

US Army Corps of Engineers
PORTLAND DISTRICT

DATE:	SOLICITATION NO.:
DESIGNED BY:	CONTRACT NO.:
DRAWN BY:	DRAWING NUMBER:
CHECKED BY:	FILE NAME:
APPROVED BY:	FILE NAME:

U.S. ARMY CORPS OF ENGINEERS
PORTLAND DISTRICT
PORTLAND, OREGON

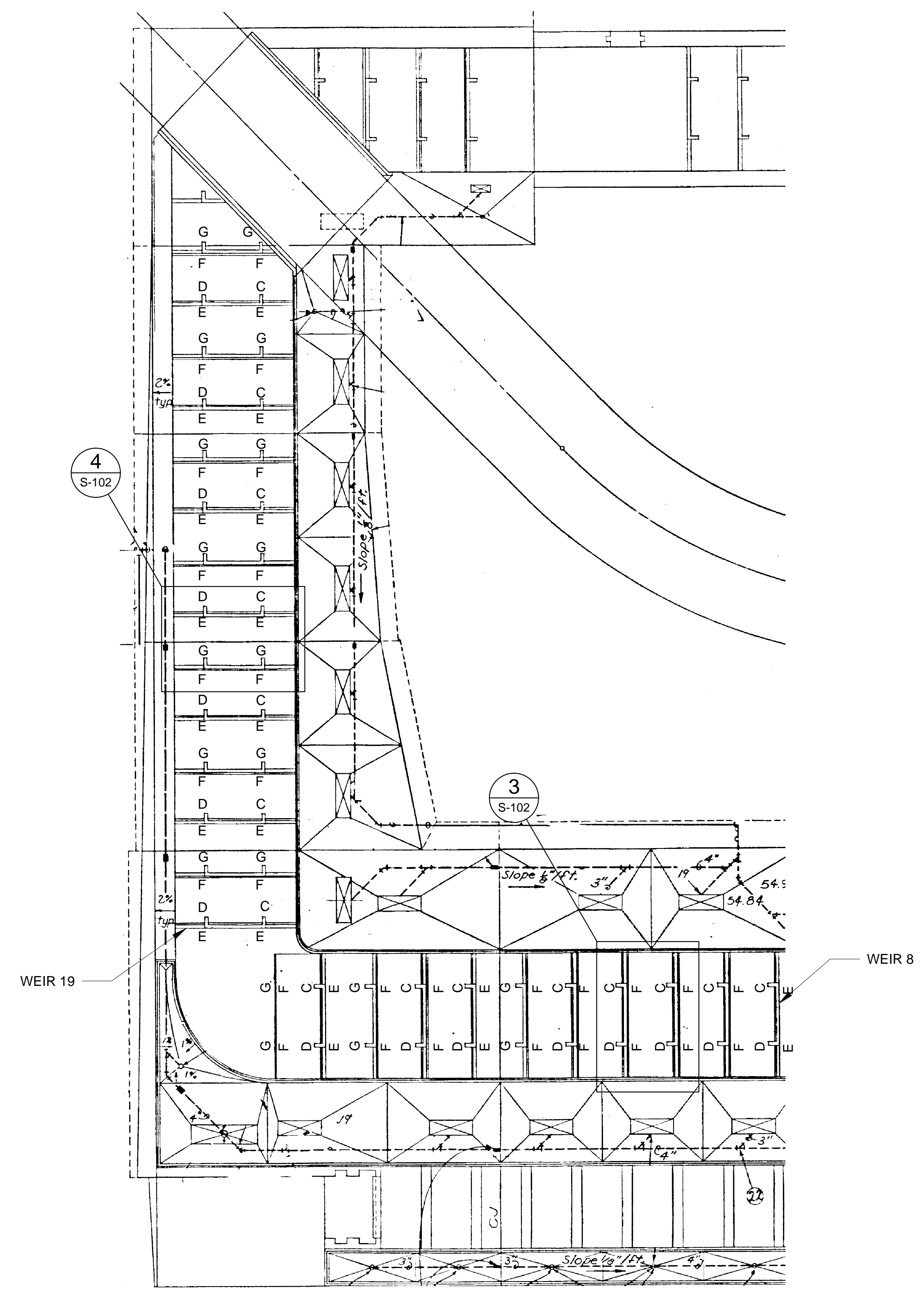
DESIGNED BY: ROBERT YADAVANI
DRAWN BY: GREGG W. MOY
CHECKED BY: MATTHEW D. HANSON
APPROVED BY: MATT W. HANSON

PLOT SCALE: 1" = 1000'
DATE: 11/17/2011
FILE NAME: BDF-1.107.G-001.dwg

**BONNEVILLE LOCK AND DAM
FISHWAY ENTRANCE
LAMPREY PASSAGE MODIFICATION**

SHEET IDENTIFICATION
G-001

Plate Type Fabrication Summary			
Plate Kind	Required For This Project	Government Furnished Plate	Plates to be fabricated
D	15	6	11
C	15		15
E	20		20
G	20		20
F	30	50	0



WASHINGTON SHOR FISH LADDER PLATE LOCATION - KEY PLAN

NTS
(GRATING AND PLATES NOT SHOWN FOR CLARITY)

NOTE:
GOVERNMENT FURNISHED PLATES WILL BE DELIVERED TO THE WORK AREA, REFER TO SPEC SECTION XXX FOR MORE DETAILS.

MARK	DESCRIPTION	DATE	APPR.

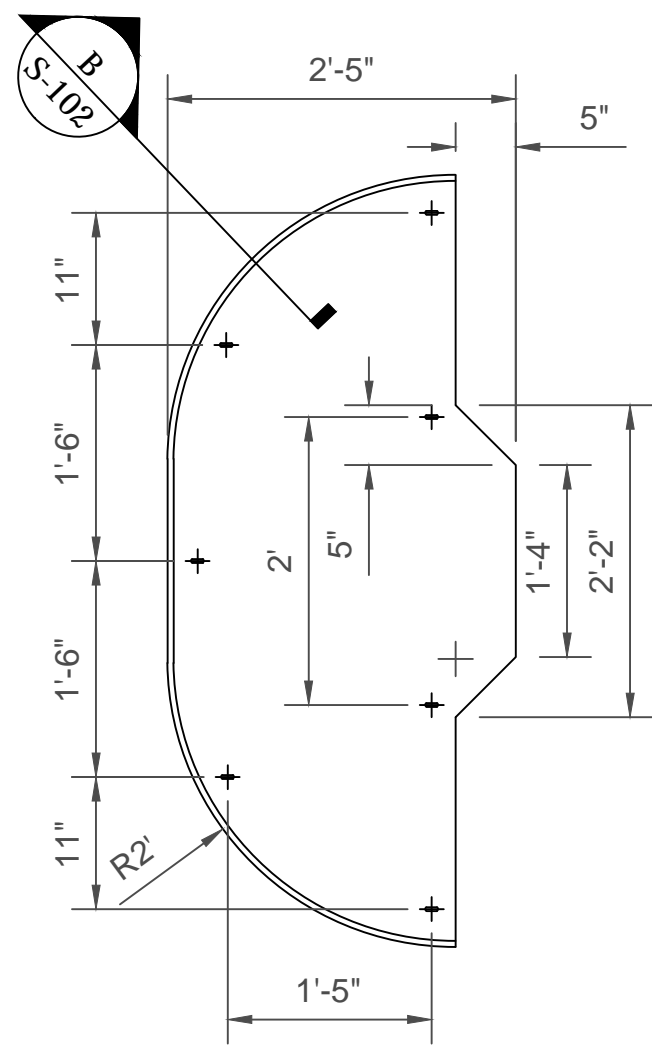
DESIGNED BY: JANANI	DATE: 08/02/2014
CHECKED BY: GREGORY	SOLICITATION NO.:
DRAWN BY: GREGORY	CONTRACT NO.:
DATE PLOTTED: 08/02/2014	DRAWING NUMBER: BDF-1.107.02/02
FILE NAME: BDF-1.107.S-001-S-102.dwg	SIZE: ANSI D

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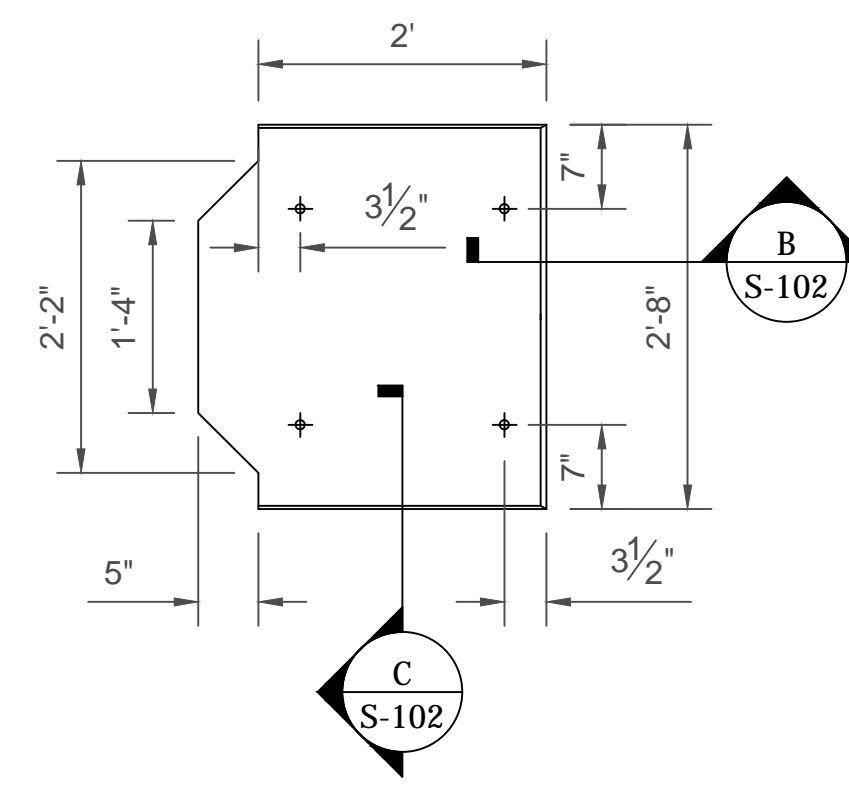
**BONNEVILLE LOCK AND DAM
FISHWAY ENTRANCE
LAMPREY PASSAGE MODIFICATION**

PLATE DETAILS SHEET 2

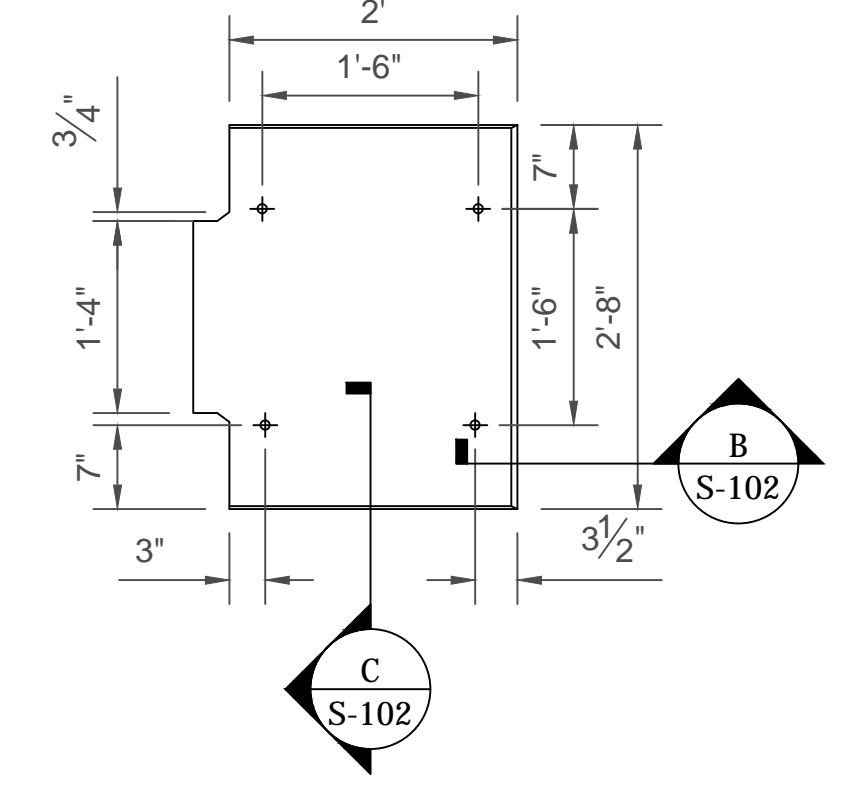
SHEET IDENTIFICATION
S-001
SHEET 0 OF 0



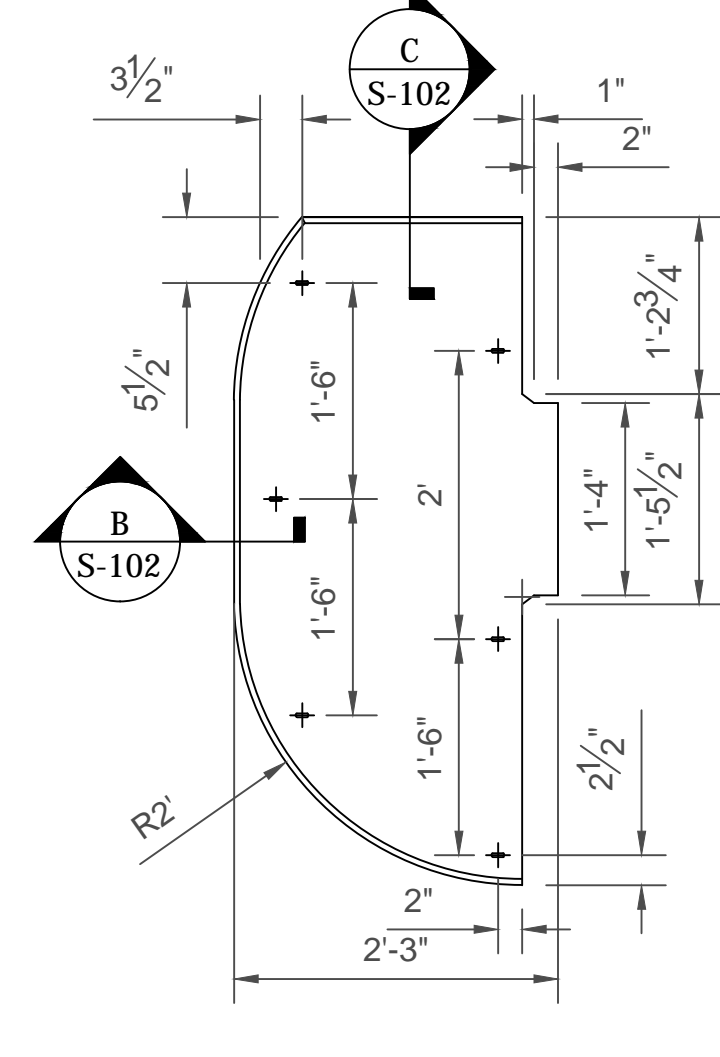
1 DETAIL - PLATING TYPE "F"
SCALE: 3/4" = 1'-0"



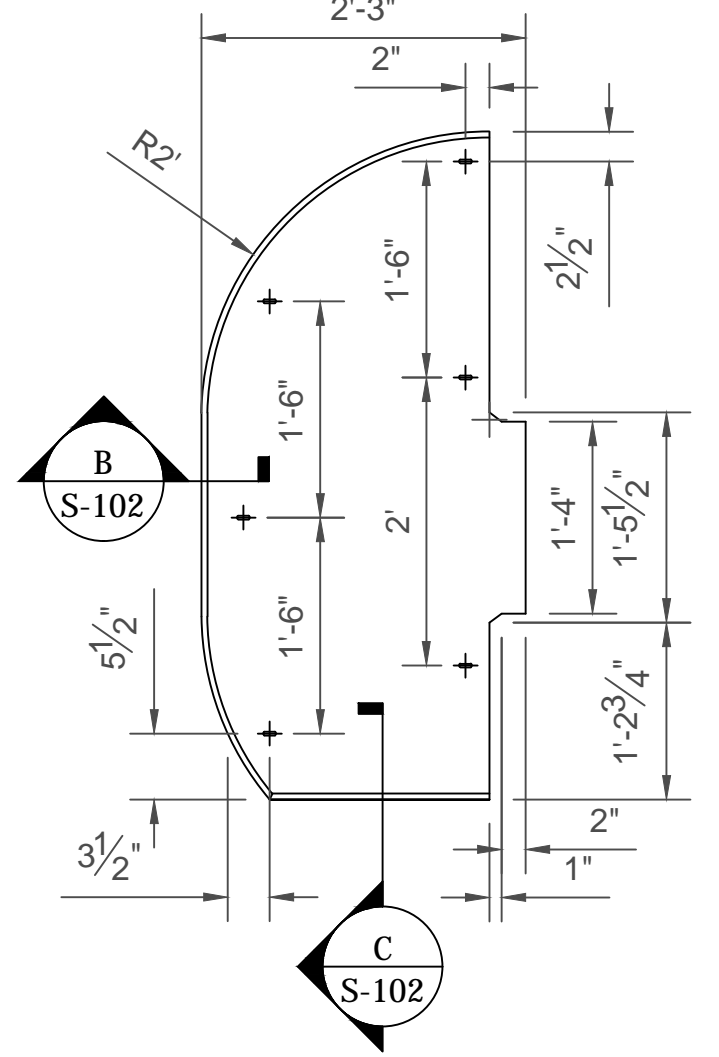
2 DETAIL - PLATING TYPE "E"
SCALE: 3/4" = 1'-0"



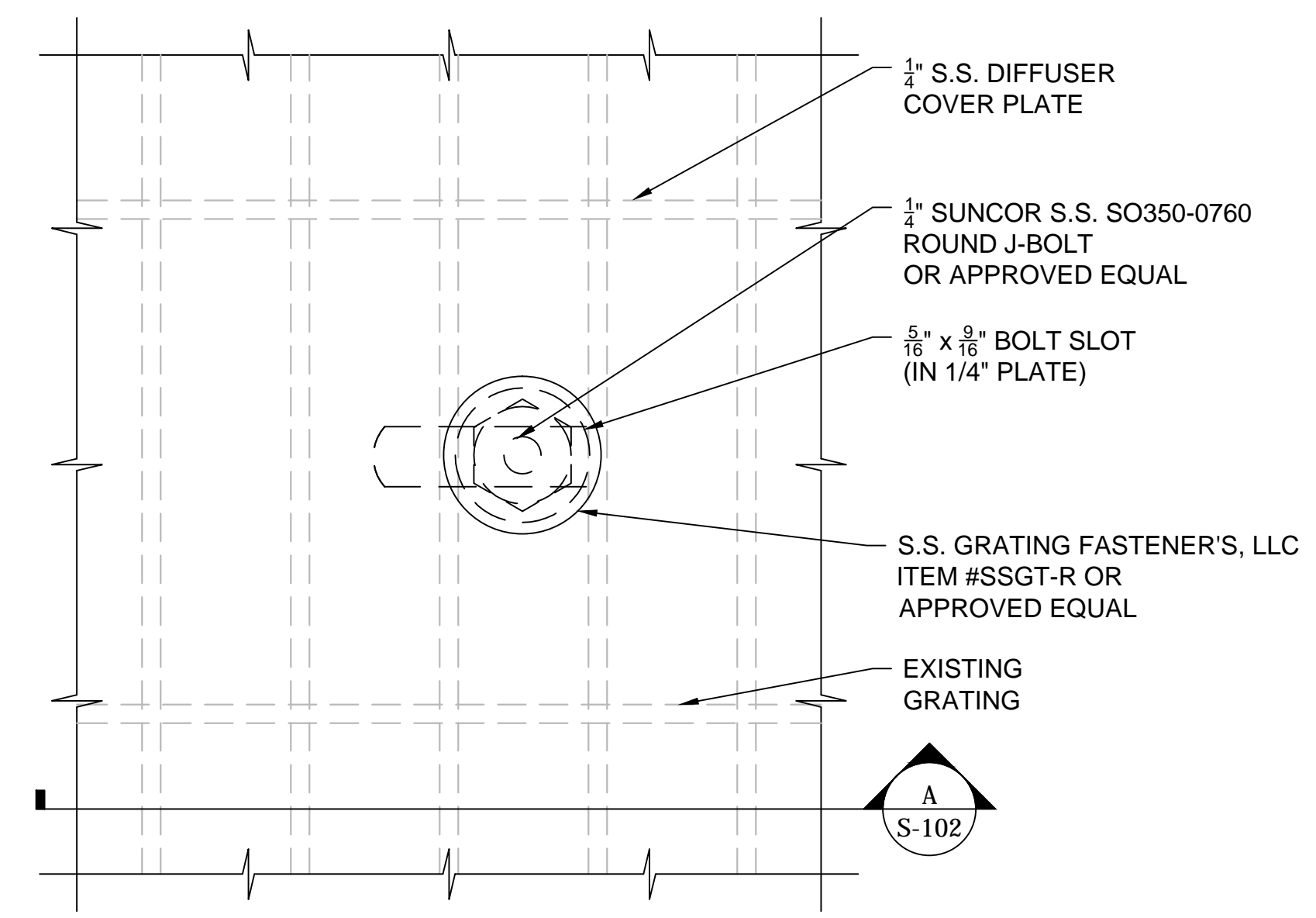
3 DETAIL - PLATING TYPE "G"
SCALE: 3/4" = 1'-0"



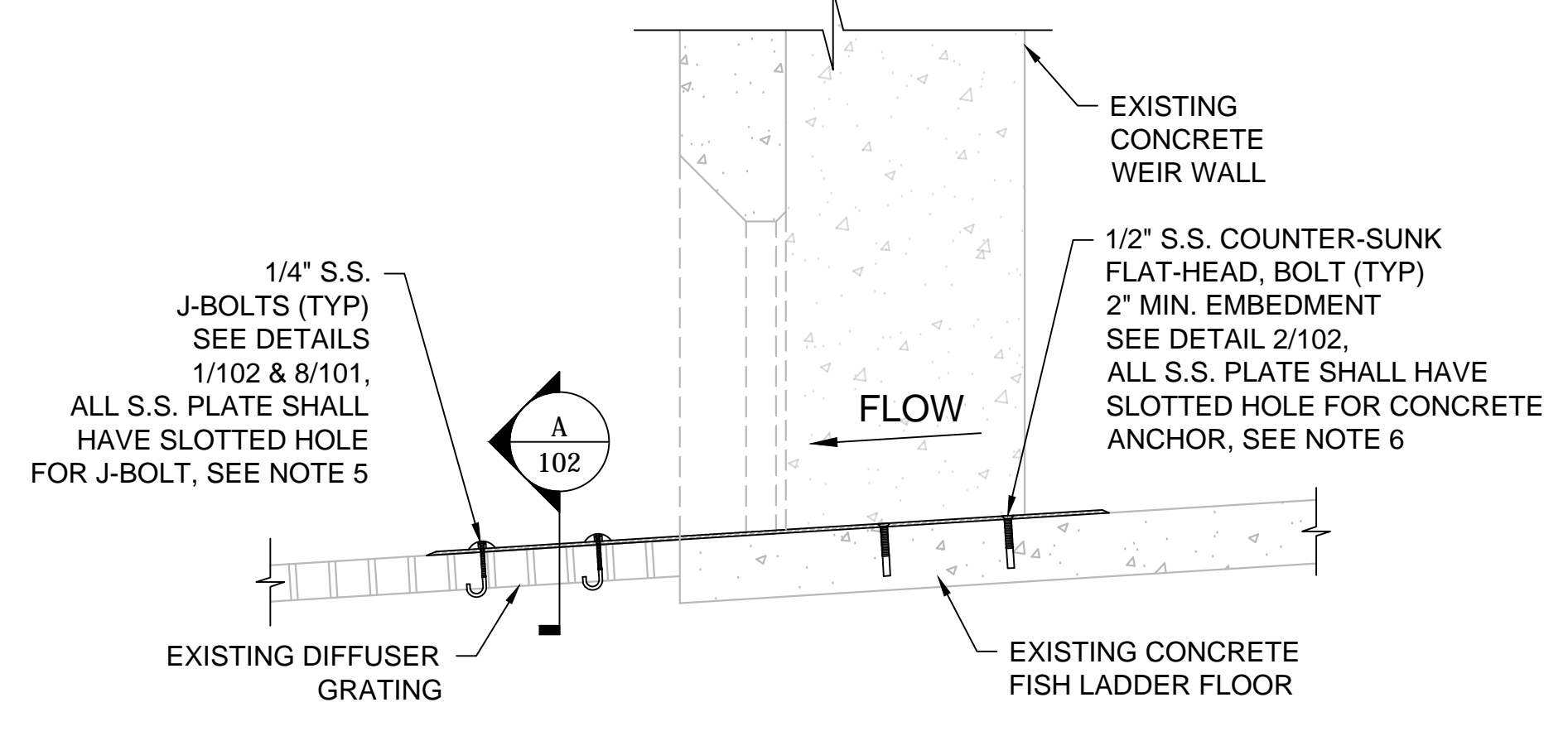
4 DETAIL - PLATING TYPE "D"
SCALE: 3/4" = 1'-0"



5 DETAIL - PLATING TYPE "C"
SCALE: 3/4" = 1'-0"



6 DETAIL - J-BOLT GRATING CLIP, TYP
SCALE: 6" = 1'-0"



A THE DALLES - SECTION - PLATES AND ANCHORS TO GRATING
SCALE: 1" = 1'-0"

- NOTES:
- DIFFUSER COMPONENTS AND APPURTENANCES ONLY PARTIALLY SHOWN FOR CLARIFY.
 - GRIND ALL EXPOSED CORNERS AND SHARP EDGES SMOOTH. SEE METALS SPECIFICATION FOR MORE INFORMATION.
 - THE EXISTING DIFFUSER COVER PLATES SHALL BE REPLACED AND INSTALLED WITH NEW DIFFUSER PLATING AS SHOWN. REFER TO INFORMATIONAL DRAWINGS FOR MORE DETAIL.
 - THE CONTRACTOR SHALL APPLY DEVCOE BAR-RUST TM235 EPOXY OR APPROVED EQUAL TO ALL SURFACES AND UNDERSIDE OF STAINLESS PLATING WHERE NEW STAINLESS STEEL DIFFUSER PLATING AND ASSOCIATED FASTENERS COME INTO DIRECT CONTACT WITH EXISTING METALS. EPOXY COATING SHALL APPLIED PER MANUFACTURE'S INSTRUCTIONS AND NOT ON THE EXISTING GRATING SURFACE.
 - USE SO350-0760 SUNCOR STAINLESS ROUND J-BOLTS, NUTS, AND GRATING CLIPS SHALL ALL BE AISI 300 SERIES STAINLESS STEEL (ALL FASTENER'S AND RELATED HARDWARE) OR APPROVED EQUAL. ALL J-BOLTS SLOTS SHALL BE 5/16" x 9/16" WITH LONG-SIDE ORIENTED PARALLEL TO THE FLOW DIRECTION.
 - SECURE DIFFUSER COVER PLATES TO CONCRETE FISHWAY FLOOR WITH 1/2" ROUND AISI 304 S.S. COUNTER SUNK FLAT-HEAD, MAX SPACING: 18" AND HILTI HDI S.S. DROP IN ANCHOR OR APPROVED EQUAL. ALL COUNTER SUNK FLAT-HEAD SLOTS SHALL BE 9/16"x11/16".
 - POSITION AND EDGE DISTANCE OF J-BOLTS MAY VARY TO ACCOMMODATE EXISTING DIFFUSER GRATING GEOMETRY. FIELD REAMING OF HOLES MAY BE REQUIRED.
 - ORIFICE PLATING TO BE CUT FROM FULL SIZE PLATE. NO SPLICING OF S.S. PLATE IS ALLOWED. DIMENSIONS SHOWN PROVIDE A 1/4" GAP BETWEEN THE PLATE AND THE DIMENSIONS SHOWN ON THE EXISTING DRAWINGS. CONTRACTOR SHALL INFORM THE GOVERNMENT OF NECESSARY PLATE MODIFICATIONS AS FIELD FITTING MAY BE REQUIRED.
 - WHEN PLATES ARE IN CONTACT WITH CONCRETE, USE DETAIL 2/102 FOR CONNECTION.
 - ALL PLATING SHALL BE 1/4" THICK S.S., UNLESS OTHERWISE NOTED.
 - IT IS ACCEPTABLE TO SHIM FISH LADDER CONCRETE FLOOR TO HAVE A SMOOTH SURFACE TO INSTALL THE PLATES.
 - ALL ORIFICE PLATES SHALL BE INSTALLED WITH NO GAP UP TO A MAXIMUM OF 1/4" AT THE ORIFICE CENTERLINE. ALL THE CENTERLINE JOINTS AND GAP BETWEEN THE ORIFICE WALL AND PLATE SHALL BE FILLED WITH SPLASH ZONE EPOXY OR APPROVED EQUAL.
 - MINIMUM EDGE DISTANCE OF 2 INCHES TO THE PLATE IS REQUIRED FOR ALL BOLT FASTENER'S UNLESS OTHERWISE NOTED.
 - THE EXPOSED HEAD OF J-BOLTS SHALL BE COVER WITH SPLASH ZONE EPOXY OR APPROVED EQUAL.



DATE: 06/10/2014	SOLICITATION NO.:	APPROVAL:
DESIGNED BY: ADARSH YADAVANI	CONTRACT NO.:	DATE:
CHECKED BY: GREGORIO GREGORIO	DRAWING NUMBER: BDF-1.107.02/101	MARK:
DESIGNED BY: GREGORIO GREGORIO	FILE NAME: BDF-1.107-S-001-S-102.dwg	DESCRIPTION:

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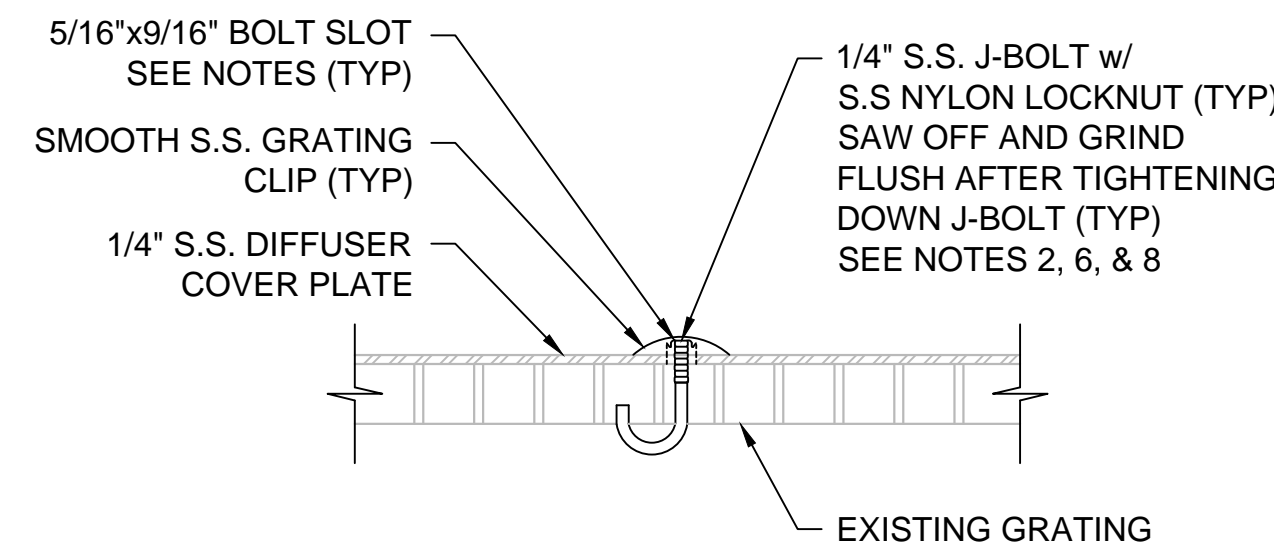
BONNEVILLE LOCK AND DAM
FISHWAY ENTRANCE
LAMPREY PASSAGE MODIFICATION
PLATE DETAILS SHEET 1

SHEET IDENTIFICATION
S-101
SHEET 10 OF 10

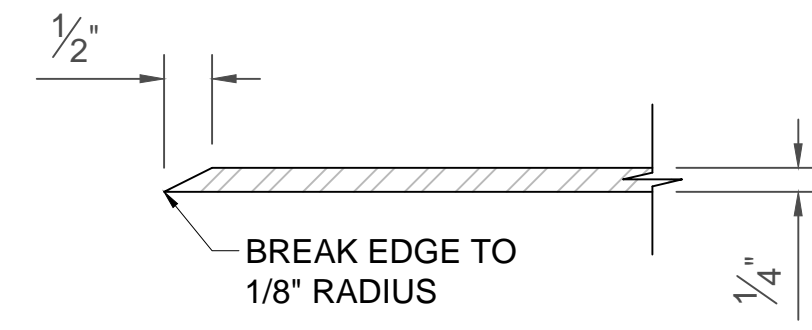


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PORTLAND DISTRICT

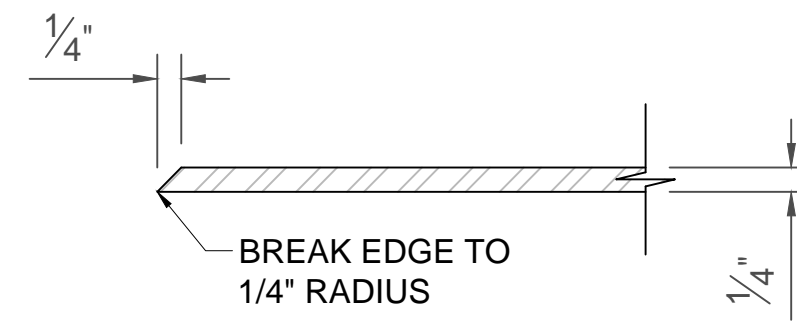
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DESCRIPTION: _____
MARK: _____



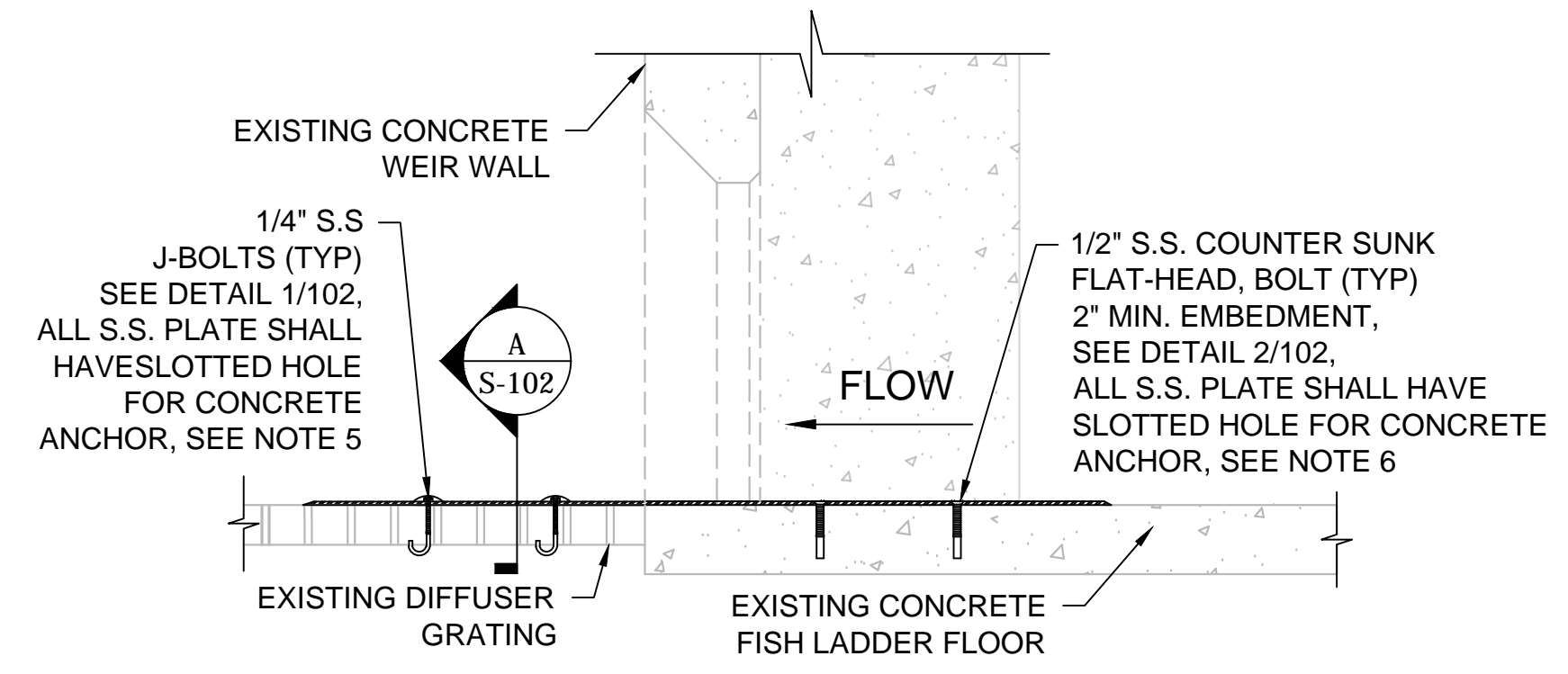
A SECTION - J-BOLT GRATING CLIP
SCALE: 6" = 1'-0"



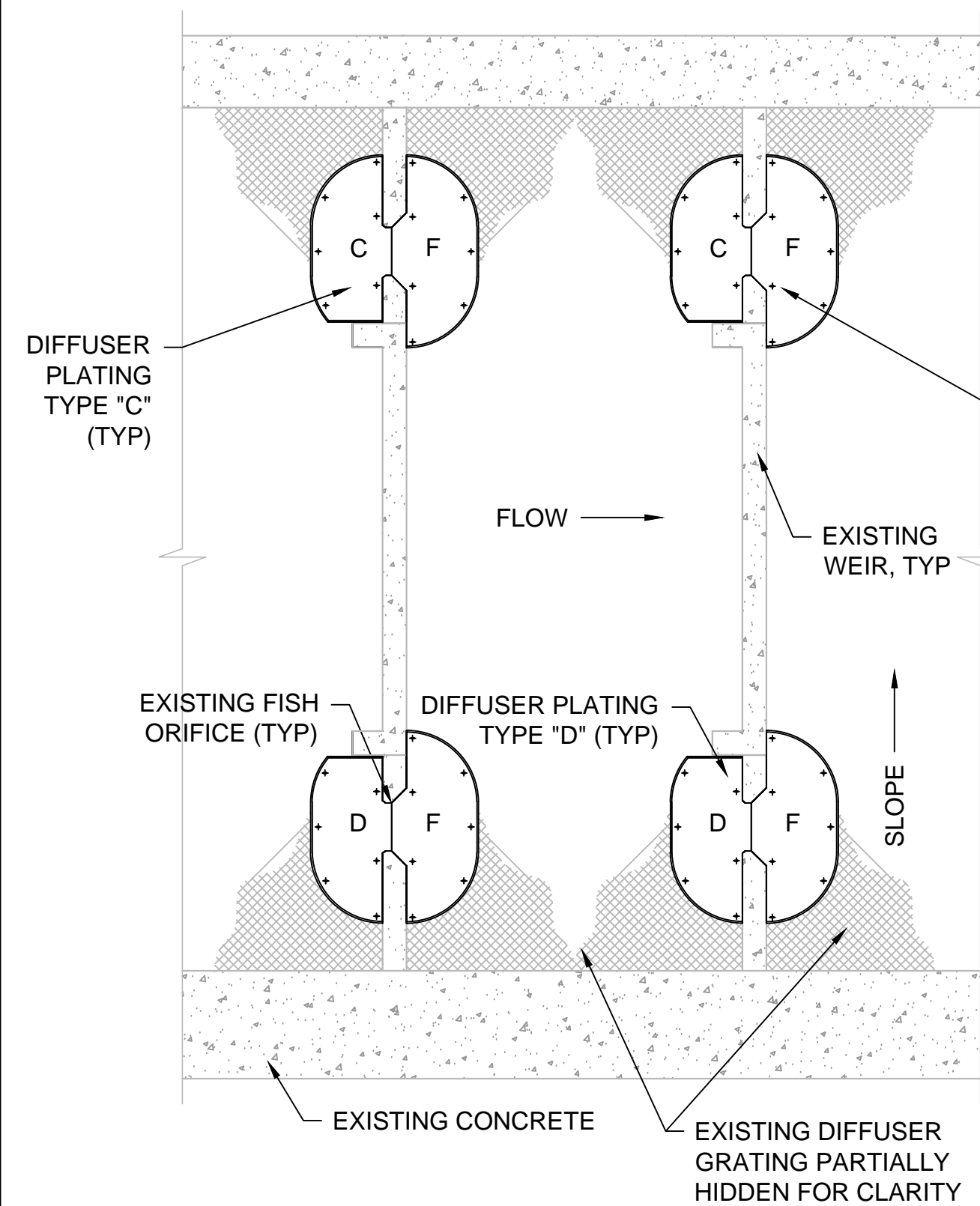
B SECTION - PLATE
SCALE: 6" = 1'-0"



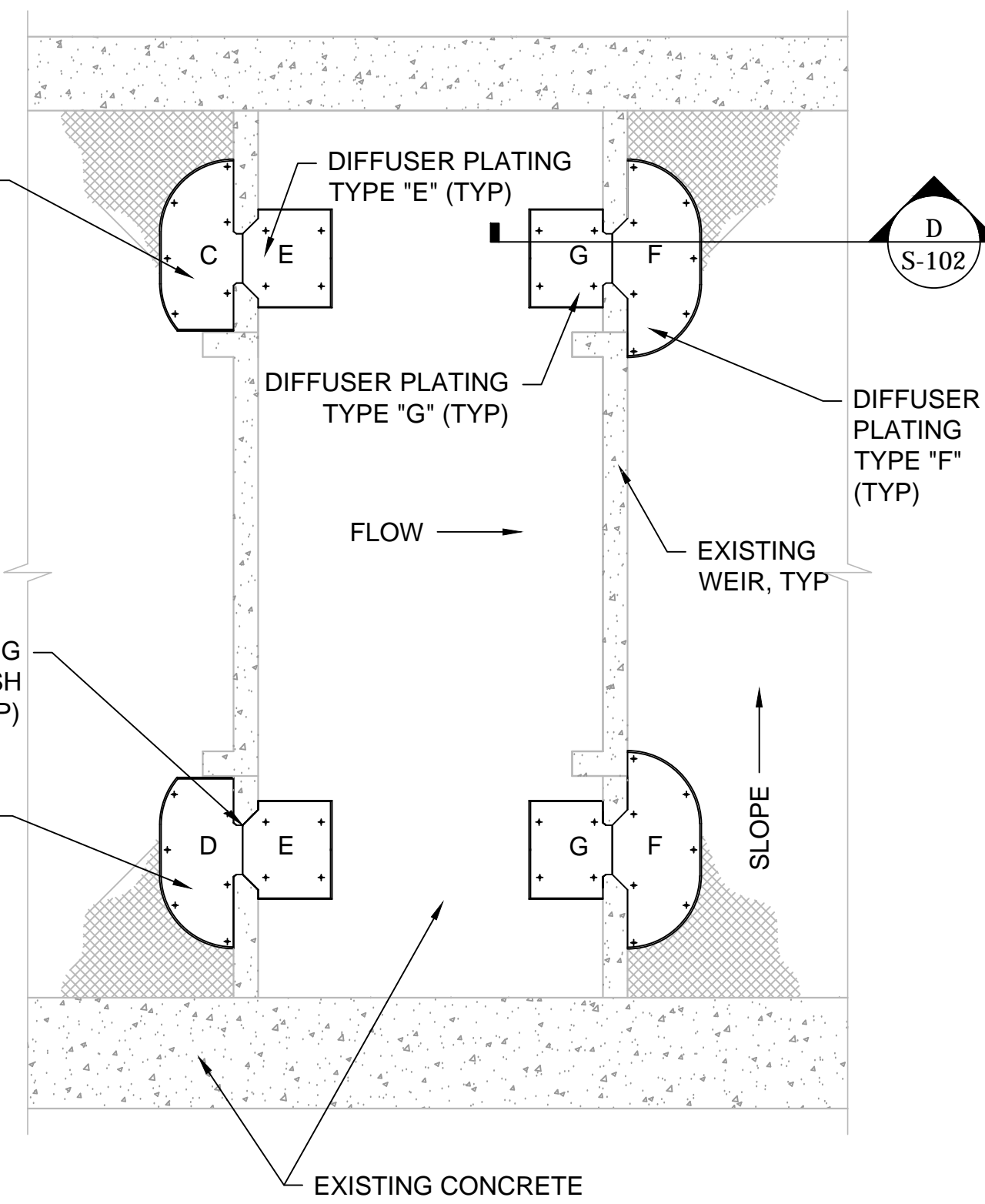
C SECTION - PLATE
SCALE: 6" = 1'-0"



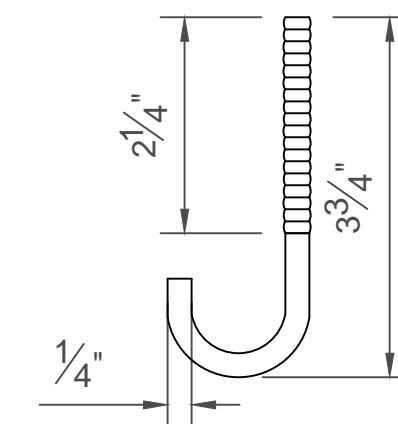
D SECTION - PLATES AND ANCHORS TO GRATING
SCALE: 1" = 1'-0"



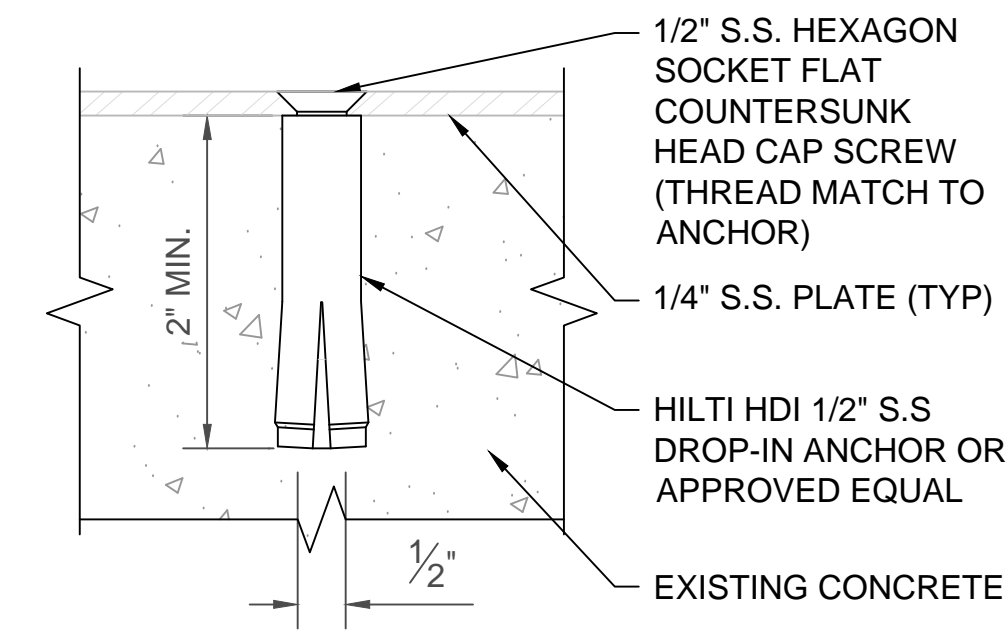
3 BONNEVILLE LOCK & DAM - DIFFUSER PLAN w/ GRATING
SCALE: 1/4" = 1'-0"



4 BONNEVILLE LOCK & DAM - DIFFUSER PLAN w/ GRATING
SCALE: 1/4" = 1'-0"



1 TYPICAL J-BOLT DETAIL
SCALE: 6" = 1'-0"



2 TYPICAL CONCRETE ANCHOR DETAIL
SCALE: 6" = 1'-0"

NOTES:
-SEE SHEET S-101

DESIGNED BY: ADAR YADAVANI
CHECKED BY: GREGOR W. GREGOR
SUBMITTED BY: MATTHEW D. HANSON
DATE: 06/16/2014
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BONNEVILLE LOCK AND DAM
FISHWAY ENTRANCE
LAMPREY PASSAGE MODIFICATION
PLATE DETAILS SHEET 2

SHEET IDENTIFICATION
S-102