THE FOLLOWING PROJECT GENERALLY CONSISTS OF RETAINING WALL INSTALLATION AND REPLACEMENT OF EXISTING FENCE/WALL AT 1914 GREEN VALLEY, ALAMO, CA THAT HAS BEEN DESTROYED BY A LANDSLIDE THAT OCCURRED IN JANUARY OF 2023 ALONG THE CREEK BANK OF A NEIGHBORING PROPERTY. THE NEW RETAINING WALL IS INTENDED TO ISOLATE THE REAR YARD FROM THE LANDSLIDE ON THE NEIGHBOR'S PROPERTY WHICH IS LEFT UN-REPAIRED.

PROJECT OWNER AND ADDRESS

APN: 194-070-083

MR. & MRS. STEVE MCDONALD 1914 GREEN VALLEY ALAMO, CA 94507

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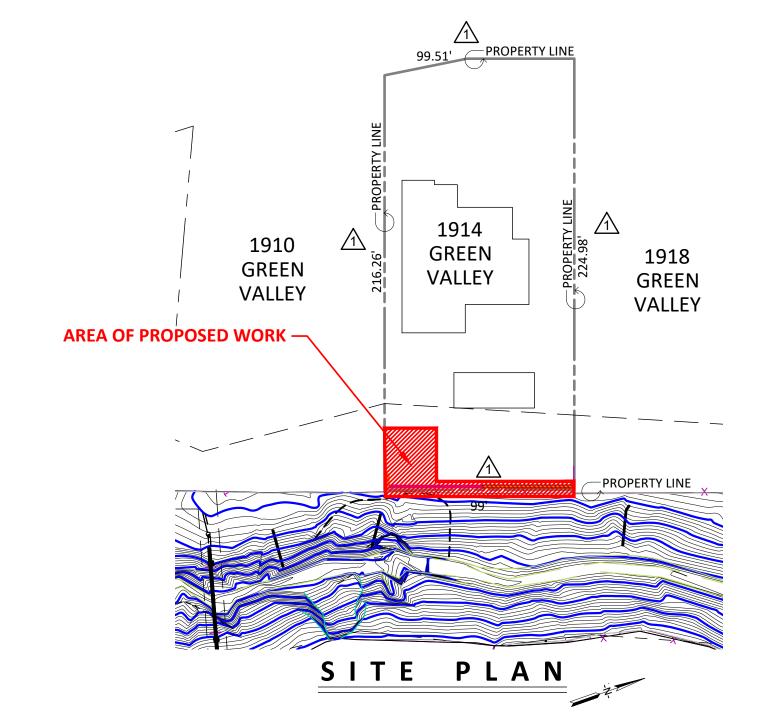
LEGEND:

EXISTING	(Symbol Size May Vary)	PROPOSED			
	PROPERTY BOUNDARY				
	CURB & GUTTER				
	STORM DRAIN				
	SWALE				
	CATCH BASIN				
\oslash	AREA DRAIN	Ø			
•	CLEANOUT	•			
0	DOWNSPOUT	0			
	UNDERPINNING PIER				
0	UNDERPINNING PIE	•			
	MANHOLE	©			
10	CONTOUR	10			
	LIMIT OF GRADING				
	DIRECTION OF SURFACE DRAINAGE	◆			

EMERGENCY RETAINING WALL McDonald's Residence

RECEIVED on 1/18/2024 CDVR23-01062
By Contra Costa County
Department of Conservation and Development

1914 GREEN VALLEY ALAMO, CA 94507



ABBREVIATIONS:

	CLEANOLIT	D) (C	DOLLY MANY CHI ODIDE
CO	CLEANOUT	PVC	POLY VINYL CHLORIDE
DS	DOWNSPOUT	PUE	PUBLIC UTILITY EASEMENT
FL	FLOW LINE	RCP	REINFORCED CONCRETE PIPE
HP	HIGH POINT	SD	STORM DRAIN
LP	LOW POINT	SDMH	STORM DRAIN MANHOLE
PL	PROPERTY LINE		
		TC	TOP OF CURB



SHEET S-1

1 OF 9 SHEETS

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ANY ENGINEERING DESIGN NOTES AND SPECIFICATIONS PRESENTED IN THIS PLAN SET ARE CONTINGENT UPON OUR FIRM BEING CONSULTED WHEN ANY QUESTIONS ARISE WITH REGARD TO THE NOTES AND SPECIFICATIONS CONTAINED HEREIN, AND TO PROVIDE TESTING AND INSPECTION SERVICES FOR CONSTRUCTION OPERATIONS. UNANTICIPATED SOIL AND GEOLOGIC CONDITIONS ARE COMMONLY ENCOUNTERED DURING CONSTRUCTION, WHICH CANNOT BE FULLY DETERMINED FROM EXISTING EXPOSURES OR BY LIMITED SUBSURFACE INVESTIGATION. SUCH CONDITIONS MAY REQUIRE ADDITIONAL EXPENDITURES DURING CONSTRUCTION TO OBTAIN A PROPERLY CONSTRUCTED PROJECT.

GENERAL NOTES

- IT SHALL BE UNDERSTOOD THAT THE TERM OWNER AS USED HEREIN IS MR. STEVE MCDONALD OF 1914 GREEN VALLEY ROAD IN ALAMO.
- 2. IT SHALL BE UNDERSTOOD THAT THE TERM COUNTY AS USED HEREIN IS CONTRA 6. COSTA COUNTY OR ITS AUTHORIZED REPRESENTATIVE.
- 3. IT SHALL BE UNDERSTOOD THE TERM ENGINEER IS THE DESIGN CIVIL ENGINEER, WILLIAM J. GIBSON, OR HIS AUTHORIZED REPRESENTATIVE.
- 4. IT SHALL BE UNDERSTOOD THAT THE TERM ESR AS USED HEREIN IS THE 1. STRUCTURAL STEEL BEAMS SHALL BE 50-KSI STEEL CONTRACTOR OF RECORD, ENGINEERED SOIL REPAIRS, INC.
- ANY DEVIATION FROM THE APPROVED PLANS DURING CONSTRUCTION WILL REQUIRE 24 HOURS PRIOR NOTICE TO THE ENGINEER. AT LEAST ONE SET OF PLANS SHALL BE ON SITE AT ALL TIMES FOR INSPECTION.
- 6. NO WORK WHATSOEVER SHALL BE COMMENCED WITHOUT FIRST NOTIFYING THE COUNTY, THE OWNER AND THE ENGINEER.
- 7. IT SHALL BE ESR'S RESPONSIBILITY TO COORDINATE INSPECTIONS WITH THE COUNTY AND THE ENGINEER.
- 8. PROTECTIVE FENCING AND/OR BARRIERS SHALL BE PROVIDED WHEN NECESSARY TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATION.
- ALL MATERIALS, METHODS AND WORK TO BE IN ACCORDANCE WITH THE PROJECT DRAWINGS AND SPECIFICATIONS AS WELL AS THE STANDARD PROVISIONS OF THE STANDARD PROVISIONS OF THE CITY OF CONCORD, THE 2022 CBC WITH ALL APPLICABLE AMENDMENTS AND UPDATES.
- 10. A PERMIT, AN APPROVED BACKFLOW PREVENTION DEVICE AND A METER ARE REQUIRED FOR TEMPORARY CONSTRUCTION WATER FROM FIRE HYDRANT AND OR EXISTING WATER SERVICE DURING CONSTRUCTION.
- 11. ESR SHALL PROVIDE THE OWNER AND ENGINEER WITH THE NAME AND TELEPHONE NUMBERS OF THE RESPONSIBLE PERSON TO CONTACT, WITH REGARD TO THIS PROJECT, 24 HOURS A DAY.
- 12. CONSTRUCTION WORK SHALL OCCUR ONLY BETWEEN THE HOURS OF 7:30 A.M TO 5:00 P.M, MONDAY THROUGH FRIDAY (NOT INCLUDING HOLIDAYS), UNLESS AN EXCEPTION IS GRANTED BY THE COUNTY. EXCEPTIONS WILL BE CONSIDERED ONLY, IN THE OPINION OF THE COUNTY, IF CONSTRUCTION DURING THE ABOVE PERIOD WOULD INCONVENIENCE THE PUBLIC AND NEIGHBORING RESIDENTS MORE THAN WORKING AT OTHER HOURS OR ON WEEKENDS.
- 13. ESR SHALL PROVIDE ADEQUATE DUST CONTROL AT ALL TIMES AS REQUIRED BY THE OWNER'S REPRESENTATIVE AND CONTRA COSTA COUNTY. ANY OPERATION THAT CREATES EXCESSIVE DUST SHALL CEASE IMMEDIATELY UNTIL SUFFICIENT MEASURES, SATISFACTORY TO THE OWNER'S REPRESENTATIVE, AND THE CITY HAVE BEEN TAKEN TO INSURE COMPLIANCE WITH DUST CONTROL 4 REQUIREMENTS.
- 14. ESR SHALL FURNISH AND INSTALL ALL SIGNS, LIGHTS, BARRICADES, AND OTHER TRAFFIC CONTROL OR WARNING DEVICES, INCLUDING FLAG PERSON, AS REQUIRED BY THE COUNTY.
- 15. ALL WORK IS SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.
- 16. LOCATIONS AND ELEVATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.
- 17. EROSION CONTROL MEASURES SHALL BE EMPLOYED DURING ANY RAINY SEASON AS REQUIRED BY THE ENGINEERS AND/OR THE COUNTY.
- 18. SEE CONTRACT DRAWINGS AND SPECIFICATIONS FOR ALL INFORMATION RELATIVE TO THE NEW AND EXISTING CONSTRUCTION AND CONDITIONS. RESOLVE CONFLICTS ON DRAWINGS WITH THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
 - a. ESR SHALL VERIFY THE LOCATION OF ALL UTILITIES AND SHALL PROTECT THEM FROM HARM AS REQUIRED TO PREVENT DAMAGE AND TO MAINTAIN THEIR USE.
- 19. ESR SHALL BE RESPONSIBLE FOR SITE CLEANUP TO THE SATISFACTION OF THE OWNER.

SPECIFICATIONS

STEEL REINFORCEMENT NOTES:

- 1. STEEL REINFORCEMENT SHALL CONFORM TO ASTM A615. LATEST REVISION. USE GRADE 60 FOR #5 BARS AND GREATER. GRADE 40 CAN BE USED FOR #4 BARS AND
- SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL AT LEAST 14 DAYS PRIOR TO INSTALLATION.
- MINIMUM CONCRETE COVER FOR REINFORCEMENT:
 - a. FOOTINGS AND PIERS 3 INCHES AT THE BOTTOM AND SIDES
 - b. #5 BAR AND SMALLER AT OTHER FORMED MEMBERS 11/2 INCHES TO FORM c. #6 BAR AND LARGER AT OTHER FORMED MEMBERS - 2 INCHES TO FORM
- REINFORCEMENT SHALL BE PLACED TO CONFORM WITH "MANUEL OF STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315 AND 318). HOLD REINFORCEMENT IN ITS TRUE VERTICAL AND HORIZONTAL POSITION WITH DEVICES SUFFICIENTLY NUMEROUS TO PERMIT PLACEMENT OF CONCRETE WITHOUT DISPLACING THE REINFORCING STEEL. ALL HOOKS FOR STIRRUPS ETC., SHALL BE 135 DEGREE HOOKS.
- THE CLEAR DISTANCE BETWEEN PARALLEL REINFORCEMENT IN LAYERS SHALL NOT BE LESS THAN 1-1/2 TIMES THE NOMINAL DIAMETER OF THE REINFORCEMENT, OR 1-1/3 TIMES THE MAXIMUM SIZE AGGREGATE, NO LESS THAN 1-1/2 INCHES.
- ALL REINFORCEMENT SHALL BE CONTINUOUS, STAGGER SPLICES WERE POSSIBLE. MINIMUM BAR LAP SHALL BE 40 BAR DIAMETERS, OR 24 INCHES (WHICHEVER IS GREATER) UNLESS OTHERWISE SHOWN.

STRUCTURAL STEEL NOTES:

- 2. FABRICATION AND ERECTION SHALL COMPLY WITH AISC SPECIFICATIONS FOR DESIGN AND FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
- WELDING SHALL CONFORM TO THE LATEST REVISIONS OF AWS D1.1 AND BE PERFORMED BY A CERTIFIED WELDER.
- SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL AT LEAST 14 DAYS PRIOR TO INSTALLATION.

CARPENTRY NOTES

- PRESERVATIVE TREATED WOOD LAGGING; WOOD EXPOSED TO THE WEATHER, IN CONTACT WITH CONCRETE OR MASONRY, OR IN DIRECT CONTACT WITH EARTH SHALL BE TREATED WOOD WITH PRESERVATIVE RETENTION AS REQUIRED FOR THAT USE. NEWLY EXPOSED SURFACES RESULTING FROM FIELD CUTTING, BORING OR HANDLING SHALL BE FIELD TREATED IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS ASSOCIATION M-4.
- ALL SAWN LUMBER (EXCEPT DECK SHEATHING) SHALL BE DOUGLAS FIR / LARCH WITH **GRADES AS FOLLOWS:**
- A. BEAMS AND HEADERS NO. 1 GRADE.
- B. POSTS, RAFTERS, JOISTS NO. 1 GRADE.
- STUDS, PLATES, BLOCKS AND MISCELLANEOUS NO. 2 GRADE
- D. DECK JOISTS, BEAMS, POSTS, AND OTHER DECK FRAMING PRESSURE TREATED

ALL MANUFACTURED LUMBER SHALL BE BY TRUS JOIST COMPANY AS FOLLOWS

- A. BEAMS AND HEADERS 2.0E PARALLAM PSL.
- B. FLOOR JOISTS TJI FLOOR JOISTS OR 2.0E PARALLAM PSL
- C. RIM JOISTS 1.7E TIMBERSTRAND LSL.
- SOME SHEARWALLS WILL REQUIRE SOME STUDS AND PLATES TO BE 3X MATERIAL. SEE SHEARWALL SCHEDULE. ALL WALLS TALLER THAN 15 FEET SHALL BE 2X6 PLATES WITH 2X6 STUDS AT 12" O.C. ALL WALLS BETWEEN 10 AND 15 FEET TALL SHALL BE 2X6 PLATES WITH 2X6 STUDS AT 16" O.C. ALL EXTERIOR WALLS SHALL BE 2X6 PLATES. WITH 2X6 STUDS AT 16" O.C. ALL 2X4 WALLS SHALL BE 2X4 PLATES WITH 2X4 STUDS AT 16" O.C.; U.O.N., SEE ARCHITECTURAL DRAWING FOR LOCATIONS.
- PLYWOOD FOR ROOF SHALL BE APA-RATED SHEATHING 1/2" C-C EXPOSURE I (32/16), UNBLOCKED U.O.N., WITH 10D NAILS SPACED AT 6" O.C. AT BOUNDARIES AND EDGES AND 12" O.C. IN THE FIELD. PLYWOOD SHEETS SHOULD BE CONTINUOUS OVER 2 OR MORE SPANS.
- PLYWOOD FOR FLOORS 1 1/8 INCH CDX (48/24) EXPOSURE 1, PSI 95 FOR FLOORS. DIAPHRAGM BLOCKED AS SHOWN ON FLOOR PLANS, TONGUE AND GROVE AT UNBLOCKED LOCATIONS, WITH 10D NAILS AT 6" O.C. AT BOUNDARIES AND EDGES, AND 10" O.C. IN THE FIELD. PLYWOOD SHEETS SHOULD BE CONTINUOUS OVER 2 OR MORE SPANS.
- PLYWOOD FOR SHEARWALLS GRADES AS NOTED ON SHERWALL SCHEDULE.
- THE MINIMUM EDGE DISTANCE FOR NAILS IN THE RECEIVING MEMBERS AND THE PLYWOOD SHALL BE 3/8 INCH FOR 2-INCH NOMINAL RECEIVING MEMBERS AND 1/2-INCH FOR 3-INCH NOMINAL RECEIVING MEMBERS. FLAT BLOCKING RECEIVING 10D NAILS SHALL BE 3X4 OR LARGER.
- GLULAM BEAMS ARCHITECTURAL GRADE IF EXPOSED AND INDUSTRIAL GRADE IF CONCEALED. CAMBERS SHALL BE TYPICALLY ACCOMPLISHED BY A RADIUS OF BEAM EQUAL TO 1600' AT THE ROOF AND 0 CAMBER AT THE FLOORS, UNLESS NOTED OTHERWISE ON THE PLANS. TENSION LAMINATIONS ARE REQUIRED ON THE TOP OF ALL CANTILEVERED AND CONTINUOUS GLULAMS (GRADE 24FV8). GRADE OF GLULAMS SHALL BE 24FV4 OR 24FV8. APA CERTIFICATE SHALL BE SUPPLIED FOR ALL GLULAMS. GLULAM BEAMS SHALL BE PROTECTED FROM MOISTURE UNTIL THE STRUCTURE IS ENCLOSED FROM THE ELEMENTS.

- ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY FOUNDATIONS SHALL BE PRESSURE-TREATED.
- 10. ALL MANUFACTURED WOOD PRODUCTS, INCLUDING PLYWOOD, SHALL NOT BE EXPOSED TO MOISTURE. SAWN LUMBER SHALL BE SURFACED DRIED, U.O.N., AND THE MOISTURE CONTENT SHALL NOT EXCEED 19 PERCENT FOR ALL SAWN LUMBER AND 16 PERCENT FOR ALL GLULAMS AT THE TIME OF ENCLOSURE.
- 11. HARDWARE AS MANUFACTURED BY THE SIMPSON STRONG TIE CORP. SEE GENERAL NOTE 11 FOR ALLOWED SUBSTITUTIONS.
- 12. NAILING IF NOT SHOWN ON THE PLANS, NAILING SHALL CONFORM TO TABLE 2304.9.1 OF THE 2007 CBC. ALL NAILS SHALL BE COMMON WIRE GAGE. IF BOX NAILS, SINKER NAILS, OR POWER-DRIVEN FASTENERS ARE TO BE USED, SUBMIT TYPE (GAGE, LENGTH AND HEAD DIAMETER) ALONG WITH I.C.C. APPROVAL TO ENGINEER FOR REVIEW, AS A DIFFERENT NAIL SPACING MAY BE REQUIRED. SEE GENERAL NOTE 11 FOR ALLOWED SUBSTITUTIONS.
- 13. MULTIPLE JOISTS SHALL BE CONNECTED WITH TWO ROWS OF 16D NAILS AT 12" O.C. STAGGERED. MANUFACTURED LUMBER SHALL BE CONNECTED AS REQUIRED BY MANUFACTURER.
- 14. HEADERS FOR BEARING HEADERS USE 6X12 FOR 2X6 WALLS AND 4X12 FOR 2X4 WALLS, WITH (2) CRIPPLES AND (2) KING STUDS AT EACH END FOR HEADERS OVER 6 FEET IN LENGTH; AND (2) KING STUDS AT EACH END FOR WALLS TALLER THAN 10 FEET; U.O.N.
- 15. ALL BOTS, RODS AND LAG SCREWS SHALL BE ASTM GRADE A307. ALL BOLT HEADS AND NUTS THAT BEAR ON WOOD SHALL HAVE WASHERS. EXPOSED BOLTS SHALL HAVE MALLEABLE IRON WASHERS.
- 16. BOLT HOLES SHALL BE A MINIMUM OF 1/32 INCH AND A MAXIMUM OF 1/16 INCH LARGER THAN THE
- 17. ALL LAG SCREWS SHALL HAVE PRE-BORED HOLES, 1/8 INCH DIAMETER. LESS THAN NOMINAL SIZE OF SCREW.
- 18. HOLES IN STUDS, IN PLATES OF STRUCTURAL BEARING WALLS, OR IN SHEARWALLS FOR PLUMBING OR OTHER REASONS - SHALL BE LIMITED TO 1/3 THE WIDTH OF THE STUD AND SHALL BE LOCATED ONLY IN THE MIDDLE 1/3 OF THE STUD. HOLES SHALL BE DRILLED ONLY: NO SAWS SHALL BE USED. HOLES IN MANUFACTURED LUMBER SHALL CONFORM TO MANUFACTURER'S GUIDELINES.
- 19. FASTENERS FOR PRESSURE PRESERVATIVE TREATED AND FIRE-RETARDANT TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER.

EPOXY

- FOR NEW ANCHOR BOLTS USE POWER-FAST + EPOXY (OR EQUIVALENT) PER MANUFACTURES RECOMMENDATIONS.
- 2. FOR CRACKS IN CONCRETE GRADE BEAMS OR CONCRETE FLOOR USE SIKADUR 52 EPOXY (OR **EQUIVALENT) PER MANUFACTURES RECOMMENDATIONS.**

GROUT

- GROUT STRENGTH SHALL BE A MINIMUM OF 2,500 PSI.
- 2. IF GROUT THICKNESS IS GREATER THAN 2 INCHES THAN A ½ " STEEL BAR SHALL BE ADDED HORIZONTALLY TO THE GROUT.

- 1. CONCRETE STRENGTH SHALL BE A MINIMUM OF 2,500 PSI.
- 2. PUMPED CONCRETE MAY BE USED AT THE CONTRACTOR'S OPTION. THE MAXIMUM AGGREGATE SIZE SHALL BE 3/4" AND SLUMP RANGE SHALL BE 4 TO 6 INCHES.
- CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE OF HOPPER. CHUTES OR TRUNKS OF VARYING LENGTHS SO THAT UNCONFINED FALL OF CONCRETE DOES NOT EXCEED 4 FEET. MECHANICAL VIBRATION FOR PROPER CONSOLIDATION IS REQUIRED.

DRILLED CONCRETE PIERS NOTES:

- CONCRETE PIERS SHALL BE INSTALLED AT THE LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER, APPROXIMATE LOCATIONS ARE SHOWN IN PLANS. CONCRETE PIERS SHALL HAVE A MINIMUM DIAMETER OF 18 INCHES AND RANGE IN DEPTH FROM 15 FEET TO 25 FEET. PIER DEPTH IS MEASURED FROM TOP OF FINISHED GROUND.
 - a. IF REQUIRED, HOLES SHALL BE CASED TO PREVENT CAVING DURING DRILLING. CASING SHALL BE RETRACTED AS CONCRETE IS PLACED.
- b. PIERS SHALL BE DRILLED STRAIGHT AND PLUM (WITHIN 1% OF VERTICAL) AND SHOULD BE CLEANED OF LOOSE SOIL AND ROCK FRAGMENTS.
- CONCRETE PLACEMENT SHOULD START AS SOON AS POSSIBLE AFTER DRILLING AND CLEANOUT IS COMPLETE. CONCRETE STRENGTH SHALL BE A MINIMUM OF 2.500 PSI.
- PUMPED CONCRETE MAY BE USED AT THE CONTRACTOR'S OPTION. THE MAXIMUM AGGREGATE SIZE SHALL BE 3/4" AND SLUMP RANGE SHALL BE 4 TO 6 INCHES.
- CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE OF HOPPER, CHUTES OR TRUNKS OF VARYING LENGTHS SO THAT UNCONFINED FALL OF CONCRETE DOES NOT EXCEED 4 FEET. MECHANICAL VIBRATION FOR PROPER CONSOLIDATION IS REQUIRED.
- IF WATER IS PRESENT IN THE HOLE, TREMIE PIPE SHALL BE MAINTAINED AT LEAST 5 FEET BELOW THE SURFACE OF THE CONCRETE DURING CASTING OF THE PIER.
- AS CONCRETE IS PLACED, ANY CASING USED TO STABILIZE THE HOLE SHOULD BE WITHDRAWN. THE BOTTOM OF THE CASING SHOULD BE MAINTAINED NOT MORE THAN 5 FEET OR LESS THAN ONE FOOT BELOW THE LEVEL OF THE CONCRETE.

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PROJECT # 4699-00

SHEET

S-2

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TIEBACK INSTALLATION NOTES:

- 0. TIEBACKS SHALL BE INSTALLED AT THE LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER, APPROXIMATE LOCATIONS ARE SHOW IN PLANS. TIEBACKS SHALL BE DRILLED TO THE DEPTH REQUIRED.
 - c. IF REQUIRED, HOLES SHALL BE CASED TO PREVENT CAVING DURING DRILLING. CASING SHALL BE RETRACTED AS GROUT OR BACKFILL IS PLACED.
 - d. TIEBACKS SHALL BE FREE OF ALL LOOSE MATERIAL.
- INSTALL DCP STEEL ROD OR STRANDS WITH CENTRALIZERS SPACED AT MAXIMUM 5-FOOT O.C. AND IMMEDIATELY FILL BORE HOLE WITH HIGH STRENGTH GROUT. TIEBACK BOLTS SHALL BE FULLY GROUTED FROM TOP TO BOTTOM OF HOLE. BONDED ZONE IS INDICATED ON THE WALL SCHEDULE.
- TEST TIEBACKS AGAINST STEEL WALER ASSEMBLY.
- 3. TESTING SHALL PROCEED AFTER GROUT IN THE PENETRATION LENGTH HAS ATTAINED THE APPROPRIATE COMPRESSIVE STRENGTH AS DETERMINED BY THE CONTRACTOR.
 - a. TIEBACKS SHALL BE STRESSED STRAIGHT AND TRUE AGAINST WALER. KINKING OR SHARP CURVATURE UNDER TENSION SHALL BE CAUSE FOR REJECTION.
 - b. STRAND/ROD AND ROCK BOLT ASSEMBLY SHALL SHOW NO EXCESSIVE (1" MAX.) MOVEMENT AT TEST LOAD.
- 4. HYDRAULIC JACKS SHALL BE CALIBRATED AND CERTIFIED WITHIN THE LAST SIX MONTHS BY AN INDEPENDENT TESTING AGENCY. CERTIFICATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO TESTING.
- 5. THE CONTRACTOR SHALL STOP EXCAVATION IF ADVERSE EFFECTS ON ADJACENT PROPERTIES ARE OBSERVED AND SHALL IMMEDIATELY NOTIFY THE CITY AND THE ENGINEER.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE DESIGN LOADS WITH RESPECT TO TIEBACKS.
- 7. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL ALL INFORMATION REGARDING THE TIEBACK INSTALLATION SYSTEM OTHER THAN AS SHOWN OR SPECIFIED ON THE DRAWINGS AND IN SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL ALL INFORMATION REGARDING TIEBACK ANCHORING DETAILS OTHER THAN SHOWN OR SPECIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- 9. THE CONTRACTOR MAY INCREASE OR DECREASE THE ANGLE OF THE TIEBACKS BY APPROXIMATELY 5 DEGREES IF DEEMED NECESSARY BY THE FIELD SUPERINTENDENT TO MEET CONDITIONS IN THE FIELD WITH THE PRIOR APPROVAL OF THE ENGINEER.
- 10. THE CONTRACTOR SHALL INSTALL WEDGE WASHERS AS REQUIRED TO CORRECT MISALIGNMENT OF THE ANCHOR RODS WITH THE ANGEL SEATS.
- 11. TENSIONING OF TIEBACK: ALL TIEBACKS SHALL BE TENSIONED USING A CENTER HOLE HYDRAULIC JACK. WHEN THE GROUT HAS ATTAINED THE REQUIRED COMPRESSIVE STRENGTH, THE ANCHORS SHOULD BE PROOF TESTED TO 1.33 TIMES THE DESIGN LOAD AS OUTLINED IN THE LATEST EDITION OF THE POST-TENSIONING INSTITUTE MANUAL. PROOF TEST LOADS SHOULD BE HELD FOR 10 MINUTES, AND THE DEFLECTION AT TEST LOAD BETWEEN THE 1 AND 10 MINUTE READINGS SHOULD NOT EXCEED 0.04 INCHES. AFTER TESTING, THE TENSION IN THE ANCHOR SHOULD BE REDUCED TO THE DESIGN LOAD AND LOCKED OFF.
- 12. THE CONTRACTOR SHALL PROVIDE THE JACKS AND JACKING MECHANISMS USED IN THE STRESSING AND TESTING OF THE INSTALLED TIEBACKS. THE CONTRACTOR SHALL SUBMIT A RECENT (MAXIMUM 6 MONTHS OLD) CERTIFIED LOAD-PRESSURE TABLE FOR THE JACKS FOR REVIEW BY THE ENGINEER PRIOR TO TESTING.
- 13. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR RE-DRILLS OR REPLACEMENT OF TIEBACKS, WHICH FAIL TO MEET TEST LOADS, AND ALL THE COSTS INVOLVED.
- 14. CEMENT GROUT SHALL HAVE A MINIMUM OF 4,000 PSI

DRAINAGE

- NO SLOPE SHALL BE LEFT TO STAND THROUGH A WINTER SEASON WITHOUT EROSION CONTROL MEASURES BEING PROVIDED.
- 2. ALL PIPES SHALL BE NON-PERFORATED SDR-35 PIPE. USE OF OTHER MATERIALS WILL BE PERMITTED ONLY UPON AUTHORIZATION OF THE ENGINEER.
- USE PIPES OF NO LESS THAN 4 INCHES IN DIAMETER. THE USE OF WYES, ELBOWS, TEES, CLEANOUTS, OR OTHER PIPE FITTINGS SHALL BE ALLOWED AT THE DISCRETION OF THE ENGINEER BASED ON FIELD CONDITIONS.
- COMPACTED ENGINEERED TRENCH BACKFILL USING NATIVE SOILS WILL BE REQUIRED BY THE ENGINEER IN LOCATIONS WHERE NON-PERFORATED PIPE IS SPECIFIED.
- 5. EROSION CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE COUNTY REQUIREMENTS.

SPECIAL INSPECTION NOTES

- 1. INSPECTIONS OF THE TIEBACK DRILLING AND VERTICAL PIER HOLE DRILLING ARE REQUIRED TO BE PERFORMED BY THE REGISTERED ENGINEER OF RECORD.
- 2. SCOPE OF INSPECTION INCLUDE:
 - INSPECT INSTALLATION OF TIEBACK AND PIER HOLE DEPTH
 - OBSERVE ALL PULLOUT (POST-TENSIONING) TESTING TO ASCERTAIN DESIGN SPECIFICATION IS ACHIEVED.
 - INSPECT INSTALLATION OF STEEL REINFORCEMENT.

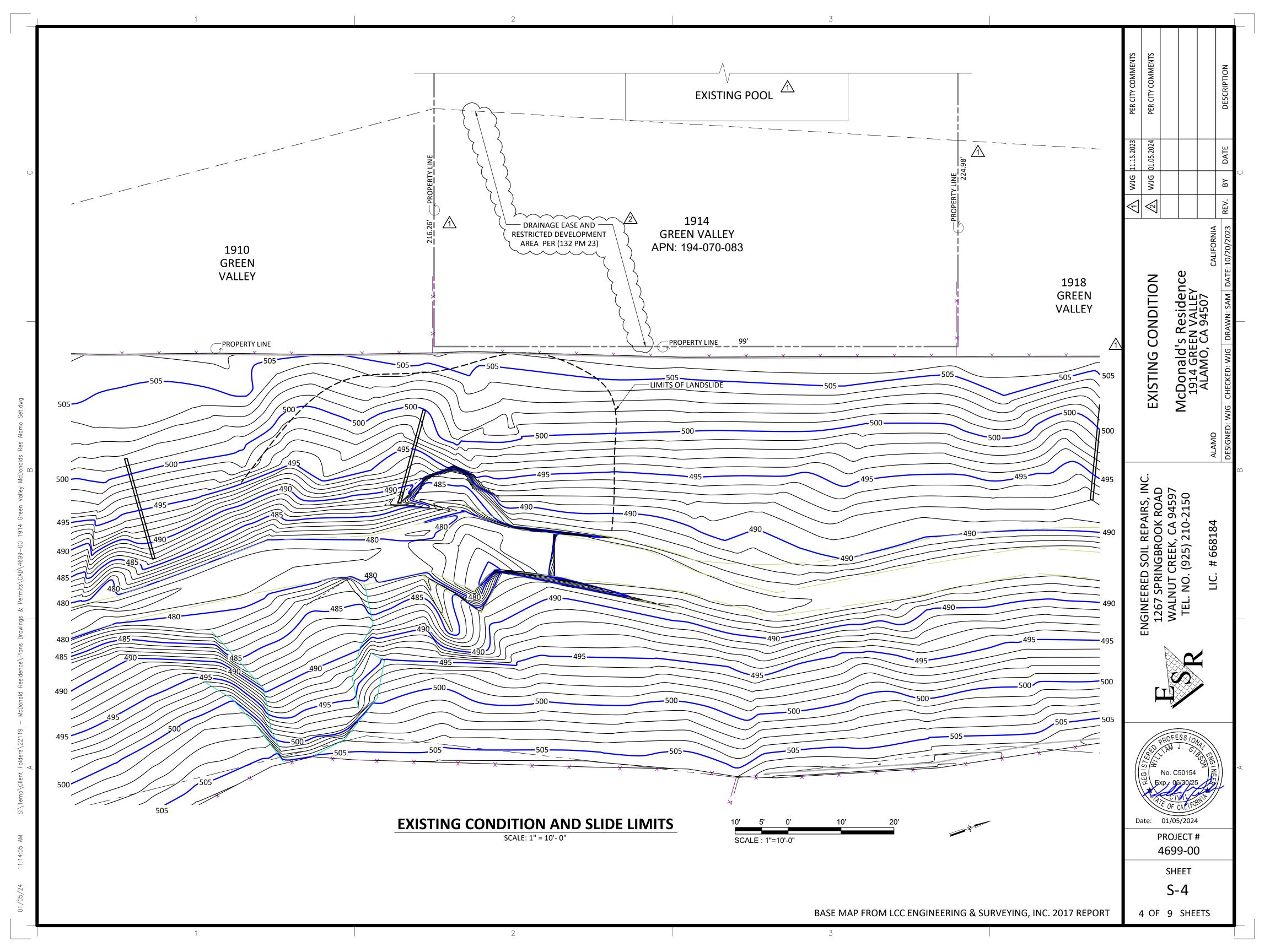
SAFETY NOTES

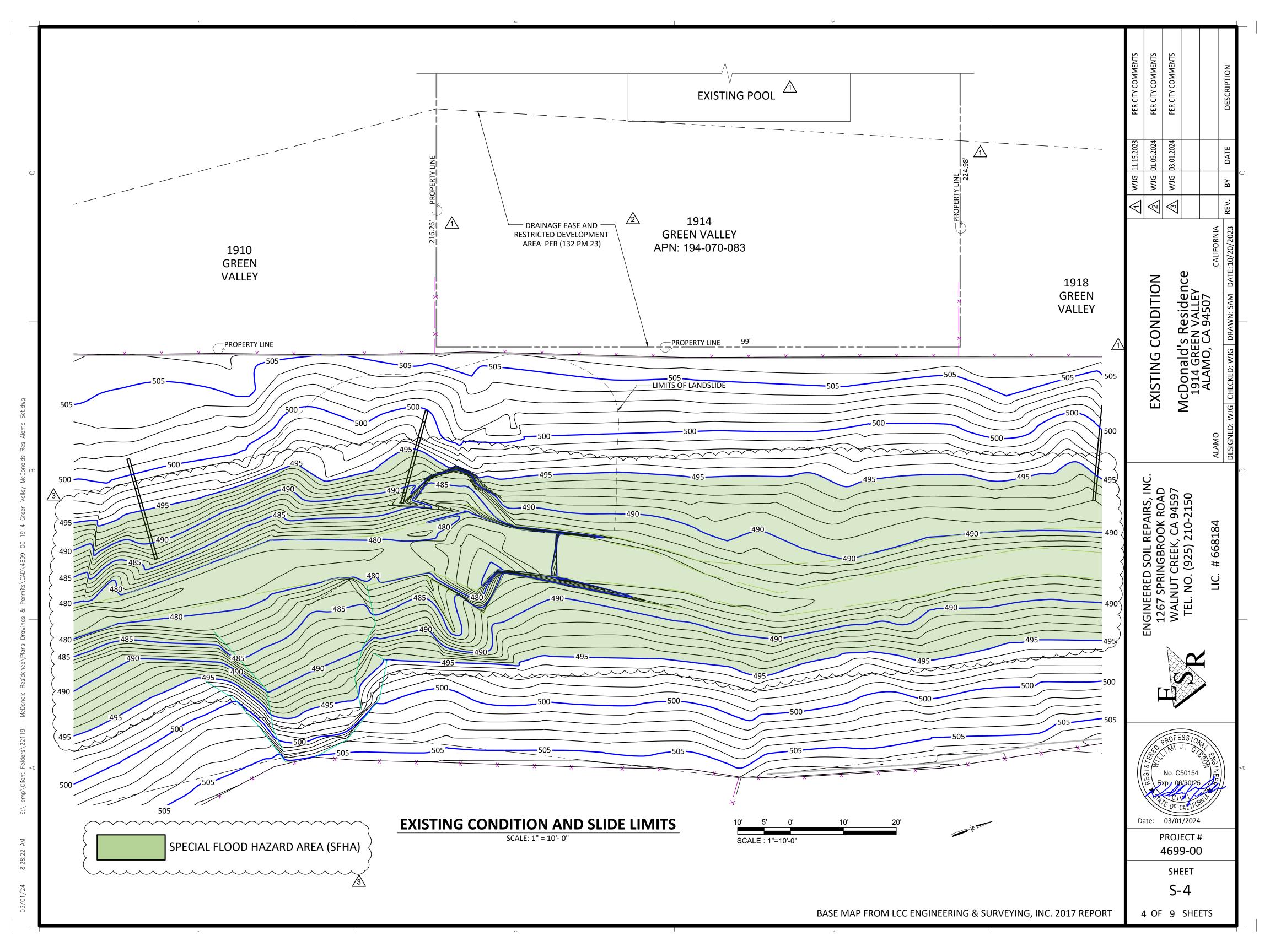
- THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND SERVICE ALERT (USA) A MINIMUM OF 2 WORKING DAYS PRIOR TO ANY DIGGING. CALL 1-800-642-2444.
- 2. THE CONTRACTOR SHALL COMPLY WITH ALL STATE, COUNTY, AND CITY LAWS AND ORDINANCES, AND REGULATIONS OF THE DEPARTMENT OF INDUSTRIAL RELATIONS O.S.H.A., AND INDUSTRIAL ACCIDENT COMMISSION RELATING TO THE SAFETY AND CHARACTER OF WORK EQUIPMENT AND LABOR PERSONNEL.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL PUBLIC RIGHTS-OF-WAY AND OFF-SITE AREAS FROM ALL DIRT, MUD, DUST, AND DEBRIS AT ALL TIMES.
- 5. THE CONTRACTOR SHALL PREVENT THE FORMATION OF ANY AIRBORNE NUISANCE BY WATERING DOWN AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE WORK AREA. IN ADDITION, THE NOISE LEVEL OF OPERATION SHALL BE KEPT TO A MINIMUM AS PER THE CITY.
- WORK SHALL BE SUSPENDED, IF IN THE OPINION OF THE CITY, DUST CONTROL MEASURES ARE NOT ADEQUATE.
- SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.

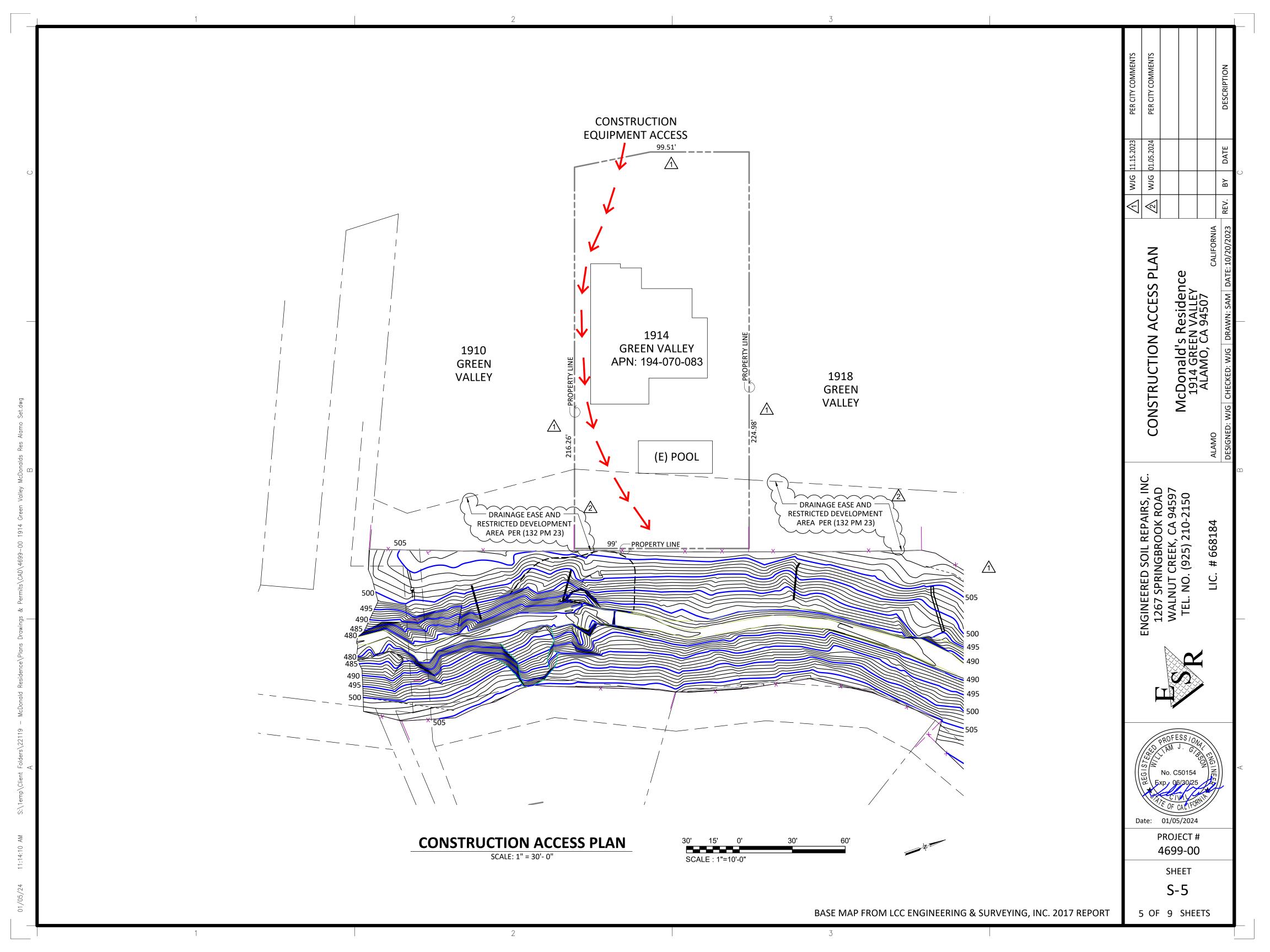
ŭ AN len EY 's Reside EEN VALLE CA 94507 NOT SPECIFICA McDonald's 1914 GREE ALAMO, (AIRS, INC (ROAD 94597 -2150 ENGINEERED SOIL REPAIRS, 1267 SPRINGBROOK ROA WALNUT CREEK, CA 9459 TEL. NO. (925) 210-215 CREEK (925) # PROJECT # 4699-00 SHEET S-3

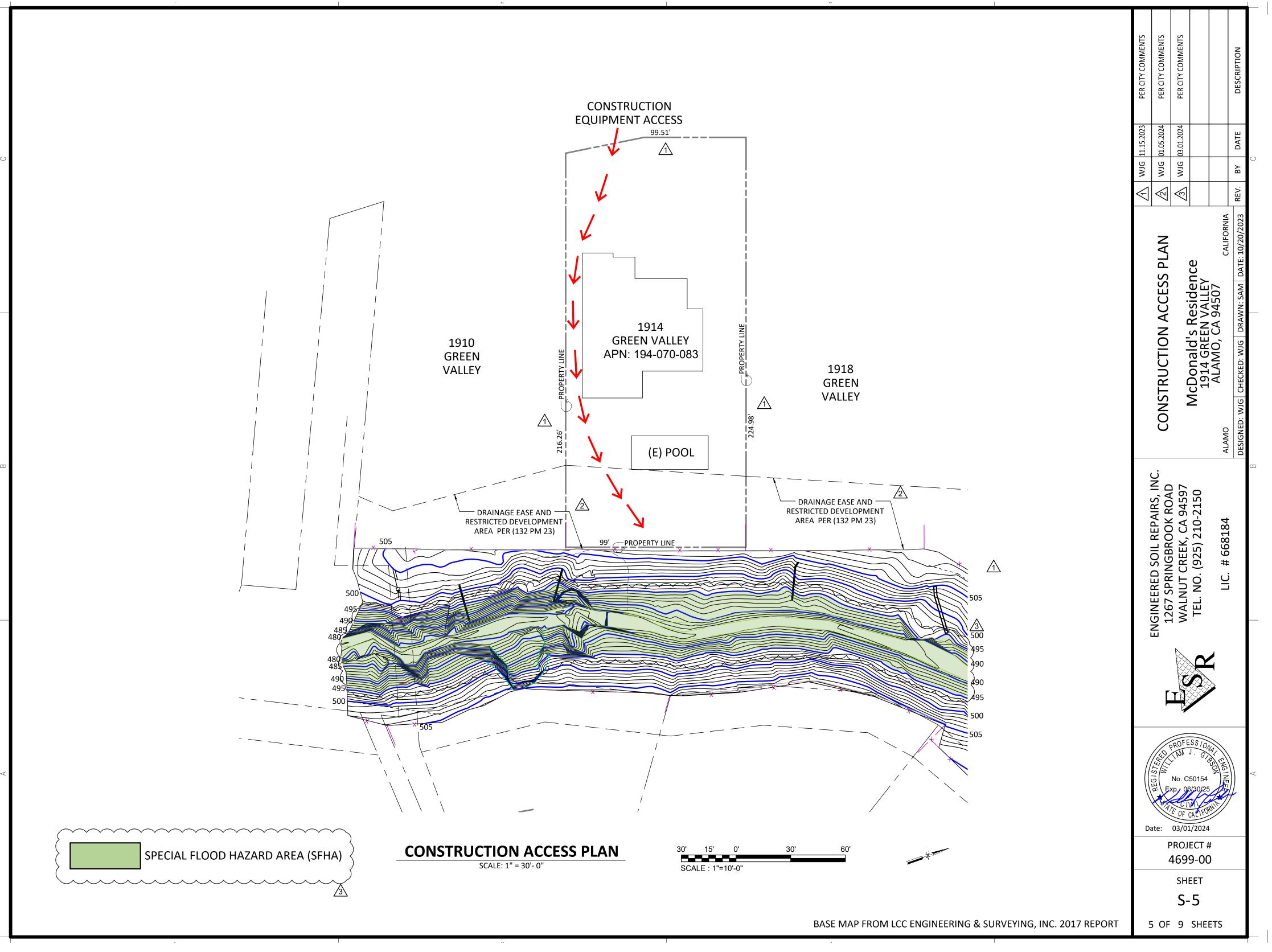
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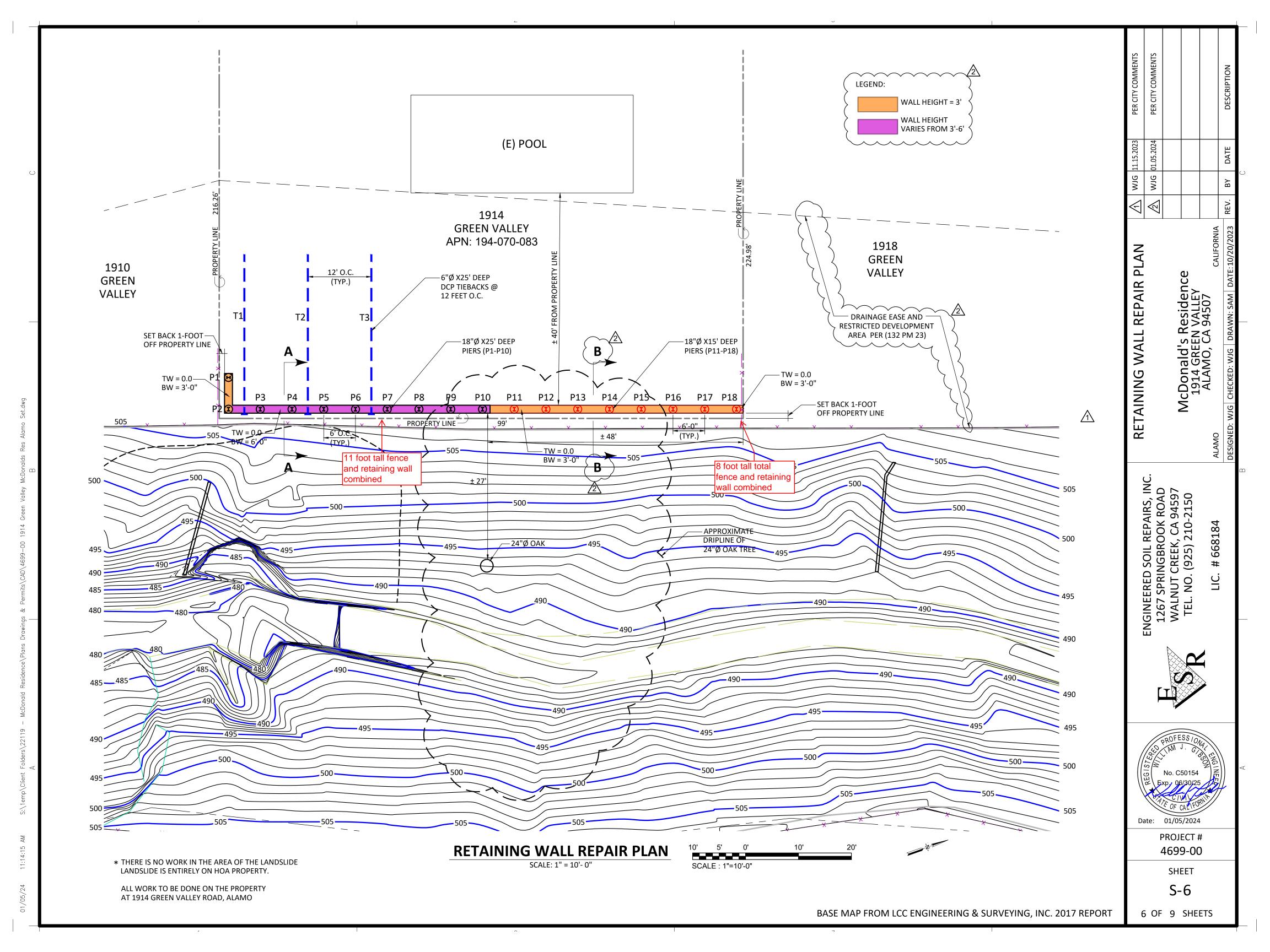


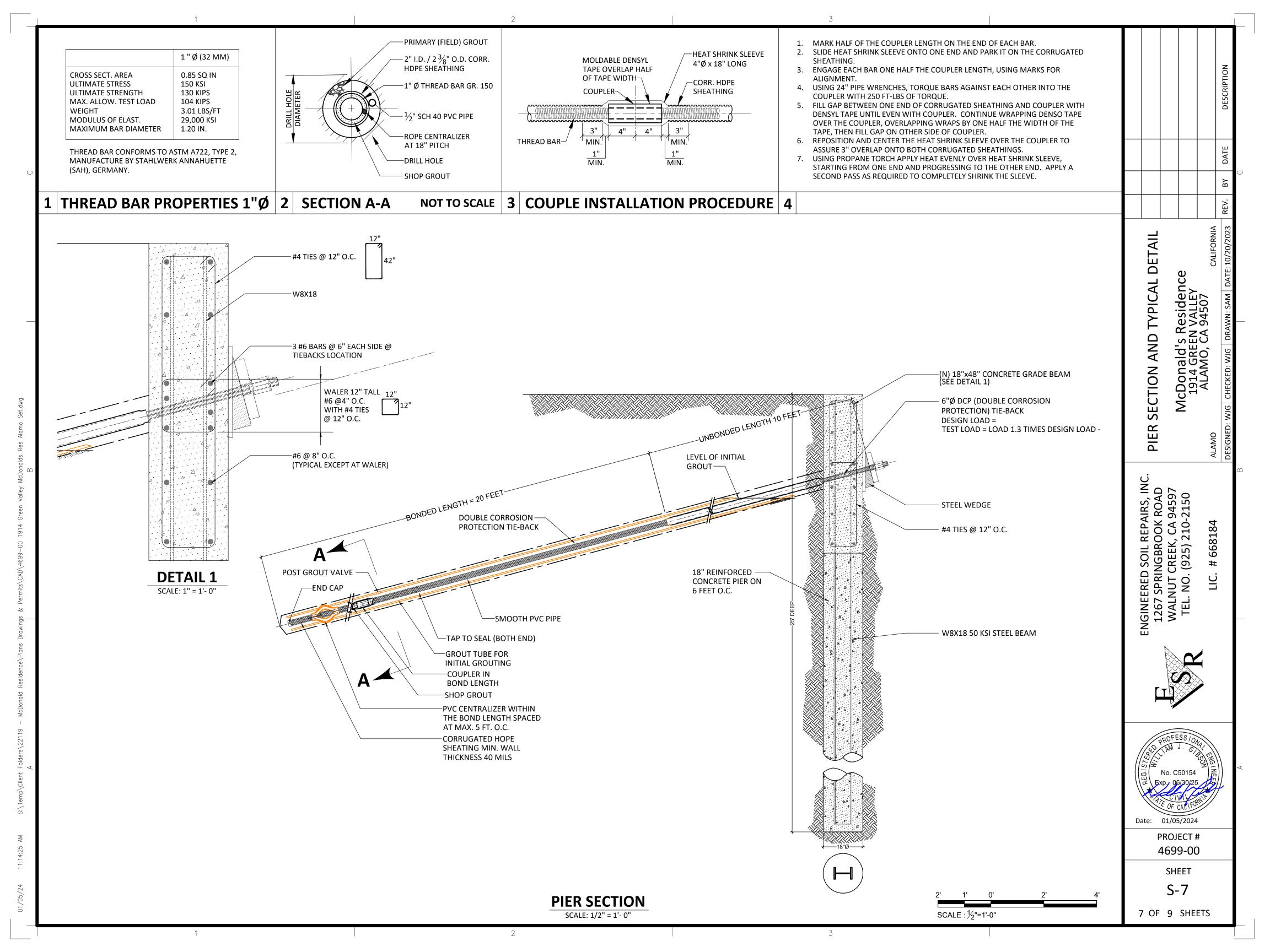


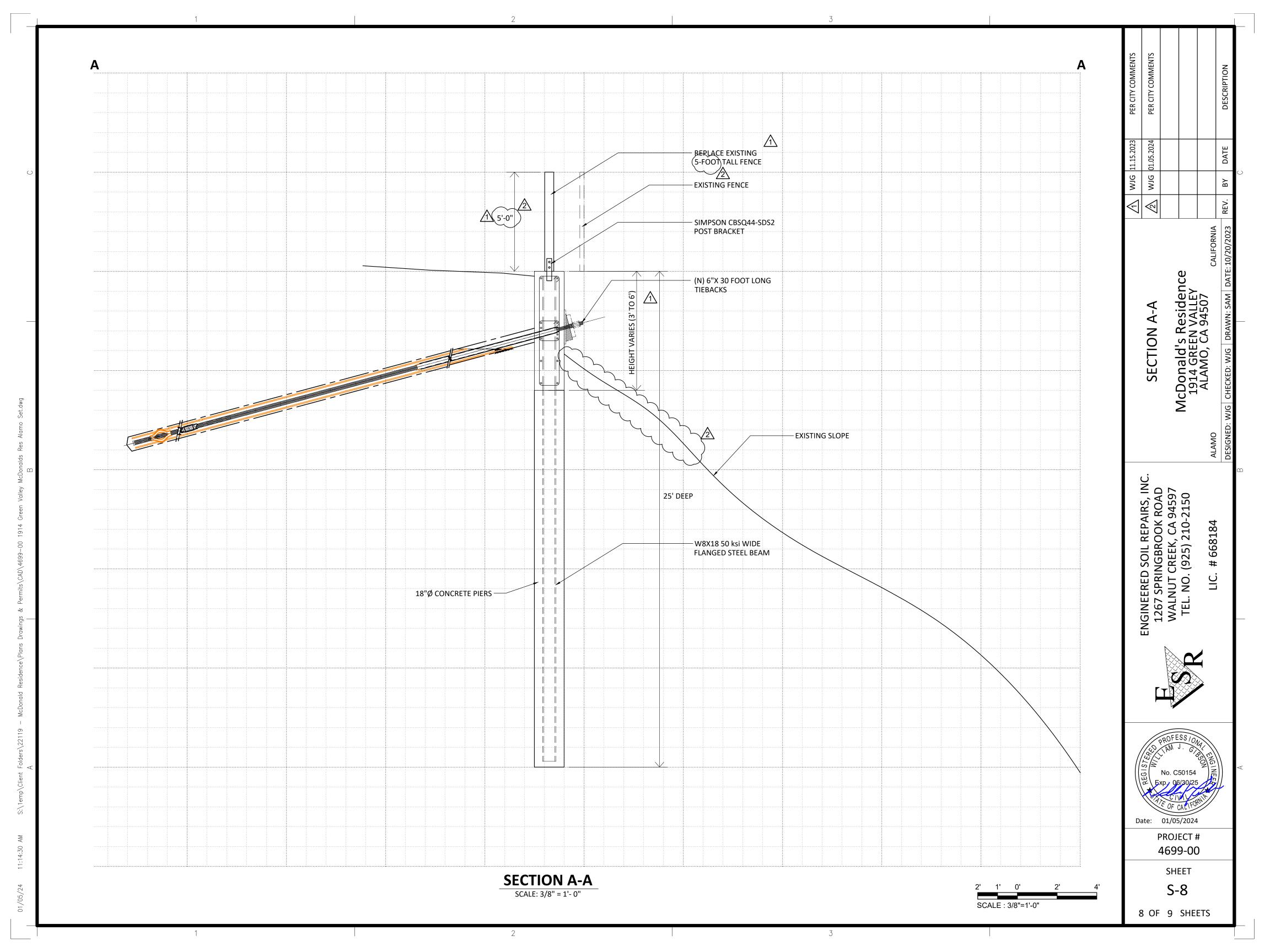




M S:\1emp\Client Folders\22119 — McDonald Residence\Plans Drawings & Permits\CAD\4699—00 1914 Green Valley McDonalds Res



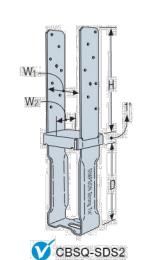


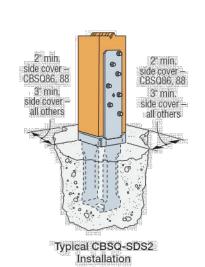


Simpson Strong-Tie® Wood Construction Connectors CBSQ

SIMPSON Strong-Tie

Column Bases (cont.)





These products are available with additional corrosion protection. For more information, see p. 14. SS For stainless-steel fasteners, see p. 21.

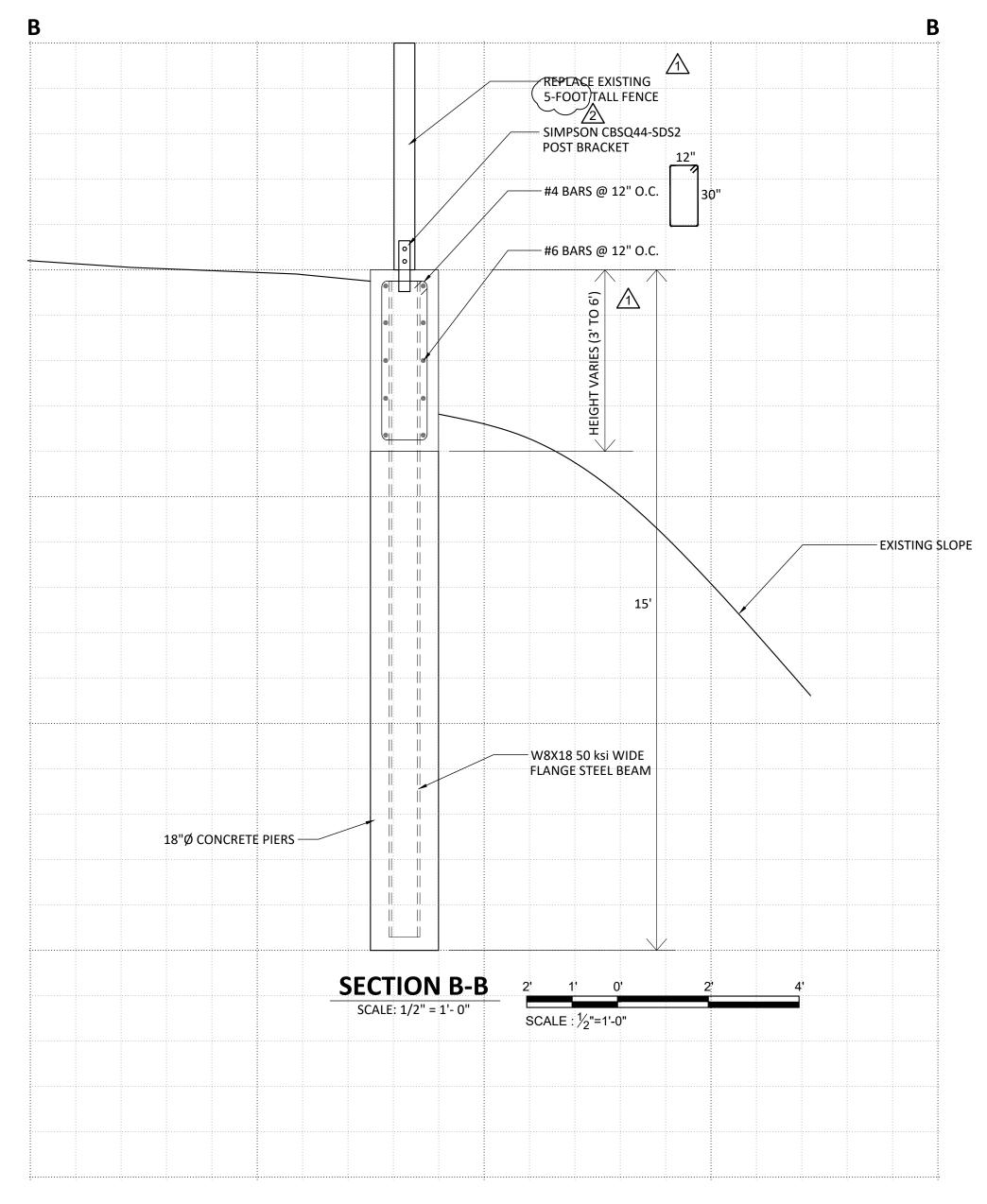
32	Model No.	Nominal	Material		Dimensions (in.)				_	Allowable Loads DF/SP			
		Column Size	Base Strap (ga.) (ga. x Width	Strap	w	W ₁ W ₂	D		Fasteners (in.)	Uncracked	Cracked	D 1 1	Code Ref.
35				(ga. x Width)	W ₁			Н		Uplift	Uplift	- Download	
3					١	Vind and	l Seismi	c Design	Category A&B				
SS	CBSQ44-SDS2	4x4	12	10 ga. x 2 1/4	3%6	31/2	7.1/6	83/8	(14) 14 x 2 SDS	5,390	4,650	10,975	
SS	CBSQ46-SDS2	4x6	12	10 ga. x 3	3%6	55/16	713/16	811/16	(14) 1/4 x 2 SDS	5,390	4,650	14,420	
SS	CBSQ66-SDS2	-6x6	12	10 ga, x 3	51/2	51/2	61/8	834	(14) 14 x 2 SDS	4,375	3.060	14,420	IIBG FL, LA
	CBSQ86-SDS2	6x8	12	8 ga. x 3	71/2	5%	61/8	811/16	(12) 1/4 x 2 SDS	3,815	2,670	20,915	
	CBSQ88-SDS2	8x8	12	8 ga. x 3	71/2	7%	61/6	811/16	(12)14 x 2 SDS	3,815	2,670	22,225	
43						Seis	smic Des	sign Cate	egory C-F				
SS	CBSQ44-SDS2	4x4	12	10 ga. x 21/4	3%6	31/2	71/6	83%	(14) 14 x 2 SDS	5,390	4,070	10,975	
SS	CBSQ46-SDS2	4x6	12	10 ga. x 3	3%6	5546	713/16	811/16	(14) 1/4 x 2 SDS	5,390	4,070	14,420	
SS	CBSQ66-SDS2	6x6	12	10 ga. x 3	51/2	51/2	67/8	8¾	(14) 1/4 x 2 SDS	3,830	2,680	=14,420	IBG. FL, LA
	CBSQ86-SDS2	6x8	12	8 ga. x 3	71/2	5%	61/8	811/16	(12) 1/4 x 2 SDS	3,340	2,335	20,915	Parameter St.
	CBSQ88-SDS2	8x8	12	8 ga. x 3	71/2	7%	61/6	811/16	(12) 14 x 2 SDS	3,340	2.335	22,225	

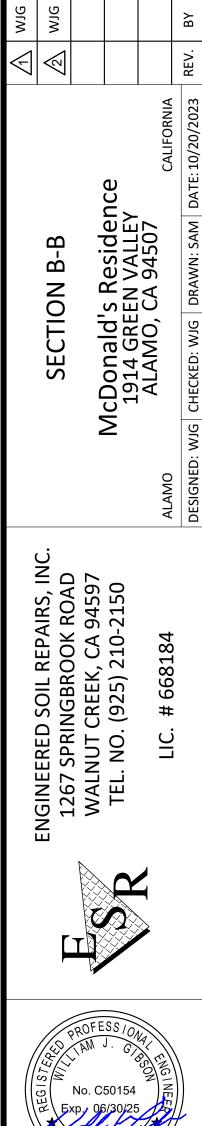
1. Loads may not be increased for duration of load...

Loads may not be increased for duration of load.
 For higher downloads, pack grout solid under 1* standoff plate before installation. Base download on column or concrete, according to the code.
 Concrete shall have a minimum compressive strength of F₂ = 2,600 psi.
 Multiply Seismic and Wind ASD uplift and lateral load values by 1.43 or 1.67, respectively, to obtain LRFD capacities.
 In accordance with IBC, Section 1613.1, detached one: and two-family dwellings in Seismic Design Category (SDC) C may use. Wind and SDC A&B* allowable loads.
 Downloads shall be reduced where limited by capacity of the post.

7 Designer is responsible for concrete design.
 8 Structural composite lumber columns have sides that show either the wide face or the edges of the lumber strands/veneers known as the narrow face. Values in the tables reflect installation into the wide face. See technical bulletin T-C-SCLCLM at strongtie.com for load reductions resulting from narrow-face installations:

9. Fasteners: SDS screws are Simpson Strong-Tie® Strong-Drive® SDS Heavy-Duty Connector screws. See pp. 21–22 for fastener information.





PROJECT# 4699-00

SHEET

S-9

OF 9 SHEETS