

Building Data Summary	
Project ID:	*****
Location:	*****
Scope of Work:	Sitework - Gridding
Date:	*****

Item #	Ref. Sheet #	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
DIVISION.01 GENERAL REQUIREMENTS														
1		Supervision and Coordination	LS	1	0%	1	\$ -	\$ -	0.000	\$ -	\$ -	\$ -	\$ 6,000.00	
2		Submittals and Shop drawings	LS	1	0%	1	\$ -	\$ -	0.000	\$ -	\$ -	\$ -	\$ 3,500.00	
3		Final Cleaning	LS	1	0%	1	\$ -	\$ -	0.000	\$ -	\$ -	\$ -	\$ 3,000.00	
4		Mobilization Costs	LS	1	0%	1	\$ -	\$ -	0.000	\$ -	\$ -	\$ -	\$ 6,000.00	
5		Temporary Control & Facilities	LS	1	0%	1	\$ -	\$ -	0.000	\$ -	\$ -	\$ -	\$ 2,500.00	
		Subtotal (General Requirements)												\$ 21,000
DIVISION 02- SITE WORK/ EXISTING CONDITIONS														
6	3,4	Grading												
7		Cut	CY	2081	0%	2081	\$ 5.90	\$ 12,277.90	0.098	\$ 40.00	\$ 3.92	\$ 8,157.52	\$ 20,435.42	
		Fill	CY	597	0%	597	\$ 8.10	\$ 4,835.70	0.152	\$ 40.00	\$ 6.08	\$ 3,629.76	\$ 8,465.46	
		Sitework												
		Concrete												
8		Concrete Driveway Per SPPWC STD Type B	SF	70	5%	74	\$ 6.20	\$ 455.70	0.020	\$ 40.00	\$ 0.80	\$ 58.80	\$ 514.50	
9		4" Thick Concrete Slab - 488 SF With #4 @ 16" O.C.E.W Over 4" Sand	CY	6	5%	6	\$ 264.00	\$ 1,663.20	2.200	\$ 40.00	\$ 88.00	\$ 554.40	\$ 2,217.60	
10		5" Thick Concrete Slab - 18165 SF With #4 Bars @ 18" Each Way 12" Sub Base 90 % Compacted Soil	CY	276	5%	290	\$ 264.00	\$ 76,507.20	2.200	\$ 40.00	\$ 88.00	\$ 25,502.40	\$ 102,009.60	
		Concrete V Drain												
11		4" Thick Concrete V Drain (1'-0" Wide, 3" Deep, 502 LF)	CY	1.54	5%	2	\$ 264.00	\$ 426.89	2.200	\$ 40.00	\$ 88.00	\$ 142.30	\$ 569.18	
12		Retention Area	SF	402	5%	422	\$ 5.90	\$ 2,490.39	0.098	\$ 40.00	\$ 3.92	\$ 1,654.63	\$ 4,145.02	
		Rip Rap												
13		6" To 12" Facing Class Rock Rip Rap Embedded Into 12" Thick Concrete	SF	331	5%	348	\$ 8.20	\$ 2,849.91	0.020	\$ 40.00	\$ 0.80	\$ 278.04	\$ 3,127.95	
		Curb & Gutter												
14		6" Thick Concrete Curb & Gutter	LF	1456	5%	1529	\$ 14.40	\$ 22,014.72	0.125	\$ 40.00	\$ 5.00	\$ 7,644.00	\$ 29,658.72	
		Fence												
15		(6'-0" H) Wrought Iron Fence	LF	357	5%	375	\$ 3.15	\$ 1,180.78	0.010	\$ 40.00	\$ 0.40	\$ 149.94	\$ 1,330.72	
		Gate												
16		(6'-0" H) Motorized Wrought Iron Double Swing Gate	EA	2	0%	2	\$ 720.10	\$ 1,440.20	0.120	\$ 40.00	\$ 4.80	\$ 9.60	\$ 1,449.80	
		CMU Retaining Wall												
17		(6'-0" H) 8" CMU Retaining Wall (540 LF)	SF	3240	5%	3402	\$ 14.40	\$ 48,988.80	0.125	\$ 40.00	\$ 5.00	\$ 17,010.00	\$ 65,998.80	
18		(10'-0" H) 8" CMU Retaining Wall (70 LF)	SF	700	5%	735	\$ 14.40	\$ 10,584.00	0.125	\$ 40.00	\$ 5.00	\$ 3,675.00	\$ 14,259.00	
19		(3'-0" H) 8" CMU Retaining Wall (350 LF)	SF	1050	5%	1103	\$ 14.40	\$ 15,876.00	0.125	\$ 40.00	\$ 5.00	\$ 5,512.50	\$ 21,388.50	
		Continuous Footing												
20		Concrete Continuous Footing (2'-0"x1'-0")	CY	71	5%	75	\$ 264.00	\$ 19,681.20	2.200	\$ 40.00	\$ 88.00	\$ 6,560.40	\$ 26,241.60	
		Utility												
21		Meter	EA	1	0%	1	\$ 740.00	\$ 740.00	1.100	\$ 40.00	\$ 44.00	\$ 44.00	\$ 784.00	
		Septic Tank												
22		(1200-1500 Gallon) Septic Tank With Bio-Microbic Micro-Fast 0.625 Internal Treatment System	EA	1	0%	1	\$ 2,960.15	\$ 2,960.15	4.500	\$ 40.00	\$ 180.00	\$ 180.00	\$ 3,140.15	
23		(2750-3000 Gallon) Septic Tank With Bio-Micro- Fast 1.50 Internal Treatment System	EA	1	0%	1	\$ 3,980.25	\$ 3,980.25	4.500	\$ 40.00	\$ 180.00	\$ 180.00	\$ 4,160.25	
		Seepage Pit												
24		Seepage Pit (5' Dia, 25' Deep, 5' Cover, 20' Effective Depth)	EA	8	0%	8	\$ 740.00	\$ 5,920.00	2.200	\$ 40.00	\$ 88.00	\$ 704.00	\$ 6,624.00	

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25		18"x18" Catch Basin	EA	4	0%	4	\$ 280.48	\$ 1,121.92	0.352	\$ 40.00	\$ 14.08	\$ 56.32	\$ 1,178.24	
26		4" Dia NDS Type Area Drain Inlet	EA	9	0%	9	\$ 12.10	\$ 108.90	0.098	\$ 40.00	\$ 3.92	\$ 35.28	\$ 144.18	
		Pipe												
27		1" Domestic Service Line	LF	40	5%	42	\$ 5.63	\$ 236.46	0.071	\$ 40.00	\$ 2.84	\$ 119.28	\$ 355.74	
28		6" Dia Restrictor Pipe	LF	75	5%	79	\$ 10.50	\$ 826.88	0.085	\$ 40.00	\$ 3.40	\$ 267.75	\$ 1,094.63	
29		8" Dia PVC Pipe	LF	32	5%	34	\$ 15.10	\$ 507.36	0.095	\$ 40.00	\$ 3.80	\$ 127.68	\$ 635.04	
30		(6" Dia) SDR 35 PVC Drain Pipe	LF	572	5%	601	\$ 10.50	\$ 6,306.30	0.085	\$ 40.00	\$ 3.40	\$ 2,042.04	\$ 8,348.34	
31		48" Dia HDPE Detention Pipe	LF	25	5%	26	\$ 8.55	\$ 224.44	0.077	\$ 40.00	\$ 3.08	\$ 80.85	\$ 305.29	
32		3" Dia Restrictor Pipe	LF	15	5%	16	\$ 7.33	\$ 115.45	0.077	\$ 40.00	\$ 3.08	\$ 48.51	\$ 163.96	
		Trenching												
33		Cut	CY	224	0%	224	\$ -	\$ -	0.986	\$ 40.00	\$ 39.43	\$ 8,832.77	\$ 8,832.77	
34		Fill	CY	168	0%	168	\$ -	\$ -	1.250	\$ 40.00	\$ 50.00	\$ 8,400.00	\$ 8,400.00	
		Subtotal (Site Work/ Existing Conditions)						\$ 244,321				\$ 101,658		\$ 345,978

			PROJECTED COST	\$	366,978
			INSURANCE	3%	\$ 11,009
			CONTINGENCY	5%	\$ 18,349
			OVERHEAD AND PROFIT	15%	\$ 55,047
			TAX	0.00%	\$ -
			SUGGESTED BID	\$	451,383

Note:																														
1.Please verify the equipment's and their prices with owner.																														
2.Online sources are used for pricing.																														
3.Prices can vary depending upon field conditions.																														



GEOTECHNICAL NOTES:

CONCLUSIONS AND RECOMMENDATIONS
BASED UPON THE FINDINGS FROM THIS INVESTIGATION, THE FOLLOWING RECOMMENDATIONS ARE SITE PREPARATIONS AND FOUNDATION DESIGN ARE PROVIDED FOR CONSIDERATION BY THE DESIGN AND CONSTRUCTION PROFESSIONALS. APPLICABLE ELEMENTS OF THESE RECOMMENDATIONS SHALL BE INCORPORATED INTO THE GRADING PLANS AND BUILDING PLANS.

SITE PREPARATIONS

IT IS RECOMMENDED THAT THE BUILDING PADS AND ALL AREAS TO RECEIVE COMPACTED FILL OR SLABS-ON-GRADE BE PREPARED BY REMOVING ANY LOOSE OR UNSUITABLE SOILS, EXTENDING DOWN INTO DENSE SAUGUS FORMATION, AND REPLACING THE REMOVED SOIL MATERIALS AS 90% COMPACTED ENGINEERED FILL. THE THICKNESS OF LOOSE OR UNSUITABLE SOILS VARIES ACROSS THE SITE, WITH A MAXIMUM ANTICIPATED THICKNESS OF APPROXIMATELY 2 FEET.

SITE PREPARATIONS FOR THE PROPOSED BUILDING AREAS SHOULD BE SUFFICIENT TO ESTABLISH A MINIMUM COMPACTED FILL THICKNESS OF 3 FEET WITHIN ALL PROPOSED BUILDING AREAS, AND EXTENDING AT LEAST 5 FEET BEYOND THE BUILDING AREAS (SEE FIGURE 4). A MINIMUM COMPACTED FILL THICKNESS OF 12 INCHES IS RECOMMENDED FOR AREAS TO RECEIVE SLABS-ON-GRADE (PATIO AND WALKWAY AREAS) AND FOR DRIVEWAY AREAS TO RECEIVE PAVEMENT.

PLACEMENT OF COMPACTED FILL

ENGINEERED COMPACTED FILL SHALL BE PLACED AT OPTIMUM CONTENT IN LAYERS APPROXIMATELY 6-8 INCHES IN THICKNESS, AND COMPACTED TO 90% RELATIVE COMPACTION. COMPACTION TESTING SHALL BE PERFORMED BY THE SOILS ENGINEER TO VERIFY 90% RELATIVE COMPACTION.

SHRINKAGE AND IMPORT MATERIAL

REMOVAL AND RECOMPACTION OF THE ON SITE SOILS MAY RESULT IN MATERIAL SHRINKAGE. A SHRINKAGE FACTOR OF 20% IS ESTIMATED. ADDITIONAL LOSSES DUE TO GROUND SUBSIDENCE FROM SITE PREPARATIONS MAY ALSO OCCUR. LOSSES DUE TO SHRINKAGE AND SUBSIDENCE SHALL BE CONSIDERED IN PLANNING FOR EARTH WORK. ANY EARTH MATERIALS THAT ARE TO BE IMPORTED TO THE SITE FOR USE AS ENGINEERED FILL SHALL BE OBSERVED AND APPROVED BY THE SOILS ENGINEER, PRIOR TO TRANSPORT

TO THE SITE. IMPORTED FILL MATERIAL SHALL BE FREE OF DEBRIS AND ROCKS GREATER THAN 8 INCHES AT THE WIDEST POINT. IMPORTED SOILS SHALL BE GRANULAR, NOT CLAYEY, AND HAVE A LOW EXPANSION INDEX. THE ROCK-TO-SOIL RATIO OF THE IMPORT MATERIAL SHALL NOT EXCEED 50%.

EXCAVATIONS AND CUT SLOPES

TEMPORARY EXCAVATIONS SHALL NOT EXCEED A VERTICAL HEIGHT OF 4 FEET. EXCAVATIONS THAT WILL EXCEED A HEIGHT OF 4 FEET SHALL BE SLOPED AT 1:1 RATIO FOR THAT PORTION OF CUT EXCEEDING A HEIGHT OF 4 FEET. PERMANENT CUT SLOPES SHALL NOT EXCEED 2H:1V SLOPE RATIO. ALL CUT SLOPES AND EXCAVATIONS SHALL BE OBSERVED AND APPROVED BY THE ENGINEERING GEOLOGIST.

FILL SLOPE CONSTRUCTION

MANUFACTURED COMPACTED FILL EMBANKMENTS SHALL NOT EXCEED 2H:1V FINISHED SLOPE SURFACE RATIO. AN EQUIPMENT WIDTH KEY SHALL BE PROVIDED AT THE TOE OF ANY FILL TO BE PLACED ON A SLOPE SURFACE THAT MEETS OR EXCEEDS 5H:1V SLOPE RATIO. THE KEY SHALL EXTEND A MINIMUM OF 12 INCHES INTO DENSE BEDROCK (SEE "FILL SLOPE DETAIL", FIGURE 5). SUBDRAINS SHALL BE INSTALLED ALONG THE LENGTH AND BACK OF THE KEYWAY OR THE LOWEST BENCH CUT INTO BEDROCK. SUBDRAINS SHALL CONSIST OF 4-INCH DIAMETER PERFORATED SCHEDULE 40 PVC PIPE, SURROUNDED BY 3/4 INCH ROCK AND WRAPPED IN FILTER CLOTH. THE PERFORATED SUBDRAINS SHALL BE PROVIDED WITH A SOLID 4-INCH DIAMETER PVC PIPE SLOPING AT 2% TO DAYLIGHT.

COMPACTED FILL SHALL BE BENCHED INTO DENSE SAUGUS FORMATION AS WORK PROGRESSES UP SLOPE (SEE GEOLOGIC CROSS-SECTION B-B). THE RESULTING COMPACTED FILL SLOPE SURFACES SHALL BE OVERFILLED AND TRIMMED BACK IN ORDER TO ENSURE 90% RELATIVE COMPACTION AT THE FINISHED SLOPE SURFACE. ALTERNATIVELY, THE SLOPE SURFACES MAY BE COMPACTED BY VIBRATORY SHEEPSFOOT OR OTHER METHOD TO ACHIEVE 90% RELATIVE COMPACTION AT THE FINISHED SLOPE SURFACE.

AREAS TO RECEIVE PAVEMENT

AREAS TO RECEIVE PAVEMENT SHALL BE PROVIDED WITH A MINIMUM 12-INCH THICK SUBBASE COMPACTED TO A MINIMUM OF 90% RELATIVE COMPACTION. PRELIMINARY STRUCTURAL SECTION DESIGN FOR THE PAVING AREAS MAY UTILIZE A STRUCTURAL SECTION CONSISTING OF 3 INCHES OF A/C OVER 4 INCHES OF AGGREGATE BASE. BASE MATERIAL SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

SITE DRAINAGE

SITE GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOOTINGS AND TO PREVENT EROSION OF THE PROPOSED GRADED SLOPES. ALL PAD AND ROOF DRAINAGE SHALL BE TRANSFERRED AWAY FROM THE BUILDING AREA VIA NON-EROSIVE DEVICES TO AN APPROVED DRAINAGE DISPOSAL SITE. DRAINAGE SHALL NOT BE ALLOWED TO POND ON THE BUILDING PAD OR ADJACENT TO ANY FOUNDATION OR ADJACENT TO ANY DESCENDING SLOPE.

FOUNDATIONS

CONVENTIONAL SPREAD FOOTINGS, CONTINUOUS FOOTINGS, OR INDEPENDENT FOOTINGS MAY BE USED TO SUPPORT PROPOSED STRUCTURES. ALL FOOTINGS SHALL BE A MINIMUM OF 12 INCHES IN WIDTH AND EMBEDDED A MINIMUM OF 12 INCHES INTO SAUGUS FORMATION OR INTO ENGINEERED COMPACTED FILL (NOT PARTIALLY INTO EACH). FOUNDATION DESIGN CRITERIA DETERMINED FROM THIS INVESTIGATION ARE AS FOLLOWS:

ANTICIPATED EXPANSION INDEX RANGE = 0-20 (VERY LOW)

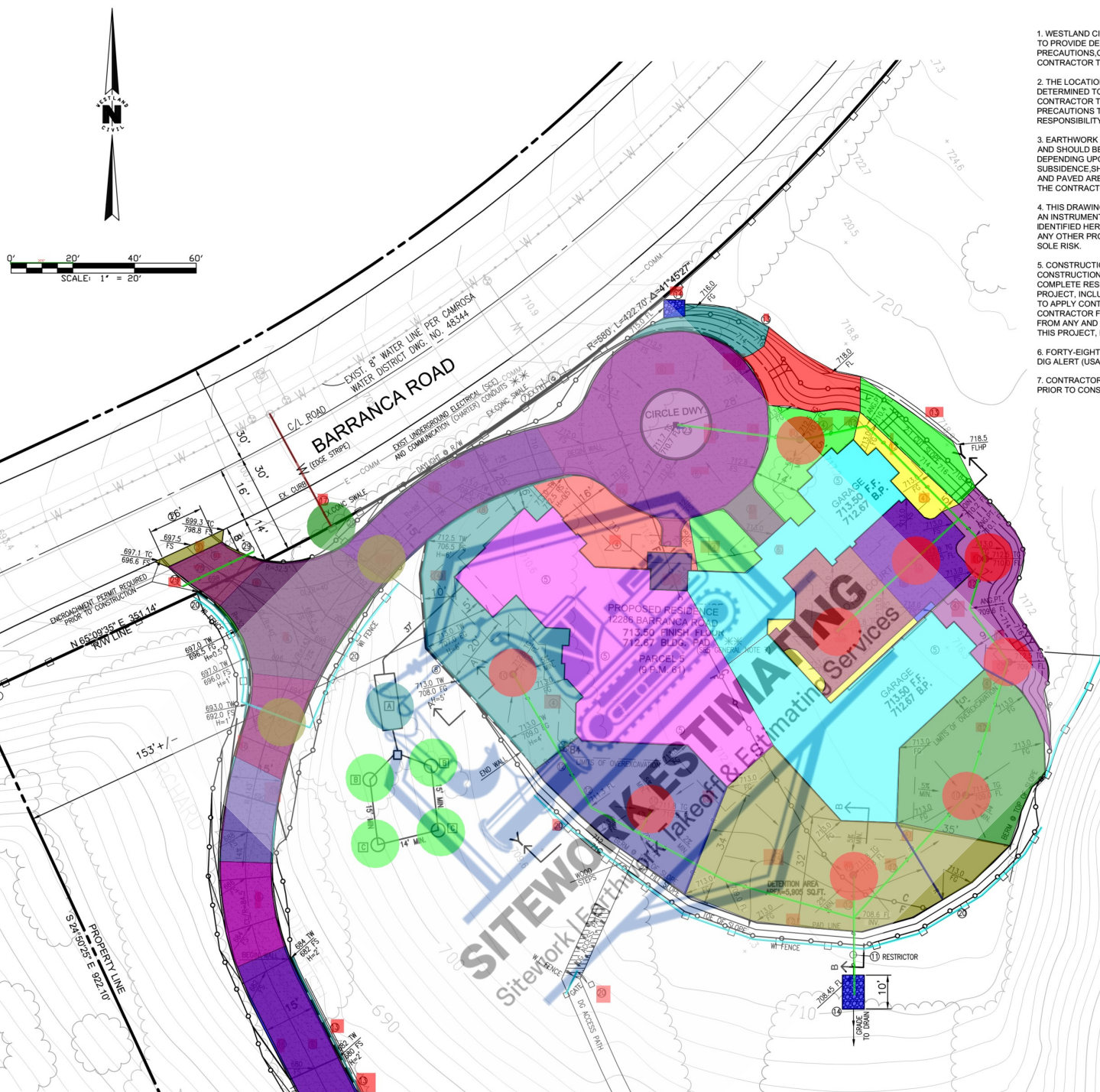
FOOTINGS

ALLOWABLE BEARING CAPACITY 2,000 PSF
LATERAL RESISTANCE 300 PSF/FT
MAXIMUM LATERAL RESISTANCE 2,000 PCF
COEFFICIENT OF FRICTION 0.35
MINIMUM REINFORCEMENT 2 #4 BARS
ONE NEAR TOP AND ONE NEAR FOOTING BOTTOM

SLABS-ON-GRADE

THICKNESS NOMINAL 4 IN.
MINIMUM REINFORCEMENT 4# BARS @ 18 IN. EACH WAY.
DOWEL FOOTINGS TO SLAB BEDDING 4 IN. COARSE SAND OR 4 IN. OF 1/2 INCH CRUSHED AGGREGATE NOTE: PLACE MOISTURE VAPOR BARRIER (10-MIL VISQUEEN OR EQUIVALENT) AT THE BASE OF THE SLAB OR WITHIN THE BEDDING LAYER.

SEE SHEET 3 FOR CONTINUATION



MATCH LINE SEE SHEET 3

WASTE-WATER
(PER SEPARATE)

- [A] RESIDENCE PROPOSED 2750 - 3000 GALLON SEPTIC TANK WITH BIO-MICROBICS MICRO-FAST 1.50 INTERNAL TREATMENT SYSTEM
- [B] RESIDENCE TWO PRIMARY SEEPAGE PITS 5' DIA. 25' DEEP 5' COVER, 20' EFFECTIVE DEPTH
- [C] RESIDENCE TWO FUTURE SEEPAGE PITS 5' DIA. 25' DEEP 5' COVER, 20' EFFECTIVE DEPTH



Know what's below.
Call before you dig.

DESCRIPTION OF REVISION	RCE	DATE	APP.	APP.	DATE



PREPARED BY:
DON WAITE CONSULTING
CIVIL ENGINEERING SERVICES
CIVIL ENGINEERS PLANNING / DESIGN LAND SURVEYORS
101 HODGSON RD., SUITE 216, HODGSON, CALIF. 91303
(805) 493-1325 FAX: (805) 446-9125
5/20/2024

I.D.# PLANDER
BARRANCA
APPROVED FOR GRADING & DRAINAGE IMPROVEMENTS:
DATE 6/6/2024
LAND DEVELOPMENT SERVICES
ENGINEERING SERVICES
VENTURA COUNTY PUBLIC WORKS AGENCY

VENTURA COUNTY
PUBLIC WORKS AGENCY
LAND DEVELOPMENT SERVICES

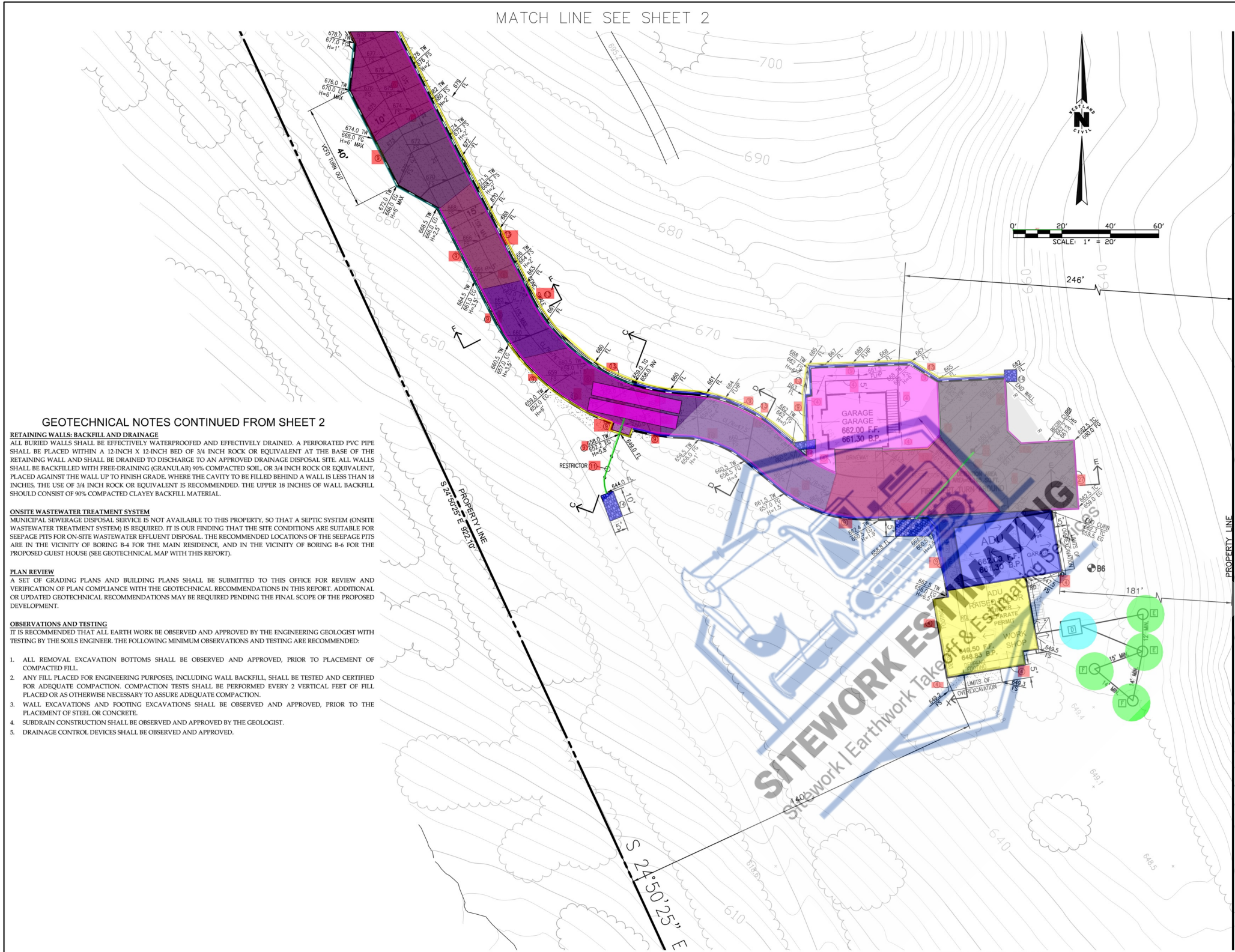
PROJ. NO.

MR. RONALD PLANDER
12286 BARRANCA DR. CAMARILLO, CA.

VCPWA DRAWING NO.
70706

5-07-24

-2	778.5 SQ FT
+2	477.8 SQ FT
-1	472.1 SQ FT
-1	504.0 SQ FT
-1	1,297.7 SQ FT
-1	280.0 SQ FT
+0.05	1,132.2 SQ FT
-2	2,852.0 SQ FT
-1	324.2 SQ FT
+0.01	524.5 SQ FT
-2	483.8 SQ FT
-3	1,229.9 SQ FT
-3	789.7 SQ FT
-0.5	3,595.3 SQ FT
-2.5	3,986.3 SQ FT
-2	1,765.8 SQ FT
-0.4	3,043.3 SQ FT
-1	1,621.1 SQ FT
-3	1,166.4 SQ FT
2.8	2,075.7 SQ FT
-1	920.4 SQ FT
-1	1,155.8 SQ FT
-1	301.8 SQ FT
Concrete Driveway Per SPP...	68.4 SQ FT
4" Thick Concrete Slab	142.5 SQ FT
5" Thick Concrete Slab	9,365.2 SQ FT
(6'-0" H) 8" CMU Retaining Wall	215.7 FT
4" Dia NDS Type Area Drain Inlet	9.0
(6" Dia) SDR 35 PVC Drain Pipe	505.0 FT
6" To 12" Facing Class Rock F	108.9 SQ FT
(6'-0" H) Wrought Iron Fence	356.6 FT
1" Domestic Service Line	39.0 FT
Meter	1.0
(6'-0" H) Motorized Wrought Iron ...	2.0
6" Dia Restrictor Pipe	74.7 FT
(2750-300 Gallon) Septic Tank	1.0
Seepage Pit (5' Dia, 25' Deep, 5' C...	4.0



GEOTECHNICAL NOTES CONTINUED FROM SHEET 2

RETAINING WALLS, BACKFILL AND DRAINAGE
ALL BURIED WALLS SHALL BE EFFECTIVELY WATERPROOFED AND EFFECTIVELY DRAINED. A PERFORATED PVC PIPE SHALL BE PLACED WITHIN A 12-INCH X 12-INCH BED OF 3/4 INCH ROCK OR EQUIVALENT AT THE BASE OF THE RETAINING WALL AND SHALL BE DRAINED TO DISCHARGE TO AN APPROVED DRAINAGE DISPOSAL SITE. ALL WALLS SHALL BE BACKFILLED WITH FREE-DRAINING (GRANULAR) 90% COMPACTED SOIL, OR 3/4 INCH ROCK OR EQUIVALENT, PLACED AGAINST THE WALL UP TO FINISH GRADE. WHERE THE CAVITY TO BE FILLED BEHIND A WALL IS LESS THAN 18 INCHES, THE USE OF 3/4 INCH ROCK OR EQUIVALENT IS RECOMMENDED. THE UPPER 18 INCHES OF WALL BACKFILL SHOULD CONSIST OF 90% COMPACTED CLAYEY BACKFILL MATERIAL.

ONSITE WASTEWATER TREATMENT SYSTEM
MUNICIPAL SEWERAGE DISPOSAL SERVICE IS NOT AVAILABLE TO THIS PROPERTY, SO THAT A SEPTIC SYSTEM (ONSITE WASTEWATER TREATMENT SYSTEM) IS REQUIRED. IT IS OUR FINDING THAT THE SITE CONDITIONS ARE SUITABLE FOR SEWAGE PITS FOR ON-SITE WASTEWATER EFFLUENT DISPOSAL. THE RECOMMENDED LOCATIONS OF THE SEWAGE PITS ARE IN THE VICINITY OF BORING B-4 FOR THE MAIN RESIDENCE, AND IN THE VICINITY OF BORING B-6 FOR THE PROPOSED GUEST HOUSE (SEE GEOTECHNICAL MAP WITH THIS REPORT).

PLAN REVIEW
A SET OF GRADING PLANS AND BUILDING PLANS SHALL BE SUBMITTED TO THIS OFFICE FOR REVIEW AND VERIFICATION OF PLAN COMPLIANCE WITH THE GEOTECHNICAL RECOMMENDATIONS IN THIS REPORT. ADDITIONAL OR UPDATED GEOTECHNICAL RECOMMENDATIONS MAY BE REQUIRED PENDING THE FINAL SCOPE OF THE PROPOSED DEVELOPMENT.

OBSERVATIONS AND TESTING
IT IS RECOMMENDED THAT ALL EARTH WORK BE OBSERVED AND APPROVED BY THE ENGINEERING GEOLOGIST WITH TESTING BY THE SOILS ENGINEER. THE FOLLOWING MINIMUM OBSERVATIONS AND TESTING ARE RECOMMENDED:

1. ALL REMOVAL EXCAVATION BOTTOMS SHALL BE OBSERVED AND APPROVED, PRIOR TO PLACEMENT OF COMPACTED FILL.
2. ANY FILL PLACED FOR ENGINEERING PURPOSES, INCLUDING WALL BACKFILL, SHALL BE TESTED AND CERTIFIED FOR ADEQUATE COMPACTION. COMPACTION TESTS SHALL BE PERFORMED EVERY 2 VERTICAL FEET OF FILL PLACED OR AS OTHERWISE NECESSARY TO ASSURE ADEQUATE COMPACTION.
3. WALL EXCAVATIONS AND FOOTING EXCAVATIONS SHALL BE OBSERVED AND APPROVED, PRIOR TO THE PLACEMENT OF STEEL OR CONCRETE.
4. SUBDRAIN CONSTRUCTION SHALL BE OBSERVED AND APPROVED BY THE GEOLOGIST.
5. DRAINAGE CONTROL DEVICES SHALL BE OBSERVED AND APPROVED.



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PREPARED BY:
DON WAITE CONSULTING
CIVIL ENGINEERING SERVICES
CIVIL ENGINEERS / PLANNING / DESIGN / LAND SURVEYORS
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REGISTERED PROFESSIONAL ENGINEER
No. 51044 5-20-2024

I.D.# PLANDER
BARRANCA

APPROVED FOR GRADING & DRAINAGE IMPROVEMENTS:
Don Waite
6/6/2024
DATE
LAND DEVELOPMENT SERVICES
ENGINEERING SERVICES
VENTURA COUNTY PUBLIC WORKS AGENCY

VENTURA COUNTY
PUBLIC WORKS AGENCY
LAND DEVELOPMENT SERVICES

SPEC. NO.
PROJ. NO.

GRADING AND DRAINAGE PLAN
MR. RONALD PLANDER
12286 BARRANCA DR. CAMARILLO, CA. 93010
7-0-7-7

SHEET 3
OF 5
VCPWA DRAWING NO.
70707

(6'-0" H) 8" CMU Retaining Wall	323.9 FT
(6'-0" H) Wrought Iron Fence	0.0 FT
(10'-0" H) 8" CMU Retaining Wall	70.1 FT
(3'-0" H) 8" CMU Retaining Wall	351.1 FT
5" Thick Concrete Slab	8,802.4 SQ FT
4" Thick Concrete Slab	346.6 SQ FT
4" Thick Concrete V Drain (1'-0" W...	362.4 FT
6" Thick Concrete Curb & Gutter	644.0 FT
6" To 12" Facing Class Rock Rip F	221.5 SQ FT
Retention Area	401.6 SQ FT
(6" Dia) SDR 35 PVC Drain Pipe	68.5 FT
(1200-1500 Gallon) Septic Tank	1.0
Seepage Pit (5' Dia, 25' Deep, 5' Cove...	4.0
+1	994.5 SQ FT
-0.5	900.1 SQ FT
-2	684.5 SQ FT
+3	541.9 SQ FT
+3	877.5 SQ FT
+1	1,289.7 SQ FT
-1.5	1,647.2 SQ FT
-1.5	1,914.8 SQ FT
-2.5	1,315.0 SQ FT
+2	1,375.6 SQ FT
-2.5	1,828.5 SQ FT

1. INSTALL 4" DIA. SDR 35 PVC DRAIN PIPE SLOPE PER PLAN
2. INSTALL 6" DIA. MIN. SDR 35 PVC DRAIN PIPE SLOPE PER PLAN, MIN. 1% SLOPE UNLESS OTHERWISE NOTED
3. CONSTRUCT CONC. V-DRAIN PER DETAIL ON SHEET 4
4. CONSTRUCT ROCK RIP-RAP PAD PER RIP-RAP DETAIL ON SHEET 4
5. INSTALL 6" ATRIUM AREA DRAIN BY NDS PRODUCTS OR APPROVED EQUAL
6. CONSTRUCT 6" (500-C-2500) CONC. CURB AND GUTTER PER DETAIL ON SHEET 4
7. INSTALL 1" DOMESTIC SERVICE LINE, INSTALL 1" METER, CONTACT CAMAROSA WATER DISTRICT FOR SERVICE REQUIREMENTS, (UNDER SEPARATE PERMIT)
8. INSTALL MIN. 4" SDR35 PVC SEWER LATERAL SLOPE=2% MIN. (UNDER SEPARATE PERMIT)
9. INSTALL MIN. 4" SEWER CLEANOUT PER CITY OF CAMARILLO STD. PLATE NO. 24, TO AWWA PER PLANNED INSPECTION OF EXIST. LATERAL SHALL BE DONE PRIOR TO CONSTRUCTION
10. MAX. 6" HIGH WROUGHT IRON FENCE (NOT A PART OF THESE PLANS)
11. 6" HIGH MOTORIZED WROUGHT IRON DOUBLE SWING VEHICLE ENTRY GATES WITH FIRE DEPT. KNOW BOX SECURITY, NOT A PART OF THESE PLANS, UNDER SEPARATE PERMIT
12. INSTALL 8" WIDE NDS TYPE TRENCH DRAIN WIDTH TO MATCH DRIVEWAY, BY NDS PRODUCT OR APPROVED EQUAL (TRAFFIC RATED)
13. INSTALL 6" RESTRICTOR PIPE S=1% MAX.
14. RETENTION AREA FOR RESIDENCE SEE SECTION B-B, SEE SHEET 4
15. RETENTION AREA FOR GUEST HOUSE ADU SEE SECTION C-C, SEE SHEET 4
16. CONSTRUCT 1' WIDE CURB SIDE OPENING CATCH BASIN PER SPPWC STD. PLAN 300-2, V=4" MIN. T=6"
17. 6" CURB, SEE SECTION E-E ON SHEET 4
18. REMOVE PORTION OF CONCRETE SWALE & INSTALL 12" PVC SDR35 AND BACKFILL WITH 2500 PSI CONCRETE
19. INSTALL MASONRY RETAINING WALL AROUND END OF 12" PVC PER SPPWC STD. 618-3, H=3' MAX. L=4'
20. INSTALL 18"x18" NDS TYPE CATCH BASIN NDS TYPE OR APPROVED EQUAL TG/INV PER PLAN
21. INSTALL 8" SDR35 PVC PIPE S=1% MIN.
22. INSTALL 2'-48" DIA. HDPE DETENTION PIPE WITH 48" CONNECT PIPE IN MIDDLE, SEE SECTION C-C SHEET 4
23. INSTALL 3" DIA. RESTRICTOR PIPE, S=1%
24. LEAVE 12" OPENING IN TOP OF WALL FOR RETENTION OVERFLOW

* SOILS ENGINEER TO VERIFY CONC. PAVEMENT AND BASE THICKNESS PRIOR TO CONSTRUCTION

NOTE:
PERFORM OVEREXCAVATION AND RECOMPACTION MIN. 3" PER CUT/FILL TRANSITION DETAIL IN GOLDCOAST GEOTECHNICAL REPORT. SEE DETAIL 4 ON SHEET 4

RETAINING WALL HEIGHTS SHOWN ON PLANS ARE EXPOSED HEIGHTS ONLY AND NOT TO TOP OF FOOTINGS (SEE STRUCTURAL PLANS)

B-4 & B-6 RECOMMENDED LOCATION FOR ONSITE WASTEWATER SYSTEM AND SEEPAGE PITS PER GEOTECHNICAL REPORT