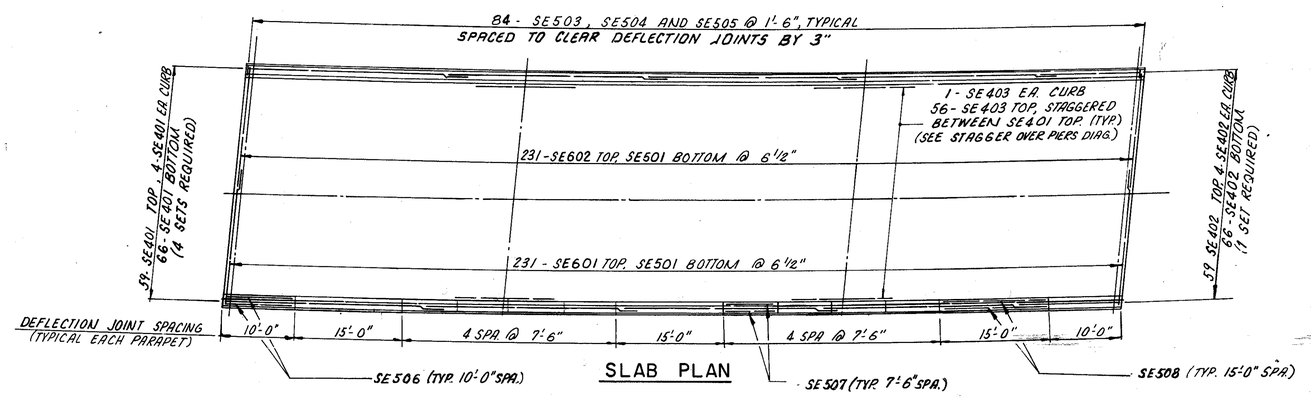
**DEFLECTIONS AND CAMBER**

| | SPAN 1 | | | SPAN 2 | | | SPAN 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1/4 | 1/2 | 3/4 | F.S. | 1/2 | 3/4 | 1/4 | 1/2 | 3/4 |
| BEAM WEIGHT DEFL'N (IN) | — | — | — | — | — | — | — | — | — |
| CONC. WEIGHT DEFL'N (IN) | 1/8 | 1/8 | 1/16 | 1/16 | 1/8 | 1/16 | 1/16 | 1/8 | 1/8 |
| CORRECT. FOR HORIZ. CURVE | -1/16 | -1/16 | -1/16 | -1/16 | -1/16 | -1/16 | -1/16 | -1/16 | -1/16 |
| REQ'D SHOP CAMBER (IN) | 1/16 | 1/16 | 0 | 0 | 1/16 | 0 | 0 | 1/16 | 1/16 |




SECTION A-A




SLAB PLAN

**DECK SCREED ELEVATIONS**

SEE NOTE 13, SHEET 11/14

| DESCRIPTION | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| C/L REAR ABUT. BRG. | 1027.46 | 1030.06 | 1029.40 | 1031.33 | 1031.39 | 1031.22 |
| 2030+00 | 1027.07 | 1029.55 | 1028.87 | 1030.74 | 1030.80 | 1030.62 |
| C/L PIER 1 BRG. | 1026.29 | 1028.85 | 1028.27 | 1030.22 | 1030.27 | 1030.10 |
| 2030+25 | 1026.32 | 1028.79 | 1028.11 | 1029.99 | 1030.04 | 1029.86 |
| SPLICE | 1026.07 | 1028.61 | 1027.86 | 1029.81 | 1029.87 | 1029.70 |
| 2030+50 | 1025.58 | 1028.05 | 1027.37 | 1029.24 | 1029.30 | 1029.11 |
| C/L PIER 2 BRG. | 1024.83 | 1027.41 | 1026.86 | 1028.82 | 1028.87 | 1028.71 |
| 2030+75 | 1024.82 | 1027.30 | 1026.62 | 1028.50 | 1028.56 | 1028.37 |
| 2031+00 | 1024.08 | 1026.55 | 1025.86 | 1027.74 | 1027.79 | 1027.61 |
| C/L FWD. ABUT. BRG. | 1023.67 | 1026.26 | 1025.73 | 1027.70 | 1027.76 | 1027.59 |

FOR NOTES, SEE SHEET 11/15.

10/15

adache - ciuni - lynn associates
CONSULTING ENGINEERS CLEVELAND, OHIO 44131

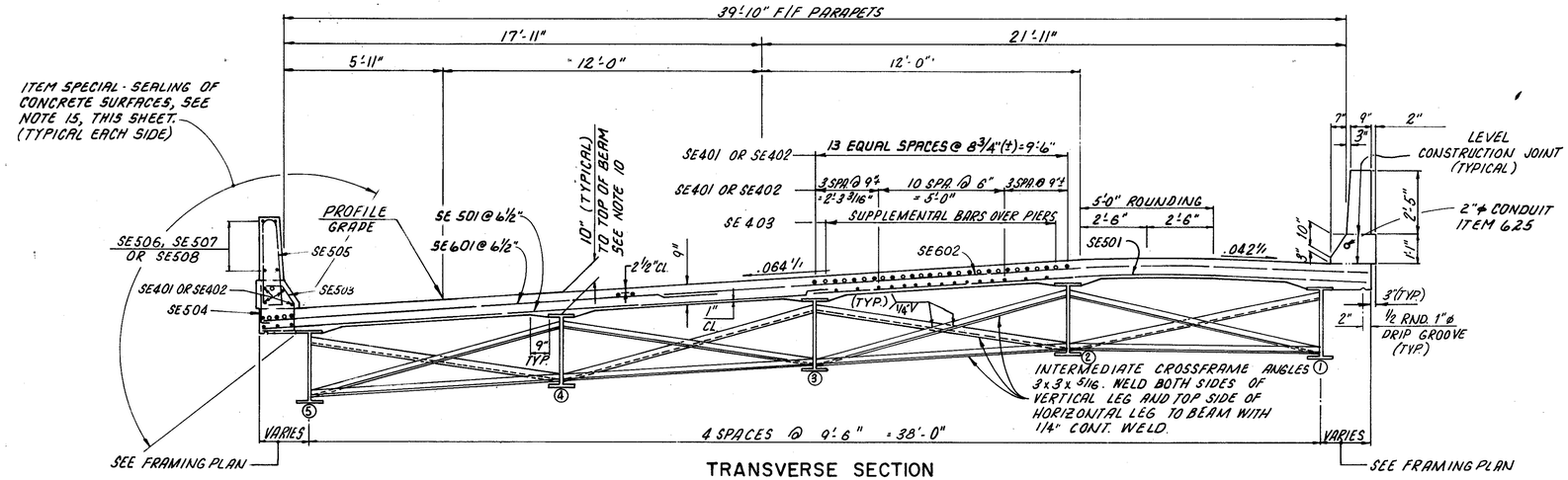
SUPERSTRUCTURE DETAILS
WESTBOUND BRIDGE
BRIDGE NO CUY-422-1907 L&R
OVER LIBERTY ROAD
CUYAHOGA COUNTY STA.2029+ 80.97
STA.2031+ 08.97

| DESIGNED | DRAWN | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|
| L.P.C. | D.R.J. | J.R.C. | E.A.F. | 1-24-86 | |

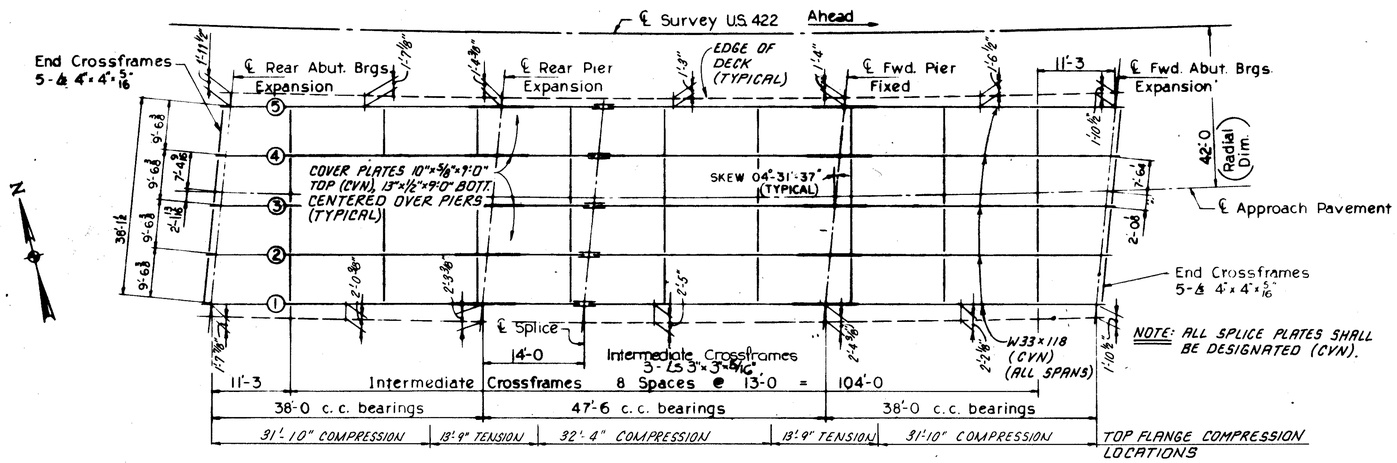
A-C-L form no. B-1

| CALC. DATE | CUY - 422 - 18.40 | OHIO |
|---|---|---|
| CHKD. DATE | GEA - 422 - 0.00 | F.H.W.A. REGION 5 |

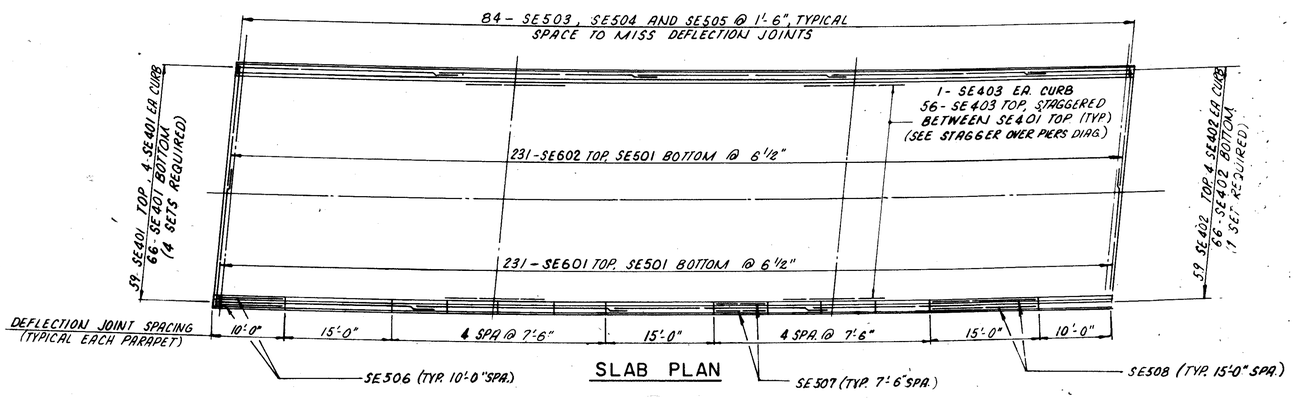
237/321




TRANSVERSE SECTION




STEEL FRAMING PLAN
EASTBOUND STRUCTURE




SLAB PLAN

## NOTES:

1. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF CMS.
2. HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER A325 UNLESS OTHERWISE NOTED.
3. FOR COVER PLATE WELDING DETAILS, SEE STANDARD DRAWING SD-1-69, SHEET 3 OF 4.
4. FOR BEAM SPLICE DETAILS, SEE STANDARD DRAWING SD-1-69, SHEET 4 OF 4. ALL SPLICE PLATES SHALL BE DESIGNATED (CVN)
5. FOR END CROSSFRAME DETAILS SEE STANDARD DRAWING SD-1-69, SHEET 1 OF 4.
6. FOR DETAILS OF ELASTOMERIC BEARINGS SEE SHEET 12/15.
7. FOR COMPRESSION SEAL EXPANSION JOINTS AT ABUTMENTS, REFER TO STANDARD DRAWING EXJ-2-81, SHEETS 1 AND 2 OF 2.
8. WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS OF THE FASCIA STRINGER FLANGES DESIGNATED "COMPRESSION". ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG, AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY AASHTO.
9. A HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" (PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" WIDTH).
10. DECK SLAB DEPTH: THE DISTANCE SHOWN FROM TOP OF DECK SLAB TO TOP OF STEEL BEAM IS THE DESIGN DIMENSION. THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED ON THIS DIMENSION EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE BEAM MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18 OF C.M.S.
11. FOR DEFLECTION, CAMBER AND SCREED ELEVATIONS, SEE SHEET 10/15.
12. TRANSVERSE DECK REINFORCING SHALL BE FIELD BENT AS REQUIRED AND INCLUDED WITH ITEM 824, EPOXY COATED REINFORCING STEEL, GRADE 60 FOR PAYMENT.
13. THE ELEVATIONS SHOWN AT THE FACE OF CURB ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE IS PLACED. PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.
14. REINFORCING STEEL WITH THE PREFIX "SE" SHALL BE EPOXY COATED.
15. ITEM SPECIAL, SEALING OF CONCRETE SURFACES: A CONCRETE SEALER, SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON THE TRANSVERSE SECTION. SEE THE PROPOSAL NOTE FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.
16. FOR REINFORCING SCHEDULE AND BAR BENDING DIAGRAMS SEE SHEETS 13/15 THRU 15/15.
17. FOR FIXED BEARING DETAILS SEE STANDARD DRAWING FB-1-82.

11/15

adache - ciuni - lynn associates
CONSULTING ENGINEERS CLEVELAND, OHIO 44131

SUPERSTRUCTURE DETAILS
EASTBOUND BRIDGE
BRIDGE NO. CUY-422-1907 L&R
OVER LIBERTY ROAD
CUYAHOGA COUNTY STA. 2029+80.97
STA. 2031+08.97

| DESIGNED | DRAWN | CHECKED | REVIEWED | DATE | REVISED |
|---|---|---|---|---|---|
| L.P.C. | D.R.J. | J.R.C. | E.A.F. | 1-24-86 | |

A·C·L form no. B-1