24997 O'NEIL AVENUE
HAYWARD, CA 94554

PROJECT DESCRIPTION:

NEW MULTIFAMILY BUILDING
3 STORIES
9 UNITS
9 PARKING SPACES

PROJECT TEAM:

BUILDING OWNER:
KUMAR-PUNIA FAMILY TRUST
2127 ARLINGTON WAY, SAN RAMON, CA 94582
(650) 863-3703
pkpunia@hotmail.com

ARCHITECT:
MARC DiGIACOMO ARCHITECT
3110 FERNSIDE BLVD., ALAMEDA, CA 94501
(415) 334-7516
Marc@DiGiacomoArchitect.com

LANDSCAPE ARCHITECT:
LANDARC ASSOCIATES
1900 S. NORFOLK ST, SUITE 350, SAN MATEO, CA 94403
(408) 361-8085
scottf@landarcassociates.com

CIVIL ENGINEER:
ACKLAND INTERNATIONAL, INC.
333 HEGENBERGER RD, SUITE 206, OAKLAND, CA 94621
(510) 633-1797
ekundayo.sowunmi@gmail.com

PLANNING DATA:

APN 444-57-6 BLOCK 57, LOT 6
ZONING: MB-T4-1 URBAN GENERAL ZONE
THOROUGHFARE DESIGNATION: ST-50-34-BR

LOT AREA:
PER SURVEYOR: 11,919 S.F. (0.2736 ACRE)
EFFECTIVE LOT AREA (NET OF R/W:) 9,199 S.F.

LOT COVERAGE: 2,862 S.F. (80 % MAX = 7,359 S.F.)

DENSITY:
0.2736 ACRE x 35 UNITS/ ACRE = 9.6 UNITS MAX

COMMON OPEN SPACE REQUIRED:
10% (PER AHP) x 9,199 S.F.= 920 S.F.

COMMON OPEN SPACE PROVIDED: 1042 S.F. (11 %)

NO CAR PARKING REQUIRED
BICYCLE PARKING: 15 BEDROOMS x .15 = 2.3 SPACES
4 BICYCLE SPACES PROVIDED

BUILDING DATA:

3 STORIES
OCCUPANCY GROUP R-2

CONSTRUCTION TYPE:
V-B WITH TYPE "S" SPRINKLER
PER CBC 903.3.1.1 AND CBC 903.2.8

GROSS AREAS BY FLOOR:
1ST FLOOR: 2501 S.F.
2ND FLOOR: 2543 S.F.
3RD FLOOR: 2543 S.F.
TOTAL: 7587 S.F. GROSS

APPLICABLE CODES:
2016 CALIFORNIA BUILDING CODE
2016 CALIFORNIA ELECTRICAL CODE
2016 CALIFORNIA MECHANICAL CODE
2016CALIFORNIA PLUMBING CODE
2016 CALIFORNIA ENERGY CODE
2016 CALIFORNIA FIRE CODE
2016 CALGREEN

DWELLING UNITS:

9 DWELLING UNITS

UNIT 1A:
2 BR, 2 BA
848 S.F. NET

UNIT 2A AND 3A:
2 BR, 2 BA
868 S.F. NET, EACH

UNIT 1B:
1 BR, 1 BA
638 S.F. NET

UNIT 2B and 3B:
1 BR, 1 BA
679 S.F. NET, EACH

UNITS 1C, 2C, AND 3C:
2 BR, 2 BA
857 S.F. NET, EACH

SHEET INDEX:

VICINITY MAP:

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LICENSED ARCHITECT
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C-29852
7/31/21
RENEWAL DATE
STATE OF CALIFORNIA

24997 O'NEIL AVE
HAYWARD, CA 94554

PLANNING SUBMITTAL	3-28-19
PLANNING REVISION 1	11-14-19
PLANNING REVISION 2	5-7-20

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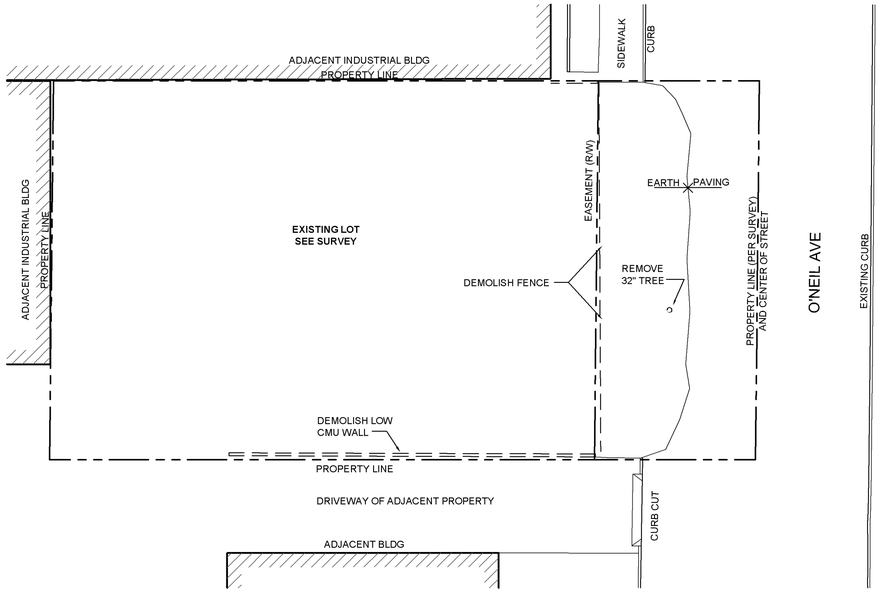
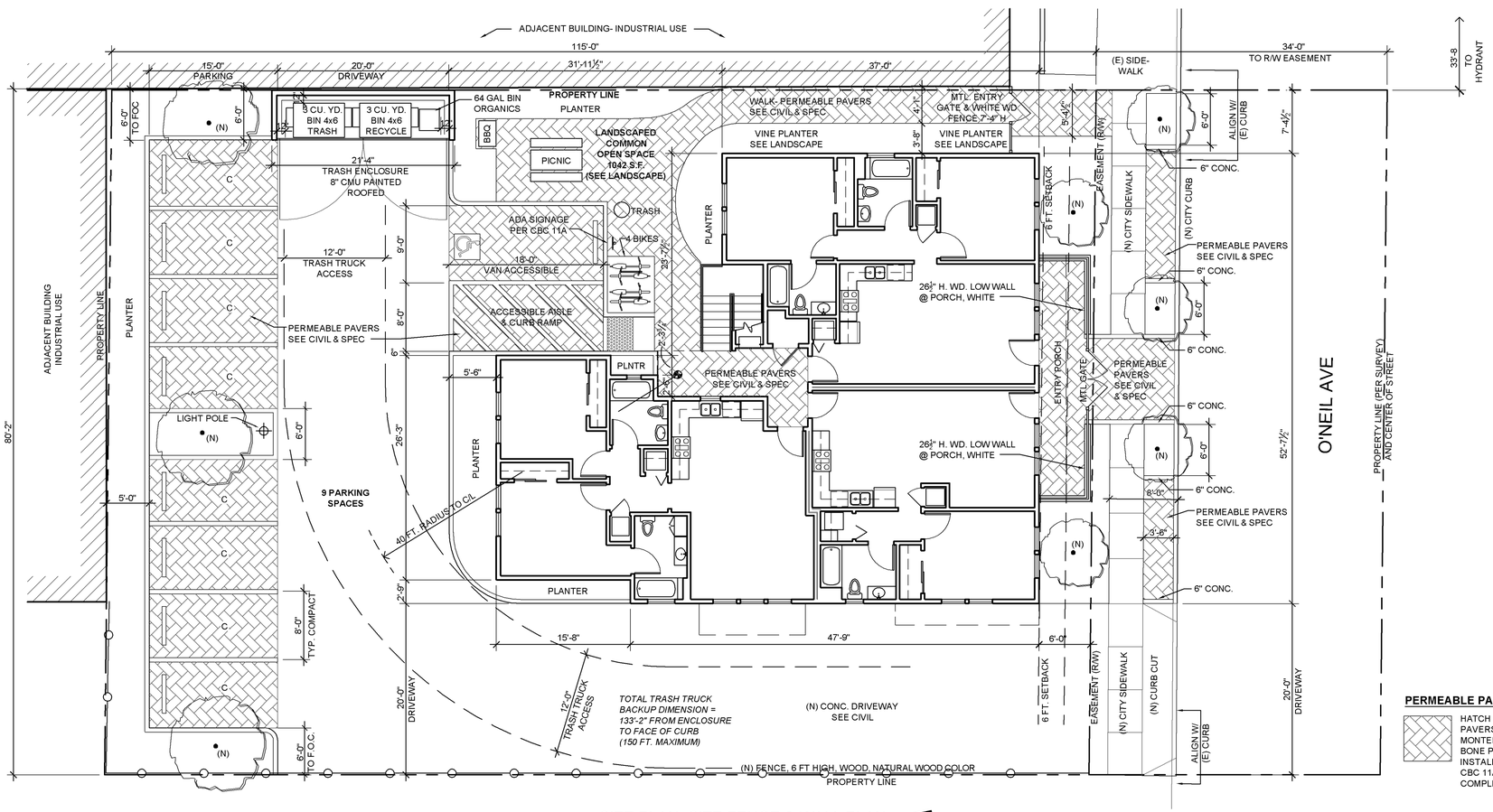


1 SITE DEMO PLAN
SCALE: 1/16" = 1'-0"



2 SITE PLAN, SITE FENCE & WALL PLAN
SCALE: 1/8" = 1'-0"

GARAGE CONTAINER CALCULATION

Formula to Determine Minimum Multi-Family Garbage Container Capacity in Cubic Yards (Must Be Included on Site Plan)

9 # of dwelling units x 1.2 (move in/out factor) x 32 (gallons per unit) ÷ 200

= 1.7 **CY/Week**

Container Capacity for Recyclables Must be Equivalent to Capacity Allocated to Trash

Trash CY/week calculation from above

1.7 **CY/Week of Recyclables**

Formula to Determine Minimum Multi-Family Organic Container Capacity in Gallons

9 # of dwelling units x 5 (gallons of organics per unit)

= 45 **Gallons/Week of Organics**

This formula must be clearly indicated on the site plan to justify the container size(s) and determine enclosure dimensions.

PERMEABLE PAVER SPEC

HATCH DENOTES PERMEABLE PAVERS, CASTLELITE BLOCK LLC MONTEREY BLEND IN HERRING-BONE PATTERN. PAVERS MUST BE INSTALLED TO COMPLY WITH CBC 11A FOR ACCESSIBILITY COMPLIANCE

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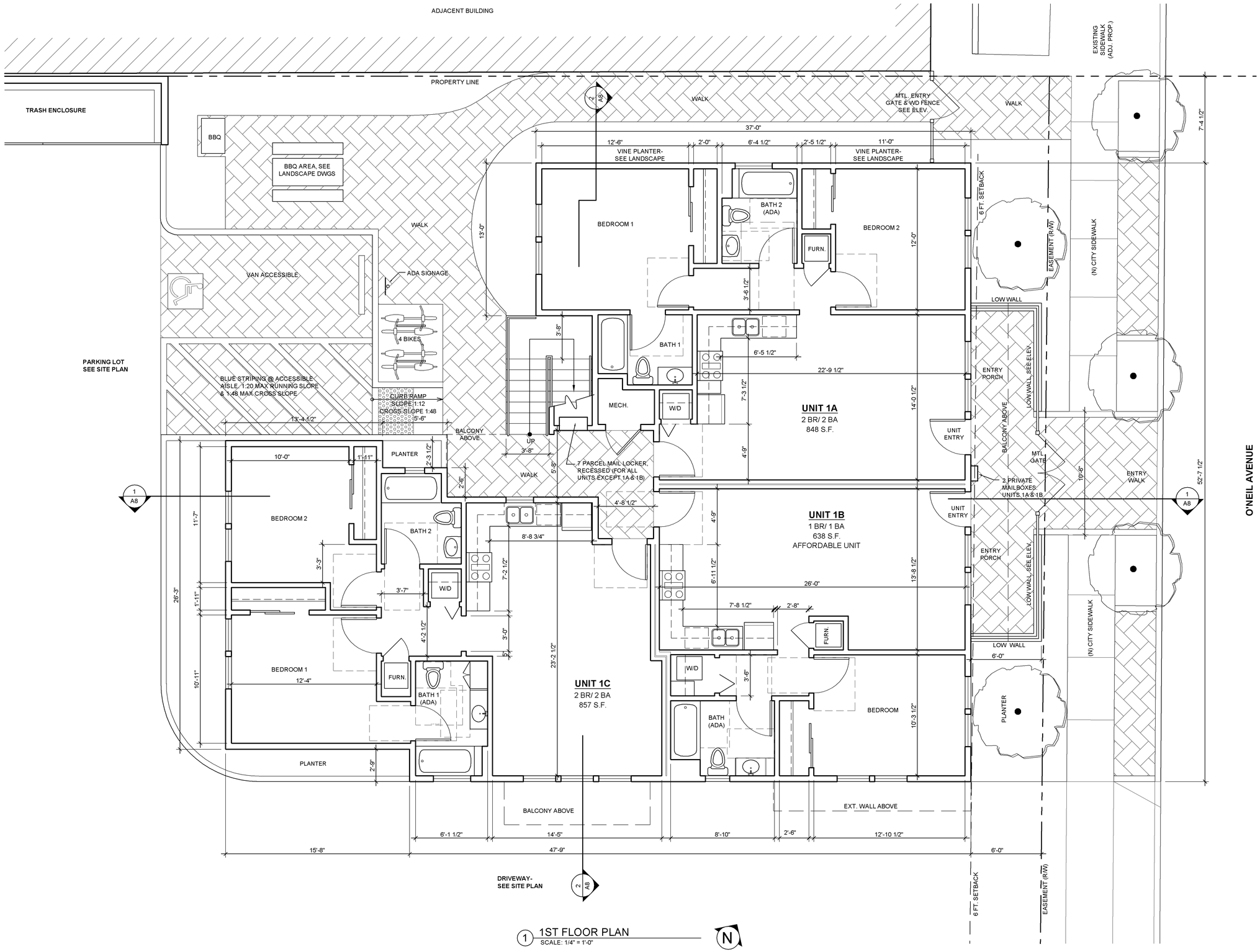

1 1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

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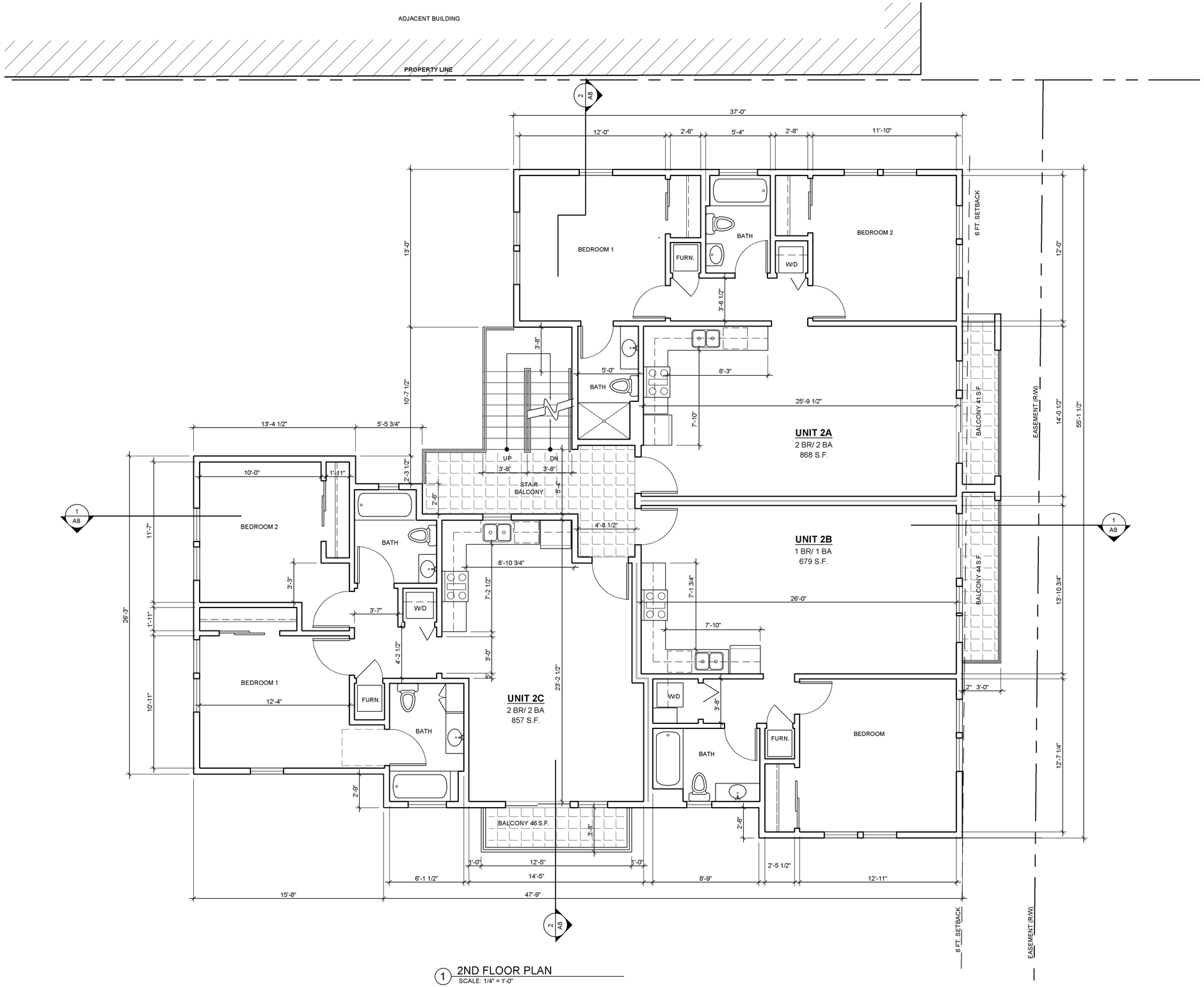
A3



1 2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

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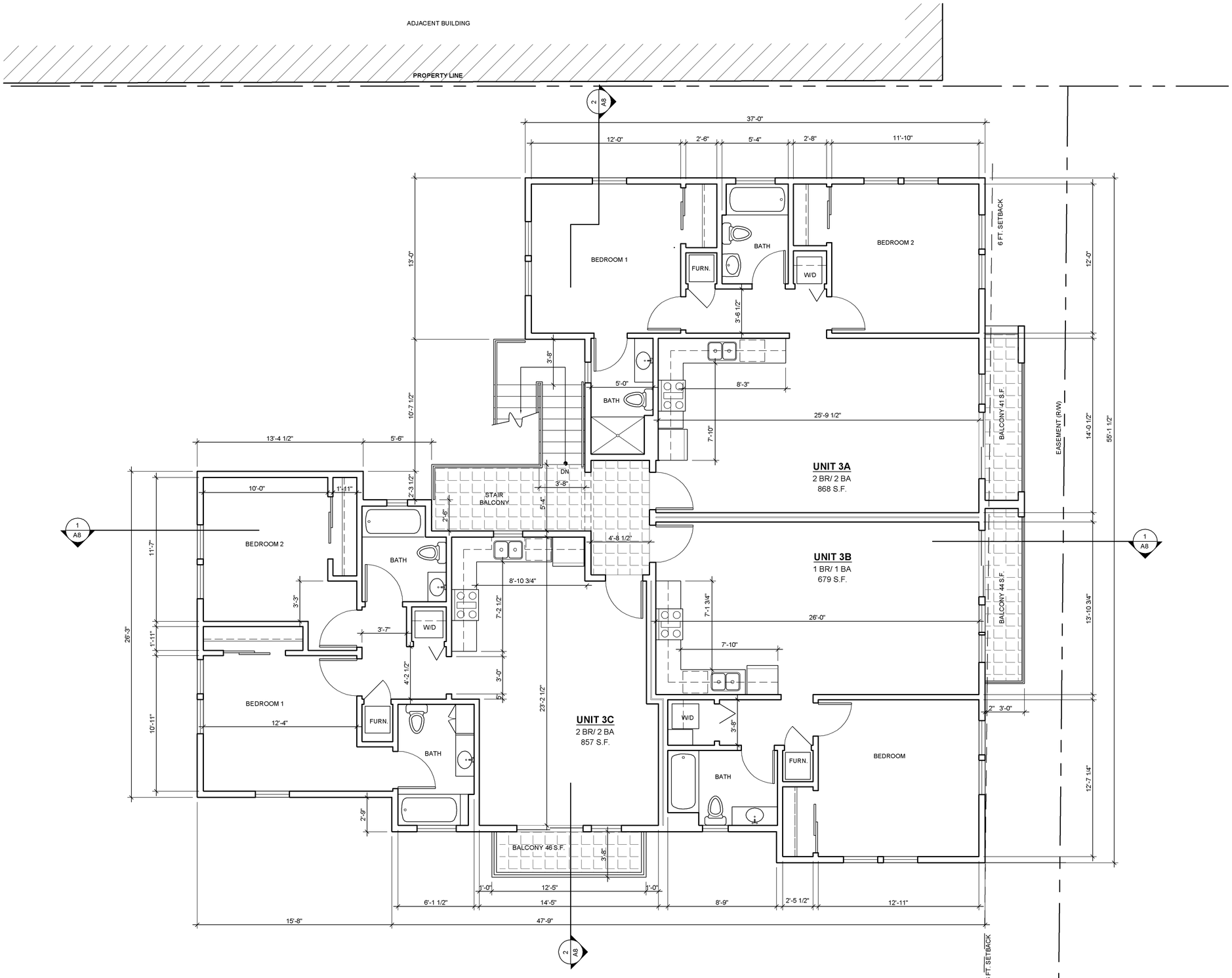

1 3RD FLOOR PLAN
SCALE: 1/4" = 1'-0"

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A5

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1 EAST ELEVATION
SCALE: 3/16" = 1'-0"

2 SOUTH ELEVATION
SCALE: 3/16" = 1'-0"

LICENSED ARCHITECT
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C-29852
7/31/21
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A6

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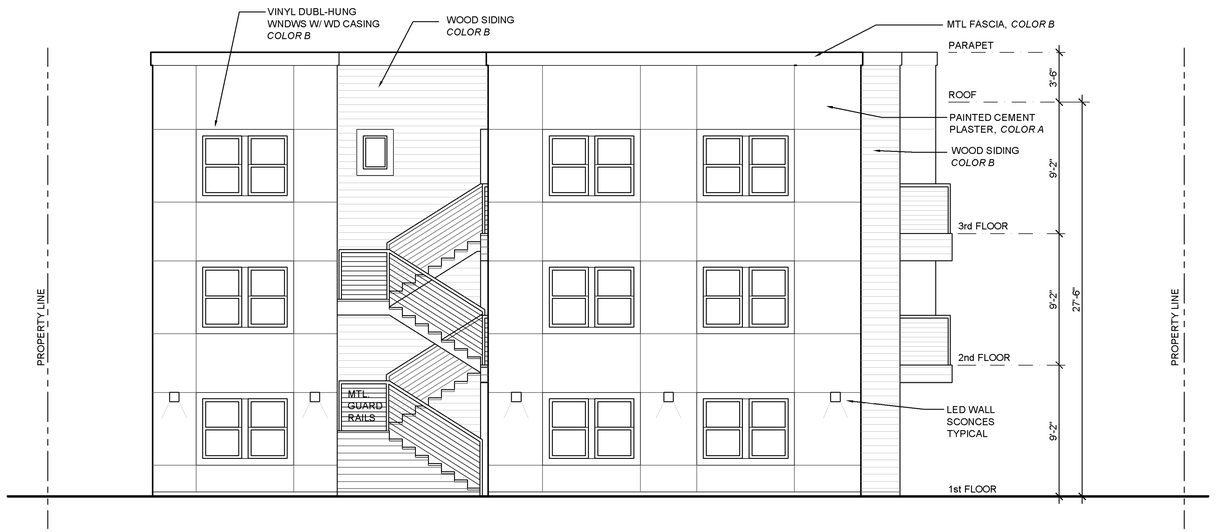

1 WEST ELEVATION
SCALE: 3/16" = 1'-0"

2 SOUTH ELEVATION
SCALE: 3/16" = 1'-0"

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A7

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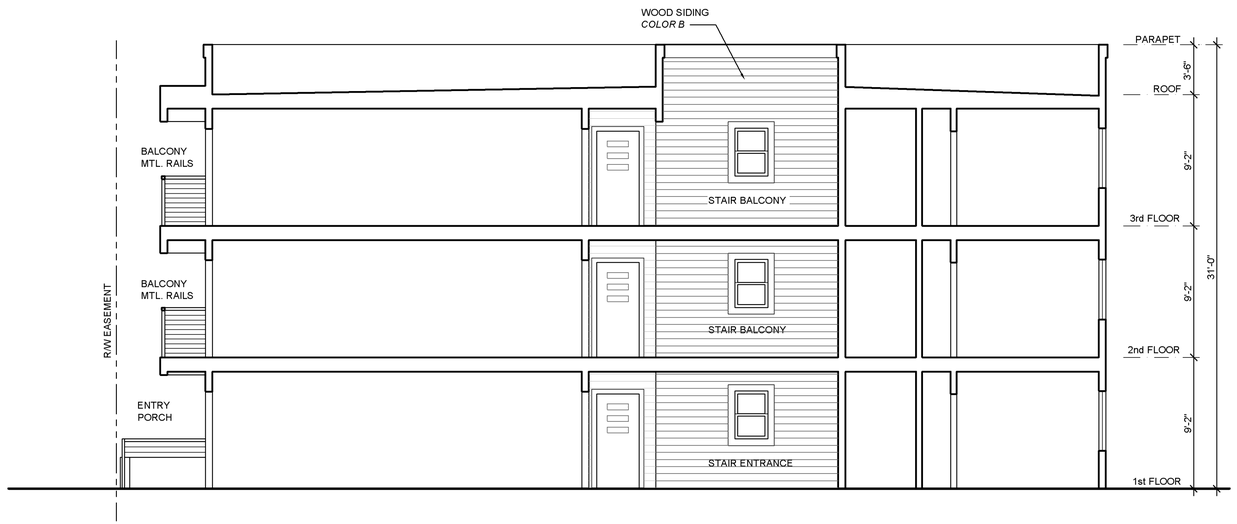
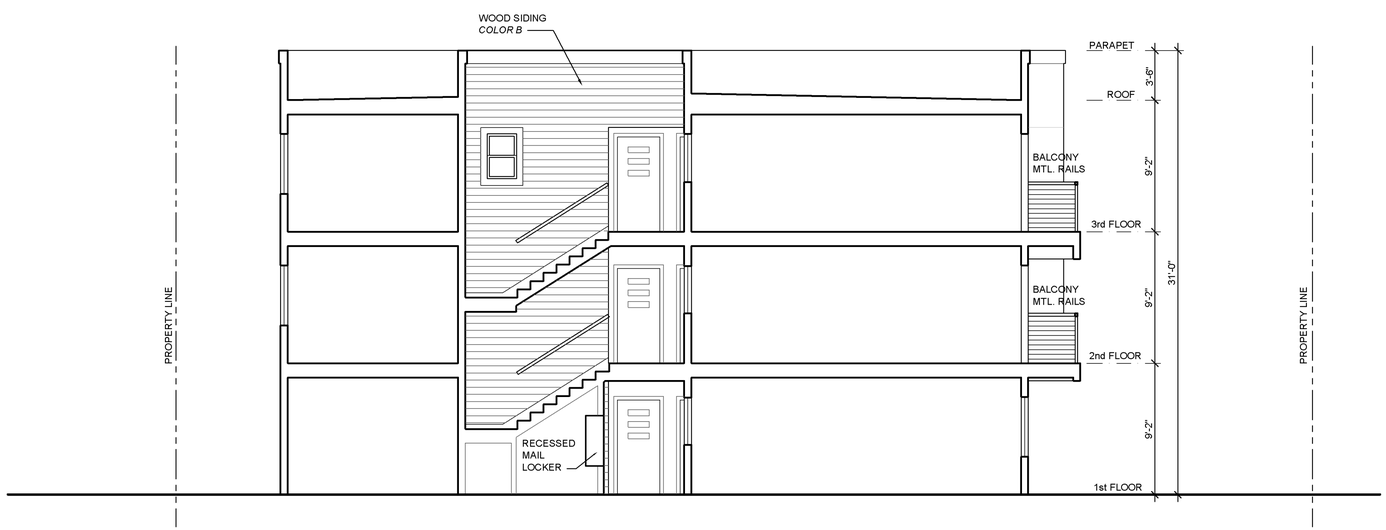


1 EAST-WEST BUILDING SECTION
SCALE: 3/16" = 1'-0"



2 NORTH-SOUTH BUILDING SECTION
SCALE: 3/16" = 1'-0"

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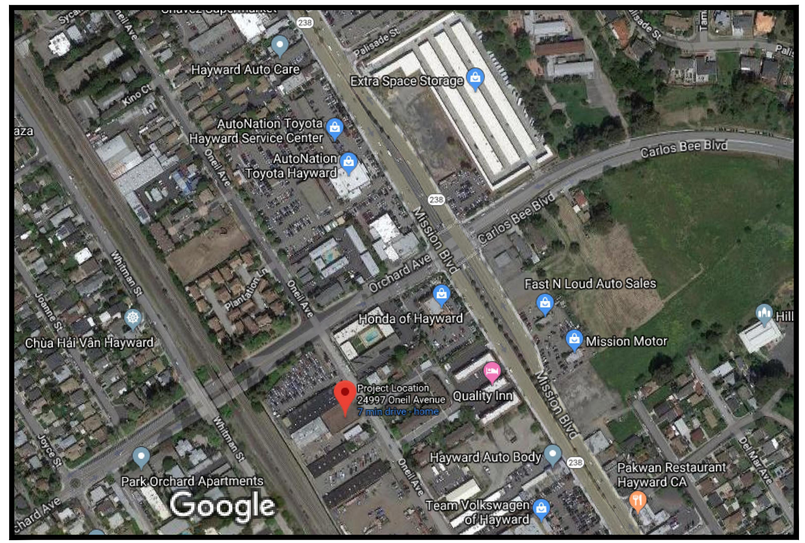
IMPROVEMENT PLANS FOR APARTMENT UNITS

24997 O'NEIL AVENUE, HAYWARD, CA

GENERAL NOTES

1. EXCEPT AS OTHERWISE SPECIFIED ON THESE PLANS, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND STANDARD DETAILS OF THE CITY OF HAYWARD AND OTHER APPLICABLE CODES.
2. CONTRACTOR SHALL VERIFY ELEVATIONS, DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD. EXISTING SURFACE UTILITIES AS SHOWN WERE LOCATED BY FIELD SURVEYS CONDUCTED FOR THE PROJECT.
3. ELEVATIONS ARE BASED ON CITY OF HAYWARD DATUM.
4. ALL GRADING AND EARTHWORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE AND/OR THE CITY OF HAYWARD, AS APPLICABLE. SPECIAL INSPECTION IS REQUIRED FOR FOOTING EXCAVATION, IN ORDER TO IDENTIFY LOCATIONS OF SOFT OR UNSUITABLE MATERIAL WHERE OVER-EXCAVATION OR RE-COMPACTION OF SOIL MAY BE NEEDED.
5. CONTRACTOR SHALL SLOPE HARDSCAPE SURFACES AT A GRADIENT OF AT LEAST 2 PERCENT AND LANDSCAPE SURFACES AT A GRADIENT OF 5 PERCENT AWAY FROM THE PERIMETER OF THE RESIDENCE FOR A DISTANCE OF AT LEAST 8 FEET, WHERE POSSIBLE.
6. AT ALL TIMES, CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. THIS INCLUDES SAFETY OF PERSONS AND PROPERTY AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ENGINEER WILL CONDUCT OCCASIONAL JOB SITE REVIEWS. HOWEVER, THESE JOB SITE REVIEWS SHALL NOT BE CONSTRUED TO INCLUDE THE REVIEW OF CONTRACTOR'S SAFETY MEASURES.
7. CONTRACTOR SHALL MAINTAIN THE STREETS AND ANY OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS MUST BE REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT.
8. CONTRACTOR SHALL PROTECT EXISTING FACILITIES TO REMAIN AND SHALL PREVENT DAMAGE TO THESE FACILITIES. ANY DAMAGE TO THESE FACILITIES DURING THE DURATION OF THE CONTRACT SHALL BE REPAIRED OR RESTORED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER TO THE SATISFACTION OF THE OWNER.
9. APPROVALS BY THE CITY OF HAYWARD OR THE OWNER DO NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS OR OMISSIONS.
10. THE CONTRACTOR SHALL NOTIFY U.S.A., UNDERGROUND SERVICES ALERT, 800-642-2444 48 HOURS PRIOR TO ANY EXCAVATION.
11. EXISTING FACILITIES ARE TO REMAIN UNLESS OTHERWISE INDICATED TO BE REMOVED OR EXCEPT AS MAY BE REQUIRED TO BE REMOVED, MODIFIED AND/OR RESTORED TO PERMIT CONSTRUCTION.
12. ALL UTILITY STRUCTURES TO REMAIN INCLUDING, BUT NOT LIMITED TO MANHOLES, CATCH BASINS, METER BOXES, WATER VALVES, FIRE HYDRANTS, TELEPHONE AND ELECTRIC VAULTS AND PULL BOXES, THAT LIE WITHIN THE PROJECT LIMITS OR AREA AFFECTED BY WORK ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR.
13. THE CONTRACTOR, SHALL ACQUIRE AND PAY ALL FEES FOR PERMITS NECESSARY TO ALLOW CONSTRUCTION.
14. CITY OF HAYWARD ENGINEER AND/OR OWNER'S INSPECTOR SHALL HAVE 48-HOUR NOTICE FOR INSPECTION.



VICINITY MAP

NOT TO SCALE

ENGINEER'S STATEMENT

THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECTION IN CONNECTION WITH THE PROPOSED APARTMENT UNITS FOR PAWAN KUMAR.

BY: Ekundayo Sowunmi
EKUNDAYO SOWUNMI, P.E.
RCE 22573 EXP. 12/31/2021

ABBREVIATIONS

@	AT	(N)	NEW
BLDG.	BUILDING	N	NORTH
BLKG.	BLOCKING	O.C.	ON CENTER
CB	CEILING	OPNG.	OPENING
CL	CENTER LINE	PR.	PAIR
CO	CLEANOUT	PLYWD.	PLYWOOD
COMPO.	COMPOSITION	(R)	REMOVE
CONC.	CONCRETE	RWL	RAINWATER LEADER
DEMO.	DEMOLITION	REF.	REFERENCE
DIA.	DIAMETER	SAD	SEE ARCHITECTURAL DRAWINGS
DN.	DOWN		
D.S.	DOWN SPOUT	SLD	SEE LANDSCAPE DRAWINGS
EA.	EACH		
(E)	EXISTING	SHT.	SHEET
EQ.	EQUAL	SS	SANITARY SEWER
EXT.	EXTERIOR	SSCO	SANITARY SEWER CLEANOUT
FG	FINISH GRADE		
FIN. FLR	FINISH FLOOR	SD	STORM DRAIN
FL	FLOW LINE	SDCO	STORM DRAIN CLEANOUT
FP	FINISH PAVEMENT		
HDR.	HEADER	TYP.	TYPICAL
HT.	HEIGHT	V.I.F.	VERIFY IN FIELD
MON	MONUMENT	W/	WITH
		WD.	WOOD

SYMBOLS

- BOUNDARY LINE
- CENTERLINE
- MONUMENT LINE
- PROPERTY LINE

EARTHWORK QUANTITIES

CUT	338 CUBIC YARDS
FILL	0 CUBIC YARDS
EXPORT	TO BE DETERMINED

NOTE: GRADING QUANTITIES REPRESENT BANK YARDAGE. THEY DO NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND ARE INTENDED TO REPRESENT IN-SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER-EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS. NOTE THE GEOTECHNICAL ENGINEER IN THE FIELD MAY REQUIRE ADDITIONAL EARTHWORK AT TIME OF CONSTRUCTION. CONTRACTOR SHALL INDEPENDENTLY DETERMINE AND IS RESPONSIBLE FOR THE ACTUAL EARTHWORK QUANTITIES FOR GRADING PERMIT APPLICATION REQUIREMENTS.

SHEET INDEX

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Ekundayo Sowunmi

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HAYWARD, CA 94554

PLANNING SUBMITTAL

PROJECT NO.:S17046
DRAWN: DS
CHECKED: ES
SCALE: AS SHOWN
DATE: 09-18-19

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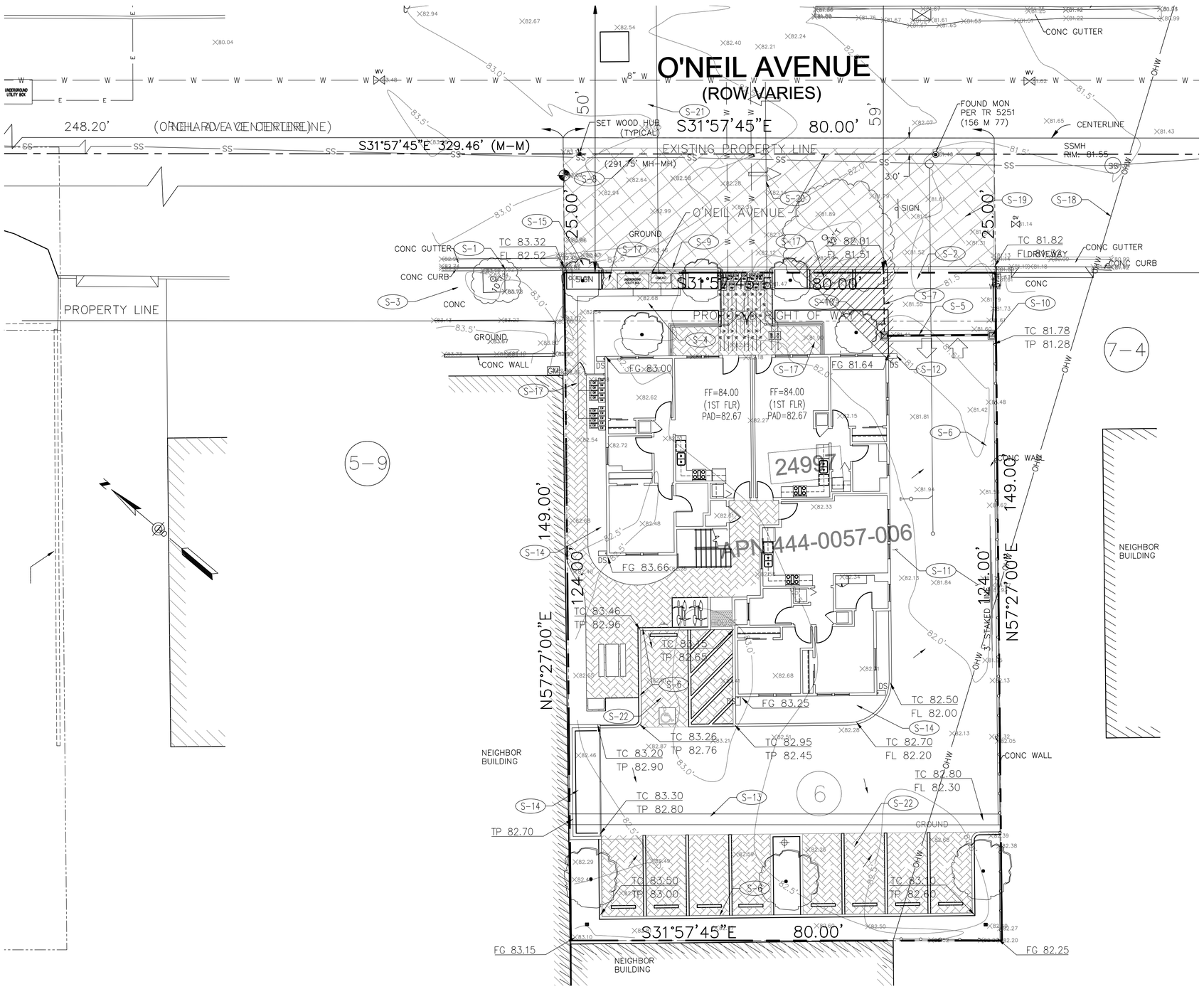

SITE PLAN

SCALE: 1" = 10'- 0"

SITE PLAN NOTES

S-1 (E) CURB AND GUTTER TO REMAIN.
S-2 (N) CONCRETE DRIVEWAY PER CITY OF HAYWARD STANDARD DETAILS.
S-3 (E) CONCRETE SIDEWALK TO REMAIN.
S-4 (N) CONCRETE SIDEWALK PER CITY OF HAYWARD STANDARD DETAILS.
S-5 (N) 4" PERFORATED STORM DRAIN PIPE (HDPE).
S-6 (N) CONCRETE CURB PER DETAIL 2/C5.0.
S-7 (N) SIDEWALK UNDERDRAIN.
S-8 (E) SANITARY SEWER MAIN.
S-9 (N) CONCRETE CURB AND GUTTER PER CITY OF HAYWARD STANDARD DETAIL.
S-10 (N) CATCH BASIN.
S-11 (N) 3" AC PAVEMENT OVER 6" AGGREGATE BASE.
S-12 (N) RAINWATER LEADER WITH SPLASH BLOCK.
S-13 (N) CONCRETE VALLEY GUTTER.
S-14 (N) PLANTER.
S-15 (N) STREET TREES.
S-16 (N) STORM DRAIN CLEANOUT PER DETAIL 5/C5.0.
S-17 (N) PERMEABLE PAVER WALK PER DETAIL 1/C5.0. PAVERS SHALL BE CASTLELITE BLOCK LLC MONTEREY BLEND IN HERRING-BONE PATTERN. PAVERS SHALL BE INSTALLED TO BE ACCESSIBLE PER CBC 11A.
S-18 OVERHEAD LINE TO BE RE-ROUTED.
S-19 (N) ASPHALT CONCRETE PAVEMENT (4" AC OVER 9" AGGREGATE BASE OVER 95% SUBGRADE).
S-20 (N) FIRE WATER.
S-21 (N) JOINT UTILITY TRENCH.
S-22 (N) PERMEABLE PAVER PARKING SPACE. PAVERS SHALL BE CASTLELITE BLOCK LLC MONTEREY BLEND IN HERRING-BONE PATTERN. PAVERS SHALL BE INSTALLED TO BE ACCESSIBLE PER CBC 11A.

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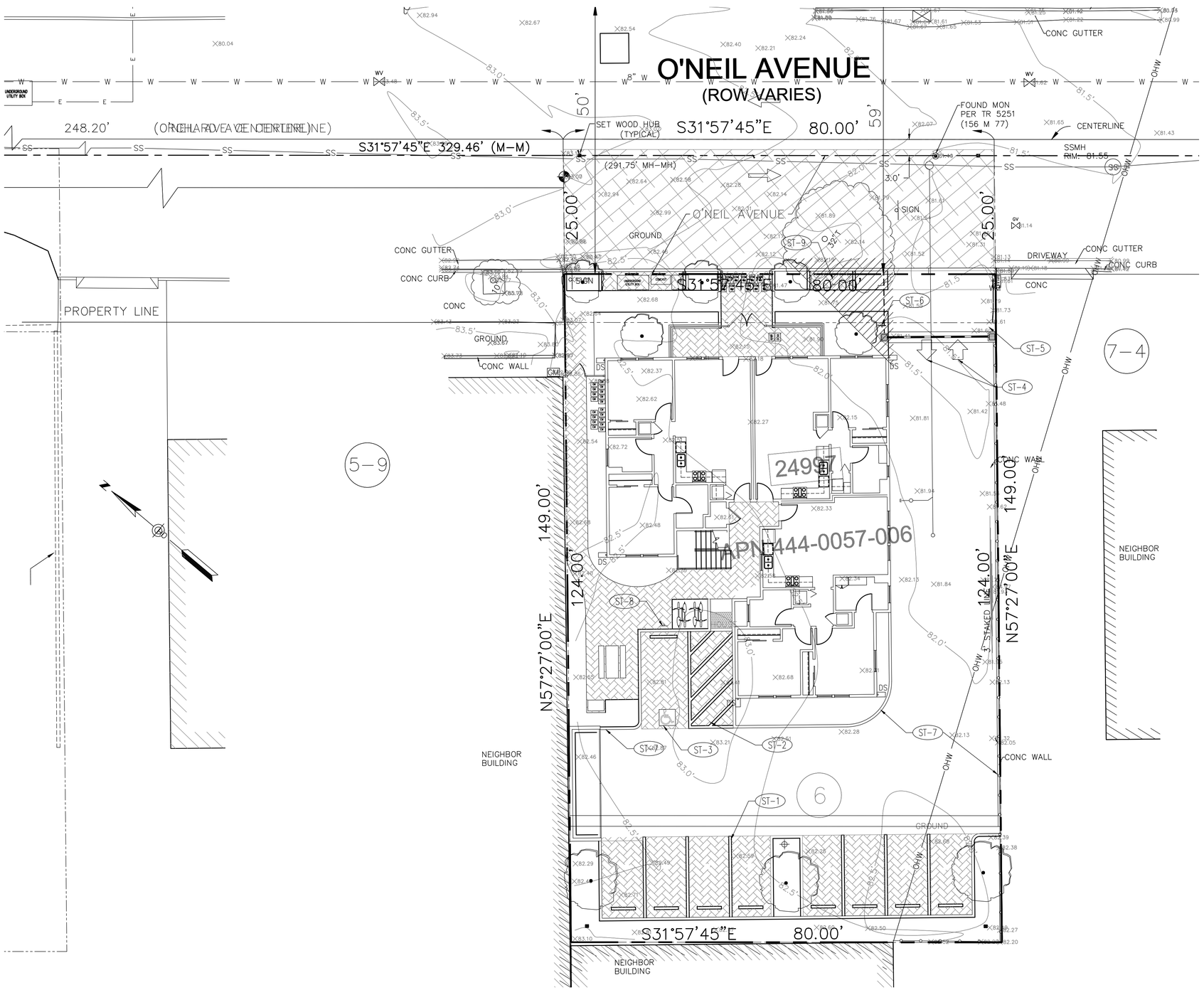

SIGNING AND STRIPING PLAN

SCALE: 1" = 10'- 0"

STRIPING AND SIGNAGE NOTES

ST-1 PAINT 4" WIDE STRIPING.
ST-2 PAINT 4" WIDE DIAGONAL STRIPING.
ST-3 PAINT ADA SYMBOL PAVEMENT MARKING.
ST-4 PAINT 12" WIDE TRAFFIC ARROW.
ST-5 INSTALL CALTRANS R1-1 STOP SIGN.
ST-6 INSTALL PRIVATE DRIVEWAY ENTRANCE SIGN,
ST-7 PAINT CURB RED.
ST-8 INSTALL CALTRANS ADA R99C PARKING SIGN.
ST-9 VISION TRIANGLE.

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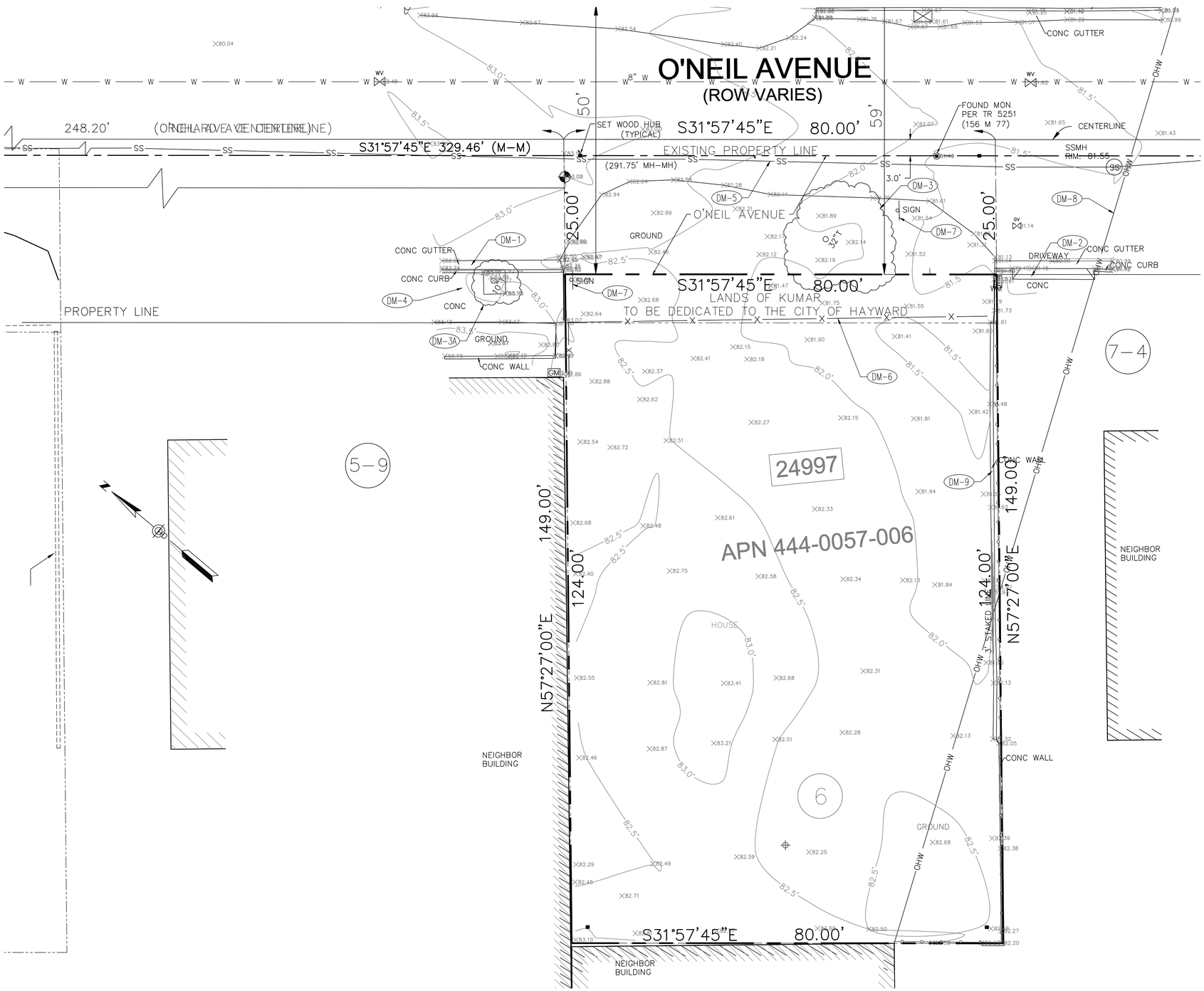

DEMOLITION PLAN

SCALE: 1" = 10'- 0"

DEMOLITION PLAN NOTES

DM-1 (E) CONCRETE CURB AND GUTTER TO REMAIN.
DM-2 (E) CONCRETE DRIVEWAY TO REMAIN.
DM-3 REMOVE (E) TREE.
DM-3A (E) TREE TO REMAIN.
DM-4 (E) CONCRETE SIDEWALK TO REMAIN.
DM-5 (E) SANITARY SEWER MAIN.
DM-6 DEMOLISH (E) FENCE.
DM-7 RELOCATE / REMOVE (E) SIGN.
DM-8 (E) OVERHEAD LINE TO BE RE-ROUTED BY COMCAST.
DM-9 REMOVE (E) CONCRETE WALL.

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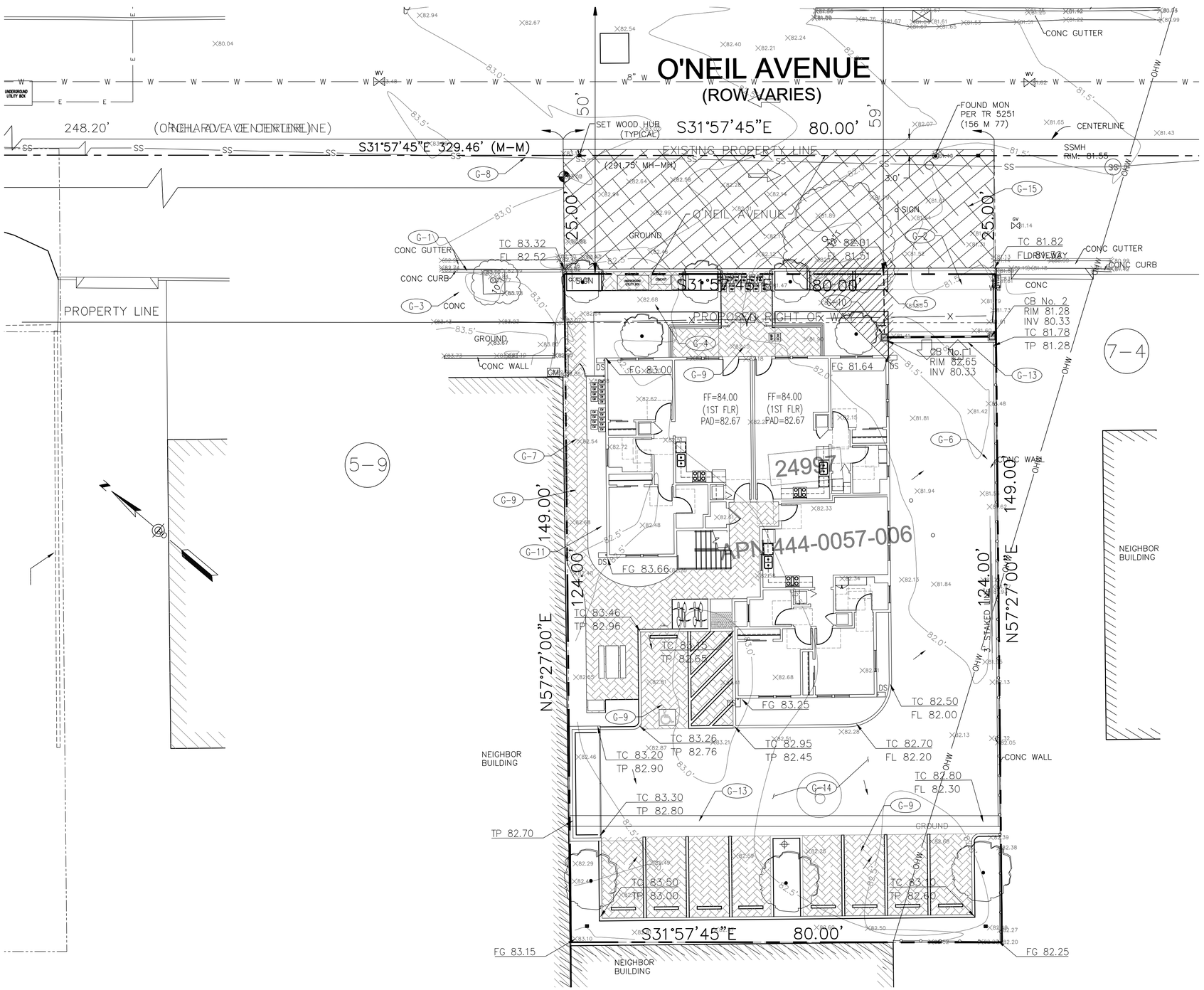

GRADING AND DRAINAGE PLAN

SCALE: 1" = 10'- 0"

GRADING AND DRAINAGE PLAN NOTES

G-1 (E) CURB AND GUTTER TO REMAIN.
G-2 CONSTRUCT (N) CONCRETE DRIVEWAY PER CITY OF HAYWARD STANDARD DETAILS.
G-3 (E) CONCRETE SIDEWALK TO REMAIN.
G-4 CONSTRUCT (N) CONCRETE SIDEWALK PER CITY OF HAYWARD STANDARD DETAILS.
G-5 (N) SIDEWALK UNDERDRAIN.
G-6 CONSTRUCT (N) CONCRETE CURB PER DETAIL 1/C5.0.
G-7 CONSTRUCT (N) CONCRETE WALK PER DETAIL 8/C5.0.
G-8 (E) SANITARY SEWER MAIN.
G-9 CONSTRUCT (N) PERMEABLE PAVER PER DETAIL 1/C5.0.
G-10 CONSTRUCT (N) CATCH BASIN.
G-11 (N) PLANTER. SEE LANDSCAPE PLANS.
G-12 NOT USED.
G-13 CONSTRUCT (N) CONCRETE VALLEY GUTTER PER DETAIL 9/C5.0.
G-14 CONSTRUCT (N) PAVEMENT (3" AC OVER 9" AGGREGATE BASE)
G-15 CONSTRUCT (N) ASPHALT CONCRETE PAVEMENT (4" AC OVER 9" AGGREGATE BASE OVER 95% SUBGRADE)

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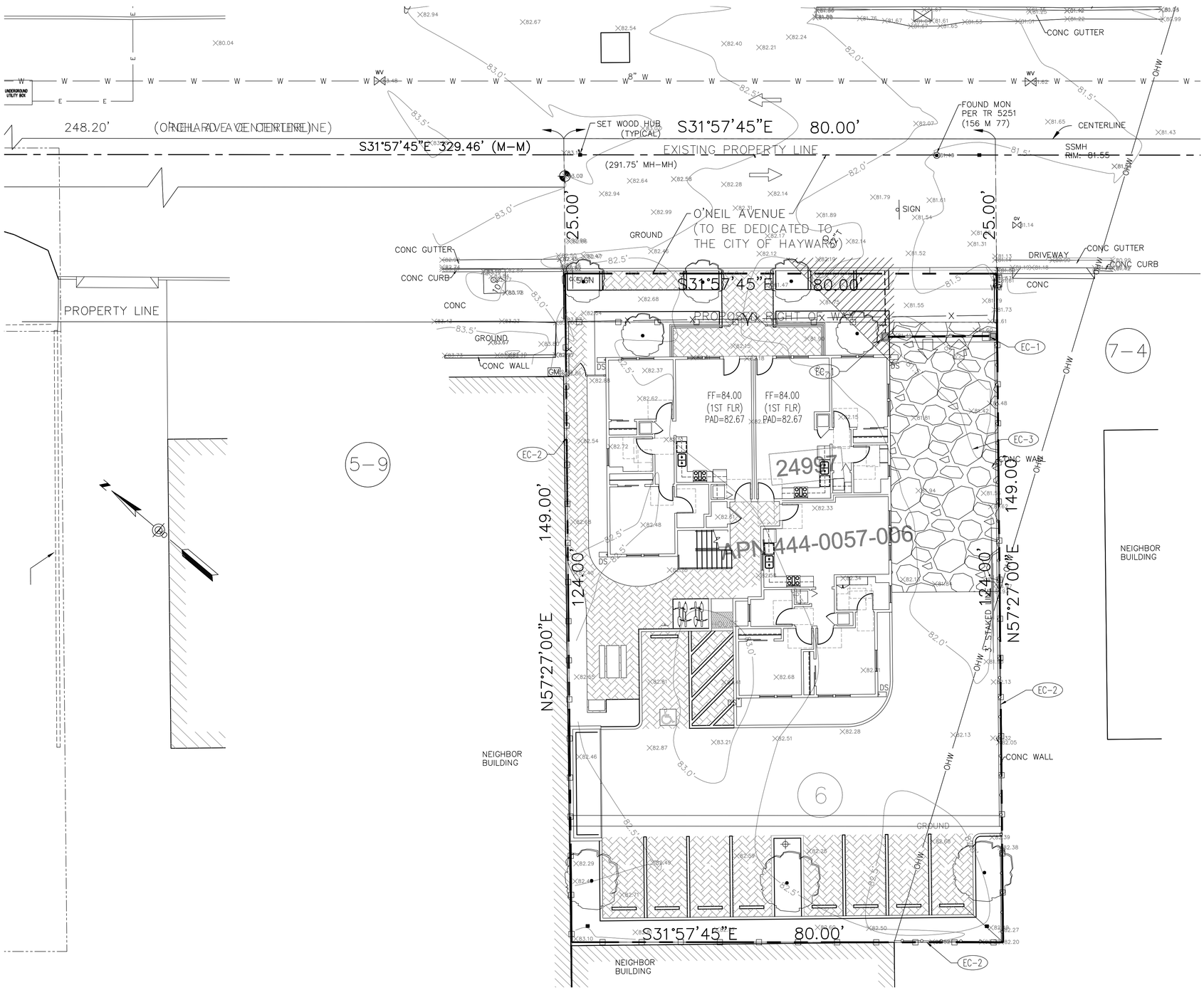
REGISTERED PROFESSIONAL ENGINEER
EKUNDAYO AKIN SOMMI
No. 22573
Exp. 12-31-21
CIVIL
STATE OF CALIFORNIA

24997 O'NEIL AVE
HAYWARD, CA 94554

PLANNING SUBMITTAL

PROJECT NO.:S17046
DRAWN: DS
CHECKED: ES
SCALE: AS SHOWN
DATE: 09-18-19

C3.0



EROSION CONTROL PLAN

SCALE: 1" = 10'- 0"

EROSION CONTROL PLAN NOTES

EC-1 INSTALL DRAINAGE INLET PROTECTION PER CITY STANDARD.
EC-2 INSTALL SILT FENCE PER DETAIL 6/C5.0.
EC-3 CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 9/C5.0.

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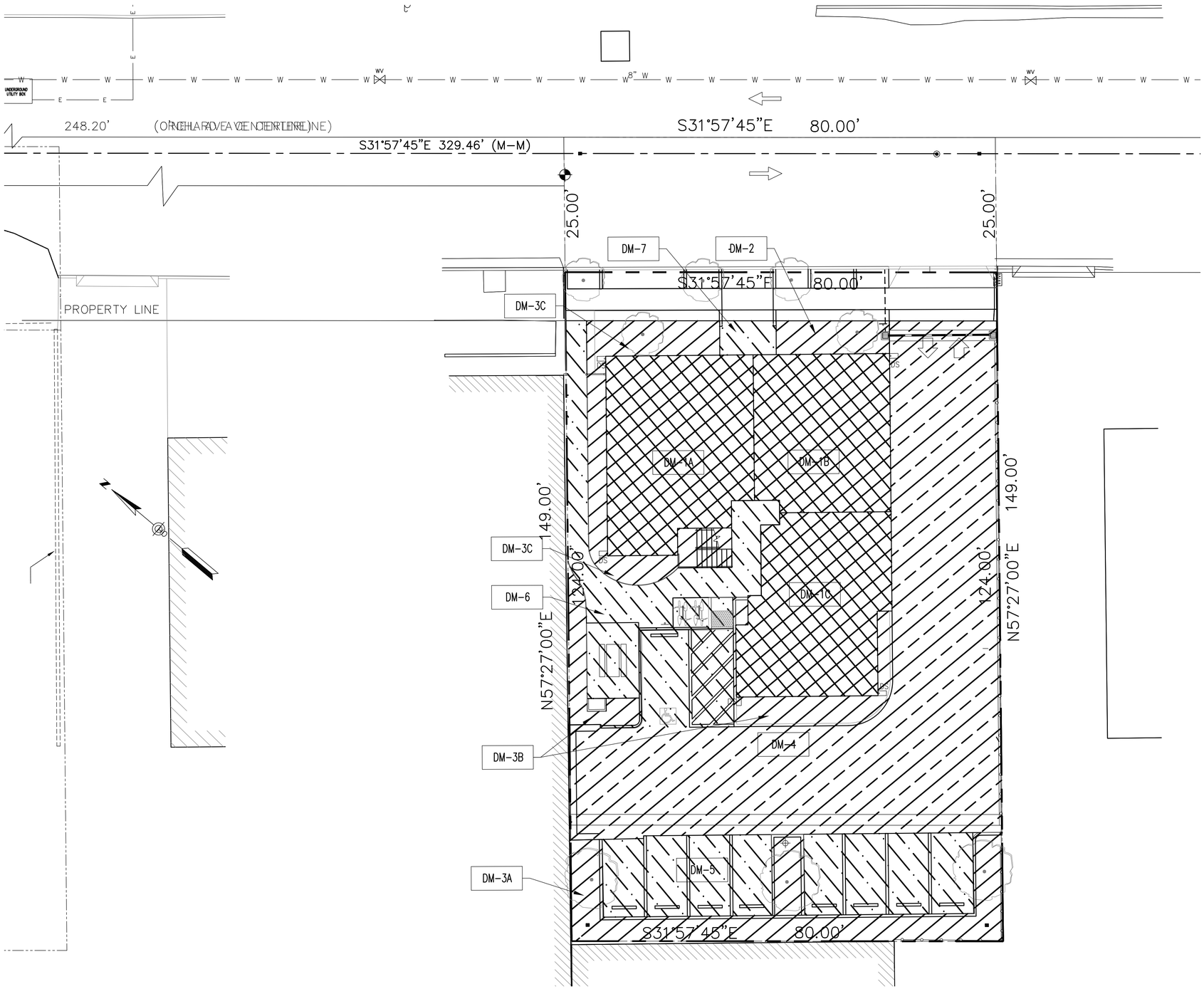

STORMWATER CONTROL PLAN

SCALE: 1" = 10'- 0"

STORMWATER CONTROL PLAN NOTES

ST-1 (N) CATCH BASIN.
ST-2 (N) CURB DRAIN.

STORMWATER TREATMENT AREA CALCULATIONS

DMA NAME	AREA (SF)	POST-PROJECT SURFACE TYPE	DMA RUN-OFF FACTOR	DMA X RUN-OFF FACTOR (SF)
DM-1A	920	CONVENTIONAL ROOF	1.00	920
DM-1B	734	CONVENTIONAL ROOF	1.00	734
DM-1C	833	CONVENTIONAL ROOF	1.00	833
DM-2	129	LANDSCAPE	0.10	13
DM-3A	508	LANDSCAPE	0.10	51
DM-3B	442	LANDSCAPE	0.10	44
DM-3C	432	LANDSCAPE	0.10	43
DM-4	3572	CONCRETE OR ASPHALT	1.00	3572
DM-5	941	PERMEABLE PAVERS	0.35	329
DM-6	476	PERMEABLE PAVERS	0.35	167
DM-7	66	PERMEABLE PAVERS	0.35	23
			TOTAL	6728

MINIMUM AREA = 0.04 X 6728= 269 SF
PROPOSED LANDSCAPE AREA = 1079 SF

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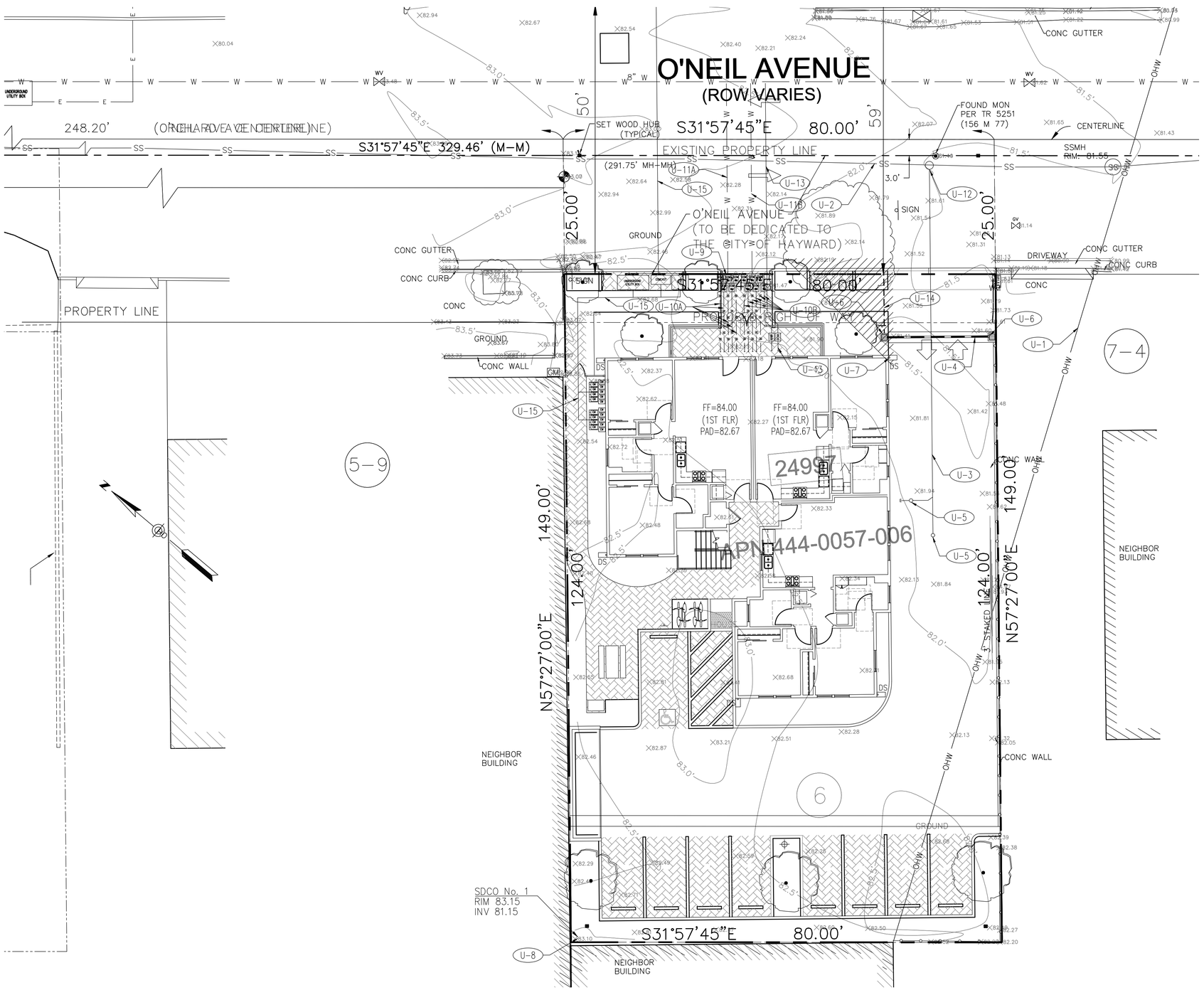
C3.2



UTILITY PLAN

SCALE: 1" = 10'- 0"

UTILITY PLAN NOTES

U-1 (E) OVERHEAD LINE TO BE RE-ROUTED BY COMCAST.
U-2 (E) SANITARY SEWER MAIN.
U-3 CONSTRUCT (N) SANITARY SEWER LATERAL.
U-4 (N) STORM DRAIN PIPE (HDPE)
U-5 INSTALL (N) SANITARY SEWER CLEANOUT.
U-6 (N) CATCH BASIN.
U-7 (N) RAINWATER LEADER AND SPLASH BLOCK.
U-8 (N) STORM DRAIN CLEANOUT.
U-9 (N) NINE 5/8" WATER METERS AND ONE 3/4" IRRIGATION WATER METER BY CITY OF HAYWARD.
U-10A INSTALL (N) WATER LINES FOR DOMESTIC WATER AND IRRIGATION WATER.
U-10B INSTALL (N) WATER LINES FOR DOMESTIC WATER.
U-11A (N) 1 1/2" MANIFOLD WATER SERVICE BY CITY OF HAYWARD FOR DOMESTIC WATER SERVICES.
U-11B (N) 2" MANIFOLD WATER SERVICE BY CITY OF HAYWARD FOR DOMESTIC WATER AND IRRIGATION WATER SERVICES.
U-12 CONSTRUCT (N) PRIVATE SEWER LATERAL.
U-13 (N) FIRE WATER SERVICE BY CITY OF HAYWARD PER HAYWARD STANDARDS SD-201 AND SD-204.
U-14 (N) SIDEWALK UNDERDRAIN.
U-15 (N) JOINT UTILITY TRENCH.

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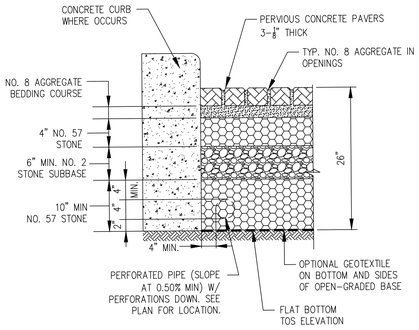
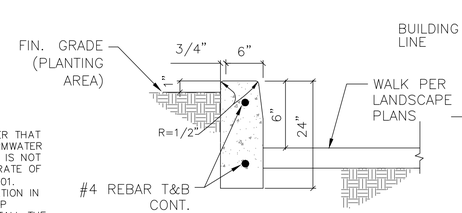
C4.0



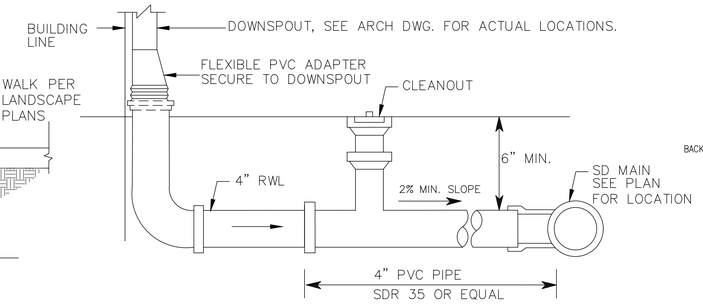
CONTRACTOR OR PERMITEE SHALL:

- PROVIDE CERTIFICATION FROM THE PAVER MANUFACTURER THAT THE PAVERS MEET THE REQUIREMENTS OF THE C3 STORMWATER HANDBOOK FOR PERVIOUS PAVERS. THIS INCLUDES, BUT IS NOT LIMITED TO, HAVING A MINIMUM SURFACE INFILTRATION RATE OF 100"/HR WHEN TESTED IN ACCORDANCE WITH ASTM C1701.
- ONLY CONTRACTORS HOLDING CERTIFICATION OF COMPLETION IN THE INTERLOCKING CONCRETE PAVEMENT INSTITUTES PICP INSTALLER TECHNICIAN COURSE SHALL BE USED TO INSTALL THE PAVERS AND AT LEAST ONE FOREMAN WITH THIS CERTIFICATION MUST BE ON THE JOBSITE AT ALL TIMES DURING CONCRETE PAVER INSTALLATION.
- PROTECT THE EXCAVATED AREA FOR PERVIOUS PAVERS FROM EXCESSIVE COMPACTION DUE TO CONSTRUCTION TRAFFIC AND PROTECT THE FINISHED PAVEMENT FROM CONSTRUCTION TRAFFIC.

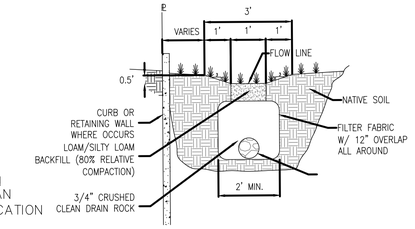
1 / C5.0 PERVIOUS PAVER
NTS



2 / C5.0 PLANTER CURB
NTS

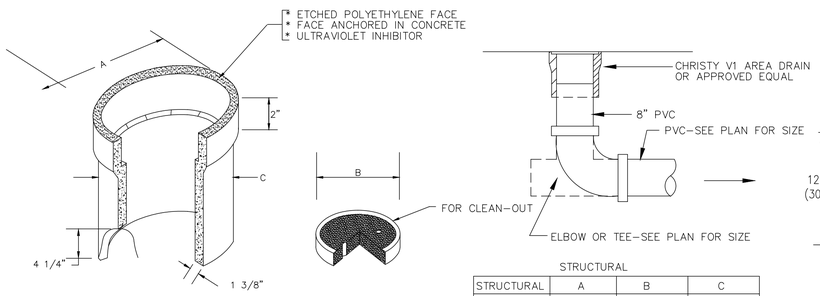


3 / C5.0 DOWNSPOUT TO RWL CONNECTION DETAIL
NTS



NOTES:
1. FLOWLINE SLOPE SHALL BE 2% OR LESS FOR EFFECTIVE DECREASED RUNOFF VELOCITY. MINIMUM FLOWLINE SLOPE 0.5%.
2. OPTIMAL DEPTH OF FLOW IS 0.25' OR LESS. WEIRS OR CHECK DAMS MAY BE USED TO IMPEDE FLOWS AND TO PROMOTE SEDIMENTATION AND NATURAL FILTRATION.
3. DRAIN ROCK SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC (MIRAFI 140N) AND OVERLAPPED AT TOP FOR THE FULL WIDTH OF THE TRENCH,
4. BACKFILL WITH COMPACTED LOAM OR SILTY LOAM SOILS (NRCS HYDROLOGIC SOIL GROUP) GROUP B FOR MODERTAE INFILTRATION RATE.
5. PLANT SWALE WITH SUITABLE PERMANENT GROUND COVER VEGETATION TO ACT AS NATURAL FILTER AND TO RETARD LOW INTENSITY FLOWS.

8 / C5.0 VEGETATED SWALE
NTS

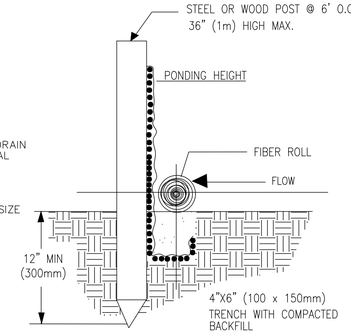


CHRISTY V1 DRAIN

STRUCTURAL

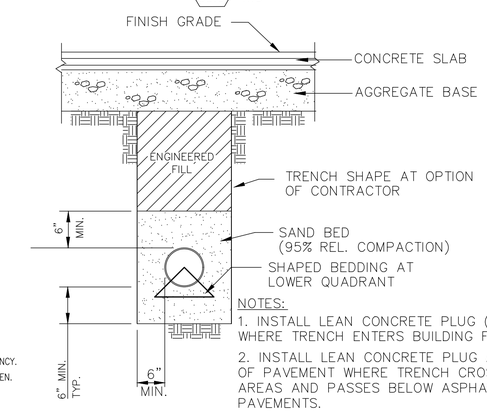
STRUCTURAL	A	B	C
AREA DRAIN	12 3/8"	8 7/8"	8"
CLEANOUT	8 3/8"	4 7/8"	4"

5 / C5.0 STORM DRAIN CLEANOUT DETAIL
NTS



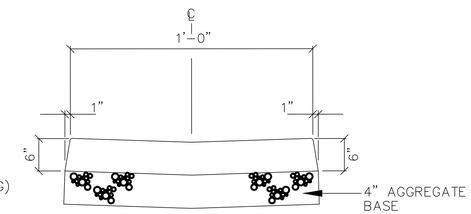
6 / C5.0 SILT FENCE
NTS

NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN. NECESSARY, 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT WILL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.



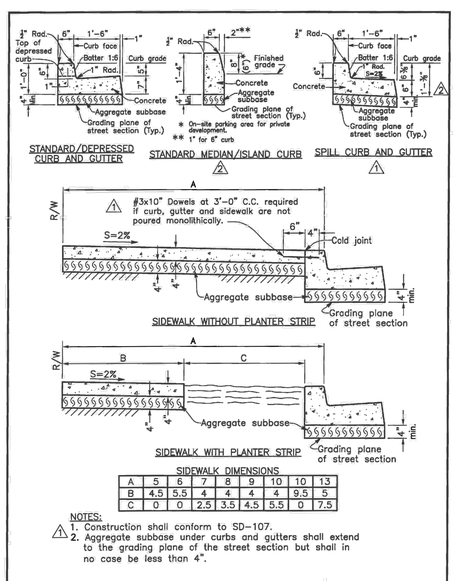
NOTES:
1. INSTALL LEAN CONCRETE PLUG (MIN. 5' LONG) WHERE TRENCH ENTERS BUILDING FOOTPRINT.
2. INSTALL LEAN CONCRETE PLUG AT THE EDGE OF PAVEMENT WHERE TRENCH CROSSES PLANTER AREAS AND PASSES BELOW ASPHALT OR CONCRETE PAVEMENTS.

7 / C5.0 TYPICAL UTILITY TRENCH DETAIL FOR PVC PIPES
NTS



SUBGRADE TO BE PREPARED PER GEOTECHNICAL REPORT

9 / C5.0 CONCRETE VALLEY GUTTER
NTS

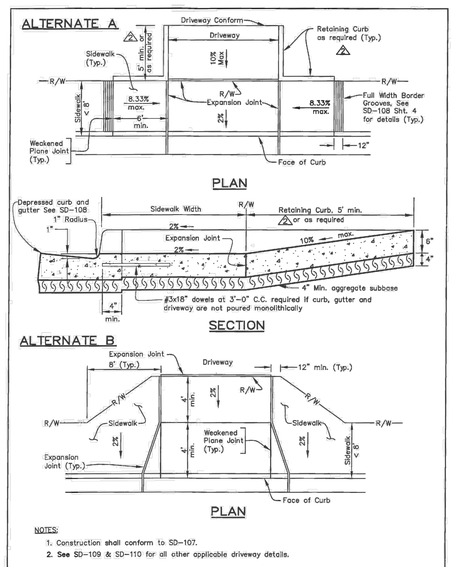


SIDEWALK DIMENSIONS

A	5	6	7	8	9	10	10	13
B	4.5	5.5	4	4	4	4	9.5	5
C	0	0	2.5	3.5	4.5	5.5	0	7.5

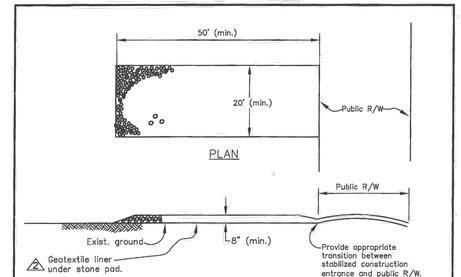
NOTES:
1. Construction shall conform to SD-107.
2. Aggregate subbase under curbs and gutters shall extend to the grading plane of the street section but shall in no case be less than 4".

HAYWARD PUBLIC WORKS DEPT. — STANDARD SIDEWALK, CURB AND GUTTER, ISLAND CURB AND CURB RAMP SECTIONS — DWG. NO. SD-108 — SHT. 1 OF 6



NOTES:
1. Construction shall conform to SD-107.
2. See SD-109 & SD-110 for all other applicable driveway details.

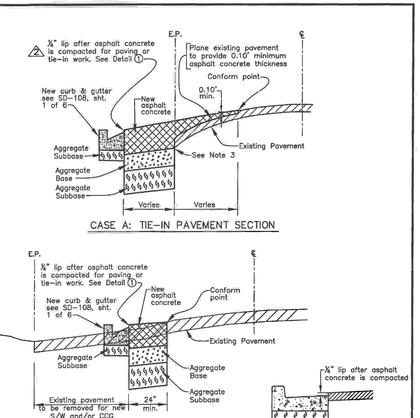
HAYWARD PUBLIC WORKS DEPT. — STANDARD DRIVEWAY FOR SIDEWALK < 8' — DWG. NO. SD-108A — SHT. 1 OF 1



DESIGN AND CONSTRUCTION SPECIFICATIONS

1. The material for construction of the pad shall be 3 to 4 inch fractured stone.
2. The thickness of the pad shall not be less than 8 inches.
3. Place geotextile liner under stone pad.
4. The width of the pad shall not be less than the full width of all points of ingress or egress.
5. The length of the pad shall be as required, but not less than 50 feet.
6. The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way shall be removed immediately.
7. When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, board or other approved methods.

HAYWARD PUBLIC WORKS DEPT. — STANDARD STABILIZED CONSTRUCTION ENTRANCE — DWG. NO. SD-111 — SHT. 1 OF 1



NOTES:
1. Tie-in pavement section shall be approved by the City Engineer.
2. Conform point shall be determined by the City Engineer and may occur anywhere between the edge of pavement and the centerline.
3. Tie-in asphalt concrete shall extend to at least the bottom of existing asphalt concrete unless otherwise approved by the City Engineer.
4. Tie-in pavement section shall be designed according to the R-value and Traffic Index and can be full-depth asphalt concrete.

HAYWARD PUBLIC WORKS DEPT. — STANDARD TIE-IN PAVEMENT — DWG. NO. SD-113 — SHT. 1 OF 1

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24997 O'NEIL AVE
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PLANNING SUBMITTAL

PROJECT NO.:S17046

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C5.0

PLANT NOTES

1. THESE NOTES ARE FOR GENERAL REFERENCE IN CONJUNCTION WITH, AND AS A SUPPLEMENT TO, THE WRITTEN SPECIFICATIONS, DETAILS, ADDENDA AND CHANGE ORDERS ASSOCIATED WITH THE CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF ALL EXISTING AND FUTURE UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH WORK TO BE DONE. CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 227-2600 PRIOR TO DIGGING. NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY SHOULD CONFLICTS ARISE.
4. FINE GRADING, HEADERS AND IRRIGATION COVERAGE SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLANTING OPERATIONS.
5. CONTRACTOR SHALL LAY OUT PLANT MATERIAL PER PLAN AND FACE TO GIVE BEST APPEARANCE OR RELATION TO ADJACENT PLANTS, STRUCTURES OR VIEWS. CONTRACTOR TO OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
6. PLANT MATERIAL SHALL NOT BE INSTALLED IN AN AREA WHICH WILL CAUSE HARM TO ADJACENT STRUCTURES OR OBSTRUCT IRRIGATION SPRAY PATTERN. NOTIFY THE OWNER'S REPRESENTATIVE SHOULD CONFLICTS ARISE.
7. PRIOR TO PLANTING INSTALLATION, CONTRACTOR SHALL OBTAIN APPROVAL OF PLANT LAYOUT FROM OWNER'S REPRESENTATIVE. PLANT LOCATIONS ARE DIAGRAMMATIC AND MAY BE ADJUSTED IN THE FIELD AT THE OWNER'S REPRESENTATIVE'S REQUEST.
8. CONTRACTOR SHALL COORDINATE PLANT LOCATION TO DRIP TUBING LOCATION AND ADJUST PLANTING AS NECESSARY TO ACHIEVE BEST RESULT.
9. ALL NON-TURF AREAS SHALL BE MULCHED WITH A MINIMUM 3" LAYER OF BARK MULCH. UNLESS OTHERWISE NOTED, FINISH GRADE OF PLANTING AREAS SHALL BE 3" BELOW ADJACENT PAVING. TAPER 3" DEPTH BARK MULCH TOP DRESSING TO 1/2" BELOW ADJACENT PAVING (1-1/2" DEPTH) WITHIN 2' OF PAVING. CONTRACTOR SHALL SUBMIT A SAMPLE TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO MULCH DELIVERY TO THE SITE. FOR FURTHER INFORMATION, SEE SPECIFICATIONS.
10. GROUND COVERS SHALL BE PLANTED EVENLY AND CONTINUOUSLY UNDER TREE AND SHRUB MASSES.
11. CONTRACTOR SHALL USE A NATURAL PRE-EMERGENT, SUCH AS CORN WEED BLOCKER OR COMPARABLE, AND SHALL APPLY ACCORDING TO THE MANUFACTURER'S DIRECTIONS PRIOR TO APPLYING MULCH.
12. ALL NEWLY PLANTED MATERIAL SHALL BE THOROUGHLY SOAKED WITH WATER WITHIN 3 HOURS OF PLANTING.
13. THIRTY DAYS AFTER PLANTING, CONTRACTOR SHALL RE-STAKE AND STRAIGHTEN TREES AS NEEDED.
14. BENEATH PROPOSED SOD, EXCAVATE EXISTING SOIL TO A DEPTH OF 12" BELOW PROPOSED FINISHED GRADE. REPLACE WITH IMPORTED LOAM SOIL AND BRING TO FINISHED GRADE.
15. THE CONTRACTOR SHALL PROVIDE FOR IN THEIR BID FOR A BASE AMENDMENT FOR SOIL AMENDMENT. AFTER ROUGH GRADING OF THE SITE A SOIL NUTRIENT TEST WILL BE CONDUCTED OF VARIOUS PLANTED AREAS AND THE PLANTER AREAS SHALL BE AMENDED BASED ON THIS SOIL MANAGEMENT REPORT.
16. SEE CIVIL ENGINEERS GRADING PLAN FOR GRADING AND DRAINAGE DESIGN ON THIS PROJECT.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE COMPLIANCE

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENATION PACKAGE. TITLE 23 CH. 2.7 SECTION 492.3

SCOTT FORNACIARI — 10/19/19
CALIFORNIA REGISTERED LANDSCAPE ARCHITECT #3980 — DATE

SITE GRADING NOTE:

LANDSCAPE GRADING FOR THE SITE IS SHOWN ON THE CIVIL ENGINEERING SITE IMPROVEMENT PLAN(S).

LANDSCAPE COEFFICIENT WUCOLS FACTOR:

RATING	SPECIES
HIGH	0.7 - 0.9
MOD. / AV.	0.4 - 0.6
LOW	0.1 - 0.3
VERY LOW	< 0.1

* WULCOLS VALUES BASED ON UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION DEPT. OF WATER RESOURCES 'A GUIDE TO ESTIMATING IRRIGATION WATER NEEDS OF LANDSCAPE PLANTINGS IN CALIFORNIA'

LANDSCAPE REQUIREMENT
11,920 SF LOT SIZE

LANDSCAPE AREAS SUMMARY - ON SITE
1,440 SF LANDSCAPE PLANTING
THERE IS NO TURF PROPOSED FOR THE PROJECT
LANDSCAPE AREAS SUMMARY - OFF SITE
80 SF LANDSCAPE PLANTING AT PARKING MEDIAN

ANOVA METRIX RECEPTICLE MODEL L2009

TRASH ENCLOSURE

OUTDOOR CREATIONS MODEL 300

BARBEQUE

OUTDOOR CREATIONS MODEL 1005

PICNIC TABLE

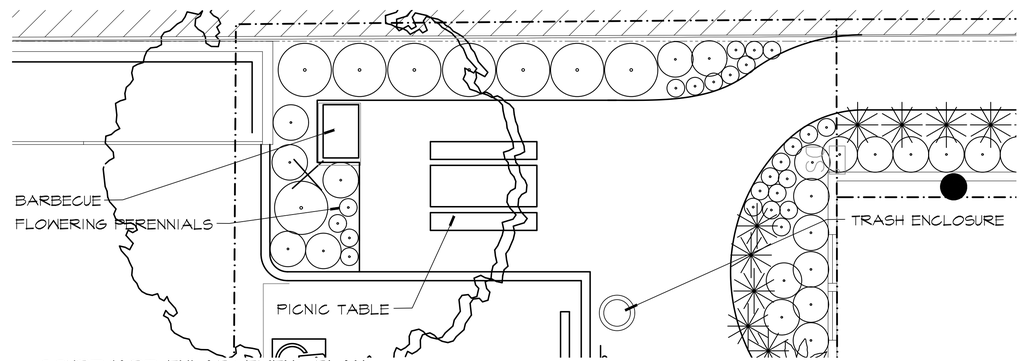
PRELIMINARY PLANT LEGEND

REGION I WUCOLS CLASS SUNSET ZONE 15

REGION I WUCOLS CLASS	SYMBOL	SIZE	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANT SPACING
	TREES					
LOW	ARB MAR	24" BOX	ARBUTUS MARINA	"MARINA" MADRONE	30'T X 30'W *	AS SHOWN ON PLAN
LOW	LAG TUS	24" BOX	LAGERSTROEMIA I. 'TUSCARORA'	CRAPE MYRTLE - PINK	22'T X 12'W	AS SHOWN ON PLAN
LOW	LAG ZUN	24" BOX	LAGERSTROEMIA I. 'ZUNI'	CRAPE MYRTLE - LAVENDER	9'T X 8'W	AS SHOWN ON PLAN
LOW	PRU CER	24" BOX	PRUNUS S. 'KWANZAN'	PURPLE LEAF PLUM	30'T X 20'W	AS SHOWN ON PLAN
	SHRUBS					
LOW	FES EJI	1 GAL	FESTUCA GLAUCA 'ELIJAH BLUE'	ELIJAH BLUE OAT GRASS	8"T X 8"W	12"
MEDIUM	HEM PEG	1 GAL	HEMEROCALLIS 'PEGGY'S PINK'	DAYLILY - PINK	2'T X 2'W	2'-3'
MEDIUM	HEM RED	1 GAL	HEMEROCALLIS 'RED VELVET'	DAYLILY - RED	2'T X 2'W	2'-3'
MEDIUM	HEU MAX	1 GAL	HEUCHERA MAXIMA	ISLAND ALUM ROOT	2'T X 3'W	3'-4'
LOW	LAV ANG	5 GAL	LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDER	2'T X 2'W	2'-3'
LOW	LAV INT	5 GAL	LAVANDULA X. 'PROVENCE'	PROVENCE LAVENDER	2'T X 3'W	3'-4'
LOW	NAN SIE	5 GAL	NANDINA D. MONFAR 'SIENNA SUNRISE'	HEAVENLY BAMBOO	3'T X 2'W *	2'-3'
VERY LOW	NAS PUL	1 GAL	NASELLA PULCHRA	PURPLE NEEDLE GRASS	3'T X 2'W	3'-4'
LOW	PHO MAO	5 GAL	PHORMIUM C. 'MAORI QUEEN'	DWARF FLAX - MAORI QUEEN	3'T X 4'W	4'-5'
LOW	RHU OVA	5 GAL	RHUS OVATA	SUGAR BUSH	10'T X 4'W	4'
MEDIUM	ROS FLO	5 GAL	ROSA FLORIBUNDA 'ICEBERG'	ICEBERG ROSE	3'T X 4'W *	4'-5'
LOW	SAL NEM	1 GAL	SALVIA NEMOROSA 'OSTERFRIELAND'	SALVIA	2'T X 2'W	2'-3'
	VINES					
MEDIUM	CLE ARM	15 GAL	CLEMATIS ARMANDII	EVERGREEN CLEMATIS VINE		
	GROUNDCOVERS					
LOW	DYM MAR		DYMONDIA MARGARETAE	DYMONDIA	3"T X 20"W	18" O.C.

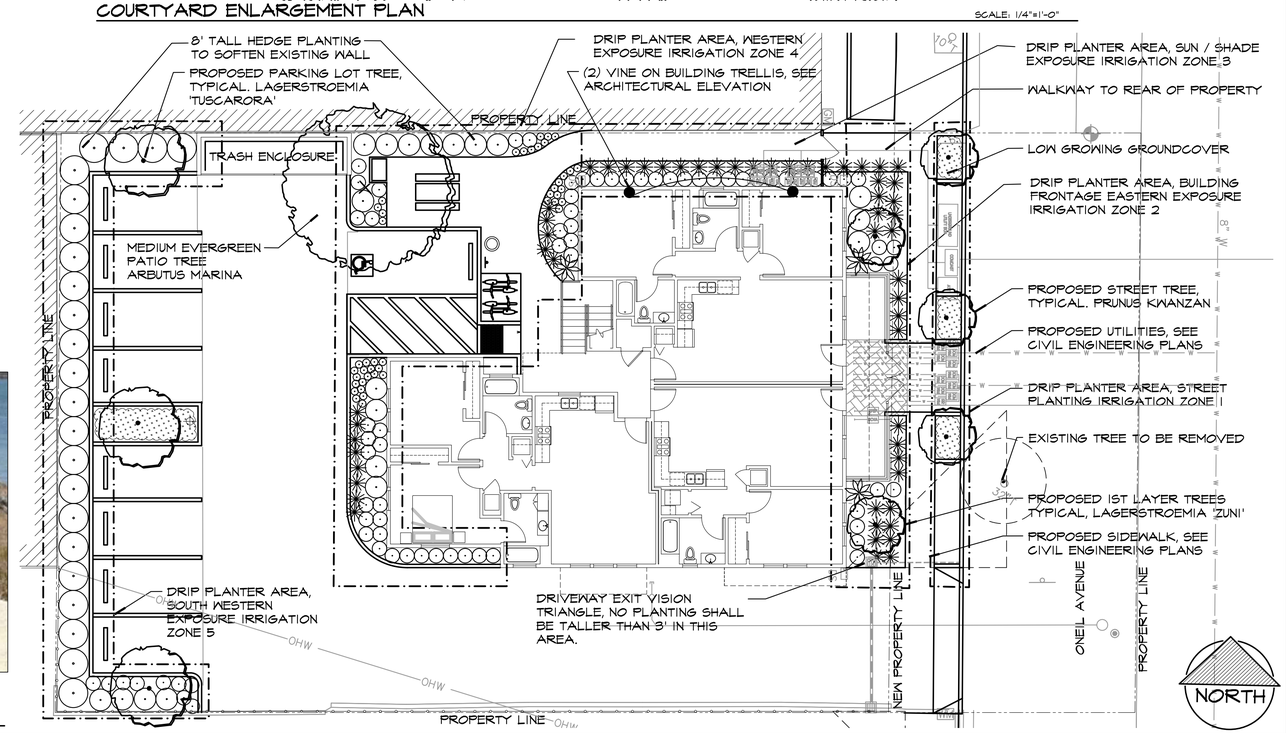
BARK MULCH - 3" COVER IN ALL PLANTERS NOT PLANTED AND FILLED IN AROUND ALL PLANTS, TYPICAL.

NOTE: PLANT SIZE REFERENCES SOURCED FROM SUNSET WESTERN GARDEN BOOK.
* PLANT SIZE REFERENCED FROM MONROVIA NURSERY, SUNSET GARDEN BOOK DID NOT HAVE INFORMATION
NOTE: STREET TREES SHALL BE PLANTED ACCORDING TO THE CITY STANDARD DETAIL SD-122



COURTYARD ENLARGEMENT PLAN

SCALE: 1/4"=1'-0"



LANDARC Associates PLLC
1900 S. Norfolk Street
Suite 350
San Mateo, CA 94403
CA RLA # 3980
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LICENSED LANDSCAPE ARCHITECT
SCOTT T. FORNACIARI
Cert. No. 3980
Signature
10/18/19
Renewal Date
9/30/2020
Date
STATE OF CALIFORNIA

PROJECT: 24997 O'NEIL AVENUE
HAYWARD, CALIFORNIA 94554

OWNER: MR. PAWAN KUMAR
24997 O'NEIL AVENUE
HAYWARD, CALIFORNIA 94554

REVISIONS

MARK	DATE	DESCRIPTION
1	11.27.19	CITY COMMENTS
2	04.14.20	CITY COMMENTS

DRAWING TITLE
CONCEPTUAL LANDSCAPE PLAN

DATE: 3/12/19
JOB NUMBER: 1902
DRAWN: SF CHECKED: SF
SCALE: 1" = 10'-0"

SHEET NUMBER
L1.1
SHEET OF

IRRIGATION NOTES

1. THESE NOTES ARE FOR GENERAL REFERENCE IN CONJUNCTION WITH AND AS A SUPPLEMENT TO THE WRITTEN SPECIFICATIONS, DETAILS, ADDENDA AND CHANGE ORDERS ASSOCIATED WITH THE CONTRACT DOCUMENTS.
2. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF EXISTING AND FUTURE UNDERGROUND SERVICES. CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 642-2444 PRIOR TO BEGINNING WORK. CONTACT OWNERS REPRESENTATIVE SHOULD ANY CONFLICTS ARISE.
3. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS.
4. THIS SYSTEM IS DESIGNED TO OPERATE AT 75 PSI AND 20 GPM MAXIMUM AT EACH VALVE LOCATION. CONTRACTOR SHALL VERIFY PRESSURE AND FLOW PRIOR TO BEGINNING OF WORK. CONTACT OWNERS REPRESENTATIVE IMMEDIATELY SHOULD CONFLICTS ARISE.
5. THE IRRIGATION SYSTEM DESIGN IS DIAGRAMMATIC. WHERE PIPING, VALVES, ETC. ARE SHOWN OUTSIDE OF PLANTING AREAS, THE INTENT IS FOR PIPING, VALVES, ETC. TO BE INSTALLED WITHIN PLANTING AREAS UNLESS OTHERWISE NOTED AND DETAILED.
6. CONTRACTOR SHALL COORDINATE IRRIGATION INSTALLATION WITH OTHER TRADES. CONTRACTOR TO COORDINATE AND VERIFY ALL SLEEVING, PIPING, ELECTRICAL SUPPLY, POINT OF CONNECTION, ETC.
7. CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND UNIFORM COVERAGE OF ALL PLANTING AND TURF AREAS. CONTRACTOR TO THROTTLE THE FLOW CONTROL AT EACH VALVE TO OBTAIN OPTIMUM OPERATING PRESSURE FOR EACH CIRCUIT. ADJUST SPRAY HEADS AND NOZZLES FOR OPTIMUM COVERAGE WHILE PREVENTING OVERSPRAY ONTO WALKWAYS AND STRUCTURES.
8. CONTRACTOR TO MAP "AS-BUILT" CONDITIONS OF THE IRRIGATION SYSTEM. PROVIDE DIMENSIONS FOR MAINLINE FROM NEAREST PAVED SURFACE OR BUILDING. REDUCE PLAN TO A LEGIBLE FORMAT, ENCASE IN PLASTIC AND PLACE IN CONTROLLER ENCLOSURE.
9. REFER TO SPECIFICATIONS AND IRRIGATIONS DETAILS
10. CONTRACTOR SHALL TOOL-TIGHTEN ALL POP-UP SPRAY NOZZLES AND CAPS.
11. CONTRACTOR SHALL PROTECT EXISTING VALVE WIRES FOR REUSE ON NEW CIRCUITING, IF / WHERE OCCURS.
12. CONTRACTOR SHALL FIELD VERIFY EXTENT OF EXISTING IRRIGATION TO BE DEMOLISHED. CHECK AND DOCUMENT OPERATIONAL CONDITION OF EXISTING SYSTEM WITH OWNER REPRESENTATIVE PRESENT PRIOR TO BEGINNING WORK.
13. CONTRACTOR SHALL REMOVE ALL EXISTING IRRIGATION HEADS AND UNDERGROUND PIPING OR COMPONENTS THAT ARE NOT REQUIRED FOR NEW IRRIGATION SYSTEM AND EXISTING TO REMAIN IRRIGATION.
14. CONTRACTOR RESPONSIBLE TO PROVIDE CONTINUOUS OPERATION OF REMAINING IRRIGATION SYSTEM OUTSIDE OF PROJECT AREA. NOTIFY OWNER REPRESENTATIVE OF ANY DISRUPTIONS OF WATER SERVICE. CONTRACTOR TO PROVIDE SUPPLEMENTAL WATER TO PLANT MATERIAL WITHIN PROJECT AREA DURING CONSTRUCTION AS REQUIRED.
15. CONTRACTOR SHALL USE MANUFACTURER-PROVIDED DEVICE TO PREVENT LOW END DRAINAGE, WHERE LOW END DRAINAGE MAY OCCUR WITH GRADE CHANGE. IN THE EVENT THAT THE DEVICE DOESN'T CONTAIN DRAINAGE, CONTRACTOR SHALL MAKE USE OF A KING BROTHERS, INC. SPRING OR FLOW CHECK VALVE AS NECESSARY.

HYDROZONE LEGEND

ZONE 1
LAWN AREA
TOTAL = 0 SF

ZONE 2
PLANTER SPRAY AREA
TOTAL = 0 SF

ZONE 3
PLANTER DRIP AREA
TOTAL = 1,309 SF

ZONE 4
TREE DRIP AREA
7 SF EACH TREE
TOTAL = 63 SF

SECTION B. WATER BUDGET CALCULATIONS

Section B1. Maximum Applied Water Allowance (MAWA)

The project's Maximum Applied Water Allowance shall be calculated using this equation:

MAWA = (Eto) (0.62) [(0.45 x LA) + (0.3 x SLA)

where:

MAWA = Maximum Applied Water Allowance (gallons per year)
Eto = Reference Evapotranspiration from Appendix A (inches per year)
0.45 = ET Adjustment Factor (ETAF)
LA = Landscape Area includes Special Landscape Area (square feet)
0.62 = Conversion factor (to gallons per square foot)
SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
0.3 = the additional ET Adjustment Factor for the Special Landscape Area (1.0 - 0.7 = 0.3)

Maximum Applied Water Allowance = 16,919 gallons per year

Show calculations.

(44.2) (0.62) [(0.45x 1,372) + (0.3) x 0 = **16,919**

City of Hayward

LANDSCAPE WATER USE STATEMENT

Project Name Multi-family residential
Project Address 24977 Oneil ave.
Hayward, CA 94554

Prepared by:
Landarc Associates PLLC RLA 3980
1900 S. Norfolk Street Suite 350
San Mateo, CA 94403 408-361-8085

PART ONE Landscape Water Allowance

Total Irrigated Landscaped Area (square feet) **Box A** **1,372**
X 20.80

Landscaped Water Allowance (Gallons per Year) **Box B** **28,538**

PART TWO Estimated Landscape Water Use

$$^{*}ELWU = \frac{LZ \times PF \times 26}{IE}$$

Landscape Zone	Area (LZ) (square feet)	Plant Factor (PF)	Irrigation Efficiency (IE)	ELWU (Gallons/Year)
1	39	0.2	0.81	250
2	256	0.4	0.81	3,287
3	126	0.4	0.81	1,618
4	357	0.4	0.81	4,584
5	531	0.2	0.81	3,409
6	63	0.2	0.81	404
TOTAL	1,372			**13,552**

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE COMPLIANCE

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENATION PACKAGE. TITLE 23 CH. 2.7 SECTION 492.3

SCOTT FORNACIARI 10/18/19
CALIFORNIA REGISTERED LANDSCAPE ARCHITECT #3980 DATE

SITE GRADING NOTE:

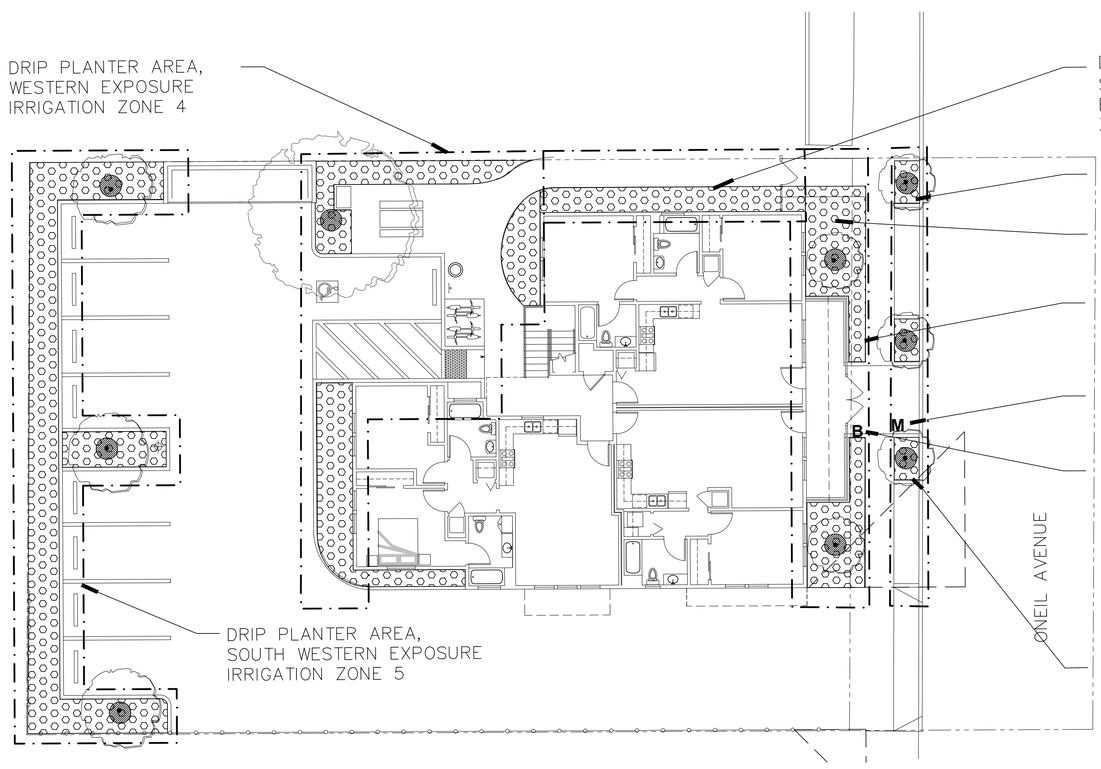
LANDSCAPE GRADING FOR THE SITE IS SHOWN ON THE CIVIL ENGINEERING SITE IMPROVEMENT PLAN(S).

SITE IRRIGATION NOTES:

1. PROJECT SHALL HAVE A SEPARATE WATER METER, SEE CIVIL ENGINEERING PLANS
2. PROJECT SHALL HAVE A SEPARATE REDUCED PRESSURE BACKFLOW PREVENTER FOR IRRIGATION
3. PROJECT STATIC WATER PRESSURE AT THIS LOCATION IS 75 PSI

HYDROZONE INFORMATION TABLE

HYDROZONE TYPE	ZONE	IRRIGATION METHOD	SQUARE FOOTAGE	% OF LANDSCAPE AREA
ZONE 3	1	DRIP	39	2
ZONE 3	2	DRIP	256	19
ZONE 3	3	DRIP	126	9
ZONE 3	4	DRIP	357	26
ZONE 3	5	DRIP	531	39
ZONE 3	6	DRIP	63	5



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LICENSED LANDSCAPE ARCHITECT SCOTT T. FORNACIARI Cert. No. 3980 Signature 10/18/19 Renewal Date 9/30/2020 Date STATE OF CALIFORNIA

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HYDROZONE PLAN

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