MESA FALLS GRANDVIEW OVERLOOK
RETAINING WALL REPAIR

CARIBOU-TARGHEE NATIONAL FOREST

ISLAND PARK, ID

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2. VICINITY MAP AND PROJECT DESCRIPTION
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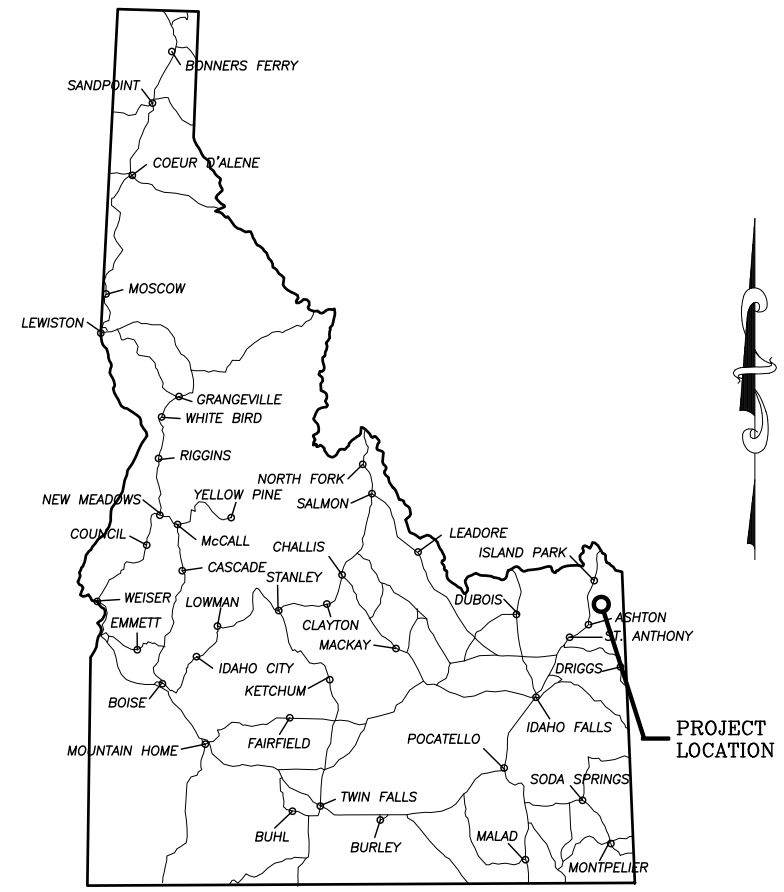


IDAHO

APPROVED

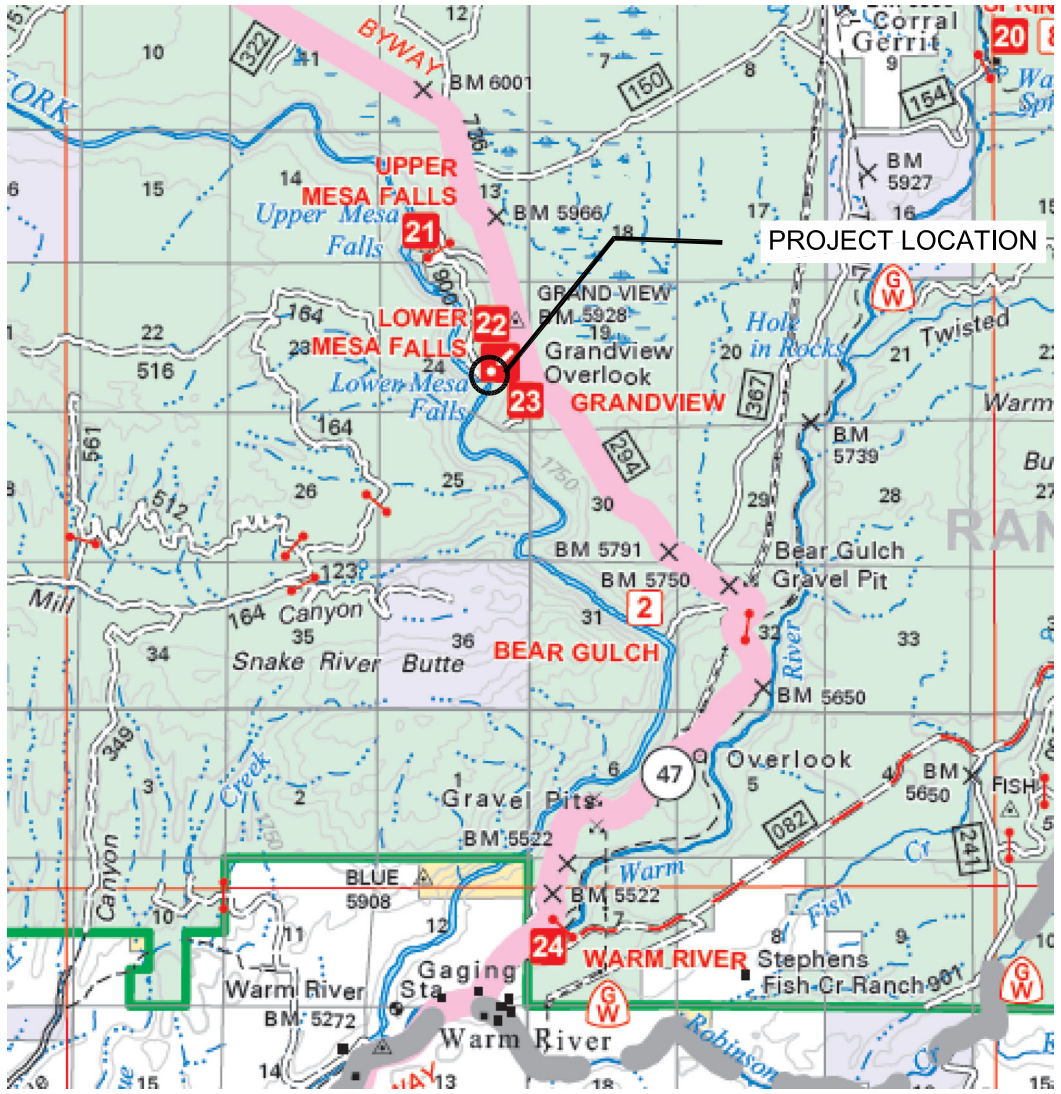
BLAKE DORY — Digitally signed by BLAKE DORY Date: 2026.05.01 13:47:15 -06'00'

DISTRICT RANGER — DATE

STEVEN JENKINS — Digitally signed by STEVEN JENKINS Date: 2026.04.30 15:52:57 -06'00'

FOREST ENGINEER — DATE

VICINITY MAP



NO SCALE

USDA Forest Service

Schedule of Items
Mesa Falls Grandview Overlook
Retaining Wall Repair

ITEM NUMBER	DESCRIPTION	METHOD OF MEAS	UNIT	QUANT.	PRICE	TOTAL
1	Retaining Wall Repair	LSQ	LS	1		
2	Basalt Rock Cap	LSQ	LS	1		
	Total					

PROJECT DESCRIPTION:

THIS PROJECT INCLUDES THE REPAIR OF THE RETAINING WALL AT THE MESA FALLS GRAND VIEW OVER LOOK. WORK INCLUDES MORTAR REPAIR OF THE ROCK WALL, STONE WORK AND WALL REPAIR, AND FABRICATION OF A BASALT STONE CAP ACROSS THE TOP OF THE WALL.

PROJECT LOCATION:

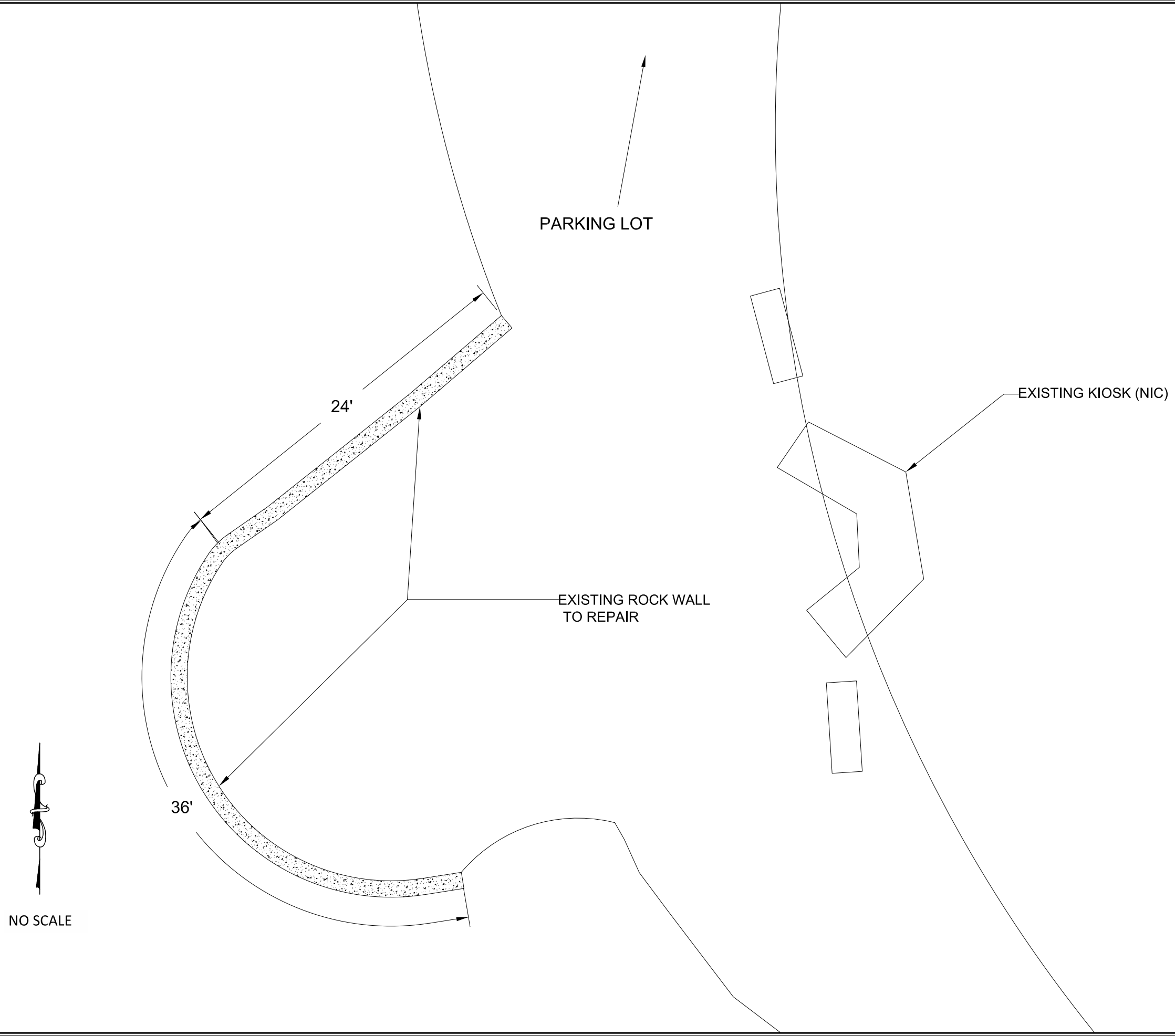
THE PROJECT IS LOCATED ON THE ASHTON-ISLAND PARK RANGER DISTRICT ON THE CARIBOU-TARGHEE NATIONAL FOREST, IN FREMONT COUNTY, IDAHO, AT LAT 44.174982°, LONG -111.314774°

U. S. Department of Agriculture
FOREST SERVICE
Intermountain Region 4 Engineering
CARIBOU-TARGHEE NATIONAL FOREST

DESIGN BY: S. JENKINS CHECK: S. JENKINS
DRAWING BY: S. JENKINS CHECK: S. JENKINS
APPROVED: DATE

MESA FALLS GRANDVIEW OVERLOOK
RETAINING WALL REPAIR
VICINITY MAP, PROJECT DESCRIPTION AND SCHEDULE OF ITEMS

PROJECT No.
DRAWING G1
SHEET 2 OF 6



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MESA FALLS GRANDVIEW OVERLOOK
RETAINING WALL REPAIR

SITE PLAN

PROJECT No.

DRAWING G2

SHEET 3 OF 6

Failed Repair Mortar (typ.)

Failed Historic Mortar (typ.)

Mortar Work: Remove and repoint all failed mortar work

All failed mortar joints shall be removed using a combination of hand hammers and chisels as well as HEPA vac supported grinding with dust collection to minimize silica dust per OSHA standards. Care must be taken to leave as much original sound historic mortar with lichens undisturbed. Only grind out failed joints, leave sound joints and blend repairs into sound joints. After all failed mortar is removed, joints are gently cleaned with forced air and hand pump sprayer water (not pressure washed). Mortar shall be mixed to match historic mortar as closely as possible, applied to damp stone work and cured properly. We want *invechiatto*: aged joints. Use the *effetto acqua sporca* method to match mortar joints where appropriate.

All mortar shall be protected from freezing as well as premature drying from wind and sun exposure to ensure a proper damp cure occurs. This requires a combination of damp burlap, drop cloths, sun shades and concrete blankets depending on night time temperatures/weather conditions.

*Note:Contractor to field verify quantities of mortar to be repaired prior to bidding

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MESA FALLS GRANDVIEW OVERLOOK
RETAINING WALL REPAIR
MORTAR WORK DETAILS

PROJECT No.
DRAWING C1
SHEET 4 of 6

Missing South End Wall Stone

Wall Top Detail

Stone Work:

Historic pieces that have been heaved over the edge shall be recovered. Clean and reset original lava pieces where possible. Source pieces from surrounding talus slopes where it is not possible to find original pieces. Replace missing/shifted stone pinning along entire backside (riverside) of columnar basalt and boulder wall. Remove all vegetation from stonework. Rebuild missing south wall end section in kind. Match historic mortar.

*Note:Contractor to field verify quantities of stone work prior to bidding

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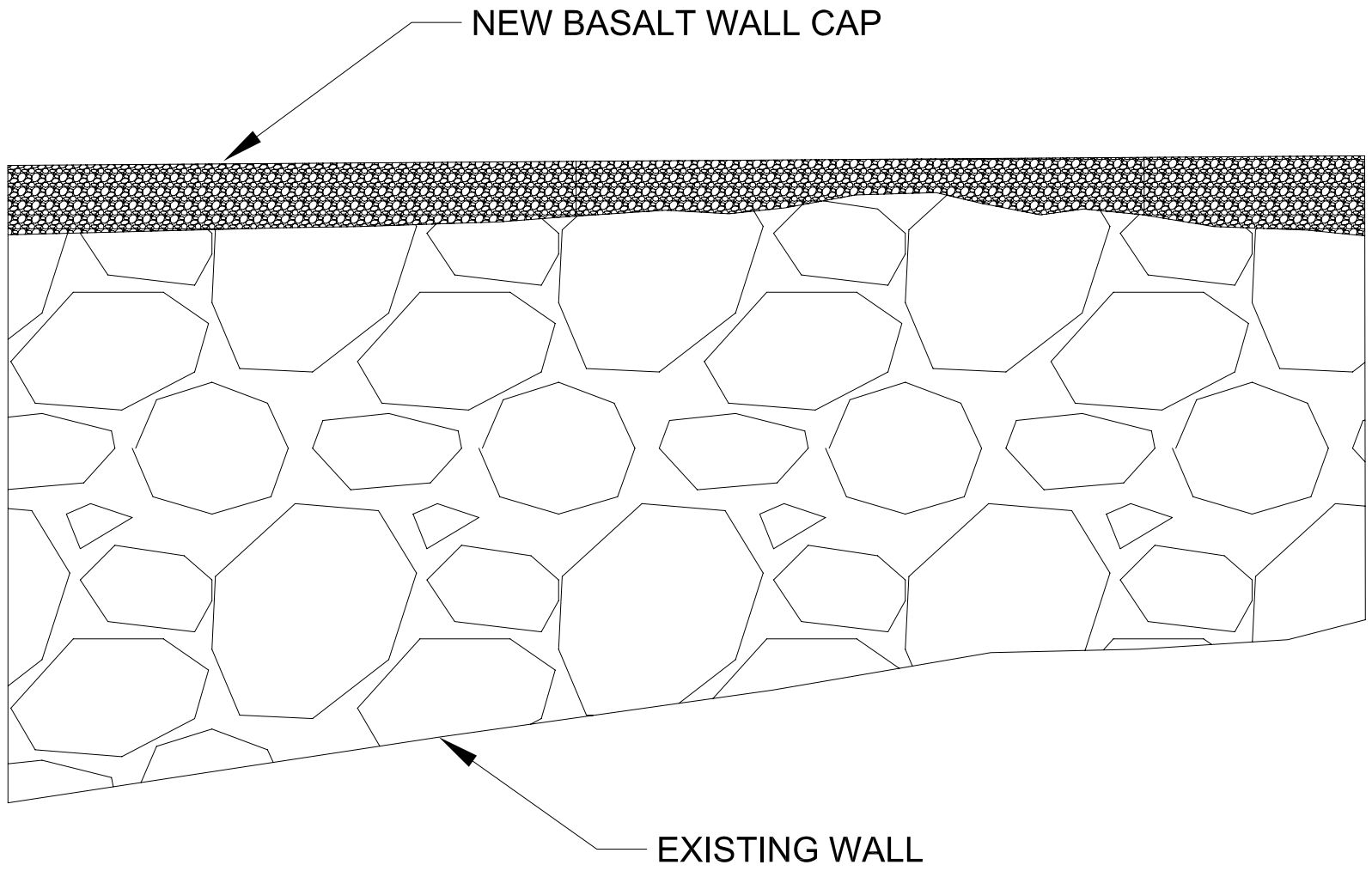
STONE WORK DETAILS

PROJECT No.
DRAWING C2
SHEET 5 OF 6



Fabricate Columnar Basalt Wall Cap :

Source columnar basalt from talus slopes on site. Fabricate cap stones by splitting large pieces with a rotary hammer drill and plug and feathers. Individual cap stones should be 18-24" front to back. Match existing wall variances (4-6" thick). Width of each capstone will be determined by average size of basalt columns (18-24"). Establish a consistent overhang over lava facing wall of 2-3" on the face. The back of the stone capping should run wild as the the existing top backing course does: flush the front face of the capping stones to establish a continuous plane of capping running the entire 60' of wall. Blending this work into the original, in kind, is key. The cap should look like it has always been there. Shape cap stones by hand with hammer and chisels. Avoid grinder and saw work: no grinder or saw marks shall be visible in finished work. Joints between cap stones must be consistent: a 5/8"-1" mortar joint is appropriate. Match mortar joint between cap bottom and wall top to existing work. The existing wall undulates at least 3". The cap should follow the existing elevations across the length of the wall: The tops of the cap stones should be flush (not necessarily level) one to the next. The undulation is achieved, accommodated, blended in with the bed joint (bottom) of the capstones.

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BASALT WALL CAP DETAILS

PROJECT No.
DRAWING C3
SHEET 6 OF 6