# GIRDER SCHEDULE

| SPAN | GIRDER | GIRDER HEIGHT H | GIRDER WIDTH W | PLAN LENGTH (ALONG GIRDER GRADE) (SEE GIRDER NOTE 1) | VOIDS | | GIRDER END DETAILS | | | | MIN. CONC. COMP. STRENGTH | | PRESTRESSING STRANDS (SEE GIRDER NOTES 2-4) | | | | | | | | "A" DIMENSION AT ℄ BEARINGS | DECK SCREED CAMBER C | MIDSPAN VERTICAL DEFLECTION D | | TRANSVERSE REINFORCEMENT | | | | | | | | | LONGITUDINAL REINFORCEMENT | | | | SHIPPING AND HANDLING DETAILS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | ROW 1 | | | ROW 2 | | | TOP ROW | | | | | | ZONE 1 | | | ZONE 2 | | | ZONE 3 | | | G1 | | G2 | | | | | | |
| | | | | | NUMBER | DIAMETER | END 1 TYPE | END 2 TYPE | $\theta_1$ | $\theta_2$ | @ 28-DAYS F'C (KSI) | @ RELEASE F'CI (KSI) | PERMANENT STRANDS | EXTENDED NUMBER AND LENGTH | DEBONDED NUMBER AND LENGTH | PERMANENT STRANDS | EXTENDED NUMBER AND LENGTH | DEBONDED NUMBER AND LENGTH | PERMANENT STRANDS | TEMPORARY STRANDS | | | LOWER BOUND @ 40 DAYS | UPPER BOUND @ 120 DAYS | BAR SIZE | SPACING | LENGTH | BAR SIZE | SPACING | LENGTH | BAR SIZE | SPACING | LENGTH | BAR SIZE | NO. OF BARS | BAR SIZE | NO. OF BARS | L | $L_1$ | $L_2$ | $K_\theta$ MINIMUM SHIPPING SUPPORT ROTATIONAL SPRING CONSTANT | $W_{CC}$ MINIMUM SHIPPING SUPPORT CNTR.-TO-CNTR. WHEEL SPACING |
| - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 4 @ 1'-9" | 2 @ 3'-0" | - | 4 @ 1'-9" | - | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | - | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

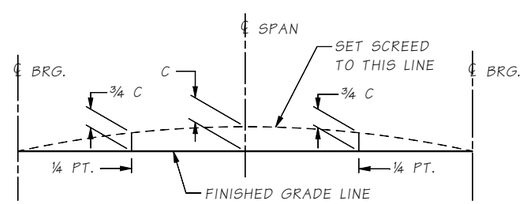
NOTES TO DESIGNER:

1. SLAB GIRDER DETAIL SHEETS 2 TO 4 ARE INTENDED TO BE USED AS IS WITHOUT NEED FOR MODIFICATION FOR MOST PROJECTS. PROJECT SPECIFIC GIRDER DETAILS ARE THEN LIMITED TO THE GIRDER SCHEDULE.
2. ZONE 1 IS INTENDED TO BE THE SPLITTING RESISTANCE ZONE DEFINED BY BDM 5.6.2.F. ZONE 2 IS INTENDED TO BE THE CONFINEMENT REINFORCEMENT ZONE DEFINED BY BDM 5.6.2.G.
3. DIMENSIONS IN THE GIRDER SCHEDULE SHALL BE SHOWN TO THE NEAREST ⅛" EXCEPT THE "A" DIMENSION WHICH SHALL BE SHOWN TO THE NEAREST ¼".
4. PROVIDE A LONGITUDINAL #4 IN CIP DECK INSIDE EXTENDED G5 AND G7 HOOKS IN ADDITION TO THE DECK REINFORCEMENT.
5. MAXIMUM SKEW ANGLE IS 30° (60° ≤ ($\theta_1$ or $\theta_2$) ≤ 120°).
6. THIS STANDARD IS INTENDED TO BE USED WITH A 5" MINIMUM CIP CONCRETE DECK. MODIFICATIONS ARE REQUIRED IF THIS STANDARD IS USED WITH AN HMA OVERLAY.
7. PLACE A MINIMUM OF 2 FULLY BONDED STRANDS IN BOTH ROW 1 AND THE TOP ROW (ALL 4 CORNERS).
8. G1 AND G2 SHOULD BE A MINIMUM OF #4 AT 1'-0" SPACING.

TYPICAL SLAB GIRDER CONFIGURATIONS

| H | W | VOIDS NUM. | VOIDS DIA. | MAX. SPAN LENGTH ~ ℄ BRG. TO ℄ BRG. |
|---|---|---|---|---|
| 12" | 4'-0" | 0 | - | 30' |
| 18" | 4'-0" | 3 | 9" | 45' |
| 24" | 4'-0" | 2 | 15.7" | 60' |
| 26" | 4'-0" | 2 | 15.7" | 65' |
| 30" | 4'-4" | 2 | 18" | 75' |

NOTE TO DESIGNER:
PLACE DETAIL ON BRIDGE DECK REINFORCEMENT PLAN.




SCREED SETTING DIMENSIONS

FOR DIMENSION "C" SEE GIRDER SCHEDULE

## GIRDER NOTES

1. PLAN LENGTH SHALL BE INCREASED AS NECESSARY TO COMPENSATE FOR SHORTENING DUE TO PRESTRESS AND SHRINKAGE.
2. ALL STRANDS SHALL BE 0.6"ø AASHTO M203 GRADE 270 LOW RELAXATION STRANDS, JACKED TO 202.5 KSI. STRANDS SHALL BE SYMMETRICAL ABOUT THE GIRDER CENTERLINE. EXTERIOR STRANDS IN EACH ROW SHALL BE FULLY BONDED.
3. SPACE EXTENDED STRANDS SYMMETRICALLY AND EVENLY ACROSS GIRDER WIDTH. STAGGER EXTENDED STRAND LOCATIONS WITH RESPECT TO GIRDERS IN ADJACENT SPANS.
4. DEBONDED STRANDS SHALL BE DEBONDED AT EACH GIRDER END FOR THE INDICATED LENGTH PARALLEL TO THE GIRDER CENTERLINE. DEBONDED STRANDS SHALL NOT BE EXTENDED PAST GIRDER ENDS. DEBONDED STRANDS SHALL BE SYMMETRICALLY PLACED ABOUT THE GIRDER CENTERLINE. DEBONDED LENGTHS OF PAIRS OF STRANDS THAT ARE SYMMETRICALLY POSITIONED ABOUT THE GIRDER CENTERLINE SHALL BE EQUAL.

Last revised on : 04/07/2016

SR FILE NO. SHEET

5.6-A8-1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Bridge Design Engr. | M:\STANDARDS\Girders\Flat Slab\SLAB 1 OF 4.MAN | | | | | | | | |
| Supervisor | | | | | REGION NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
| Designed By | | | | | 10 | WASH. | | | |
| Checked By | | | | | | | | | |
| Detailed By | | | | | JOB NUMBER | | | | |
| Bridge Projects Engr. | | | | | | | | | |
| Prelim. Plan By | | | | | | | | | |
| Architect/Specialist | DATE | REVISION | BY | APP'D | | | | | |

Fri Jun 10 14:30:04 2016

BRIDGE AND STRUCTURES OFFICE

Washington State Department of Transportation

STANDARD PRESTRESSED CONCRETE GIRDERS

SLAB GIRDER DETAILS 1 OF 3

BRIDGE SHEET NO.

SHEET OF SHEETS