GENERAL NOTES

1. DESIGN SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2004 EDITION) AND SUPPLEMENTS THERETO.

2. DESIGN SPECIFICATIONS:
AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), LRFD BRIDGE DESIGN SPECIFICATIONS 2004 EDITION.

FOOT STRUCTURES DESIGN GUIDELINES FOR LOAD AND RESISTANCE FACTOR DESIGN, 2005.

3. DESIGN METHOD:
LOAD AND RESISTANCE FACTOR DESIGN METHOD (LRFD).

PRESTRESSED BEAMS HAVE BEEN DESIGNED FOR SERVICE LOAD, SERVICE CASES I & III, AND CHECKED FOR STRENGTH LIMIT STATES IN ACCORDANCE WITH THE AASHTO LRFD CODE.

PRESTRESSED PILES HAVE BEEN CHECKED TO VERIFY NO TENSION EXISTS IN THE CONCRETE UNDER ANY SERVICE LOAD CONDITION.

4. DESIGN LOADING:
A. OPERATIONAL IMPORTANCE FACTOR = 1.0, IN ACCORDANCE WITH THE FOOT STRUCTURES DESIGN GUIDELINES.

B. DEAD LOADS
UNIT WEIGHT OF REINFORCED CONCRETE (DC) 0.150 KCF
UNIT WEIGHT OF POST-TENSIONED CONCRETE (DC) 0.155 KCF
TRAFFIC RAILING BARRIERS (DC) 0.421 KLF EACH
TRAFFIC RAILING MEDIAN BARRIERS (DC) 0.496 KLF EACH
SIP FORMS (SEE NOTE 16) 0.015 KSF
ALLOW 1/2 INCH SACRIFICIAL DECK THICKNESS FOR GRINDING AND GROOVING.
C. LIVE LOAD HL-93 LOADING

D. SEISMIC
DESIGN CONFORMS WITH THE FOOT STRUCTURES DESIGN GUIDELINES SEISMIC PROVISIONS, SECTION 2.3.

5. FUTURE WEARING SURFACE
DESIGN DOES NOT INCLUDE ALLOWANCE FOR FUTURE WEARING SURFACE.

7. REINFORCING STEEL:
ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, UNCOATED (BLACK), EXCEPT THAT SPIRAL TIES SHALL BE MANUFACTURED FROM COLD-DRAWN STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A82.

8. ENVIRONMENTAL CLASSIFICATION:
SUBSTRUCTURES EXTREMELY AGGRESSIVE (CHLORIDES)
SUPERSTRUCTURES EXTREMELY AGGRESSIVE (CHLORIDES)

9. CONCRETE SURFACE FINISH:
A CLASS 5 FINISH COATING SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES: RAILING BARRIERS (SEE FIGURE 1).

10. PLAN DIMENSIONS:
ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.

12. SCOUR:
THE STRUCTURE HAS BEEN DESIGNED FOR THE SCOUR ELEVATIONS SHOWN IN THE PILE INSTALLATION TABLE. THE 100 YEAR SCOUR ELEVATION IS APPLICABLE TO ALL LIMIT STATES. THE 500 YEAR SCOUR ELEVATION IS CONSIDERED AN EXTREME LIMIT STATE.

13. EXPANSION JOINTS:
ALL EXPANSION JOINTS ARE DESIGNED FOR THE FOLLOWING TOTAL MOVEMENTS:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>JOINT TYPE</th>
<th>TOTAL MOVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>END BENT 1</td>
<td>STRIP SEAL</td>
<td>1.25 IN</td>
</tr>
<tr>
<td>PIER 4, 8, 12, 16, 20, 24, 28, 32, 36 AND 40</td>
<td>STRIP SEAL</td>
<td>2.50 IN</td>
</tr>
<tr>
<td>PIER 44</td>
<td>FINGER JOINT</td>
<td>4.50 IN</td>
</tr>
<tr>
<td>PIER 49</td>
<td>FINGER JOINT</td>
<td>4.50 IN</td>
</tr>
<tr>
<td>PIERS 53, 57, 61, 65, 69, 73, 77, 81, 85, 89, 93, 97, 100 AND 101E</td>
<td>STRIP SEAL</td>
<td>2.50 IN</td>
</tr>
<tr>
<td>END BENTS 103W, 103E</td>
<td>STRIP SEAL</td>
<td>1.25 IN</td>
</tr>
</tbody>
</table>

14. UTILITIES:
THE UNDERGROUND UTILITIES IN THE BRIDGE PLANS ARE AT APPROXIMATE LOCATIONS. REFER TO THE ROADWAY PLANS FOR ADDITIONAL UTILITY DETAILS.

FOR LOCATIONS OF EXISTING UTILITIES, SEE PLAN AND ELEVATION SHEETS.

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# Silica Fume is required for Concrete Below Elevation 14.0 Feet.
# Silica Fume only for Trestle Bent Piles. (Except End Bents & Piers 2 & 3)

CONCRETE COVER:
- CIP SUPERSTRUCTURE = 2 IN. (TYPICAL, EXCEPT AS NOTED)
- CIP/PRECAST SUBSTRUCTURE = 4½ IN. FOR EXTERNAL SURFACES CAST AGAINST EARTH AND SURFACES IN CONTACT WITH THE WATER
- 4 IN. FOR OTHER EXTERNAL SURFACES
- 2 IN. FOR PEDESTALS

CONCRETE COVERS SHOWN IN THE PLANS DO NOT INCLUDE PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER."
GENERAL NOTES, CONT.

15. SCREEDING DECK SLABS:
SCREED THE RIDING SURFACE OF THE BRIDGE DECK AND APPROACH SLABS TO ACHIEVE THE
FINISH GRADE ELEVATIONS SHOWN IN THE PLANS. ACCOUNT FOR THEORETICAL DEFLECTIONS
DUE TO DECK SELF-WEIGHT, DECK CASTING SEQUENCE, DECK FORMING SYSTEMS, CONSTRUCTION
LOADS, OVERLAYS AND TEMPORARY SNIping, ETC. AS REQUIRED. MEET THE FINISH AND
SMOOTHNESS REQUIREMENTS OF THE SPECIFICATIONS.

16. STAY-IN-PLACE FORMS:
STAY-IN-PLACE POLYMER LAMINATED GALVANIZED STEEL FORMS SHALL ONLY BE PERMITTED FOR
SPANS 1 THRU 1 & 94 THRU 103 (EASTBOUND), 1 THRU 8 ' (WESTBOUND) AND 44 THRU 48 (EASTBOUND AND WESTBOUND).
* - STAY-IN-PLACE FORMS NOT PERMITTED BETWEEN GIRDERS 1, 2 & 3 FOR SPAN 5 (WESTBOUND).

17. JOINTS IN CONCRETE:
CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS IndICATED ON THE PLANS.
ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE PRIOR
APPROVAL OF THE ENGINEER.

BEFORE DEPOSING NEW CONCRETE ON OR AGAINST CONCRETE WHICH HAS HARDENED, PREPARE
SURFACE IN ACCORDANCE WITH SPECIFICATION 400-9.

18. STABILITY OF END BELTS:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE END BELTS
DURING CONSTRUCTION.

19. CONCRETE CHAMFERS:
ALL CONCRETE EDGES SHALL HAVE A 3/8 CHAMFER.

20. CHANNEL CLEARANCE:
THE MINIMUM CHANNEL HORIZONTAL CLEARANCE SHALL BE MAINTAINED AT 150 FT. UNLESS
OTHER U.S. COAST GUARD APPROVAL IS OBTAINED.

21. ELEVATIONS:
ELEVATIONS ARE BASED ON NAVD 1988 VERTICAL DATUM.

22. TURBIDITY DURING REMOVAL AND INSTALLATION OF PILES IN WATER PIERS:
IF THE CONTRACTOR ELECTS OR IS REQUIRED TO USE PREFORMED PILE HOLES AND/OR
JETTING AT THE PIERS, TURBIDITY CONTROL MEASURES SHALL BE EMPLOYED WHICH SATISFY THE
MINIMUM REQUIREMENTS OF THE PERMITTING AGENCY (S).

23. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH
CSA RAILROAD WHEN CONSTRUCTION ACTIVITIES FALL WITHIN RAILROAD RIGHT-OF-WAY.

24. ABBREVIATIONS:
CIP - CAST-IN-PLACE
FPB - FRONT FACE BACK WALL
FP - EACH FACE
NF - NEAR FACE
FF - FAR FACE
BFK - BACK FACE BACK WALL
TFP - TYPICAL
TC - TANGENT OF CURVE
CONST - CONSTRUCTION
EXIST - EXISTING
SPACE - SPACES
EQ - EQUAL
R/W - RIGHT-OF-WAY
SQ - SQUARE
CONC - CONCRETE
APPROX - APPROXIMATE
UNL - UNLESS NOTED OTHERWISE
GENERAL NOTES, CONT.

SPliced Girder Main Span Unit

1. Thermal Loads:
   Normal Mean Temperature 70°F
   Thermal Coefficient 6.0 x 10^-6 per °F

   Temperature Range for Design of Structure:
   Rise 25°F
   Fall 25°F

   Differential Temperature
   Positive Nonlinear Gradient
   \( T_1 = 4°F \)
   \( T_2 = 11°F \)
   \( T_3 = 1°F \)

   Negative Nonlinear Gradient
   \( T_1 = -12.3°F \)
   \( T_2 = -3.3°F \)
   \( T_3 = -1°F \)

5. Beam Erection
   A. Submit drawing for proposed erection sequence.
   B. The contractor shall submit any deviation from the proposed erection sequence to the engineer for approval. The engineer may require signed and sealed design calculations from the contractor's specialty engineer.

6. The contractor shall verify that all blockout dimensions fit the contractor's stressing equipment and anchorage bearing plates.

3. Design Method - Stresses/Loads
   Spliced girder unit designed for service limit states and checked for strength limit states in accordance with the AASHTO LRFD Code.

4. Temporary Works
   A. The contractor shall design and provide all temporary works required for the erection of the main unit superstructure. These items include, but are not limited to temporary supports, cross-bracing, strong-backs, and devices to secure segments transversely and longitudinally. The design and shop drawings submittal shall be done in accordance with the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction." In addition, a thorough list of the anticipated construction loads during each step of the erection sequence shall be included.
   B. The contractor shall include in the prestressed beam shop drawings submittal any inserts or holes cast in the beams for the purpose of temporary cross-bracing.
   C. After construction is completed, temporary supports shall be removed.
OVERALL BRIDGE LENGTH = 13,620'-4" EB & 13,736'-4" WB

SPAN UNIT 12 = 888'-0" (DECK UNIT)
SPAN UNIT 13 = 544'-0"

ELEVATION
(EB BRIDGE SHOWN; WB BRIDGE SIMILAR)

NOTES:
1. FOR NOTES AND LEGEND, SEE SHEET B3-4.
1. FOR NOTES AND LEGEND, SEE SHEET B3-4.
Overall Bridge Length = 13,880'-4" EB

SPAN UNIT 24 = 544'-0"
SPAN UNIT 25 EB = 544'-0"
SPAN UNIT 26 EB = 368'-0"

4 SPANS @ 136'-0"
SEE SHEET II FOR CONTINUATION WB

4 SPANS @ 136'-0" EB

3 SPANS @ 122'-8" EB

NOTES:
1. FOR NOTES AND LEGEND, SEE SHEET B3-4.
VERTICAL PROFILE ALONG PGL - WESTBOUND

VERTICAL PROFILE ALONG PGL - EASTBOUND

NOTE:
WORK THIS SHEET WITH SHEETS B3-4 THRU B3-14
ESTIMATED QUANTITIES *

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY PER CAP</th>
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<td></td>
</tr>
<tr>
<td>Reinforcing Steel (Pull Connections)</td>
<td>Lb</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Quantity for Shear Key reinforcing included.

NOTES:
1. For additional pedestal & shear key quantities, see sheets B3-6A to B3-71.
2. Remove forms after concrete obtains a minimum strength of.
3. Use high range water reducer and 3/8" max aggregate size for concrete (spec)