Tidal Bridge-Sized Culvert (≥ 20 ft)

Memorandum to: **Submittal Date:** _____

Supersedes Submittal Date: _____

RPG Road Design Engineer: _____

RPG Structural Design Engineer: _____

RPG Geotechnical Design Engineer: _____

From: RPG Hydraulic Design Engineer: _____

Subject: Hydrology Data for Culvert over: _____

County: _____ **Road/Route:** _____ **Project ID:** _____

Structure No.: _____ **Asset ID:** _____

Culvert Information

Box Dimension: Span: _____ ft. Rise: _____ ft.

Extension: Right: _____ ft. Left: _____ ft.

Estimated Length: _____ ft. Diameter: _____

No. Barrels: _____ Material type: _____

Skew Angle: _____ ° Centerline Station: _____

Inlet Invert Elev.: _____ ft. Outlet Invert Elev.: _____ ft.

Riprap Required: _____ To Elevation: _____ ft.

Comments: _____

_____

_____

_____

_____

Required Hydrology Information for Plans

HYDROLOGY DATA:

Mean Higher High Water Elev. = _____ ft.

Mean Lower Low Water Elev. = _____ ft.

Tidal Surge Height $_{AEP\text{-}10\%}$ = _____ ft.

Stillwater Height $_{AEP\text{-}1\%}$ = _____ ft. Max. Wave Height $_{1\%}$ = _____ ft

Stillwater Height $_{AEP\text{-}0.2\%}$ = _____ ft. Max. Wave Crest El. $_{1\%}$ = _____ ft

_____ Headwater Elev. = _____ ft. Wave Runup Elev. $_{1\%}$ = _____ ft

Headwater Elev. $_{AEP\text{-}1\%}$ = _____ ft.

Vel. $_{AEP\text{-}1\%}$ = _____ ft/sec

Vel. $_{AEP\text{-}0.2\%}$ = _____ ft/sec

Historical Highwater Elev. = _____

BACKWATER UPSTREAM OF THE BRIDGE-SIZED CULVERT

HW Elev. = _____ including _____ ft. Backwater

1% AEP (100-Year) HW Elev. = _____ including _____ ft. Backwater

STRUCTURE OVERTOPPING FLOOD

0.2% AEP (500-Year) flow = _____ cfs Overtopping flow: _____

Direction of Downstream Flow on Plans: _____

Hydraulic Engineer in HDSO: _____

Date Modified: 1/8/2026