GENERAL NOTES

DESCRIPTION: This drawing provides the complete plan details for semi-integral diaphragm guides.

DESIGNER NOTES: Each diaphragm guide has been designed to a factored capacity normal to the rub plates of 103 kip and parallel to the rub plates of 517 kip. Rub plates shall be installed on both sides of the diaphragm guide.

CONCRETE: Perform work according to CMS 511. Use the same class of concrete used in the abutment, f'c = 4.0 ksi.

REINFORCING STEEL: Provide reinforcement according to CMS 509. Min. yield strength = 60 ksi.

STAINLESS STEEL: Use 304 SS or equivalent. Rebar is to be 1/2" or larger. Provide end welded studs in accordance with CMS 711.01.

STEEL BACKING PLATE: Provide ASTM A709 grade 50 steel backing plates according to CMS 711.01.

END WELDED STUDS: Provide end welded studs in accordance with CMS 711.01.


CORROSION PROTECTION: Shop metallize and seal all steel surfaces, except PTFE-Stainless steel sliding surfaces, in the guide for this purpose.

BETTER WELDED AROUND THE ENTIRE PERIMETER TO THE BACKING PLATE PER 869.12.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES PROVIDED IN THE BID.

UNIT OF PAYMENT: 50 lineal feet or total quantity of diaphragm guide.

ITEM UNIT DESCRIPTION

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<th>Total</th>
<th>TYPE</th>
<th>DIMENSIONS</th>
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DIAPHRAGM GUIDE PLAN
(CW skew angle shown, see note for 0° skew)
CCW = COUNTERCLOCKWISE
CW = CLOCKWISE

DIAPHRAGM GUIDE ELEVATION
(CCW skew angle shown, CW similar)

CONSTRUCTION JOINT

DIAPHRAGM GUIDE PLAN
(CCW skew angle shown, see note for 0° skew)
CCW = COUNTERCLOCKWISE
CW = CLOCKWISE

DIAPHRAGM GUIDE ELEVATION
(CCW skew angle shown, CW similar)

CONSTRUCTION JOINT

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

OFFICE OF STRUCTURAL ENGINEERING

DATE 07-18-14

103 - 108 - 15

7 - DG801

5 - DG601

NUMBER
TOTAL
TYPE
DIMENSIONS
A
B
C

DG801 5 3 12-05 3'-05"
DG601 7 5 2'-08" 3'-07" 2'-40"

BENDING DIAGRAMS

SEAL THE PERIMETER OF THE RUB PLATE MATE SURFACE WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S.

DETAIL A

PTFE = POLYTETRAFLUORETHYLENE
SS = STAINLESS STEEL
PFTE = POLYTETRAFLUORETHYLENE
SS = STAINLESS STEEL

RUB PLATE DETAILS
50 = STAINLESS STEEL
PTFE = POLYTETRAFLUORETHYLENE

REINFORCEMENT IN THE BEAM SEAT.

** - PLACE TO AVOID INFERENCE WITH LONGITUDINAL