

SPECIAL INSPECTION SCHEDULE		
ITEM	FREQUENCY	ANCHOR / PILE TYPE
HELICAL PILES/ANCHORS	PHYSICAL OBSERVATION OF START OF INSTALLATION AND REVIEW OF ALL INSTALLATION LOGS	MAGNUM GEO-SOLUTIONS, LLC.
CONCRETE	NONE REQUIRED	OPTIONAL
REINFORCING STEEL	NONE REQUIRED	OPTIONAL



MAGNUM GEO-SOLUTIONS, LLC
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PROJECT NAME:

RESIDENCE

ADDRESS

CITY, STATE

CLIENT:
 YOUR COMPANY
 NAME

Street Address

City, State

Contact: Your Name
 your number

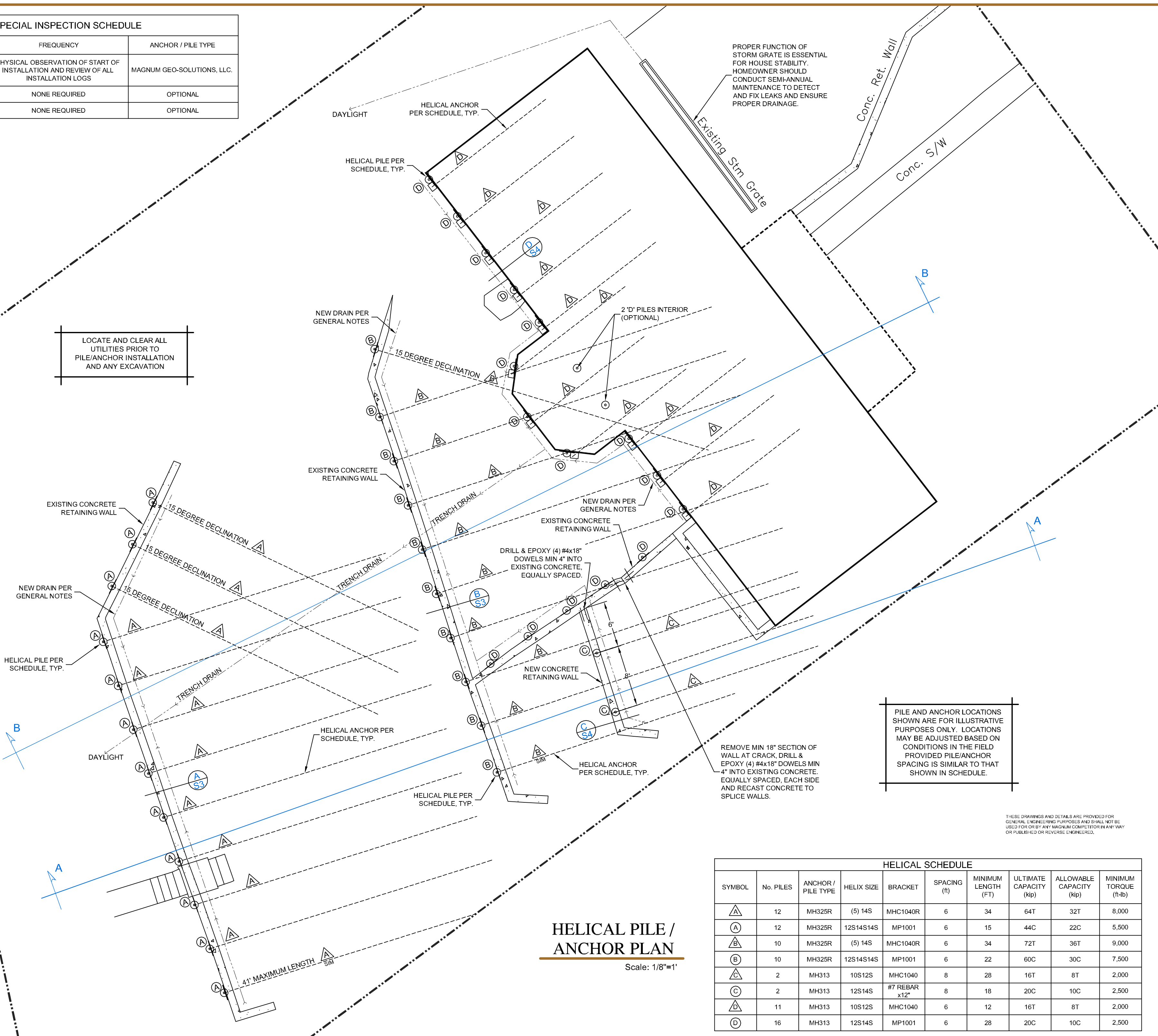
HELICAL PILE AND ANCHOR LOCATION

NO.	DATE	REVISION/ISSUE

DESIGNED BY: MMB
 DRAWN BY: MMB
 CHECKED BY: HAP
 PROJECT No: RRHS1

DATE: 6/26/09
 SCALE: AS SHOWN

SHEET: S1



HELICAL PILE / ANCHOR PLAN
 Scale: 1/8"=1'

HELICAL SCHEDULE

SYMBOL	No. PILES	ANCHOR / PILE TYPE	HELIX SIZE	BRACKET	SPACING (ft)	MINIMUM LENGTH (FT)	ULTIMATE CAPACITY (kip)	ALLOWABLE CAPACITY (kip)	MINIMUM TORQUE (ft-lb)
△	12	MH325R	(5) 14S	MHC1040R	6	34	64T	32T	8,000
⊙	12	MH325R	12S14S14S	MP1001	6	15	44C	22C	5,500
△	10	MH325R	(5) 14S	MHC1040R	6	34	72T	36T	9,000
⊙	10	MH325R	12S14S14S	MP1001	6	22	60C	30C	7,500
△	2	MH313	10S12S	MHC1040	8	28	16T	8T	2,000
⊙	2	MH313	12S14S	#7 REBAR x12"	8	18	20C	10C	2,500
△	11	MH313	10S12S	MHC1040	6	12	16T	8T	2,000
⊙	16	MH313	12S14S	MP1001	6	28	20C	10C	2,500

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PILE AND ANCHOR LOCATIONS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. LOCATIONS MAY BE ADJUSTED BASED ON CONDITIONS IN THE FIELD PROVIDED PILE/ANCHOR SPACING IS SIMILAR TO THAT SHOWN IN SCHEDULE.



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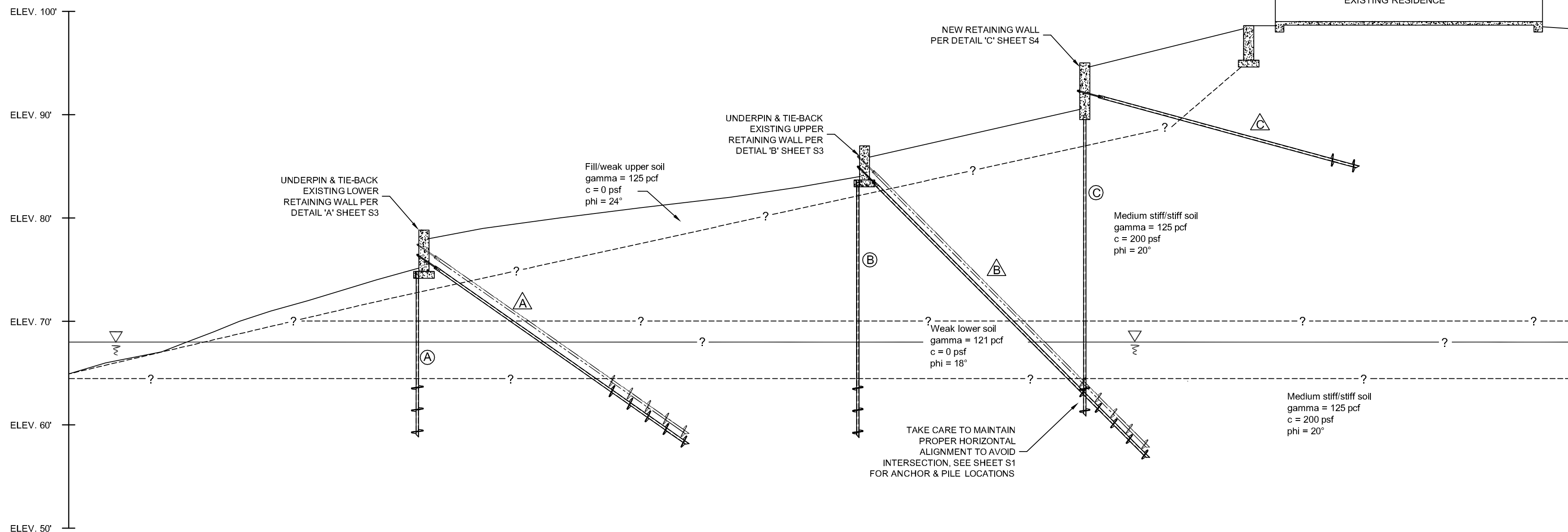
City, State

Contact: Your Name

your number

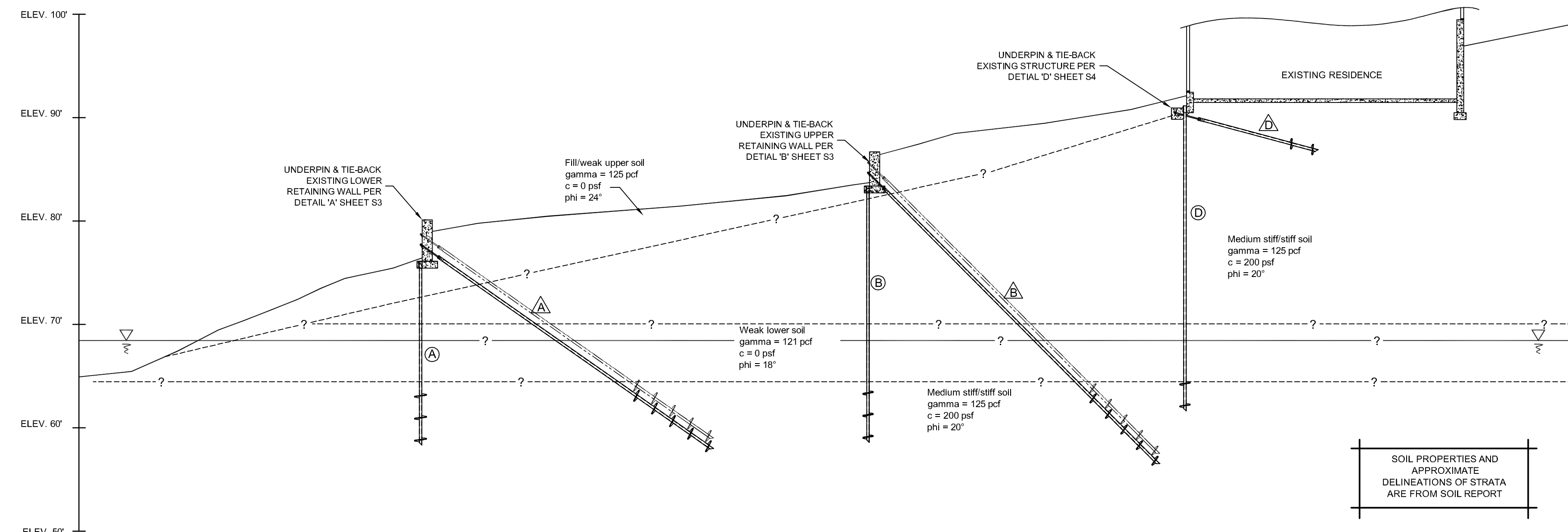
ELEVATION CROSS-SECTIONS

NO.	DATE	REVISION/ISSUE



SECTION A-A

Scale: 1/8"=1'



SECTION B-B

Scale: 1/8"=1'

SOIL PROPERTIES AND APPROXIMATE DELINEATIONS OF STRATA ARE FROM SOIL REPORT

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PROJECT No: RRHS1

SHEET: S2



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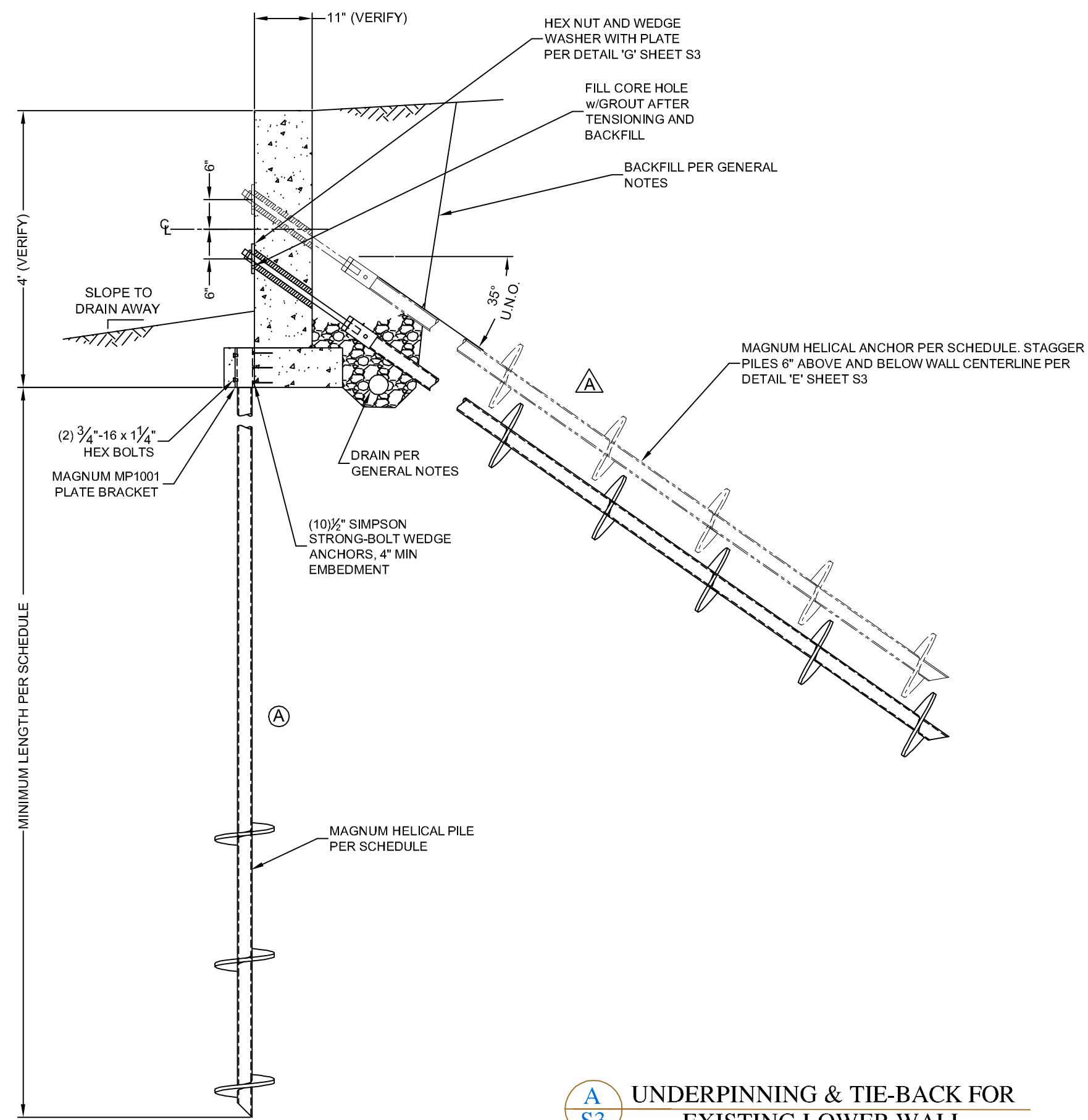
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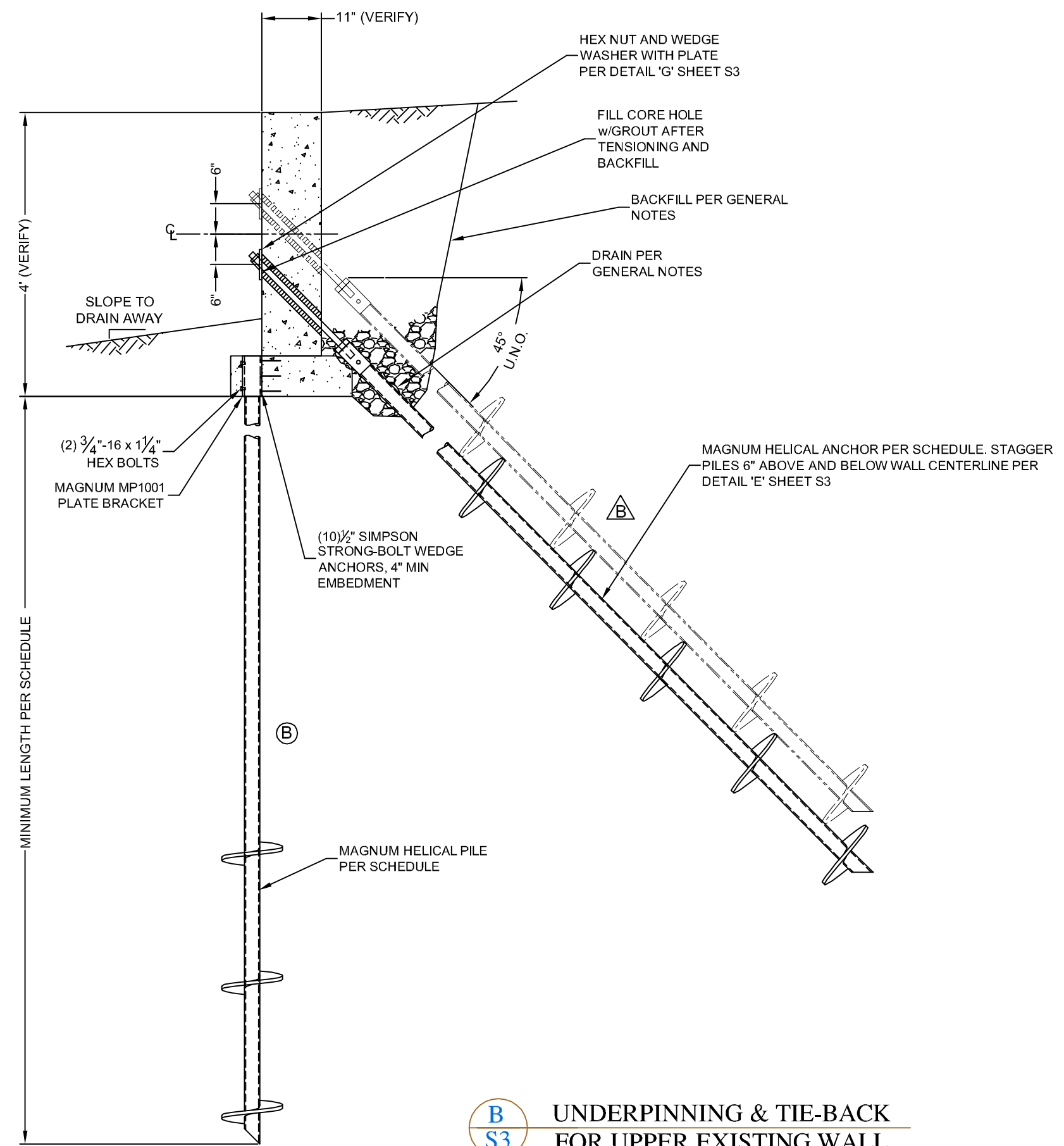
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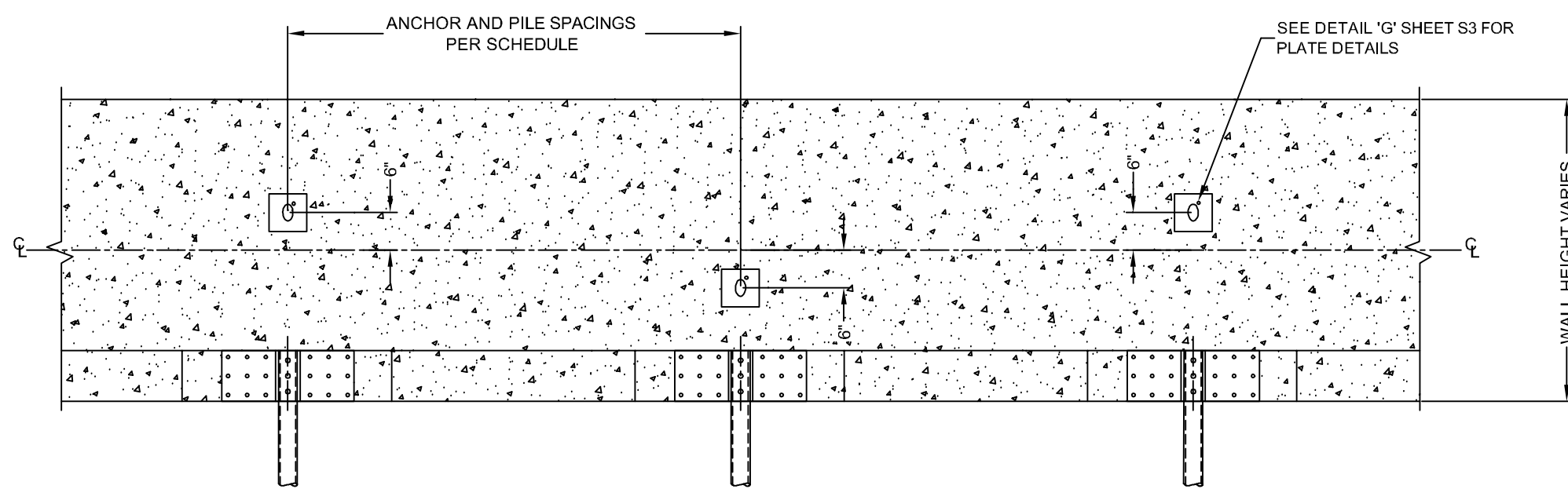
A
S3 UNDERPINNING & TIE-BACK
 FOR EXISTING LOWER WALL

Scale: NTS



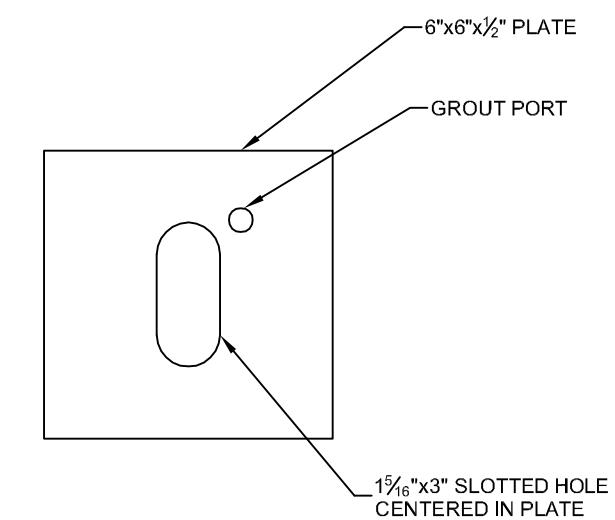
B
S3 UNDERPINNING & TIE-BACK
 FOR UPPER EXISTING WALL

Scale: NTS



E
S3 UNDERPINNING & TIE-BACK
 PLACEMENT

Scale: NTS



G
S3 TIE-BACK PLATE

Scale: NTS

HELICAL PILE AND ANCHOR
 DETAILS

NO.	DATE	REVISION/ISSUE

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 PROJECT No: RRHS1

SHEET: S3



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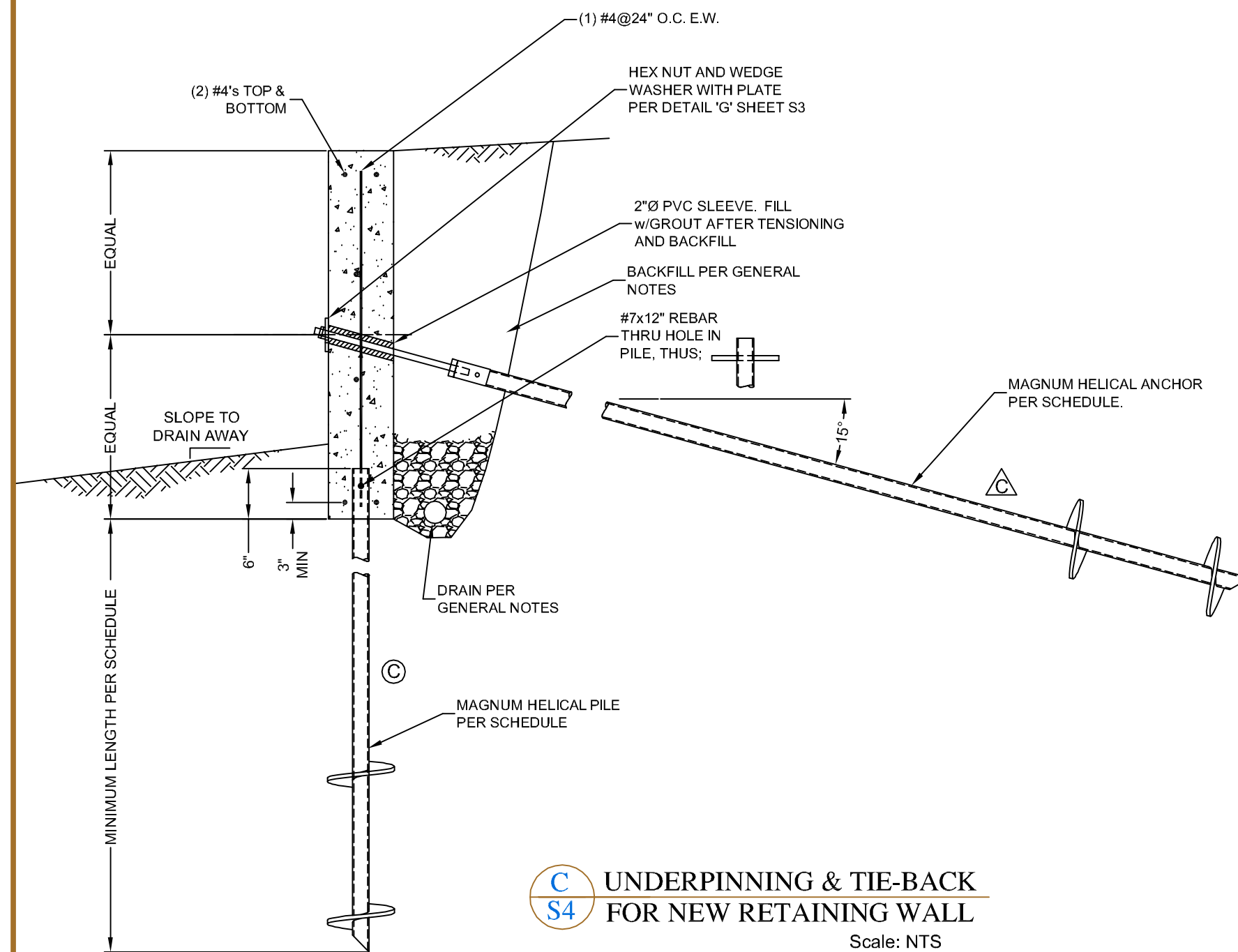
HELICAL PILE AND ANCHOR
 DETAILS

NO.	DATE	REVISION/ISSUE

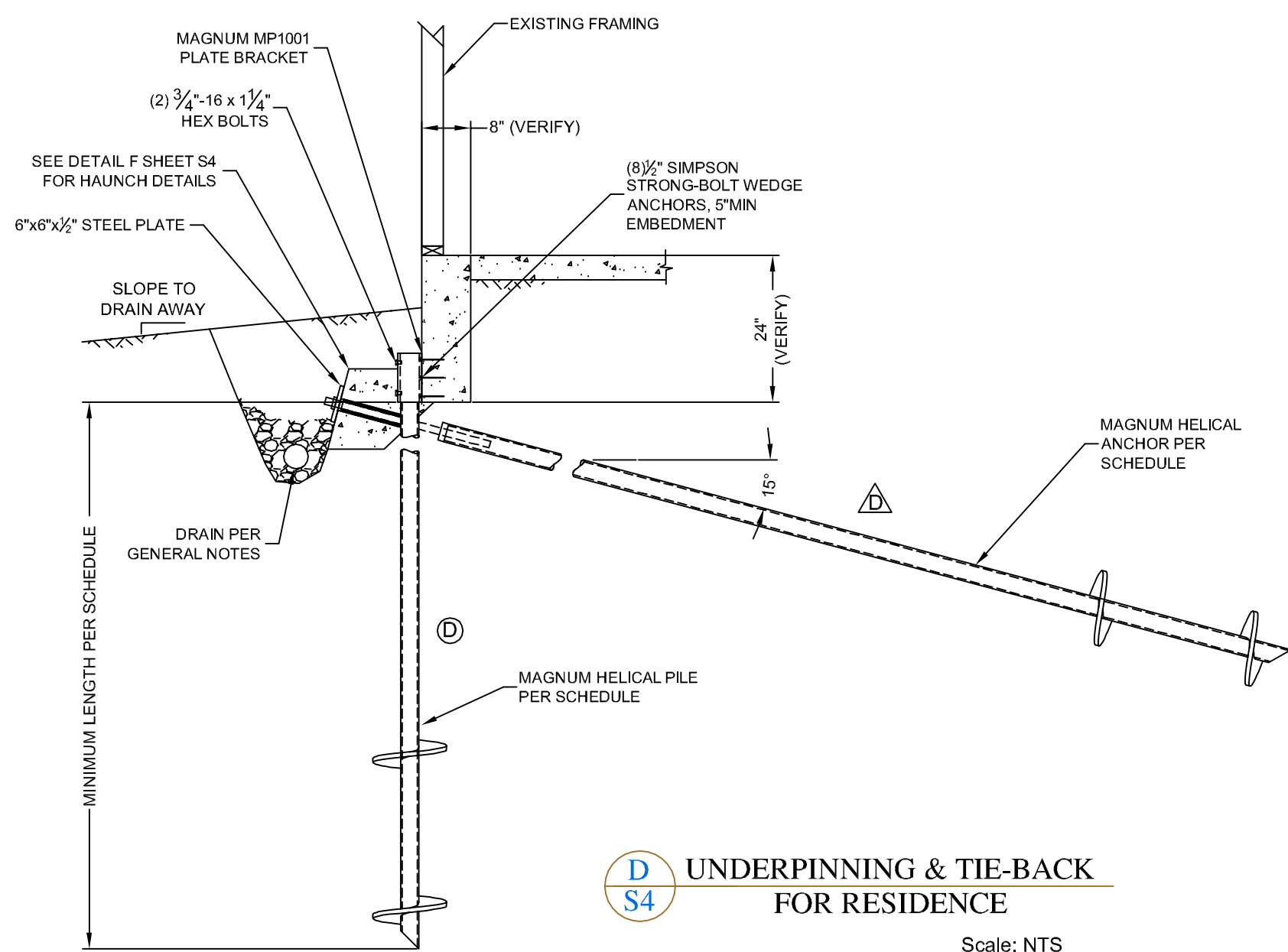
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 CHECKED BY: HAF
 PROJECT No: RRHS1

DATE: 6/26/09
 SCALE: AS SHOWN

SHEET: S4



C
S4
 UNDERPINNING & TIE-BACK
 FOR NEW RETAINING WALL
 Scale: NTS



D
S4
 UNDERPINNING & TIE-BACK
 FOR RESIDENCE
 Scale: NTS

General Notes:

1. Codes:
 This plan was prepared based on most recent versions of the State Building Code and ICC-ES AC308.

2. Loads:
 This plan is based upon the following load parameters (by others):
 Roof Load = 45 psf
 Floor Load = 50 psf
 Concrete = 145 pcf

3. Subsurface Conditions:
 Soils report by: Soil Engineering Company, City, State, Project Name; dated Month Day, Year.
 Helix sizing based on SPT values obtained in borings.

4. Materials:
 This plan is based upon the following material properties (Not all materials may be used in this plan). If there is a conflict between these specifications and plans by others, the more stringent criteria should be followed.

Connectors: All bolts shall be ASTM A490 (U.N.O.). All anchors shall be Simpson Strong-bolt wedge anchors with nominal shear strength of 6,560 lb per wedge anchor or greater.

Helical Piles: All helical piles/anchors and end caps shall be manufactured and supplied by Magnum Piering Inc. Piles, anchors and caps may be bare steel.

Concrete: Concrete shall contain Type II cement, 6% ±1% air entrainment, and a minimum 28 day compressive strength of 3000 psi.

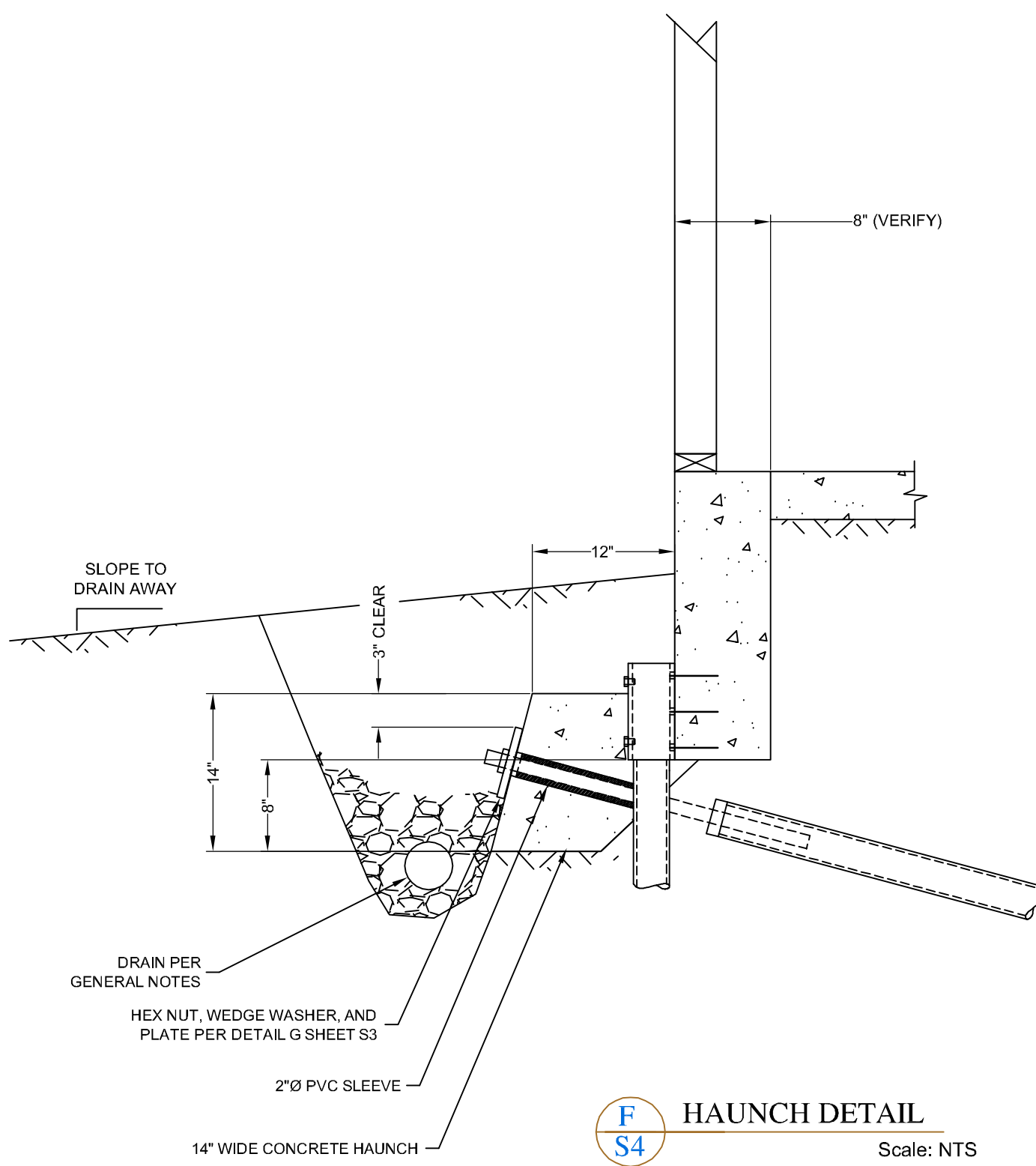
Grout: All grout shall be non-shrink standard grout or chemical grout with minimum 28 day compressive strength of 1,500 psi.

Reinforcing Steel: Reinforcing steel shall be deformed grade 60 steel unless noted otherwise (U.N.O.) on the plan and shall conform to ASTM A615. Minimum concrete cover shall be 2" U.N.O. on the plan. Overlaps shall be 36 bar diameters but not less than 24". Detail reinforcing bars in accordance to the ACI detailing manual and ACI code, latest edition. All foundation wall reinforcement should be wired in place. Slab and footing reinforcement shall utilize chairs or other acceptable methods to achieve the required cross section location.

Structural Steel: Structural steel beams shall conform to ASTM A50. 3" diameter adjustable steel columns shall be 11GA or better and rated for a safe allowable load of not less than 14 kips for columns up to 8'-0" in height, and 12.5 kips for columns up to 9'-0" in height. 3.5" diameter adjustable steel columns shall be schedule 40 and rated for a safe allowable load of not less than 36 kips for columns up to 10'-0" in height. All adjustable steel columns shall have 1" to 3" of threads exposed.

5. Installation:
 Helical piles/anchors shall be furnished and installed at the locations, inclinations, and orientations shown on the plans. Standard tolerance for transverse positioning is ± 1"; for longitudinal positioning the tolerance is ± 0.5", and for declination the tolerance is ± 5". Helical piles/anchors should extend to or beyond the minimum depth shown on the plans or contained in the soil report. Continue installation until average installation torque equals or exceeds that shown on the helical pile/anchor schedule. Log installation depth and torque at 3-foot intervals during installation and submit installation logs to Engineer for review prior to completion of the project.

Post-tension helical anchors by snug tightening hex nut against anchor plate.



F
S4
 HAUNCH DETAIL
 Scale: NTS

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