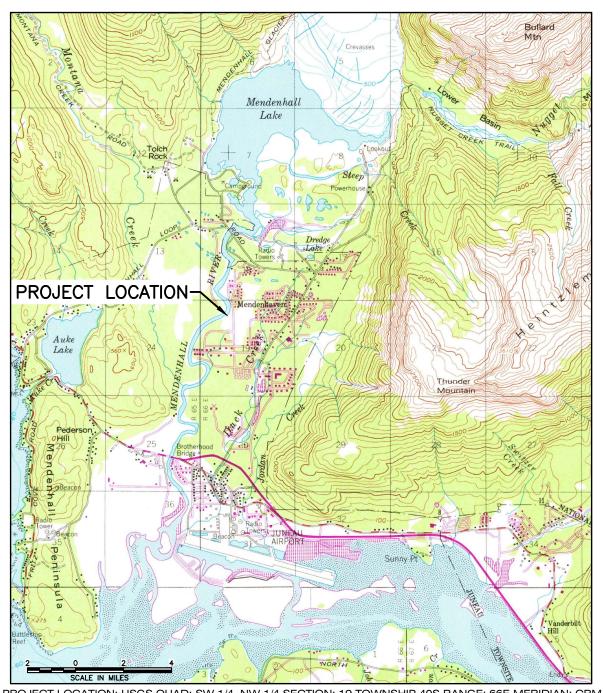
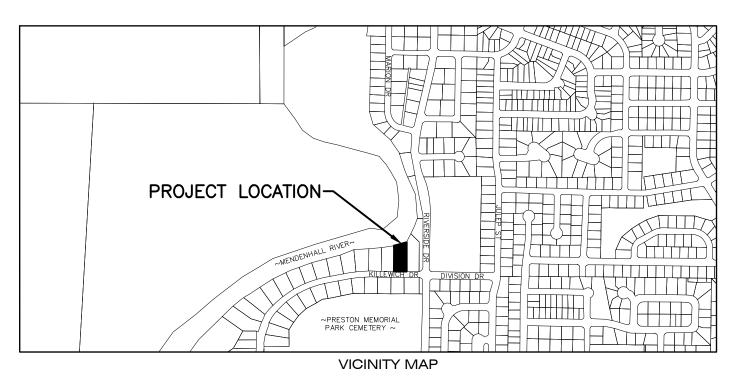
# 3879 KILLEWICH DR **BANK STABILIZATION & REPAIRS**



PROJECT LOCATION: USGS QUAD: SW 1/4, NW 1/4 SECTION: 19 TOWNSHIP 40S RANGE: 66E MERIDIAN: CRM LATITUDE: N 58.391496° LONGITUDE: W -134.584614°





RECORD OF REVISIONS



	DRAWN BY:	C. BYDLON
	DESIGNED BY:	C. BYDLON
	CHECKED BY:	L. CHAMBERS
1	2201 DUNN STREET, STE 2	

## 3879 KILLEWICH DR **BANK STABILIZATION & REPAIRS**

OWNER: DONNA SCHULTZ 3879 KILLEWICH DR JUNEAU, AK 99801

PLAT: SMITH PARK VI, BLOCK A, LOT 12

**COVER** 

SHEET NUMBER OF 3

#### 1.1 DESCRIPTION

A. THE WORK UNDER THIS SECTION INCLUDES PROVIDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR FURNISHING AND PLACING A PROTECTIVE COVERING OF STONE, AS SHOWN ON THE DRAWINGS. OR AS DIRECTED BY THE ENGINEER.

#### 2.1 MATERIALS

A. STONE FOR THIS WORK SHALL BE HARD ANGULAR QUARRY STONES AND HAVE A PERCENTAGE OF WEAR OF NOT MORE THAN 50 AT 500 REVOLUTIONS AS DETERMINED BY ASTM C 535. THE LEAST DIMENSION OF ANY PIECE OF STONE SHALL BE NOT LESS THAN 1/4 ITS GREATEST DIMENSION. STONES SHALL MEET THE FOLLOWING GRADATION REQUIREMENT FOR THE CLASS SPECIFIED:

### CLASS III:

NO MORE THAN 10% OF THE STONES BY TOTAL WEIGHT SHALL WEIGH MORE THAN 1,400 POUNDS PER PIECE, AND NO MORE THAN 15% OF THE STONES BY TOTAL WEIGHT SHALL WEIGH LESS THAN 25 POUNDS PER PIECE. THE STONES SHALL BE EVENLY GRADED AND A MINIMUM OF 50% BY WEIGHT OF THE STONES SHALL WEIGH 700 POUNDS OR MORE PER PIECE.

3.1 CONSTRUCTION

- A. SLOPES TO BE PROTECTED WITH RIPRAP SHALL BE FREE OF BRUSH, TREES, STUMPS AND OTHER OBJECTIONABLE MATERIAL AND SHALL BE DRESSED TO A REASONABLY SMOOTH SURFACE.
- B. THE STONES SHALL BE HANDLED OR PLACED TO THE THICKNESS, HEIGHT AND LENGTH SHOWN ON THE DRAWINGS, OR AS STAKED. WITH A MINIMUM OF VOIDS.
- C. UNDESIRABLE VOIDS SHALL BE FILLED WITH SMALL STONES OR SPALLS. THE ROCK SHALL BE MANIPULATED SUFFICIENTLY BY MEANS OF A BULLDOZER, EXCAVATOR, ROCK TONGS, OR OTHER SUITABLE EQUIPMENT TO SECURE A REASONABLY REGULAR SURFACE AND MASS STABILITY.
- D. RIPRAP PROTECTION SHALL BE PLACED TO ITS FULL COURSE THICKNESS IN SUCH MANNER AS TO AVOID DISPLACING THE UNDERLYING MATERIAL. PLACING OF RIPRAP PROTECTION IN LAYERS OR BY DUMPING INTO CHUTES OR BY SIMILAR METHODS LIKELY TO CAUSE SEGREGATION WILL NOT BE PERMITTED.
- E. ALL RIPRAP SHALL BE SO PLACED AND DISTRIBUTED SUCH THAT THERE WILL BE NO LARGE ACCUMULATION OR AREA COMPOSED MAINLY OF EITHER THE LARGER OR SMALL SIZES OF STONE.
- F. THE CONTRACTOR SHALL PROVIDE A LEVEL, COMPACT AREA OF SUFFICIENT SIZE TO DUMP AND SORT TYPICAL LOADS OF RIPRAP AT AN APPROVED LOCATION; AND SHALL DUMP LOADS, AS SPECIFIED, IN THIS AREA; AND SHALL ASSIST THE ENGINEER AS NEEDED TO SORT AND MECHANICAL EQUIPMENT AS PURPOSE OF DETERMINING IF THE RIPRAP IS WITHIN SPECIFICATIONS. MECHANICAL EQUIPMENT AS NEEDED TO ASSIST IN THIS SORTING SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- G. THE CONTRACTOR SHALL PHASE THE WORK AS SUCH TO MINIMIZE THE NEED FOR IN-WATER WORK AND REDUCE THE POTENTIAL FOR DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS FROM THE WORK AREA TO ADJOINING WATER BODIES. IDEALLY WORK BELOW MEAN HIGH WATER (MHW) WILL BE PERFORMED DURING SEASONAL LOW FLOW RIVER CONDITIONS.
- H. RIPRAP DEPTH SHOWN IN THE TYPICAL SECTION INCLUDES EXISTING RIPRAP AND RIPRAP PLACED AS PART OF THIS PROJECT. EXISTING RIPRAP MAY BE REDISTRIBUTED, AS NECESSARY.

EXISTING STREAM BOTTOM-

(TYPICAL SECTION NOTE 2)

## AS NECESSARY SALVAGED TOPSOIL SHALL BE PLACED, GRADED & COMPACTED TO MATCH EXISTING GROUND CONTOURS. RE-SEED ALL AREAS OF DISTURBED SOIL. 7"-3" -EXISTING GROUND LAYOUT PT SERIES (B)-ELEV. 35.00' -LAYOUT PT SERIES (A) PROPOSED RIPRAP, CLASS III-EXISTING RIPRAP MATERIAL MAY BE LEFT IN PLACE OR UTILIZED TO RECONSTRUCT RIPRAP SLOPE OHWM ELEV. 20.00' ▽ 4'-0" DEPTH RIPRAP. CLASS III (TYPICAL SECTION NOTE 3) LAYOUT PT SERIES (C) 5'-0" DEPTH RIPRAP, CLASS III

TYPICAL SECTION NOTE:

1. THE INTENT OF THE DESIGN IS TO RECONSTRUCT AN EXISTING PARTIALLY FAILED RIPRAP SLOPE. ANY EXISTING RIPRAP MATERIAL SHALL BE INCORPORATED INTO THE FINAL DESIGN BY EITHER LEAVING IT

3. RIPRAP DEPTH SHOWN IN THE TYPICAL SECTION INCLUDES EXISTING RIPRAP AND RIPRAP PLACED AS

2. STREAM FEATURES BELOW WATER LEVEL AT THE TIME OF SURVEY HAVE BEEN APPROXIMATED.

PART OF THIS PROJECT. EXISTING RIPRAP MAY BE REDISTRIBUTED, AS NECESSARY.

QUANTITY ESTIMATES ON SHEET 3 INCLUDE ONLY IMPORTED MATERIAL.

UNDISTURBED, OR PLACING IT IN A DIFFERENT LOCATION ON THE SLOPE WITHIN THE PROJECT AREA.

TYPICAL SECTION A

11-10"

RECORD OF REVISIONS

No. DATE

DESCRIPTION

LUCAS M. CHANGERS:
05/16/2024

PROFESSION



ELEV. 10.00'

DRAWN BY: C. BYDLON
DESIGNED BY: C. BYDLON
CHECKED BY: L. CHAMBERS

2201 DUNN STREET, STE 2
JUNEAU, AK 99801
(907) 780-4004

solutions@proHNS.com

LAYOUT PT SERIES (E)-

3879 KILLEWICH DR BANK STABILIZATION & REPAIRS

(TYPICAL SECTION NOTE 3)

OWNER: DONNA SCHULTZ 3879 KILLEWICH DR JUNEAU, AK 99801

-LAYOUT PT SERIES (F)

PLAT: SMITH PARK VI, BLOCK A, LOT 12 TYPICAL SECTION

SHEET NUMBER

OF 3

May 16, 2024

