ABBREVIATIONS

&	And
¬	Angle
@	At
℄	Centerline
°	Degrees
Ø	Diameter
#	Number OR Pound
∥	Parallel
⊥	Perpendicular
±	Plus or Minus
ℙ	Property Line
A.B.	Anchor Bolt
ABV.	Above
A/C.	Air Condition
A.C.T.	Acoustic Ceiling Tile
ACOUS.	Acoustical
ADD.	Addendum
ADH.	Adhesive
ADA	Americans with Disabilities Act
ADDL.	Additional
ADJ.	Adjacent
ADJT.	Adjustable
A.F.F.	Above Finished Floor
AGGR.	Aggregate
AL.	Aluminum
A.P.	Access Panel
APPROX.	Approximate
ANCH.	Anchor
ANOD.	Anodized
ARCH.	Architectural
ASPH.	Asphalt
AUTO	Automatic
AXON.	Axonometric
BD.	Board OR Bollard
BEL.	Below
BETW	Between
BFP	Backflow Preventer
BLDG.	Building
BLKG.	Block(ing)
BM.	Beam
B.M.	Brick Module
B.O.	Bottom Of
BOT.	Bottom
B.P.	Building Paper
BRKT.	Bracket
BRG.	Bearing
BRK.	Brick
B.U.R.	Built-up Roofing
BSMT.	Basement
CAB.	Cabinet
CAT.	Category
CEM.	Cement
CER.	Ceramic
C.G.	Corner Guard
CHAN.	Channel
C.I.	Cast Iron
C.I.P.	Cast in Place
C.J.	Control Joint
CLG.	Ceiling
CLKG.	Caulking
CLO.	Closet
CLR.	Clear
C.M.U.	Concrete Masonry Unit
CNTR.	Counter
C.O.	Cased Opening
CO.	Cleanout
COL.	Column
COMP.	Compress(ed)(ion)(ible)
COND.	Condition
CONC.	Concrete
CONST	Construction
CONT.	Continuous
CONTR.	Contractor
CPT	Carpet
C.R.	Cold Rolled
CSFH	Countersunk Flat Head
C.T.	Ceramic Tile
CTR.	Center
CTSK	Countersunk
CW.	Curtain wall
DA	Double Acting
DB	Design Build
DBL.	Double
DEPT.	Department
DET./DTL.	Detail
DEPR	Depress(ed)(ion)
D.F.	Drinking Fountain OR Douglas Fir
D.G.	Decomposed Granite
DIA.	Diameter
DIM.	Dimension
DN.	Down
D.O.	Door Opening
DPR	Dispenser
DR.	Door
DRN.	Drain
DS.	Downspout
D.W.	Dishwasher
DWG.	Drawing
DWR.	Drawer
E	East
(E)	Existing
EA.	Each
E.I.F.S.	Exterior Insulation Finish System
E.J.	Expansion Joint
ELEC.	Electrical
ELEV.	Elevator OR Elevation
EMER.	Emergency
ENCL.	Enclosure
ENGR.	Engineer
EOS	Edge of Slab
E.P.	Electrical Panelboard
EPDM	Ethylene Polypropylene (elastic plastic flashing)
EQ.	Equal
EQUIP.	Equipment
ERA	Exterior Roof Assembly
ESA	Exterior Soffit Assembly
EWA	Exterior Wall Assembly
E.W.C.	Electrical Water Cooler
EXH	Exhaust
EXP	Expansion
EXPO.	Exposed
EXT.	Exterior
F.	Fabric
F.A.	Fire Alarm OR Floor Assembly
FAB	Fabricate(d)
FACP	Fire Alarm Control Panel
F.D.	Floor Drain OR Fire Damper
FND.	Foundation
F.E.	Fire Extinguisher
F.E.C.	Fire Extinguisher Cabinet
F.F.	Finish Floor
F.H.	Flat Head OR Full Height
F.H.C.	Fire Hose Cabinet
F.H.W.S.	Flat Head Wood Screw
FIN.	Finish(ed)
FIXT.	Fixture
FL./FLR.	Floor
FLASH.	Flashing
FLOUR.	Flourescent

F.O.	Face Of
F.O.C.	Face of Concrete
F.O.F.	Face of Finish
F.O.S.	Face of Stud
F.O.W.	Face of Wall
F.P.	Fireproof(ing)
F.R.	Fire Retardant, Fire Rated
F.S.	Fire Sprinkler, Full Size
FSD	Fire Seperation Distance
F.T.	Fire Treated
FT.	Foot OR Feet
FTG.	Footing
FUR.	Furring
FUT.	Future
F.V.C.	Fire Valve Cabinet
GA.	Gauge
GALV.	Galvanized
G.B.	Grab Bar
G.C.	General Contractor
G.D.	Garbage Disposal
GEN.	General
GFCI	Ground Fault Circuit Interruption
GL.	Glass, Glazing
G.N.	General Note
GND.	Ground
G.R.	Guard Rail
GR.	Grade
GSM	Galvanized Sheet Metal
GT	Grout
GYP.	Gypsum Board
H.B.	Hose Bib
H.C.	Hollow Core
HD.	Head OR Handryer
HDBD.	Hardboard
HDR	Header
HDW.	Hardware
HDWD.	Hardwood
HT.	Height
H.M.	Hollow Metal
HNDRL.	Handrail
HOR.	Horizontal
H.PT.	High Point
H.R.	Handrail
HR.	Hour
H.V.A.C.	Heating, Ventilation, Air Conditioning
H.W.	Hot Water
I.D.	Inside Diameter / Dimension
IN.	Inch
INCAN.	Incandescent
INCL.	Include(d)(ing)
INFO.	Information
INSUL.	Insulation, Insulated
INT.	Interior
INTER.	Intermediate
INV.	Invert
J-BOX	Junction Box
JST.	Joist
JT.	Joint
KO.	Knockout
K.P.	Kick Plate
L.	Length
LAM.	Laminate
LAV.	Lavatory
LEV.	Level
LG.	Long
L.F.	Linear Foor
L.PT.	Low Point
LTG.	Lighting
LTWT.	Lightweight
LVL	Laminated Veneer Lumber OR Level
LVR	Louver
M	Meter OR Men
MM	Milimeter
MAINT.	Maintenance
MAT.	Material
MAS.	Masonry
MAX.	Maximum
MDF	Medium Density Fiber Board
MECH.	Mechanical
MED. CAB.	Medicine Cabinet
MEMB.	Membrane
M.E.P.	Mechanical, Electrical, Plumbing
MFR.	Manufacturer
M.H.	Manhole
MID.	Middle
MIN.	Minimum
MIRR.	Mirror
MISC.	Miscellaneous
MLDG	Moulding
MR	Moisture Resistant
MOD.	Module
MPOE	Minimum Point of Entry
MTD.	Mounted
MTL.	Metal
MUL.	Mullion
MWRK	Millwork
N	North
(N)	New
NA	Not Applicable
N.I.C.	Not In Contract
NO.	Number
NOM.	Nominal
N.T.S.	Not To Scale
O.A.	Overall
O.C.	On Center
O.D.	Outside Diameter
O.F.C.I	Owner Furnished Contractor Installed
OFD.	Overflow Drain
OFL.	Overflow Leader
O.F.O.I	Owner Furnished Owner Installed
OPER.	Operable
OPNG.	Opening
OPP.	Opposite
OPP. HD.	Opposite Hand
OSB	Oriented Stand Board
OVHD.	Overhead
OZ.	Ounce
OWSJ	Open Web Steel Joist
PAV.	Paving
PBD	Particle Board
P.C.	Precast Concrete
PERF.	Perforated
PERP.	Perpendicular
P.G.	Paint Grade
PLT.	Plate
P.LAM.	Plastic Laminate
PLAS.	Plaster
PLYWD.	Plywood
PLBG.	Plumbing
POL.	Polished
PNL.	Panel
PNT.	Paint
PR.	Pair
PRECST.	Precast
PREFAB.	Prefabricated

PSF	Pounds per Square Foot
PSI	Pounds per Square Inch
PT.	Point OR Pressure Treated
PTD.	Painted
P.T.D.	Paper Towel Dispenser
P.T.R.	Paper Towel Receptacle
PTN.	Partition
PVC	Polyvinyl Chloride
QTY	Quantity
R.	Riser
R.A.	Return Air
RAD.	Radius, Radii
R.B.	Resilient Base, Rubber Base
RCP	Reflected Ceiling Plan
R.D.	Roof Drain
REC.	Recessed
REF.	Reference
REFG.	Refridgerator
REINF.	Reinforced
REM.	Remaining
REQ.	Required
RES.	Resistant
RESIL.	Resilient
RETG.	Retaining
REV.	Revise(d)(vision)
RFL.	Reflect(ed)(ive)(or)
RGTR.	Register
RH	Right Hand
R.H.M.	Radiant Heat Manifold
RM.	Room
RND.	Round
R.O.	Rough Opening
R.P.	Radius Point
RSF	Resilient Sheet Flooring
RT	Resilient Tile
RWL.	Rain Water Leader
S	South
S.A.F.	Self-Adhered Flashing
S.C.	Solid Core OR Sealed Concrete
S.C.D.	Seat Cover Dispenser OR See Civil Drawings
SCHED.	Schedule(d)
S.D.	Soap Dispenser
SECT.	Section
S.E.D.	See Electrical Drawings
SF	Square Feet
S.F.P.D.	See Fire Protection Drawings
S.F.	Square Foot (Feet)
S.H.	Sprinkler Head
SHLF.	Shelf
SHTG.	Sheathing
SHWR.	Shower
SIM.	Similar
S.J.C.	Seismic Joint Cover
SK.	Sink
SL.	Sliding
S.L.D.	See Landscape Drawings
S.M.	Stanchion Module OR Sheet Metal
S.M.D.	See Mechanical Drawings
S.N.D.	Sanitary Napkin Dispenser
S.N.R.	Sanitary Napkin Receptacle
SNT.	Sealant
S.O.G.	Slab On Grade
S.P.D.	See Plumbing Drawings
SPEC.	Specification
SPKR.	Speaker
SQ.	Square
S.S.	Stainless Steel
S.S.D.	See Structural Drawings
ST.	Steel OR Street OR Stair
STC	Sound Transmission Coefficient
STD.	Standard
STL.	Steel
STOR.	Storage
STRUC.	Structure
SUSP.	Suspend(ed)
S.W.	Sheer Wall
S.Y.	Square Yard(s)
SYM.	Symmetrical
SYS.	System
(T)	Tempered
T.	Tread
T-24	Title 24
T. & G.	Tongue and Groove
T.B.	Towel Bar
T.B.D.	To Be Determined
T.C.	Terra Cotta
T.D.	Top of Deck(ing)
TEL.	Telephone
TEMP.	Tempered OR Temporary
T.F.	Transparent Finish
THK.	Thick
THRU.	Through
T.O.	Top Of
T.O.C.	Top of Curb
T.O.CONC.	Top of Concrete
T.O.F.	Top of Footing
T.O.J.	Top of Joist
T.O.P.	Top of Parapet
T.O.PL.	Top of Plate
T.O.S.	Top of Slab
T.O.STL.	Top of Steel
T.O.W.	Top of Wall
T.P.D.	Toilet Paper Dispenser
T.P.H.	Toilet Paper Holder
T.S.	Tube Steel
T.V.	Television
TYP.	Typical
TZ	Terrazzo
U.C.	Under Counter
U.L.	Underwriters Laboratory
UNF.	Unfinished
U.O.N.	Unless Otherwise Noted
UR.	Urinal
UTIL	Utility
VAR.	Varies
VB.	Vapor Barrier
VCT	Vinyl Composition Tile
VNR.	Veneer
VER.	Verify
VERT.	Vertical
V.I.F.	Verify in Field
VOL.	Volume
W	West OR Width OR Women
W/	With
WC	Water Closet
W/D	Washer/Dryer
WD.	Wood
WDW	Window
W.H.	Water Heater
WM	Wire Mesh
W/O	Without
WO	Where Occurs
WP.	Waterproof
W.PT.	Work Point
W.R.	Water Resistant
WSCT.	Wainscot
WT.	Weight
WWF	Welded Wire Fabric

PROJECT DESCRIPTION

ARF AVENUE HOUSING PROJECT IS A 9 UNIT INFILL DEVELOPMENT IN HAYWARD, CA. THIS WILL PROVIDE OPTIONS THAT ARE IN LINE WITH THE SURROUNDING AREA'S AESTHETIC.

PROJECT DIRECTORY

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PROJECT INFORMATION

LOCATION
ADDRESS: ARF AVENUE, HAYWARD, CA 94545

BUILDING DESCRIPTION
ZONING: RS
HEIGHT/BULK DISTRICT: 30'-0"
SETBACKS:
FRONT: 20'-0"
SIDES: 5'-0" OR 10% OF FRONT TILL 10'
REAR: 20'-0"
OCCUPANCY GROUP: R-3
CONSTRUCTION TYPE: V-B
NUMBER OF STORIES: 2

REFERENCED CODES
ALL CONSTRUCTION TO COMPLY WITH LOCAL CODES AND ORDINANCES CURRENTLY IN USE WITH LOCAL JURISDICTION AND THE FOLLOWING CODE EDITIONS:
A. 2016 CALIFORNIA BUILDING CODE
B. 2016 CALIFORNIA EXISTING BUILDING CODE
C. 2016 CALIFORNIA MECHANICAL CODE
D. 2016 CALIFORNIA ELECTRICAL CODE
E. 2016 CALIFORNIA PLUMBING CODE
F. 2016 CALIFORNIA ENERGY CODE
G. 2016 CALIFORNIA FIRE CODE

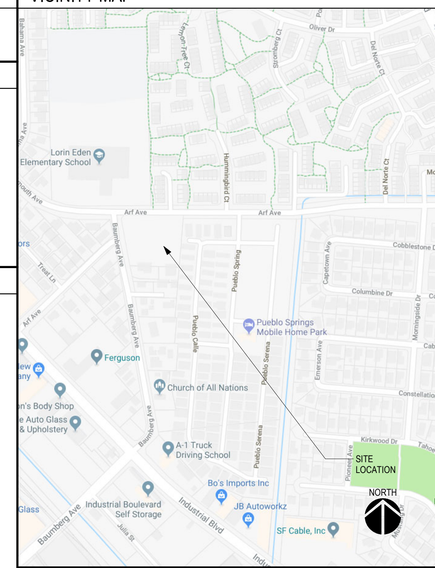
AREA TAKE-OFFS

LOT NUMBER	PLAN TYPE	SITE AREA	TOTAL AREA	SET BACKS FRONT	REAR	LEFT	RIGHT
1	A	5,988 SF	2,502 SF	20'	20'	6'7"	10'
2	C	5,216 SF	2,333 SF	20'	20'	5'9"	5'9"
3	C	5,796 SF	2,333 SF	20'	20'	10'	6'8"
4	B	6,322 SF	1,967 SF	20'	20'	7'2"	10'
5	C2	5,280 SF	2,333 SF	20'	20'	5'	5'
6	D	6,945 SF	2,502 SF	20'	20'	5'	5'
7	A2	5,907 SF	1,967 SF	20'	20'	5'	5'
8	A	5,555 SF	2,502 SF	20'	20'	5'11"	6'
9	B	6,633 SF	1,967 SF	20'	20'	10'	8'4"

SYMBOLS

PROPERTY LINE
CENTER LINE
MATCH LINE
COLUMN GRID (1, A)
EXTERIOR ELEVATION (1 / A1.01)
SECTION (1 / A1.01)
INTERIOR ELEVATION (A, B, C, D; 1 / A1.01)
DETAIL REGION CALLOUT (SIM; 1 / A101)
DOOR TAG (100A)
WINDOW/STOREFRONT TAG (100A)
MATERIAL TAG (MAT-1)
EQ-EQUIPMENT/FN-FURNITURE/PL-PLUMBING/MW-MILLWORK TAG (EQ-1)
KEYNOTE TAG (200)
PARTITION TYPE TAG (BA)
ALIGN TAG (ALIGN)
CONTROL OR DATUM POINT (10'-0" A.F.F. GYP. CEILING, TYP.)
REVISION AND DELTA (1)

VICINITY MAP



SHEET INDEX

SHEET NUMBER	SHEET NAME	SITE PLAN REVIEW	SITE PLAN REVIEW RESUBMITTAL	FINAL PARCEL MAP SUBMITTAL
1 - PROJECT DATA				
G0.00	COVER SHEET	•	•	•
G1.00	CAL GREEN	•		
G1.01	CAL GREEN	•		
SURVEYOR				
SV.1	TRACT MAP NO. 7768	•	•	•
CIVIL				
C1	GRADING & DRAINAGE PLANS	•	•	•
C2	SITE PLAN & UTILITIES	•	•	•
C3	STORMWATER CONTROL	•	•	•
C4	CONSTRUCTION EROSION CONTROL	•	•	•
3 - ARCHITECTURAL				
A1.00	ARCHITECTURAL SITE PLAN	•	•	
A2.00	PLAN A - PROPOSED FLOOR PLAN	•	•	
A2.01	PLAN A - PROPOSED ROOF PLAN	•	•	
A2.10	PLAN A2 - PROPOSED FLOOR PLAN		•	
A2.11	PLAN A2 - PROPOSED ROOF PLAN		•	
A2.20	PLAN B - PROPOSED FLOOR PLAN	•	•	
A2.21	PLAN B - PROPOSED ROOF PLAN	•	•	
A2.30	PLAN C - PROPOSED FLOOR PLAN	•	•	
A2.31	PLAN C - PROPOSED ROOF PLAN	•	•	
A2.40	PLAN C2 - PROPOSED FLOOR PLAN		•	
A2.41	PLAN C2 - PROPOSED ROOF PLAN		•	
A2.50	PLAN D - PROPOSED FLOOR PLAN		•	
A2.51	PLAN D - PROPOSED ROOF PLAN		•	
A7.00	PLAN A - EXTERIOR ELEVATIONS	•	•	
A7.01	PLAN A - BUILDING SECTIONS	•	•	
A7.10	PLAN A2 - EXTERIOR ELEVATIONS		•	
A7.11	PLAN A2 - BUILDING SECTIONS		•	
A7.20	PLAN B - EXTERIOR ELEVATIONS	•	•	
A7.21	PLAN B - BUILDING SECTIONS	•	•	
A7.30	PLAN C - EXTERIOR ELEVATIONS	•	•	
A7.31	PLAN C - BUILDING SECTIONS	•	•	
A7.40	PLAN C2 - EXTERIOR ELEVATIONS		•	
A7.41	PLAN C2 - BUILDING SECTIONS		•	
A7.50	PLAN D - EXTERIOR ELEVATIONS		•	
A7.51	PLAN D - BUILDING SECTIONS		•	
A8.00	PLAN A - AXON VIEW		•	
A8.10	PLAN A2 - AXON VIEW		•	
A8.20	PLAN B - AXON VIEW		•	
A8.30	PLAN C - AXON VIEW		•	
A8.40	PLAN C2 - AXON VIEW		•	
A8.50	PLAN D - AXON VIEW		•	
A9.00	RENDER	•	•	
A9.01	STREET SCAPE		•	
A9.10	MATERIALS	•		
3 - CONSULTANTS				
L1.01	TREE PROTECTION PLAN		•	•
L1.02	CONCEPTUAL LANDSCAPE PLAN		•	•
L1.03	PLANT LIST & NOTES		•	•
L1.04	LANDSCAPE STATEMENT		•	•
L1.05	CONCEPUTAL IRRIGATION PLAN		•	•
L1.06	LANDSCAPE MATERIALS		•	•
E1.0	SITE PHOTOMETRIC CALCULATION	•		•

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9 UNIT DEVELOPMENT
ARF AVENUE
HAYWARD, CA 94545

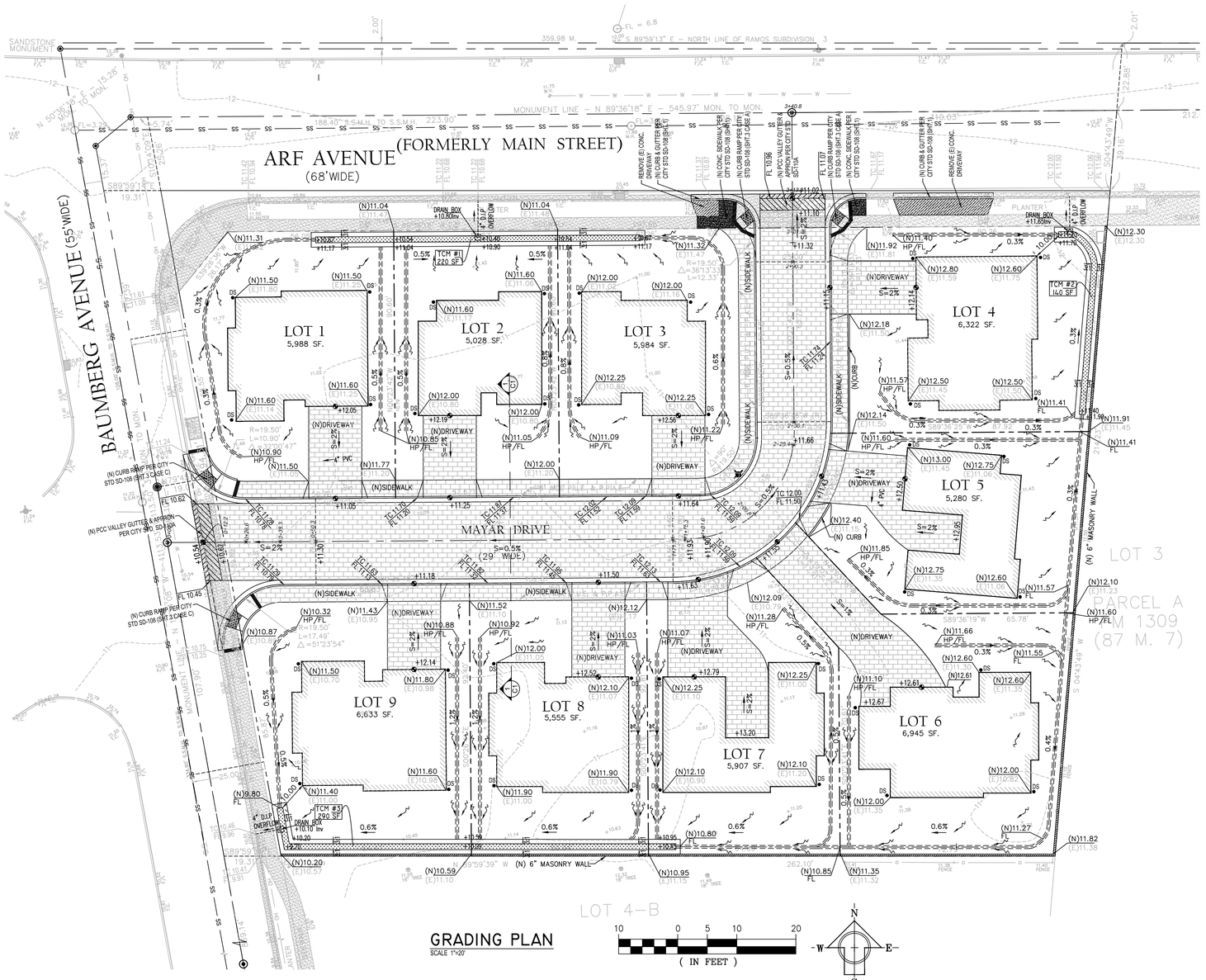
ISSUED FOR:	DATE:
SITE PLAN REVIEW	08/21/2018
SITE PLAN REVIEW RESUBMITTAL	12/17/2018
FINAL PARCEL MAP SUBMITTAL	02/20/2019

LICENSED ARCHITECT
LEIGHTON LEE
NO. C-19274
REN. 09-30-19
STATE OF CALIFORNIA

COVER SHEET
G0.00

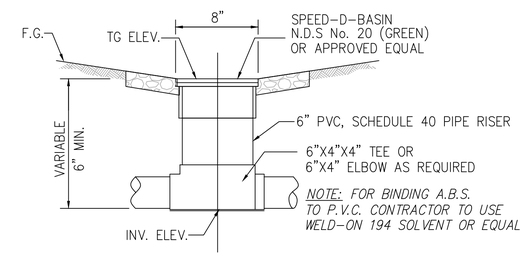
PROJECT NO. 18021

18021
ARF AVENUE
HAYWARD, CA 94545



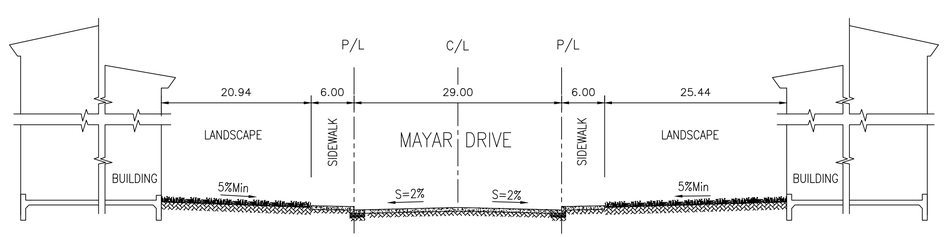
LEGEND & ABBREVIATIONS

	CONTOUR LINES	SSMH	SANITARY SEWER MANHOLE
	EXISTING PROPERTY LINES	C/O	CLEANOUT
	NEW PROPERTY LINES	WV	WATER VALVE
W	WATER LINES	WM	WATER METER
SS	SANITARY SEWER LINES	GM	GAS METER
SD	STROM DRAIN LINES	PP	POWER POLE
HO	ELECTRIC OVERHEAD LINES	SS	STREET SIGN
GAS	GAS LINES	DS	DOWNSPOUT
	1 FT. GRASSY SWALE	TC	TOP OF CURB
	FOOTPRINT AREA	FL	FLOW LINE
DS	DOWNSPOUT W/SPLASH BLOCK	HP	HIGHPOINT
	BIORETENTION AREA	PL	PROPERTY LINE
(E)11.25	EXISTING GRADES	CL	CENTERLINE
(N)10.65	NEW GRADES	RIM	RIM
	DRAINAGE FLOW	INV	INVERT
	PERMEABLE PAVERS AREA	CONC.	CONCRETE
		SW	SIDEWALK
		DW	DRIVEWAY



TYPICAL LANDSCAPE AREA DRAIN DETAIL

NOT TO SCALE



SECTION 1-1

TYPICAL MAYAR DRIVE CROSS SECTION

SCALE: 1"=10'

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GRADING & DRAINAGE PLANS
TRACT 7768
ARF AVE AT BAUMBERG, HAYWARD, ALAMEDA COUNTY

ISSUED FOR:	DATE:
	05/24/2018
1	
2	
3	

REGISTERED PROFESSIONAL ENGINEER
TUANG XUAN TRAN
NO. C056209
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

C1
GRADING & DRAINAGE PLANS

PROJECT NO. 17053

17053

998 BURNETT AVENUE
SAN FRANCISCO, CA 94131

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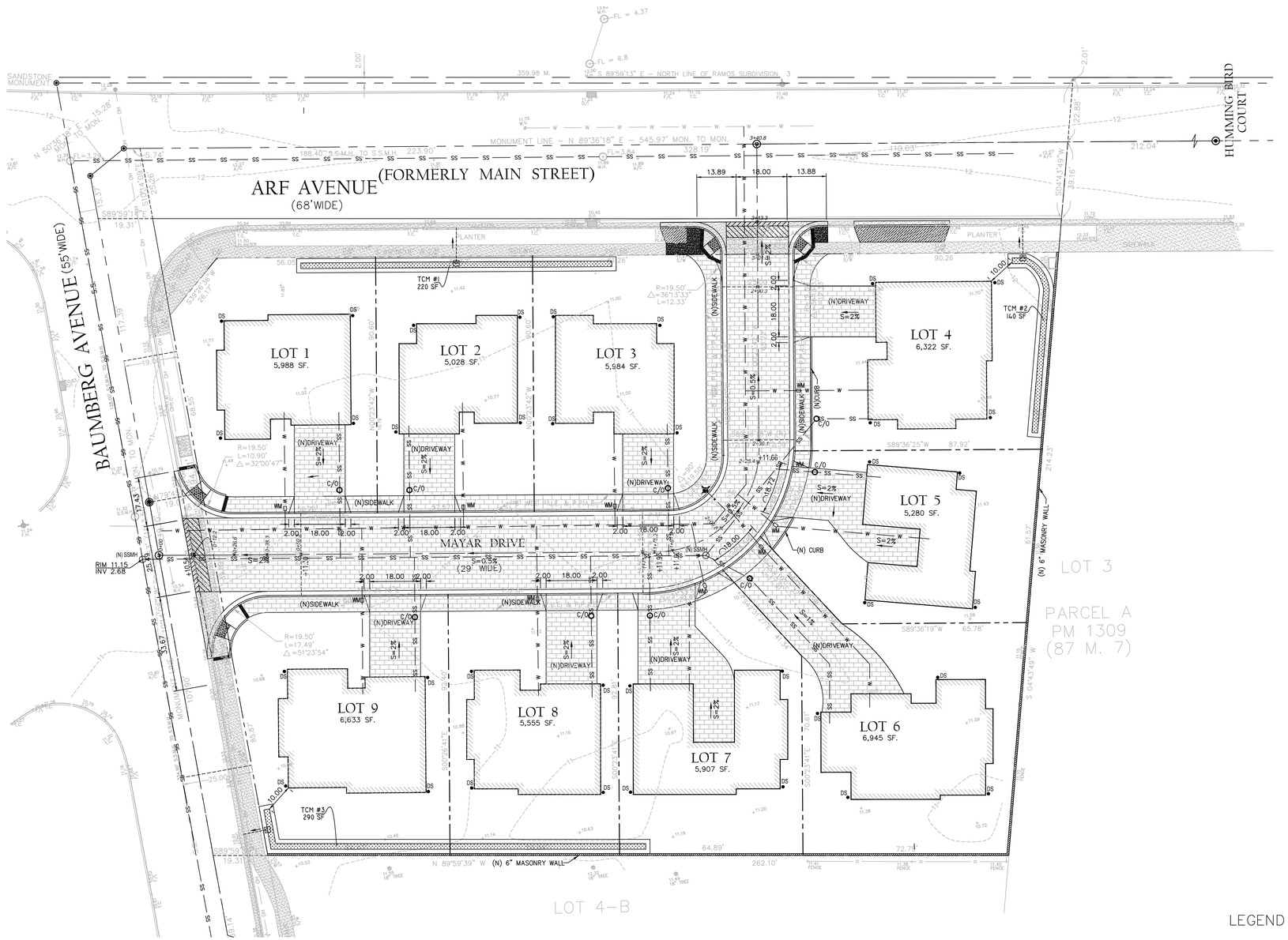
GRADING & DRAINAGE PLANS
TRACT 7768
ARF AVE AT BAUMBERG, HAYWARD, ALAMEDA COUNTY



SITE & UTILITY PLAN

SCALE 1"=20'

10 0 5 10 20
(IN FEET)

N
W E
S

LEGEND & ABBREVIATIONS

100	CONTOUR LINES	SSMH	SANITARY SEWER MANHOLE
	EXISTING PROPERTY LINES	C/O	CLEANOUT
	NEW PROPERTY LINES	WV	WATER VALVE
W	WATER LINES	WM	WATER METER
SS	SANITARY SEWER LINES	GM	GAS METER
SD	STROM DRAIN LINES	PP	POWER POLE
HO	ELECTRIC OVERHEAD LINES	SS	STREET SIGN
GAS	GAS LINES	DS	DOWNSPOUT
	1 FT. GRASSY SWALE	TC	TOP OF CURB
	FOOTPRINT AREA	FL	FLOW LINE
DS	DOWNSPOUT W/SPLASH BLOCK	HP	HIGHPOINT
	BIORETENTION AREA	PL	PROPERTY LINE
(B)11.25	EXISTING GRADES	CL	CENTERLINE
(N)10.65	NEW GRADES	RIM	RIM
	DRAINAGE FLOW	INV	INVERT
	PERMEABLE PAVERS AREA	CONC.	CONCRETE
		SW	SIDEWALK
		DW	DRIVEWAY

ISSUED FOR:	DATE:
	05/24/2018
1	
2	
3	

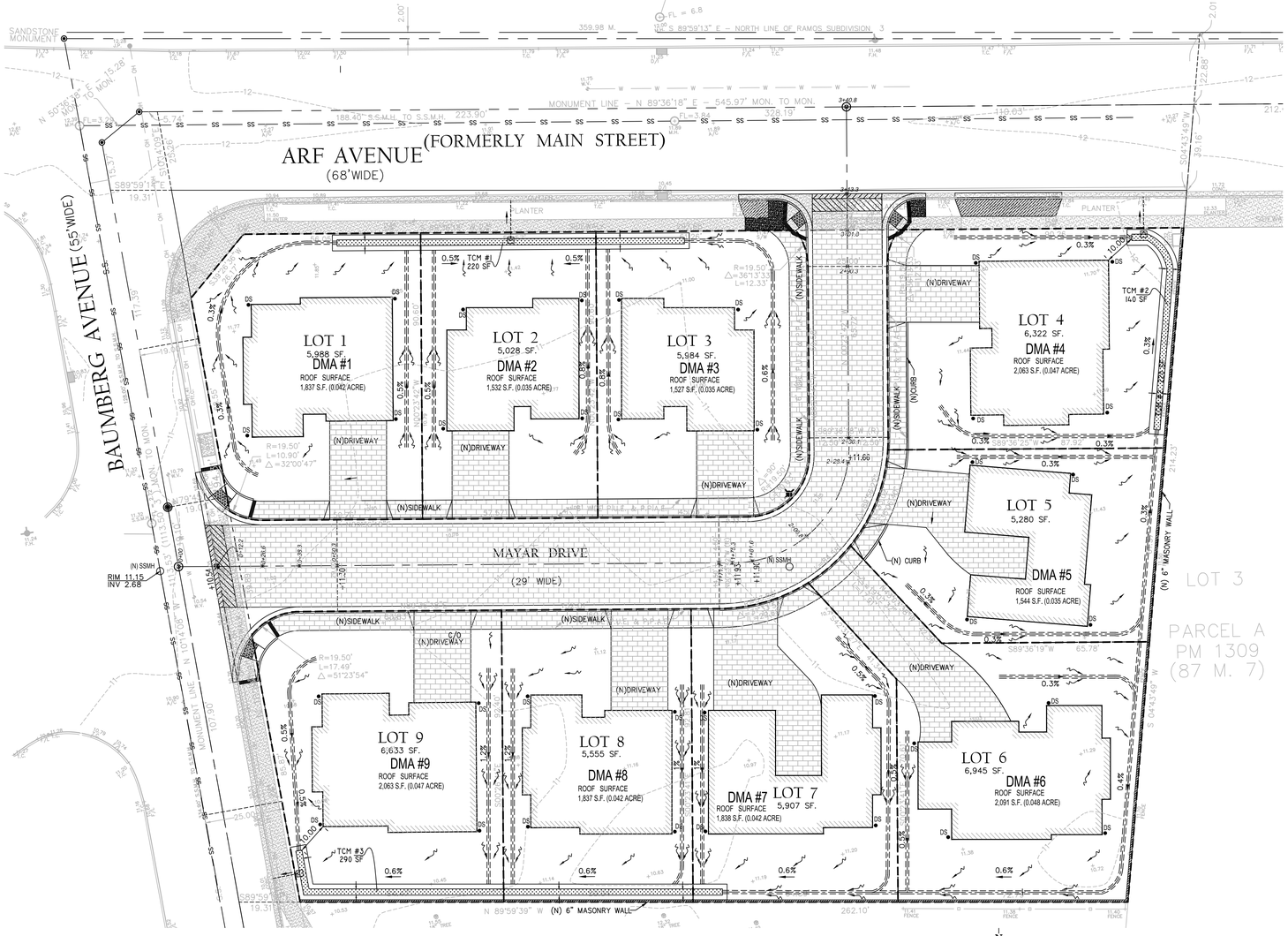
REGISTERED PROFESSIONAL ENGINEER
TUONG XUAN TRAN
NO. C056209
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

C2
SITE PLAN & UTILITIES

PROJECT NO. 17053

17053

998 BURNETT AVENUE
SAN FRANCISCO, CA 94131



STORMWATER CONTROL PLAN

SCALE 1"=20'

(IN FEET)

BIORETENTION AREA

BIORETENTION AREAS, OR "RAIN GARDENS," FUNCTION AS SOIL AND PLANT-BASED FILTRATION DEVICES THAT REMOVE POLLUTANTS THROUGH A VARIETY OF PHYSICAL, BIOLOGICAL, AND CHEMICAL TREATMENT PROCESSES. THESE FACILITIES NORMALLY CONSIST OF A PONDING AREA, ORGANIC LAYER OR MULCH LAYER, PLANTING SOIL, AND PLANTS. BIORETENTION AREAS ARE DESIGNED TO DISTRIBUTE STORMWATER RUNOFF EVENLY ALONG A PONDING AREA. PERCOLATION OF STORED WATER IN THE BIORETENTION AREA'S ENGINEERED PLANTING SOIL WITH A HIGH RATE OF INFILTRATION WILL ENTER AN UNDERLYING ROCK LAYER, FROM WHICH WATER WILL EITHER PERCOLATE INTO THE UNDERLYING SOIL OR ENTER THE UNDERDRAIN, SO THAT THE BIORETENTION AREA EMPTIES OVER TWO DAYS. UNLESS THE GEOTECHNICAL ENGINEER IDENTIFIES CONDITIONS, SUCH AS STEEP SLOPE OR A HIGH GROUNDWATER TABLE, THAT WOULD MAKE INFILTRATION UNSAFE, BIORETENTION AREAS SHOULD BE DESIGNED TO MAXIMIZE INFILTRATION BY RAISING THE UNDERDRAIN TOWARD THE TOP OF THE ROCK LAYER. BIORETENTION AREAS CAN BE ANY SHAPE, INCLUDING A LINEAR TREATMENT MEASURE. THE GUIDELINES LISTED BELOW APPLY TO BIORETENTION AREAS.

DESIGN AND SIZING GUIDELINES

DRAINAGE AREA AND SETBACK REQUIREMENTS

- SET BACK FROM STRUCTURES 10' OR AS REQUIRED BY STRUCTURAL OR GEOTECHNICAL ENGINEER, OR LOCAL JURISDICTION.
- THE DMA SHOULD NOT CONTAIN A SIGNIFICANT SOURCE OF SOIL EROSION, SUCH AS HIGH VELOCITY FLOWS ALONG SLOPES NOT STABILIZED WITH VEGETATION OR HARDSCAPE.
- AREAS IMMEDIATELY ADJACENT TO BIORETENTION AREA SHOULD HAVE SLOPES MORE THAN 0.5% FOR PAVEMENT AND MORE THAN 1% FOR VEGETATED AREAS.

TREATMENT DIMENSIONS AND SIZING

- THE SURFACE AREA OF BIORETENTION AREAS SHOULD BE EQUAL TO 4% OF THE EFFECTIVE IMPERVIOUS AREA OF THE DRAINAGE MANAGEMENT AREA (DMA). THE EFFECTIVE IMPERVIOUS AREA MULTIPLIED BY 0.04 SIZING FACTOR WILL EQUAL THE FOOTPRINT OF THE BIORETENTION AREA. INSTRUCTIONS FOR CALCULATING THE EFFECTIVE IMPERVIOUS AREA ARE PROVIDED IN SECTION 5.1. WHERE ALLOWED BY THE MUNICIPALITY FOR REDEVELOPMENT OR INFILL SITES, BIORETENTION FACILITIES MAY BE SIZED USING THE COMBINATION FLOW- AND VOLUME-BASED METHOD.
- WHERE THERE IS A POSITIVE SURFACE OVERFLOW, BIORETENTION AREAS SHOULD HAVE FREEBOARD OF AT LEAST 0.2 FEET TO THE LOWEST STRUCTURAL MEMBER VERSUS THE 100-YEAR STORM WATER LEVEL IN THE BIORETENTION AREA, UNLESS LOCAL JURISDICTION HAS OTHER REQUIREMENTS.
- WHERE THE BIORETENTION AREA IS IN A SUMP THAT DEPENDS ON OUTFLOW THROUGH A CATCH BASIN, THE BIORETENTION AREA SHOULD HAVE A FREEBOARD OF AT LEAST 0.5 FEET TO THE LOWEST BUILDING FINISHED FLOOR ELEVATION (INCLUDING GARAGE AND EXCLUDING CRAWL SPACE) FOR CONDITIONS WITH THE OUTLET 50 PERCENT CLOGGED, UNLESS LOCAL JURISDICTION HAS OTHER REQUIREMENTS. WHERE THE FREEBOARD CANNOT BE PROVIDED, EMERGENCY PUMP MAY BE ALLOWED ON A CASE-BY-CASE BASIS.
- MINIMUM 2 INCHES BETWEEN THE CREST OF THE EMERGENCY OUTFALL RISER AND HIGHER ELEVATION (TOP OF PLANTING MOUNDS) OF THE TREATMENT SURFACE AREA.
- THE ELEVATION OF THE SURFACE AREA MAY VARY AS NEEDED TO DISTRIBUTE STORMWATER FLOWS THROUGHOUT THE SURFACE AREA.
- SIDE SLOPES DO NOT EXCEED 3:1; DOWNSTREAM SLOPE FOR OVERFLOW SHOULD NOT EXCEED 3:1.
- SURFACE PONDING DEPTHS SHOULD VARY, WITH A MAXIMUM 12-INCH DEPTH. IF PONDING DEPTHS EXCEED 6 INCHES, LANDSCAPE ARCHITECT SHOULD APPROVE PLANTING PALETTE FOR DESIRED DEPTH.
- THE INLET TO THE OVERFLOW CATCH BASIN SHOULD BE AT LEAST 6 INCHES ABOVE THE LOW POINT OF THE BIORETENTION PLANTING AREA.

VEGETATION

- PLANT SPECIES SHOULD BE SUITABLE TO WELL-DRAINED SOIL AND OCCASIONAL INUNDATION.
- SHRUBS AND SMALL TREES SHOULD BE PLACED TO ANCHOR THE BIORETENTION AREA COVER.
- TREE PLANTING SHOULD BE AS REQUIRED BY THE MUNICIPALITY. IF LARGER TREES ARE SELECTED, PLANT THEM AT THE PERIPHERY OF BIORETENTION AREA.
- UNDERDRAIN TRENCH SHOULD BE OFFSET AT EDGE OF TREE PLANTING ZONE, AS NEEDED, TO MAXIMIZE DISTANCE BETWEEN TREE ROOTS AND UNDERDRAIN. CONSIDER INSTALLING SOLID PIPE FOR UNDERDRAINS IN THE VICINITY OF TREES, TO AVOID ROOT INTRUSION INTO PERFORATIONS OF THE UNDERDRAIN PIPE.
- USE INTEGRATED PEST MANAGEMENT (IPM) PRINCIPLES IN THE LANDSCAPE DESIGN TO HELP AVOID OR MINIMIZE ANY USE OF SYNTHETIC PESTICIDES AND QUICK-RELEASE FERTILIZER. CHECK WITH THE LOCAL JURISDICTION FOR ANY LOCAL POLICIES REGARDING THE USE OF PESTICIDES AND FERTILIZERS.
- DROUGHT TOLERANT PLANTS ARE PREFERRED. PROVIDE SUFFICIENT IRRIGATION TO MAINTAIN PLANT LIFE.
- TREES AND VEGETATION DO NOT BLOCK INFLOW, CREATE TRAFFIC OR SAFETY ISSUES, OR OBSTRUCT UTILITIES.

SOIL CONSIDERATIONS FOR ALL BIOTREATMENT SYSTEMS

- SOILS IN THE FACILITY SHOULD MEET BIOTREATMENT SOIL SPECIFICATIONS APPROVED BY THE REGIONAL WATER BOARD (APPENDIX L). A MINIMUM PERCOLATION RATE OF 5 INCHES PER HOUR AND A MAXIMUM PERCOLATION RATE OF 10 INCHES/HOUR ARE REQUIRED (INITIAL INFILTRATION RATE MAY EXCEED THIS TO ALLOW FOR TENDENCY OF INFILTRATION RATE TO REDUCE OVER TIME). PLANTING SOIL LAYER SHOULD BE AT LEAST 18 INCHES DEEP.
- AN UNDERDRAIN SYSTEM IS GENERALLY REQUIRED. DEPENDING ON INFILTRATION RATE OF IN SITU SOILS, THE LOCAL JURISDICTION MAY ALLOW INSTALLATION WITHOUT AN UNDERDRAIN ON A CASE-BY-CASE BASIS.
- IF THERE IS LESS THAN 5 FEET SEPARATION BETWEEN THE BOTTOM OF THE FACILITY AND THE SEASONAL HIGH GROUNDWATER TABLE, OR INFILTRATION IS NOT ALLOWED DUE TO OTHER SITE CONSTRAINTS, AN IMPERMEABLE LINER SHOULD BE PLACED AT THE BASE OF THE FACILITY AND THE UNDERDRAIN SHOULD BE PLACED ON THE IMPERMEABLE LINER.
- FILTER FABRIC SHOULD NOT BE USED IN OR AROUND UNDERDRAIN TRENCH.
- THE UNDERDRAIN SHOULD INCLUDE A MINIMUM 4-INCH DIAMETER PERFORATED PIPE (PERFORATIONS FACING DOWNWARD) WITH CLEANOUTS AND CONNECTION TO A STORM DRAIN OR DISCHARGE POINT. TO HELP PREVENT CLOGGING, TWO ROWS OF PERFORATION MAY BE USED. CLEAN-OUT SHOULD CONSIST OF A VERTICAL, RIGID, NON-PERFORATED PVC PIPE, WITH A MINIMUM DIAMETER OF 4 INCHES AND A WATERTIGHT CAP FIT FLUSH WITH THE GROUND, OR AS REQUIRED BY MUNICIPALITY.
- THERE SHOULD BE ADEQUATE FALL FROM THE UNDERDRAIN TO THE STORM DRAIN OR DISCHARGE POINT.
- UNDERDRAIN TRENCH SHOULD INCLUDE A 12-INCH THICK LAYER OF CALTRANS STANDARD SECTION 68- 1.025 PERMEABLE MATERIAL CLASS 2.
- INSTALL AND MAINTAIN A 3-INCH LAYER OF COMPOSTED MULCH (ALSO CALLED "AGED MULCH") IN AREAS BETWEEN PLANTINGS. PEA GRAVEL, ROCK, COBBLE OR LARGE BARK MULCHES THAT RESIST FLOATING MAY ALSO BE USED. "MICRO-BARK" AND "GORILLA HAIR" MULCHES ARE NOT RECOMMENDED.
- WHEN USING THE COMBINATION FLOW AND VOLUME METHOD, THE SURFACE OF THE BIOTREATMENT SOIL IS ASSUMED TO BE THE BOTTOM OF THE PONDING AREA; THERE IS NO ADJUSTMENT FOR DEPTH OF MULCH.

CONSTRUCTION REQUIREMENTS FOR ALL BIOTREATMENT SYSTEMS

- WHEN EXCAVATING, AVOID SPREADING FINES OF THE SOILS ON BOTTOM AND SIDE SLOPES. REMOVE ANY SMEARED SOILED SURFACES AND PROVIDE A NATURAL SOIL INTERFACE INTO WHICH WATER MAY PERCOLATE.
- MINIMIZE COMPACTION OF EXISTING SOILS. PROTECT FROM CONSTRUCTION TRAFFIC.
- PROTECT THE AREA FROM CONSTRUCTION SITE RUNOFF. RUNOFF FROM UNSTABILIZED AREAS SHOULD BE DIVERTED AWAY FROM BIOTREATMENT FACILITY.

MAINTENANCE CONSIDERATIONS FOR ALL TREATMENT MEASURES

- A MAINTENANCE AGREEMENT SHOULD BE PROVIDED.
- MAINTENANCE AGREEMENT SHOULD STATE THE PARTIES' RESPONSIBILITY FOR MAINTENANCE AND UPKEEP.
- PREPARE A MAINTENANCE PLAN AND SUBMIT WITH MAINTENANCE AGREEMENT. MAINTENANCE PLAN TEMPLATES ARE IN APPENDIX H.

SOURCE: ALAMEDA COUNTYWIDE CLEAN WATER PROGRAM
SECTION 6.1 OF C.3 STORMWATER TECHNICAL GUIDANCE V5.1 MAY 2016

IMPERVIOUS AREA (BMP TO BE USED)

DMA	SURFACE	SIZE (SQ FT)	BMP TO BE USED	MINIMUM SURFACE AREA (SF)		SURFACE AREA AS DESIGNED (SF)		VOLUME OF TREATED RUNOFF (CF)	
#1	ROOF OF LOT 1	1,837	BIORETENTION AREA	68	183	220		87	237
	ROOF OF LOT 2	1,532	BIORETENTION AREA	56				73	
	ROOF OF LOT 3	1,527	BIORETENTION AREA	59				77	
#2	ROOF OF LOT 4	2,063	BIORETENTION AREA	75	133	140		97	171
	ROOF OF LOT 5	1,544	BIORETENTION AREA	58				74	
#3	ROOF OF LOT 6	2,091	BIORETENTION AREA	77	286	290		100	371
	ROOF OF LOT 7	1,838	BIORETENTION AREA	67				87	
	ROOF OF LOT 8	1,837	BIORETENTION AREA	66				86	
	ROOF OF LOT 9	2,063	BIORETENTION AREA	76				98	
TOTAL		16,296		600	600	602	602	779	779

LEGEND & ABBREVIATIONS

100	CONTOUR LINES	SSMH	SANITARY SEWER MANHOLE
	EXISTING PROPERTY LINES	C/O	CLEANOUT
	NEW PROPERTY LINES	WV	WATER VALVE
W	WATER LINES	WM	WATER METER
SS	SANITARY SEWER LINES	GM	GAS METER
SD	STROM DRAIN LINES	PP	POWER POLE
HO	ELECTRIC OVERHEAD LINES	SS	STREET SIGN
GAS	GAS LINES	DS	DOWNSPOUT
	1 FT. GRASSY SWALE	TC	TOP OF CURB
	FOOTPRINT AREA	FL	FLOW LINE
DS	DOWNSPOUT W/SPLASH BLOCK	HP	HIGHPOINT
	BIORETENTION AREA	PL	PROPERTY LINE
(B)1.23	EXISTING GRADES	CL	CENTERLINE
(N)10.65	NEW GRADES	RIM	RIM
	DRAINAGE FLOW	INV	INVERT
	PERMEABLE PAVERS AREA	CONC.	CONCRETE
		SW	SIDEWALK
	DMA AREA	DW	DRIVEWAY

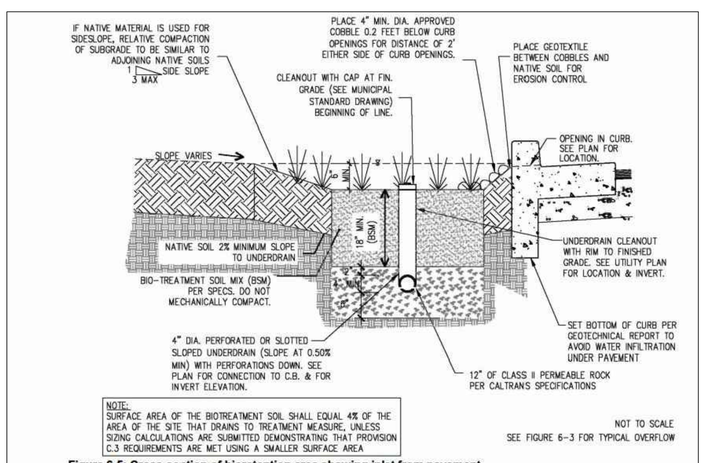


Figure 6-5: Cross-section of bioretention area showing inlet from pavement.

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SAN FRANCISCO, CA 94130
T: 415 534 8184

GRADING & DRAINAGE PLANS
TRACT 7768
ARF AVE AT BAUMBERG, HAYWARD, ALAMEDA COUNTY

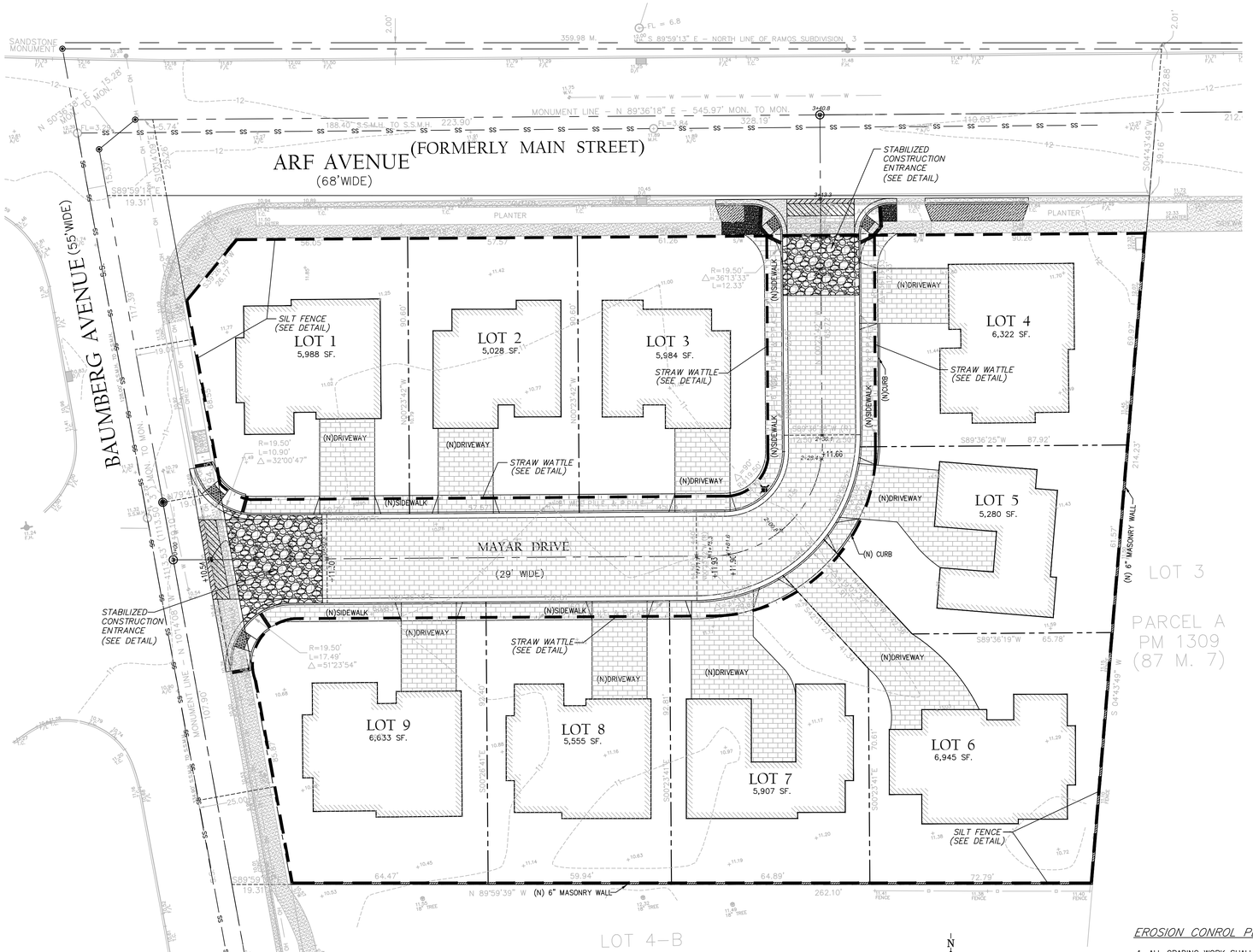
ISSUED FOR:	DATE:
	05/24/2018
1	
2	
3	

REGISTERED PROFESSIONAL ENGINEER
TUONG XUAN TRAN
NO. C056209
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

C3
STORMWATER CONTROL

PROJECT NO. 17053

17053
998 BURNETT AVENUE
SAN FRANCISCO, CA 94131



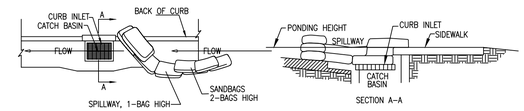
EROSION CONTROL PLAN

SCALE 1"=20'

10 0 5 10 20

(IN FEET)

N W E S

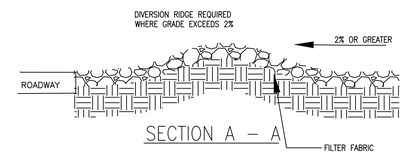


NOTES:

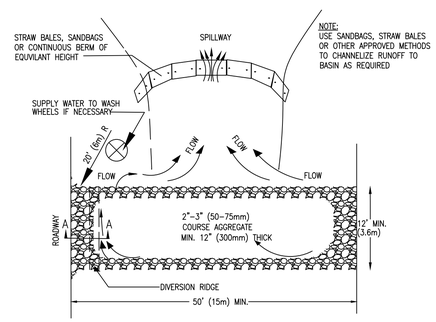
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

TYPICAL PROTECTION FOR STORM DRAIN INLET

N.T.S.

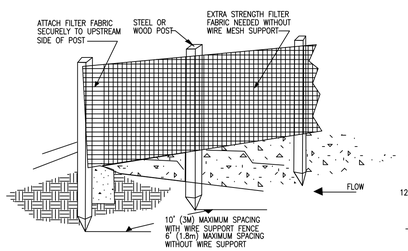


SECTION A – A



NOTE:
USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED

PLAN
GRAVEL CONSTRUCTION ENTRANCE

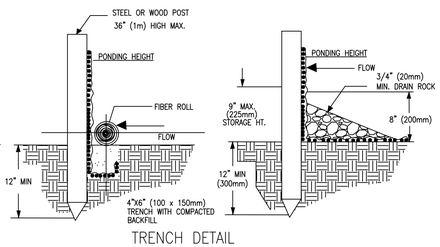


NOTES:

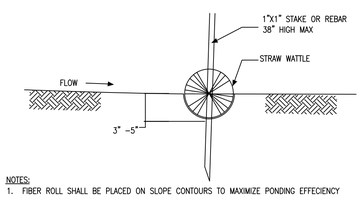
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY, 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT WILL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE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

SILT FENCE

NTS



TRENCH DETAIL



NOTES:

1. FIBER ROLL SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFECIENCY
2. INSPECT AND REPAIR ROLL AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
4. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH, 3" – 5" DEEP, DUB ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

STRAW WATTLES

N.T.S.

EROSION CONROL PLAN NOTES

1. ALL GRADING WORK SHALL BE WINTERIZED PRIOR TO OCTOBER 15, BY PLACING APPROPRIATE SILT FENCING, SILT FENCE/STRAW BALE DIKES AND STRAW BALES IN A MANNER TO MINIMIZE EROSION AND COLLECT SEDIMENT AND ALSO BY HYDROSEEDING AREAS DISTRURBED.

2. THIS PLAN IS INTENDED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.

3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND FILLING ALL PLANS WITH THE RELATED AGENCIES ASSOCIATED WITH THEIR WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PERMITS FOR STORAGE OF HAZARDOUS MATERIALS, BUSINESS PLANS, PERMITS FOR STORAGE OF FLAMMABLE LIQUIDS, GRADING PERMITS, OR OTHER PLANS OR PERMITS REQUIRED BY CITY OF HAYWARD. ALL PROPERTY OWNERS, CONTRACTORS, OR SUBCONTRACTORS WORKING ON-SITE ARE INDIVIDUALLY RESPONSIBLE FOR OBTAINING AND SUBMITING ANY BUSINESS PLANS OR PERMITS REQUIRED BY CITY, STATE OR LOCAL AGENCIES.

4. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING THE RAINY SEASON (OCT. 15 TO MAY 15), UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THIS PLAN TO MEET FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE OWNER. CHANGES MADE TO SUIT FIELD CONDITIONS WILL BE MADE ONLY WITH THE APPROVAL OF OR THE DIRECTION OF THE OWNER. CHANGES MADE TO SUIT FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CIVIL ENGINEER AND THE CITY OF HAYWARD FOR COMMENTS AND APPROVAL.

5. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AS NECESSARY AT THE END OF EACH WORKING DAY, AFTER SIGNIFICANT RAIN OR DAILY DURING THE RAINY SEASON.

6. IF SIGNIFICANT SEDIMENT OR OTHER VISUAL SYMPTOMS OF IMPURITIES ARE NOTICED IN THE STORM WATER, CONTACT THE CIVIL ENGINEER IMMEDIATELY.

7. CONTRACTOR IS RESPONSIBLE FOR INSPECTION AND RESTORATION OF ALL ASPECTS OF THE EROSION CONTROL PLAN. SEDIMENT ON THE SIDEWALKS AND GUTTERS SHALL BE REMOVED BY SHOVEL OR BROOM AND DISPOSED APPROPRIATELY.

8. ALL EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFORMING TO THE ELEMENTS SHOWN ON THIS PLAN AND RELATED DOCUMENTS.

9. CONTRACTOR TO EMPLOY BEST MANAGEMENT PRACTICES (BMP'S) IN ACCODANCE WITH THE ASSOCIATION OF BAY AREA GOVERMENTS (ABAG) LATEST RECOMMENDATIONS.

10. ALL DUMPS OR OTHER TRASH STORAGE ENCLOSURES SHALL BE UTILIZED SOLELY FOR NON-HAZARDOUS MATERIALS.

11. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS, THE SITE SHALL BE MAINTAINED SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF ENTERS THE STORM DRAIN SYSTEM. THESE PLANS SHALL REMAIN IN EFFECT UNTIL THE IMPROVEMENTS ARE ACCEPTED BY ALAMEDA COUNTY AND ALL SLOPES ARE STABILIZED.

12. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF ALAMEDA COUNTY.

13. REMOVE SPOILS PROMPTLY AND AVOID STOCKPILING OF FILL MATERIALS WHEN RAIN IS IN FORECAST. IF RAIN IS FORECAST OR APPARENT, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH PLASTIC OR A TAR, AT THE REQUEST OF ALAMEDA COUNTY.

14. STORE, HANDLE AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES SO AS TO PREVENT THEIR ENTRY INTO THE STORM DRAIN SYSTEM. CONTRACTOR MUST NOT ALLOW CONCRETE, WASHWATERS, SLURRIES, PAINT OR OTHER MATERIALS TO ENTER THE CATCH BASINS, STORM DRAINAGE OR ENTER SITE RUNOFF.

15. USE FILTRATION OR OTHER APPROVED MEASURES TO REMOVE SEDIMENT FROM DEWATERING AFFLUENT.

16. NO CLEANING, FUELING OR MAINTAINING VEHICLES ON SITE SHALL BE PERMITED TO ALLOW DELETERIOUS MATERIALS FROM ENTERING THE CATCH BASINS, STORM DRAINAGE, OR ENTER SITE RUNOFF.

17. EROSION CONTROL MEASURES TO BE EMPLOYED PER "EROSION AND SEDIMENT CONTROL FIELD MANUAL", CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD-SAN FRANCISCO BAY REGION.

18. ALL BARREN AREAS GENERATED DURING THE RAINY SEASON SHALL BE COVERED WITH STRAW OR EQUIVALENT, OR WELL SECURED WITH HEAVY PLASTIC TARPS OR GRAVEL, DEPENDING ON THE LOCATION, CONDITIONS, AND FREQUENCY OF ACCESS.

19. ALL EXCESS EXCAVATED SOIL MATERIALS (SPOILS) SHALL BE PROMPTLY REMOVED FROM THE PROPERTY AFTER EXCAVATION.

20. ALL EXCESS EXCAVATED SOIL MATERIALS (SPOILS) SHALL BE LEGALLY DISPOSED OF OFFSITE AT THE OWNER-DESIGNATED LOCATION FROM THE PROPERTY ACROSS MISSION TIERRA PLACE STREET. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE NECESSARY DOCUMENTATION FROM THE OWNER TO ASCERTAIN FOR HIMSELF THAT THE OWNER HAS LEGAL RIGHT OR PERMISSION FOR SUCH DISPOSAL TO BE MADE AT THE OWNER-DESIGNATED LOCATION.

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SAN FRANCISCO, CA 94130
T: 415 534 8184

GRADING & DRAINAGE PLANS
TRACT 7768
ARF AVE AT BAUMBERG, HAYWARD, ALAMEDA COUNTY

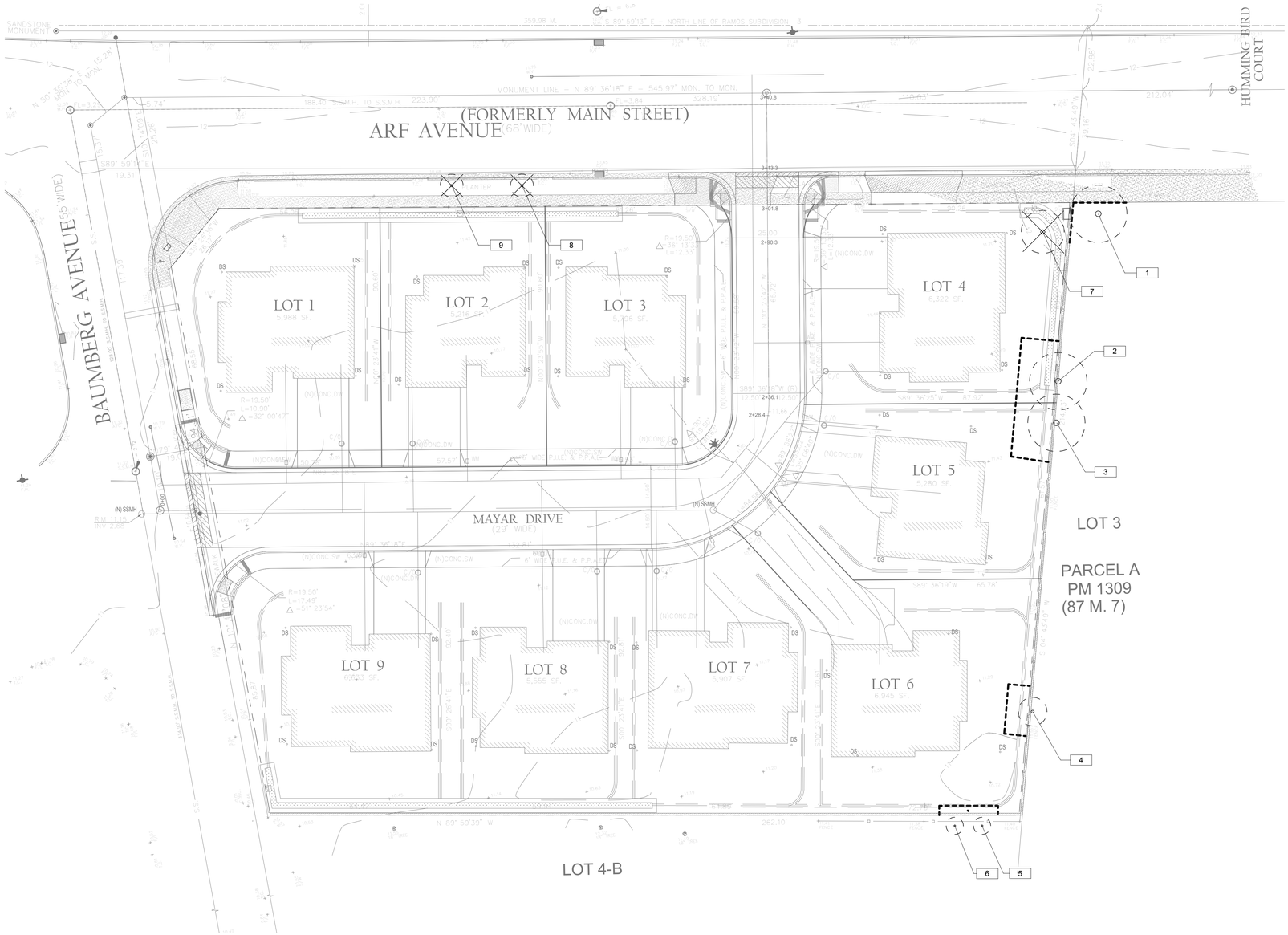
ISSUED FOR:	DATE:
	05/24/2018
1	
2	
3	

REGISTERED PROFESSIONAL ENGINEER
TUONG XUAN TRAN
NO. C056209
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

C4
CONSTRUCTION EROSION CONTROL

PROJECT NO. 17053

17053
988 BURNETT AVENUE
SAN FRANCISCO, CA 94131



TREE PROTECTION NOTES

1. ARBORIST REPORT & TREE PROTECTION MEASURES HAS BEEN PREPARED BY **X**. DATED **X**.
2. PRIOR TO THE START OF DEMOLITION, CLEARING OR GRUBBING MEET WITH THE PROJECT ARBORIST TO IDENTIFY TREES SLATED FOR PRESERVATION AND REMOVAL, REVIEW THE LOCATION OF THE TREE PROTECTION FENCING, WORK PROCEDURES AND THE NEED FOR CLEARANCE AROUND TREES.
3. TREE PROTECTION ZONE SHALL BE ESTABLISHED AROUND TREES TO BE PRESERVED. NO GRADING, EXCAVATION, CONSTRUCTION OR STORAGE OF MATERIALS SHALL OCCUR WITHIN THAT ZONE.
4. UNDERGROUND SERVICES INCLUDING UTILITIES, SUB-DRAINS, WATER OR SEWER, AND IRRIGATION SYSTEMS SHALL BE ROUTED AROUND THE TREE PROTECTION ZONE. WHERE ENCROACHMENT CANNOT BE AVOIDED, SPECIAL CONSTRUCTION TECHNIQUES SUCH AS HAND DIGGING OR TUNNEL-ING UNDER ROOTS SHALL BE EMPLOYED WHERE NECESSARY TO MINIMIZE ROOT INJURY.
5. IRRIGATION SYSTEMS MUST BE DESIGNED SO THAT NO TRENCHING WILL OCCUR WITHIN THE TREE PROTECTION ZONE.
6. FENCE ALL TREES TO BE RETAINED TO COMPLETELY ENCLOSE THE TREE PRO-TECTION ZONE PRIOR TO DEMOLITION, GRUBBING OR GRADING. FENCES SHALL BE 6 FT. CHAIN LINK OR EQUIVALENT AS APPROVED BY THE CITY OF HAYWARD. FENCES ARE TO REMAIN UNTIL ALL GRADING AND CONSTRUCTION IS COMPLETED.
7. NO GRADING, CONSTRUCTION, DEMOLITION OR OTHER WORK SHALL OCCUR WITHIN THE TREE PROTECTION ZONE. ANY MODIFICATIONS MUST BE APPROVED AND MONITORED BY THE CONSULTING ARBORIST.
8. TREE PROTECTION FENCES DEFINE A SPECIFIC TREE PROTECTION ZONE FOR EACH TREE OR GROUP OF TREES. FENCES ARE TO REMAIN UNTIL ALL SITE WORK HAS BEEN COMPLETED. FENCES MAY NOT BE RELOCATED OR REMOVED WITH-OUT PERMISSION OF THE CONSULTING ARBORIST.
9. ALL TREES ARE TO BE PRESERVED IN ACCORDANCE WITH THE TREE PRESERVATION ORDINANCE. PRIOR TO THE COMMENCEMENT OF CLEARING AND GRADING OPERATIONS.
10. TREE PROTECTION MEASURES ARE TO BE IN COMPLIANCE WITH CITY CODES AND THE ARBORIST REPORT.
11. VALUE OF REPLACEMENT TREE IS BASED ON WHOLESALE PRICE OF TREE. AND DOES NOT INCLUDE DELIVERY, INSTALLATION, AND IRRIGATION.
12. A TREE REMOVAL PERMIT IS REQUIRED PRIOR TO THE REMOVAL OF ANY TREE.
13. TREE REMOVAL PERMIT WILL NOT BE ISSUED PRIOR TO APPROVAL OF LANDSCAPE IMPROVEMENT PLANS.

TREE APPRAISAL VALUE OF EXISTING TREES TO BE REMOVED

1. INFO TO BE PROVIDED BY ARBORIST REPORT

TREE APPRAISAL NOTES

1. ABOVE IS A SUMMARY OF THE TREE APPRAISAL VALUE OF EXISTING PROTECTED TREES TO BE REMOVED AT ARF & BAUMBERG AVENUE HOMES, HAYWARD, CA, AS PREPARED BY **X DATED X.**
2. FOR PROPOSED PLANTED TREES AND THEIR VALUE SEE L-4 PLANTING PLAN NOTES
3. REMOVAL VALUE IS: **$XXXXXX**.
4. REPLACEMENT VALUE IS: $**XXXXX**; SEE SHEET L-4 TREE LIST FOR PROPOSED INDIVIDUAL TREE VALUES.

TREE PROTECTION LEGEND

1 — EXISTING TREE TO REMAIN AND TREE NUMBER

2 — EXISTING TREE TO BE REMOVED AND TREE NUMBER

TREE PROTECTION FENCING
TPZ= TREE PROTECTION ZONE IS DEFINED AS THE DRIPLINE PLUS 4'; PLACE TREE PROTECTION FENCING AT THIS LOCATION OR AS DIRECTED WITH ARBORIST REPORT, WHICHEVER IS MOST STRINGENT

EXISTING TREE INVENTORY

TREE NUMBER	BOTANIC NAME	COMMON NAME	DBH	TO BE REMOVED
1	CALOCEDRUS DECURRENS	INCENSE CEDAR	24"	
2	PINUS SPP.	PINE	15"	
3	PINUS SPP.	PINE	12"	
4	CALOCEDRUS DECURRENS	OAK	9"	
5	CUPRESSUS SEMPERVIRENS 'GLAUCA'	BLUE ITALIAN CYPRESS	5"	
6	CUPRESSUS SEMPERVIRENS 'GLAUCA'	BLUE ITALIAN CYPRESS	5"	
7	AESCULUS CALIFORNICA	CALIFORNIA BUCKEYE	6"-8"	X
8	PYRUS CALLERYANA	CALLERY PEAR	6"-8"	X
9	PYRUS CALLERYANA	CALLERY PEAR	6"-8"	X

0' 8' 16' 32' 64'

NORTH

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PGAdesign
LANDSCAPE ARCHITECTS
tel 510.465.1284 url PGAdesign.com
444 17th Street Oakland CA 94612

ISSUED FOR:	DATE:
PERMIT SUBMITTAL	12/03/2018
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SHEET TITLE

TREE PROTECTION PLAN

DATE 12/03/2018
SCALE As indicated
DRAWN XA CHECKED KK

L1.01

PROJECT NO. 18021

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HAYWARD, CA 94545
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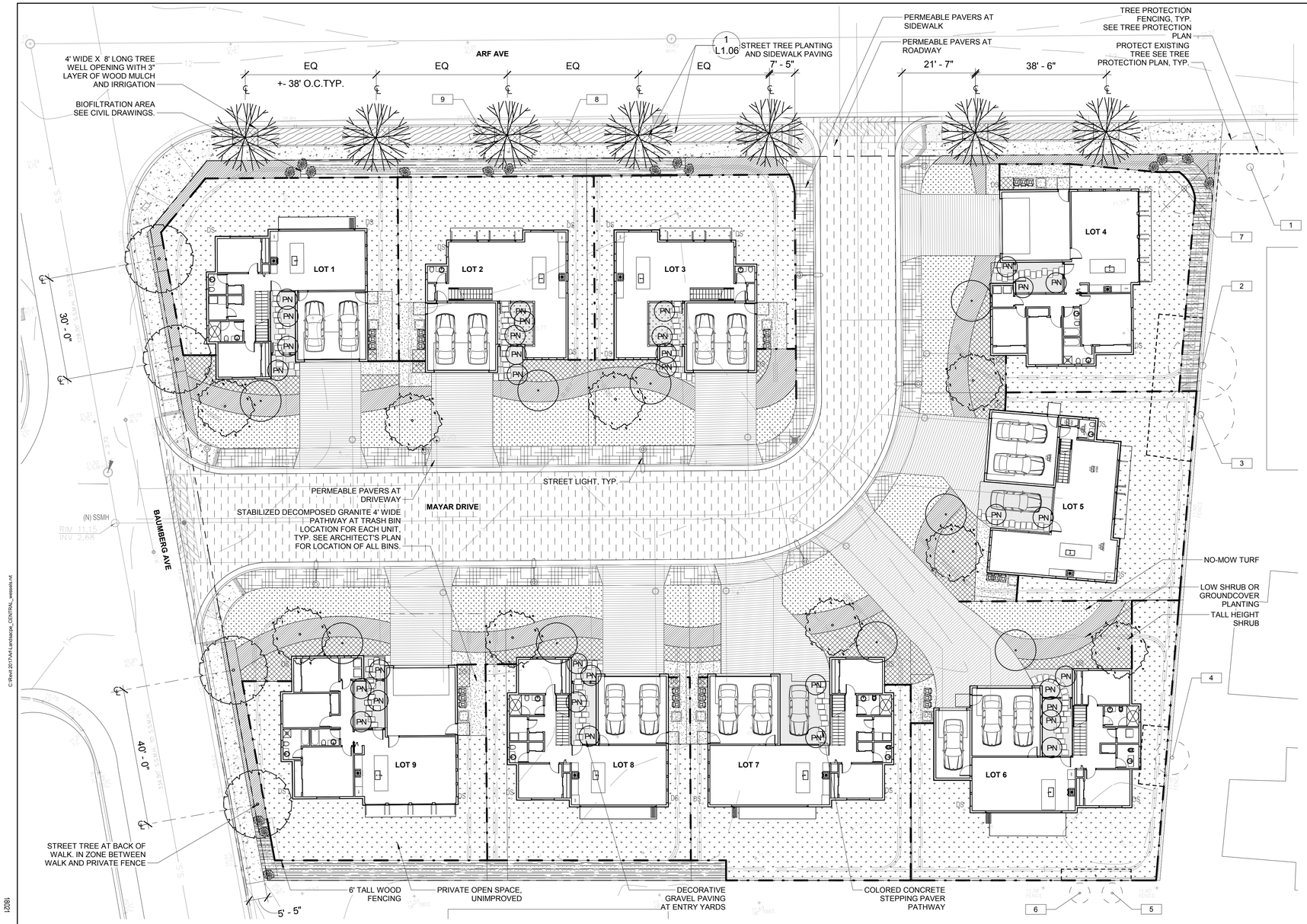

PLANTING LEGEND

- PROPOSED STREET TREE: QUERCUS VIRGINIANA (VIRGINIA OAK)
- PROPOSED STREET TREE: PISTACIA CHINENSIS (CHINESE PISTACHE)
- PROPOSED FRONT YARD TREE: CELTIS OCCIDENTALIS (HACKBERRY)
- PROPOSED FRONT YARD ACCENT TREE: LAGERSTROEMIA INDICA (CRAPE MYRTLE)
- 1 — EXISTING TREE AND CANOPY TO REMAIN AND TREE NUMBER, SEE TREE REMOVAL PLAN FOR IDENTIFICATION
- 2 — EXISTING TREE TO REMOVE AND TREE NUMBER, SEE TREE PROTECTION PLANS FOR IDENTIFICATION AND PROTECTION
- PN — BAMBOOS AT ENTRIES TO HOMES
- LOW HEIGHT SHRUB OR GROUNDCOVER, SEE PLANT LIST FOR SUGGESTED SPECIES
- TALL HEIGHT SHRUB, SEE PLANT LIST FOR SUGGESTED SPECIES
- NO-MOW TURF: SOD AS AVAILABLE FROM DELTA BLUEGRASS COMPANY, WWW.DELTABLUEGRASS.COM, COMMERCIAL NAME: NATIVE PRESERVATION MIX, OR APPROVED EQUIVALENT. MIX INCLUDES THE FOLLOWING:
  - FESTUCA RUBRA
  - STIPA PULCHRA
  - STIPA CERNUA
  - KOELERIA MACRANTHA
- BIOFILTRATION PLANTING, SEE PLANT LIST FOR SUGGESTED SPECIES
- PRIVATE OPEN SPACE - UNIMPROVED

LANDSCAPE STATEMENT

I HAVE COMPLIED WITH THE CRITERIA OF CITY OF HAYWARD BAY-FRIENDLY WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLAN.

KAREN KROLEWSKI

HARDSCAPE & SITE FURNISHING LEGEND

- EXISTING CITY STANDARD SIDEWALK, SEE CIVIL PLANS
- STEPOUT ZONE PAVERS, MANUFACTURER: CASTLELITEBLOCK, MODEL: CASTLE STONE, COLOR: MONTEREY BLEND, PATTERN: HERRINGBONE
- PERMEABLE PAVERS AT SIDEWALK, HYDRO-FLO BY PACIFIC INTERLOC, COLOR: GREY, PATTERN: RUNNING BOND.
- PERMEABLE PAVERS AT ROADWAY, HYDRO-FLO BY PACIFIC INTERLOC, COLOR: B12 SUMMIT SUNRISE, PATTERN: HERRINGBONE.
- PERMEABLE PAVERS AT DRIVEWAY, HYDRO-FLO BY PACIFIC INTERLOC, COLOR: B6 TAHOE GRANITE, PATTERN: PARQUET.
- DECOMPOSED GRANITE PAVING
- DECORATIVE GRAVEL PAVING
- COLORED CONCRETE STEPPING PAVER PATHWAY
- BOULDER AT BIOFILTRATION AREA
- 6' TALL WOOD FENCING, SEE ARCHITECT'S PLAN

0' 8' 16' 32' 64'

NORTH

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SHEET TITLE

CONCEPTUAL LANDSCAPE PLAN

DATE 12/03/2018	
SCALE 1/16" = 1'-0"	
DRAWN XA, MW	CHECKED KK

L1.02

PROJECT NO. 18021

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TREE LIST

QTY	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING	WATER USE	DROUGHT TOLERANT	WHOLESALE NURSERY COST	TOTAL COST
TREE								
9	CELTIS OCCIDENTALIS 'PRARIE SENTINEL'	PRARIE SENTINEL HACKBERRY	24" BOX	AS SHOWN	LOW	Yes	$250.00	$2250.00
9	LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	AS SHOWN	LOW	Yes	$150.00	$1350.00
4	PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	AS SHOWN	LOW	Yes	$150.00	$600.00
7	QUERCUS VIRGINIANA	VIRGINIA OAK	24" BOX	AS SHOWN	MODERATE	No	$150.00	$1050.00
								$5250.00

SHRUB & GROUNDCOVER LIST

BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	PROPOSED SPACING	MATURE SPACING AND HEIGHT SOURCE	MATURE HEIGHT	MATURE WIDTH	WATER USE	STORMWATER TOLERANT	DROUGHT TOLERANT
TALL SHRUB									
ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN'	HOWARD MCMINN MANZANITA	5 GAL	6' - 0"	PERRY LANDSCAPE PLANTS	6' - 0"	6' - 0"	LOW	Yes	Yes
CARPENTERIA CALIFORNICA 'ELIZABETH'	BUSH ANEMONE	5 GAL	5' - 0"	PERRY LANDSCAPE PLANTS	8' - 0"	5' - 0"	MODERATE	No	No
PHYLLOSTACHYS NIGRA	BLACK BAMBOO	15 GAL	AS SHOWN	PERRY LANDSCAPE PLANTS	15' - 0"	6' - 0"	LOW	No	Yes
PITTOSPORUM TENUIFOLIUM 'SILVER SHEEN'	SILVER SHEEN KOHUHU	5 GAL	3' - 0"	PERRY LANDSCAPE PLANTS	12' - 0"	3' - 0"	MODERATE	No	No
WESTRINGIA FRUTICOSA 'WYNYABBIE GEM'	COAST ROSEMARY	5 GAL	6' - 0"	PERRY LANDSCAPE PLANTS	6' - 0"	6' - 0"	LOW	Yes	Yes
LOW SHRUB									
AGAVE 'BLUE GLOW'		1 GAL	1' - 6"	PERRY LANDSCAPE PLANTS	1' - 0"	1' - 6"	LOW	No	Yes
CHONDROPETALUM TECTORUM	CAPE RUSH	1 GAL	3' - 0"	SAN MARCOS GROWERS	2' - 0"	3' - 0"	LOW	Yes	Yes
CISTUS 'SUNSET'	ROCKROSE	1 GAL	3' - 0"	PERRY LANDSCAPE PLANTS	1' - 0"	3' - 0"	LOW	No	Yes
CISTUS SALVIFOLIUS	ROCKROSE	1 GAL	5' - 0"	PERRY LANDSCAPE PLANTS	1' - 6"	5' - 0"	LOW	No	Yes
NANDINA DOMESTICA 'LEMON LIME'	LEMON LIME HEAVENLY BAMBOO	1 GAL	3' - 0"	SUNSET	3' - 0"	3' - 0"	LOW	No	Yes
PHORMIUM 'CREAM DELIGHT'	NEW ZEALAND FLAX	1 GAL	4' - 0"	SAN MARCOS GROWERS	2' - 0"	4' - 0"	LOW	Yes	Yes
PHORMIUM 'JACK SPRATT'	NEW ZEALAND FLAX	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	Yes	Yes
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL	4' - 0"	PERRY LANDSCAPE PLANTS	4' - 0"	4' - 0"	MODERATE	No	No
ROSMARINUS OFFICINALIS 'BENENDEN BLUE'	BENENDEN BLUE ROSEMARY	1 GAL	4' - 0"	SUNSET	3' - 0"	4' - 0"	LOW	No	Yes
GROUNDCOVER									
ANIGOZANTHOS 'AMBER VELVET'	AMBER VELVET KANGAROO PAW	1 GAL	2' - 0"	SAN MARCOS GROWERS	3' - 0"	2' - 0"	LOW	Yes	Yes
ARCTOSTAPHYLOS UVA-URSI 'GREEN SUPREME'	MANZANITA	1 GAL	8' - 0"	SAN MARCOS GROWERS	1' - 0"	8' - 0"	MODERATE	No	No
BOUTELOUA GRACILIS 'BLONDE AMBITION'	MOSQUITO GRASS	1 GAL	1'- 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	Yes	Yes
CALAMAGROSTIS X ACUTIFLORA 'FOLISUS'	MENDOCINO REED GRASS	1 GAL	2'- 0"	PERRY LANDSCAPE PLANTS	1 1/2' - 0"	2' - 0"	MODERATE	No	No
CAREX DIVULSA	BERKELEY SEDGE	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	Yes	Yes
CEANOTHUS GLORIOSUS 'ANCHOR BAY'	POINT REYES CEANOTHUS	1 GAL	4' - 0"	SAN MARCOS GROWERS	2' - 0"	4' - 0"	LOW	Yes	Yes
COTYLEDON ORBICULATA VAR 'ORBICULATA'	PIGS EARS	1 GAL	2' - 0"	SAN MARCOS GROWERS	2' - 0"	2' - 0"	LOW	No	Yes
ECHEVERIA ELEGANS 'MEXICAN SNOWBALL'	MEXICAN SNOWBALL ECHEVERIA	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	No	Yes
FESTUCA CALIFORNICA 'RIVER HOUSE BLUES'	CALIFORNIA FESCUE RIVER HOUSE BLUES	1 GAL	2' - 0"	SAN MARCOS GROWERS	2' - 0"	2' - 0"	LOW	No	Yes
FESTUCA GLAUCA 'ELIJAH BLLUE'	ELIJAH BLUE FESCUE	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	Yes	Yes
HELLEBORUS ARGUTIFOLIUS	CORSICAN HELLEBORE	1 GAL	2' - 0"	SAN MARCOS GROWERS	2' - 0"	2' - 0"	LOW	No	Yes
KALANCHOE GASTONIS-BONNIEARI	DONKEY EARS	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	LOW	No	Yes
KALANCHOE THYRSIFOLIA	PADDLE PLANT	1 GAL	1' - 0"	SAN MARCOS GROWERS	1'- 0"	1' - 0"	LOW	No	Yes
LIRIOPE MUSCARI 'BIG BLUE'	LILY TURF	1 GAL	1' - 0"	SAN MARCOS GROWERS	1' - 0"	1' - 0"	MODERATE	No	No
LOMANDRA LONGIFOLIA 'NYALLA'	NYALLA MAT RUSH	1 GAL	3' - 0"	SAN MARCOS GROWERS	3' - 0"	3' - 0"	LOW	Yes	Yes

PLANTING DESIGN INTENT & NOTES

1. ALL LANDSCAPE AREAS ARE TO BE MAINTAINED BY HOME OWNERS' ASSOCIATION. PRIVATE YARDS WILL BE MAINTAINED BY INDIVIDUAL HOME OWNERS.
2. PLANT LISTS ARE SUGGESTED PALETTE, PLANTS MAY BE SUBSTITUTED AT OWNER'S DISCRETION SO LONG AS THEY ARE NATIVE AND/OR CLIMATE ADAPTED, AND MEET WATER CONSERVATION REQUIREMENTS.
3. VALUE OF REPLACEMENT TREE IS BASED ON WHOLESALE PRICE OF TREE AND DOES NOT INCLUDE DELIVERY, INSTALLATION, AND IRRIGATION.
4. PLANT ALL TREES A MINIMUM OF 5 FEET AWAY FROM ANY UNDERGROUND UTILITIES, A MINIMUM OF 15 FEET FROM A LIGHT POLE, AND A MINIMUM OF 30 FEET FROM THE FACE OF A TRAFFIC SIGNAL, OR AS OTHERWISE SPECIFIED BY THE CITY.
5. PLANT TREES ACCORDING TO THE CITY STANDARD DETAIL SD-122.
6. PROVIDE ROOT BARRIER FOR ALL TREES LOCATED WITHIN 7 FEET OF PAVED EDGES OR STRUCTURE. ROOT BARRIER IS 24 INCH DEEP BY APPROXIMATELY 6 FT LONG PANEL BARRIER, DEEP ROOT SM 24, AVAILABLE FROM VILLA LANDSCAPE PRODUCTS, INC. (714) 630-3181; ROOT SOLUTIONS (800)554-0914 OR APPROVED EQUIVALENT. INSTALL AT EACH TREE ON SIDEWALK SIDE, CONTINUOUS, CENTER 12' LENGTH PER TREE. NO ROOT BARRIER REQUIRED WHERE THERE IS A DEEPENED CURB INSTALLED ADJACENT TO TREE PLANTING.
7. ALL SHRUBS, GROUNDCOVERS, TREES AND VINES SELECTED FOR PLANTING ARE LOW WATER USE. ALL SHRUBS AND GROUNDCOVER AREAS (NON-TURF AREAS) TO BE IRRIGATED WITH DRIP IRRIGATION. ALL TURF AREAS IRRIGATED WITH HIGH-EFFICIENCY SPRAY.
8. NON-TURF AREAS: AT LEAST 75% OF THE PLANT SELECTION IS NATIVE OR CLIMATE APPROPRIATE LOW WATER USE SPECIES AND REQUIRE MINIMAL WATER ONCE ESTABLISHED. UP TO 25% OF THE PLANTS MAY BE NON-DROUGHT TOLERANT VARIETY AS LONG AS THEY ARE APPROPRIATELY GROUPED TOGETHER AND IRRIGATED SEPARATELY AND EFFICIENTLY AS HYDROZONES.
9. NO PLANTED SPECIES CAN BE LISTED BY CAL-IPC (CALIFORNIA INVASIVE PLANT COUNCIL) AS INVASIVE IN THE SAN FRANCISCO BAY AREA, AND PLANT RIGHT, KEEP INVASIVE PLANTS IN CHECK BY CALIFORNIA HORTICULTURAL INVASIVE'S PREVENTION (CAL-HIP).
10. WATER USE ACCORDING TO "WUCOLS: WATER USE CLASSIFICATION OF LANDSCAPE SPECIES":
    HIGH
    MODERATE
    LOW
    VERY LOW

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ISSUED FOR: DATE:
PERMIT SUBMITTAL 12/03/2018
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SHEET TITLE

PLANT LIST & NOTES

DATE 12/03/2018
SCALE 1/16" = 1'-0"
DRAWN XA CHECKED KK

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PROJECT NO. 18021

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HAYWARD, CA 94545
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REQUIRED LANDSCAPE STATEMENT SUBMITTAL

CONSIDER REGIONAL AND MICRO-CLIMATIC, TOPOGRAPHY, SOLAR ORIENTATION AND SOIL CONDITIONS:
THE SITE IS LOCATED IN SUNSET ZONE 17. THE SITE ITSELF SLOPES AT AN AVERAGE GRADIENT OF 2% AND IS CLEAR OF LARGE SHRUBS AND TREES. SOILS ARE PREDOMINANTLY WILLOWS CLAY AND ARE WELL DRAINED. TYPICALLY THIS SOILS IS PRIME FARMLAND. THESE SOILS ARE WELL-SUITED TO AMENDING AND PLANTING.

EXPLAIN HOW WATER CONSERVATION AND LONG TERM GREEN WASTE REDUCTION GOAL WILL BE ACHIEVED:
LOW-WATER USE/CLIMATE ADAPTED PLANTS WILL BE USED FOR LANDSCAPING, AND A "SMART/ET" CONTROLLER SPECIFIED TO DELIVER THE MINIMUM AMOUNT OF IRRIGATION REQUIRED TO SUSTAIN HEALTHY PLANT GROWTH. 3" OF ORGANIC MULCH WILL BE SPECIFIED THROUGHOUT PLANTING AREAS. GREENWASTE REDUCTION WILL BE ACHIEVED BY USING PLANTS THAT DO NOT REQUIRE CLIPPING, AND SPACING PLANTS AT THEIR MATURE WIDTHS FROM WALKS AND STRUCTURES.

EXPLAIN HOW INTEGRATED AND/OR ORGANIC PEST CONTROL PRACTICE WOULD BE PROPOSED DURING SOIL PREPARATION:
SOILS WILL NOT BE TREATED WITH CHEMICAL PRE-EMERGENTS, AND ORGANIC, NON-CHEMICAL FERTILIZERS WILL BE SPECIFIED FOR PLANTING OPERATIONS. CARDBOARD SHEET MULCHING WILL BE USED FOR INITIAL WEED CONTROL. OMRI OR STA CERTIFIED COMPOST WILL BE INCORPORATED INTO SOILS AT A RATE OF 5% BY VOLUME DURING SOIL PREPARATION.

EXPLAIN HOW PROPOSED LANDSCAPE DESIGN COMPLEMENTS ARCHITECTURAL STYLE, FORM, BUILDING COLORS AND MATERIALS, AND PROJECT AND BUILDING ENTRANCES:
THE BUILDINGS HAVE BEEN DESIGNED TO HAVE ENCLOSED COURTYARDS AT EACH ENTRY AND A 1960S RETRO STYLE. PLANT MATERIALS HAVE BEEN SELECTED TO COMPLEMENT THIS APPROACH. THE PLANTING PLAN INCLUDES A DIVERSE SELECTION OF EVERGREEN AND DECIDUOUS CANOPY TREES OF VARIED HEIGHT AND FORM. ALSO INCLUDED ARE CLIMATE-ADAPTED MEDITERRANEAN GARDEN PLANTS LIKE LOMANDRA AND PHORMIUM WILL LEAVE LEND A MODERN LOOK TO THE PLANTING HIEL USING LOW AMOUNTS OF IRRIGATION. LARGE CANOPY TREES HAVE BEEN PLACED TO SIGNAL KEY PROJECT AND BUILDING ENTRANCES. IN ADDITION AT ENTRY COURTYARDS, BLACK BAMBOO AND RIVER ROCK WILL SIGNAL THE ENTRIES.

EXPLAIN HOW THE PROPOSED LANDSCAPE IMPROVEMENTS MAKE POSITIVE CONTRIBUTION PHYSICALLY AND AESTHETICALLY TO SURROUNDING NEIGHBORHOODS:
ARF AVENUE AND BAUMBERG AVENUE WILL BENEFIT FROM NEWLY PLANTED STREET TREES AND SIDWALK PAVERS. THESE FEATURES ARE IN KEEPING WITH THE EXISTING NEIGHBORHOOD.

EXPLAIN HOW SAFETY, FUNCTION AND AESTHETICAL ENHANCEMENTS FOR PEDESTRIAN NETWORK AND EXPERIENCE ARE ADDRESSED:
EXISTING SIDWEWALKS AROUND THE PROJECT SITE WILL BE ENHANCED. IN ADDITION THE NEW PROJECT ROAD WILL HAVE SIDEWALKS ON BOTH SIDES OF THE STREET.

EXPLAIN THE TYPE OF LANDSCAPE BUFFERS TO ADJACENT LAND USE WITH COMBINATION OF TREES, SHRUBS, VINES AND GROUNDCOVERS ARE PROVIDED:
THE LANDSCAPE ON THE INTERIOR SIDES WILL BE COMPLETED BY HOMEWONERS, NEW WOOD FENCING HAS BEEN PROVIDED. ALONG ARF AVENUE ADN BAUMBERG AVENUE NEW STREET TREES LAONG WITH A BIOFILTRATION AREA WILL PROVIDE UFFERS TO THOSE STREETS.

MAXIMIZE THE USE OF PERMEABLE PAVING TYPES AS RECOMMENDED BY BAY-FRIENDLY LANDSCAPE GUIDELINES AND ALAMEDA COUNTY CLEAN WATER PROGRAM. REFERENCE WEBSITES: PREMEABLE PAVERS WILL BE INSTALLED AT THE DRIVEWAYS. THE PROPOSED PAVER IS THE 'HYDRO-FLO' INTERLOCKING PERMEABLE PAVING STONE BY PACIFIC INTERLOCK PAVINGSTONE, 'UNIVERSAL' MODEL.

MAXIMIZE USAGE OF RECYCLED MATERIAL IN ALL ASPECTS OF CONSTRUCTION MATERIAL:
RECYCLED MATERIALS WILL BE USED FOR THE COMPOST SOIL AMENDMENTS AND ARBOR WASTE WOOD MULCH.

SCREEN PARKING, LOADING, SERVICE AREAS, UTILITIES, SOLID BUILDING SURFACES, RETAINING WALLS, MASONRY WALLS, AND FENCES WITH TREES, SHRUBS AND VINES:
RECYCLING AND TRASH AREAS WIL BE SCREENED WITH TALL SHRUB AND PRIVACY WOOD FENCING. THE WOOD FENCING FACING STREET FRONTAGES WILL BE SCREENED WITH BIOFLTRATION PLANTING AREAS.

ALLOW SPACE FOR PLANTS TO MATURE, AND NOT TO CAUSE DAMAGE TO PAVEMENT OR UNDERGROUND UTILITIES:
TREE PLACEMENT HAS BEEN COORDINATED WITH KNOWN UNDERGROUND UTILITIES TO ENSURE CLEARANCE. TREE WELLS WILL BE GENEROUSLY SIZED, AND TREE SPECIES SELECTED THAT COEXIST WELL WITH PAVEMENT.

SELECT APPROPRIATE TYPE OF PLANTS TO PRESERVE SIGHT DISTANCE AT SITE ENTRIES/EXITS AND INTERNAL CIRCULATION ROUTES WITHOUT SHEARING:
PLANTS AT ENTRIES WILL BE SELECTED TO REACH A MATURE SIZE OF 3' MAX AND WILL NOT REQUIRE SHEARING. WHERE TREES ARE SHOWN, THEY WILL BE LARGE CANOPY SPECIES, AND WILL BE PLANTED FROM NURSERY SPECIMENS WITH A MINIMUM LOW BRANCH HEIGHT OF 10'.

EROSION CONTROL: PLANT DEEP-ROOTED PLANTS ON SLOPES; AND SPECIFY JUTE MESH NETTING OR EQUAL ON SLOPES 3:1 OR STEEPER, OR ON SLOPES SHOWING SIGNS OF EROSION:
THERE ARE NO SLOPES STEEPER THAN 3:1 PROPOSED ON THE SITE. ALL EXPOSED SOILS WILL BE COVERED WITH PLANTING AND MULCH COVER TO MITIGATE EROSION AND ENCOURAGE HEALTHY ROOT GROWTH TO STABILIZE THE SITE.

SELECT DIVERSE PLANT SPECIES TO DISPLAY VARIOUS TEXTURE, FORM, FOLIAGE COLOR, FLOWERS, SEASONAL COLOR, AND ATTRACT WILD LIFE:
THE PLANT PALETTE IS DIVERSE, WITH A TOTAL OF 28 DIFFERENT SPECIES. FINE AND COARSE TEXTURED PLANTS HAVE BEEN INCLUDED, WITH A GOOD VARIETY OF FORM THAT WILL LEND ITSELF TO THE MODERN INPSIRED LOOK OF THE ARCHITECTURE.

FOR PROJECTS LOCATED ALONG THE ARTERIAL STREETS, STREET FRONTAGE LANDSCAPING IS CONSISTENT WITH GUIDELINES IN LANDSCAPE BEAUTIFICATION PLAN (LBP):
SITE IS NOT LOCATED ON AN ARTERIAL STREET, AND DOES NOT HAVE TO MEET THE LANDSCAPE BEAUTIFICATION PLAN GUIDELINES.

PROJECTS LOCATED IN THE HAYWARD HILLS AND IN THE URBAN/WILDLAND INTERFACE AREAS MUST CONFORM WITH HAYWARD'S HILLSIDE DESIGN AND URBAN/WILDLAND INTERFACE GUIDELINES COMMENT:
THE HAYWARD HILLS ARE GENERALLY DEFINED AS THE AREAS EAST OF MISSION BOULEVARD AND SOUTH OF "D" STREET. PROPERTIES SUBJECT TO THE INTERFACE PROVISIONS ARE DESIGNATED BY THE HAYWARD FIRE DEPARTMENT AND TYPICALLY INCLUDE SITES THAT ABUT OPEN SPACE OR RIPARIAN CORRIDORS. COPIES OF THE GUIDELINES ARE AVAILABLE AT THE PLANNING DIVISION AND ON THE CITY'S WEBSITE AT WWW.HAYWARD-CA.GOV.

STATE WATER CONSERVATION, RUN-OFF CONTROL AND EROSION CONTROL MEASURES THROUGH IRRIGATION DESIGN:
IRRIGATION DESIGN WILL INCLUDE A 'SMART/ET' CONTROLLER WITH THE CAPACITY TO ADJUST IRRIGATION SCHEDULES TO SITE-SPECIFIC RAINFALL AND EVAPOTRANSPIRATION. THE SYSTEM WILL ALSO BE DESIGNED TO APPLY IRRIGATION WATER IN SEVERAL SHORT CYCLES WITH INTERVENING REST PERIODS, TO ALLOW WATER TO SOAK INTO THE SOIL. 3" DEPTH OF ORGANIC MULCH WILL BE APPLIED IN ALL PLANTING AREAS, INCREASING THE SOIL'S CAPACITY TO RETAIN WATER, AND SLOWING ANY RUNOFF THAT MAY RESULT DUE TO RAINSTORMS OR PIPE BREAKAGE.

STATE TYPE OF IRRIGATION SYSTEM TO BE USED:
ALL PLANTS WILL BE WATERED WITH DRIP/BUBBLER IRRIGATION, EXCEPT IN LIMITED TURF AREAS, WHICH WILL BE WATERED WITH HIGH-EFFIENCY SPRAY.

STATE IF STOCKPILING TOPSOIL WOULD BE PRACTICED:
TOPSOIL WILL BE STOCKPILED, PENDING SOIL TEST RESULTS. A SUITABLE STOCKPILE LOCATION WILL BE IDENTIFIED, WHERE IT CAN BE SET ASIDE WITHOUT IMPACTING CONSTRUCTION OPERATIONS.

STATE THE INTENT TO RECYCLE MINIMUM 50% OF LANDSCAPE CONSTRUCTION AND GREEN WASTE:
THE PROJECT SPECIFICATIONS WILL BE WRITTEN TO REQUIRE RECYCLING OF A MINIMUM OF 50% OF LANDSCAPE CONSTRUCTION AND GREENWASTE GENERATED BY CONSTRUCTION.

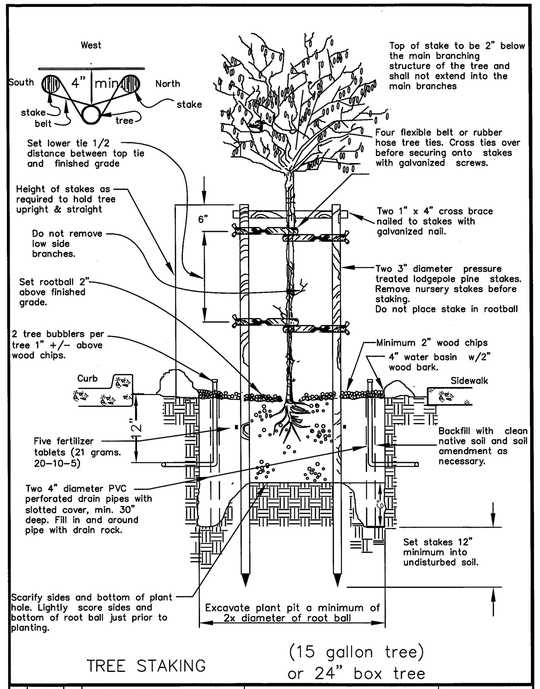
BAY-FRIENDLY LANDSCAPE PRACTICES NOTES

EACH PROJECT IS REQUIRED TO MEET ARTICLE 12, CITY OF HAYWARD, BAY-FRIENDLY WATER EFFICIENT LANDSCAPE ORDINANCE
SEE CITY OF HAYWARD WEB SITE FOR FULL CODE:
HTTPS://WWW.HAYWARD-CA.GOV/SITES/DEFAULT/FILES/CH-10_A-12_BAYFRIENDLYWATEREFFICIENTLANDSCAPE.PDF

PLANS AND INSTALLED LANDSCAPE TO COMPLY WITH CITY BAY-FREINDLY WATER EFFICIENT CODE, IN ADDITION THE THE NINE REQUIRED PRACTICES ARE SUMMARIZED BELOW:

1. MULCH ALL SHRUB AREAS WITH 3 INCH THICK LAYER OF MULCH. ALL SOIL ON SITE IS PROTECTED WITH A MINIMUM OF 3 INCHES OF MULCH AFTER CONSTRUCTION. ALL MULCH IS ARBOR WASTE MATERIAL.
2. AMEND SOIL WITH COMPOST BEFORE PLANTING. COMPOST IS SPECIFIED AS THE SOIL AMENDMENT, AT THE RATES INDICATED BY A SOIL ANALYSIS TO BRING THE SOIL ORGANIC MATTER CONTENT TO A MINIMUM OF 3.5% BY DRY WEIGHT OR 1 INCH OF COMPOST. OPTION 1: REQUIRE IMPORT TOPSOIL TO MEET ORGANIC MATTER CONTENT OF A MINIMUM 3.5% BY DRY WEIGHT. OPTION 2: SUBMIT SOILS REPORT THAT IDENTIFIES EXISTING TOPSOIL MEETS ORGANIC MATTER CONTENT OF 3.5% BY DRY WEIGHT OR GREATER.
3. REDUCE AND RECYCLE LANDSCAPE CONSTRUCTION WASTE. DIVERT 50% OF LANDSCAPE CONSTRUCTION AND DEMOLITION WASTE BY VOLUME OR WEIGHT.
4. CHOOSE AND LOCATE PLANTS THAT GROW TO NATURAL SIZE AND AVOID SHEARING. NO PLANT SPECIES WILL REQUIRE SHEARING. SELECT SPECIES AND SPACING TO ALLOW PLANTS TO GROW TO NATURAL SIZE AND SHAPE WITHOUT SHEARING AT ANY POINT IN THE LIFESPAN OF THE PLANT, EXCLUDING STRUCTURAL AND REGULAR MAINTENANCE.
5. DO NOT PLANT INVASIVE SPECIES. NONE OF THE PLANT SPECIES LISTED BY CAS-IPC AS INVASIVE IN THE SAN FRANCISCO, BAY AREA ARE INCLUDED IN THE PLANTING DESIGN.
6. GROW DROUGHT TOLERANT CALIFORNIA NATIVE, MEDITERRANEAN OR CLIMATE ADAPTED PLANTS. A MINIMUM OF 75% OF THE TOTAL NUMBER OF PLANTS IN THE NON-TURF AREAS MUST BE SPECIES THAT REQUIRE NO OR LITTLE SUMMER WATERING ONCE ESTABLISHED. SPECIES SHOULD BE ADAPTED TO THE CLIMATE IN WHICH THEY WILL BE PLANTED, AS REFERENCED BY A THIRD PARTY SOURCE. PLANT SHALL BE RATED FOR MODERATE OR OCCASIONAL WATER USE FOR THIS REGION AND CLIMATE.
7. MINIMIZE TURF.A MAXIMUM OF 25% OF TOTAL IRRIGATED AREA IS SPECIFIED AS TURF, WITH SPORTS OR MULTI-USE FIELDS EXEMPTED.
8. SPECIFY AUTOMATIC WEATHER-BASED CONTROLLER WITH SOIL MOISTURE AND/OR RAIN SENSOR.A WEATHER-BASED IRRIGATION CONTROLLERS, SOIL MOISTURE BASED CONTROLLERS, OR OTHER SELF-ADJUSTING IRRIGATION CONTROLLERS, SHALL BE REQUIRED FOR ENTIRE IRRIGATION SYSTEM.
9. SPRINKLER AND SPRAY HEADS ARE NOT SPECIFIED IN AREAS LESS THAN 8 FEET WIDE.SPRINKLER AND SPRAY HEADS ARE NOT SPECIFIED IN AREAS LESS THAN OR EQUAL TO 8 FEET WIDE TO PREVENT OVERSPRAY AND RUNOFF. ACCEPTABLE ALTERNATIVES INCLUDE BUBBLER OR DRIP WITH SUBSURFACE RIGID LATERAL PIPES. BUBBLERS SHALL NOT EXCEED 1.5 GALLONS PER MINUTE PER BUBBLER.

KEY CHANGES TO THE CURRENT BAY-FRIENDLY WATER EFFICIENT LANDSCAPE ORDINANCE INCLUDE BUT NOT LIMITED TO SECTION 10-12.03 APPLICABILITY, SECTION 10-12.12 IRRIGATION EFFICIENCY, SECTION 10-12.14 REQUIREMENT FOR INSTALLING BASIC "LAUNDRY TO LANDSCAPE" PLUMBING IN EACH RESIDENCE, SECTION I 0-12.15 RECOMMENDING ON-SITE RAINWATER RETENTION AND INFILTRATION WITH POROUS PAVEMENTS AND REQUIRING MINIMUM ONE FIFTY (50)
GALLON COVERED RAIN CATCHMENT DEVICE PER RESIDENCE, AND APPENDIX B WATER EFFICIENT LANDSCAPE WORKSHEET FOR WATER BUDGET CALCULATION. THE "LAUNDRY TO LANDSCAPE" COMPLIANCE SHALL BE ADDRESSED DURING THE BUILDING PERMIT PROCESS THROUGH THE BUILDING DIVISION AND SHALL COMPLY TO THE CALIFORNIA PLUMBING CODE: CONTACT BUILDING OFFICIAL GARY NORDAHL FOR MORE INFORMATION.



REV	DATE	BY	CITY OF HAYWARD ENGINEERING DIVISION	STREET TREE PLANTING	DWG. NO. SD-122
			DRAWN BY: JT DATE: 6-13-08		FILED
			CHECKED BY: MHW SCALE: NTS		
			APPD. CITY ENGINEER / APPROVED DIR. PUBLIC WORKS		SHT. 1 OF 2

STREET TREE PLANTING SPECIFICATIONS

1. Tree shall be healthy, disease and insect-free, well rooted, and properly trained with a straight trunk that can stand upright without support. Tree shall exhibit a central leader, or a main branch that can be trained as a central leader. Branches shall be well-developed and shall be evenly and radially distributed around the trunk. Root ball shalll not exhibit kinked or circling roots.
2. Tree shall comply with federal and state laws requiring inspection for plant diseases and pest infestation. Clearance from the county agricultural commissioner, as required by law, shall be obtained before planting trees delivered from outside the county.
3. Prior to planting tree, determine the location of existing or future underground utilities. Locate tree a minimum of 5 feet from lateral service lines and driveways. Locate tree a minimum of 15 feet from a light pole, and a minimum of 30 feet from the face of a traffic signal, or as otherwise specified by the City.
4. Tree pit shall be tested for proper drainage prior to planting tree. Fill pit with water; if water remains after a 24-hour period, auger three 4"-diameter by 3-foot deep holes at the bottom of the tree pit. Backfill with drain rock.
5. Set tree in an upright and plumb position. As much as possible, tree shall be positioned such that dominant branches are parallel to the roadway and are oriented away from potential conflicts.
6. If required by the City, a pressure-compensating bubbler, or drip emitters, shall be provided to each tree.
7. Depending on the planter strip width, or the tree well size and the tree species being planted, a 24" deep root-barrier may be required by the City to be placed between the root-ball and the curb and/or sidewalk. Length of strip barrier or size of the box barrier will be specified by the City.
8. Stakes are to be removed when the tree diameter meets or exceeds the diameter of the stake.

REV	DATE	BY	CITY OF HAYWARD ENGINEERING DIVISION	STREET TREE PLANTING	DWG. NO. SD-122
			DRAWN BY: JT DATE: 6-13-08		FILED
			CHECKED BY: MHW SCALE: NTS		
			APPD. CITY ENGINEER / APPROVED DIR. PUBLIC WORKS		SHT. 2 OF 2

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HAYWARD, CA 94545

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444 17th Street Oakland CA 94612

ISSUED FOR: DATE:
PERMIT SUBMITTAL 12/04/2018
1
2
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SHEET TITLE
LANDSCAPE STATEMENT

DATE 12/03/2018
SCALE 1/16" = 1'-0"
DRAWN XA CHECKED KK

L1.04

PROJECT NO. 18021

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18021
ARF AVENUE
HAYWARD, CA 94545
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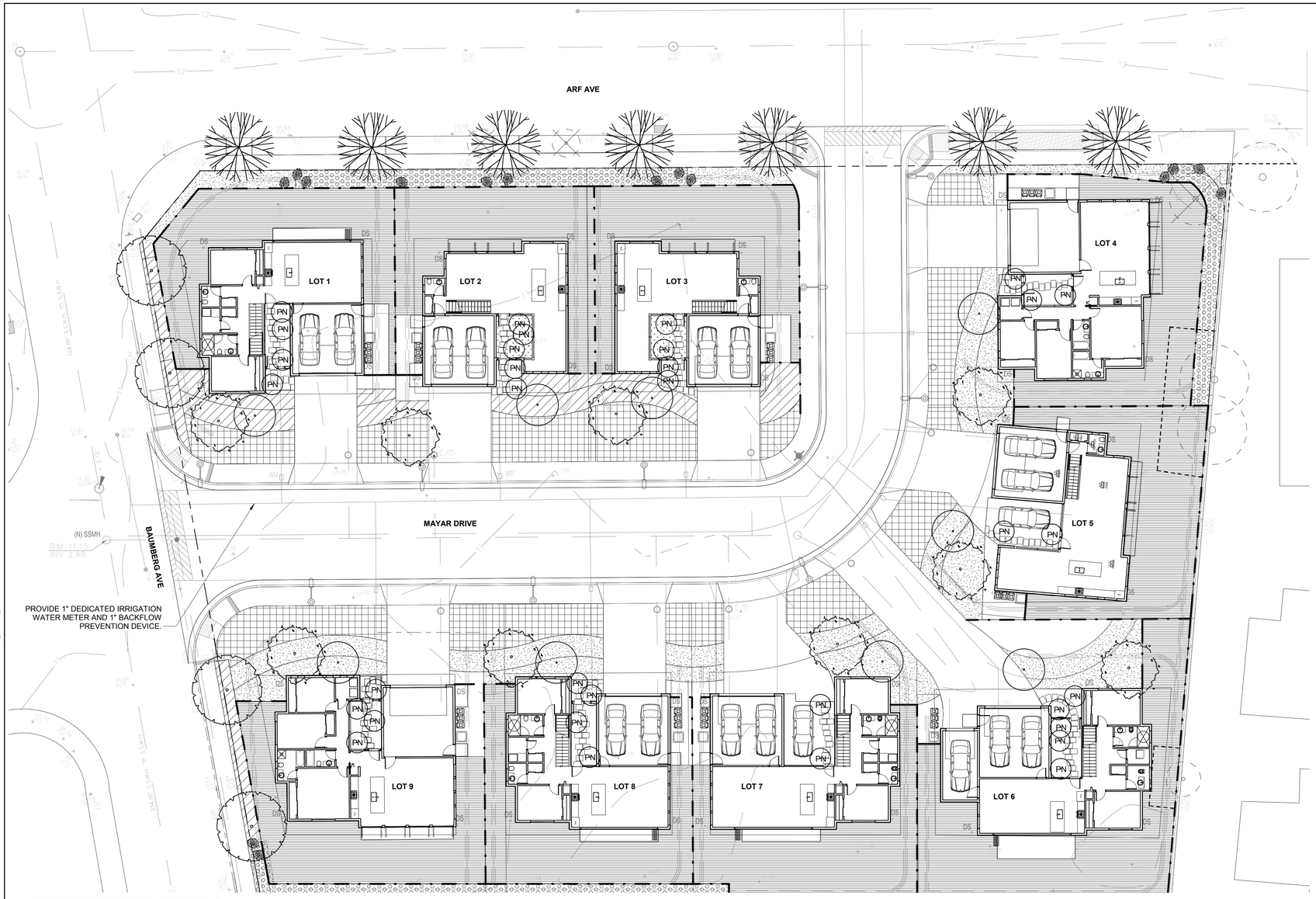

IRRIGATION DESIGN INTENT & PERFORMANCE STANDARDS

1. ALL SHRUBS, GROUNDCOVERS, TREES AND VINES SELECTED FOR PLANTING ARE LOW OR MODERATE WATER USE. ALL SHRUBS AND GROUNDCOVER AREAS (NON-TURF AREAS) TO BE IRRIGATED WITH DRIP IRRIGATION. ALL TURF AREAS IRRIGATED WITH HIGH EFFICIENCY SPRINKLERS.
2. LANDSCAPING TO BE DESIGNED TO BE IRRIGATED AT NO MORE THAN 45% OF THE REFERENCE EVAPOTRANSPIRATION FOR THE IRRIGATED AREA.
3. NO TRADITIONAL TURF HAS BEEN SPECIFIED.
4. TURF IS NOT ALLOWED IN AREAS LESS THAN 10' WIDE.
5. AUTOMATIC, SELF-ADJUSTING IRRIGATION CONTROLLERS ARE TO BE SPECIFIED ON ALL IRRIGATION SYSTEMS AND WILL AUTOMATICALLY ACTIVATE AND DEACTIVATE THE IRRIGATION SYSTEM BASED ON CHANGES IN THE WEATHER. ALL AUTOMATIC IRRIGATION SYSTEMS ARE EQUIPPED WITH A RAIN SENSORS.
6. OVERHEAD SPRINKLER IRRIGATION FOR TURF AREAS ONLY, NO SPRINKLERS OR SPRAY HEADS IN AREAS LESS THAN 10' WIDE. LANDSCAPE DESIGN BEST PRACTICES WILL INCLUDE DISTRIBUTION UNIFORMITY, HEAD TO HEAD SPACING AND SETBACKS FROM WALKWAYS AND PAVEMENT.
7. HOMEOWNER AND DEVELOPER TO CONFORM TO EBMUD SECTION 31 WATER EFFICIENCY REQUIREMENTS FOR LANDSCAPE. PLANS PROVIDED INCLUDE SUGGESTED PLANT PALETTE, AND IRRIGATION DESIGN/BUILD SPECIFICATION TO CONFORM TO SECTION 31. HOMEOWNER TO REFER TO EBMUD BOOK "PLANTS AND LANDSCAPES FOR SUMMER-DRY CLIMATES OF THE SAN FRANCISCO BAY REGION" FOR FURTHER INFORMATION AND PLANT SELECTION. IN ADDITION WWW.STOPWASTE.ORG WEB SITE PROVIDES ADDITIONAL INFORMATION REGARDING BAY FRIENDLY PLANTS AND PRACTICES FOR LANDSCAPING.
8. VALVES AND CIRCUITS TO BE SEPARATED (INDIVIDUAL HYDROZONES) BASED ON PLANT MATERIAL AND WATER USE.
9. STATIC PRESSURE AT POINT OF CONNECTION TO BE 60 PSI OR HIGHER. IRRIGATION DEMAND NOT TO EXCEED 20 GPM AT 60 PSI STATIC PRESSURE.
10. PROVIDE AUTOMATIC IRRIGATION SYSTEM THAT PROVIDES 100% UNIFORM COVERAGE AND MEETS CURRENT WATER EFFICIENCY STANDARDS FOR LANDSCAPE AREAS.
11. IRRIGATION BACKFLOW PREVENTION DEVICE TO BE LOCATED CLOSER TO STRUCTURE AWAY FROM EDGE OF ROAD OR PAVEMENT ON A CONCRETE PAD. A POLAR BLANKET AND STEEL CAGING TO BE PROVIDED FOR EACH BACKFLOW PREVENTER.
12. WATER USE ACCORDING TO "WUCOLS: WATER USE CLASSIFICATION OF LANDSCAPE SPECIES":
    1. H = HIGH
    2. M = MODERATE
    3. L = LOW
    4. VL = VERY LOW
13. ALL DEVELOPER INSTALLED LANDSCAPE IMPROVEMENTS INCLUDING BIORETENTION AREAS IN INDIVIDUAL LOTS SHALL BE IRRIGATED BY A DEDICATED IRRIGATION WATER METER AND SHALL BE MAINTAINED BY HOA. THE CONCEPTUAL IRRIGATION PLANS SHALL INCLUDE DESIGNATION OF LANDSCAPE ZONES PER WATER USE (HYDROZONE MAP), PROPOSED DEDICATED IRRIGATION WATER METER LOCATION AND SIZE, STATIC WATER PRESSURE (PSI) AT POINT OF CONNECTION, PERFORMANCE STANDARDS, AND BACKFLOW PREVENTION DEVICE LOCATIONS.
14. MANUAL SHUT OFF VALVE SUCH AS A GATE VALVE, BALL VALVE OR BUTTERFLY VALVE SHALL BE INSTALLED AFTER THE BACKFLOW PREVENTION DEVICE.
15. MUNICIPAL CODE ARTICLE 12, APPENDIX B WATER EFFICIENT LANDSCAPE WORKSHEET FOR WATER BUDGET CALCULATION FOR MAXIMUM APPLIED WATER ALLOWANCE AND ESTIMATED TOTAL WATER ALLOWANCE. THE WATER BUDGET CALCULATION SHALL PROVIDE ETO FOR THE CITY OF HAYWARD, 44.2, AND THE CALCULATION METHODOLOGY USED. FOR RESIDENTIAL DEVELOPMENTS WITH MORE THAN FIVE OR MORE UNITS SHALL BE CONSIDERED PROVIDING "NON-RESIDENTIALLANDSCAPE" AND SHALL USE ET ADJUSTMENT FACTOR OF 0.45, NOT 0.55.
16. ALL BIOFILTRATION AND STREETSCAPE PLANTINGS TO BE IRRIGATED BY HOA.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) is 44.20 **ETAF for MAWA is** 0.45

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
Biotreatment areas (Very Low and Low)	0.25	DRIP	0.81	0.31	1852	574	**15730**
Shrubs - Full Sun (Very Low and Low)	0.25	DRIP	0.81	0.31	1679	520	**14250**
Shrubs - Shade/Part (Low and Moderate)	0.50	DRIP	0.81	0.62	3736	2316	**63468**
No Mow Turf Mix (Very Low and Low)	0.25	SPRAY	0.75	0.33	3939	1300	**35625**
Street Trees (Moderate)	0.50	DRIP	0.81	0.62	259	161	**4412**
Trees in Planted Areas (Low)	0.25	DRIP	0.81	0.31	88	27	**740**
				Totals	**11553**	**4898**	**134225**
					(A)	(B)	
Special Landscape Areas							
				1			
				Totals	**0**	**0**	**0**
					(C)	(D)	
						ETWU Total	**134225**
						Maximum Allowed Water Allowance (MAWA)[f]	**142469**

ETAF Calculations:

Regular Landscape Areas

Total ETAF x Area	(B)	**4898**
Total Area	(A)	**11553**
Average ETAF	**B÷A=**	**0.42**

All Landscape Areas

Total ETAF x Area	(B+D)	**4898**
Total Area	(A+C)	**11553**
Sitewide ETAF=(B+D)÷(A+C)		**0.42**

HYDROZONE TYPES

HYDROZONE 1: MIXED PLANTINGS IN SUN EXPOSURE, SELECT VERY LOW AND LOW WATER USE SPECIES FROM PLANT LIST APPROPRIATE FOR SUN EXPOSURE, DRIP IRRIGATED.

HYDROZONE 2: MIXED PLANTINGS IN PART SUN TO SHADE, SELECT LOW AND MODERATE WATER USE SPECIES IN PLANT LIST APPROPRIATE FOR PART SUN TO SHADE EXPOSURE, DRIP IRRIGATED.

HYDROZONE 3: BIOTREATMENT AREAS, SELECT STORM WATER TOLERANT, VERY LOW AND LOW WATER USE SPECIES FROM PLANTS LIST, DRIP IRRIGATED

HYDROZONE 4: NO MOW TURF (SEE PLANTING PLAN FOR SPECIES), HIGH-EFFICIENCY SPRAY IRRIGATED

HYDROZONE 5: UNIRRIGATED AND UNIMPROVED AREA

HYDROZONE 6: TREES, LOCATION INDICATED ON PLAN

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PGAdesign
LANDSCAPE ARCHITECTS
tel 510.465.1284 url PGAdesign.com
444 17th Street Oakland CA 94612

ISSUED FOR:	DATE:
PERMIT SUBMITTAL	12/04/2018
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SHEET TITLE

CONCEPTUAL IRRIGATION PLAN

DATE 12/03/2018
SCALE As indicated
DRAWN XA CHECKED KK

L1.05

PROJECT NO. 18021

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18021
ARF AVENUE
HAYWARD, CA 94545
Fri Dec 07 2018 9:10:52

PERMEABLE UNIT PAVERS AT SIDEWALK

COLOR: GREY
PATTERN: RUNNING BOND
PACIFIC INTERLOCK: HYDRO FLO PAVER
http://www.pacinterlock.com/

PERMEABLE UNIT PAVERS AT DRIVEWAYS

COLOR: B6 TAHOE GRANITE
PATTERN: PARQUET
PACIFIC INTERLOCK: HYDRO FLO PAVER
http://www.pacinterlock.com/

PERMEABLE UNIT PAVERS AT ROADWAY

COLOR: B12 SUMMIT SUNRISE
PATTERN: HERRINGBONE
PACIFIC INTERLOCK: HYDRO FLO PAVER
http://www.pacinterlock.com/

CONCRETE STEPPING STONES AT FRONT ENTRIES

BROOM FINISH COLORED CONCRETE

6' TALL WOOD FENCING

MANUFACTURER: HOME DEPOT
WOOD TYPE: WESTERN CEDAR
FINISH: UNFINISHED

BOULDERS AT BIOTREATMENT AREAS

INSTALL AT BIOFILTRATION AREA AS SHOWN
HOOKER CREEK BOULDER AS AVAILABLE FROM
AMERICAN SOIL AND STONE

NO MOW TURF

NATIVE PRESERVATION MIX
DELTA BLUE GRASS
http://www.deltabluegrass.com/
TEL: 800.637.8873

ARBOR WASTE MULCH

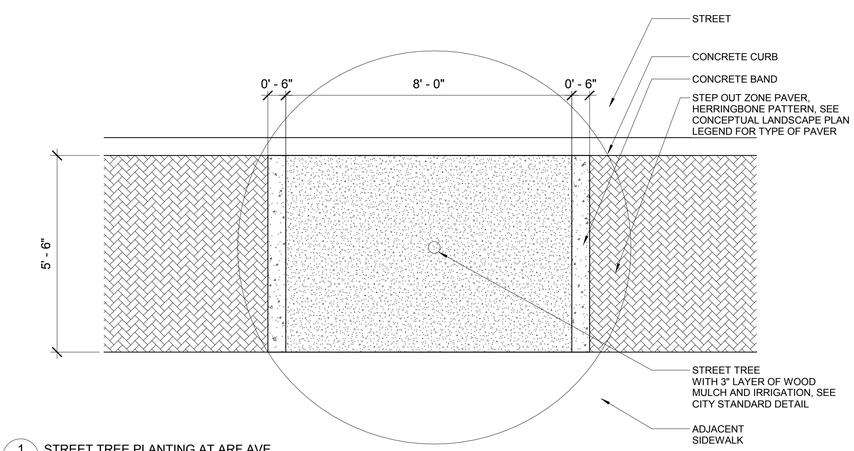
3" DEPTH AT ALL PLANTING AREAS
GRAB N' GROW SOIL PRODUCTS
http://grabngrowsoil.com/product/arbor-mulch/
TEL: 707.575.7275

GRAVEL AT FRONT ENTRIES

3/4" BLACK LA PAZ PEBBLES
LYNGSO INC.
https://www.lyngsogarden.com/
TEL: 650.364.1730

DECOMPOSED GRANITE

SUNSET GOLD PATH FINES WITH STABILIZER
LYNGSO INC.
https://www.lyngsogarden.com/
TEL: 650.364.1730



1 / L1.06 STREET TREE PLANTING AT ARF AVE
1/2" = 1'-0"

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ISSUED FOR:	DATE:
PERMIT SUBMITTAL 2018	
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2	
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SHEET TITLE

LANDSCAPE MATERIALS

DATE 12/03/2018
SCALE 1/2" = 1'-0"
DRAWN XA | CHECKED KK

L1.06

PROJECT NO. 18021

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18021
ARF AVENUE
HAYWARD, CA 94545
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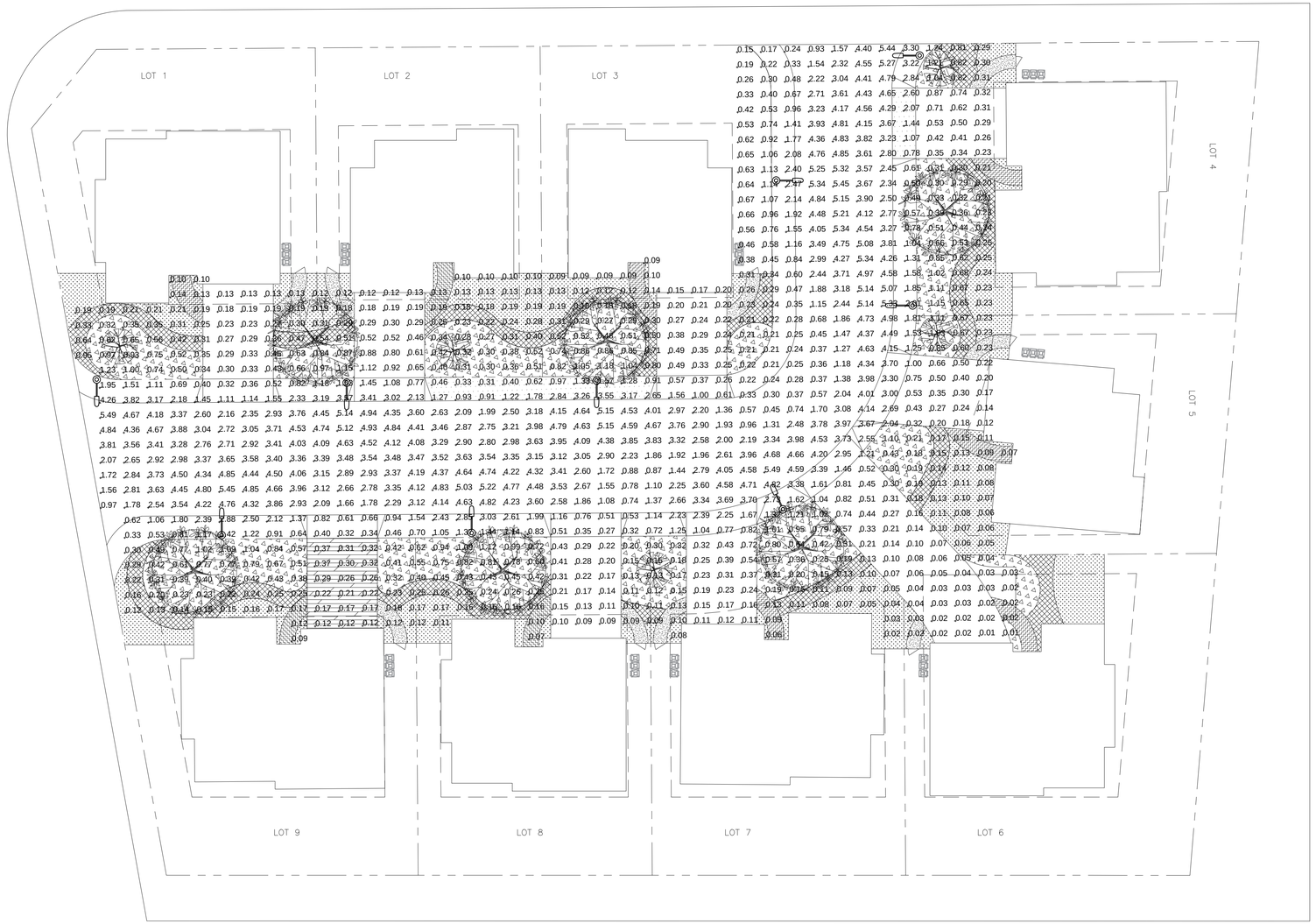

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E1.0

SITE PHOTOMETRIC CALCULATION

SCALE: 1/16"=1'-0"

GENERAL NOTES:

1. MR ENGINEERING, INC. DISCLAIMER:
   CALCULATIONS ARE PERFORMED USING INDUSTRY-RECOGNIZED SOFTWARE, AND ARE PROVIDED FOR THE ESTIMATION PURPOSES ONLY. INPUT DATA FOR THE CALCULATIONS CORRESPONDS TO THE INFORMATION PROVIDED TO US (ASSUMPTIONS MAY BE MADE FOR INFORMATION THAT IS NOT PROVIDED). IT IS THE RESPONSIBILITY OF THOSE USING THIS SERVICE TO VERIFY THAT OUR INPUT DATA IS CONSISTENT WITH EXPECTED FIELD CONDITIONS. RESULTS OF THE LIGHTING CALCULATIONS ACCURATELY REFLECT THE INPUT DATA. HOWEVER, ACTUAL LIGHTING LEVELS WILL VARY DEPENDING ON FIELD CONDITIONS SUCH AS ROOM CHARACTERISTICS, TEMPERATURE, VOTLAGE, AND LAMP/BALLAST OUTPUT AND OTHER FACTORS. CALCULATIONS ARE ALSO SUBJECT TO THE LIMITATIONS OF THE SOFTWARE. DE TO THE ABOVE CONSIDERATIONS, MR ENGINEERING, INC CANNOT GUARANTEE THAT ACTUAL LIGHT LEVELS MEASURED IN THE FIELD WILL MATCH OUR INITIAL CALCULATIONS.

2. CALCULATION VALUES SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE (EVERY 10 FT SPACING).

3. PHOTOMETRIC DATA USED AS INPUT FOR THERE CALCULATIONS IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP, RATINGS. FIELD PERFORMANCE WILL DEPEND ON THE ACTUAL LAMP, BALLAST, ELECTRICAL AND SITE CHARACTERISTICS.

EXTERIOR LIGHTING FIXTURE SCHEDULE

FIXTURE SYMBOL	FIXTURE TYPE	DESCRIPTION	MANUFACTURER'S CATALOG NO.	LAMPS	VOLT	WATTS	MOUNTING
	Z	12.5 FT. LED POLE LIGHT WITH PHOTOCELL	LITHONIA LIGHTING DSX1 LED 30C 700 30K T1S MVOLT MA DLL127F 1.5 JU OR APPROVED EQUAL	LED	120	68.1	POLE MOUNTED

CALCULATION SURFACE LIST

DESIGNATION	CALC TYPE	UNITS	E_{av} (fc)	E_{max} (fc)	E_{min} (fc)	E_{ave} / E_{min}	E_{max} / E_{min}
RESIDENTIAL AREA	ILLUMINANCE	Fc	1.45	5.73	0.01	145	573

DESIGNATION	CALC TYPE	UNITS	E
VERTICAL CALCULATION POINT - LOT 1	ILLUMINANCE	Fc	0.19
VERTICAL CALCULATION POINT - LOT 2	ILLUMINANCE	Fc	0.12
VERTICAL CALCULATION POINT - LOT 3	ILLUMINANCE	Fc	0.10
VERTICAL CALCULATION POINT - LOT 4	ILLUMINANCE	Fc	0.02
VERTICAL CALCULATION POINT - LOT 5	ILLUMINANCE	Fc	0.02
VERTICAL CALCULATION POINT - LOT 6	ILLUMINANCE	Fc	0
VERTICAL CALCULATION POINT - LOT 7	ILLUMINANCE	Fc	0.08
VERTICAL CALCULATION POINT - LOT 8	ILLUMINANCE	Fc	0.07
VERTICAL CALCULATION POINT - LOT 9	ILLUMINANCE	Fc	0.16

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engineers@mrengcon.com
www.mrengcon.com

MR ENGINEERING CONSULTANTS INC.

ISSUED FOR: DATE:

1

2

3

SITE PHOTOMETRIC CALCULATION

E1.0

PROJECT NO. 18021

GROSS BUILDING AREA

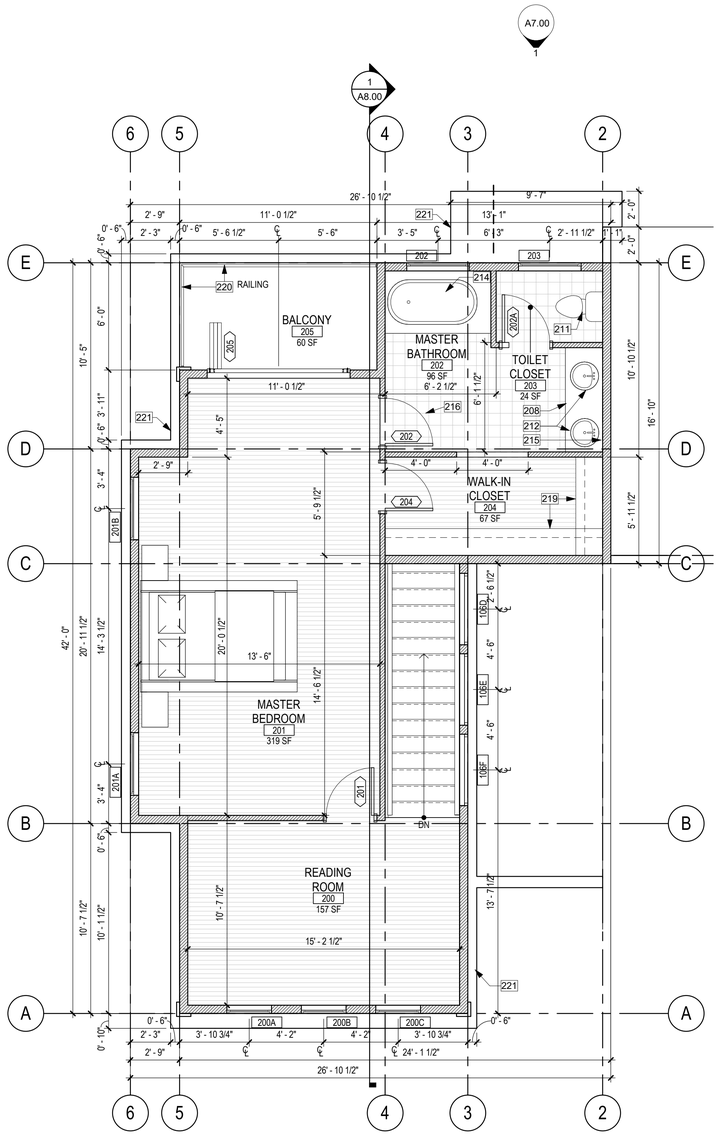
AREA NAME	AREA
GARAGE	433 SF
FIRST FLOOR	1257 SF
SECOND FLOOR	795 SF
	2485 SF

FLOOR PLAN KEYNOTES

NUMBER	COMMENT
200	LINE OF CEILING ABOVE
202	SOLID SURFACE COUNTER @ 18" HIGH WITH CABINETS BELOW
203	LINE OF GARAGE DOOR TRACK ABOVE
204	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
205	KITCHEN SINK W/ GARBAGE DISPOSAL. (KITCHEN FAUCETS MAX 1.8 GPM FLOW RATE @ 60 PSI)
206	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
207	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
208	
209	SOLID SURFACE COUNTER @ 42" HIGH WITH CABINETS BELOW
210	SOLID SURFACE CABINETS @ 3'-6" HEIGHT, MOUNTED 4'-6" A.F.F.
211	WATER CLOSET, MAX FLUSH VOLUME OF 1.28 GPF
212	LAVATORY, MAX FLOW RATE OF 1.2 GPM @ 60 PSI
213	SHOWER, MAX FLOW RATE OF 2.0 GPM @ 80 PSI
214	BATHTUB, MAX FLOW RATE OF 2.0 GPM @ 80 PSI
215	MIRROR MOUNTED ABOVE VANITY
216	TILE
217	WASHER SPACE, PROVIDE HOT & COLD WATER SUPPLY, WASTELINE, AND PAN W/ DRAIN TO EXTERIOR
218	DRYER SPACE, PROVIDE SMOOTH MTL. VENT TO EXTERIOR
219	LINE OF SHELVES AND ROD
220	GUARDRAIL @ 42" A.F.F.
221	LINE OF PAINTED WOOD BAND BELOW
300	LINE OF CEILING ABOVE
301	LINE OF CEILING ABOVE
302	LINE OF CEILING ABOVE
303	LINE OF CEILING ABOVE
304	LINE OF CEILING ABOVE
700	(N) EXTERIOR SCONCE
701	(N) 42" METAL GUARDRAIL. NO OPENING SHALL ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH
702	

FLOOR PLAN SHEET NOTES

1. GENERAL CONTACTOR TO BE RESPONSIBLE FOR ADEQUATELY FRAMING, BRACING, AND STRUCTURING ALL WALLS AND OTHER GYPSUM BOARD CONSTRUCTION IN ACCORDANCE WITH APPLICABLE TYPICAL DETAILS CONTAINED IN THESE DRAWINGS. WHETHER OR NOT SPECIFICALLY REFERENCED IN THE PLANS, ALL PARTITIONS SHALL BE BRACED IN ACCORDANCE WITH SEISMIC CODE REQUIREMENTS.
2. IN THE EVENT OF CONFLICT BETWEEN DATA SHOWN ON DRAWINGS AND DATA SHOWN ON THE SPECIFICATIONS, THE DRAWINGS SHALL TAKE PRECEDENCE. DETAIL DRAWINGS TAKE PRECEDENCE OVER DRAWING OF SMALLER SCALE. SHOULD THE CONTRACTOR AT ANY TIME DISCOVER AN ERROR IN A DRAWING OR SPECIFICATION OR A DISCREPANCY OR VARIATION BETWEEN DIMENSIONS ON DRAWINGS AND MEASUREMENTS AT THE SITE OR LACK OF DIMENSIONS OR OTHER INFORMATION, THE GENERAL CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL CLARIFICATION HAS BEEN MADE.
3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFING THE DIMENSIONS AND ELEVATIONS AT THE SITE. THE CONTRACTOR AND SUB-CONTRACTORS SHALL COORDINATE THE LAYOUT AND EXACT LOCATIONS OF ALL PARTITIONS, DOORS, ELECTRICAL/TELEPHONE OUTLETS, LIGHTSWITCHES AND THERMOSTATS WITH THE ARCHITECT IN THE FIELD PRIOR TO PROCEEDING.
4. ALL PARTITIONS ARE DIMENSIONED FROM FACE OF FINISH TO FACE OF FINISH, U.O.N.
5. PARTITIONS SHOWN TO ALIGN WITH FACE OF EXISTING CONSTRUCTION OR NEW PARTITIONS SHOULD ALIGN FINISHED FACE TO FINISHED FACE.
6. DIMENSIONS INDICATED TO BE "CLEAR" SHALL BE MAINTAINED AND DISCREPANCIES OR VARIATIONS ON THESE DIMENSIONS SHALL BE REVIEWED WITH ARCHITECT BEFORE BEGINNING CONSTRUCTION.
7. PATCH AND REPAIR (E) WALLS & CEILINGS AS REQUIRED AND PREPARE TO RECEIVE (N) FINISHES AS SCHEDULED, VERIFY EXTEND OF WORK IN THE FIELD.
8. FLOOR TOLERANCE: FINISHED FLOOR TO BE LEVELED TO A TOLERANCE OF 1/4" SLOPE IN 10 FEET. GENERAL CONTRACTOR TO IMMEDIATELY VERIFY SLOPE AND REPORT ANY DEVIATIONS FROM ABOVE STATED TOLERANCE TO MAVRIK STUDIO.
9. PRIOR TO COMMENCING WORK ALIGNMENT OF DOOR HEADS AND OTHER CRITICAL HORIZONTAL ELEMENTS SHALL BE MAINTAINED AT A CONSTANT LEVEL AND SHALL NOT ALLOW VARIATIONS IN THE FLOOR PLATES.
10. PROVIDE APPROPRIATE STRUCTURAL BACKING AND REINFORCING IN PARTITIONS BEHIND ALL WALL-MOUNTED, WALL ANCHORED OR SUPPORTED ITEMS. ALL CONCEALED WOOD USED FOR SUCH SUPPORT SHALL BE FIRE RETARDANT TREATED.
11. MULTIPLE LIGHT SWITCHES TO BE GANGED WITHIN A SINGLE COVER-PLATE TO MAXIMUM EXTENT POSSIBLE. WHERE MULTIPLE SWITCHES CANNOT BE GANGED WITHIN A SINGLE COVER-PLATE, SWITCHES ARE TO BE ADJACENT TO EACH OTHER OR AS CLOSE AS POSSIBLE.
12. GC TO PROVIDE ALL APPLIANCES AND FIXTURES, U.O.N.
13. THE CONTRACTOR SHALL "STRIKE OUT" LOCATION OF ALL WALLS, DOORS, MULLIONS, SOFFITS, RAISED FLOORS, HOUSEKEEPING AND UTILITY EQUIPMENT PADS, AND OTHER MAJOR ELEMENTS, OR AS DIRECTED BY ARCHITECT AT THE BEGINNING OF THE PROJECT BEFORE PROCEEDING WITH CONSTRUCTION. IF DISCREPANCIES EXIST BETWEEN FIELD CONDITIONS AND THE DRAWINGS NOTIFY ARCHITECT.
14. ALL DOOR JAMBS ON HINGE SIDE SHALL BE 4" U.O.N.
15. REFER TO SHEET A9.00 FOR DOOR AND WINDOW SCHEDULE.
16. THE CONTRACTOR IS RESPONSIBLE FOR VERIFING THE DIMENSIONS AND ELEVATIONS AT THE SITE. THE CONTRACTOR AND SUB-CONTRACTORS SHALL COORDINATE THE LAYOUT AND EXACT LOCATIONS OF ALL PARTITIONS, DOORS, ELECTRICAL/TELEPHONE OUTLETS, LIGHTSWITCHES AND THERMOSTATS WITH THE ARCHITECT IN THE FIELD PRIOR TO PROCEEDING.
17. WHEREVER DIAGONAL BRACING IS INDICATED OR OTHERWISE REQUIRED, INSTALL BRACING UNEXPOSED TO VIEW, PARTICULARLY AT SUSPENDED OR DRYWALL CEILING AREAS. IF EXPOSED TO VIEW CONDITIONS EXIST IN THE DESIGN, DO NOT BRACE INTO THE AREA WHERE NO CEILING IS TO BE INSTALLED, OR INTO THE "MORE OPEN"AND VISIBLE SIDE OF BULKHEAD/SOFFIT WHERE BOTH SIDES SHALL BE WITHOUT A CEILING.
18. WHERE A GYPSUM BOARD PARTITION MEETS FLUSH WITH THE FACE OF AN EXISTING PARTITION, REMOVE THE EXISTING METAL CORNER BEAD BEFORE INSTALLING THE NEW PARTITION.
19. NEW WALLS TO ALIGN WITH CENTER OF (E) WINDOW MULLIONS U.O.N.
20. ALIGN NEW PARTITION SURFACES WITH THE EXISTING ADJACENT OR ADJOINING SURFACES WHERE INDICATED. TAPE AND SAND THE JOINTS TO SMOOTH WITHOUT ANY VISIBLE JOINTS. PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES.
21. PATCH EXISTING DAMAGED PARTITIONS THROUGHOUT ENTIRE PROJECT AREA TO MATCH ADJACENT SURFACES.
22. AT OPENINGS IN GYPSUM BOARD WALLS FOR DUCT WORK, RETURN AIR, WRAP HEAD, JAMBS AND SILL OF OPENING WITH GYPSUM BOARD. U.O.N.
23. VERTICAL DIMENSIONS ARE FROM TOP OF FLOOR SLAB, EXCEPT WHERE OTHERWISE NOTED TO BE ABOVE FINISH FLOOR.
24. DIMENSION ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT UNLESS NOTED +/- OR VIF.
25. THE GENERAL CONTRACTOR SHALL VERIFY THAT NO CONFLICT EXIST IN THE LOCATION OF ANY MECHANICAL, HVAC, TELEPHONE, ELECTRICAL, AND PLUMBING (TO INCLUDE ALL PIPING, DUCTWORK, CONDUIT, CABLES, ETC.) AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED. ELEMENTS TO BE EXPOSED TO VIEW SHALL BE REVIEWED WITH THE ARCHITECT AND COORDINATED BY AND BETWEEN THE GENERAL CONTRACTOR AND PERTINENT SUB-CONTRACTORS PRIOR TO CONSTRUCTION OR FABRICATION PROCEEDING.
26. CALCULATIONS AND DETAILS FOR MOUNTING HANDRAILS & CONNECTION OF GUARDRAILS SHALL BE PROVIDED FOR REVIEW AND APPROVAL BY RAILING FABRICATOR PRIOR TO INSTALLATION FOR COMPLIANCE WITH 2010 CRC R301.5
27. VERIFY APPLIANCE DIMENSIONS PRIOR TO CABINET FABRICATION
28. STAIR RISE MUST BE AT LEAST 4" & NO GREATER THAN 7 3/4" FOR EACH STEP. NO MORE THAN 3/8" VARIATION BETWEEN STEPS. (CRC R311.7.4.1)
29. PAINT ALL WALLS AND CEILING. COLOR TBD BY CLIENT.
30. ALL DIMENSIONS AT WINDOWS & DOORS ARE TO THE CENTERLINE. (U.O.N.)
31. ALL TEMPERED GLASS SHALL BE AFFIXED WITH A PERMANENT LABEL PER 2010 CRC R308.4
32. PROVIDE ACCOUSTICAL PIPE WRAP AT ALL SECOND FLOOR WASTE LINES.



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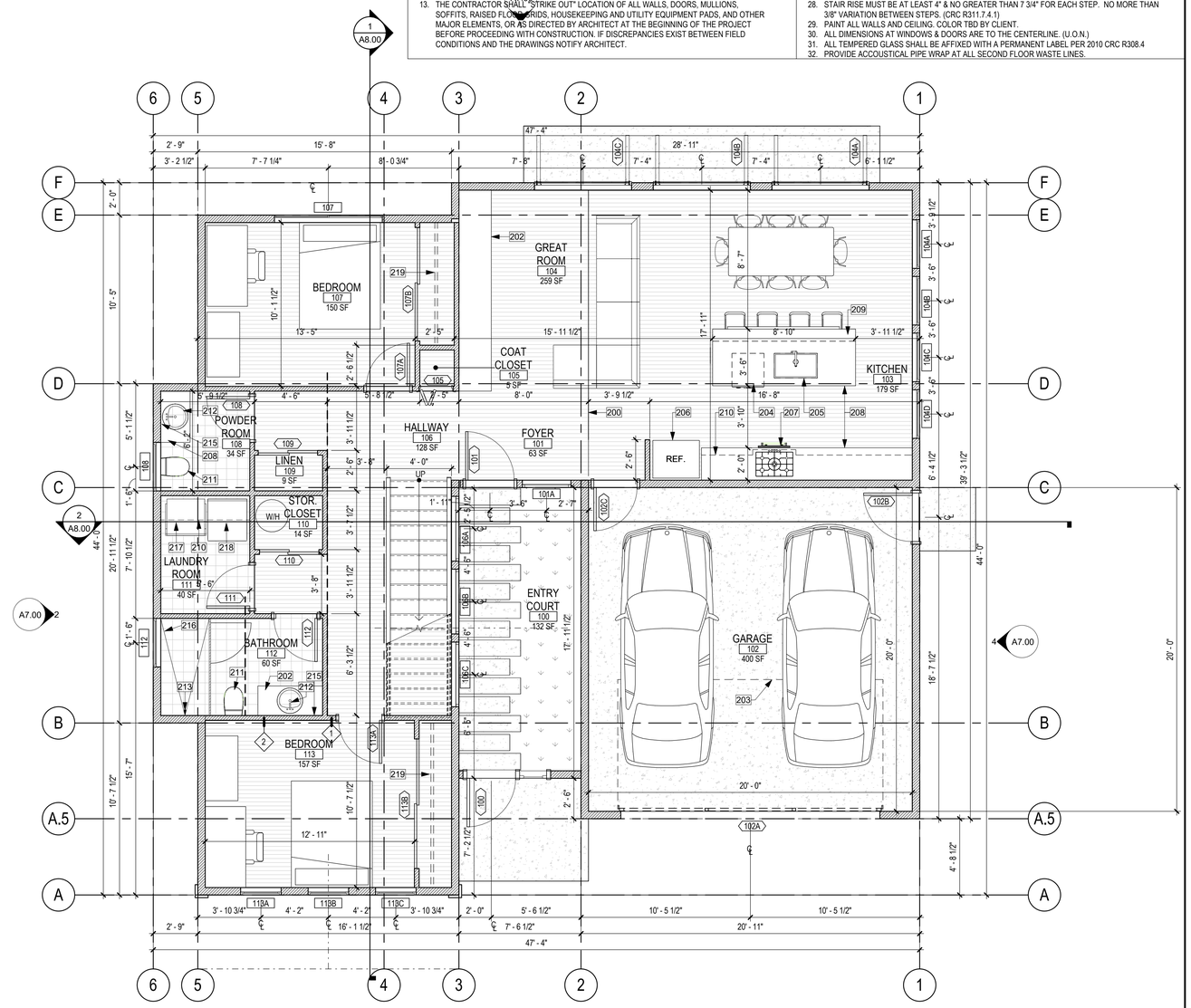

1 PROPOSED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

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9 UNIT DEVELOPMENT - LOT 1

ARF AVENUE
HAYWARD, CA 94545

NO.	REVISION	DATE

LICENSED ARCHITECT
LEIGHTON LEE
NO. C-19274
REN. 09-30-17
STATE OF CALIFORNIA

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PLAN A - FIRST AND SECOND FLOOR PLAN

A2.00

PROJECT NO. 18021

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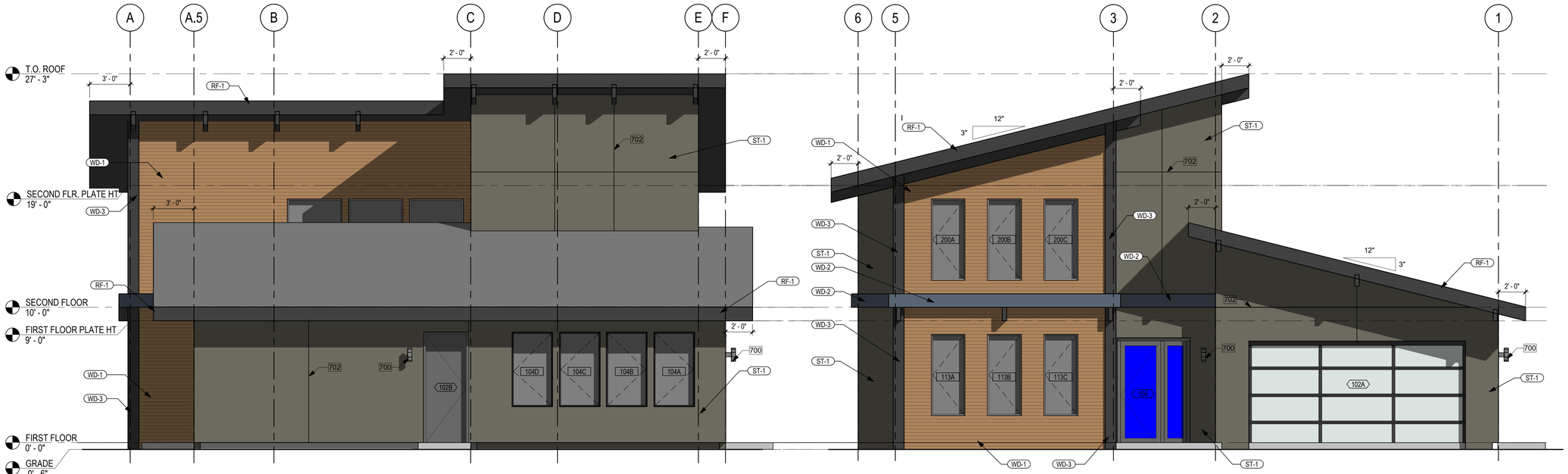
MATERIAL'S LEGEND

MATERIAL MARK	DESCRIPTION
ROOF	
RF-1	DARK GRAY ASPHALT SHINGLES
STUCCO	
ST-1	PAINTED 3-COAT STUCCO
WOOD	
WD-1	WOOD SIDING
WD-2	PAINTED WOOD BAND
WD-3	PAINTED WOOD TRIM

EXTERIOR ELEVATION KEYNOTES

NUMBER	COMMENT
700	(N) EXTERIOR SCONCE
701	(N) 42" METAL GUARDRAIL. NO OPENING SHALL ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH
702	



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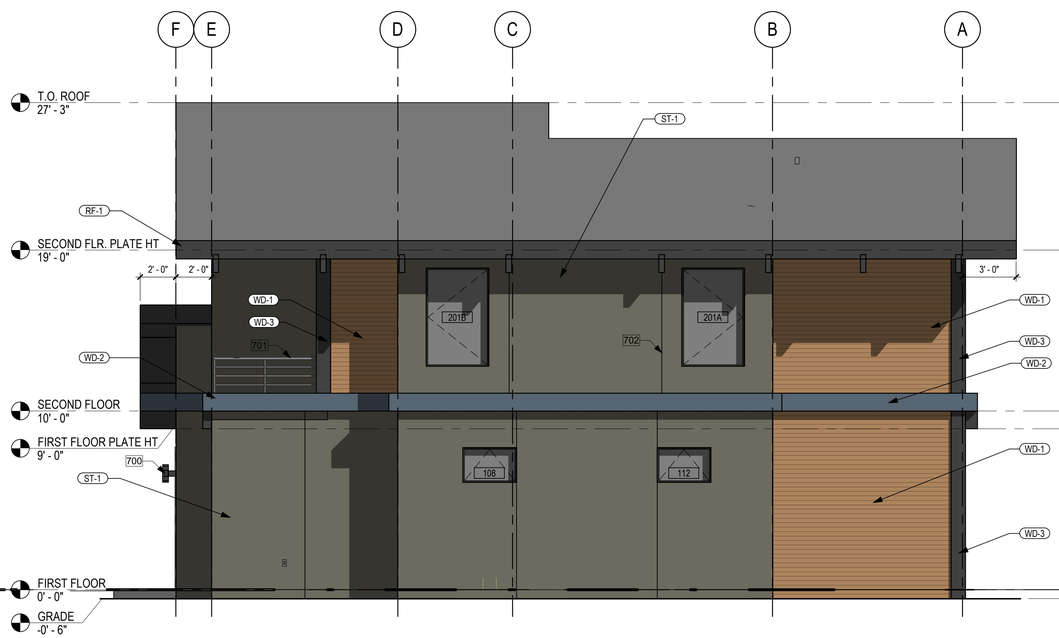
SCALE: 1/4" = 1'-0"

3 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



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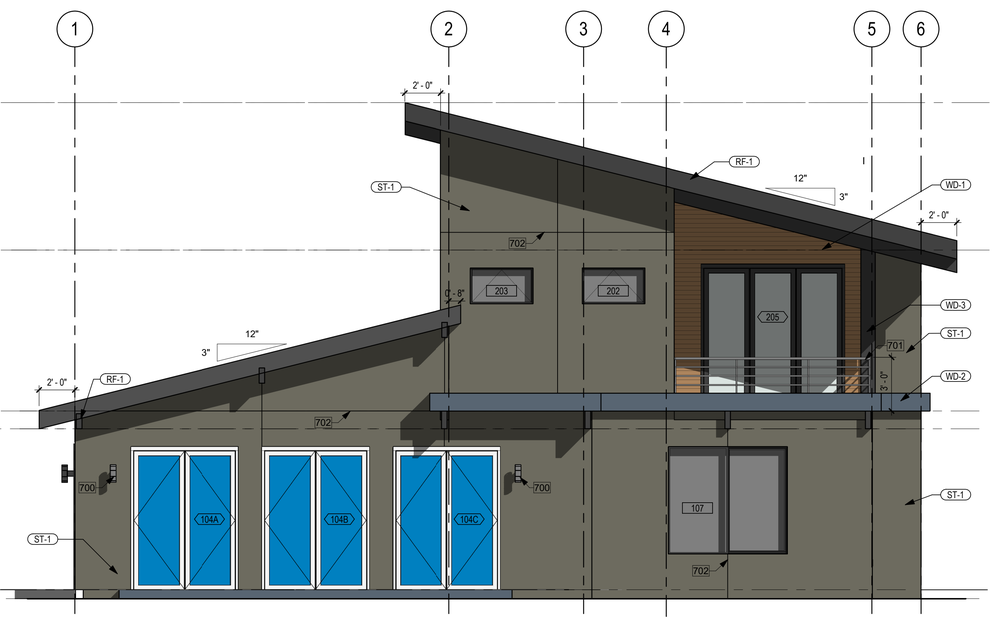

1 REAR ELEVATION
SCALE: 1/4" = 1'-0"

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PLAN A - EXTERIOR ELEVATIONS

A7.00

PROJECT NO. 18021

GROSS BUILDING AREA

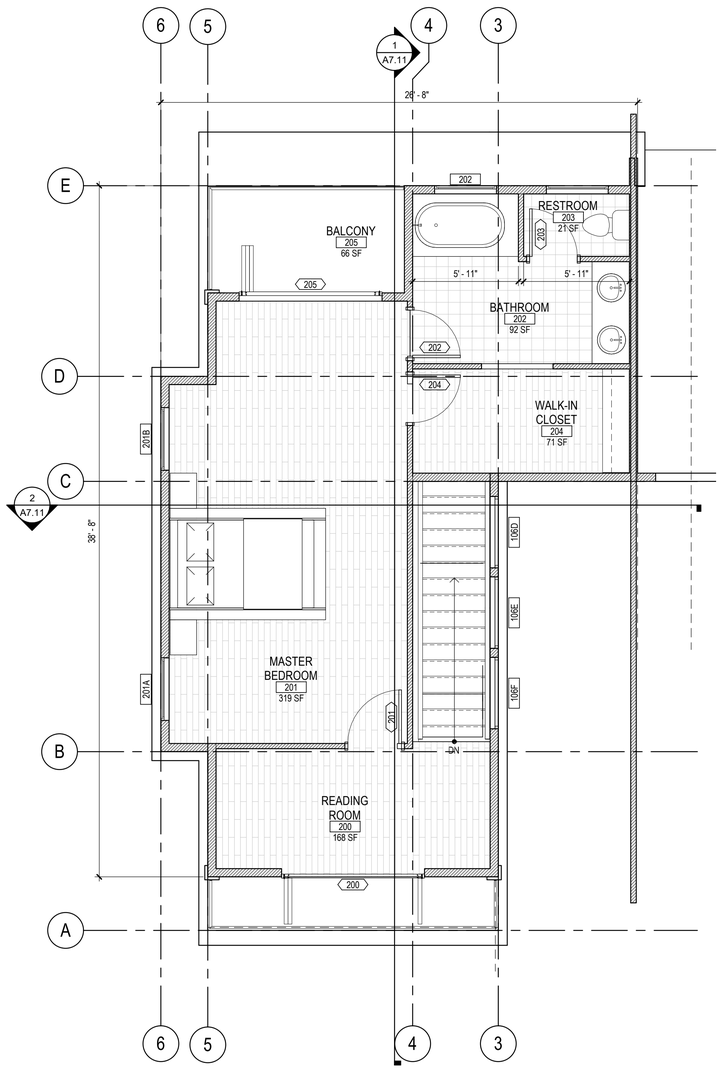
AREA NAME	AREA
GARAGE	1824 SF
FIRST FLOOR	Redundant Area
SECOND FLOOR	737 SF
	2561 SF

FLOOR PLAN KEYNOTES

NUMBER	COMMENT

FLOOR PLAN KEYNOTES

NUMBER	COMMENT



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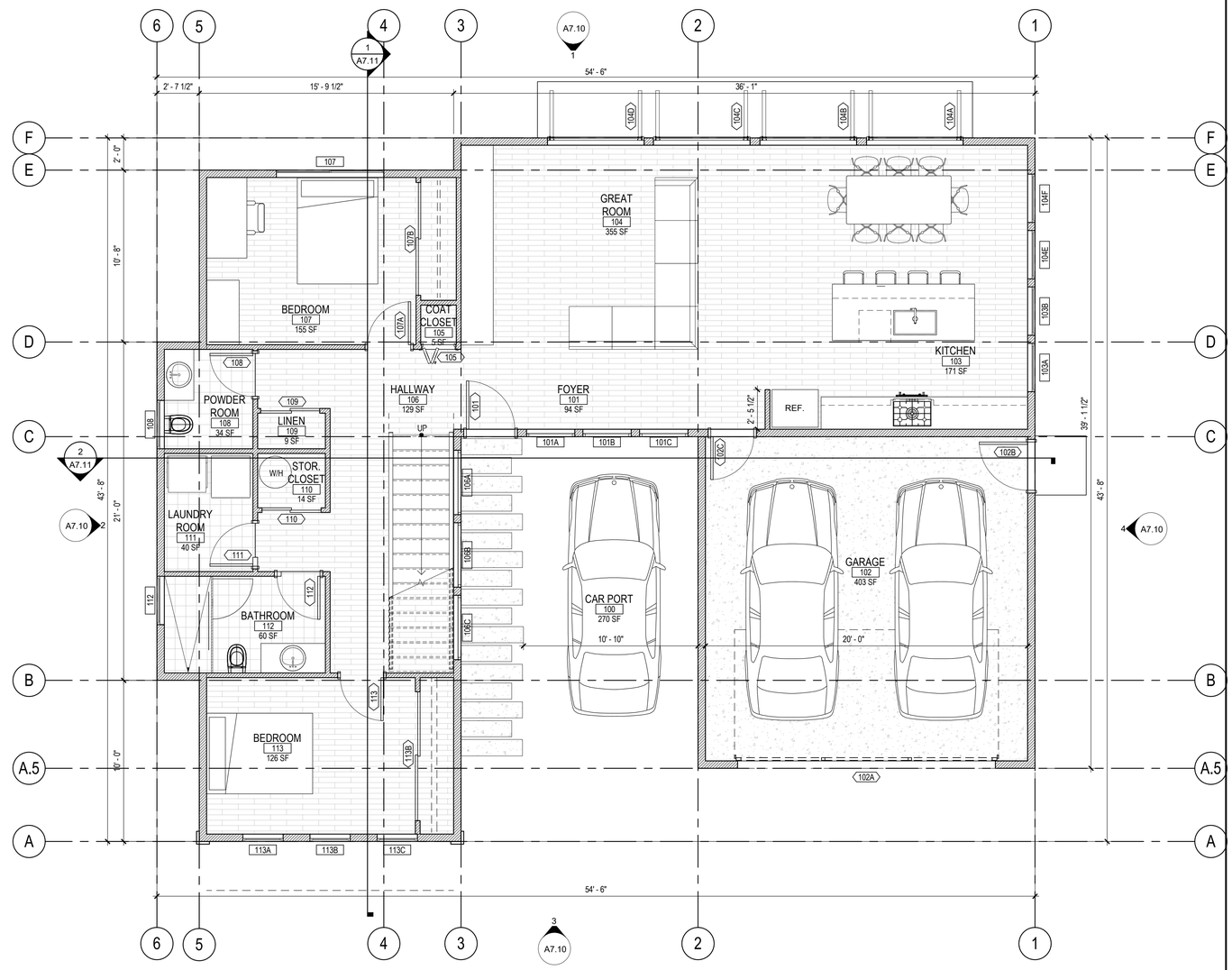

1 PROPOSED FIRST FLOOR
SCALE: 1/4" = 1'-0"

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9 UNIT DEVELOPMENT - LOT 7

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PLAN A2 - FLOOR PLAN

A2.10

PROJECT NO. 18021

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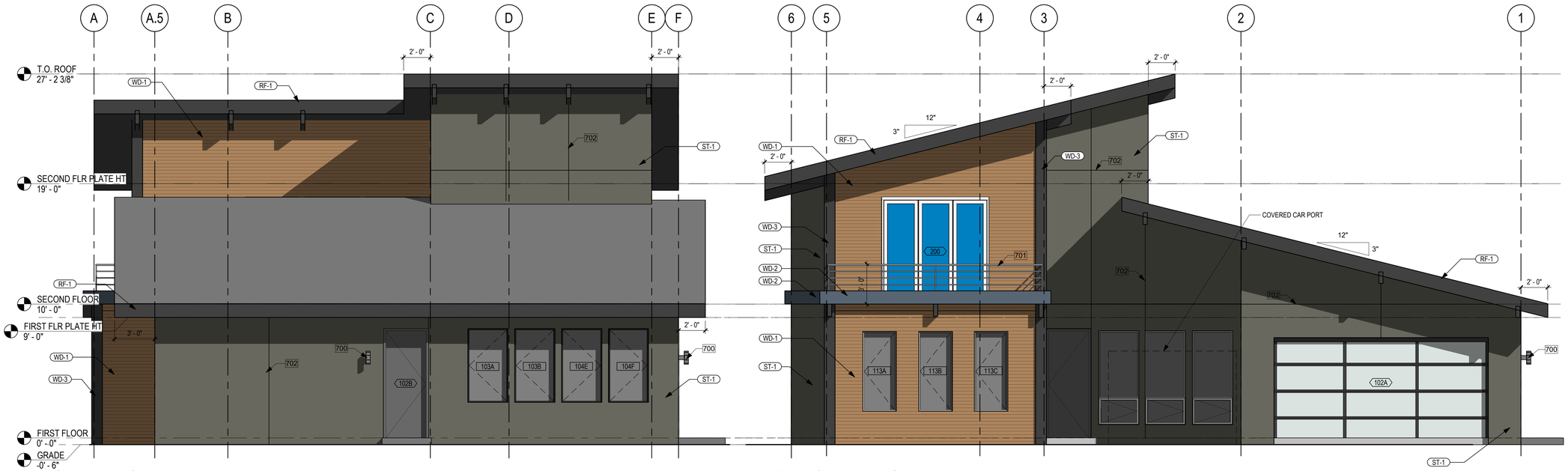

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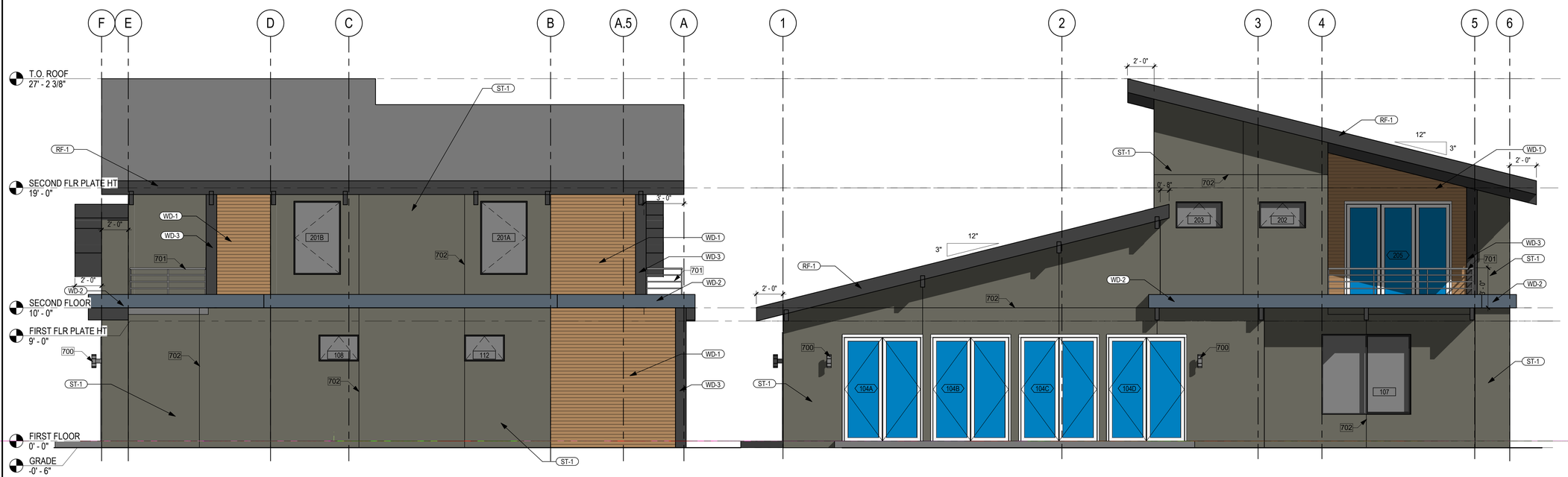
3 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



2 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

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

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PLAN A2 - EXTERIOR ELEVATIONS

A7.10

PROJECT NO. 18021

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FLOOR PLAN KEYNOTES

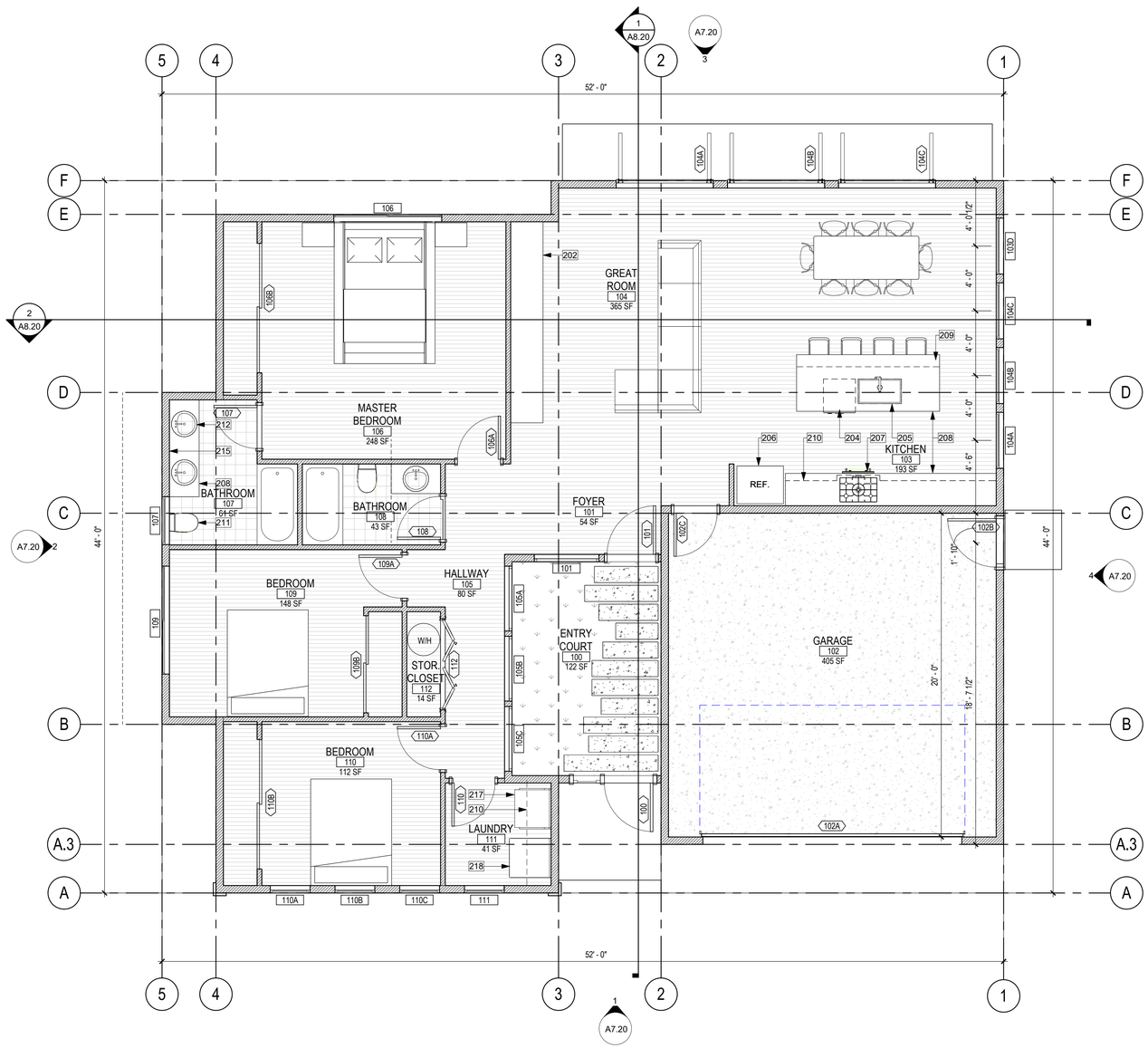
NUMBER	COMMENT
202	SOLID SURFACE COUNTER @ 18" HIGH WITH CABINETS BELOW
204	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
205	KITCHEN SINK W/ GARBAGE DISPOSAL. (KITCHEN FAUCETS MAX 1.8 GPM FLOW RATE @ 60 PSI)
206	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
207	DISHWASHER SPACE W/ DRAIN TO GARBAGE DISPOSAL
208	
209	SOLID SURFACE COUNTER @ 42" HIGH WITH CABINETS BELOW
210	SOLID SURFACE CABINETS @ 3'-6" HEIGHT, MOUNTED 4'-6" A.F.F.
211	WATER CLOSET, MAX FLUSH VOLUME OF 1.28 GPF
212	LAVATORY, MAX FLOW RATE OF 1.2 GPM @ 60 PSI
215	MIRROR MOUNTED ABOVE VANITY
217	WASHER SPACE, PROVIDE HOT & COLD WATER SUPPLY, WASTELINE, AND PAN W/ DRAIN TO EXTERIOR
218	DRYER SPACE, PROVIDE SMOOTH MTL. VENT TO EXTERIOR

FLOOR PLAN KEYNOTES

NUMBER	COMMENT

GROSS BUILDING AREA

AREA NAME	AREA
FIRST FLOOR	1936 SF
GARAGE	Redundant Area
	1936 SF



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

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9 UNIT DEVELOPMENT - LOT 9

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PLAN B - FLOOR PLAN

A2.20

PROJECT NO. 18021

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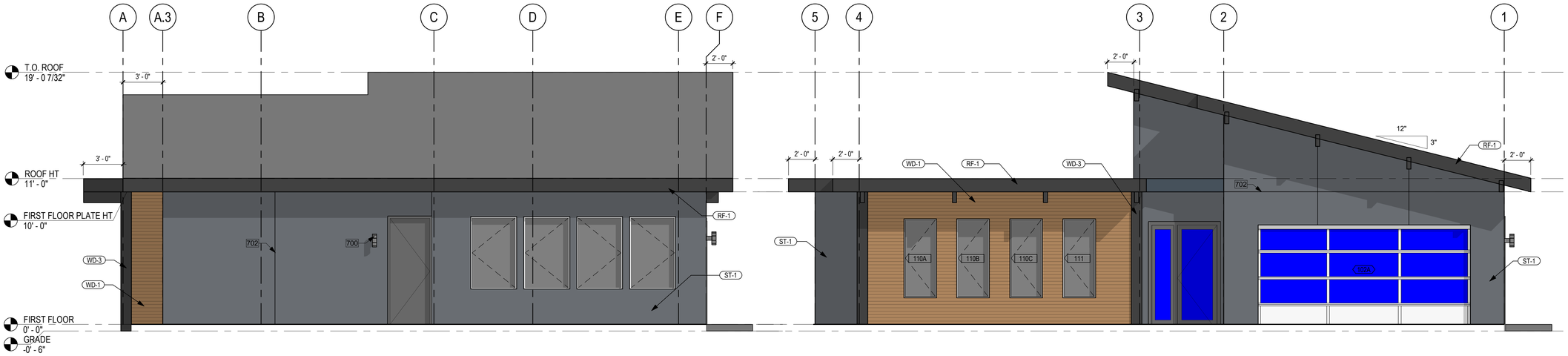

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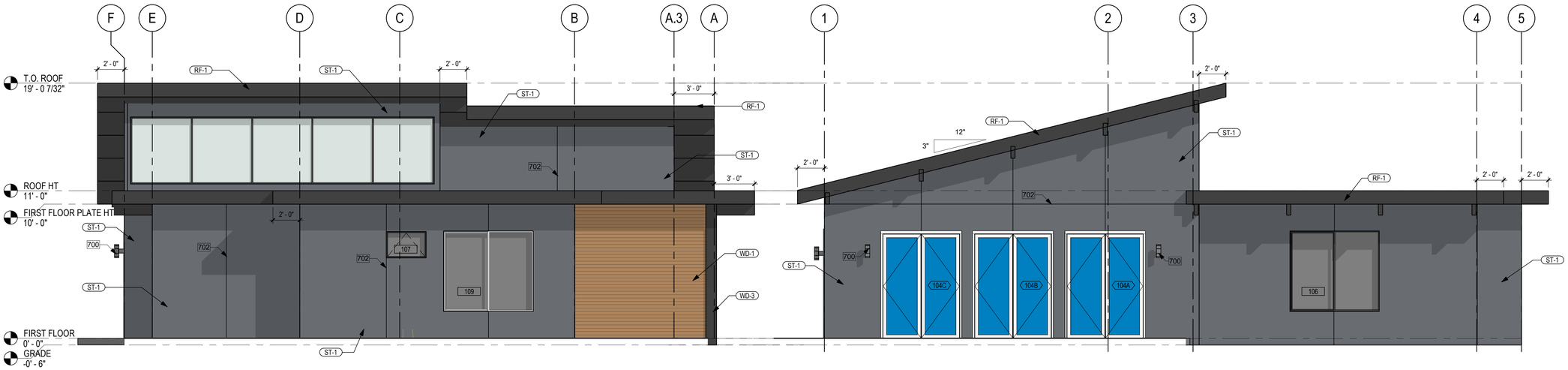
3 FRONT ELEVATION
SCALE: 1/4" = 1'-0"



2 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

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

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PLAN B - EXTERIOR ELEVATIONS

A7.20

PROJECT NO. 18021

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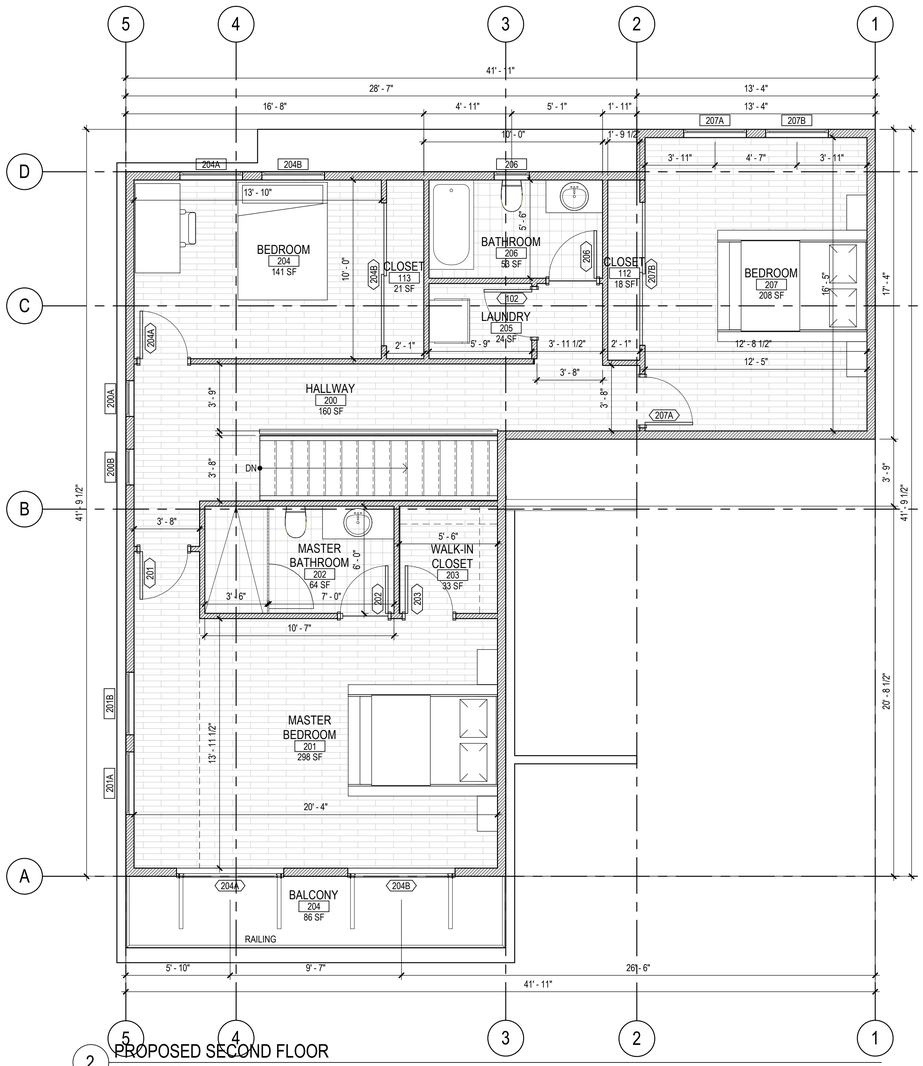
FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

GROSS BUILDING AREA	
AREA NAME	AREA
GARAGE	1449 SF
FIRST FLOOR	Redundant Area
SECOND FLOOR	1263 SF
	2712 SF



2 PROPOSED SECOND FLOOR

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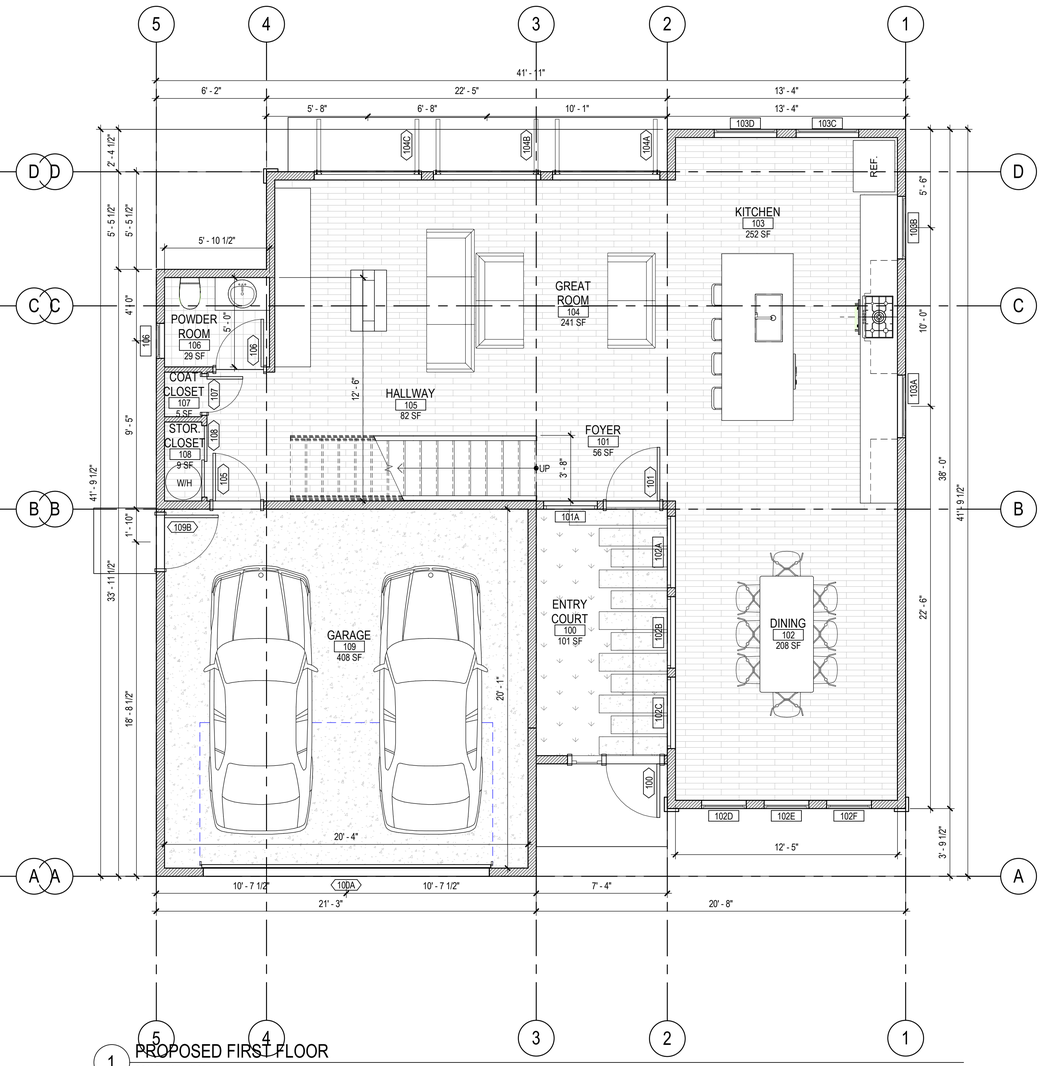

1 PROPOSED FIRST FLOOR

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

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9 UNIT DEVELOPMENT - LOT 2

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PLAN C - FLOOR PLAN

A2.30

PROJECT NO. 18021

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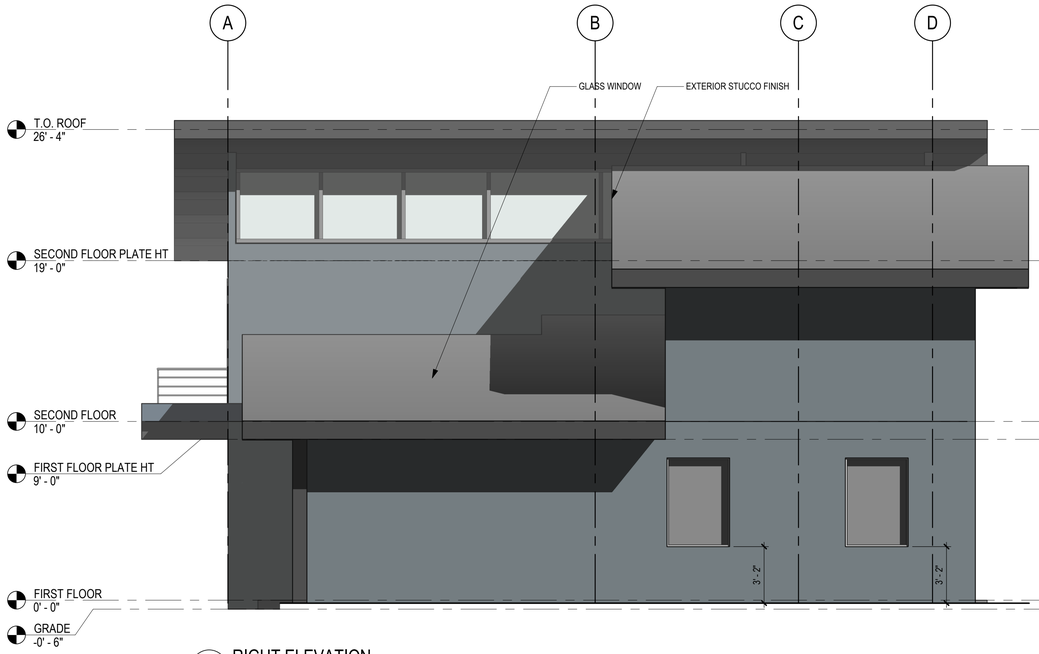

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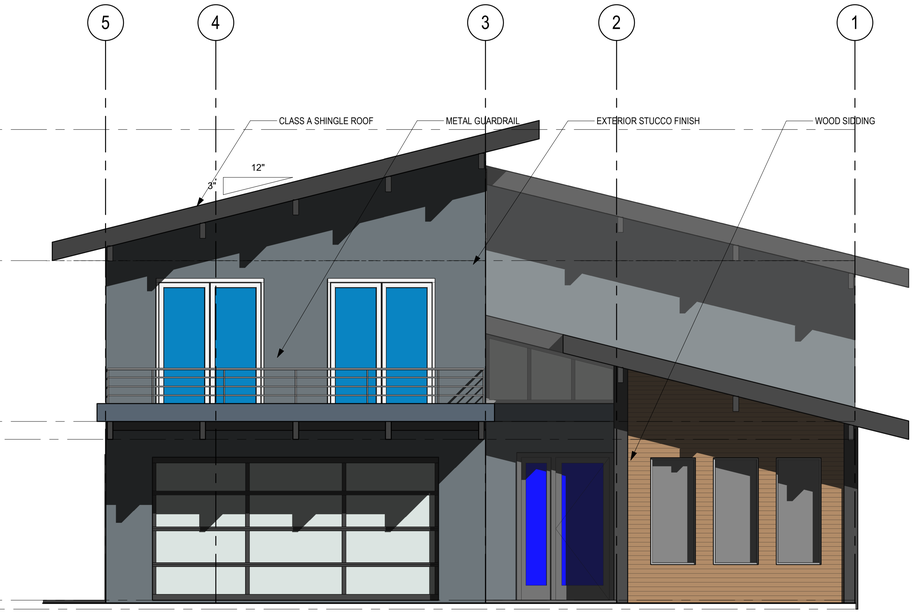

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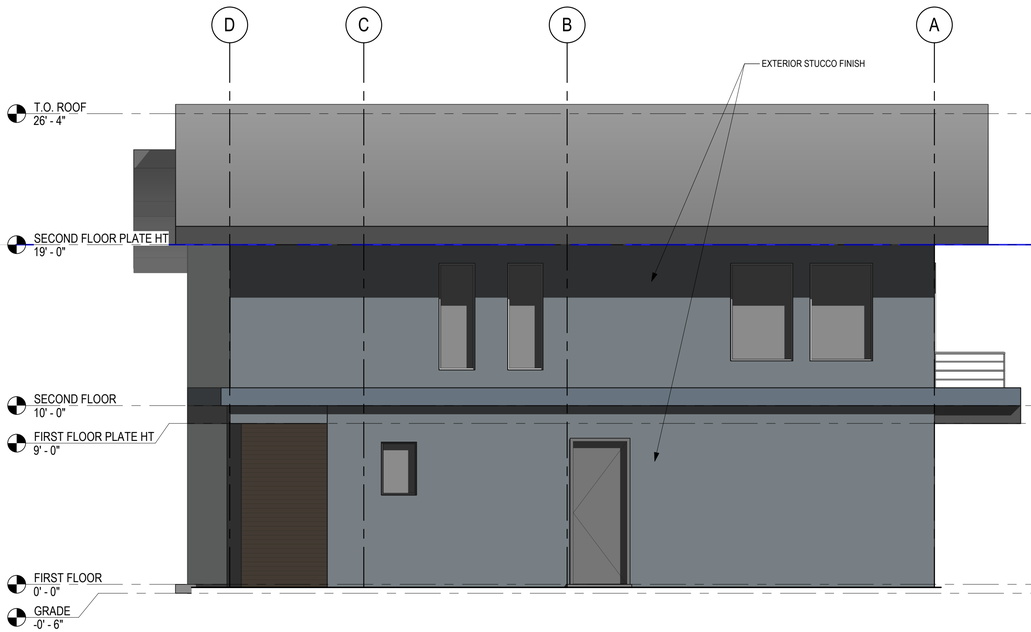

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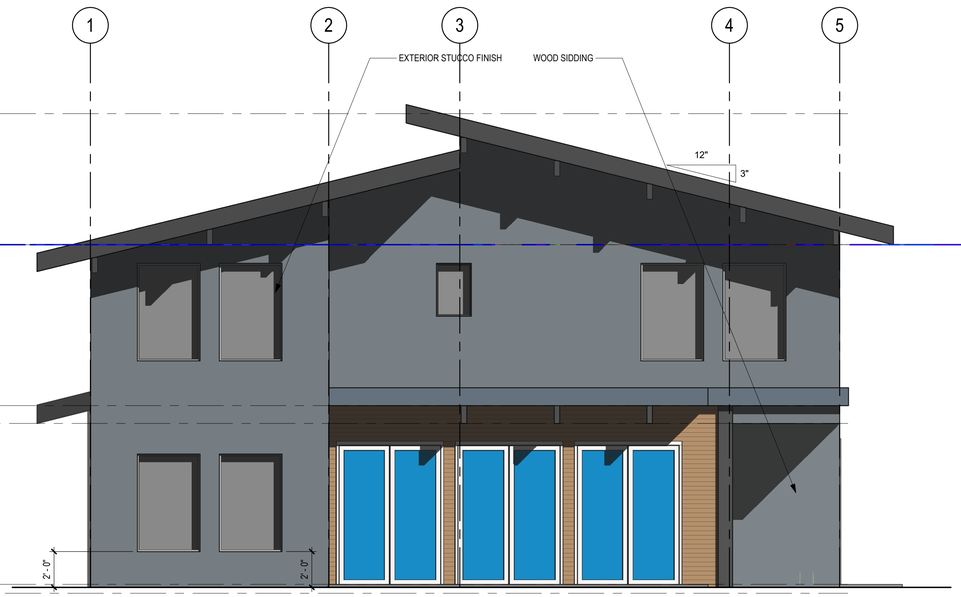

4 REAR ELEVATION
SCALE: 1/4" = 1'-0"

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PLAN C - EXTERIOR ELEVATIONS

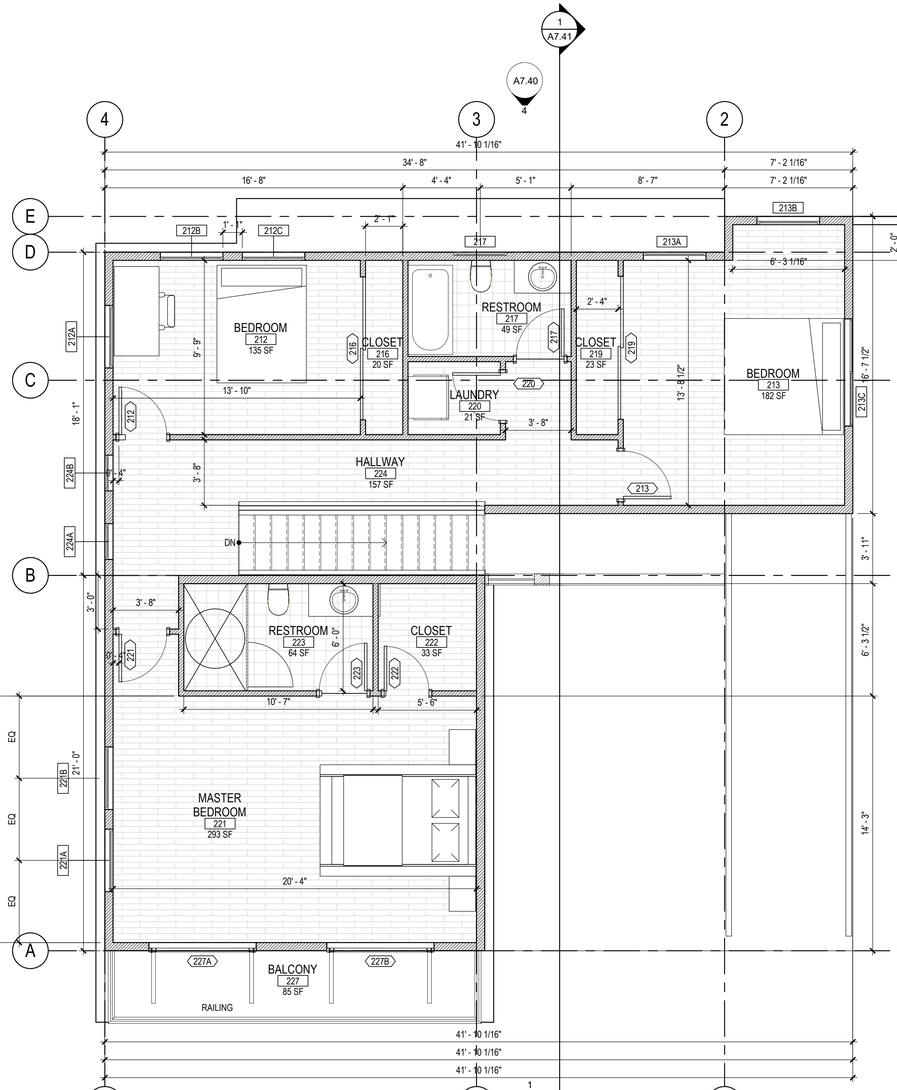
A7.30

PROJECT NO. 18021

FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

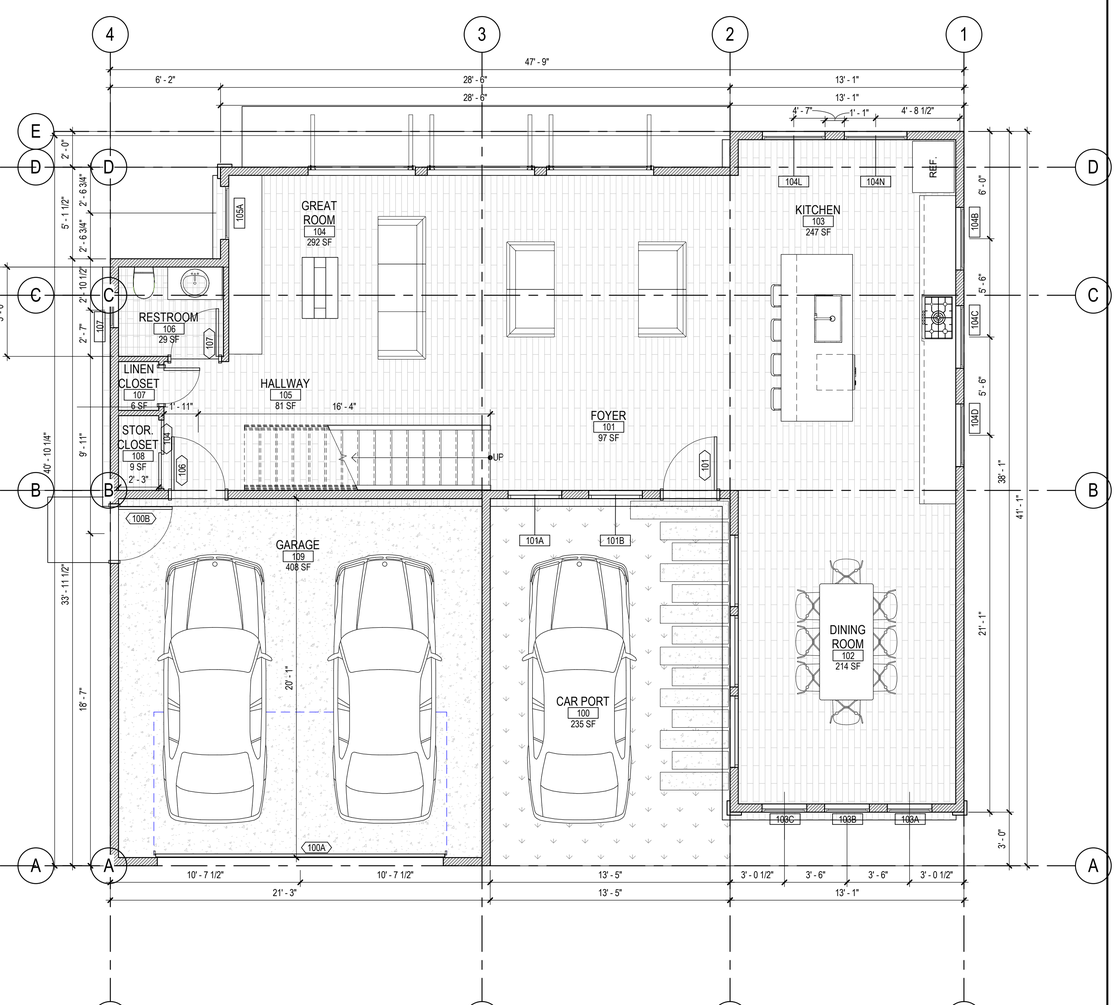
FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

GROSS BUILDING AREA	
AREA NAME	AREA
GARAGE	1546 SF
FIRST FLOOR	Redundant Area
SECOND FLOOR	1148 SF
	2694 SF



2 PROPOSED SECOND FLOOR

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



1 PROPOSED FIRST FLOOR

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

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9 UNIT DEVELOPMENT - LOT 5

ARF AVENUE
HAYWARD, CA 94545

NO.	REVISION	DATE

LICENSED ARCHITECT
LEIGHTON LEE
NO. C-19274
REN. 09-30-17
STATE OF CALIFORNIA

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PLAN C 2 - FLOOR PLAN

A2.40

PROJECT NO. 18021

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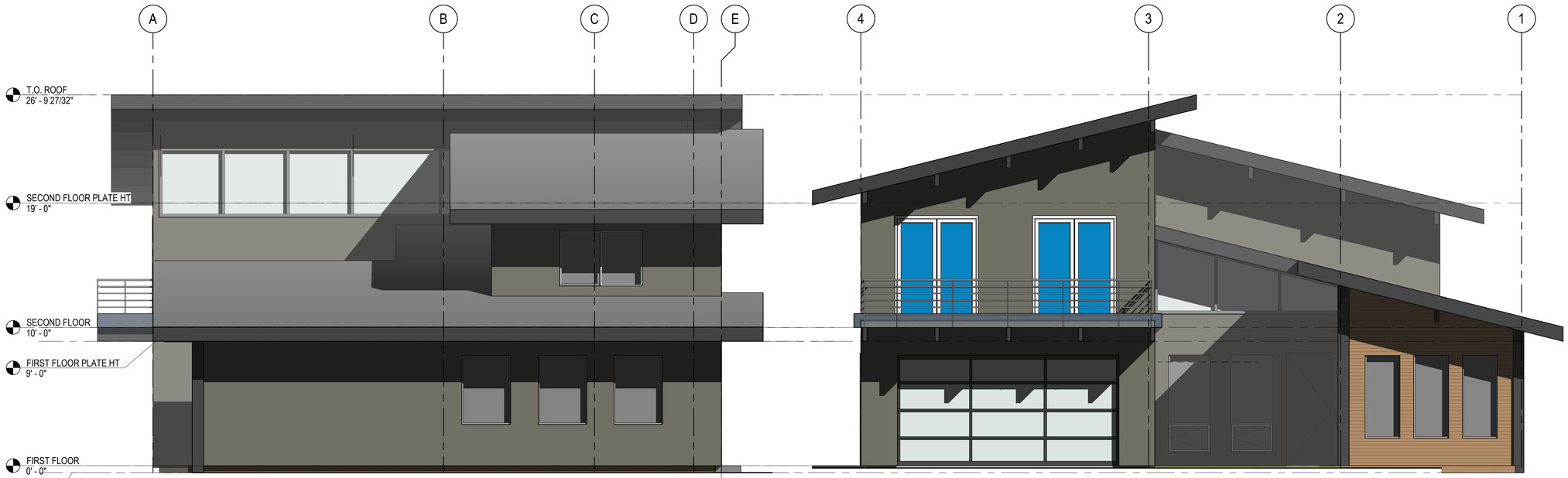
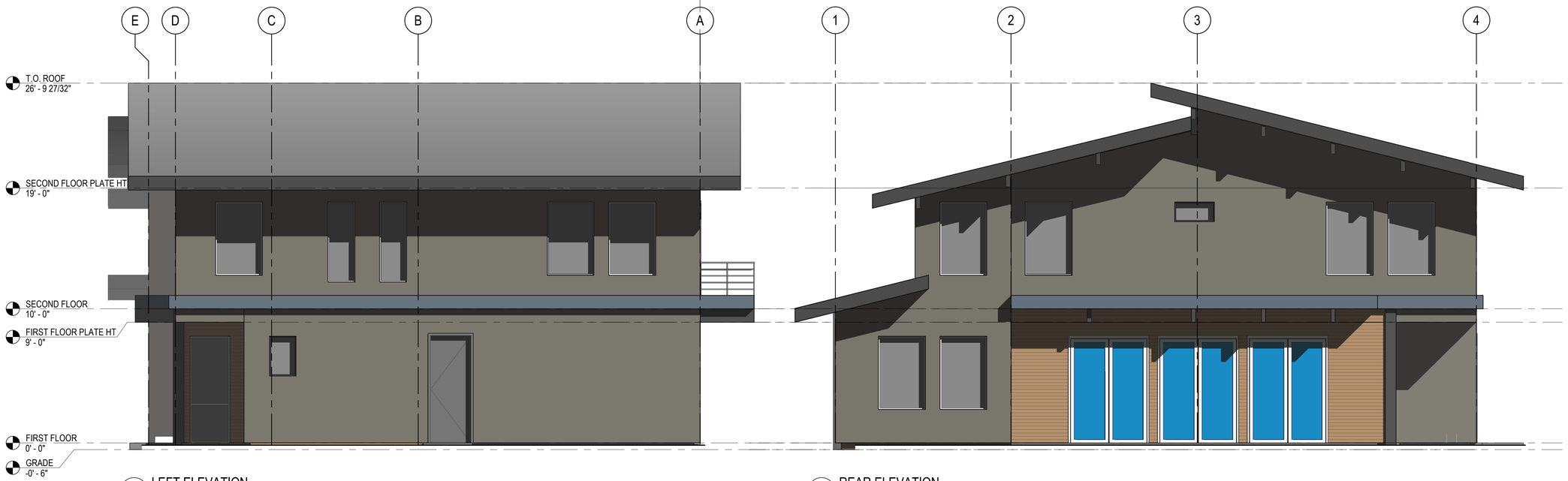


2 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

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



3 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

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

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PLAN C2 - EXTERIOR ELEVATIONS

A7.40

PROJECT NO. 18021

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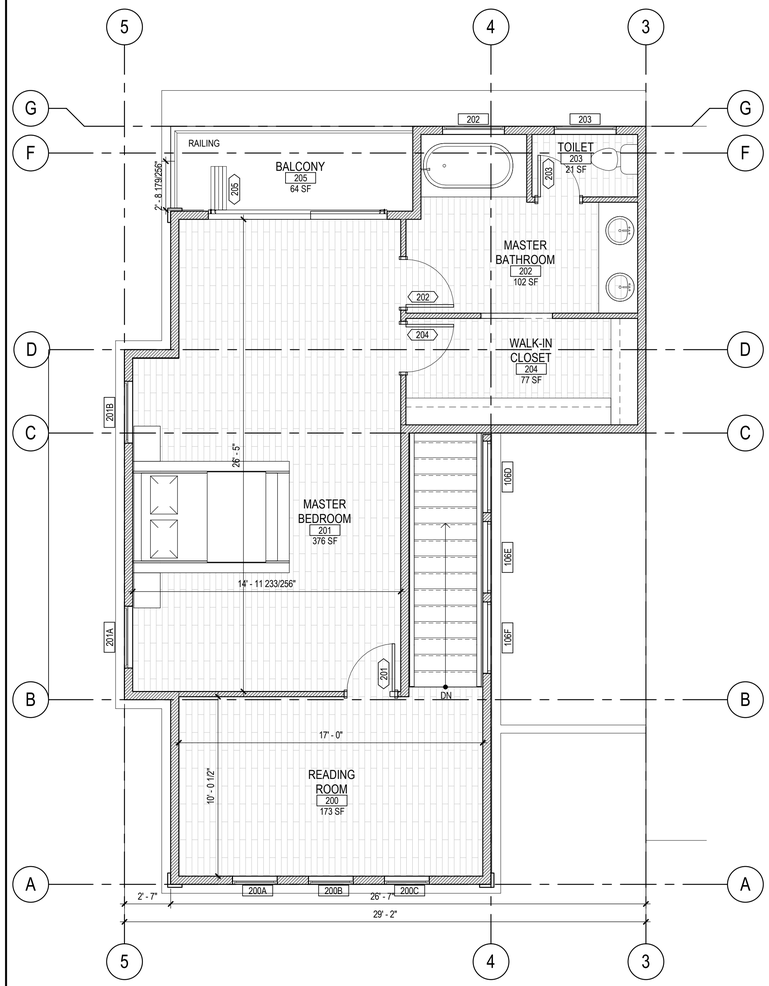
FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

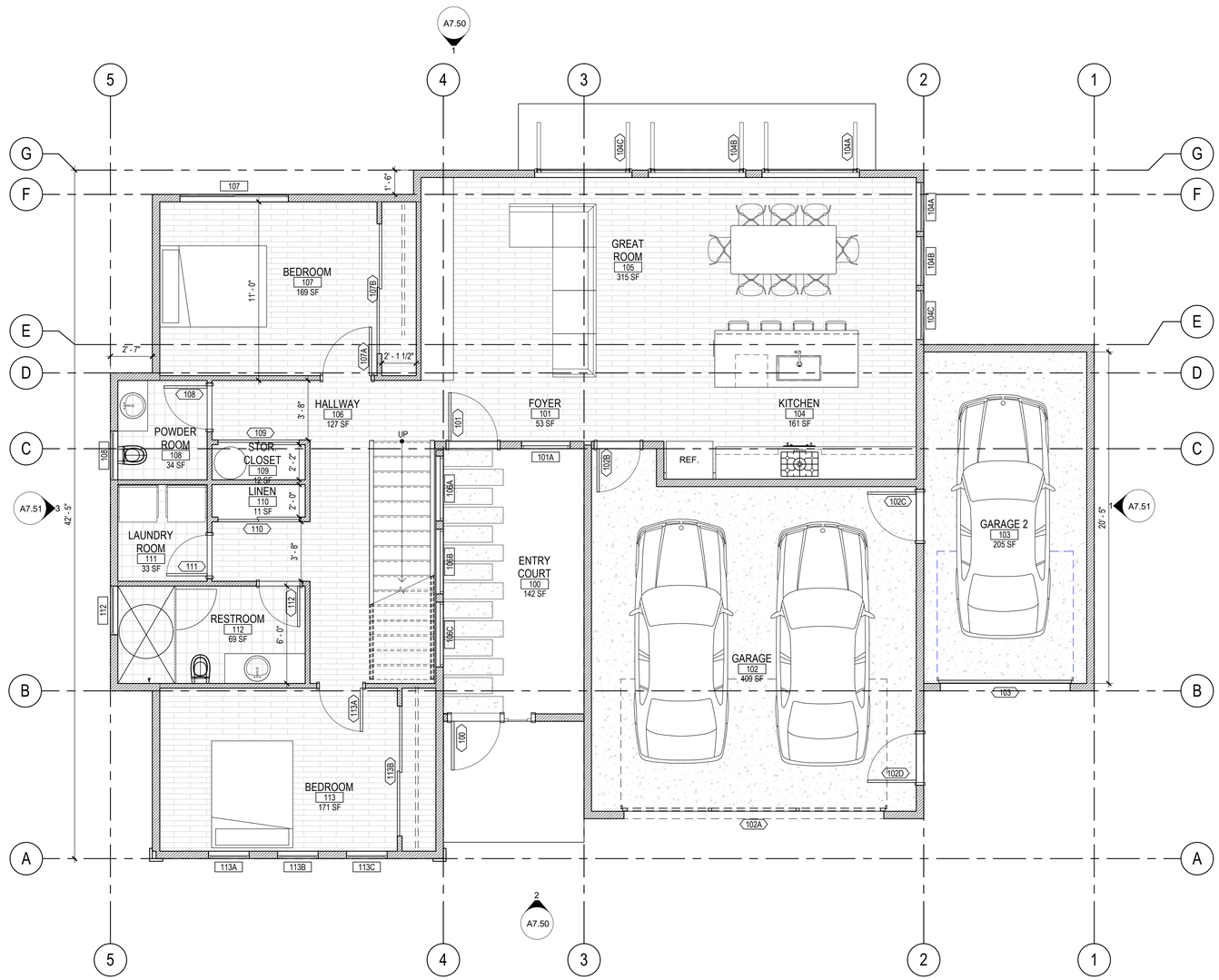
FLOOR PLAN KEYNOTES	
NUMBER	COMMENT

GROSS BUILDING AREA	
AREA NAME	AREA
GARAGE	1999 SF
FIRST FLOOR	Redundant Area
SECOND FLOOR	895 SF
	2894 SF



2 PROPOSED SECOND FLOOR

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



1 PROPOSED FIRST FLOOR

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

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9 UNIT DEVELOPMENT - LOT 6

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HAYWARD, CA 94545

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LICENSED ARCHITECT
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PLAN D - FLOOR PLAN

A2.50

PROJECT NO. 18021

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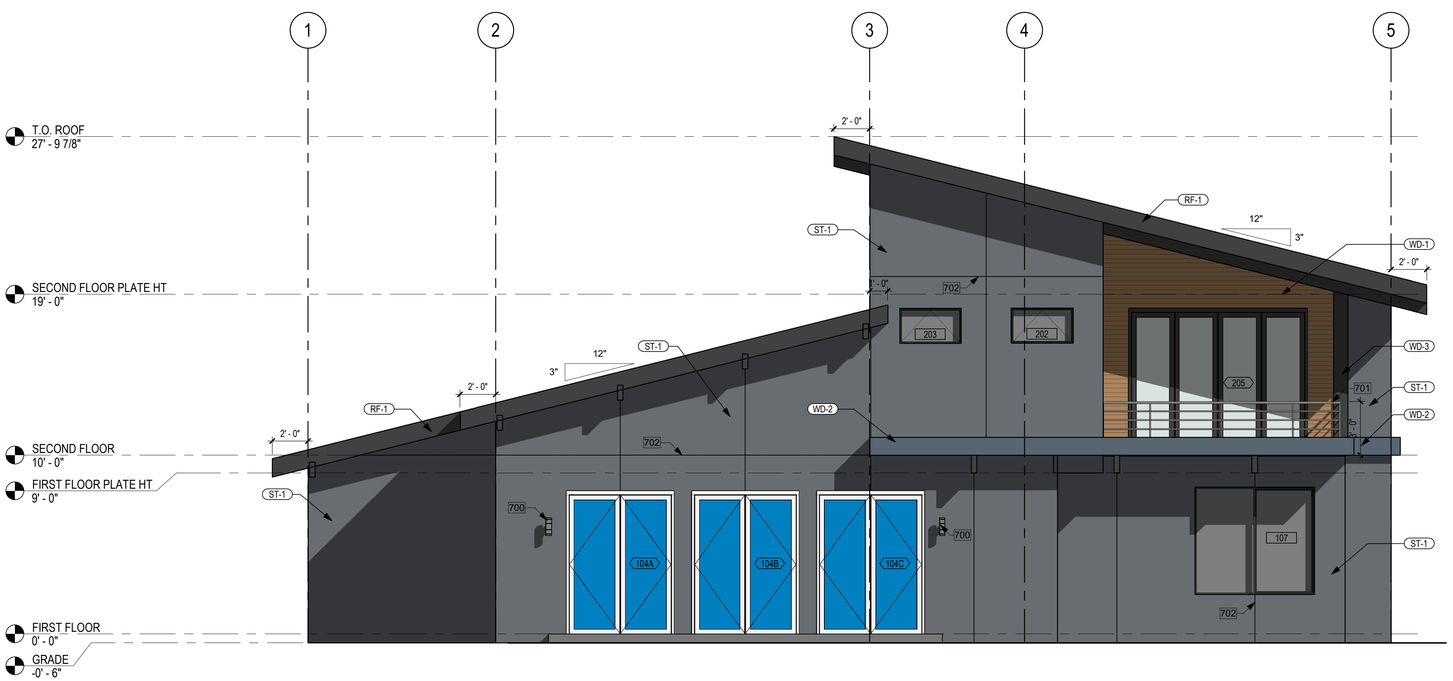
2 FRONT ELEVATION

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



1 REAR ELEVATION

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

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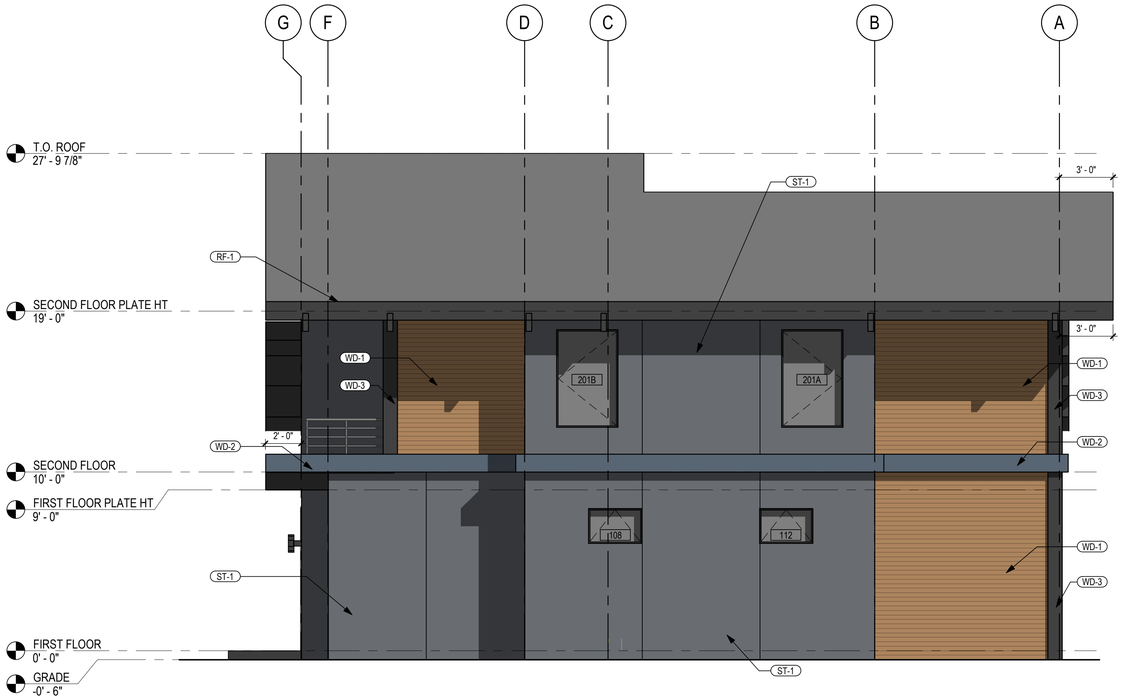
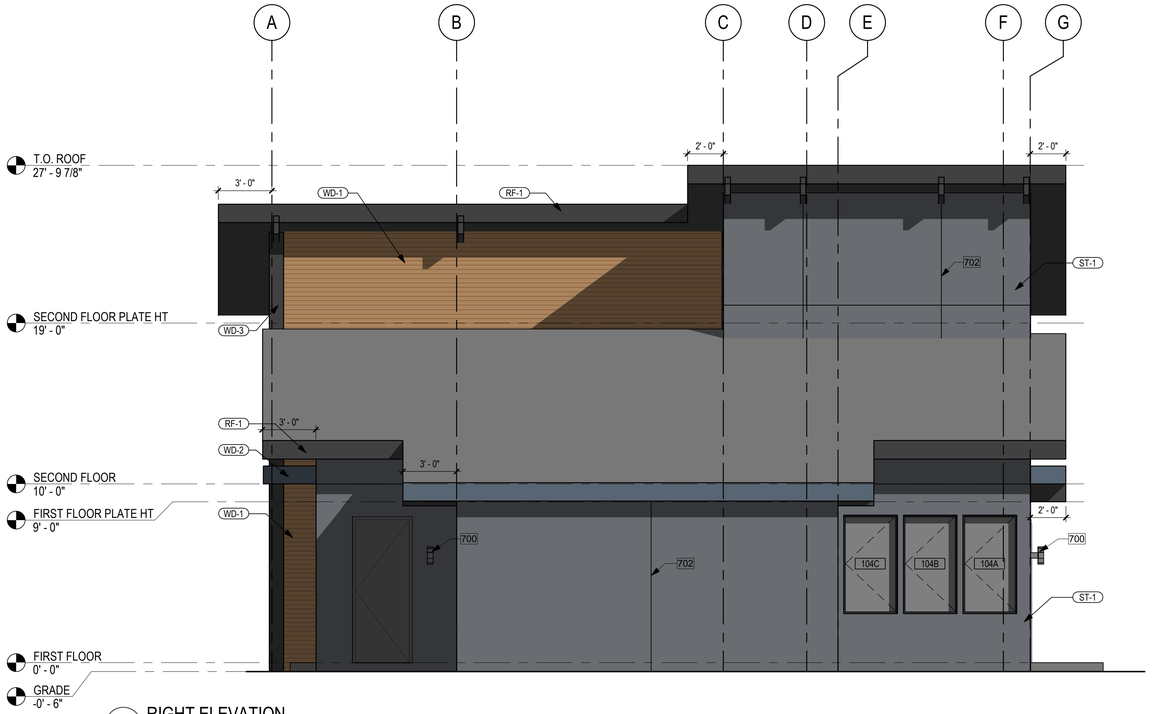
PLAN D - EXTERIOR ELEVATIONS

A7.50

PROJECT NO. 18021



3 LEFT ELEVATION
SCALE: 1/4" = 1'-0"



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

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PLAN D - EXTERIOR ELEVATIONS

A7.51

PROJECT NO. 18021

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