**DESIGNER NOTES**

- For criteria).

**LEGEND**

- For structural approach details.

**TABLE**

<table>
<thead>
<tr>
<th>Bar Size</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>2'-6&quot;</td>
</tr>
<tr>
<td>G</td>
<td>1'-3&quot;</td>
</tr>
<tr>
<td>L</td>
<td>1'-0&quot;</td>
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</tbody>
</table>

**ABUTMENT, TYPE AI (INTEGRAL ABUTMENT)**

**STANDARD 12.01**

**BILL OLIVA**

**DATE: D-22**
**SECTION A-A**

***3" x 3" BEVEL ENDS AT EDGE OF BRIDGE DECK***

PART TRANSVERSE SECTION AT ABUTMENT, TYPE A1 DIAPHRAGM WITH A RAISED SIDEWALK

**SECTION B-B**

SECTION THRU SIDEWALK

**SECTION THRU MEDIAN WITH A JOINT**

CROSS SECTION THRU UNANCHORED MEDIAN

*ANCHORAGE TO DECK NOT REQUIRED FOR WIDTHS > 3'-0" EXCEPT ALL MEDIAN SECTIONS ON TOP OF PAVING BLOCK MUST BE ANCHORED* CLEAN ALL LOOSE MATERIAL ON THE DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING AIR PRESSURE WATER OR AIR DUSTING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. ALL GROUT AND REQUIRED TO BE DRIED FIVE DAYS OF COMPLETING THE DECK POOL.

CROSS SECTION THRU MEDIAN WITH A JOINT

DEFLECTION JOINT DETAIL

SUCH DEFLECTION JOINTS IN PARAPET OR SIDEWALK USING THE FOLLOWING CRITERIA:

1. MEDIAN STRUCTURES AND SLAB STRUCTURES WITH A MEDIAN SECTION OF MAXIMUM DIMENSION TO BE GIVEN THE JOINT DETAILS AS SHOWN IN THE FIGURE. JOINT DETAIL SIZES MAY BE REDUCED UP TO 1'-0" WITHOUT ADVERSE EFFECTS.

2. ADDITIONAL JOINTS IN MEDIAN STRUCTURES MAY BE REQUIRED TO REDUCE EXCESSIVE MEDIAN THERMAL DTE.

DESIGNER NOTES

FOR EXTREME SIDEWALK RATING AND READING OR SIDEWALKS MAY BE LEVEL BENEATH THE MEDIAN TO MATCH THE MEDIAN DECK THICKNESS TO REDUCE EXCESSIVE MEDIAN THERMAL.
28" GIRDERS

PRE-TENSION

A = 312 SQ. IN.

f' = 0.75 x 270,000 = 202,500 P.S.I

for low relaxation strands

f = 0.75 x 270,000

y = -13.42 IN.

S = -2,138 IN.

P(init.) = \( \frac{f}{E} \) (KIPS)

STANDARD STRAND PATTERNS FOR UNDRAPED STRANDS (0.5" DIA.)

<table>
<thead>
<tr>
<th>NO. STRANDS</th>
<th>a (inches)</th>
<th>P(init) (KIPS)</th>
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<tbody>
<tr>
<td>8</td>
<td>-10.42</td>
<td>248</td>
</tr>
<tr>
<td>10</td>
<td>-8.26</td>
<td>310</td>
</tr>
<tr>
<td>12</td>
<td>-6.70</td>
<td>372</td>
</tr>
<tr>
<td>14</td>
<td>-5.42</td>
<td>434</td>
</tr>
<tr>
<td>16</td>
<td>-4.44</td>
<td>500</td>
</tr>
</tbody>
</table>

STANDARD STRAND PATTERNS FOR DRAPED STRANDS (0.5" DIA.)

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STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY

TO AVOID DRAPING OF 0.6" DIA. STRANDS

(0.5" DIA. STRANDS MAY ALSO BE USED)

DESIGNER NOTES

ON THE STRAND PATTERN SHEET PLACE A BOX AROUND EACH STRAND PATTERN THAT APPLIES TO THE DESIGNED STRUCTURE AND LABEL THE SPAN IT IS USED IN.

28" PRESTRESSED GIRDERS DESIGN DATA

BUREAU OF STRUCTURES

APPROVED: Bill Oliva

DATE: 5-22

STANDARD 95.02
SECTION A-A

PLACE AS SHOWN

#3 BAR

#3 BARS

ANGLE, SEE STD. 19.34

(SEE DETAIL A)

STIRRUPS

4 PAIRS #6 STIRRUPS

EACH END

#5 U-SHAPED BAR

#6 BAR

STEEL BRGS.

23 PAIRS EACH END

#3 BARS

IN PAIRS

#6 STIRRUPS

1 PAIR EACH END

#6 BARS

EACH END

#6 BAR

END OF GIRDER

OF BEARING & STEEL BRGS.

ELASTOMERIC ANCHOR PLATE

FILLER ON PALLET

2"

OR ELASTOMERIC BRGS.

SUPPORT WITH STEEL

4 @ 3"

= 1'-0"

2 @ 6"

1'-0"

STIRRUP PAIRS

BETWEEN LIMITS OF #3 #4, 2'-3" LONG. PLACE

#4 STIRRUPS

LIMITS OF #3

#4 BARS MIN.

(4" LEG)

MIN. DECK

7" STD. OR

VERT. WIRE AREA

SHALL BE > 40% OF

AREA OF HORIZ. WIRE

SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS

GIRDER END OF

HOLD DOWN

STIRRUP PAIRS

CENTERS OF GRAVITY OF

REINFORCEMENT WHICH REQUIRE PRIOR APPROVAL FROM THE

DESIGNER NOTES

NO PRECAST GIRDER TYPE I 36-W"-INCH.

SPECIFY CONCRETE STRENGTH AS REQUIRED BY DESIGN FROM A

VARIATION OF SLIP FORM TO 4-WALL SLIP FORM. USE 36-W"-INCH STRANDS FOR ALL PATTERNS.

THE MAX. NUMBER OF DRAPED STIRRUPS, STIRRUPS IN

REPRESENTATION OF STIRRUP AREA AT END SECTION OF THE GIRDER IS BASED ON THE STIRRUP PATTERN LISTED ON STANDARD 19.12.

AND THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDER. SEE SECTION 503.3.4 OF STANDARD 503.3.4.

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THE DESIGN ENGINEER DETERMINES THE VALUE BASED ON 2" MIN. LIFTING HOLE AT EDGE OF GIRDER, 3'-6" MIN. GIRDER CLEARANCE AND CALCULATED TOTAL PRESTRESS STRAND AREA. INCLUDING THE CANTILEVERED GIRDER END.

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