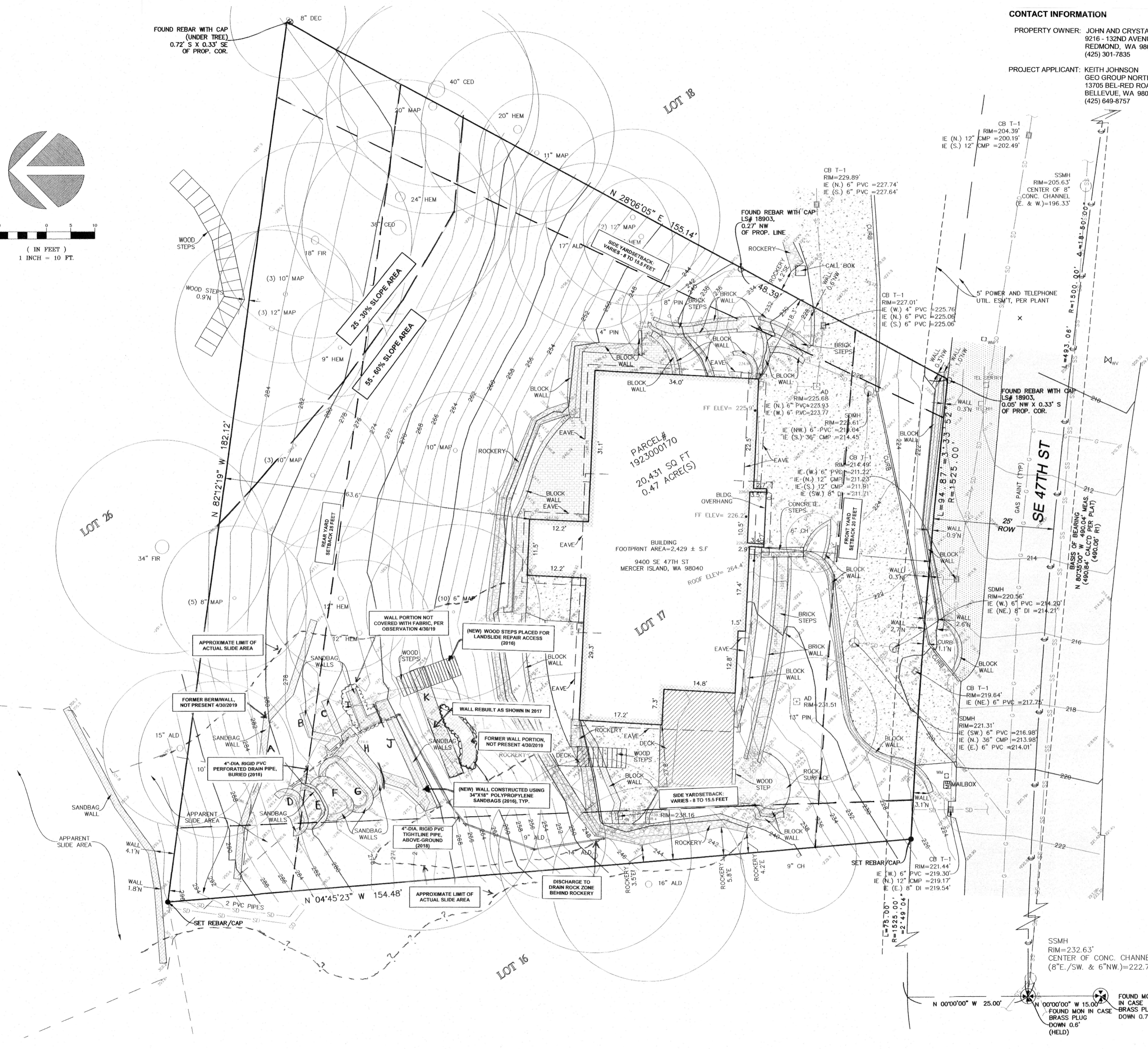


FOUND REBAR WITH CAP  
(UNDER TREE)  
0.72' S X 0.33' SE  
OF PROP. COR.



**CONTACT INFORMATION**

PROPERTY OWNER: JOHN AND CRYSTAL LEONG  
9216 - 132ND AVENUE NE  
REDMOND, WA 98052  
(425) 301-7835

PROJECT APPLICANT: KEITH JOHNSON  
GEO GROUP NORTHWEST, INC.  
13705 BEL-RED ROAD  
BELLEVUE, WA 98005  
(425) 649-8757

**GENERAL NOTES**

- THE PURPOSE OF THE PROJECT IS TO REPAIR DAMAGE TO THE PORTION OF THE SLOPE AREA ON THE SITE PROPERTY THAT WAS DAMAGED BY A LANDSLIDE WHICH OCCURRED IN DECEMBER 2015. ACTIVITIES TO REPAIR THIS DAMAGE, AND INDICATED IN THESE PLANS, CONSISTS OF THE CONSTRUCTION OF STACKED SANDBAG WALLS FOR TO STABILIZE AND RETAIN EXPOSED SOILS IN THE AREA WHERE THE LANDSLIDE OCCURRED.
- THIS SITE PLAN IS ADAPTED FROM THE TOPOGRAPHIC & BOUNDARY SURVEY, LEONG RESIDENCE, 9400 SE 47TH ST, MERCER ISLAND, WA 98040, BY TERRANE, DATED 12/21/2016.
- THE 'APPARENT SLIDE AREA' INDICATED ON THE SITE PLAN IS BASED ON INTERPRETATION BY THE SURVEYOR IN THE FIELD DURING DECEMBER 2016, AFTER THE LANDSLIDE DEBRIS REMOVAL AND SANDBAG WALL INSTALLATION ACTIVITIES HAD BEEN COMPLETED. THE ACTUAL SLIDE AREA ALSO ENCOMPASSES THE CLEARED AND STABILIZED AREA OF THE SLOPE THAT WAS THE SUBJECT OF THE REPAIR ACTIVITIES, INDICATED AS 'APPROXIMATE ACTUAL SLIDE AREA'.
- CONSTRUCTION OF THE SANDBAG WALLS OCCURRED DURING MAY TO JULY 2016, AND WAS PERFORMED BY THE PROPERTY OWNER. PRIOR TO THE CONSTRUCTION WORK, LANDSLIDE DEBRIS IN THE AFFECTED AREA WAS REMOVED, AND THE EXPOSED AND DISTURBED SOILS IN THE AREA WERE COVERED WITH TEMPORARY PLASTIC SHEETING UNTIL THE START OF CONSTRUCTION WORK.
- CONSTRUCTION OF THE SANDBAG WALLS WAS PERFORMED BY USING ON-SITE SANDY LANDSLIDE DEBRIS SOILS AND 10x10 WEAVE POLYPROPYLENE SANDBAGS OF 34"x18" SIZE THAT WERE FILLED MANUALLY ON SITE. THE FILLED SANDBAGS WERE PLACED ON A FIRM, LEVEL SOIL SUBGRADE WHICH WAS SHALLOWLY BENCHES AS NEEDED TO ACCOMMODATE THE TOPOGRAPHY. THE FILLED BAGS WERE PLACED IN AN OVERLAPPING SINGLE-WIDTH PATTERN FOR THE LOWER EIGHT WALLS, AND WERE PLACED IN AN OVERLAPPING TWO-DIMENSIONAL PATTERN FOR THE RELATIVELY TALLER WALLS (WALLS I, J, AND K). NO EARTHEN OR AGGREGATE FILL MATERIAL WAS BROUGHT ONTO THE SITE FOR THE CONSTRUCTION WORK.
- DURING 2018, A SHALLOW DRAINAGE LINE USING 4"-DIAMETER RIGID PVC PERFORATED PIPE WAS INSTALLED ALONG THE NORTH SIDE OF THE UPPER SANDBAG WALLS (WALLS D, E, F, G, AND H), AND ROUTED TO THE LOWER FACE OF WALL J. A 4"-DIAMETER RIGID PVC TIGHTLINE PIPE RUNS FROM THIS POINT ABOVE-GROUND TOWARD THE SOUTHWEST AND DISCHARGES TO THE DRAIN ROCK ZONE BEHIND AN EXISTING ROCKERY IN A DOWNSLOPE AREA TO THE WEST OF THE RESIDENCE.
- DURING CONSTRUCTION, A SET OF FABRICATED WOOD STEPS WAS PLACED ONTO THE SLOPE BELOW THE CONSTRUCTION AREA TO PROVIDE ACCESS. THESE STEPS REMAIN IN PLACE.
- THE EXPOSED PORTIONS OF THE SANDBAG WALLS WERE COVERED DURING LATE 2018 AND APRIL 2019 WITH 2 TO 3 LAYERS OF HEAVY-DUTY LANDSCAPE WEEK BARRIER FABRIC FOR LONG-TERM PROTECTION FROM ULTRAVIOLET RADIATION FROM SUNLIGHT. THE FABRIC WAS AFFIXED TO THE SANDBAGS USING CONSTRUCTION-GRADE STAPLES.
- DURING LATE 2018 TO APRIL 2019, TOPSOIL AND SURFACE MULCHING WERE PLACED IN THE TERRACE BELOW THE CONSTRUCTION WALLS, AND VEGETATION WAS PLANTED TO PROVIDE FOR PERMANENT EROSION CONTROL.
- AREAL COVERAGE OF THE SANDBAG WALLS IS APPROXIMATELY 344 SQ. FT., BASED ON MEASUREMENTS FROM THE SURVEY. AREAS FOR EACH OF THE WALLS ARE AS FOLLOWS:

WALL A: 0 (not present)	WALL B: 18.75
WALL C: 11.25	WALL D: 22.5
WALL E: 23.25	WALL F: 25.5
WALL G: 33	WALL H: 33.75
WALL I: 28.25	WALL J: 22.5
WALL K: 76.5	

- MAXIMUM HEIGHTS OF THE SANDBAG WALLS RANGE FROM APPROXIMATELY ONE FOOT TO APPROXIMATELY 5.5 FEET, BASED ON FIELD MEASUREMENT. MAXIMUM HEIGHTS FOR EACH WALL ARE AS FOLLOWS:

WALL A: 0 (not present)	WALL B: 1
WALL C: 1	WALL D: 2
WALL E: 2.5	WALL F: 3
WALL G: 3.25	WALL H: 3
WALL I: 2.5	WALL J: 4
WALL K: 5.5	

- WE PERFORMED A CALCULATION OF HARDSCAPE AREAS ON SITE PRIOR TO THE CONSTRUCTION OF THE SANDBAG WALLS. THESE AREAS INCLUDE THE HOUSE ROOF AREA, BLOCK WALLS, ROCKERIES, BRICK PATHS AND PATIOS, EXTERIOR DECKING, AND THE DRIVEWAY. THE APPROXIMATE CALCULATED AREAS BASED ON HAND MEASUREMENTS OFF THE TOPOGRAPHIC SURVEY, IN SQUARE FEET, ARE AS FOLLOWS:

ROOF: 2972.5  
ROCKERIES: 415.5  
DECKS, PATIOS, PATHS, BLOCK WALLS: 1669.5  
DRIVEWAY: 1802.5

TOTAL: 6860

SANDBAG WALLS: 344 SQ. FT.

TOTAL PROPERTY AREA: 20,431 SQ. FT.

- WE PERFORMED A CALCULATION OF GRADING FOR THE PROJECT BASED ON HAND MEASUREMENTS OFF THE TOPOGRAPHIC SURVEY. THE APPROXIMATE CALCULATED AMOUNTS OF CUT AND FILL, IN CUBIC YARDS, ARE AS FOLLOWS:

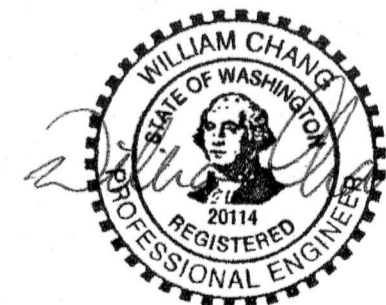
CUT/EXCAVATION: 15 YD<sup>3</sup>  
FILL: 50 YD<sup>3</sup>

TOTAL (CUT + FILL): 65 YD<sup>3</sup>

- YARD SETBACKS: FRONT = 20 FEET; REAR = 25 FEET; SIDE = 17% OF LOT WIDTH (8 FEET AT FRONT END, 15.5 FEET AT REAR END).

MAXIMUM TOTAL HEIGHT OF SANDBAG WALLS IN YARD SETBACK: 4.5 FEET. (WALLS D + E)

NOTE: ALL BUILDINGS AND IMPROVEMENTS ARE EXISTING UNLESS OTHERWISE IDENTIFIED AS 'FORMER' OR 'REMOVED'.



Know what's below.  
Call before you dig.

**APPROVAL STAMPS:**

**CONTRACTOR NOTE:**

THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. AGENCIES INVOLVED SHALL BE NOTIFIED WITHIN A REASONABLE TIME PRIOR TO THE START OF CONSTRUCTION.

REV	DATE	DESCRIPTION
0		
1	8/2/19	Resp. to In-situ Comments

**Group Northwest, Inc.**  
13705 Bel-Red Rd, Bellevue, WA 98005  
Phone 425-649-8757 FAX 425-649-8758  
Email info@geogroupnw.com

**SITE PLAN**  
(AS - BUILT)

**LANDSLIDE REPAIR**  
9400 SE 47TH STREET  
MERCER ISLAND, WASHINGTON 98040

SHEET NUMBER  
**1**

PROJECT  
G-4149