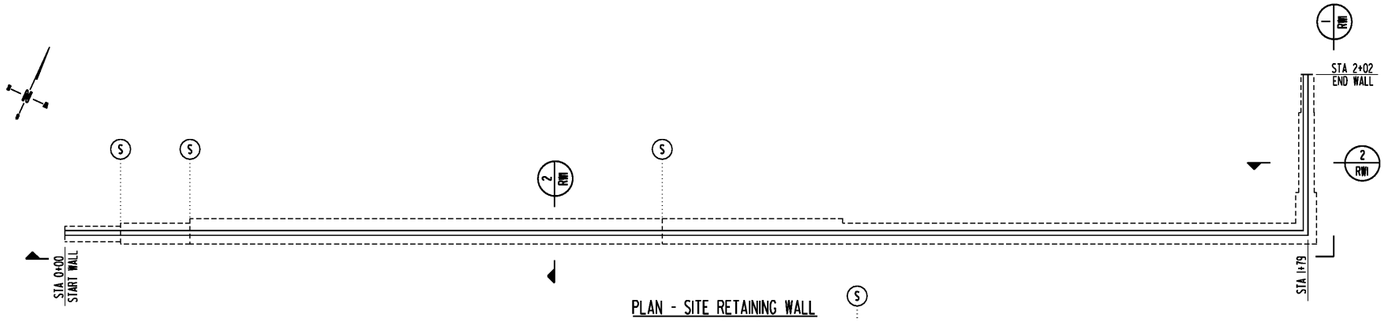
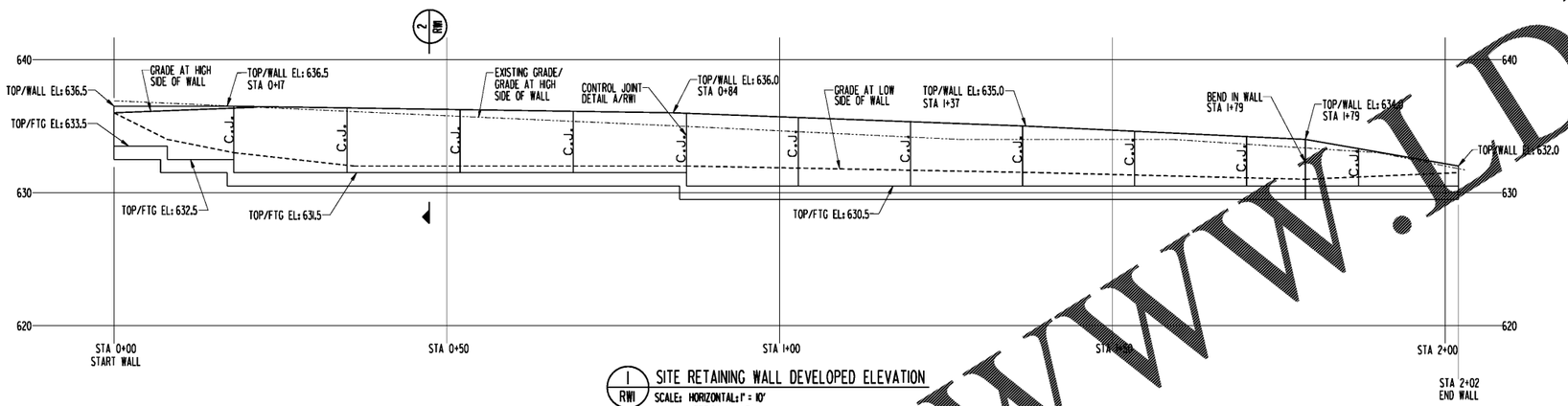


PLAN - SITE RETAINING WALL

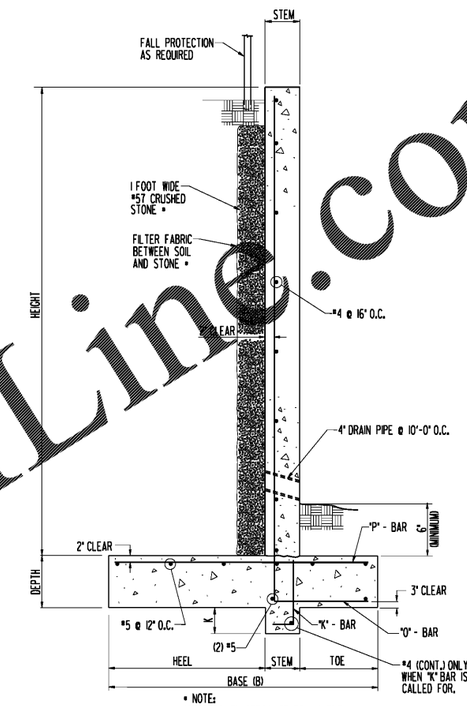
SCALE: 1" = 10'-0"

S = STEPPED FOOTING INDICATOR - SEE DETAIL B/RW1



1 / RW1 SITE RETAINING WALL DEVELOPED ELEVATION

SCALE: HORIZONTAL: 1" = 10'
VERTICAL: 1" = 5'



* NOTE:
MIRADRAIN, ENKADRAIN OR EQUIVALENT SYNTHETIC DRAINAGE BLANKET MAY BE USED IN PLACE OF CRUSHED STONE AND FILTER FABRIC.

2 / RW1 SECTION

SCALE: 3/4" = 1'-0"

GENERAL NOTES FOR RETAINING WALLS

1. ALL DESIGN, DETAILING, FABRICATION AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:
   A. THE SOUTH CAROLINA BUILDING CODE (2015 EDITION).
   B. AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM) SPECIFICATIONS.
   C. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14).
   D. SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI-301).

RETAINING WALL DESIGN PARAMETERS

1. ALLOWABLE SOIL BEARING PRESSURE = 3000 PSF
2. ACTIVE EQUIVALENT FLUID PRESSURE = 41.5 PSF/FT
3. PASSIVE EQUIVALENT FLUID PRESSURE = 318 PSF/FT.
4. COEFFICIENT OF FRICTION BETWEEN SOIL AND CONCRETE = 0.30.
5. BACKFILL COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
6. ANGLE OF INTERNAL FRICTION = 28 DEGREES
7. SOIL UNIT WEIGHT = 115 PCF
8. 300 PSF SURCHARGE STARTING 5 FEET BEHIND THE WALL, EXTENDING FOR 10 FEET.

STRUCTURAL CONCRETE GENERAL NOTES:

1. CONCRETE SHALL BE NORMAL WEIGHT WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. REINFORCING STEEL IN CONCRETE SHALL BE ASTM A-615, GRADE 60.
   a. REINFORCING STEEL IN CONCRETE SHALL BE FREE FROM MUD, OIL, RUST OR COATINGS THAT WOULD REDUCE OR DESTROY BOND.
   b. REINFORCING TENSION LAP SPLICES SHALL BE A MINIMUM OF 24" FOR #4 BARS, AND 28" FOR #5 BARS.
   c. MINIMUM CONCRETE COVER ON BARS SHALL BE 2" FOR FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND; 3" FOR UNFORMED SURFACES DEPOSITED AGAINST THE GROUND; EXCEPT AS NOTED.

SPECIAL INSPECTIONS

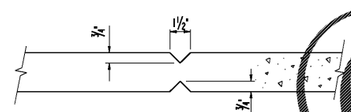
1. FOOTINGS SHALL BE CHECKED WITH A HAND AUGER AND DYNAMIC CONE PENETROMETER BY THE SPECIAL INSPECTION AGENCY TO VERIFY ADEQUATE SOIL BEARING CAPACITY. FOOTINGS SHALL BE CHECKED AT LEAST EVERY 2 FEET, TO A DEPTH EQUAL TO THE FOOTING WIDTH. SOIL THAT DOES NOT MEET BEARING CAPACITY REQUIREMENTS SHALL BE REMEDIATED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
2. FOOTING AND WALL DIMENSIONS, AND REINFORCING STEEL SHALL BE CHECKED FOR COMPLIANCE WITH THE DRAWINGS.
3. CONCRETE SHALL BE SAMPLED IN ACCORDANCE WITH ASTM C172 AND TESTED IN ACCORDANCE WITH ASTM C39.
4. SPECIAL INSPECTIONS AGENCY SHALL SUBMIT COPIES OF REPORTS TO ENGINEER FOR REVIEW, AND SHALL PREPARE A FINAL REPORT OF SPECIAL INSPECTIONS UPON COMPLETION OF INSPECTIONS.

RETAINING WALL BACKFILL

1. BACKFILL BEHIND RETAINING WALL SHALL BE COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. COMPACTION SHALL BE A MINIMUM OF 95% STANDARD PROCTOR FOR MAXIMUM DRY DENSITY.
2. TEST BACKFILL BEHIND RETAINING WALL IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. DO NOT USE HEAVY EQUIPMENT WITHN 5 FEET OF BACK OF WALL.

GRADING AND WALL LOCATION

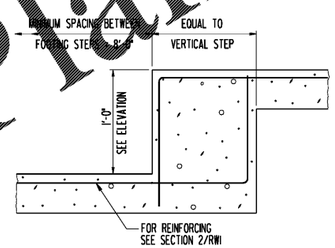
GRADING AND RETAINING WALL LOCATION FROM GREENBERG FARROW DRAWING C-3, DATED 3-16-18.



SPACE CONTROL JOINTS AS SHOWN ON WALL ELEVATION
CONTINUE REINFORCING (NOT SHOWN) THROUGH JOINT

A / RW1 WALL CONTROL JOINT DETAIL

SCALE: NONE



TYPICAL STEPPED FOOTING

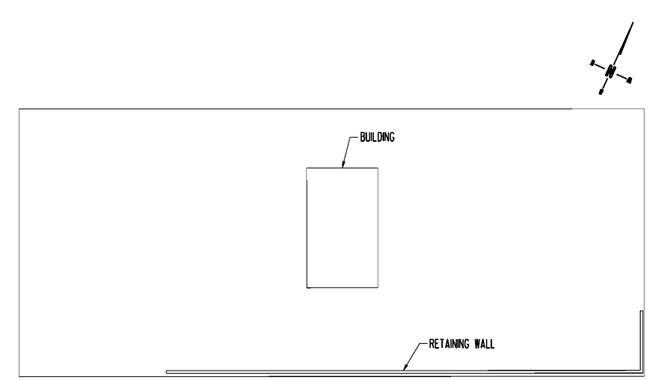
B / RW1 DETAIL

SCALE: NONE

WALL SCHEDULE FOR SITE RETAINING WALL

HEIGHT	STEM	BASE	TOE	HEEL	DEPTH	"O" BAR	"P" BAR	"K" BAR
2'-0"	8"	1'-10"	4"	10"	12"	#4 @ 12" O.C.	#4 @ 12" O.C.	N/A
3'-0"	8"	2'-5"	7"	1'-2"	12"	#4 @ 12" O.C.	#4 @ 12" O.C.	N/A
4'-0"	8"	3'-0"	1'-2"	1'-2"	12"	#4 @ 12" O.C.	#4 @ 12" O.C.	N/A
5'-0"	8"	3'-8"	1'-9"	1'-3"	12"	#4 @ 12" O.C.	#4 @ 12" O.C.	#4 @ 24" O.C.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 31009 MEHDI MONZAVI



KEY PLAN

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REVISIONS

625 Holcomb Bridge Road
Norcross, Georgia 30071
770-209-0029 Fax 582-2300
www.unitedconsulting.com

We're here for you
UNITED CONSULTING

PROJECT DESCRIPTION

MURPHY USA
506 SC 72
GREENWOOD, SOUTH CAROLINA
GREENBERG FARROW

SHEET TITLE

SITE RETAINING WALL

SCALE: AS NOTED
DRAWN BY: PJC
CHECKED BY: MM
DATE: MARCH 26, 2018
PROJECT I.D.: 18-SC-01997-02
DRAWING NUMBER

RW1

Order Plans @ WWW.LDILine.com

AS-120 (24 X 36)

18-01997-02.dgn