CONTRA COSTA COUNTY

AGENDA - PUBLISHED

Alamo Municipal Advisory Council

Tuesday, January 6, 2026 **6:00 PM** **Alamo Women's Club - 1401 Danville Blvd., Alamo**

Agenda Items: Items may be taken out of order based on the business of the day and preference of the Committee

1. Call to Order - Pledge of Allegiance - Roll Call
2. District II Board of Supervisors Staff
3. Public Comment
4. CDVR25-01055 - 208 Valley Oaks Drive, Alamo **26-20**

   Attachments: CDVR25-01055 - Agency Comment Request
5. Alamo Roundabout Landscaping Survey
6. Subcommittee Reports **26-21**
7. Review and Approve December 2025 Record of Actions **26-22**

   Attachments: DRAFT Alamo MAC ROA 12.2.2025
8. Future Agenda Items

The next meeting is currently scheduled for February 3, 2026 at 6:00pm.

Adjourn

The Committee will provide reasonable accommodations for persons with disabilities planning to attend the Committee meetings. Contact the staff person listed below at least 72 hours before the meeting. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at 309 Diablo Road, Danville, during normal business hours. Staff reports related to items on the agenda are also accessible online at www.contracosta.ca.gov.

For Additional Information Contact: Cameron Collins at Cameron.Collins@ bos.cccounty.us

File #: 26-20 **Agenda Date:** 1/6/2026 **Agenda #:** 4.

Advisory Board: Alamo Municipal Advisory Council
Subject: CDVR25-01055 - 208 Valley Oaks, Drive
Contact: Joe Lawlor, Department of Conservation and Development

Information:
The applicant requests a variance permit to allow an approximately 8 ft. 9 in.
side yard setback (where 20 ft. is the minimum required), for construction of a pool with raised bond beams.

CONTRA COSTA COUNTY
DEPARTMENT OF CONSERVATION AND DEVELOPMENT
COMMUNITY DEVELOPMENT DIVISION
30 Muir Road
Martinez, CA 94553-4601
Phone: 925-655-2700
Fax: 925-655-2758

CONTRA COSTA
CONSERVATION & DEVELOPMENT

AGENCY COMMENT REQUEST

Date 11/19/2025

We request your comments regarding the attached application currently under review.

DISTRIBUTION

INTERNAL

- ✔ Building Inspection
- Grading Inspection
- Advance Planning
- Housing Programs
- Trans. Planning
- Telecom Planner
- ALUC Staff
- HCP/NCCP Staff
- County Geologist

HEALTH SERVICES DEPARTMENT

- ✔ Environmental Health
- Hazardous Materials

PUBLIC WORKS DEPARTMENT

- Engineering Services
- Special Districts
- Traffic
- Flood Control (Full-size)

LOCAL

- ✔ Fire District _____
  - ✔ San Ramon Valley – (email) rwendel@srvfire.ca.gov
  - Consolidated – (email) fire@cccfpd.org
- ✔ Sanitary District Central San
- ✔ Water District EBMUD
- City of _____
- School District(s) _____
- LAFCO
- Reclamation District #_____
- East Bay Regional Park District
- Diablo/Discovery Bay/Crockett CSD
- ✔ MAC/TAC Alamo
- ✔ Improvement/Community Association **(AIA)**
- CC Mosquito & Vector Control Dist (email)

OTHERS/NON-LOCAL

- CHRIS (email only: nwic@sonoma.edu) __
- Fish and Wildlife, Region 3 – Bay Delta __
- ive American Tribes

ADDITIONAL RECIPIENTS

_____

_____

Please submit your comments to:

Project Planner Joseph Lawlor
Phone # 925-655-2872
E-mail joseph.lawlor@dcd.cccounty.us
County File # CDVR25-01055

Prior to 12/19/2025

* * * * *

We have found the following special programs apply to this application:

- Landslide
- Active Fault Zone (A-P)
- Liquefaction
- Flood Hazard Area
- ✔ 60-dBA Noise Control
- CA EPA Hazardous Waste Site
- High or Very High FHSZ

* * * * *

AGENCIES: Please indicate the applicable code section for any recommendation required by law or ordinance. Please send copies of your response to the Applicant and Owner.

Comments: None Below ___ Attached

Print Name _____

_____
Signature DATE

Agency phone # _____

CONTRA COSTA
CONSERVATION & DEVELOPMENT

Planning Application Summary

County File Number: CDVR25-01055 **File Date: 11/3/2025**

Applicant:
taylor hawkins Hawkins Enterprises
6 crow canyon ct suite 110
san ramon, CA 94583

taylor@hawkinspools.com
(925) 415-5258

Property Owner:
TODD A MCGREGOR
208 VALLEY OAKS DR
ALAMO, CA 94507 204

taylor@hawkinspools.com
(213) 393-3633

Project Description: The applicant requests a variance permit to allow an approximately 8 ft. 9 in. side yard setback (where 20 ft. is the minimum required), for construction of a pool with raised bond beams

Project Location: (Address: 208 VALLEY OAKS DR, ALAMO, CA 94507 204), (APN: 197371014)

Additional APNs:

General Plan Designation(s): RVL

Flood Hazard Areas: X

60-dBA Noise Control: Yes

Sphere of Influence: N/A

Sanitary District: CENTRAL SANITARY

Specific Plan: N/A

Zoning District(s): A-2 : R-40 **AP**

Fault Zone: No

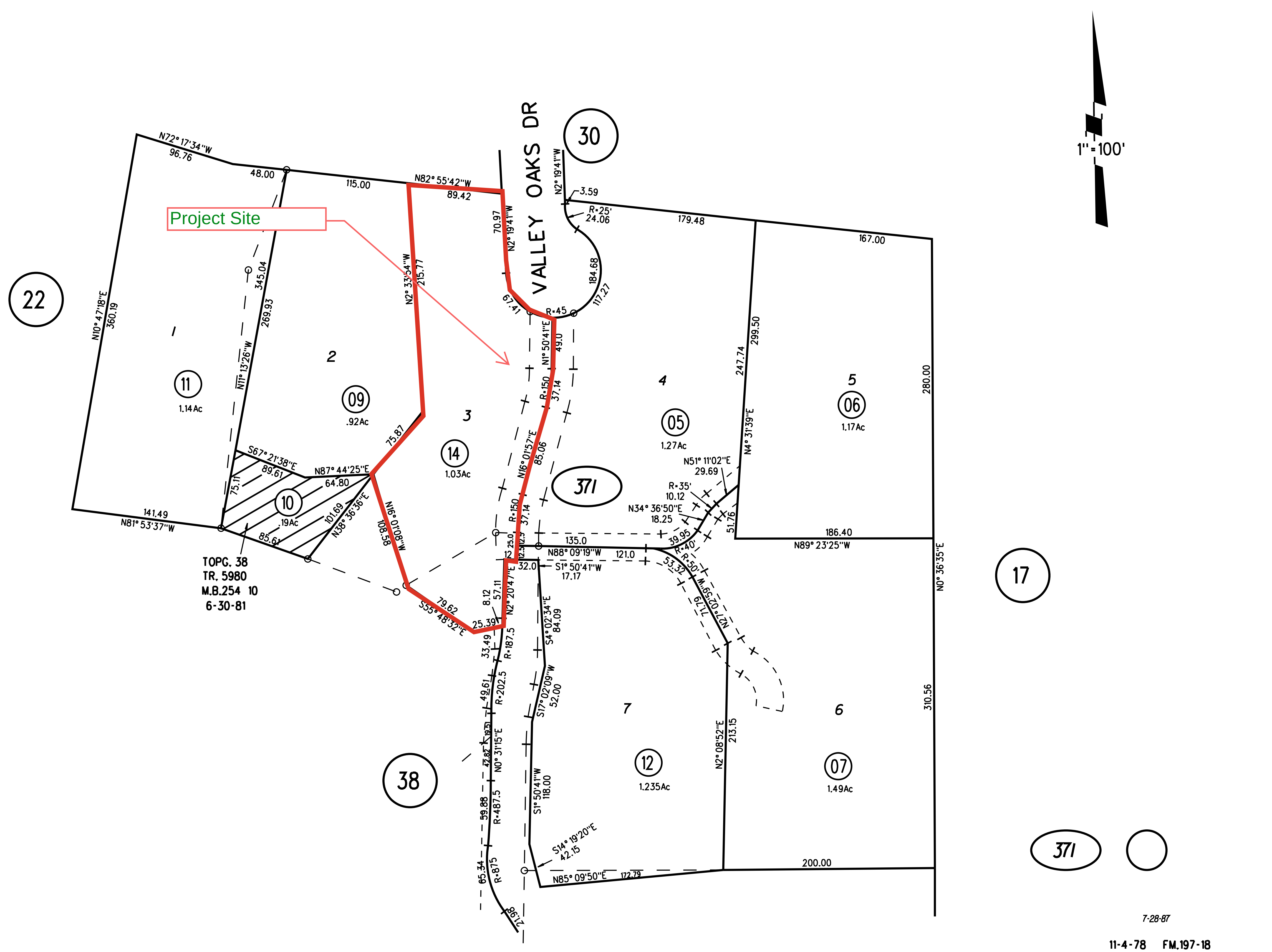
MAC/TAC: Alamo

Fire District: SAN RAMON VLY FIRE

Housing Inventory Site: NO

Fees:

Fee Item	Description	Account Code	Total Fee	Paid
052B	Notification Fee ($30)	002606-9660-REV-000-5B052B	30.00	30.00
VRS0044	Zone Variance - DCD	002606-9660-REV-000-5B0044	3250.00	3250.00
		Total:	**3280.00**	**3280.00**



NOTE: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE INFORMATION DELINEATED HEREON. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL LOT SPLIT OR BUILDING SITE ORDINANCES.

7-28-87

11-4-78 FM.197-18

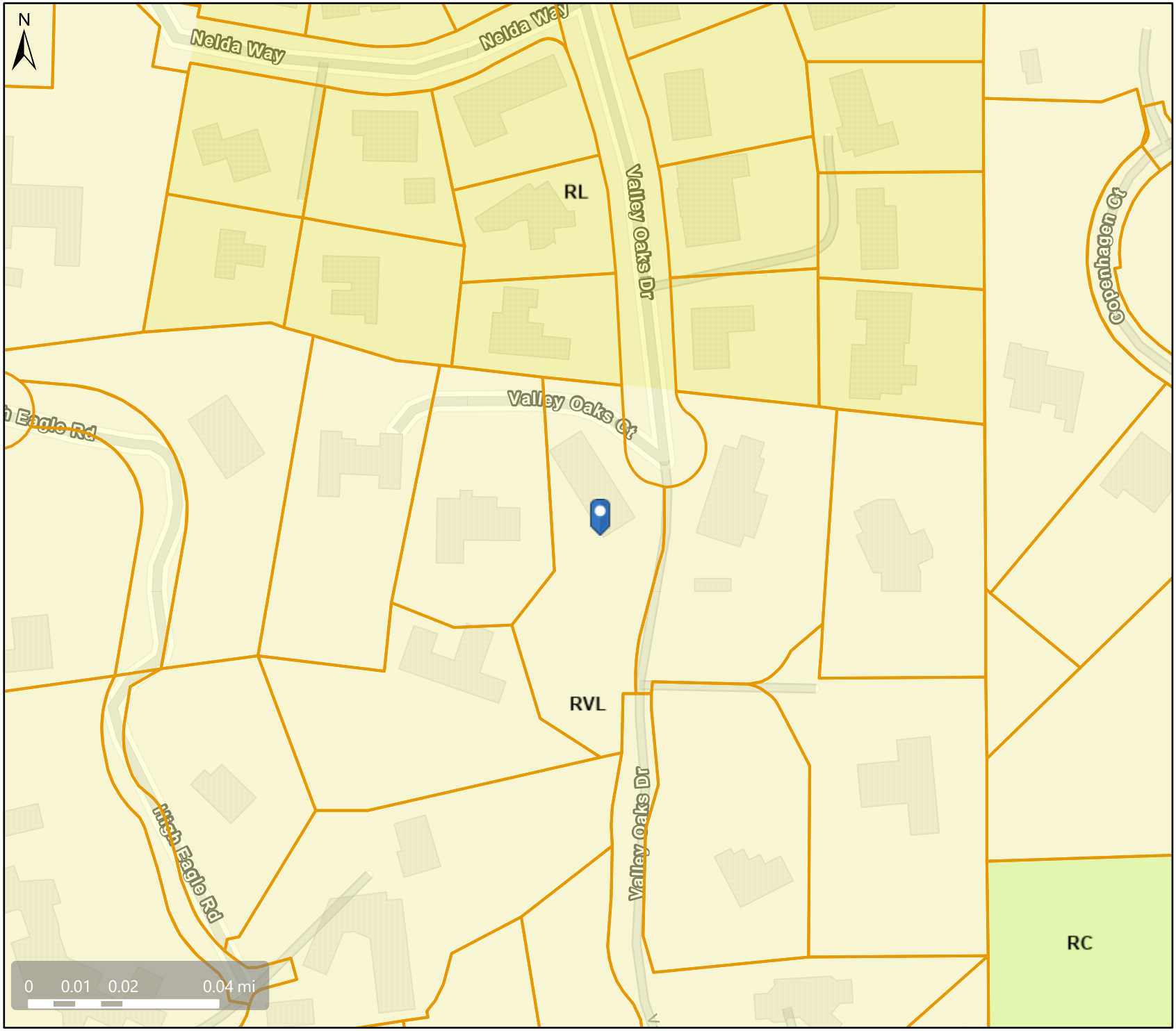
ASSESSOR'S MAP

BOOK 197 PAGE 37

CONTRA COSTA COUNTY, CALIF.

Sanborn Date : 11/06/1999

General Plan RVL



Map Legend

- Assessment Parcels

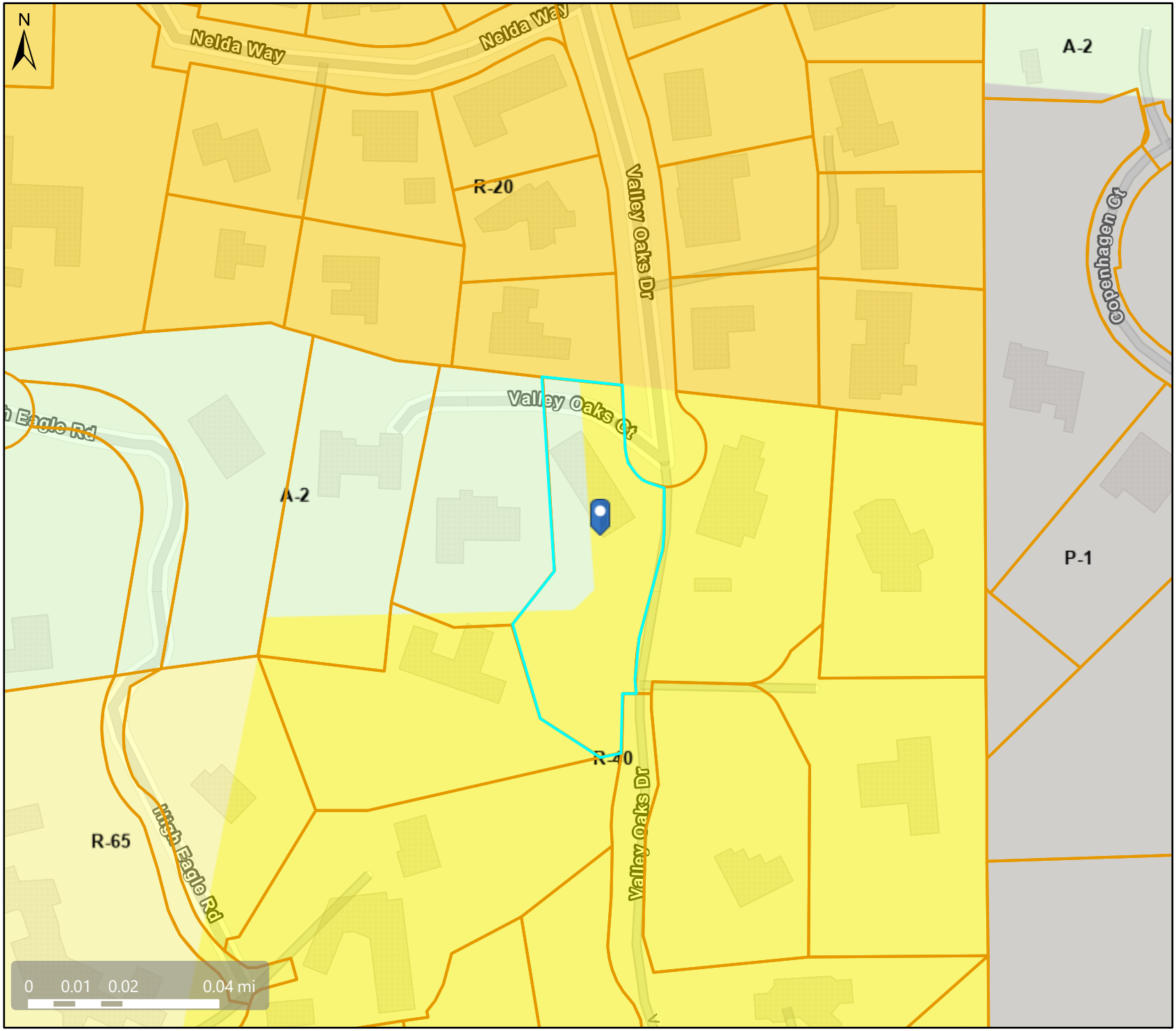
Planning

General Plan

- RVL (Residential Very-Low Density) (≤1 du/na)
- RL (Residential Low Density) (1-3 du/na)
- RC (Resource Conservation)

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphe
Datum: WGS 1984

Zoning R-40 and A-2



Map Legend

- Assessment Parcels

Planning

Zoning

ZONE_OVER

- R-20 (Single Family Residential)
- R-40 (Single Family Residential)
- R-65 (Single Family Residential)
- A-2 (General Agriculture)
- P-1 (Planned Unit)

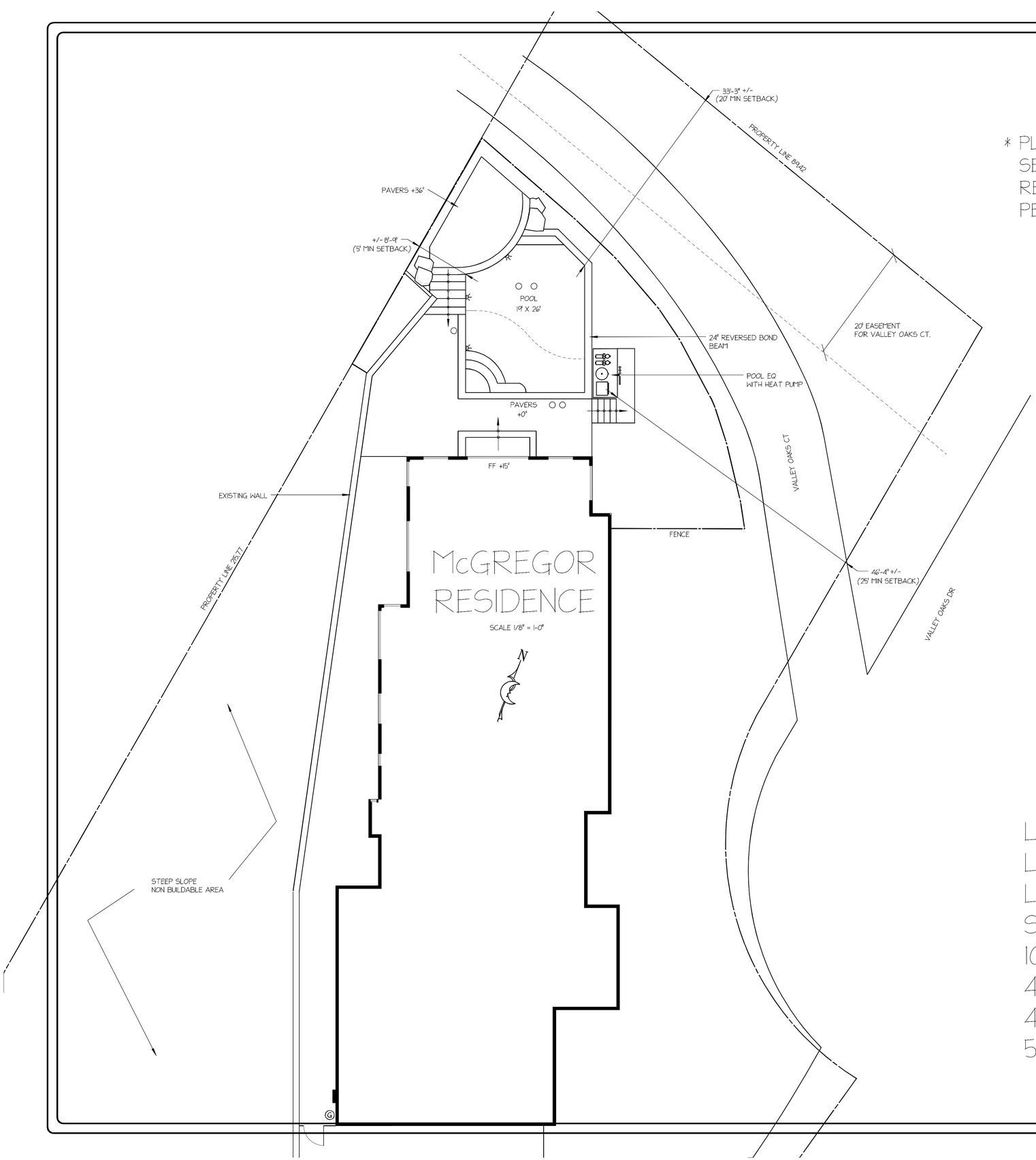
Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphe
Datum: WGS 1984

Aerial

Map Legend

- Assessment Parcels
- Planning
  - Unincorporated
  - Board of Supervisors' Districts
- Base Data
  - Address Points

Spatial Reference
PCS: WGS 1984 Web Mercator Auxiliary Sphe
Datum: WGS 1984



RECEIVED on 11/03/2025 CDVR25-01055
By Contra Costa County
Department of Conservation and Development

* PLEASE VERIFY THAT THE SUGGESTED SETBACK ON THE BACK WEST SIDE MUST BE 20' REQUIRING A VARIANCE AND NOT THE NORMAL 5' PER PUBLISHED GUIDELINES FOR SWIMMING POOLS

PROJECT NOTES:
1. PROPOSED SWIMMING POOL WITH ELECTRIC HEAT PUMP (NO GAS HEATER).
2. NO TREES ARE WITHIN 20' OF THE PROPOSED PROJECT.

VARIANCE APPLICATION NOTES:

1. THE NORTH (SIDE) AND EAST (FRONT) SETBACKS ARE IN COMPLIANCE WITH THE REQUIRED DISTANCES.
2. THE REAR SETBACK REQUEST IS FOR 5' FROM THE WEST (BACK) PROPERTY LINE.

REASON FOR VARIANCE:
1. ALL OTHER AREAS OF THE PROPERTY ARE STEEP SLOPES AND NOT ACCESSIBLE OR BUILDABLE.

2. VALLEY OAK CT. WAS NOT CORRECTLY BUILT IN THE REQUIRED EASEMENT AND ALMOST ENTIRELY ENCRAOCHES ONTO THE McGREGOR PROPERTY.

3. THE LOCATION OF THE PROPOSED POOL IS RESTRICTED DUE TO THE LOCATION OF VALLEY OAKS CT. BEING BUILT IN THE WRONG LOCATION OUTSIDE OF THE ALLOCATED EASEMENT.

4. IF VALLEY OAKS CT WAS NOT ENCRAOCHING ON THE PROPERTY THERE WOULD BE ROOM FOR THE POOL TO MEET THE 20' SUGGESTED SETBACK.

CONTACT:
TAYLOR HAWKINS
taylor@hawkinspools.com
(925) 415-5258

L-1 - SWIMMING POOL
L-2 - SITE PLAN
L-3 - NOTES
S-1 - ENGINEERING COVER SHEET
100 - POOL STRUCTURAL DETAILS
400 - WALL SURCHARGE DETAILS
440 - RAISED BOND BEAM DETAILS
501 - FREESTANDING WALL DETAILS

NOTES

HAWKINS POOLS
80 S. BUCHANAN CIR. SUITE A
PACHECO, CA. 94553
OFFICE (925) 886-1300
LIC# 454213

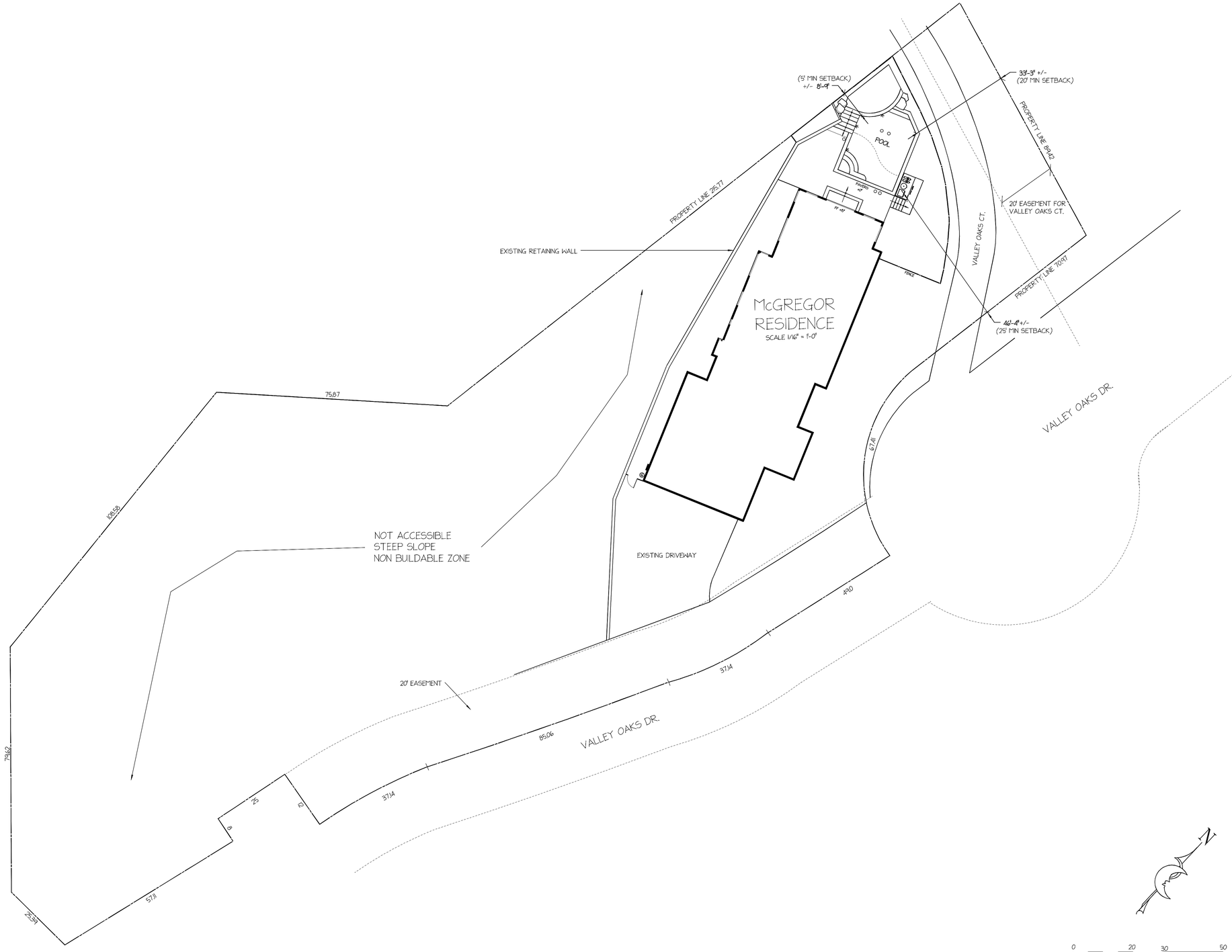
No.	Date	Description

REVISIONS

SWIMMING POOL

McGREGOR,
TODD & NATALIE
208 VALLEY OAKS DR
ALAMO, CA
213-393-3633
hypoxidoc@gmail.com

SCALE 1/8" = 1'-0"	PROJECT NO.
DRAWN BY JEFF JONES	
CHECKED BY	SHEET NO. L-1
DATE 10-28-25	
DATE OF PRINT	



NOTES

HAWKINS POOLS

80 S. BUCHANAN CIR. SUITE A

PACHECO, CA 94553

OFFICE (925) 886-1300

FAX (925) 838-7670

LIC. # 454213

No.	Date	Description

REVISIONS

SITE PLAN

McGREGOR,
TODD & NATALIE

208 VALLEY OAKS DR
ALAMO, CA

213-393-3633

SCALE	1/16" = 1'-0"
DRAWN BY	
CHECKED BY	
DATE	10-28-25
DATE OF PRINT	

PROJECT NO.

SHEET NO.

L-2

ENERGY NOTES

PUMP SIZING AND FLOW RATES

1. PUMP FLOW RATES SHALL BE CALCULATED USING THE FOLLOWING EQUATION: H = C X F 2
WHERE:
H - THE TOTAL SYSTEM HEAD IN FEET OF WATER
F= THE FLOW RATE IN GALLONS PER MINUTE (GPM)
C= A COEFFICIENT BASED ON THE VOLUME OF THE POOL
0.0167 FOR POOLS LESS THAN OR EQUAL TO 17,000 GALLONS.
0.0082 FOR POOLS GREATER THAN 17,000 GALLONS.

2. FILTRATION PUMPS SHALL BE SIZED, OR IF PROGRAMMABLE, SHALL BE PROGRAMMED, SO THAT THE FILTRATION FLOW RATE IS NOT GREATER THAN THE RATE NEEDED TO TURN OVER THE POOL WATER VOLUME IN 6 HOURS OR 36 GPM, WHICHEVER IS GREATER.

3. PUMP MOTORS USED FOR FILTRATION WITH A CAPACITY OF 1 HP OR MORE SHALL BE MULTI-SPEED.

4. EACH AUXILIARY POOL LOAD SHALL BE SERVED BY EITHER SEPERATE PUMPS OR THE SYSTEM SHALL BE SERVED BY A MULTI-SPEED PUMP. EXCEPTION: PUMPS LESS THAN 1 HP MAY BE SINGLE SPEED.

5. MULTI-SPEED PUMPS SHALL HAVE CONTROLS WHICH DEFAULT TO THE FILTRATION FLOW RATE WHEN NO AUXILIARY POOL LOADS ARE OPERATING.

6. FOR MULTI-SPEED PUMPS, THE CONTROLS SHALL DEFAULT TO THE FILTRATION FLOW RATE SETTTING WITHIN 24 HOURS AND SHALL HAVE AN OVERRIDE CAPABILITY FOR SERVICING.

SYSTEM PIPING.

7. A LENGTH OF STRAIGHT PIPE THAT IS GREATER THAN OR EQUAL TO AT LEAST 4 PIPE DIAMETERS SHALL BE INSTALLED BEFORE THE PUMP.

8. POOL PIPING SHALL BE SIZED SO THAT THE VELOCITY OF THE WATER AT MAXIMUM FLOW FOR AUXILIARY POOL LOADS DOES NOT EXCEED 8 FEET PER SECOND IN THE RETURN LINE AND 6 FEET PER SECOND IN THE SUCTION LINE.

9. ALL ELBOWS SHALL BE SWEEP ELBOWS OR OF AN ELBOW-TYPE THAT HAS A PRESSURE DROP OF LESS THAN THE PRESSURE DROP OF STRAIGHT PIPE WITH A LENGTH OF 30 PIPE DIAMETERS.

VALVES

10. MINIMUM DIAMETER OF BACKWASH VALVES SHALL BE 2 INCHES OR THE DIAMETER OF THE RETURN PIPE, WHICHEVER IS GREATER.

SWIMMING POOL AND SPA HEATER REQUIREMENTS

POOL AND SPA HEATER SHALL BE CERTIFIED BY THE ENERGY COMMISSION TO COMPLY WITH 110.4 AND 110.5 TO INCLUDE THE FOLLOWING:

1. MINIMUM HEATING EFFICIENCY TO APPLIANCE EFFICIENCY REGULATIONS.
2. THE ON / OFF SWITCH IS OUTSIDE OF THE HEATER.
3. PERMANENT AND WEATHERPROFF OPERATING INSTRUCTIONS.
4. NO ELECTRIC RESITANCE HEATING.
5. ELECTRIC SPARK IGNITION, NO CONTINUOUSLY BURNING PILOT LIGHTS.
6. THE POOL AND SPA TO HAVE A FITTED COVER INSTALLED PRIOR TO THE FINAL INSPECTION.

PROJECT NOTES

OCCUPANCY - RESIDENTIAL GROUP R-3

THE PROJECT WILL MEET ALL CURRENT LOCAL CITY, COUNTY, AND STATE BUILDING CODES.

THE FOLLOWING CODES AND NOTES APPLY:

1. PER CRC R106.1.1
THE FOLLOWING CODES SHALL APPLY
2022 CALIFORNIA RESIDENTIAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFRONIA PLUMBING CODE

2. ALL CURRENT MUNICIPAL CODES

3. SMOKE AND CARBON MONOXIDE ALARMS SHALL COMPLY WITH CRC R314.3 AND R315.3 TO BE VERIFIED IN FIELD.

4. THE SWIMMING POOL AND SPA SUCTION LINES WILL HAVE ANTI-ENTRAPMENT GRATES PER CRC AV100.8

5. IF AN AUTOMATIC POOL COVER IS SHOWN THE POOL AUTOMATIC COVER SHALL COMPLY WITH ASTM F1346.CRC AV 100.2

6. POOL & SPA LIGHTING IS LED LOW VOLT AND MEETS ALL 2022 CALIFORNIA ELECTRICAL CODES.

7. GAS LINE TRENCHING: MIN 18" DEEP. POLYETHELENE PIPE WITH METALIC TRANSITIONAL RISERS. 14 GAUGE TRACER WIRE

8. DRAINAGE NOTE: THE SITE IS NOT BEING REGRADED. THE EXISTING GRADES REMAIN. THE NEW DECKS WILL TIE INTO THE EXISTING DRAIN SYSTEM. STORM WATER PATTERNS WILL NOT BE ALTERED.

9. ALL WIRING THE IS BURIED MUST BE LISTED AS WET RATED.

10. THE POOL WILL BE FENCED PER POOL CODES CBC SECTION 3109.4.4.3 THE PROJECT WILL MEET ALL CURRENT SAFETY ORDINACE CODES.

11. SAFETY FENCING SPECIFICATIONS: 60" HIGH MIN. NO OPENINGS OR VOIDS TO EXCEED 4". THE FENCE TO HAVE A 2" X 4" TOP AND BOTTOM RAIL WITH 4" X 4" MIN. PTDF POST. THE BOTTOM RAIL NOT TO EXCEED 2" ABOVE GRADE. THE GATES TO OPEN OUT AWAY FROM THE POOL, TO BE SELF CLOSING AND SELF LATCHING. THE LATCH A MIN. OF 60" ABOVE GRADE.

12. STATE OF CALIFORNIA DROWNING PREVENTION SAFETY FEATURES PER CBC SEC. 3109.4.4.2 & BUILDING STANDARDS INFORMATION BULLETIN 17-8 EFFECTIVE 1-1-18: THIS PROJECT WILL BE EQUIPPED WITH DOOR ALARMS THAT MEET THE CODE REQUIRMENTS AND 'POOLGUARD MODEL PGRM-2' NSF CERTIFIED TO THE ASTM SAFTEY SPECIFICATION F 2208.

13. POOL COVER PROVIDED PER CA ENERGY CODE 110.4(b)2. LOCATION- ON THE POOL.

14. THE POOL LIGHTS ARE LED LOW VOLT. THERE ARE NO LIGHTS, OUTLETS, OR ELECTRICAL SERVICE WITHIN 15' OF THE WATER OF THE POOL PER CEC Art.680.22 (B)

15. BONDING- PER CEC Sec.680.26(C) THE POOL WATER WILL BE BONDED WITH A 4" SQUARE STAINLESS STEEL 316L (9 SQ. INCHES) ROPE CUP ANCHOR. MOUNTED BELOW WATER SURFACE. ALL POOL LIGHTS ARE PLASTIC LOW VOLT.

ALL ADDITIONAL BONDING PER STRUCTURAL NOTES ON SHEET 100 IF PROVIDED.

16. THE ELECTICAL FROM THE MAIN PANEL TO THE POOL SUB-PANEL SHALL USE #8 AWG CONDUCTOR HOUSED IN 1 1/4" CONDUIT AND BURRIED AT A DEPTH NO LESS THAN 18". PER CEC TABLE 300.5

17. THE MOTOR FOR POOL COVER SHALL BE AT LEAST 5 FEET FROM THE INSIDE WALL OF THE POOL UNLESS SEPARATED BY A WALL, COVER, OR OTHER PERMANENT BARRIER. THE DEVICE THAT CONTROLS THE OPERATION OF THE MOTOR FOR AN ELECTRICALLY OPERATED POOL COVER SHALL BE IN A LOCATION SUCH THAT THE OPERATOR HAS FULL VIEW OF THE POOL. CEC 680.27(B) (1)

18. OUTLETS SUPPLYING POOL PUMP MOTORS CONNECTED TO SINGLE-PHASE, 120-VOLT THROUGH 240-VOLT BRANCH CIRCUITS, SHALL BE PROVIDED WITH GFCI PROTECTION FOR PERSONNEL. CEC 680.21 (C)

19. ALL RECEPTACLES WITHING 20' OF THE POOL MUST BE GFCI

20. OVERHEAD WIRES SHALL NOT CROSS THE POOL CEC 680.9 (A)

21. POOL LIGHTS TO HAVE GFCI PROTECTION ON A SEPERATE BRANCH CIRCUIT CEC 680.23(A)(3)

SCALE IN FEET

NOTES

HAWKINS POOLS
80 S. BUCHANAN CIR. SUITE A
PACHECO, CA. 94553
OFFICE (925) 886-1300
LIC# 454213

No.	Date	Description

REVISIONS

NOTES

McGREGOR,
TODD & NATALIE

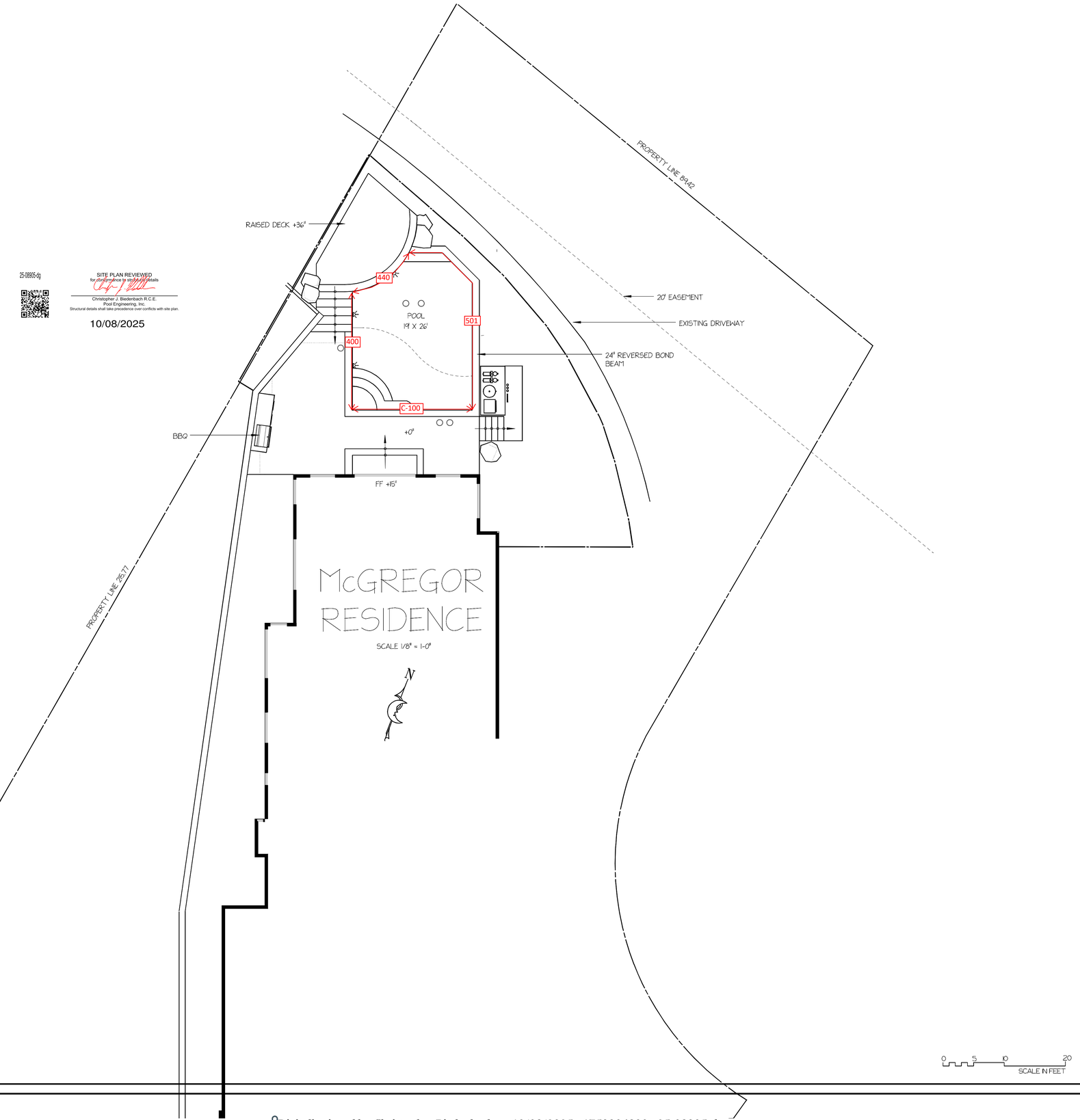
208 VALLEY OAKS DR
ALAMO, CA

213-393-3633

SCALE	1/8" = 1'-0"
DRAWN BY	
CHECKED BY	
DATE	
DATE OF PRINT	

PROJECT NO.

SHEET NO.
L-3



25-08905-dg

SITE PLAN REVIEWED
for compliance to applicable details

Christopher J. Biedenbach R.C.E.
Pool Engineering, Inc.
Structural details shall take precedence over conflicts with site plan.

10/08/2025

NOTES

HAWKINS POOLS
80 S. BUCHANAN CIR. SUITE A
PACHECO, CA. 94553
OFFICE (925) 886-1300
LIC# 454213

No.	Date	Description
REVISIONS		

McGREGOR,
TODD & NATALIE

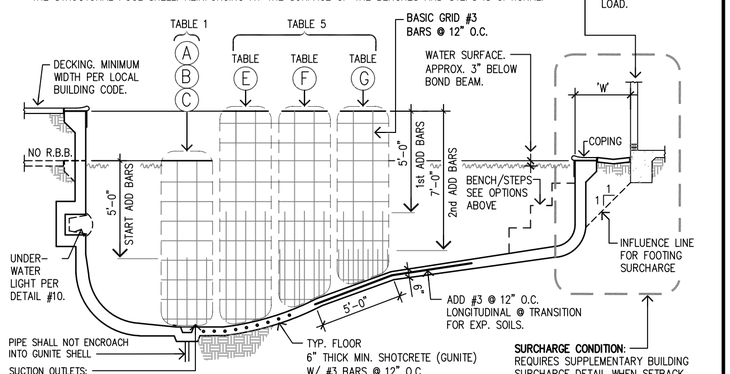
208 VALLEY OAKS DR
ALAMO, CA

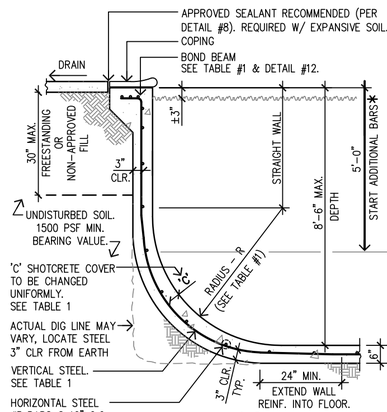
213-393-3633

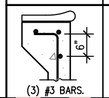
SCALE	1/8" = 1'-0"
DRAWN BY	JEFF JONES
CHECKED BY	
DATE	7-8-25
DATE OF PRINT	

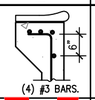
PROJECT NO.

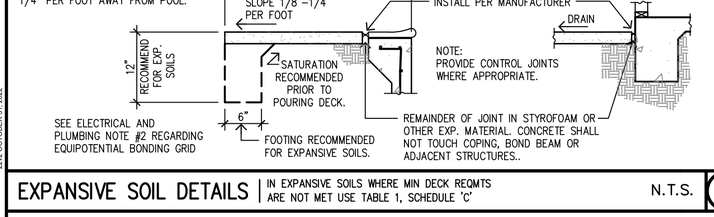
SHEET NO.
S-1

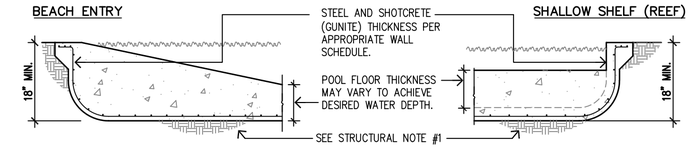


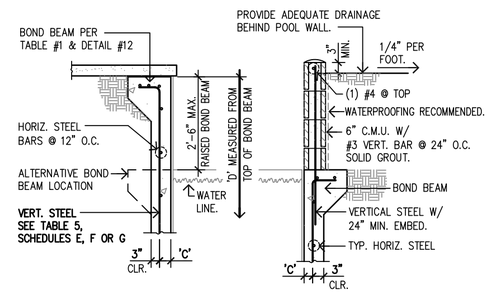


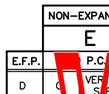


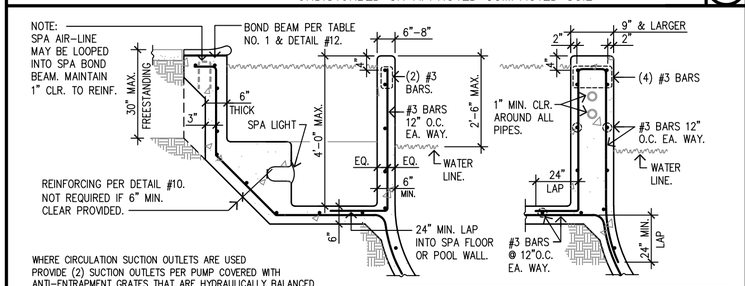


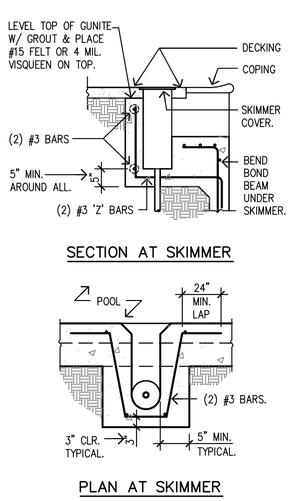


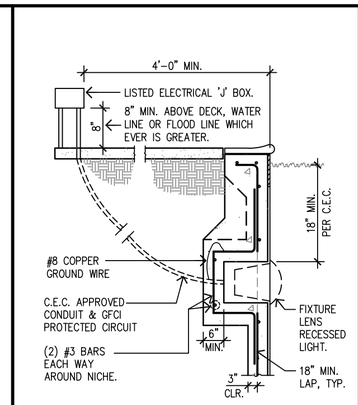


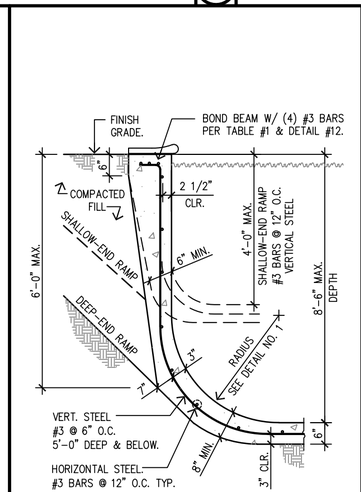


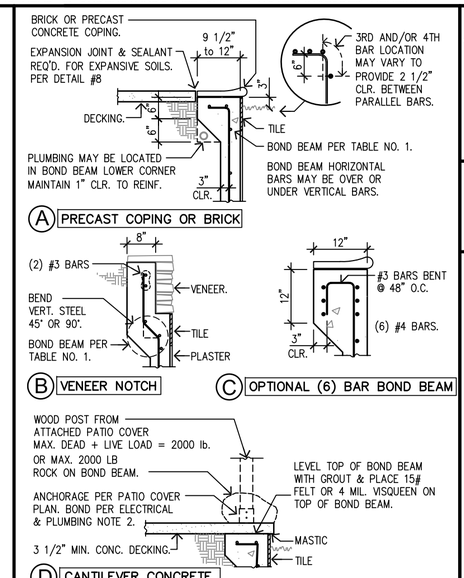












STANDARD POOL STRUCTURAL PLAN

TYPICAL LONGITUDINAL SECTION

N.T.S. ②

BENCH AND STEP OPTIONS:

1. UNDISTURBED EARTH MAY BE LEFT IN PLACE TO FORM THE STEPS OR BENCHES. REINFORCING STEEL SHOULD BE PLACED AROUND THE STEP OR BENCH SHAPED EARTH (3" CLEAR FROM EARTH).
2. THE EARTH MAY BE REMOVED AND BENCHES AND STEPS MAY BE FORMED OF SHOTCRETE (GUNITE) WITHIN THE STRUCTURAL POOL SHELL. REINFORCING AT THE SURFACE OF THE BENCHES AND STEPS IS OPTIONAL.

SUCTION OUTLETS: WHERE CIRCULATION SUCTION OUTLETS ARE USED PROVIDE (2) SUCTION OUTLETS PER PUMP COVERED WITH ANTI-ENTRAPMENT GRATES THAT ARE HYDRAULICALLY BALANCED AND SYMMETRICALLY PLUMBED THROUGH "T" FITTINGS. DRAINS SHALL BE SEPARATED BY THREE FEET IN ANY DIMENSION. SEE ELECTRICAL AND PLUMBING NOTE 8.

ALTERNATIVES TO SUCTION OUTLETS, INCLUDING SKIMMERS OR PERIMETER OVERFLOW SYSTEMS, MAY BE USED TO CONDUCT WATER TO THE RECIRCULATION PUMP.

IN HIGH WATER TABLE, INSTALL HYDROSTATIC VALVE AND ROCK PACK AT LOW POINT.

SURCHARGE CONDITION: REQUIRES SUPPLEMENTARY BUILDING SURCHARGE DETAIL WHEN SETBACK TO FOOTING 'W' IS LESS THAN POOL DEPTH.

(6' HIGH MAX. FREESTANDING MASONRY SCREEN OR GARDEN WALL DOES NOT REQUIRE SURCHARGE DETAIL)

STANDARD WALL SECTION

N.T.S. ①

RADIUS NOTE: FLOOR TO WALL TRANSITION RADIUS MAY VARY SLIGHTLY DEPENDING ON CONTRACTOR OR OWNER DESIGN INTENT. RADIUS SHALL NOT BE LESS THAN 1-FOOT AND SHALL NOT EXCEED 5-FEET.

NOTE:
BOND BEAM HORIZONTAL BARS MAY BE OVER OR UNDER VERTICAL BARS.
TYPICAL INCLUDING ALL SPECIAL DETAILS.

ADDITIONAL BARS BEGIN AT 5'-0" FROM THE TOP OF THE POOL WALL. (RAISED OR NOT RAISED).

* IF POOL WALL HEIGHT DOES NOT EXCEED 5'-0" THEN NO ADDITIONAL BARS ARE REQUIRED. **(DOES NOT APPLY TO SUPPLEMENT DETAILS)**

TABLE NO. 1

		NON-EXPANSIVE		EXPANSIVE		NO DECK/HIGH EXP.	
		A		B		C	
		(3) #3 BARS.		(4) #3 BARS.		(4) #3 BARS.	
E.F.P.		[illegible] P.C.F.		[illegible] P.C.F.		65 P.C.F.	
D	R	C	VERTICAL STEEL	C	VERTICAL STEEL	C	VERTICAL STEEL
3'0"	1'-0"	3"	#3 @ 12"	3"	#3 @ 12"	3"	#3 @ 12"
3'6"	1'-0"	3"		3"		3"	
4'0"	1'-0"	3"		3"		4"	
4'6"	1'-0"	3"		3½"		5"	
5'0"	1'-6"	[illegible]	#3 @ 6"	[illegible]	#3 @ 6"	5"	#3 @ 6"
5'6"	2'-0"	3"		4"		5"	
6'0"	2'-6"	3"		4"		6"	
6'6"	3'-0"	3"		4½"		7"	
7'0"	3'-6"	[illegible]		5"		8"	
7'6"	4'-0"	[illegible]		5½"		9"	
8'0"	4'-6"	[illegible]		[illegible]		10"	
8'6"	5'-0"	[illegible]		6"		10"	

ITEM NOT APPLICABLE
POOL ENGINEERING, INC.

ITEM NOT APPLICABLE
POOL ENGINEERING, INC.

'D' IS DISTANCE DOWN FROM TOP OF POOL WALL.

INDICATES TYPICAL RADIUS (ACTUAL RADIUS MAY VARY, SEE RADIUS NOTE AT TOP)

NO DECK OR HIGH EXPANSIVE SOIL

SURCHARGE CONDITIONS – ADDITIONAL SPECIAL DETAILS REQUIRED FOR CONDITIONS ABOVE

N.T.S. ③

NOTE:
WHEN ACTUAL SITE CONDITIONS EXCEED THE LIMITATIONS BELOW OR ADDITIONAL SURCHARGES NOT COVERED BY THIS PLAN ARE PRESENT, ADDITIONAL SURCHARGE DETAILS ARE REQUIRED.

POOLS SHALL COMPLY WITH SLOPE SETBACKS (CBC 1808.7.3)

SHALLOW FEATURES – MAINTAIN 18" MIN. EMBEDMENT INTO UNDISTURBED OR APPROVED COMPACTED SOIL

N.T.S. ④

SLOPING ENTRIES SHALL CONFORM TO ANSI/APSP/ICC-5 AND/OR THE ISPSC (WHERE ADOPTED)

RAISED BOND BEAM

N.T.S. ⑤

MASONRY NOTES:

1. CONCRETE BLOCK SHALL BE NORMAL WEIGHT UNITS (135 PCF), CONFORMING TO CBC/IBC SEC. 2103, AND ASTM C 90. ALL CONCRETE BLOCK SHALL HAVE A DESIGN STRENGTH OF f'm = 2000 psi.
2. GROUT SHALL CONFORM TO CBC/IBC SEC. 2103 & ASTM C 476 WITH f'c=2,000 PSI.
3. MORTAR SHALL BE TYPE M WITH f'c = 2500 psi AND SHALL CONFORM TO CBC/IBC SEC. 2103 & ASTM C 270.

TABLE NO. 5 RAISED BOND BEAM

	NON-EXPANSIVE		EXPANSIVE		NO DECK/HIGH EXP.	
	E		F		G	
E.F.P.	[illegible] P.C.F.		P.C.F.		65 P.C.F.	
D	C	VERTICAL STEEL	C	VERTICAL STEEL	C	VERTICAL STEEL
3'6"	3"	#3 @ 12"	3"	#3 @ 12"	3"	#3 @ 12"
4'0"	3"		3"		4"	
4'6"	3"		3½"		5½"	
5'0"	3"	#3 @ 6"	3½"	#3 @ 6"	5½"	#3 @ 6"
5'6"	3"		4"		6½"	
6'0"	3½"		5"		7½"	
6'6"	[illegible]		[illegible]		8½"	
7'0"	5"	[illegible]	6"	#3 @ 4"	8½"	#3 @ 3"
7'6"	5½"		6"		8½"	
8'0"	6½"		7"		8½"	
8'6"	7½"		8"		9½"	
9'0"	[illegible]		[illegible]		10½"	
9'6"	[illegible]		[illegible]		11½"	
10'0"	9"		11"		12½"	
11'0"	9"		[illegible]		13"	

ITEM NOT APPLICABLE
POOL ENGINEERING, INC.

ITEM NOT APPLICABLE
POOL ENGINEERING, INC.

NOTES

BY THE USE OF THIS PLAN, THE USER ACKNOWLEDGES THAT HE HAS READ & UNDERSTANDS ALL OF THE NOTES INCLUDED HEREIN. ⑥

GENERAL NOTES

1. THIS STANDARD POOL STRUCTURAL PLAN MUST BE ACCOMPANIED BY A CLEAR PLOT PLAN SHOWING POOL AND/OR SPA SHAPE, DEPTH, DISTANCE TO PROPERTY LINE, GRADE CHANGES & SLOPES AND ADJACENT STRUCTURES.
2. REPRESENTATIVES OF POOL ENGINEERING INC. HAVE NOT INSPECTED THE SITE & ARE RELYING ON INFORMATION PROVIDED BY THE CONTRACTOR OR OWNER TO DETERMINE THE ADEQUACY OF THIS STANDARD POOL STRUCTURAL PLAN FOR THE ACTUAL SITE CONDITIONS. SHOULD SITE CONDITIONS VARY FROM THAT COVERED BY THIS STANDARD POOL STRUCTURAL PLAN, IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR THE OWNER TO NOTIFY POOL ENGINEERING INC. AND OBTAIN APPLICABLE SPECIAL ENGINEERING DETAILS PRIOR TO CONSTRUCTION. EXPANSIVE SOIL DETAILS ARE VALID ONLY FOR STATED EQUIVALENT FLUID PRESSURES AND POOL ENGINEERING INC. RECOMMENDS THAT THE OWNER OR CONTRACTOR OBTAIN A SOILS REPORT.
3. POOL ENGINEERING INC. (PEI) RECOMMENDS THAT THE PROPERTY OWNER AND/OR POOL CONTRACTOR RETAIN A LICENSED GEOTECHNICAL CONSULTANT TO OBTAIN GEOTECHNICALLY RELATED DESIGN CRITERIA FOR THE PROPOSED POOL SITE. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR POOL CONTRACTOR TO REQUIRE THAT THE LICENSED GEOTECHNICAL CONSULTANT CONFIRM THAT THE POOL STRUCTURAL PLANS PROVIDED MEET THE REQUIREMENTS OF THE PROJECT SITE AND THE GEOTECHNICAL REPORT. WHEN A GEOTECHNICAL REPORT HAS NOT BEEN PROVIDED TO PEI, IT IS THE OWNER AND/OR CONTRACTOR'S RESPONSIBIILITY TO VERIFY THAT THE SITE GEOTECHNICAL CONDITIONS ARE SUITABLE FOR CONSTRUCTION OF THE PROPOSED POOL BASED ON THE PEI PLANS BEING USED.
4. THIS PLAN IS NOT VALID WITHOUT ADDITIONAL SURCHARGE DETAILS WHEN THE CONDITIONS AS SHOWN IN DETAIL #3 APPLY (PER CBC SECTION 1808.7.3). ALL POOLS SHALL COMPLY WITH SLOPE SETBACKS PER CBC SECTION 1808.7.3.
5. THE STANDARD POOL STRUCTURAL PLAN IS NOT INTENDED TO BE APPLICABLE TO NON-STRUCTURAL ITEMS INCLUDING BUT NOT LIMITED TO PLUMBING, ELECTRICAL, FENCING, CONCRETE DECKING AND POOL GEOMETRICS.
6. DECKING CONSTRUCTION IS SHOWN AS RECOMMENDED MINIMUM CONSTRUCTION AND DOES NOT DEMONSTRATE A SYSTEM THAT WILL RESIST HEAVING DUE TO SOIL EXPANSION.
7. ALL CONSTRUCTION SHALL COMPLY WITH THE 2022 EDITIONS OF THE CALIFORNIA BUILDING CODE (CBC), CALIFORNIA ELECTRICAL CODE (CEC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA ENERGY CODE, 2022 BUILDING ENERGY EFFICIENCY STANDARDS, 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, AND LOCAL ORDINANCES.
8. POOLS WITH DIVING BOARDS SHALL MEET DIVING BOARD MANUFACTURER'S POOL GEOMETRIC STANDARDS AND/OR LOCAL CODES.
9. SIGNS & SAFETY EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.
10. PUBLIC POOLS REQUIRE COUNTY HEALTH DEPARTMENT APPROVAL AND PROVISIONS FOR ASSISTIVE DEVICES FOR THE DISABLED.
11. CONTRACTOR OR OWNER SHALL VERIFY ALL FIELD CONDITIONS & DIMENSIONS AT JOB SITE AND SHALL BE RESPONSIBLE FOR JOB SITE CONDITIONS AND THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE COURSE OF CONSTRUCTION.
12. POOL LENGTH, GRADE BREAK LOCATIONS & DEPTH DIMENSIONS AS NOTED ON THE PLOT PLAN SHALL COMPLY WITH ANSI/APSP/PHTA SUGGESTED MINIMUM STANDARDS FOR RESIDENTIAL POOLS AND LOCALLY ADOPTED POOL AND SPA CODES. PUBLIC POOLS SHALL COMPLY WITH APPLICABLE STATE AND LOCAL HEALTH DEPT. REGULATIONS.

ELECTRICAL AND PLUMBING

1. ALL ELECTRICAL SHALL BE IN CONFORMANCE WITH THE 2022 CEC.
2. POOL SHELL AND PERIMETER PAVED AND UNPAVED SURFACES SHALL BE BONDED IN ACCORDANCE WITH CEC 680.26(B). BONDING TO PERIMETER SURFACES SHALL BE PROVIDED AS SPECIFIED IN CEC 680.26(B)(2)(A) OR (2)(B) AND SHALL BE ATTACHED TO THE POOL REINFORCING STEEL OR COPPER CONDUCTOR GRID AT A MINIMUM OF FOUR (4) POINTS UNIFORMLY SPACED AROUND THE PERIMETER OF THE POOL.
3. OBTAIN ELECTRICAL AND PLUMBING PERMITS ALONG WITH POOL BUILDING PERMIT.
4. ALL EQUIPMENT SHALL BE LISTED AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH LOCAL REGULATIONS.
5. POOLS SHALL BE EQUIPPED WITH A FILTERING SYSTEM.
6. BACKWASH SHALL BE DISPOSED OF IN AN APPROVED MANNER.
7. POOL/SPA WATER HEATER AND GAS PIPING INSTALLATION TO BE IN CONFORMANCE WITH THE CPC.
8. SUCTION OUTLETS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ANSI/APSP-7 AND 2022 CBC SECTION 3109.2 (HS CODE §§ 115920-115929).
9. POTABLE WATER SUPPLY TO SWIMMING POOLS, SPAS, AND HOT TUBS SHALL BE PROTECTED FROM BACKFLOW IN ACCORDANCE WITH CPC 603.5.20
10. CHEMICAL DISPENSERS SHALL COMPLY WITH 2022 CPC SECTION 603.5.21 REQUIREMENTS FOR PROTECTION AGAINST BACKFLOW AND COMPLY WITH ASSE 1055.

STRUCTURAL NOTES

1. SOIL SHALL HAVE A MINIMUM BEARING VALUE OF 1500 PSF. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR APPROVED COMPACTED FILL. THIS PLAN IS NOT SUITABLE WHERE POTENTIAL EXISTS FOR DIFFERENTIAL MOVEMENT FROM DISSIMILAR SOIL CONDITIONS UNDER POOL, INCLUDING BUT NOT LIMITED TO CUT-FILL TRANSITIONS.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS & CONFORM TO ASTM A615 GRADE 40 FOR #3 BARS AND #4 BARS. SPLICES TO BE LAPPED A MINIMUM OF 24". MINIMUM CLEARANCE BETWEEN PARALLEL BARS IS 2 1/2". #5 BARS USED ON SUPPLEMENTARY DETAILS SHALL BE GRADE 60 (UNLESS NOTED) AND BE LAPPED A MIN OF 30".
3. (1) #4 BAR IS EQUIVALENT TO AND MAY BE USED IN PLACE OF (2) #3 BARS, WITH THE EXCEPTION THAT IF #4 BARS ARE USED FOR THE BASIC GRID, THE MAXIMUM SPACING IS #4 BARS AT 18" O.C..
4. BONDING/GROUNDING (PER THE CEC) OF THE STRUCTURAL REINFORCING MUST BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE/SHOTCRETE.
5. PORTLAND CEMENT SHOTCRETE SHALL CONFORM TO ASTM C150 AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI AND A WATER/CEMENT RATIO LESS THAN OR EQUAL TO 0.45.

WHERE SHOTCRETE IS EXPOSED TO SOIL OR WATER CONTAINING DELETERIOUS AMOUNTS OF WATER SOLUBLE SULFATE, OR WHERE INTENDED TO HAVE LOW PERMEABILITY WHERE EXPOSED TO WATER, SHOTCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4,500 PSI, W/C RATIO ≤ 0.45, AND SHALL UTILIZE TYPE V CEMENT.

6. KEEP CONCRETE DAMP CONTINUOUSLY FOR 14 DAYS.
7. ALL INTERIOR SURFACES OF POOL/SPA SHALL BE COATED WITH A WATERPROOF SURFACE.

GLAZING IN HAZARDOUS LOCATIONS

GLAZING SHALL COMPLY WITH THE CBC SECTION 2406.4, INCLUDING LOCALLY ADOPTED AMENDMENTS.

1. GLAZING IN WALLS AND FENCES USED AS A BARRIER SHALL BE SAFETY GLAZING WHEN ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
   - A. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE ANY STANDING OR WALKING SURFACE.
   - B. THE GLAZING IS WITHIN 5 FEET OF A SWIMMING POOL OR SPA DECK AREA.

CONTINUOUS SHOTCRETE INSPECTION

WHERE REQUIRED BY THE PERMITTING AGENCY, PNEUMATIC CONCRETE PLACEMENT SHALL BE INSPECTED BY A SPECIAL INSPECTOR IN CONFORMANCE WITH CBC SECTION 1704, WHO SHALL SUBMIT A STATEMENT INDICATING COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

TITLE 24

1. PUMPS SHALL BE SIZED PER SECTION 150(p) OF THE LATEST ADOPTED EDITION OF THE BUILDING ENERGY EFFICIENCY STANDARDS.
2. A LENGTH OF STRAIGHT PIPE GREATER THAN OR EQUAL TO 4 PIPE DIAMETERS SHALL BE INSTALLED BEFORE THE PUMP.
3. ALL ELBOWS SHALL BE SWEEP ELBOWS.
4. MANDATORY REQUIREMENTS FOR POOL & SPA HEATING SYSTEMS & EQUIPMENT:
   - 4.1. SYSTEM IS CERTIFIED WITH: THERMAL EFFICIENCY THAT COMPLIES WITH THE APPLIANCE EFFICIENCY REGULATIONS, READILY ACCESSIBLE ON-OFF SWITCH, WEATHERPROOF OPERATING INSTRUCTIONS ON ENERGY EFFICIENT OPERATIONS, NO ELECTRIC RESISTANCE HEATING AND NO PILOT LIGHT.
   - 4.2. SYSTEM IS INSTALLED WITH:
     - A) AT LEAST 36" PIPE BETWEEN FILTER & HEATER FOR FUTURE SOLAR HEATING.
     - B) COVER FOR OUTDOOR POOLS OR OUTDOOR SPA.
   - 4.3. POOL SYSTEM HAS DIRECTIONAL INLETS & A CIRCULATION PUMP TIME SWITCH TO PERMIT OFF PEAK OPERATION.

FENCING AND BARRIERS

1. PRIOR TO FILLING, THE POOL AND OR SPA SHALL BE COMPLETELY ENCLOSED BY 5' MIN. HIGH FENCING & GATES WITH NO OPENINGS 4" OR GREATER. GATES TO BE SELF-CLOSING & SELF-LATCHING WITH LATCH A MIN. OF 5' HIGH. ACCESS GATES THROUGH FENCING SHALL OPEN AWAY FROM THE POOL. MAXIMUM VERTICAL CLEARANCE FROM GROUND TO POOL FENCING SHALL NOT EXCEED 2 INCHES. WHERE THIS VARIES FROM LOCAL CODES, THE LOCAL CODES SHALL PREVAIL.
2. BARRIERS SHALL COMPLY WITH CBC SECTION 3109.2 (HS CODE §§ 115920-115929), INCLUDING LOCALLY ADOPTED AMENDMENTS.

CITY OF FREMONT SPECIAL NOTES

THESE NOTES ARE ONLY APPLICABLE IN THE CITY OF FREMONT.

1. SEPARATE GRADING PERMIT IS REQUIRED FOR SWIMMING POOL INSTALLATION AT SLOPED SITE. GRADING PLAN SHALL BE PREPARED, STAMPED AND SIGNED BY A LICENSED CIVIL ENGINEER IN THE STATE OF CALIFORNIA.
2. MINIMUM DISTANCE BETWEEN EXTERIOR WALL OF ADJACENT BUILDING & SWIMMING POOL SHALL BE 3'-0" WIDE WALKWAY PLUS THE WIDTH OF SWIMMING POOL BOND BEAM AND NO LESS THAN THE DEPTH OF THE POOL ADJACENT TO THE BUILDING. REFER TO STANDARD POOL STRUCTURAL PLAN, DETAIL #2.
3. FOR COMMERCIAL POOLS, HEALTH DEPARTMENT SUBMITTAL PLANS SHALL ACCOMPANY THIS STRUCTURAL PLAN INDICATING ALL REQUIREMENTS OF THE CBC AND COUNTY HEALTH DEPARTMENT FOR PUBLIC SWIMMING POOLS.

CITY OF ROCKLIN SPECIAL NOTES

THESE NOTES ARE ONLY APPLICABLE IN THE CITY OF ROCKLIN.

1. IN THE ABSENCE OF A SITE SPECIFIC SOILS INVESTIGATION, SWIMMING POOL AND SPA CONSTRUCTION SHALL CONFORM TO STANDARD POOL STRUCTURAL PLAN STEEL AND GUNITE SCHEDULES FOR HIGH EXPANSIVE SOIL WITH A MINIMUM SOIL EQUIVALENT FLUID PRESSURE OF 65 P.C.F. (SCHEDULES C AND G).
2. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL OR CERTIFIED FILL COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557.

CITY OF SAN JOSE SPECIAL NOTES

THESE NOTES ARE ONLY APPLICABLE IN THE CITY OF SAN JOSE.

1. ENGINEER TO SPECIFY TABLES AND DETAILS THAT APPLY TO A SPECIFIC JOB BY ONE OF THE FOLLOWING METHODS:
   - A. A SITE PLAN STAMPED AND SIGNED BY THE ENGINEER REFERRING TO THE APPROPRIATE DETAILS AND SCHEDULES.
   - B. A LETTER STAMPED AND SIGNED PROVIDED THE SAME INFORMATION.
   - C. A STANDARD POOL PLAN WITH THE ADDRESS WRITTEN IN BY THE ENGINEER ALSO IDENTIFYING SCHEDULES AND DETAILS.
2. SWIMMING POOL AND SPA CONSTRUCTION SHALL CONFORM TO STANDARD POOL STRUCTURAL PLAN STEEL AND GUNITE SCHEDULES WITH A MINIMUM SOIL EQUIVALENT FLUID PRESSURE OF 45 P.C.F. FOR EXPANSIVE SOIL (UNITED SOIL CLASSIFICATIONS GW, GP, GM, GC, SW, SP, SM, SM-SC, ML). AN EQUIVALENT FLUID PRESSURE OF 30 PCF, NON-EXPANSIVE SOIL, MAY ONLY BE USED IF RECOMMENDED BY A SOILS ENGINEER.
3. OVER THE COUNTER PERMITS ARE NOT POSSIBLE IN AREAS DESIGNATED AS 'SPECIAL GEOLOGICAL HAZARD.' THE MASTER PLAN MIGHT BE USEABLE BASED ON THE FINDINGS OF THE GEOLOGIC AND GEOTECHNICAL REPORTS.
4. IN ACCORDANCE WITH CBC SECTION 1802.2.7, A SITE SPECIFIC SOILS INVESTIGATION MAY BE REQUIRED FOR PROJECTS LOCATED IN SEISMIC DESIGN CATEGORIES D, E, OR F.

SPA DETAILS – SPA DETAILS MAY BE USED FOR SPAS WITHOUT POOLS.

N.T.S. ⑦

WHERE CIRCULATION SUCTION OUTLETS ARE USED PROVIDE (2) SUCTION OUTLETS PER PUMP COVERED WITH ANTI-ENTRAPMENT GRATES THAT ARE HYDRAULICALLY BALANCED AND SYMMETRICALLY PLUMBED THROUGH "T" FITTINGS. DRAINS SHALL BE SEPARATED BY THREE FEET IN ANY DIMENSION. SEE ELECTRICAL AND PLUMBING NOTE 8.

DAM WALL HORIZ. BAR LAP SPLICE:	6" DAM	– LAP INTO SPA REINF.
	12" DAM	– LAP INSIDE BARS INTO SPA REINF. – LAP OUTSIDE BARS INTO POOL REINF.

EXPANSIVE SOIL DETAILS

IN EXPANSIVE SOILS WHERE MIN DECK REQMTS ARE NOT MET USE TABLE 1, SCHEDULE 'C'

N.T.S. ⑧

SLOPE EARTH SURFACE 1/4" PER FOOT OR SLOPE DECKING 1/8" TO 1/4" PER FOOT AWAY FROM POOL.

NOTE:
PROVIDE CONTROL JOINTS WHERE APPROPRIATE.

SEE ELECTRICAL AND PLUMBING NOTE #2 REGARDING EQUIPOTENTIAL BONDING GRID

SKIMMER DETAIL

N.T.S. ⑨

SECTION AT SKIMMER

PLAN AT SKIMMER

SECTION AT LIGHT

N.T.S. ⑩

NOTES:

1. **INSTALL NO. 8 COPPER GROUND WIRE FROM LIGHT NICHE TO BRASS CONDUIT TO POOL REBAR, OR NON-METALLIC CONDUIT CAN BE USED WITH INSULATED NO. 8 COPPER WIRE INTERIOR W/ APPROVED POTTING COMPOUND PER THE C.E.C.**
2. **SWIMMING POOL LIGHTING FIXTURES SHALL COMPLY WITH APPLICABLE UNDERWRITERS' LABORATORIES REQUIREMENTS FOR LIGHTING FIXTURES U.L. STANDARD 676.**

SHALLOW/DEEP END RAMP

⑪

NOTE:
EXTRA REINFORCING TO EXTEND 24" MIN. EACH SIDE OF RAMP.

BOND BEAM DETAILS

N.T.S. ⑫

Ⓐ PRECAST COPING OR BRICK

Ⓑ VENEER NOTCH

Ⓒ OPTIONAL (6) BAR BOND BEAM

Ⓓ CANTILEVER CONCRETE

FOR USE ONLY AT:
208 Valley Oaks Dr
Alamo, CA 94507-2046

25-08905-dg

CHRISTOPHER J. BIEDENBACH
No. 74003
Exp. 6/30/27
CIVIL

10/08/2025

THIS PLAN IS VALID ONLY WITH QR CODE THAT WHEN SCANNED DISPLAYS THE PROJECT ADDRESS AND JOB NUMBER MATCHING THAT SHOWN ABOVE ENGINEER'S STAMP

AUTHORIZED SIGNATURES:
TODD L. LACHER, P.E.
CHRIS BIEDENBACH, P.E.
MATTHEW THOMPSON, P.E.

STANDARD POOL STRUCTURAL PLAN

PREPARED IN ACCORDANCE WITH
THE 2022 CALIFORNIA BUILDING CODE
(2021 INTERNATIONAL BUILDING CODE)

pool engineering inc.
1201 N. Tustin Ave.
Anaheim, California 92807
Email: info@PoolEng.com
Phone: (714) 630-6100

SHEET:
100

CALCULATIONS

METHODOLOGY:

(SURCHARGE LOADING BASED ON BOUSSINESQ METHOD, MODIFIED BY TERZAGI FOR TYPICAL BUILDING/FOOTING, 1,000 P.S.F. BEARING PRESSURE).

γ = EQUIVALENT FLUID PRESSURE

$OTM = 1/6\ \gamma H^3 + \sum[(P_i)(r_i)]$

WHERE γ = 60 p.c.f. AND

$P_i = 1/2(\sigma_i + \sigma_{i-1})(6\text{ in})$

r_i = vertical dist. from P_i to z depth.

NET MOM = OTM – RESISTING MOMENT

$fs = \frac{M(12\text{ in/ft})}{As\ j\ d} = \frac{Mt\ (12)}{As\ (0.887)\ d}$

$fc = \frac{M(2)\ 12\text{ in/ft}}{j\ k\ b\ d^2} = \frac{Mt\ (2)(12)}{(0.887)(0.339)(12)\ d^2} < 1125\text{ psi}$

$vc = \frac{(1/2)\ \gamma H^2}{(12\text{ in/ft})\ j\ d} = \frac{\gamma H^2}{(2)(12)(0.887)\ d} < 55\text{ psi}$

f'c = 2,500 p.s.i.

Fs = 20,000 p.s.i.

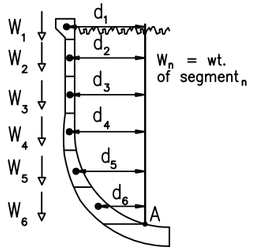
fc = 0.45 f'c = 1125 p.s.i.

$Vc = 1.1\sqrt{f'c}$ = 55 p.s.i.

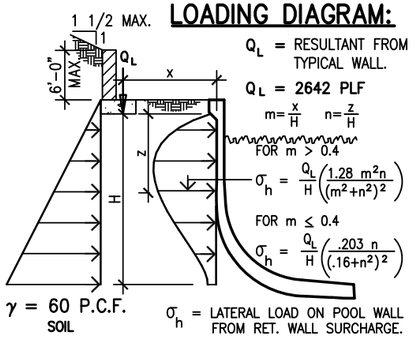
RESISTING MOMENT:

RESISTING MOMENT ABOUT POINT A

$RM = W_1 d_1 + W_2 d_2 + \ldots W_n d_n$



LOADING DIAGRAM:



Q_L = RESULTANT FROM TYPICAL WALL.

Q_L = 2642 PLF

$m = \frac{x}{H}$ $n = \frac{z}{H}$

FOR m > 0.4

$\sigma_h = \frac{Q_L}{H}\left(\frac{1.28\ m^2 n}{(m^2+n^2)^2}\right)$

FOR m ≤ 0.4

$\sigma_h = \frac{Q_L}{H}\left(\frac{.203\ n}{(.16+n^2)^2}\right)$

CALCULATION RESULTS:

RETAINING WALL SURCHARGE, E.F.P. = 60 P.C.F.
RESULTS FOR 'X'= 1'–0" W/ NO RAISED BOND BEAM

DEPTH 'D'	SOIL OTM ft–#	LOAD OTM ft–#	SOIL RM ft–#	NET Mom	t	VERTICAL STEEL	fs p.s.i.	fc p.s.i.	vc p.s.i.
2'–0"	80	56	78	95	6"	#3 @ 12"	3985	110	8.3
2'–6"	156	176	89	349	7"	#3 @ 6"	5492	189	11.2
3'–6"	429	674	123	1301	9"	"	13191	356	14.8
4'–6"	911	1486	214	2710	10"	#3 @ 3"	11981	440	19.0
5'–6"	1664	2531	443	4329	11"	"	16589	562	21.8
6'–6"	2746	3734	925	5755	13"	add 3 #4	11280	439	21.6
7'–6"	4219	5045	1935	7329	13"	"	14367	560	26.0
8'–6"	6141	6431	6214	6358	13½"	"	11828	447	29.1

RESULTS FOR 'X'= 1'–0" W/ 2'–6" RAISED BOND BEAM

HEIGHT 'H'	SOIL OTM ft–#	LOAD OTM ft–#	SOIL RM ft–#	NET Mom	t	VERTICAL STEEL	fs p.s.i.	fc p.s.i.	vc p.s.i.
2'–0"	80	33	78	95	6"	#3 @ 12"	3985	110	6.4
2'–6"	156	106	89	349	7"	#3 @ 6"	5492	189	8.5
3'–6"	429	433	123	1301	9"	"	13191	356	11.9
4'–6"	911	1021	172	2784	10"	#3 @ 3"	12307	452	16.1
5'–6"	1664	1839	227	4739	11"	"	18160	615	19.5
6'–6"	2746	2839	320	6770	13"	add 3 #4	13270	517	20.0
7'–6"	4219	3976	582	8536	13"	"	16731	652	24.6
8'–6"	6141	5215	1127	10532	13½"	"	19591	741	28.0
9'–0"	7290	5864	1563	11674	13½"	add 3 #5	15116	723	30.6
10'–0"	10000	7211	3023	14187	13½"	"	18370	879	35.8
11'–0"	13310	8608	8719	13200	14"	"	16251	755	39.4

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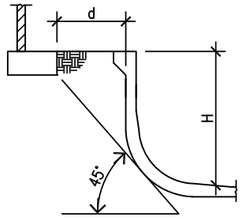
THIS DETAIL IS NOT NEEDED WHEN 'd' IS GREATER THAN 'H'.



SHORING NOTES:
1. THIS PLAN DEPICTS THE STRUCTURES IN A COMPLETED STATE ONLY. THE INSTALLER IS RESPONSIBLE FOR JOB SITE CONDITIONS AND THE SAFETY OF ALL PERSONS & PROPERTY DURING THE COURSE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND PROVIDING BRACING DURING CONSTRUCTION AND/OR ERECTION TO SUPPORT ALL LOADS TO WHICH THE STRUCTURES AND SUPPORTING SOIL MAY BE SUBJECTED.

TABLE 400

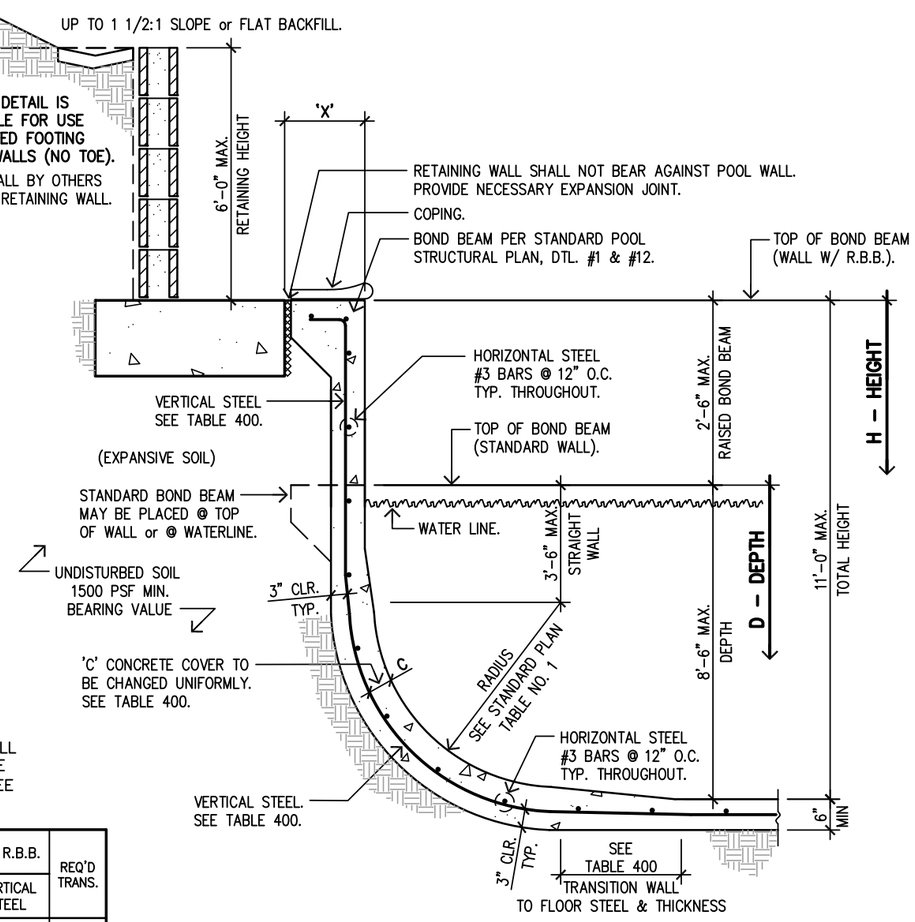
'D' OR 'H' IS DISTANCE FROM TOP OF POOL WALL DOWNWARD. BEGIN SPECIFIED STEEL & GUNITE THICKNESS AT INDICATED 'D' OR 'H' DEPTH. (SEE STANDARD STRUCTURAL PLAN, DETAIL #2)

POOL DEPTH	NO R.B.B.		REQ'D TRANS.
D	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–5"
5'–0"	7"	"	2'–10"
6'–0"	9"	"	3'–2"
6'–6"	9½"	add 3 #4	3'–3"
7'–6"	9½"	"	3'–3"
8'–0"	9½"	"	3'–3"
8'–6"	10"	"	3'–3"

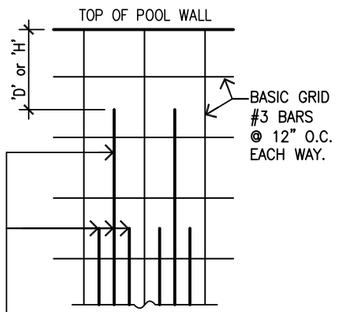
SEE ADD BARS DIAGRAM

TOTAL HEIGHT	2'–6" MAX. R.B.B.		REQ'D TRANS.
H	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–5"
5'–0"	7"	"	3'–2"
6'–0"	9"	"	4'–3"
6'–6"	9½"	add 3 #4	4'–8"
7'–6"	9½"	"	4'–11"
8'–0"	9½"	"	4'–11"
8'–6"	10"	"	4'–11"
9'–0"	10"	add 3 #5	4'–11"
10'–0"	10"	"	5'–0"
10'–6"	10½"	"	5'–2"
11'–0"	10½"	"	5'–3"

SEE ADD BARS DIAGRAM



TYPICAL ADD BAR REINFORCING DIAGRAM



VERTICAL REINFORCEMENT AS SPECIFIED IN TABLE STARTS A DISTANCE 'D' OR 'H' DOWN FROM TOP OF POOL WALL. REINFORCEMENT OTHER THAN BASIC GRID NEED NOT EXTEND TO TOP OF POOL WALL. ADD BARS TO BE EQUALLY SPACED BETWEEN BASIC GRID.

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10/08/2025

PLAN VALID ONLY WITH EMBEDDED QR CODE ON DETAIL, WHICH WHEN SCANNED DISPLAYS THE INTENDED PROJECT ADDRESS

THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD POOL STRUCTURAL PLAN

RETAINING WALL SURCHARGE
UPSLOPE OR LEVEL BACKFILL
MAX. FOOTING BEARING PRESSURE = 1,500 P.S.F.
EQUIVALENT FLUID PRESSURE = 60 P.C.F.

25-08905-dg

DETAIL #400

CALCULATIONS

METHODOLOGY:

(SURCHARGE LOADING BASED ON BOUSSINESQ METHOD, MODIFIED BY TERZAGI FOR TYPICAL BUILDING/FOOTING, 1,500 P.S.F. BEARING PRESSURE).

γ = EQUIVALENT FLUID PRESSURE

$OTM = 1/6\ \gamma H^3 + \sum\left[(P_i)(r_i)\right]$

WHERE γ = 60 p.c.f. AND

$P_i = 1/2(\sigma_i + \sigma_{i-1})(6\text{ in})$

r_i = vertical dist. from P_i to z depth.

NET MOM = OTM – RESISTING MOMENT

$$fs = \frac{M(12\text{ in/ft})}{As\ j\ d} = \frac{Mt\ (12)}{As\ (0.887)\ d}$$

$$fc = \frac{M(2)\ 12\text{ in/ft}}{j\ k\ b\ d^2} = \frac{Mt\ (2)(12)}{(0.887)(0.339)(12)\ d^2} < 1125\text{ psi}$$

$$\nu c = \frac{(1/2)\ \gamma H^2}{(12\text{ in/ft})\ j\ d} = \frac{\gamma H^2}{(2)(12)(0.887)\ d} < 55\text{ psi}$$

f'c = 2,500 p.s.i.

Fs = 20,000 p.s.i. GR. 40
32,000 p.s.i. GR. 60

fc = 0.45 f'c = 1125 p.s.i.

Vc = $1.1\sqrt{f'c}$ = 55 p.s.i.

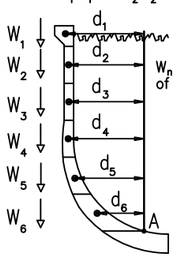
RETAINING WALL SURCHARGE, E.F.P. = 60 P.C.F.
RESULTS FOR 6'–0" MAX. RAISED BOND BEAM

HEIGHT 'H'	SOIL OTM ft–#	LOAD OTM ft–#	SOIL RM ft–#	NET Mom	t	VERTICAL STEEL	fs p.s.i.	fc p.s.i.	νc p.s.i.
2'–0"	80	18	38	136	6"	#3 @ 12"	5667	163	5.2
2'–6"	156	60	49	390	7"	#3 @ 6"	6102	220	6.7
4'–6"	911	647	132	2824	10"	#3 @ 3"	12425	478	13.4
6'–6"	2746	1987	260	6819	12½"	add 3 #4	14051	591	19.0
9'–0"	7290	4481	516	13228	15½"	add 3 #5	14110	634	24.4
12'–0"	17280	8201	2012	23608	17½"	#5 @ 3"	18191	828	33.2
14'–6"	30486	11647	14000	28134	19½"	#5 @ 3"	18883	795	39.8

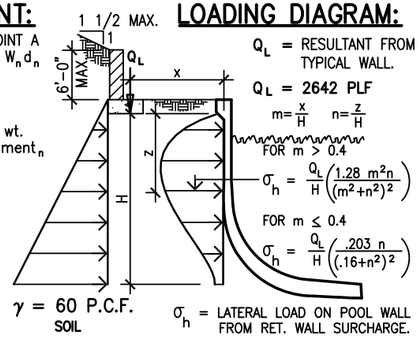
INDICATES GRADE 60 STEEL

RESISTING MOMENT:

RESISTING MOMENT ABOUT POINT A
$RM = W_1 d_1 + W_2 d_2 + \ldots W_n d_n$



LOADING DIAGRAM:



Q_L = RESULTANT FROM TYPICAL WALL.

Q_L = 2642 PLF

$m = \frac{x}{H}$ $n = \frac{z}{H}$

FOR m > 0.4

$$\sigma_h = \frac{Q_L}{H}\left(\frac{1.28\ m^2 n}{(m^2+n^2)^2}\right)$$

FOR m ≤ 0.4

$$\sigma_h = \frac{Q_L}{H}\left(\frac{.203\ n}{(.16+n^2)^2}\right)$$

TABLE 440

'D' OR 'H' IS DISTANCE FROM TOP OF POOL WALL DOWNWARD.
BEGIN SPECIFIED STEEL & GUNITE THICKNESS AT INDICATED 'D' OR 'H' DEPTH (SEE STANDARD STRUCTURAL PLAN, DETAIL #2).

TOTAL HEIGHT	3'–0" MAX. R.B.B.		REQ'D TRANS.
H	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–9"
5'–0"	7"	"	3'–5"
6'–0"	9"	"	4'–6"
6'–6"	9"	add 3 #4	4'–11"
7'–0"	10"	"	5'–2"
7'–6"	10"	"	5'–6"
8'–0"	11"	"	5'–6"
8'–6"	11"	"	5'–6"
9'–0"	12"	add 3 #5	5'–6"
10'–0"	12"	"	5'–6"
11'–0"	14"	"	5'–6"
11'–6"	14"	"	5'–6"

USE DOUBLE CURTAIN DETAIL — SEE ADD BARS DIAGRAM

TOTAL HEIGHT	4'–0" MAX. R.B.B.		REQ'D TRANS.
H	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–9"
5'–0"	7"	"	3'–5"
6'–0"	9"	"	4'–6"
6'–6"	9"	add 3 #4	4'–11"
7'–0"	10"	"	5'–2"
7'–6"	10"	"	5'–6"
8'–0"	11"	"	5'–9"
8'–6"	11"	"	6'–0"
9'–0"	12"	add 3 #5	6'–0"
10'–0"	12"	"	6'–0"
11'–0"	14"	#5 @ 3"	6'–0"
12'–0"	14"	"	6'–0"
12'–6"	14"	"	6'–0"

USE DOUBLE CURTAIN DETAIL — SEE ADD BARS DIAGRAM

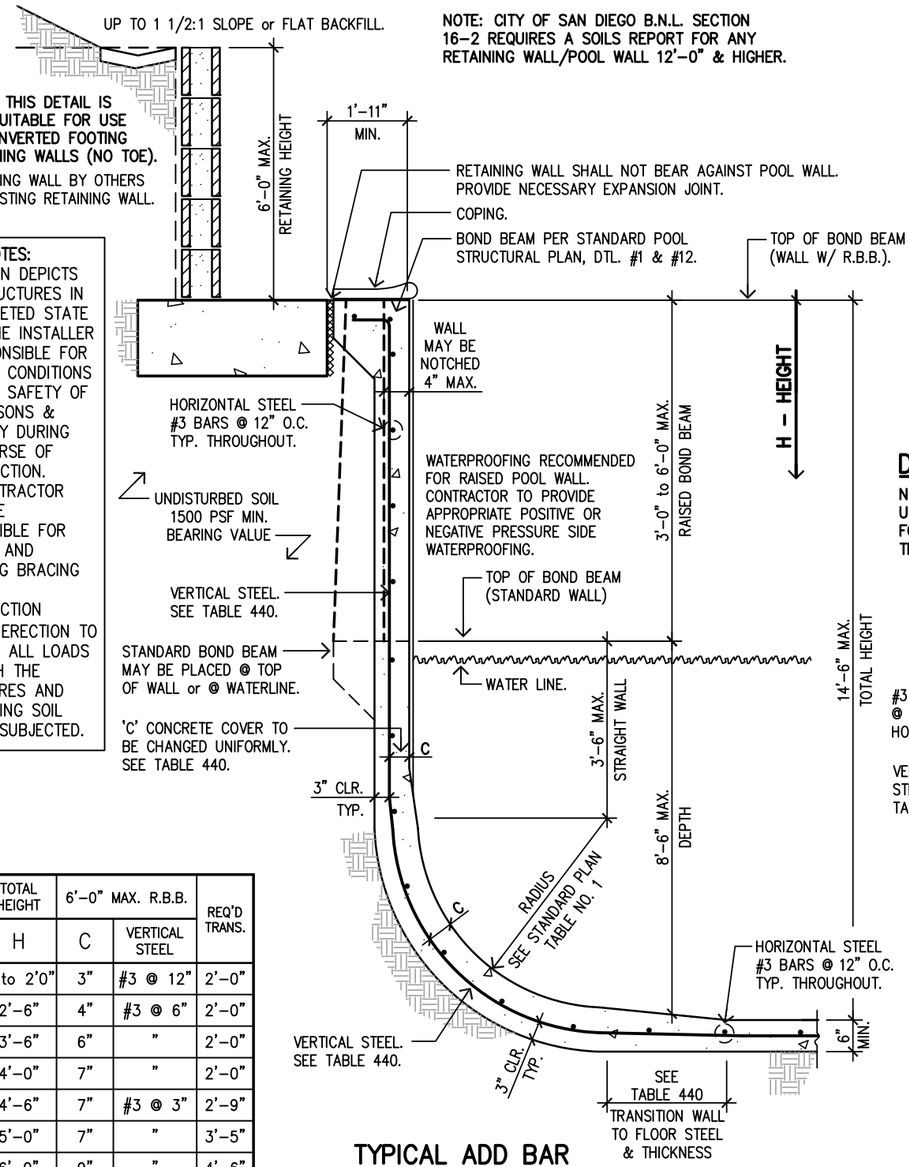
TOTAL HEIGHT	5'–0" MAX. R.B.B.		REQ'D TRANS.
H	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–9"
5'–0"	7"	"	3'–5"
6'–0"	9"	"	4'–6"
6'–6"	9"	add 3 #4	4'–11"
7'–0"	10"	"	5'–2"
7'–6"	10"	"	5'–6"
8'–0"	11"	"	5'–9"
8'–6"	11"	"	6'–0"
9'–0"	12"	add 3 #5	6'–4"
10'–0"	12"	"	6'–8"
11'–0"	14"	"	6'–8"
11'–6"	14"	#5 @ 3"	6'–8"
12'–6"	14"	"	6'–8"
13'–6"	16"	"	6'–8"

USE DOUBLE CURTAIN DETAIL — SEE ADD BARS DIAGRAM

TOTAL HEIGHT	6'–0" MAX. R.B.B.		REQ'D TRANS.
H	C	VERTICAL STEEL	
0 to 2'0"	3"	#3 @ 12"	2'–0"
2'–6"	4"	#3 @ 6"	2'–0"
3'–6"	6"	"	2'–0"
4'–0"	7"	"	2'–0"
4'–6"	7"	#3 @ 3"	2'–9"
5'–0"	7"	"	3'–5"
6'–0"	9"	"	4'–6"
6'–6"	9"	add 3 #4	4'–11"
7'–0"	10"	"	5'–2"
7'–6"	10"	"	5'–6"
8'–0"	11"	"	5'–9"
8'–6"	11"	"	6'–0"
9'–0"	12"	add 3 #5	6'–4"
10'–0"	12"	"	7'–0"
11'–0"	14"	"	7'–3"
12'–0"	14"	#5 @ 3"	7'–3"
12'–6"	14"	"	7'–3"
13'–6"	16"	"	7'–3"
14'–6"	16"	"	7'–3"

USE DOUBLE CURTAIN DETAIL — SEE ADD BARS DIAGRAM

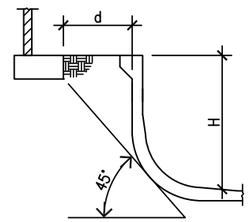
INDICATES GRADE 60 STEEL



NOTE: CITY OF SAN DIEGO B.N.L. SECTION 16–2 REQUIRES A SOILS REPORT FOR ANY RETAINING WALL/POOL WALL 12'–0" & HIGHER.

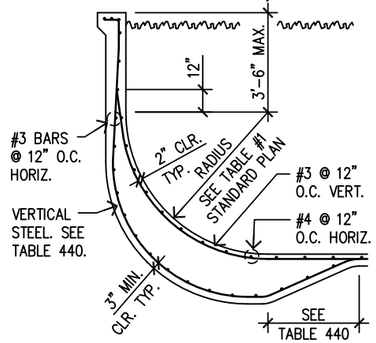
SHORING NOTES:
1. THIS PLAN DEPICTS THE STRUCTURES IN A COMPLETED STATE ONLY. THE INSTALLER IS RESPONSIBLE FOR JOB SITE CONDITIONS AND THE SAFETY OF ALL PERSONS & PROPERTY DURING THE COURSE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND PROVIDING BRACING DURING CONSTRUCTION AND/OR ERECTION TO SUPPORT ALL LOADS TO WHICH THE STRUCTURES AND SUPPORTING SOIL MAY BE SUBJECTED.

THIS DETAIL IS NOT NEEDED WHEN 'd' IS GREATER THAN 'H'.

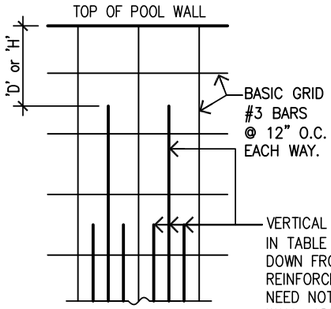


DOUBLE CURTAIN DETAIL

NOTE:
USE DOUBLE CURTAIN DETAIL IN RADIUS FOR 'C' MORE THAN 11½" (TOTAL THICKNESS MORE THAN 15" THICK).



TYPICAL ADD BAR REINFORCING DIAGRAM



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10/08/2025

PLAN VALID ONLY WITH EMBEDDED QR CODE ON DETAIL, WHICH WHEN SCANNED DISPLAYS THE INTENDED PROJECT ADDRESS

THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD POOL STRUCTURAL PLAN

RETAINING WALL SURCHARGE
3'–0" to 6'–0" RAISED BOND BEAM
MAX. FOOTING BEARING PRESS. = 1,500 P.S.F.
EQUIVALENT FLUID PRESSURE = 60 P.C.F.

25-08905-dg

DETAIL #440

22v1 December 09, 2022

CALCULATIONS

METHODOLOGY:

γ = EQUIVALENT FLUID PRESSURE

CASE I

OTM = 1/6 γ H^3 WHERE γ = 60 pcf

NET MOM = OTM − RESISTING MOMENT

CASE II

OTM = 1/6 γ H^3 WHERE γ = 62.4 pcf

NET MOM = OTM + RESISTING MOMENT

$$fs = \frac{M(12\ in/ft)}{As\ j\ d} = \frac{Mt\ (12)}{As\ (0.887)\ d}$$

$$fc = \frac{M(2)\ 12\ in/ft}{j\ k\ b\ d^2}$$

$$= \frac{Mt\ (2)(12)}{(0.887)(0.339)(12)\ d^2} < 1125\ psi$$

$$vc = \frac{(1/2)\ \gamma\ H^2}{(12\ in/ft)\ j\ d}$$

$$= \frac{\gamma\ H^2}{(2)(12)(0.887)\ d} < 55\ psi$$

f'c = 2,500 psi

Fs = 20,000 psi

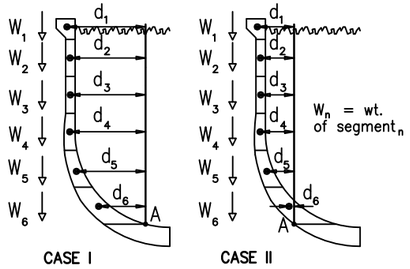
fc = 0.45 f'c = 1125 psi

Vc = 1.1 $\sqrt{f'c}$ = 55 psi

RESISTING MOMENT:

RESISTING MOMENT ABOUT POINT A

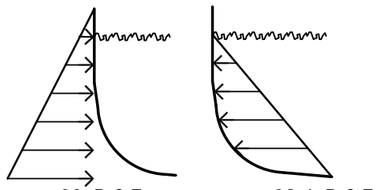
RM = $W_1 d_1 + W_2 d_2 + \ldots W_n d_n$



CASE I CASE II

LOADING DIAGRAM:

THIS DETAIL IS DESIGNED FOR EACH OF THE LOAD CASES DEFINED BELOW.



γ = 60 P.C.F. CASE I

γ = 62.4 P.C.F. CASE II

CALCULATION RESULTS:

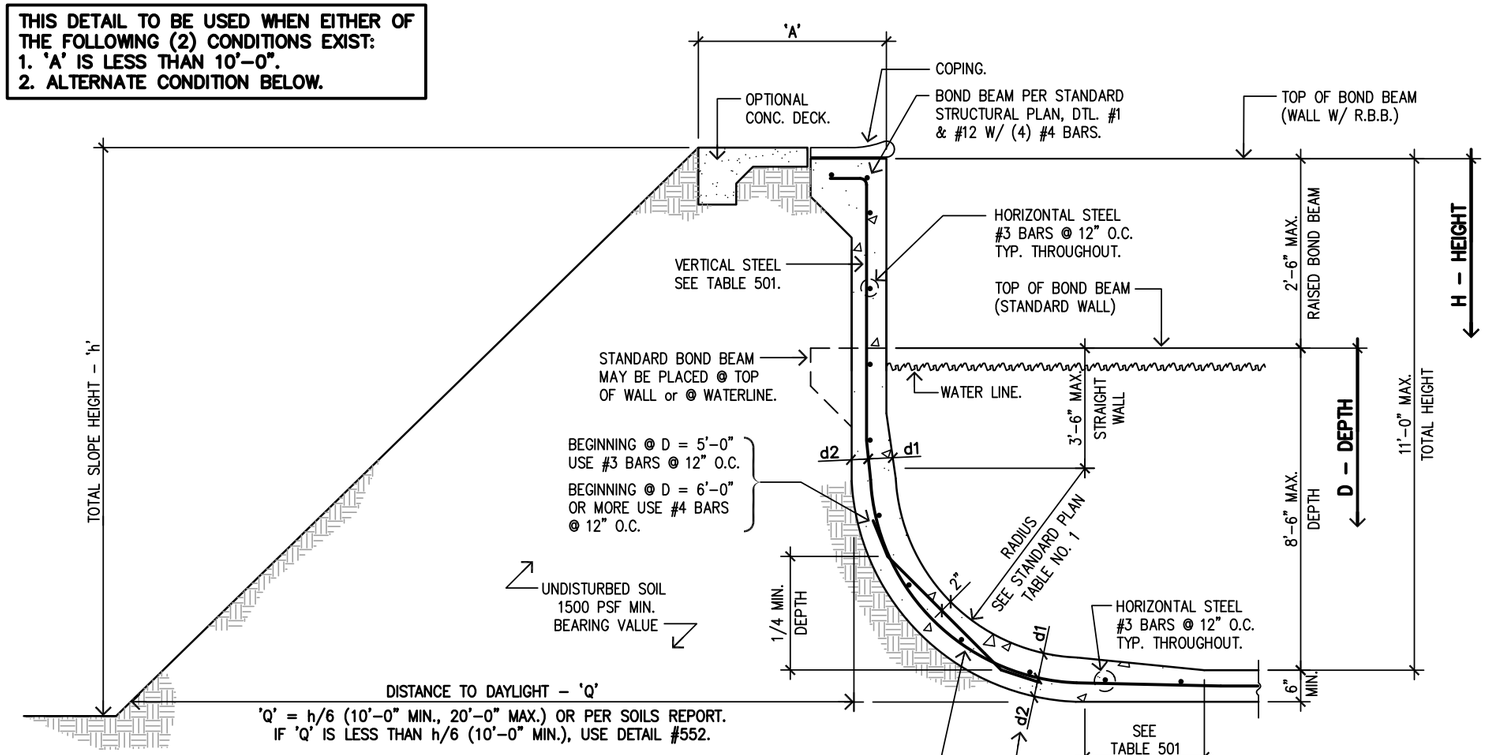
FREESTANDING WALL
EQUIVALENT FLUID PRESSURE = 60 P.C.F.
RESULTS FOR NO RAISED BOND BEAM

DEPTH 'D'	SOIL OTM ft−#	WATER OTM ft−#	SOIL RM ft−#	WATER RM ft−#	NET Mom	CASE I d1 SOIL	CASE II d2 WATER	VERTICAL STEEL	fs p.s.i.	fc p.s.i.	vc p.s.i.
3'−6"	429	446	106	−53	393	3"	3"	#3 @ 12"	15354	427	10.6
4'−0"	640	666	124	−55	611	3"	3"	#3 @ 6"	12275	508	13.9
5'−0"	1250	1300	230	−57	1020	3½"	4½"	"	17454	660	17.9
6'−0"	2160	2246	497	−2	1663	4"	5½"	add 3 #4	8283	580	22.5
7'−0"	3430	3567	1046	315	3882	4"	5½"	"	13807	832	30.6
8'−0"	5120	5325	2259	971	6296	4"	6½"	"	18781	998	40.0
8'−6"	6141	6387	4820	888	7275	4"	7½"	"	18671	889	45.2

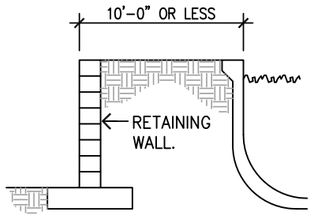
RESULTS FOR 2'−6" MAX. RAISED BOND BEAM

HEIGHT 'H'	SOIL OTM ft−#	WATER OTM ft−#	SOIL RM ft−#	WATER RM ft−#	NET Mom	CASE I d1 SOIL	CASE II d2 WATER	VERTICAL STEEL	fs p.s.i.	fc p.s.i.	vc p.s.i.
3'−6"	429	10	106	−53	323	3"	3"	#3 @ 12"	12607	351	10.2
4'−0"	640	35	116	−63	524	3"	3"	#3 @ 6"	10537	436	13.3
5'−0"	1250	163	135	−99	1115	3½"	3"	"	19071	722	17.9
6'−0"	2160	446	163	−165	1997	4½"	3"	#3 @ 3"	13563	666	20.0
7'−0"	3430	948	251	−163	3179	5"	3"	"	19325	891	24.5
8'−0"	5120	1730	508	−82	4612	6"	3"	add 3 #4	14965	938	26.7
9'−0"	7290	2856	1031	195	6259	6½"	4"	"	18669	1064	31.2
10'−0"	10000	4388	2082	611	7918	8"	5½"	"	18993	1021	31.3
11'−0"	13310	6387	6678	291	6678	8½"	6½"	"	19921	1034	35.6

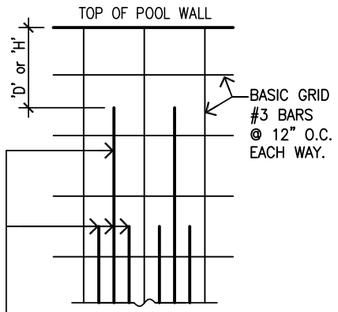
THIS DETAIL TO BE USED WHEN EITHER OF THE FOLLOWING (2) CONDITIONS EXIST:
1. 'A' IS LESS THAN 10'−0".
2. ALTERNATE CONDITION BELOW.



ALTERNATE CONDITION



TYPICAL ADD BAR REINFORCING DIAGRAM



VERTICAL REINFORCEMENT AS SPECIFIED IN TABLE STARTS A DISTANCE 'D' OR 'H' DOWN FROM TOP OF POOL WALL. REINFORCEMENT OTHER THAN BASIC GRID NEED NOT EXTEND TO TOP OF POOL WALL. ADD BARS TO BE EQUALLY SPACED BETWEEN BASIC GRID.

TABLE 501

'D' OR 'H' IS DISTANCE FROM TOP OF POOL WALL DOWNWARD.
BEGIN SPECIFIED STEEL & GUNITE THICKNESS AT INDICATED 'D' OR 'H' DEPTH.
(SEE STANDARD STRUCTURAL PLAN, DETAIL #2)

POOL DEPTH	NO RAISED BOND BEAM			REQ'D TRANS.
D	d1	d2	VERTICAL STEEL	
0 to 3'6"	3"	3"	#3 @ 12"	2'−0"
4'−0"	3"	3"	#3 @ 6"	2'−0"
4'−6"	3"	3½"	"	2'−0"
5'−0"	3½"	4½"	"	2'−0"
5'−6"	4"	5½"	"	2'−0"
6'−0"	4"	5½"	add 3 #4	2'−0"
6'−6"	4"	5½"	"	2'−0"
7'−0"	4"	5½"	"	2'−0"
7'−6"	4"	5½"	"	2'−0"
8'−0"	4"	6½"	"	2'−0"
8'−6"	4"	7½"	"	2'−0"

TOTAL HEIGHT	2'−6" MAX. RAISED BOND BEAM			REQ'D TRANS.
H	d1	d2	VERTICAL STEEL	
0 to 3'6"	3"	3"	#3 @ 12"	2'−0"
4'−0"	3"	3"	#3 @ 6"	2'−0"
4'−6"	3"	3"	"	2'−0"
5'−0"	3½"	3"	"	2'−0"
5'−6"	4½"	3"	"	2'−0"
6'−0"	4½"	3"	#3 @ 3"	2'−0"
6'−6"	4½"	3"	"	2'−0"
7'−0"	5"	3"	"	2'−8"
7'−6"	6"	3"	"	2'−8"
8'−0"	6"	3"	add 3 #4	2'−10"
8'−6"	6"	3½"	"	2'−11"
9'−0"	6½"	4"	"	3'−0"
9'−6"	7"	5"	"	3'−2"
10'−0"	8"	5½"	"	3'−2"
10'−6"	8½"	6½"	"	3'−2"
11'−0"	8½"	6½"	"	3'−2"

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FOR USE ONLY AT:
208 Valley Oaks Dr
Alamo, CA 94507-2046

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER J. BIEDENBACH No. 74003 Exp. 6/30/27 CIVIL STATE OF CALIFORNIA

10/08/2025

PLAN VALID ONLY WITH EMBEDDED QR CODE ON DETAIL, WHICH WHEN SCANNED DISPLAYS THE INTENDED PROJECT ADDRESS

THIS DETAIL TO BE USED IN CONJUNCTION WITH STANDARD POOL STRUCTURAL PLAN

FREESTANDING WALL
EQUIVALENT FLUID PRESSURE = 60 P.C.F.

25-08905-dg

DETAIL #501

File #: 26-21 **Agenda Date:** 1/6/2026 **Agenda #:** 6.

Advisory Board: The Alamo Municipal Advisory Council
Subject: Subcommittee Reports

Information:

- Alamo Subcommittee for Schools: Straznicka, Parkinson, Angel-Ordonez
- Alamo AOB/Roundabout: Struthers, Barclay, Burke
- Land Use Planning Subcommittee: Barclay (Chair), Brannan, Burke
- Iron Horse Corridor Subcommittee: Struthers
- Parks and Recreation Subcommittee: Chaput (Chair), Struthers, Mowat
- Public Safety (Police P-2, Fire, Emergency): Brannan, Chaput
- Trees and Landscape Subcommittee: Mowat, Burke

File #: 26-22 **Agenda Date:** 1/6/2026 **Agenda #:** 7.

Advisory Board: Alamo Municipal Advisory Council
Subject: December 2025 Record of Actions

Information:
December 2025 Record of Actions

Alamo Municipal Advisory Council
Michaela Straznicka, Chair
Sharon Burke, Vice Chair
Anne Struthers
Cecily Barclay
Robert Brannan
Robert Mowat
Michelle Parkinson
Michael Sene, Alternate

Candace Andersen, Supervisor
Contra Costa County, District 2
309 Diablo Road
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925.655.2300
cameron.collins@bos.cccounty.us

The Alamo Municipal Advisory Council serves as an advisory body to the Contra Costa County Board of Supervisors and the Department of Conservation and Development.

RECORD OF ACTIONS
Tuesday, December 2, 2025
6:00 p.m.
Alamo Women's Club
1401 Danville Blvd., Alamo

1. **Call to Order – Pledge of Allegiance – Roll Call**

2. **Agency Reports *(15 minutes)***
   a. San Ramon Valley Fire Protection District (SRVFPD)

3. **District II Board of Supervisors Staff**
   a. **Zone 54 Fence Replacement**
   b. **Livorna Park Budget Update**
   Request a detailed and comprehensive budget update from Public Works, including a breakdown by line items.
   Review and discuss potential bid alternates associated with specific budget line items.
   Invite Public Works to attend an upcoming meeting to provide updates and address questions.

4. **Public Comment**
   Comment on San Ramon Creek – who maintains the creek?
   315 Miranda Lane, Alamo

5. **Presentation**
   Public Works, Flood Control

6. **CDVR25-01036 – 236 Angela Avenue**
   Darrin Derita, Applicant
   Public Comment:
   Mike Gibson

   *The Alamo MAC **recommends approval** of the application subject to the condition that the existing two large oak trees be preserved to the extent possible; and that the proposed landscaping be consistent with the established character of the surrounding neighborhood. The Council bases its recommendation on the observation that many homes on the street have undergone similar remodels, with the house in question being one of the last unremodeled homes on Angela Avenue; that Angela Avenue is a private road maintained by the neighbors; and that the proposed project would result in the home being more compatible with the neighborhood. Unanimous approval.*

7. **CDVR25-01054 – 1048 Adrienne**
   Public Comment:

Shannon Daughton, Applicant
Mike Gibson

*The property owner was present at the meeting. The Alamo MAC **recommends approval** of the application based on the Council's conclusion that the proposed improvements will enhance the home's compatibility with the surrounding neighborhood. Unanimous approval.*

8. **CDSD25-09717 – 455 Livorna Road**
    a. The applicant requests approval of a Vesting Tentative Map for a proposed subdivision of approximately 13.65 acres into eight single-family residential lots.

Public Comment:
Art Anderson, Property Owner
Pam Nieting, Applicant
Cyrus Bouzar
Mike Gibson
John Hayes
Alfred Ralph
Jorge Picasso

*The Alamo MAC **recommends approval** contingent upon verification by the Department of Conservation and Development that the slope density complies with General Plan requirements. For the benefit of future residents of this subdivision, the MAC further recommends that, to the extent permitted by law, the property be re-zoned to R-40 to ensure consistency with the General Plan. If the County is legally unable to require the applicant to initiate re-zoning, the MAC recommends that the County evaluate re-zoning the property independently. The MAC further recommends that, to the extent legally possible, the County ensures all conditions of approval, particularly those related to infrastructure and land development, have been met or bonded for the entire subdivision, prior to recording of the first final map. The motion was approved 5 ayes, 1 no, 1 abstention.*

9. **CSA R7 Budget**
Motion to accept the budget by Member Struthers, unanimous approval.

10. **Zones 36, 45 and 54 Budgets**
Motion to accept the budget by Member Struthers, unanimous approval.

11. **Subcommittee Reports** *(20 minutes)*
- Alamo Subcommittee for Schools: Straznicka, Parkinson
  Light is red too long for too long on Danville Blvd., check out the timing on Hemme
- Alamo AOB/Roundabout: Struthers, Barclay, Burke
- Land Use Planning Subcommittee: Barclay (Chair), Brannan, Burke
- Iron Horse Corridor Subcommittee: Struthers
- Parks and Recreation Subcommittee: Chaput (Chair), Struthers, Mowat
- Public Safety (Police P-2, Fire, Emergency): Brannan, Chaput
- Trees and Landscape Subcommittee: Mowat, Burke

12. **Review and Approve November 2025 Records of Action**
Approved

13. **Alamo MAC Member Comments**

14. **Adjourn**

Adjourn to the Alamo MAC Meeting on Tuesday, January 6, 2026 at the Alamo Women's Club.

The Alamo Municipal Advisory Council will provide reasonable accommodations for persons with disabilities planning to attend the meeting who contact Supervisor Candace Andersen's office at least 72 hours before the meeting at 925.655.2300

Materials distributed for the meeting are available for viewing at the District 2 Office at 309 Diablo Road, Danville, CA 94526. To receive a copy of the Alamo MAC agenda via mail or email, please submit your request in writing using a speaker card or by contacting Supervisor Andersen's office at 925.655.2300. Complete name and address must be submitted to be added to the list.