STARBUCKS - HAYWARD, CA

1/15/2025

MWT

STARBUCKS - HAYWARD, CA

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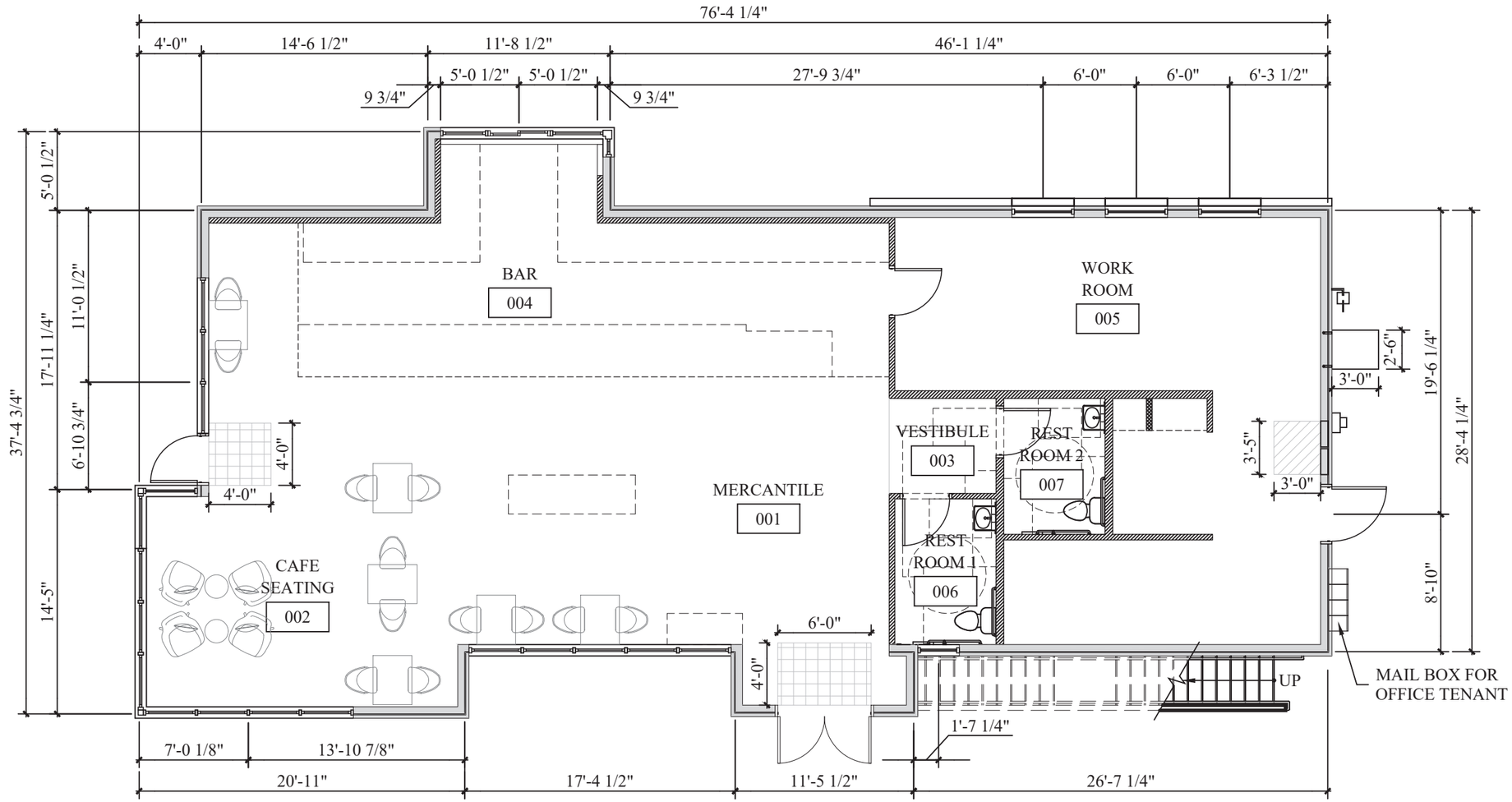

1 CONCEPTUAL 1ST FLOOR PLAN

1/8" = 1'-0" TOTAL AREA: 2,345 SF

STARBUCKS
HAYWARD, CA
21-054

N

MWT

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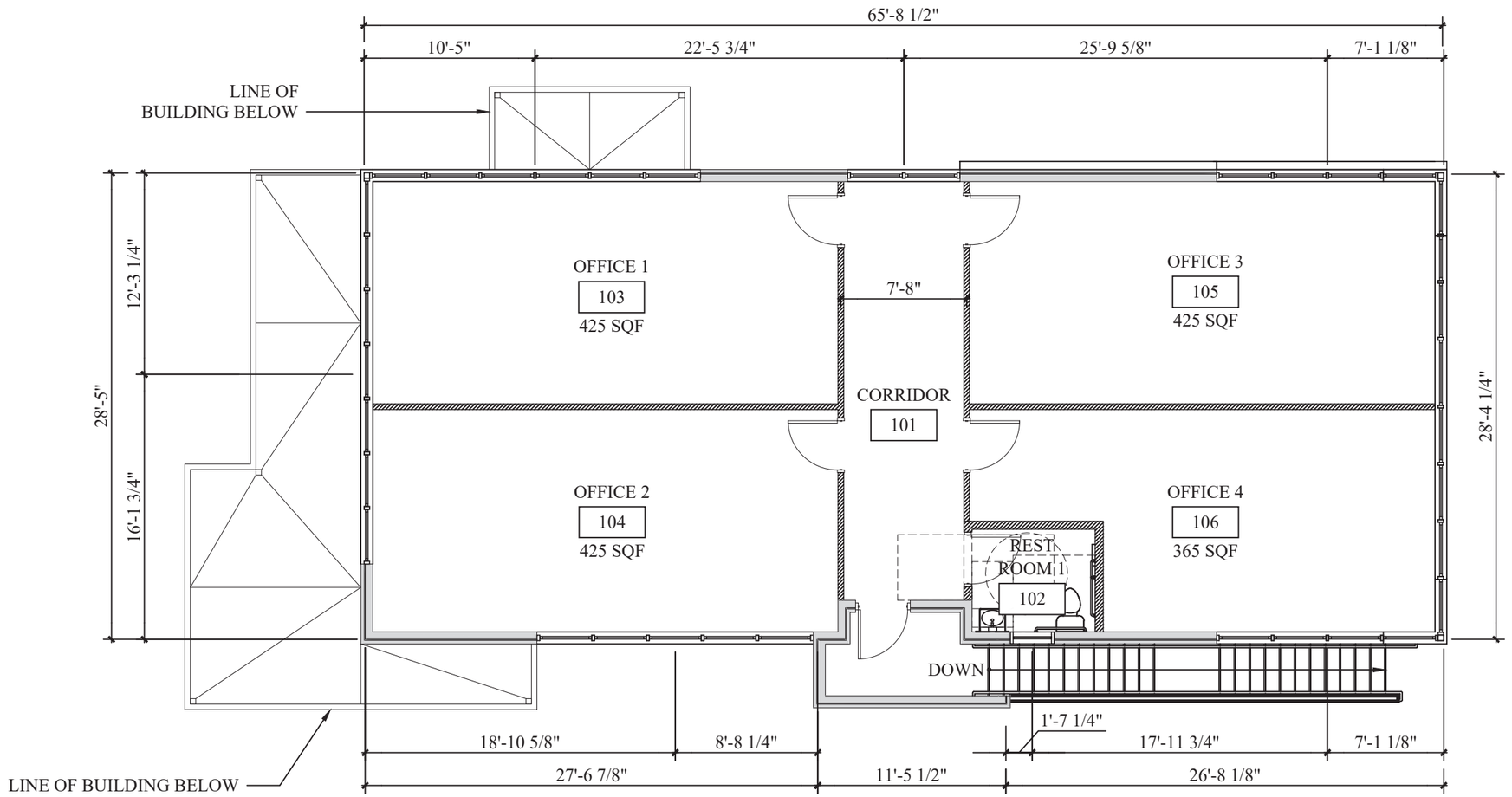
1/15/2025



1 CONCEPTUAL 2ND FLOOR PLAN

1/8" = 1'-0" TOTAL AREA: 1,912 SF

STARBUCKS
HAYWARD, CA
21-054

N

MWT

1/15/2025

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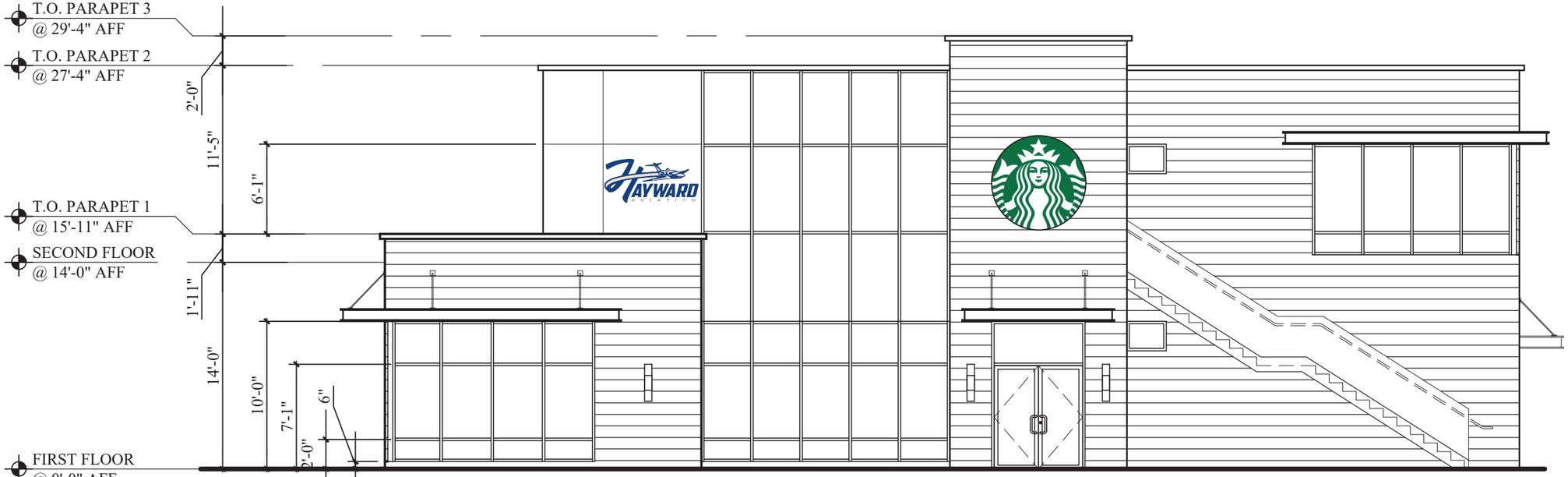
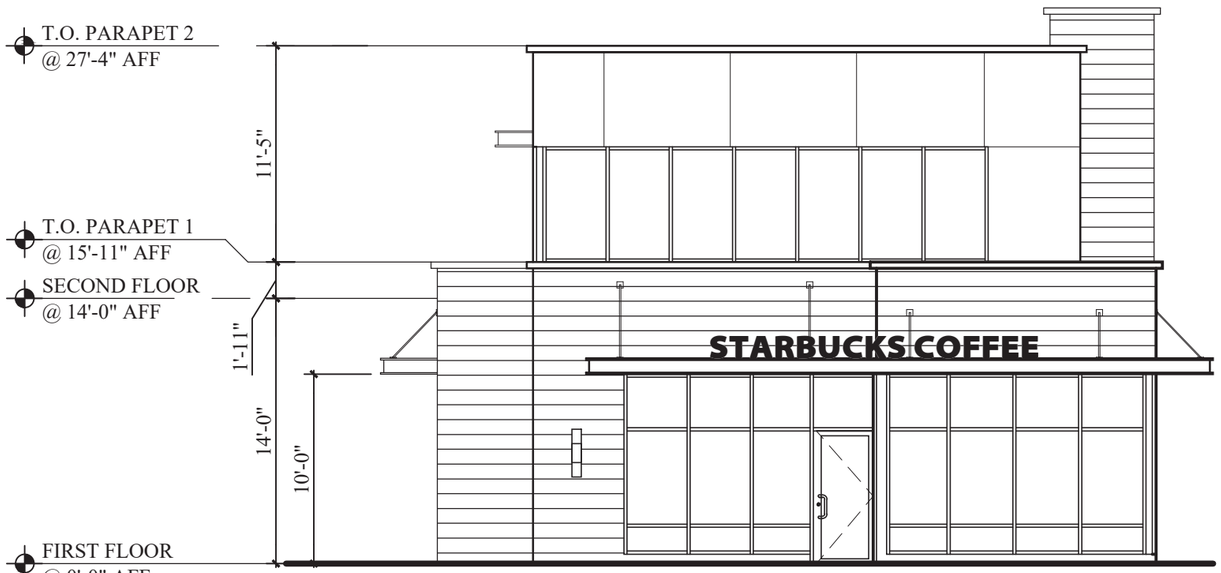


2 CONCEPTUAL ELEVATION

1/8" = 1'-0"



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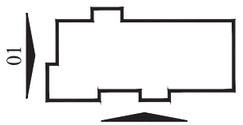

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STARBUCKS
HAYWARD, CA
21-054

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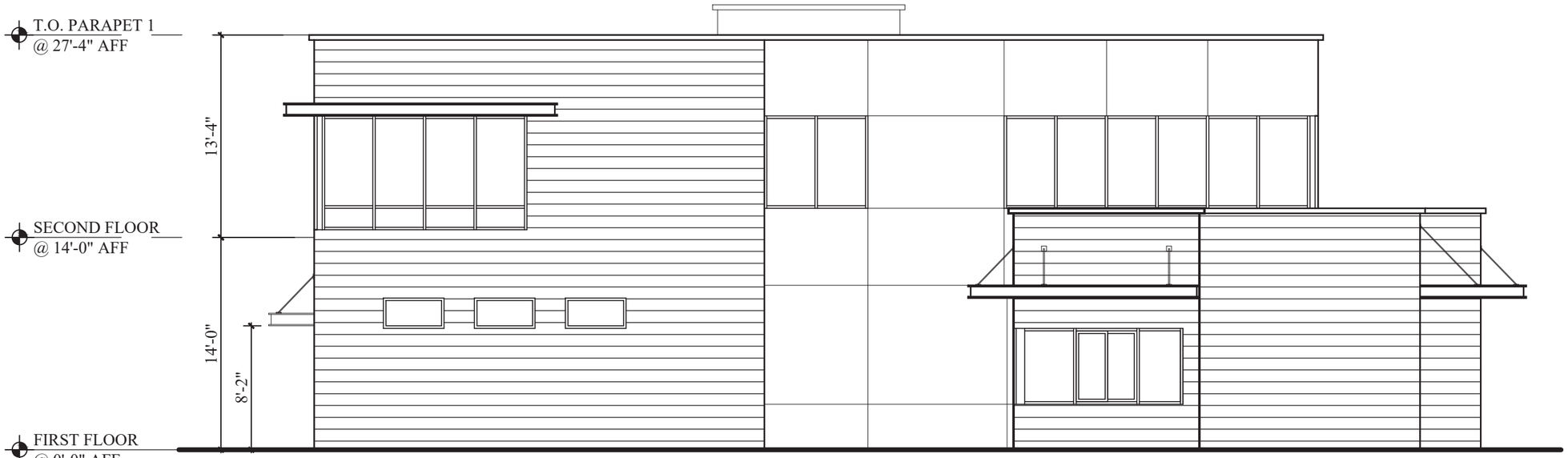
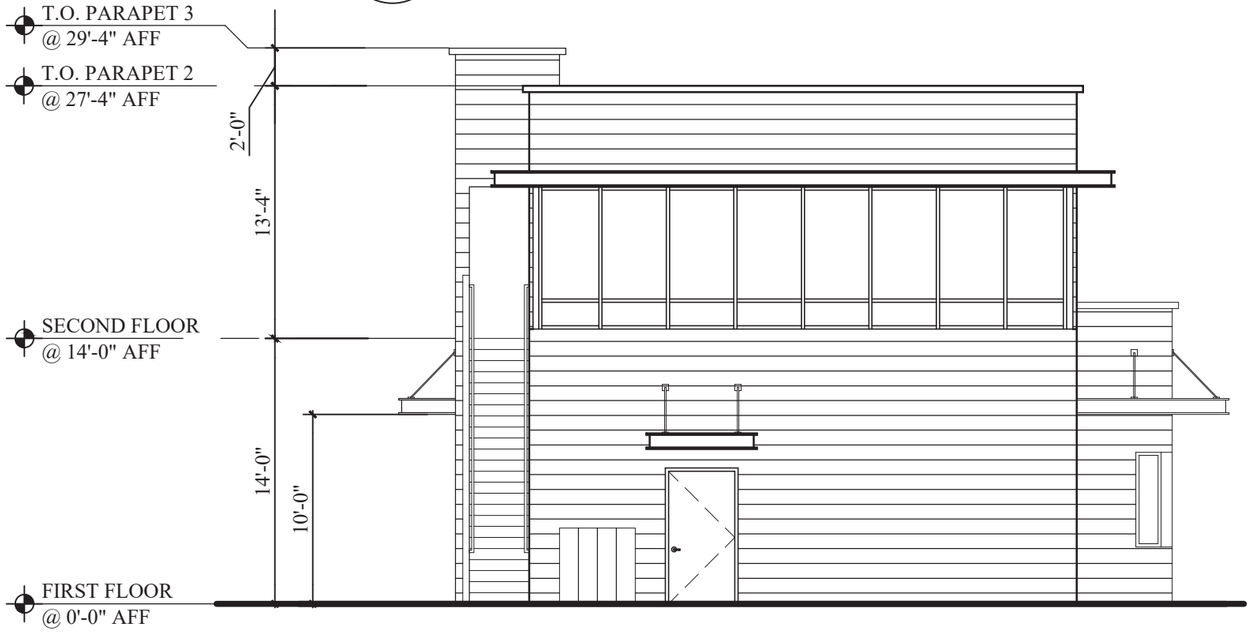


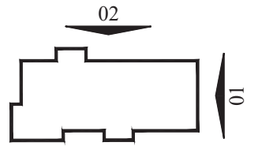
2 CONCEPTUAL ELEVATION

1/8" = 1'-0"



1 CONCEPTUAL ELEVATION

1/8" = 1'-0"



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STARBUCKS
HAYWARD, CA
21-054

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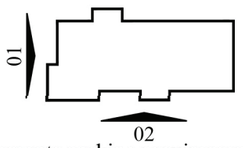
1/15/2025

2 CONCEPTUAL ELEVATION

1/8" = 1'-0"

1 CONCEPTUAL ELEVATION

1/8" = 1'-0"



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HAYWARD, CA
21-054

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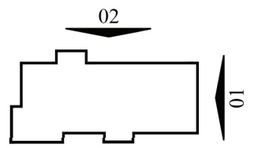
1/15/2025

2 CONCEPTUAL ELEVATION

1/8" = 1'-0"

1 CONCEPTUAL ELEVATION

1/8" = 1'-0"



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HAYWARD, CA
21-054

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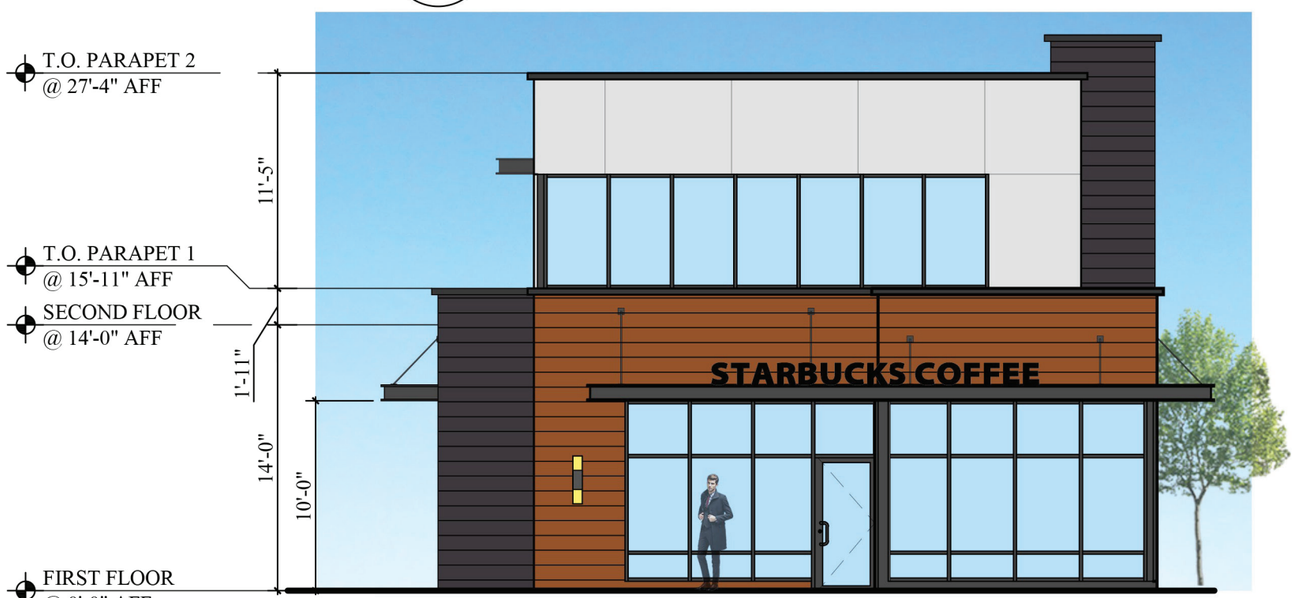
1/15/2025

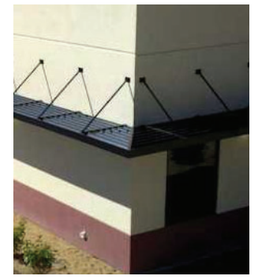
2 CONCEPTUAL ELEVATION

1/8" = 1'-0"



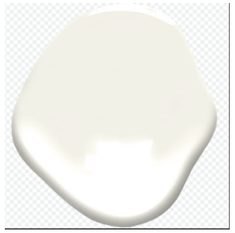
1 CONCEPTUAL ELEVATION

1/8" = 1'-0"

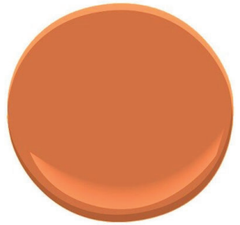


LOUVERED ALUMINUM SUNSHADE

WIRE MESH STEEL RAILING; BLACK



STUCCO - WHITE DOVE



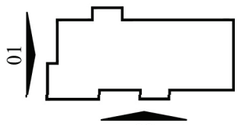
STUCCO - PUMPKIN CREAM

METAL COPING, WINDOW FRAMES, AND ACCESSORIES BLACK

FIBER CEMENT - RICH ESPRESSO

STUCCO - NATURAL BROWN

STARBUCKS
HAYWARD, CA
21-054



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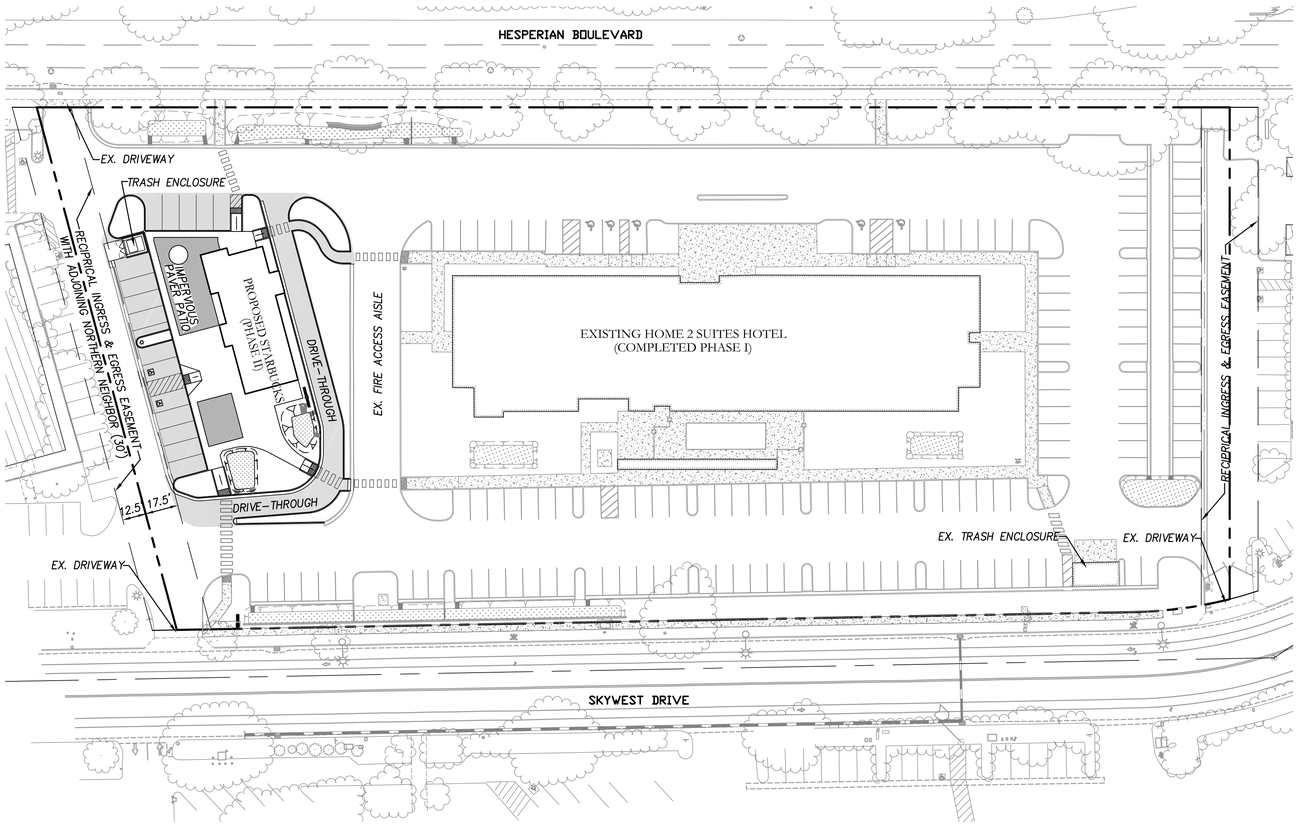
1/15/2025

SITE PLAN REVIEW

FOR

HOME 2 SUITES PHASE II - STARBUCKS



PROPOSED SITE PLAN

SCALE: 1" = 40'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

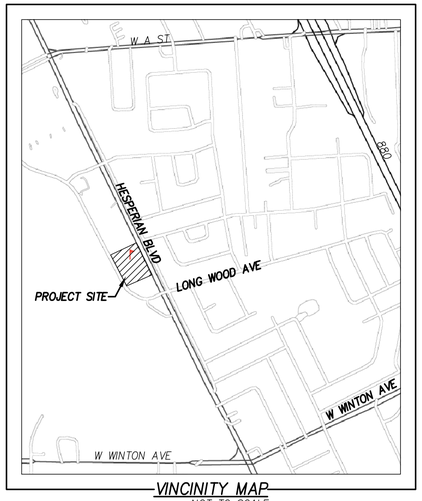
SHEET INDEX

LEGEND

SYMBOL EXISTING	SYMBOL PROPOSED	DESCRIPTION
		HINGE LINE/TOP/TOE
		CONCRETE V-DITCH
		GRADED SWALE
205	202	CONTOUR LINES
		DAYLIGHT LINE/LIMIT OF GRADING
		PROPERTY LINE/ BOUNDARY / RIGHT-OF-WAY
		EASEMENT LINE
		CENTERLINE (℄)
		FENCE (CHAIN LINK)
		DRIVEWAY
		CURB, GUTTER & SIDEWALK
		RETAINING WALL (AS DESCRIBED) w/ SUB-DRAIN
		CITY STANDARD BARRICADE
8"W	8"W	WATER LINE AND VALVE
8"SS	8"SS	SANITARY SEWER LINE AND MANHOLE OR CLEANOUT
15"SD	15"SD	STORM DRAIN LINE AND MANHOLE
	SDCO	4" PERF/SOLID SUBDRAIN WITH CLEANOUTS
WM	WM	WATER LATERAL / METER
	4"SS	SANITARY SEWER CLEANOUT (SSCO)
		AREA DRAIN WITH SUMP BOTTOM (NDS 1212 OR APPROVED EQUAL)
		FLAT DRAIN INLET AS SPECIFIED
		FIRE HYDRANT
RELOCATED		STREETLIGHT STANDARD WITH MAST ARM AND LUMINAIRE (ELECTROLIER)
		PULL BOX (AS NOTED)
E	E	ELECTRICAL CONDUIT
G	G G	GAS MAIN
G T	T T	TELEPHONE CONDUIT
T		STREET MONUMENT
		BOLLARD
		JOINT POLE w/ GUY ANCHOR
	2%	PERCENT GRADE
	△	VERTICAL GRADE BREAK (PROFILE)
		ACCESSIBLE ROUTE

ABBREVIATIONS

AB	AGGREGATE BASE	N/B	NORTH BOUND
AC	ASPHALT CONCRETE	P	PAD
AD	AREA DRAIN	PA	PLANTER AREA
BC	BEGIN CURVE	PL, P/L	PROPERTY LINE
BM	BENCHMARK	PCC	POINT OF COMPOUND CURVATURE
BMP	BEST MANAGEMENT PRACTICE	PERF.	PERFORATED
BOT.	BOTTOM	PIEE	PRIVATE INGRESS & EGRESS EASEMENT
BSW	BACK OF SIDEWALK	PRC	POINT OF REVERSE CURVATURE
BVC	BEGIN VERTICAL CURVE	PROJ.	PROJECTED
BW	BOTTOM OF WALL (EXPOSED)	PSDE	PRIVATE STORM DRAIN EASEMENT
CL	CENTER LINE	PUE	PUBLIC UTILITY EASEMENT
CB	CATCH BASIN	PV	PAVEMENT/ASPHALT GRADE
CO	CLEAN OUT	PVI	POINT OF VERTICAL INTERSECTION
CR	CURB RETURN	R=	RADIUS OF CURVE
DI	DRAIN INLET	△=	INCLUDED ANGLE OF CURVE
DS	ROOF DOWN SPOUT	L=	ARC LENGTH OF CURVE
EC	END CURVE	RCP	REINFORCED CONCRETE PIPE
EL	ELEVATION	RIM	RIM ELEVATION
EP	EDGE OF PAVEMENT	R/W	RIGHT OF WAY
EVC	END VERTICAL CURVE	S	SLOPE
EX	EXISTING	S/B	SOUTH BOUND
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT	SD	STORM DRAIN
F/C	FACE OF CURB	SDCO	STORM DRAIN CLEANOUT
FDC	FIRE DEPARTMENT CONNECTION	SDE	STORM DRAIN EASEMENT
FF	FINISHED FLOOR	SDMH	STORM DRAIN MANHOLE
FG	FINISHED GRADE	SE	SIDEWALK EASEMENT
FH	FIRE HYDRANT	SF	SQUARE FEET
FL	FLOW LINE	S.O.	SIDE OPENING
FOGLN	FOG LINE (WHITE STRIPE)	SS	SANITARY SEWER
GB	GRADE BREAK	SSE	SANITARY SEWER EASEMENT
GI	GREASE INTERCEPTOR	SSCO	SANITARY SEWER CLEANOUT
GM	GAS METER	SSMH	SANITARY SEWER MANHOLE
GR	GRATE ELEVATION	STD	STANDARD
HP	HIGH POINT	TB	TOP OF BERM
IRR	IRRIGATION	TC	TOP OF CURB
JT	JOINT TRENCH	TCM	TREATMENT CONTROL MEASURE
LF	LINEAL FEET	TW	TOP OF WALL
LIP	LIP OF GUTTER	TYP	TYPICAL
LP	LOW POINT	VC	VERTICAL CURVE
MAX	MAXIMUM	W	WATER LINE
MH	MANHOLE	WM	WATER METER



VINCINITY MAP

NOT TO SCALE

PROJECT GENERAL NOTES:

1.	OWNER(S) :	RAMESTA HOSPITALITY, LLC 1445 HOTEL CIRCLE SOUTH SAN DIEGO, CA 92108 CONTACT: JAYWANT SHAH
2.	DEVELOPER :	RAMESTA HOSPITALITY, LLC 1445 HOTEL CIRCLE SOUTH SAN DIEGO, CA 92108 CONTACT: JAYWANT SHAH
3.	CIVIL ENGINEER :	STERLING CONSULTANTS 46560 FREMONT BLVD, SUITE 205 FREMONT, CA 94538 CONTACT: DILIP S. KISHNANI, P.E., QSD TEL: 925-705-3633
5.	SOIL ENGINEER :	TBD
7.	APNs:	432-108-008 & 432-108-007
8.	EXISTING LAND USE:	VACANT
9.	PROPOSED LAND USE:	RETAIL AND COMMERCIAL
10.	SITE AREA (GROSS):	159,430 SF (3.66 ACRES)
11.	PROPOSED BLDG. FLOOR AREA:	18,365 SQ.FT. (1ST FLOOR ONLY)
12.	GENERAL PLAN 2040:	RETAIL OFFICE AND COMMERCIAL
13.	EXISTING ZONING:	AT-C
14.	WATER SYSTEM:	CITY OF HAYWARD
15.	SEWER SYSTEM:	CITY OF HAYWARD
16.	STORM DRAIN SYSTEM:	CITY OF HAYWARD
17.	GAS & ELECTRIC:	PACIFIC GAS & ELECTRIC (P.G.&E.)
18.	TELEPHONE:	AT&T
19.	TOPOGRAPHY:	EXISTING TOPOGRAPHY AS SHOWN IS PER FIELD SURVEY DONE BY STERLING CONSULTANTS IN FEBUARY 2107.
20.	BOUNDARY:	BOUNDARY AS SHOWN IS BASED ON A SURVEY DONE BY STERLING CONSULTANTS IN FEBUARY 2017
21.	FLOOD ZONE:	ZONE X (UNSHADED)
22.	GRADING:	GRADES SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.
23.	DIMENSIONS:	DIMENSIONS (SHOWN TO NEAREST TENTH OF A FOOT) AND SUBJECT TO MINOR CHANGES DURING FINAL DESIGN.
24.	UTILITIES:	ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND. ALL STORM DRAINS, SANITARY SEWERS AND WATER MAINS SHALL ADHERE TO MINIMUM SIZES & SLOPES PER THE GOVERNING AGENCIES.
25.	C3 COMPLIANCE:	STORMWATER TREATMENT WILL BE ACHIEVED THROUGH MULTIPLE AT-GRADE STORM WATER PLANTERS AS SHOWN ON THE STORM WATER CONTROL PLAN SHEET

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:

NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:

STERLING CONSULTANTS

46560 FREMONT BOULEVARD, UNIT NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8955 x100

PREPARED FOR:

RAMESTA HOSPITALITY, LLC
1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS

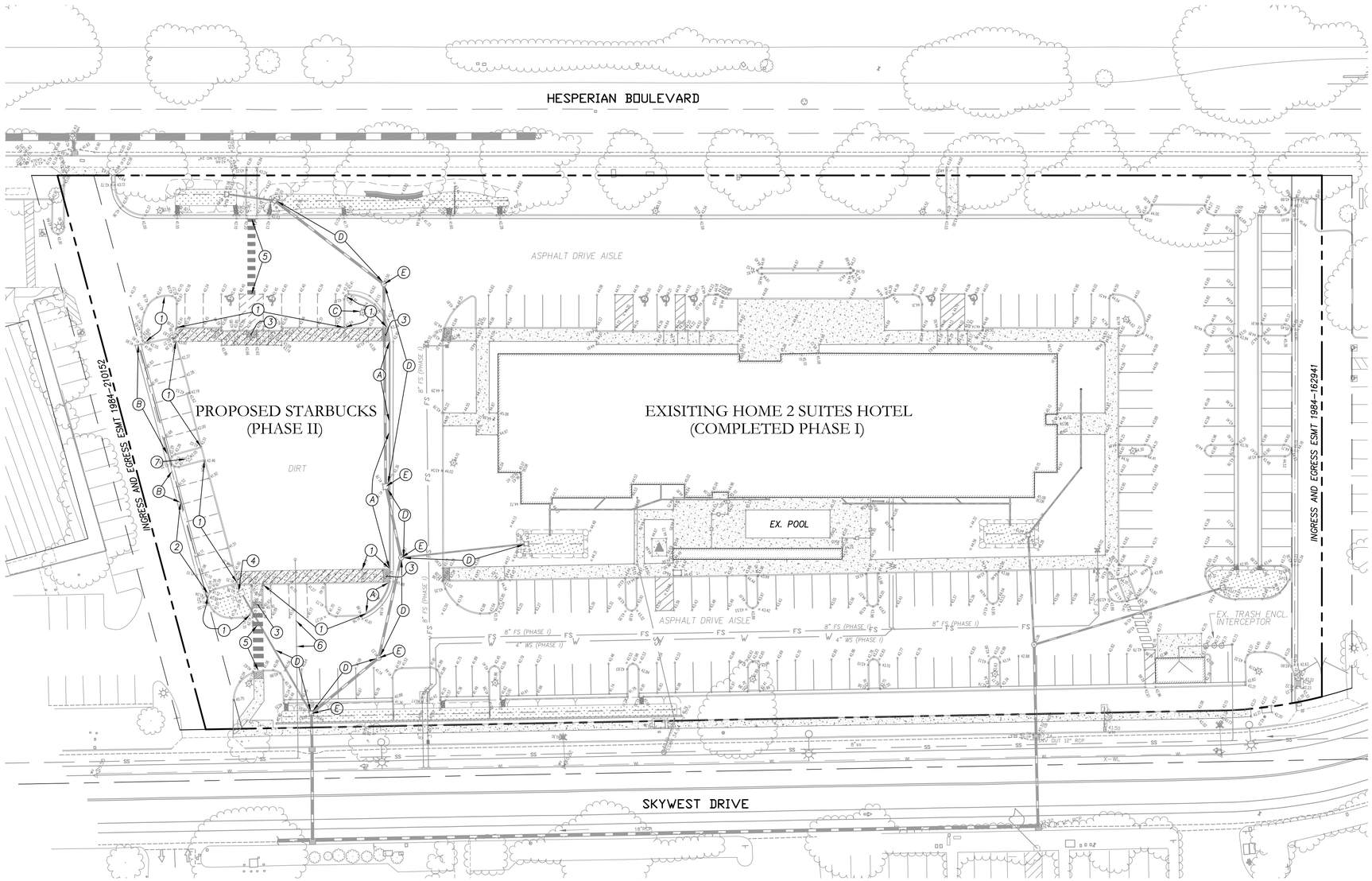
TITLE SHEET, PRELIMINARY SITE PLAN & NOTES

CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C1

1 OF 7 SHEETS

JOB NO. 2018-323-A



EXISITING CONDITIONS MAP & PRELIMINARY DEMOLITION PLAN

SCALE: 1" = 30'

DEMOLITION LEGEND

- PL
- SAWCUT
- EXISTING GRADE ELEVATION
- EXISTING CONTOUR w/ ELEVATION
- EXISTING BIO-RETENTION

ABBREVIATIONS

ASPH.	ASPHALT
CONC.	CONCRETE
EP	EDGE OF PAVEMENT
EX	EXISTING
GM	GAS METER
MB	MAIL BOX
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN-OUT
WM	WATER METER
WV	WATER VALVE
JP	JOINT POLE
TPZ	TREE PROTECTION ZONE

DEMOLITION NOTES:

CONTRACTOR SHALL OBTAIN A DEMOLITION PERMIT FROM THE CITY OF HAYWARD BUILDING DEPARTMENT PRIOR TO START OF DEMOLITION.

THE PROPERTY LINE SHALL BE THE LIMITS OF DEMOLITION UNDER THE GRADING PERMIT. DEMOLITION WITHIN CITY RIGHT-OF-WAY SHALL BE DONE UNDER AN ENCROACHMENT PERMIT WITH THE CITY OF HAYWARD.

CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTIONS WITH THE RESPECTIVE UTILITY AGENCIES PRIOR TO START OF DEMOLITION ON THE SITE.

UTILITIES TO BE ABANDONED WITHIN THE AREAS OF PROPOSED IMPROVEMENTS SHALL BE REMOVED IN THEIR ENTIRETY OR ABANDONED IN PLACE PER RECOMMENDATIONS IN THE PROJECT SOILS REPORT.

PROTECTION NOTES

- (A) PROTECT EXISTING CURB & GUTTER
- (B) PROTECT EXISTING VALLEY GUTTER
- (C) PROTECT EXISTING AREA LIGHT
- (D) PROTECT EXISTING STORM DRAIN PIPE
- (E) PROTECT EXISTING STORM DRAIN STRUCTURE

REMOVAL NOTES

- REMOVE EXISTING CONCRETE SIDEWALK
- REMOVE EXISTING ASPHALT PAVEMENT
- REMOVE EXISTING STRIPING
- (1) REMOVE EXISTING CURB AND GUTTER
- (2) REMOVE EXISTING VALLEY GUTTER
- (3) REMOVE EXISTING TRUNCATED DOMES
- (4) REMOVE EXISTING DRAIN INLET
- (5) REMOVE EXISTING PEDESTRIAN CROSSING STRIPING
- (6) REMOVE PORTION OF EX. 6" SS (FOR GREASE INTERCEPTOR)
- (7) REMOVE EXISTING AREA LIGHT

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:

NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:

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APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS

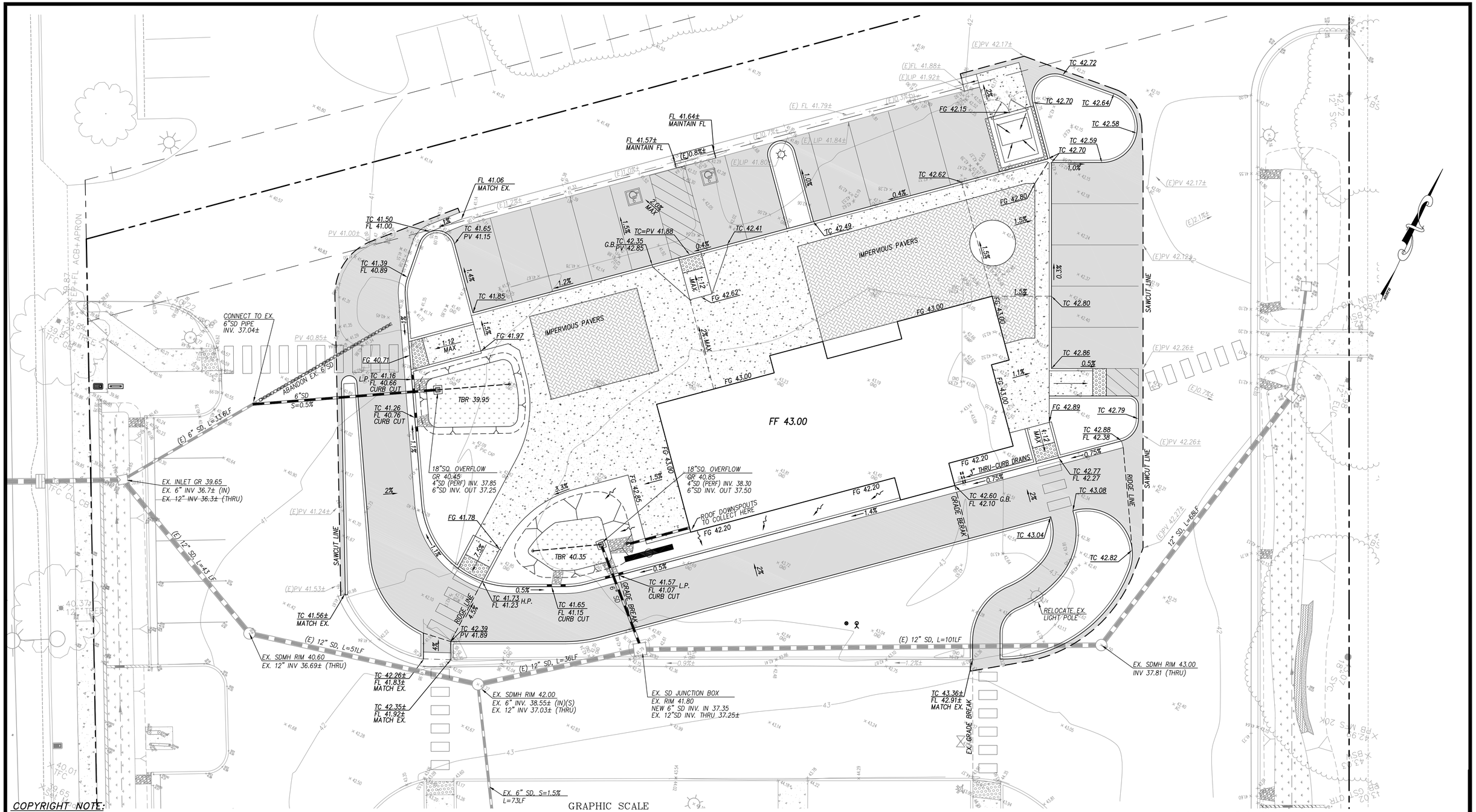
EXISITING CONDITIONS MAP & PRELIMINARY DEMO PLAN

CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C2

2 OF 7 SHEETS

JOB NO. 2018-323-A



GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

PRELIMINARY GRADING PLAN
SCALE: 1" = 10'

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
DILIP S. KISHNANI
C 51620
STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, UNIT NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8955 x100

PREPARED FOR:
RAMESTA HOSPITALITY, LLC
1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS
PRELIMINARY GRADING AND DRAINAGE PLAN

CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C3
3 OF 7 SHEETS
JOB NO. 2018-323-A

EX. OVERFLOW RISER
EX. BIO-RETENTION
EX. OVERFLOW RISER
EX. BIO-RETENTION FACILITY
EX. LP
EX. LP
EX. LP
EX. LP
EX. 12" SD
EX. SDMH
NEW TRASH ENCLOSURE WITH AREA DRAIN TO SANITARY SEWER
PROPOSED STARBUCKS (PHASE II)
RELOCATE EX. LP
EX. 12" SD
3" THRU-CURB DRAIN
6"SD FROM ROOF DS
NEW FIRE FDC+PIV
NEW 6" FS FIRE SVC.
EX. HYD.
NEW LP
NEW 6" SS
NEW 18"SQ. INLET OVERFLOW RISER
DOM. WTR SVC.
EX. SD JUNCTION BOX
6" SD
NEW 8" SS
NEW SSCO OVER EX. SS STUB (BUILT PHASE I)
NEW 18"SQ. INLET OVERFLOW RISER
EX. 6"SS
EX. 12" SD
EX. 8" FIRE SVC. (BUILT PHASE I)
EX. SDMH
(N)GREASE INTERCEPTOR CONNECT TO EX. 6"SS 750 GALLONS MIN. TO BE SIZED DURING BUILDING PERMITS
EX. 6" SD
EX. 12" SD (BUILT PHASE I TYP.)
EX. FIRE DCDA
EX. BFP
EX. LP
EX. LP
EX. LP
(N) DOM. W SVC. WM & BFP (SIZE TBD)
EX. OVERFLOW RISER
EX. BIO-RETENTION FACILITY
EX. HYD.
EX. 6" SS (BUILT PHASE I)
EX. 8" SS MAIN
EX. 8"FS
EX. 3"W
EX. 8" ACP WATER MAIN
NEW DOMESTIC WATER SVC. TAP

EXISTING HOME 2 SUITES HOTEL
(COMPLETED PHASE I)

EX. LP
EX. LP
EX. LP
EX. OVERFLOW RISER
EX. BIO-RETENTION
EX. 6" SD
EX. TRANSFORMER
EX. FDC+PIV
EX. 4"W
EX. 6"FS
EX. BIO-RETENTION
EX. HYD.
EX. 8"SS LAT.
EX. BIO-RETENTION
EX. 8" FIRE SVC. (BUILT PHASE I)
EX. 4" DOMESTIC SVC. (BUILT PHASE I)
EX. 8" FIRE SVC. (BUILT PHASE I)
EX. TRASH ENCL. INTERCEPTOR
EX. LP
EX. LP
EX. LP

PRELIMINARY UTILITY PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
DILIP S. KISHNANI
C 51620
STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, UNIT NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8955 x100

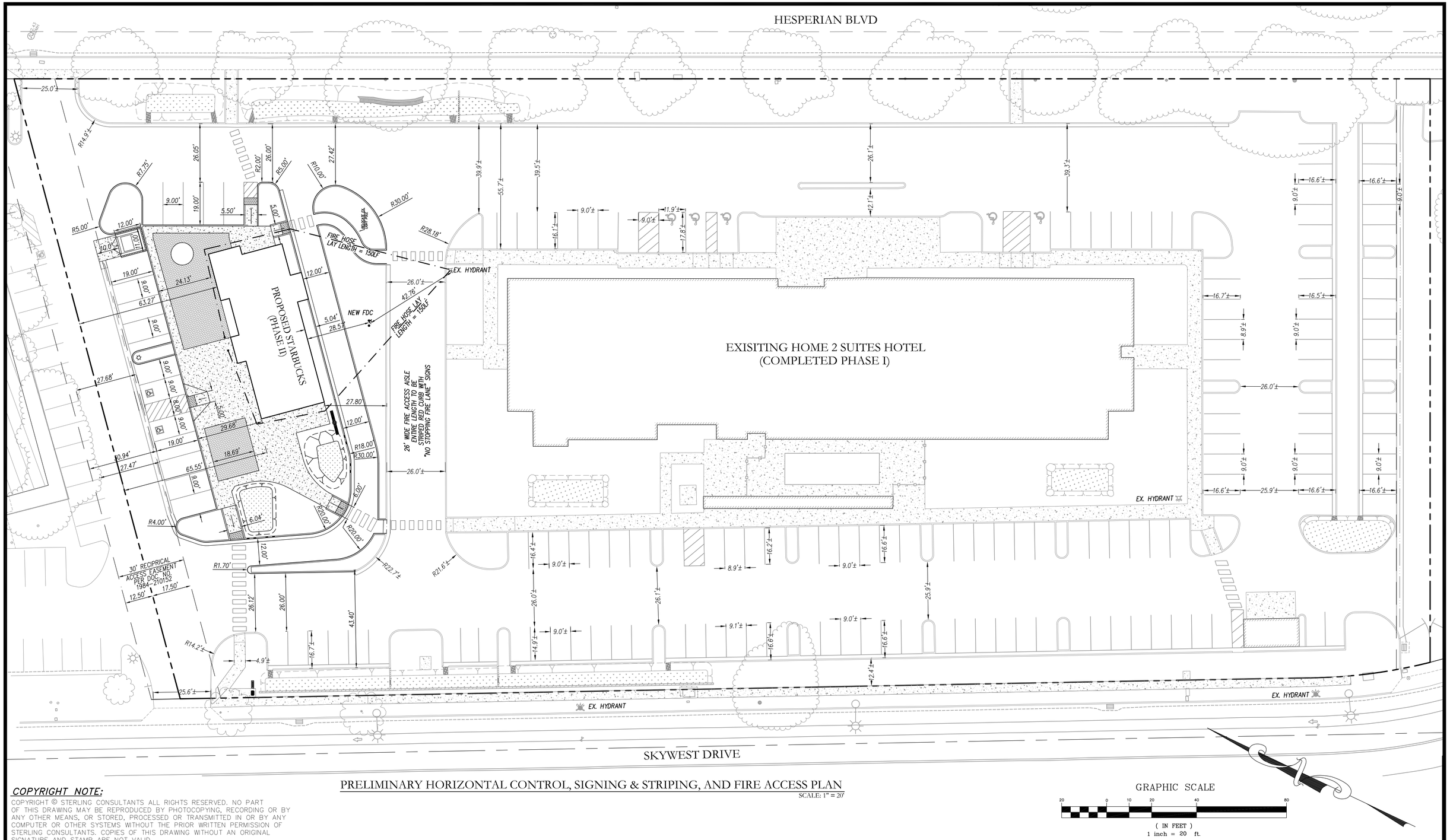
PREPARED FOR:
RAMESTA HOSPITALITY, LLC
1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS
PRELIMINARY UTILITY PLAN

CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C-4
4 OF 7 SHEETS
JOB NO. 2018-323-A



PRELIMINARY HORIZONTAL CONTROL, SIGNING & STRIPING, AND FIRE ACCESS PLAN

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:

NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:

STERLING CONSULTANTS

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FREMONT, CA 94538
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PREPARED FOR:

RAMESTA HOSPITALITY, LLC
1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS

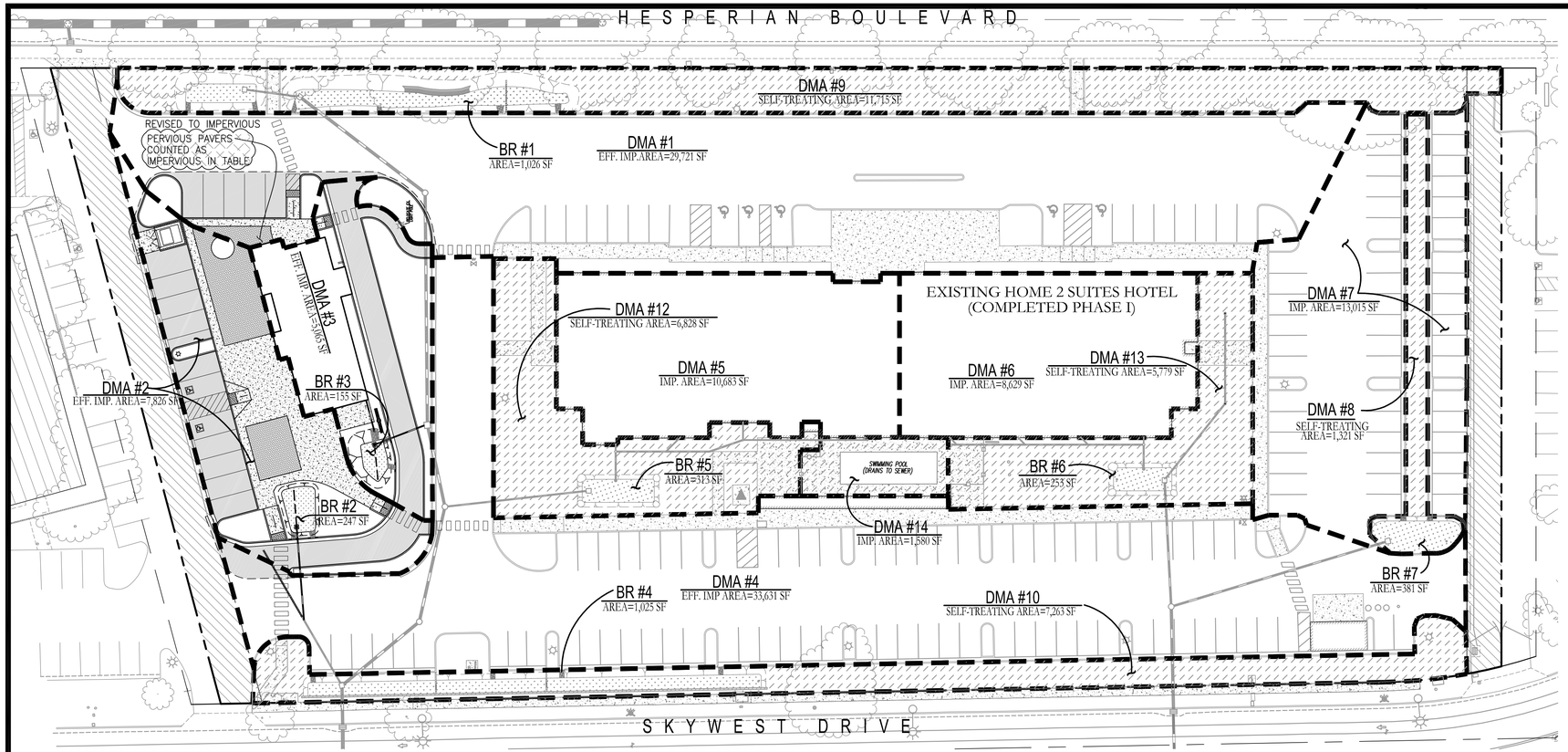
PRELIMINARY HORIZONTAL CONTROL, STRIPING & FIRE ACCESS PLAN

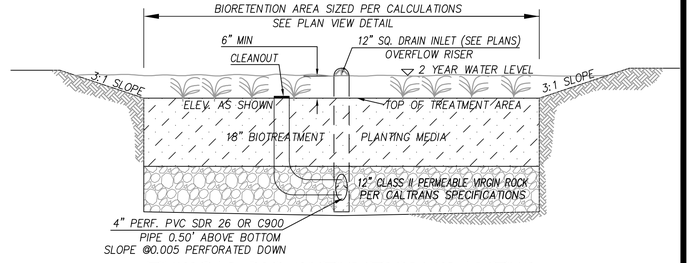
CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C-5

5 OF 7 SHEETS

JOB NO. 2018-323-A

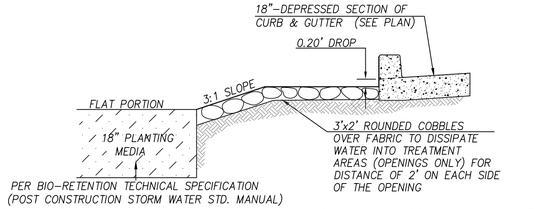




TYPICAL BIO-RETENTION PLANTER

NOT TO SCALE

NOTE: THE BIO-TREATMENT SOIL MIX (BSM) USED IN THE DESIGN OF THE PROPOSED BIO-TREATMENT AREA SHALL BE PER ATTACHMENT L OF THE C.3 STORMWATER TREATMENT TECHNICAL GUIDANCE DATED JANUARY 1, 2016 WITH A MINIMUM INFILTRATION RATE OF 5" PER HOUR.



TYPICAL BIO-RETENTION PLANTER (@ OPENING)

NOT TO SCALE

STORMWATER TREATMENT MEASURES SUMMARY TABLE (FROM PHASE I)

DMA#	TREATMENT CONTROL MEASURES	a TOTAL DRAINAGE AREA(SF)	b PERVIOUS AREA(SF)	c IMPERVIOUS AREA(SF)	d EFFECTIVE PERVIOUS AREA(SF)	e EFFECTIVE IMPERVIOUS AREA(SF)	f TREATMENT AREA REQUIRED (SF)	TREATMENT AREA PROVIDED (SF)	PONDING DEPTH (INCHES)	TREATMENT TYPE	SIZING METHOD
1	BR#1	34,684	523	34,161	–	34,213	1,026	1,026	8"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
2	BR#2	3,482	191	3,291	19	3,310	97	97	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
3	BR#3	6,684	596	6,088	–	6,148	184	184	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
4	BR#4	36,598	1,746	34,852	175	35,027	1,025	1,025	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
5	BR#5	10,683	–	10,683	–	–	313	313	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
6	BR#6	8,629	–	8,629	–	–	283	283	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
7	BR#7	13,015	–	13,015	–	–	381	381	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
8	NA	1,321	1,321	–	–	–	–	–	–	SELF-TREATING	–
9*	NA	11,715	11,520	195	–	–	–	–	–	SELF-TREATING	–
10*	NA	7,263	6,987	276	–	–	–	–	–	SELF-TREATING	–
11*	NA	2,987	2,513	384	–	–	–	–	–	SELF-TREATING	–
12*	NA	6,828	6,188	640	–	–	–	–	–	SELF-TREATING	–
13*	NA	5,779	5,368	411	–	–	–	–	–	SELF-TREATING	–
14	NA	1,580	–	1,580	–	–	–	–	–	SELF-TREATING (DRAINS TO SEWER)	–

PHASE I NOTE: TABLE ABOVE IS PER HOME 2 SUITES PHASE I GRADING PLANS PREPARED BY STERLING CONSULTANTS DATED 08/29/2023 AS DELTA REVISION 4.
*IMPERVIOUS AREAS TREATED BY TREE CREDIT PER AC COUNTY C.3 STORMWATER MANUAL TABLE 4-1. SEE LANDSCAPE PLANS.

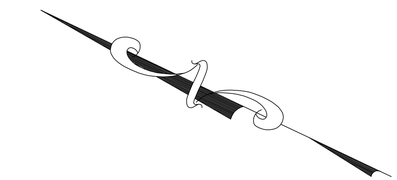
STORMWATER TREATMENT MEASURES SUMMARY TABLE (PHASE II)

DMA#	TREATMENT CONTROL MEASURES	a TOTAL DRAINAGE AREA(SF)	b PERVIOUS AREA(SF)	c IMPERVIOUS AREA(SF)	d EFFECTIVE PERVIOUS AREA(SF)	e EFFECTIVE IMPERVIOUS AREA(SF)	f TREATMENT AREA REQUIRED (SF)	TREATMENT AREA PROVIDED (SF)	PONDING DEPTH (INCHES)	TREATMENT TYPE	SIZING METHOD
1	BR#1	32,611	3,211[1]	29,400	321	29,721	871 (892)[2]	1,026	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
2	BR#2	9,303	1,641	7,662	164	7,826	229 (235)[2]	247	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
3	BR#3	7,281	2,462	4,819	246	5,065	149 (152)[2]	155	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD
4	BR#4	35,067	1,596	33,471	160	33,631	986 (1,009)[2]	1,025	6"	BIO-RETENTION	COMBINATION FLOW AND VOLUME METHOD

PHASE II NOTE: TABLE ABOVE QUANTIFIES PROPOSED CHANGES TO PHASE I DMAs AND TREATMENT CONTROL MEASURES.
1) PHASE I DMA #1 PERVIOUS AREA WAS INCORRECT. PHASE II DMA #1 PERVIOUS AREA CORRECTS ERROR IN UNTOUCHED PHASE I AREAS IN ADDITION TO BEING REVISED WITH PROPOSED PHASE II CHANGES.
2) DENOTES TREATMENT AREA REQUIRED PER 3% OF TOTAL IMPERVIOUS AREA
3) PERVIOUS PAVERS IN DMA #2 ARE COUNTED AS IMPERVIOUS SURFACES IN SUMMARY TABLE FOR THE SAKE OF TREATMENT SIZING

LEGEND

- DRAINAGE MANAGEMENT AREA (DMA)
- BR #1 — BIORETENTION PLANTERS (BR #1 – BR #7) SEE TYPICAL DETAIL THIS SHEET
- SELF-TREATING AREAS
- EXISTING PAVEMENT / DRAINS TO EXISTING DRAINAGE PATTERN



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPROVED FOR CONSTRUCTION
REGISTERED PROFESSIONAL ENGINEER DILIP S. KISHNANI C 51620 STATE OF CALIFORNIA

PREPARED BY:
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PREPARED FOR:
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1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 SITE PLAN REVIEW 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS
PRELIMINARY HORIZONTAL CONTROL PLAN

CITY OF HAYWARD ALAMEDA COUNTY CALIFORNIA

SHEET NO. C6
6 OF 7 SHEETS
JOB NO. 2018-323-A

Worksheet for Calculating the Combination Flow and Volume Method

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:	HOME 2 SUITES	
1-2	City application ID:	Site Plan Review (SPR)	
1-3	Site Address or APN:	432-108-008 & 007	
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	18.0 **Inches**	Click here for map
	Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site.		
1-6	Applicable Rain Gauge[2]	Oakland	
	Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.		

The calculations presented here are based on the **combination flow and volume hydraulic sizing method** provided in the Clean Water Program Alameda County C.3 Technical Guidance, Version 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

MAP adjustment factor is automatically calculated as: 0.98

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, shown in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: BR#1

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	29,400	1.0	29,400
2-3	Pervious service	3,211	0.1	321
	Total DMA Area (square feet) =	32,611		

2-4 ***Total Effective Impervious Area (EIA)*** 29,721 **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

Applicable Rain Gauge	Mean Annual Precipitation (in)	Unit Basin Storage Volume (in) for Applicable Runoff Coefficients: Coefficient of 1.00
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** 0.67 **Inches**
(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** 0.66 **Inches**
(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** 1,628 **Cubic feet**
(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

4.0 Calculate the Duration of the Rain Event

4-1 Rainfall intensity 0.2 **Inches per hour**

4-2 Divide Item 3-2 by Item 4-1 3.29 **Hours of Rain Event Duration**

5.0 Preliminary Estimate of Surface Area of Treatment Measure

5-1 4% of DMA impervious surface 1,189 **Square feet**

5-2 Area 25% smaller than item 5-1 892 **Square feet**

5-3 Volume of treated runoff for area in Item 5-2 1,221 **Cubic feet** (Item 5-2 * 5 inches per hour * 1/12 * Item 4-2)

6.0 Initial Adjustment of Depth of Surface Ponding Area

6-1 Subtract Item 5-3 from Item 3-3 407 **Cubic feet** (Amount of runoff to be stored in ponding area)

6-2 Divide Item 6-1 by Item 5-2 0.5 **Feet** (Depth of stored runoff in surface ponding area)

6-3 Convert Item 6-2 from ft to inches 5.5 **Inches** (Depth of stored runoff in surface ponding area)

6-4 If ponding depth in Item 6-3 meets your target depth, skip to Item 8-1. If not, continue to Step 7-1.

7.0 Optimize Size of Treatment Measure

7-1 Enter an area larger or smaller than Item 5-2 871 **Sq.ft.** (enter larger area if you need less ponding depth; smaller for more depth.)

7-2 Volume of treated runoff for area in Item 7-1 1,193 **Cubic feet** (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)

7-3 Subtract Item 7-2 from Item 3-3 435 **Cubic feet** (Amount of runoff to be stored in ponding area)

7-4 Divide Item 7-3 by Item 7-1 0.50 **Feet** (Depth of stored runoff in surface ponding area)

7-5 Convert Item 7-4 from feet to inches 6.00 **Inches** (Depth of stored runoff in surface ponding area)

7-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth.

8.0 Surface Area of Treatment Measure for DMA

8-1 Final surface area of treatment* 871 **Square feet** (Either Item 5-2 or final amount in Item 7-1)

**Note: Check with the local jurisdiction as to its policy regarding the minimum biotreatment surface area allowed.*

Worksheet for Calculating the Combination Flow and Volume Method

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:	HOME 2 SUITES	
1-2	City application ID:		
1-3	Site Address or APN:	432-108-008 & 007	
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	18.0 **Inches**	Click here for map
	Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site.		
1-6	Applicable Rain Gauge[2]	Oakland	
	Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.		

The calculations presented here are based on the **combination flow and volume hydraulic sizing method** provided in the Clean Water Program Alameda County C.3 Technical Guidance, Version 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

MAP adjustment factor is automatically calculated as: 0.98

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, shown in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: DMA #2

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	7,662	1.0	7,662
2-3	Pervious service	1,641	0.1	164
	Total DMA Area (square feet) =	9,303		

2-4 ***Total Effective Impervious Area (EIA)*** 7,826 **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

Applicable Rain Gauge	Mean Annual Precipitation (in)	Unit Basin Storage Volume (in) for Applicable Runoff Coefficients: Coefficient of 1.00
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** 0.67 **Inches**
(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** 0.66 **Inches**
(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** 429 **Cubic feet**
(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

4.0 Calculate the Duration of the Rain Event

4-1 Rainfall intensity 0.2 **Inches per hour**

4-2 Divide Item 3-2 by Item 4-1 3.29 **Hours of Rain Event Duration**

5.0 Preliminary Estimate of Surface Area of Treatment Measure

5-1 4% of DMA impervious surface 313 **Square feet**

5-2 Area 25% smaller than item 5-1 235 **Square feet**

5-3 Volume of treated runoff for area in Item 5-2 321 **Cubic feet** (Item 5-2 * 5 inches per hour * 1/12 * Item 4-2)

6.0 Initial Adjustment of Depth of Surface Ponding Area

6-1 Subtract Item 5-3 from Item 3-3 107 **Cubic feet** (Amount of runoff to be stored in ponding area)

6-2 Divide Item 6-1 by Item 5-2 0.5 **Feet** (Depth of stored runoff in surface ponding area)

6-3 Convert Item 6-2 from ft to inches 5.5 **Inches** (Depth of stored runoff in surface ponding area)

6-4 If ponding depth in Item 6-3 meets your target depth, skip to Item 8-1. If not, continue to Step 7-1.

7.0 Optimize Size of Treatment Measure

7-1 Enter an area larger or smaller than Item 5-2 229 **Sq.ft.** (enter larger area if you need less ponding depth; smaller for more depth.)

7-2 Volume of treated runoff for area in Item 7-1 314 **Cubic feet** (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)

7-3 Subtract Item 7-2 from Item 3-3 115 **Cubic feet** (Amount of runoff to be stored in ponding area)

7-4 Divide Item 7-3 by Item 7-1 0.50 **Feet** (Depth of stored runoff in surface ponding area)

7-5 Convert Item 7-4 from feet to inches 6.03 **Inches** (Depth of stored runoff in surface ponding area)

7-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth.

8.0 Surface Area of Treatment Measure for DMA

8-1 Final surface area of treatment* 229 **Square feet** (Either Item 5-2 or final amount in Item 7-1)

**Note: Check with the local jurisdiction as to its policy regarding the minimum biotreatment surface area allowed.*

Worksheet for Calculating the Combination Flow and Volume Method

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:	HOME 2 SUITES	
1-2	City application ID:	Site Plan Review (SPR)	
1-3	Site Address or APN:	432-108-008 & 007	
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	18.0 **Inches**	Click here for map
	Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site.		
1-6	Applicable Rain Gauge[2]	Oakland	
	Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.		

The calculations presented here are based on the **combination flow and volume hydraulic sizing method** provided in the Clean Water Program Alameda County C.3 Technical Guidance, Version 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

MAP adjustment factor is automatically calculated as: 0.98

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, shown in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: BR#3

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	4,819	1.0	4,819
2-3	Pervious service	2,462	0.1	246
	Total DMA Area (square feet) =	7,281		

2-4 ***Total Effective Impervious Area (EIA)*** 5,065 **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

Applicable Rain Gauge	Mean Annual Precipitation (in)	Unit Basin Storage Volume (in) for Applicable Runoff Coefficients: Coefficient of 1.00
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** 0.67 **Inches**
(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** 0.66 **Inches**
(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** 277 **Cubic feet**
(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

4.0 Calculate the Duration of the Rain Event

4-1 Rainfall intensity 0.2 **Inches per hour**

4-2 Divide Item 3-2 by Item 4-1 3.29 **Hours of Rain Event Duration**

5.0 Preliminary Estimate of Surface Area of Treatment Measure

5-1 4% of DMA impervious surface 203 **Square feet**

5-2 Area 25% smaller than item 5-1 152 **Square feet**

5-3 Volume of treated runoff for area in Item 5-2 208 **Cubic feet** (Item 5-2 * 5 inches per hour * 1/12 * Item 4-2)

6.0 Initial Adjustment of Depth of Surface Ponding Area

6-1 Subtract Item 5-3 from Item 3-3 69 **Cubic feet** (Amount of runoff to be stored in ponding area)

6-2 Divide Item 6-1 by Item 5-2 0.5 **Feet** (Depth of stored runoff in surface ponding area)

6-3 Convert Item 6-2 from ft to inches 5.5 **Inches** (Depth of stored runoff in surface ponding area)

6-4 If ponding depth in Item 6-3 meets your target depth, skip to Item 8-1. If not, continue to Step 7-1.

7.0 Optimize Size of Treatment Measure

7-1 Enter an area larger or smaller than Item 5-2 149 **Sq.ft.** (enter larger area if you need less ponding depth; smaller for more depth.)

7-2 Volume of treated runoff for area in Item 7-1 204 **Cubic feet** (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)

7-3 Subtract Item 7-2 from Item 3-3 73 **Cubic feet** (Amount of runoff to be stored in ponding area)

7-4 Divide Item 7-3 by Item 7-1 0.49 **Feet** (Depth of stored runoff in surface ponding area)

7-5 Convert Item 7-4 from feet to inches 5.91 **Inches** (Depth of stored runoff in surface ponding area)

7-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth.

8.0 Surface Area of Treatment Measure for DMA

8-1 Final surface area of treatment* 149 **Square feet** (Either Item 5-2 or final amount in Item 7-1)

**Note: Check with the local jurisdiction as to its policy regarding the minimum biotreatment surface area allowed.*

Worksheet for Calculating the Combination Flow and Volume Method

Instructions: After completing Section 1, make a copy of this Excel file for each Drainage Management Area within the project. Enter information specific to the project and DMA in the cells shaded in yellow. Cells shaded in light blue contain formulas and values that will be automatically calculated.

1.0 Project Information

1-1	Project Name:	HOME 2 SUITES	
1-2	City application ID:		
1-3	Site Address or APN:	432-108-008 & 007	
1-4	Tract or Parcel Map No:		
1-5	Site Mean Annual Precip. (MAP)[1]	18.0 **Inches**	Click here for map
	Refer to the Mean Annual Precipitation Map in Appendix D of the C.3 Technical Guidance to determine the MAP, in inches, for the site.		
1-6	Applicable Rain Gauge[2]	Oakland	
	Enter "Oakland Airport" if the site MAP is 16.4 inches or greater. Enter "San Jose" if the site MAP is less than 16.4 inches.		

The calculations presented here are based on the **combination flow and volume hydraulic sizing method** provided in the Clean Water Program Alameda County C.3 Technical Guidance, Version 4.0. The steps presented below are explained in Chapter 5, Section 5.1 of the guidance manual, applicable portions of which are included in this file, in the tab called "Guidance from Chapter 5".

MAP adjustment factor is automatically calculated as: 0.98

(The "Site Mean Annual Precipitation (MAP)" is divided by the MAP for the applicable rain gauge, shown in Table 5.2, below.)

2.0 Calculate Percentage of Impervious Surface for Drainage Management Area (DMA)

2-1 Name of DMA: DMA #4

For items 2-2 and 2-3, enter the areas in square feet for each type of surface within the DMA.

	Type of Surface	Area of surface type within DMA (Sq. Ft)	Adjust Pervious Surface	Effective Impervious Area
2-2	Impervious surface	33,471	1.0	33,471
2-3	Pervious service	1,596	0.1	160
	Total DMA Area (square feet) =	35,067		

2-4 ***Total Effective Impervious Area (EIA)*** 33,631 **Square feet**

3.0 Calculate Unit Basin Storage Volume in Inches

Table 5-2: Unit Basin Storage Volumes (in inches) for 80 Percent Capture Using 48-Hour Drawdowns

Applicable Rain Gauge	Mean Annual Precipitation (in)	Unit Basin Storage Volume (in) for Applicable Runoff Coefficients: Coefficient of 1.00
Oakland Airport	18.35	0.67
San Jose	14.4	0.56

3-1 ***Unit basin storage volume from Table 5.2:*** 0.67 **Inches**
(The coefficient for this method is 1.00, due to the conversion of any landscaping to effective impervious area)

3-2 ***Adjusted unit basin storage volume:*** 0.66 **Inches**
(The unit basin storage volume is adjusted by applying the MAP adjustment factor.)

3-3 ***Required Capture Volume (in cubic feet):*** 1,842 **Cubic feet**
(The adjusted unit basin sizing volume [inches] is multiplied by the size of the DMA and converted to feet)

4.0 Calculate the Duration of the Rain Event

4-1 Rainfall intensity 0.2 **Inches per hour**

4-2 Divide Item 3-2 by Item 4-1 3.29 **Hours of Rain Event Duration**

5.0 Preliminary Estimate of Surface Area of Treatment Measure

5-1 4% of DMA impervious surface 1,345 **Square feet**

5-2 Area 25% smaller than item 5-1 1,009 **Square feet**

5-3 Volume of treated runoff for area in Item 5-2 1,381 **Cubic feet** (Item 5-2 * 5 inches per hour * 1/12 * Item 4-2)

6.0 Initial Adjustment of Depth of Surface Ponding Area

6-1 Subtract Item 5-3 from Item 3-3 460 **Cubic feet** (Amount of runoff to be stored in ponding area)

6-2 Divide Item 6-1 by Item 5-2 0.5 **Feet** (Depth of stored runoff in surface ponding area)

6-3 Convert Item 6-2 from ft to inches 5.5 **Inches** (Depth of stored runoff in surface ponding area)

6-4 If ponding depth in Item 6-3 meets your target depth, skip to Item 8-1. If not, continue to Step 7-1.

7.0 Optimize Size of Treatment Measure

7-1 Enter an area larger or smaller than Item 5-2 986 **Sq.ft.** (enter larger area if you need less ponding depth; smaller for more depth.)

7-2 Volume of treated runoff for area in Item 7-1 1,350 **Cubic feet** (Item 7-1 * 5 inches per hour * 1/12 * Item 4-2)

7-3 Subtract Item 7-2 from Item 3-3 492 **Cubic feet** (Amount of runoff to be stored in ponding area)

7-4 Divide Item 7-3 by Item 7-1 0.50 **Feet** (Depth of stored runoff in surface ponding area)

7-5 Convert Item 7-4 from feet to inches 5.99 **Inches** (Depth of stored runoff in surface ponding area)

7-6 If the ponding depth in Item 7-5 meets target, stop here. If not, repeat Steps 7-1 through 7-5 until you obtain target depth.

8.0 Surface Area of Treatment Measure for DMA

8-1 Final surface area of treatment* 986 **Square feet** (Either Item 5-2 or final amount in Item 7-1)

**Note: Check with the local jurisdiction as to its policy regarding the minimum biotreatment surface area allowed.*

DATE: DECEMBER 10, 2024					
SCALE: AS NOTED					
DRAWN: KT/PV					
DESIGNED: KT					
ENGINEER: DSK/KT					
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR

PREPARED BY, OR UNDER THE DIRECTION OF:
NOT APPOVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER — DILIP S. KISHNANI — C 51620 — STATE OF CALIFORNIA

PREPARED BY:
STERLING CONSULTANTS
46560 FREMONT BOULEVARD, UNIT NO. 205
FREMONT, CA 94538
1sterlingconsultants@gmail.com PHONE: 510.344.8955 x100

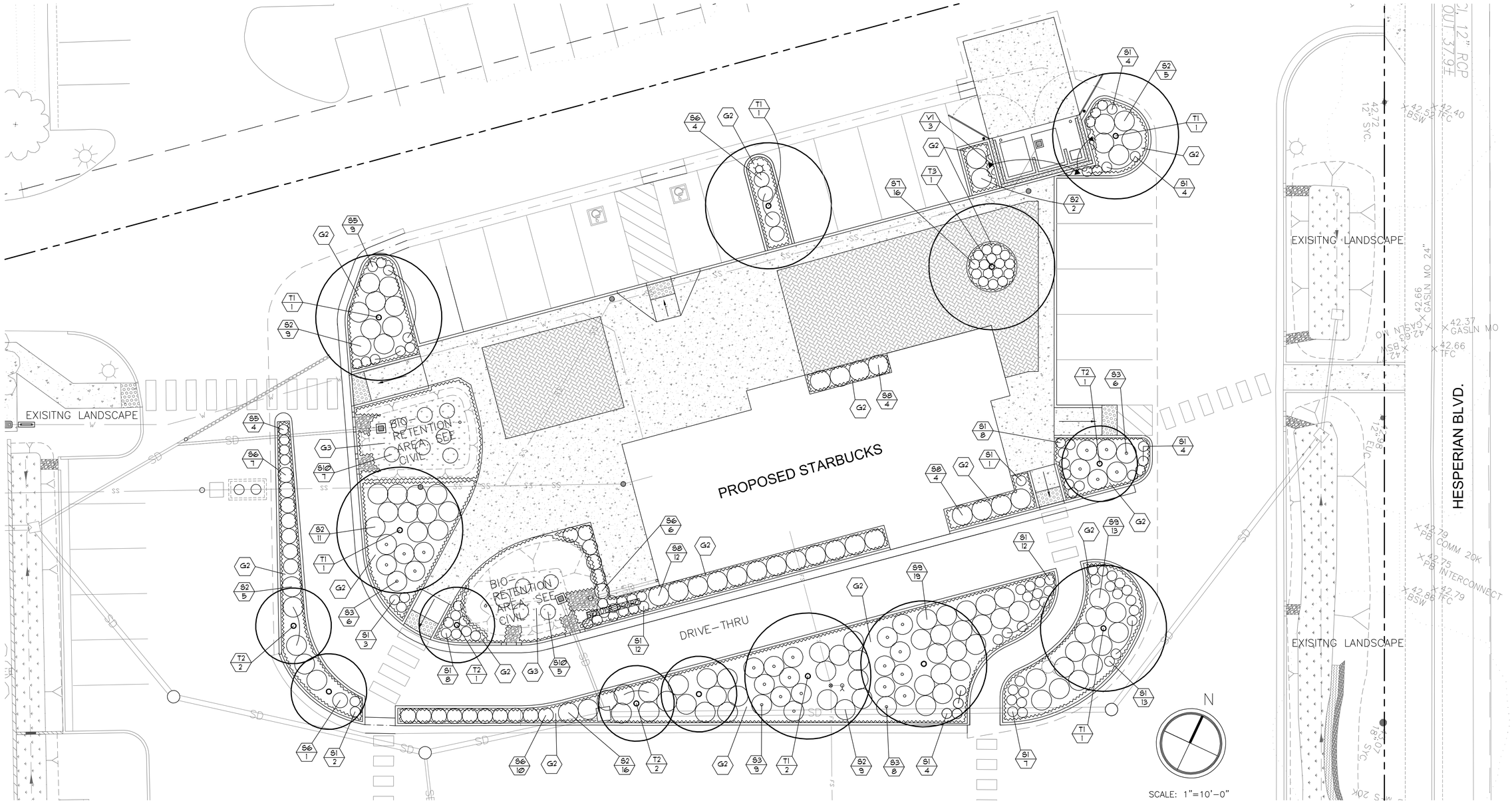
PREPARED FOR:
RAMESTA HOSPITALITY, LLC
1445 HOTEL CIRCLE SOUTH
SAN DIEGO, CA 92108

APNs: 432-108-008 & 007 — SITE PLAN REVIEW — 22101 HESPERIAN BOULEVARD

HOME 2 SUITES PHASE II - STARBUCKS
PRELIMINARY BIO-RETENTION SIZING WORKSHEETS

CITY OF HAYWARD — ALAMEDA COUNTY — CALIFORNIA

SHEET NO. C7
7 OF 7 SHEETS
JOB NO. 2018-323-A



PLANT LEGEND

(S1) INDICATES PLANT KEY
3 INDICATES PLANT QUANTITY

WUCOLS	KEY	BOTANICAL/COMMON NAME		SIZE	QTY.	REMARKS	APPROX. HT. & WIDTH
		TREES					
L	T1	PISTACHIA CHINENSIS 'KEITH DAVEY'	CHINESE PISTACHE	24" BOX	7		30'-60', 30'-50'
M	T2	GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24" BOX	6		25'-30', 20'
M	T3	PLATANUS ACERIFOLIA 'COLUMBIA'	LONDON PLANE TREE	24" BOX	1		40'-80', 30'-40'
		SHRUBS AND PERENNIALS					
L	S1	LOMANDRA LONGIFOLIA 'LIME TUFF'	DWARF MAT RUSH	1 G.C.	-		3'-4', 2'-3'
L	S2	RAPHIOLEPIS I. 'DANCER'	INDIA HAWTHORN	15 G.C.	-		4', 5'
M	S3	ROSAMARINUS O. 'GLORIZIA'	ROSEMARY	5 G.C.	-		4'-5'-4'-5'
L	S4	NANDINA DOMESTICA	HEAVENLY BAMBOO	5 G.C.	-		6'-8', 3'-4'
L	S5	DIETES BICOLOR	FORTNIGHT LILY	5 G.C.	-		2'-3', 2'
L	S6	LAVANDULA A.'HIDCOTE SUPERIOR'	ENGLISH LAVENDER	5 G.C.	-		1.5', 1.5'
L	S7	ALSTROEMERIA HYBRIDS	PERUVIAN LILY	5 G.C.	-	LOW GROWING EVERGREEN VARS.	3'-4', 1'
L	S8	MYRTUS COMMUNIS	MYRTLE	5 G.C.	-		5'-6', 4'-5'
L	S9	SALVIA LEUCANTHA 'SANTA BARBARA'	MEXICAN BUSH SAGE	5 G.C.	-		5'-6', 4'-5'
L	S10	LEYMUS CONDENSATUS 'CANYON PRINCE'	LYME GRASS	5 G.C.	-		4', 3'

PLANT LEGEND (CONT'D.)

		GROUNDCOVERS, BIO-FILTRATION, AND VINES			
-	G1	DELETED	-	-	
-	G2	BARK MULCH, MEDIUM GRIND 'WALK-ON' BARK	MED.	AS REQ.	3" DEPTH
L	G3	CAREX PRAEGRACILIS — CLUSTERED FIELD SEDGE	PLUGS	AS REQ.	SPACE TRI. @ 12" O.C.
L	V1	PARTHENOCISSUS TRICUSPIDATA — BOSTON IVY	5 G.C.	3	TRAIN TO WALL

NOTES

1. AN AUTOMATIC IRRIGATION SYSTEM CONFORMING TO ALL STATE AND LOCAL WATER CONSERVATION AND 'WELO' STANDARDS WILL BE PROVIDED IN ALL LANDSCAPE AREAS.
2. 'WUCOLS' REFERS TO 'WATER USE CLASSIFICATION OF LANDSCAPE SPECIES' PUBLISHED DATA. L=LOW, M=MEDIUM, H=HIGH.
3. HOTICULTURAL SOIL TESTING AND SOIL AMENDMENTS SHALL WILL BE REQUIRED AS PER CITY RECOMMENDATIONS AND WILL BE DETAILED IN THE LANDSCAPE CONSTRUCTION DOCUMENTS.

LICENSED LANDSCAPE ARCHITECT
CHARLES WILSON
NO. 1682
Signature
Exp. 3-31-25
STATE OF CALIFORNIA

NO	DATE	REVISIONS
1	12.11.24	CITY COMMENTS AND COORDINATION
2	02.24.25	CITY COMMENTS AND COORDINATION

STARBUCKS

HAYWARD, CALIFORNIA

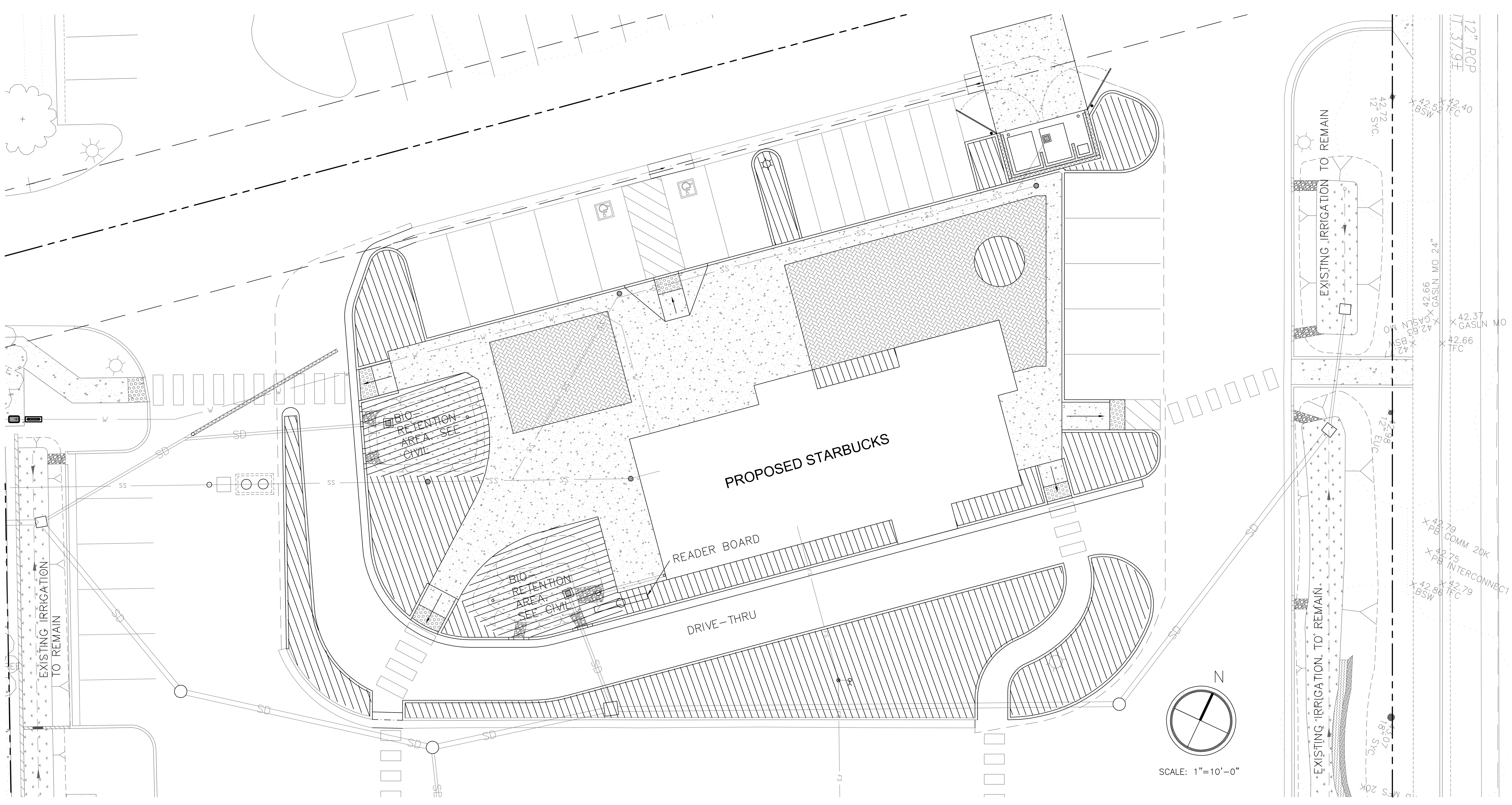
WILSON & ASSOCIATES
LANDSCAPE ARCHITECTURE
815 SAN DIEGO ROAD • BERKELEY, CA 94707
PH: 510-644-9602 • E: cwilson815@gmail.com

PRELIMINARY LANDSCAPE PLAN

BY: CW
JOB:
DATE: 07.23.24

L-1.0

SHT. ___ OF ___
REVISIONS



LEGEND

HYDROZONE 1 - BIO-FILTRATION PLANTERS, MP OVERHEAD ROTOR SPRAY IRRIGATION, 955 SQ. FT.

HYDROZONE 2 - MIXED LANDSCAPE, TREES, SHRUBS, DRIP IRRIGATION, 3,825 SQ. FT.

TOTAL SQ. FT. OF LANDSCAPE = 4,780

NOTES

1. 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 DESGIN PLAN.
2. DRIP IRRIGATION TO USE IN-LINE EMITTERS AT 18" SPACING AT 0.5 GPM.
3. THE IRRIGATION CONTROLLER WILL BE WEATHER BASED AND A RAIN SENSOR WILL BE PROVIDED.

WELO WORKSHEET

Appendix B – Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET STARBUCKS REV. 02-24-25
This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

City of Hayward Reference Evapotranspiration (ETo) 44.2

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							
1-BIORETEN.	0.3	SPRAY	0.75	0.4	955	382	10,468
2-MIXED LS	0.3	DRIP	0.81	0.37	3,825	1,415	38,784
				Totals	(A)	(B)	49,252
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
						ETWU Total	49,252
						Maximum Allowed Water Allowance (MAWA)[e]	58,946

[a]Hydrozone #/Planting Description
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b]Irrigation Method
overhead spray or drip
or drip

[c]Irrigation Efficiency
0.75 for spray head
0.81 for drip

[d]ETWU (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e]MAWA (Annual Gallons Allowed) =
(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.
44.2 x 0.62 x (0.45 x 4,780) = 58,946

ETAF Calculations
All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

Regular Landscape Area

Total ETAF x Area	(B)
Total Area	(A)
Sitewide ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas and 0.45 or below for non-residential areas.

LICENSED LANDSCAPE ARCHITECT
CHARLES WILSON
NO. 1682
Signature
Exp. 3-31-25
STATE OF CALIFORNIA

NO	DATE	REVISIONS
1	02.24.25	CITY COMMENTS AND COORDINATION

STARBUCKS

HAYWARD, CALIFORNIA

WILSON & ASSOCIATES
LANDSCAPE ARCHITECTURE
815 SAN DIEGO ROAD • BERKELEY, CA 94707
PH: 510-644-9602 • E: cwilson815@gmail.com

CONCEPTUAL IRRIGATION PLAN

BY: CW
JOB:
DATE: 12.11.24

L-2.0

SHT. ____ OF ____

REVISIONS