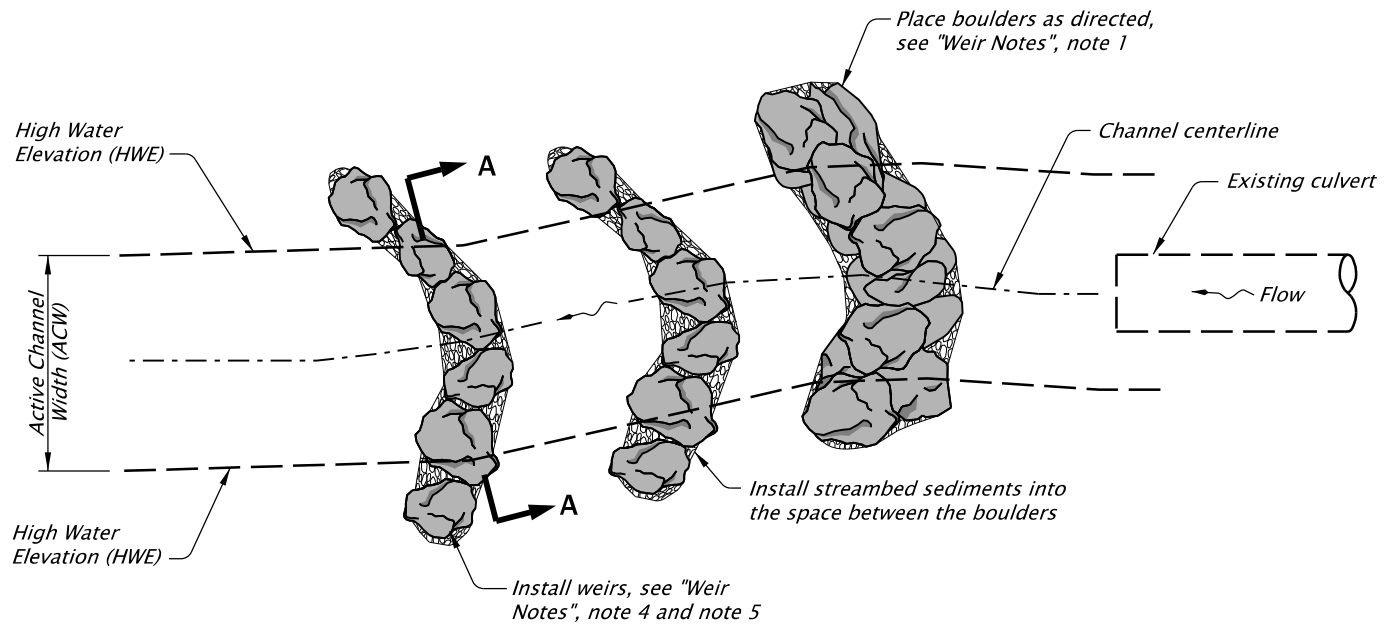
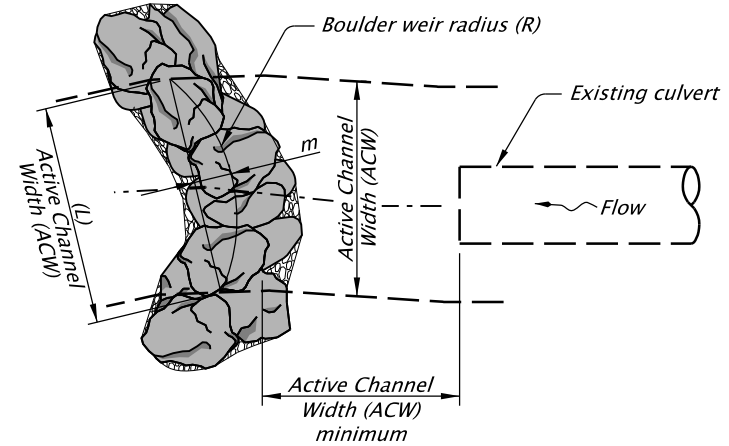




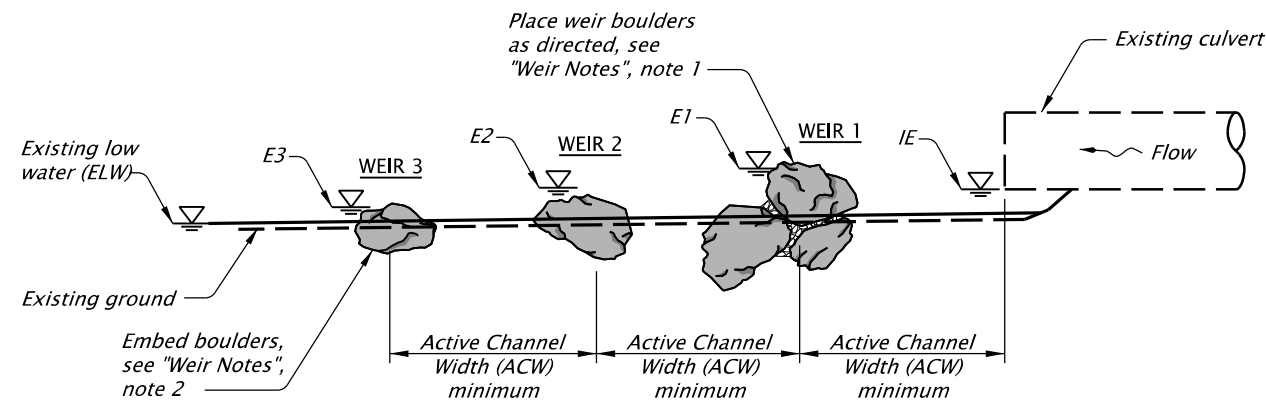
TYPICAL WEIR PLAN
NOT TO SCALE



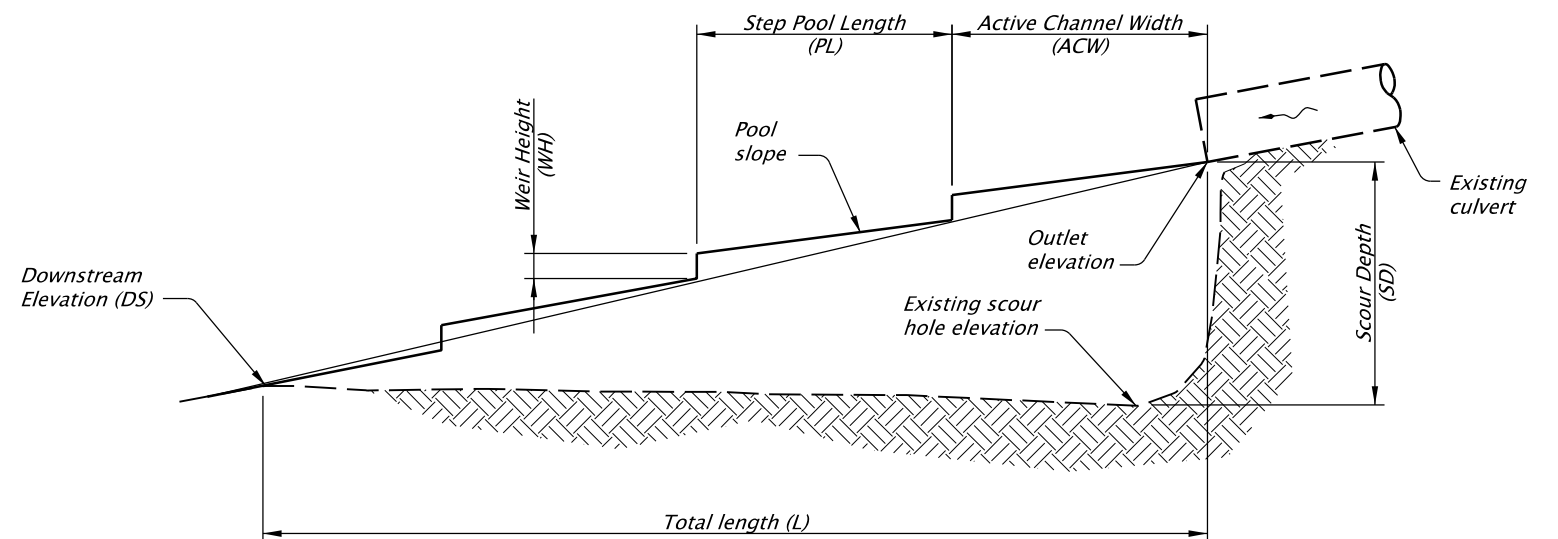
BOULDER WEIR RADIUS PLAN
NOT TO SCALE

OUT-OF-BARREL WEIR NOTES:

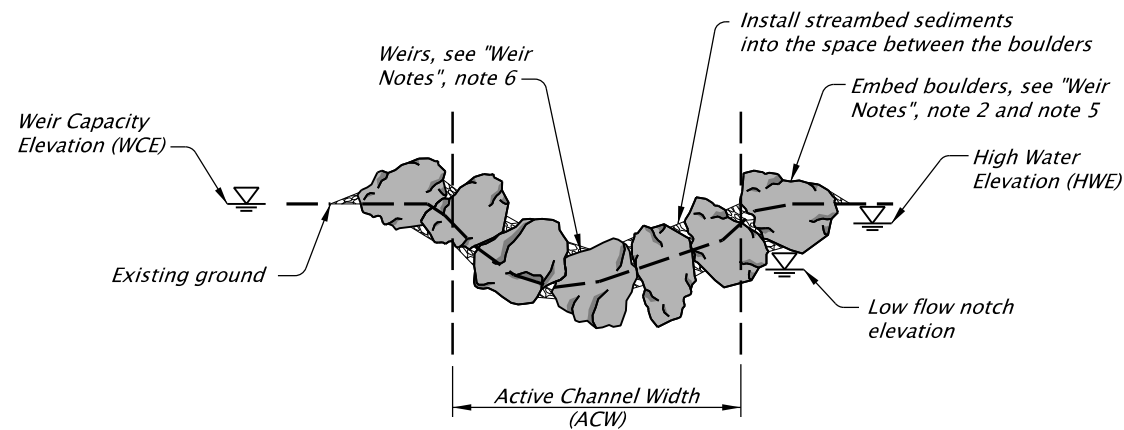
1. Boulders may be placed in a single row or stacked in a pyramid shape as necessary to achieve the required elevation. If a pyramid stack is necessary, embed the bottom layer of boulders into natural substrate a minimum of 40 percent by volume and wedge subsequent boulders into the bottom layer such that boulders will not dislodge in the current.
2. Embed boulders into natural substrate a minimum of 40 percent by volume.
3. Install streambed material into the space between the boulders.
4. Install weirs in an "upstream arch" shape as shown.
5. Extend weirs a minimum of one boulder length in each direction beyond the Active Channel Width.
6. Construct weirs with low flow notches in the center of each weir, such that the stream will flow through notch during low flows.



TYPICAL STREAM PROFILE
NOT TO SCALE



TYPICAL WEIR LAYOUT
NOT TO SCALE



SECTION A-A
NOT TO SCALE

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON DEPARTMENT OF TRANSPORTATION
TECHNICAL SERVICES
DETAILS

OUT-OF-BARREL
AQUATIC PASSAGE
ENHANCEMENTS

DETAIL NO.

DET 5500