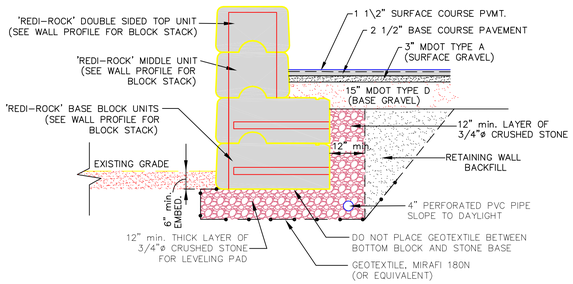
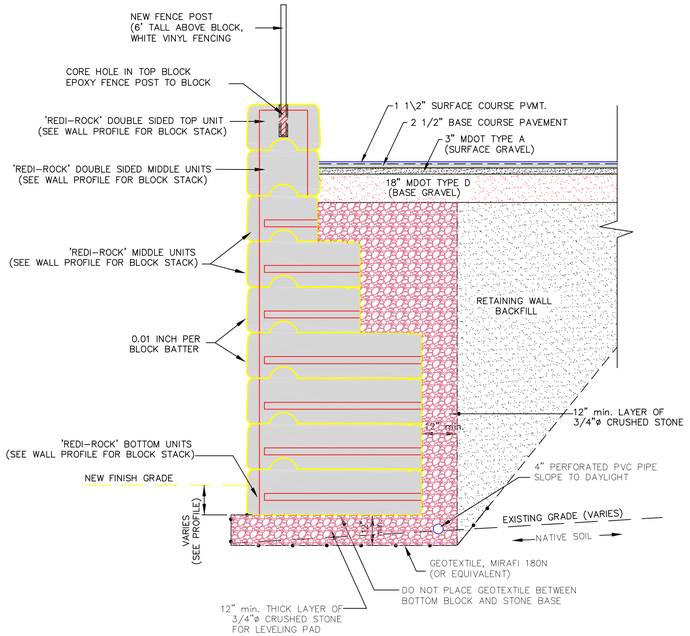


TYPICAL CROSS SECTION

NOT TO SCALE



TYPICAL CROSS SECTION

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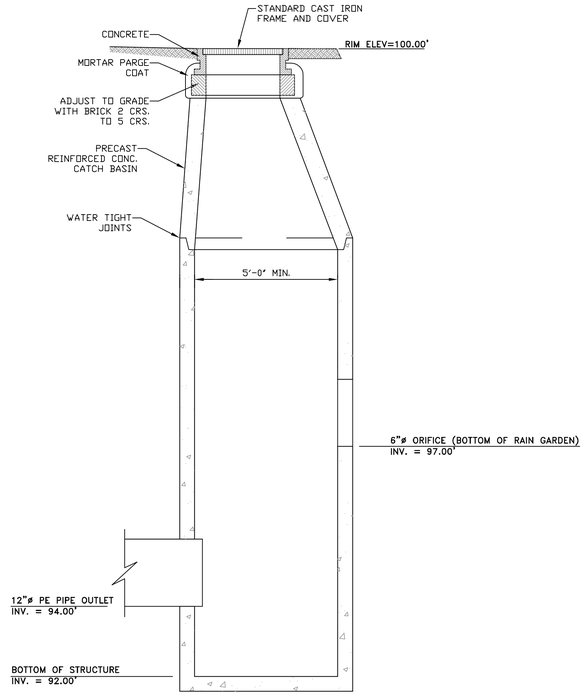


OUTLET CONTROL STRUCTURE

NOT TO SCALE

GENERAL NOTES

1) IT IS THE RESPONSIBILITY OF THE OWNER, CONTRACTOR OR THEIR RESPECTIVE REPRESENTATIVES TO ENSURE THAT CONSTRUCTION OF THE WALL AND MATERIALS USED IN THE CONSTRUCTION OF THE WALL ARE IN ACCORDANCE WITH THESE SPECIFICATIONS AND/OR THE CONTRACT SPECIFICATIONS WHICH EVER ARE MORE STRINGENT.

2) E.S. COFFIN ENGINEERING & SURVEYING ACCEPTS NO RESPONSIBILITY NOR LIABILITY IN THE DETERMINATION OF THE ADEQUACY OF SITE MATERIALS AND WALL LAYOUT.

3) PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THAT ALL ELEVATIONS AND ASSUMED SITE CONDITIONS SHOWN ON THESE DRAWINGS ARE ACCURATE TO THE GIVEN SITE CONDITIONS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF S.G.S. PRIOR TO THE START OF CONSTRUCTION.

4) THE WALL HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE WALL BACKFILL MATERIAL SHALL BE FREE OF SUBSURFACE DRAINAGE OR WATER (SEEPAGE). PERMANENT SUBSURFACE WATER (SEEPAGE) COLLECTION AND DIVERSION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR OWNERS ENGINEER (SEE RECOMMENDED TYPICAL DETAILS).

5) DURING CONSTRUCTION BEFORE RAIN EVENTS, BACKFILL SURFACE SHALL BE GRADED AWAY FROM THE WALL FACE AND A TEMPORARY SOIL BERM CONSTRUCTED NEAR THE TOP CREST TO PREVENT SURFACE WATER RUNOFF FROM OVERTOPPING THE WALL. PROVIDE PRECAUTIONS AS NECESSARY TO ENSURE THAT SURFACE RUN OFF FROM ADJACENT AREAS DOES NOT ENTER THE WALL CONSTRUCTION SITE. DURING CONSTRUCTION BEFORE RAIN EVENTS, BACKFILL SURFACE SHALL BE SMOOTHED OUT TO PREVENT PONDING OF WATER AND SATURATION OF SOIL.

6) THE REDI-ROCK WALL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER AND THE INFORMATION FURNISHED ON THESE DRAWINGS.

7) FOUNDATION EXCAVATION SHALL EXTEND TO COMPETENT SOIL. (UNLESS NOTED OTHERWISE) ALL EXISTING TOPSOIL, LOOSE MATERIAL, FILL, ORGANIC SOILS AND OTHER SOFT OR UNSTABLE FOUNDATION SOILS SHALL BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE WALL AND REPLACED WITH 3/4"ø CRUSHED STONE. REMOVE UNSUITABLE FOUNDATION SOILS TO THE LATERAL LIMITS EXTENDING BEYOND THE WALL A DISTANCE EQUAL TO THE DEPTH OF FILL REQUIRED BELOW THE WALL PLUS (1) ONE FOOT.

8) UPON COMPLETION OF THE EXCAVATION, THE NATURAL SUBGRADE SHALL BE COMPACTED USING A VIBRATORY ROLLER AND MAKING A MINIMUM OF 5 PASSES.

9) INSTALL A 12" (MINIMUM THICK) LAYER OF COMPACTED [" CRUSHED STONE FOR BLOCK WALL LEVELING PAD OR CONCRETE FOOTING. EXTEND LEVELING PAD 6" HORIZONTALLY IN ALL DIRECTIONS BEYOND LIMITS OF THE PRECAST BLOCK WALL.

10) INSTALL THE BASE COURSE OF BLOCKS ON THE PREPARED FOUNDATION LEVELING PAD. LEVELING PAD MATERIAL VARIES ACCORDING TO SECTION AND PLAN/PROFILE. ENSURE THAT THE BASE COURSE IS LEVEL SIDE TO SIDE AND PLUMB. ADJUST BLOCKS AS REQUIRED TO PROVIDE A STRAIGHT AND LEVEL BASE COURSE.

MATERIAL SPECIFICATIONS

INSTALL 3/4"ø DRAINAGE STONE AND WALL BACKFILL SOIL BEHIND THE WALL. COMPACT WALL BACKFILL IN LIFTS NOT EXCEEDING 18".

SWEEP OFF TOP OF BLOCKS AND GRIND SMOOTH ANY ROUGH EDGES ON THE BACK OF THE BLOCKS TO AVOID DAMAGE TO GEOGRID.

CONTRACTOR SHALL TAKE PRECAUTIONS DURING THE INSTALLATION AND COMPACTION OF THE DRAINAGE AND BACKFILL MATERIAL TO ENSURE THAT WALL BACKFILL DOES NOT CONTAMINATE THE DRAINAGE STONE DIRECTLY BEHIND THE WALL. REMOVE AND REPLACE ANY AREAS OF DRAINAGE MATERIAL THAT INADVERTENTLY BECOMES CONTAMINATED DURING THE BACKFILLING OPERATION.

CONTINUE PLACEMENT OF BLOCK WALL, DRAINAGE AGGREGATE AND WALL BACKFILL SOIL TO FULL HEIGHT OF WALL MAINTAINING HORIZONTAL AND VERTICAL ALIGNMENT DURING CONSTRUCTION. USE SMALL VIBRATORY PLATE COMPACTOR WITHIN 3' OF THE BACK OF THE WALL.

3/4"ø DRAINAGE STONE SHALL BE CLEAN ANGULAR CRUSHED STONE MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422.

SIEVE SIZE	PERCENT PASSING
1"	100
1/4"	90 – 100
3/8"	20 – 55
No. 4	0 –10
No. 8	0 – 5

WALL BACKFILL SHALL BE A FREE DRAINING, WELL GRADED GRANULAR MATERIAL MEETING THE FOLLOWING GRADATION (REFERENCE MDOT 703.22, GRAVEL BORROW).

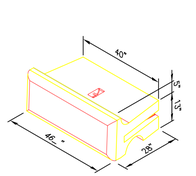
SIEVE SIZE	PERCENT PASSING
4"	100
1/4"	25 – 70
No. 40	0 – 30
No. 200	0 – 5

BLOCKS SHALL BE 28", 41" AND 60" REDI-ROCK, UNDER LICENSE OF REDI-ROCK INTERNATIONAL, VERTICAL BATTER. COLOR AND FACING TO BE SELECTED BY OWNER BASED ON SAMPLES PROVIDED BY MANUFACTURER. SETBACK SHALL BE 0.01 INCHES PER BLOCK.

THE FOLLOWING ASSUMPTIONS WERE USED IN THE DESIGN:
A) SLOPE AT TOP OF WALL IS LEVEL.
B) MINIMUM DESIGN EMBEDMENT AT WALL FACE VARIES
C) SOIL PROPERTIES:
FOUNDATION SOIL: NATIVE, UNIT WEIGHT = 125 pcf, phi = 30°
RETAINED SOIL: NATIVE, UNIT WEIGHT = 130 pcf, phi = 34°
D) LIVE LOAD SURCHARGE = 250 psf
E) GROUNDWATER AT OR BELOW BASE OF WALL.
F) SEISMIC DESIGN COEFFICIENT = 0.08
G) MAXIMUM CONTACT PRESSURE = 3,500 psf

GEOTEXTILE SHALL CONSIST OF MIRAFI 180N OR EQUIVALENT.

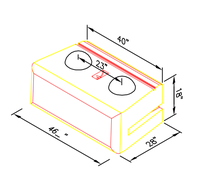
CONCRETE FOR WALL BASE FOOTINGS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000psi AND BE AIR ENTRAINED AS REQUIRED TO PROVIDE AN AIR CONTENT OF 5% (:1%).



VOLUME = 8.55 c.f. WEIGHT = 1,223 lbs.

28" TOP BLOCK

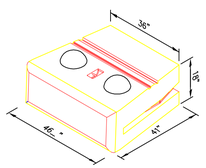
NOT TO SCALE



VOLUME = 12.36 c.f. WEIGHT = 1,768 lbs.

28" BOTTOM BLOCK

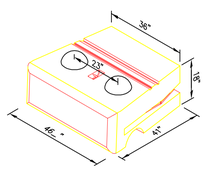
NOT TO SCALE



VOLUME = 17.37 c.f. WEIGHT = 2,483; lbs.

41" BOTTOM BLOCK

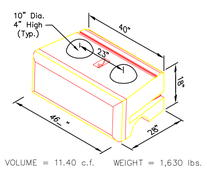
NOT TO SCALE



VOLUME = 16.44 c.f. WEIGHT = 2,351; lbs.

41" MIDDLE BLOCK

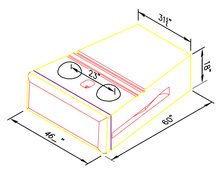
NOT TO SCALE



VOLUME = 11.40 c.f. WEIGHT = 1,630 lbs.

28" MIDDLE BLOCK

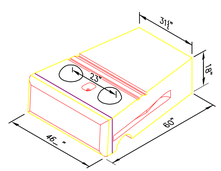
NOT TO SCALE



VOLUME = 23.97 c.f. WEIGHT = 3,428; lbs.

60" BOTTOM BLOCK

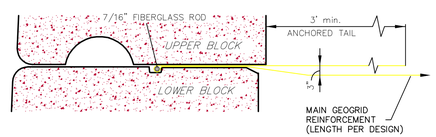
NOT TO SCALE



VOLUME = 23.06 c.f. WEIGHT = 3,297; lbs.

60" MIDDLE BLOCK

NOT TO SCALE



GEOGRID TO BLOCK CONNECTION DETAIL

NOT TO SCALE

STATE OF MAINE
JAMES E. COFFIN
8500
LICENSED
PROFESSIONAL ENGINEER

E.S. COFFIN ENGINEERING & SURVEYING
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DATE

REVISIONS

NO.

SHEET TITLE: DETAILS IV

SCALE: AS SHOWN

DRAWN BY: TGH
CHECKED BY: JEC

DATE: SEPTEMBER 22, 2021

CLIENT/PROJECT: HATHAWAY HOLDINGS, LLC

LOCATION: 150 DRESDEN AVENUE

TOWN: GARDINER COUNTY: KENNEBEC STATE: MAINE

PROJ. NO. 2020-174

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