

LANDSCAPE ARCHITECTURE DRAWINGS FOR: ACME FAMILY APARTMENTS

1905 & 1885 SEBASTOPOL ROAD SANTA ROSA, CA 95407

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE HELD LIABLE FOR ALL DAMAGE INCURRED DURING CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN A CURRENT STRUCTURAL SOILS REPORT. THIS SOILS REPORT SHALL SUPERSEDE THE RECOMMENDATIONS AND DETAILS SHOWN ON THESE PLANS AND SPECIFICATIONS.
4. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SLEEVES AS INDICATED ON THE IRRIGATION PLANS WITH PAVING CONTRACTOR.
5. REFER TO SPECIFICATIONS FOR ACCEPTED STANDARDS OF MATERIALS AND WORKMANSHIP.
6. ALL FORMS AND ALIGNMENT OF HARDSCAPE ITEMS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO POURING. (CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO THE INSPECTION.)
7. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AND/OR GRADE DIFFERENCES WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
8. THE LOCATION OF FEATURES TO BE CONSTRUCTED, NOT SPECIFICALLY DIMENSIONED, MAY BE DETERMINED BY SCALE. VERIFY ALL SUCH CONDITIONS WITH OWNER'S NOTIFICATION.
9. ALL CURVE-TO-CURVE AND CURVE-TO-TANGENT LINES SHALL BE NEAT, TRIM, SMOOTH, AND UNIFORM.
10. ALL CONSTRUCTION AND INSTALLATION OF LANDSCAPE ITEMS SHALL BE PER LOCAL CODES AND ORDINANCES.
11. CONTRACTOR SHALL FULLY GUARANTEE ALL WORK FOR A ONE-YEAR PERIOD FROM OWNER'S ACCEPTANCE OF WORK.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR WEED ABATEMENT AS RECOMMENDED BY A LICENSED PEST CONTROL OPERATOR DURING THE CONTRACTOR'S MAINTENANCE PERIOD.
13. CONTRACTOR SHALL OBTAIN A CURRENT AGRONOMIC SOILS REPORT. THIS SOILS REPORT SHALL SUPERSEDE THE RECOMMENDATIONS AND DETAILS SHOWN ON THESE PLANS.
14. THE LANDSCAPE CONTRACTOR IS TO ENSURE THAT IRRIGATION AND DRAIN LINES ARE LOCATED AND INSTALLED SO THAT THE MATERIALS SHOWN ON THE PLANTING PLANS CAN BE ACCOMMODATED.
15. IF ANY CONCRETE WORK SHOWN ON THESE PLANS ABUTS WOOD SIDING ON BUILDINGS, INSTALL GALVANIZED METAL FLASHING TO PROTECT WOOD SIDING.
16. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION REFERENCED IN THE PLANS AND SPECIFICATIONS. ANY CONSTRUCTION NOT MEETING THE APPROVAL OF THE OWNER OR THE LANDSCAPE ARCHITECT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH ACCEPTABLE CONSTRUCTION.
17. ALL DIMENSIONS SHALL BE VERIFIED AGAINST EXISTING CONDITIONS AND ANY DISCREPANCIES REPORTED TO THE OWNER'S REPRESENTATIVE.

DIG ALERT:

CALIFORNIA STATE LAW SAYS YOU MUST CALL BEFORE YOU DIG. GOVERNMENT CODE SECTION 4216-42169 STATES THAT "EXCAVATION": GRADING, TRENCHING, DIGGING, DITCHING, DRILLING, AUGURING, TUNNELING, SCAPING, CABLE OR PIPE PLOWING, DRIVING, FOUNDATION DIGGING, LANDSCAPE DIGGING PLUMBING, FENCE POST OR ANY OTHER WAY. OUR PERMIT FOR DIGGING WILL NOT BE VALID WITHOUT A DIG ALERT TICKET NUMBER AND NOTIFICATION THAT THE MARKOUT HAS BEEN COMPLETED. THERE IS ALSO A 14-DAY WINDOW (SECTION 4216(E)) IN WHICH YOU MUST COMPLETE THE PROPOSED DIGGING. IF YOU WILL NEED ADDITIONAL TIME BEYOND THE 14 DAYS, IT IS YOUR RESPONSIBILITY TO RECALL DIG ALERT. DIG ALERT TOLL-FREE NUMBER IS 1.800.227.2600

ABBREVIATIONS:

ARCH.	ARCHITECT	LOW	LIMIT of WORK	TC	TOP of CURB
BOW	BACK of WALK	LP	LOW POINT	TG	TOP of GRATE
BS	BOTTOM of STEPS	MAX.	MAXIMUM	TS	TOP of STEPS
CB	CATCH BASIN	MIN.	MINIMUM	TW	TOP of WALL
CF	CURB FACE	NIC	NOT in CONTRACT	VERT.	VERTICAL
CJ	COLD JOINT	NTS	NOT to SCALE	W/	WITH
CL	CENTERLINE	OC	ON CENTER	W/O	WITHOUT
CMU	CONCRETE MASONRY UNIT	PA	PLANTING AREA	WWM	WELDED WIRE MESH
CO	CLEAN OUT	PERF.	PERFORATED		
COMP.	COMPACTED	POC	POINT of CONNECTION		
CONC.	CONCRETE	PL	PROPERTY LINE		
CONT.	CONTINUOUS	R	RADIUS		
DIA.	DIAMETER	REBAR	REINFORCING BAR		
EA.	EACH	SIM.	SIMILAR		
EJ	EXPANSION JOINT	SAD	SEE ARCHITECT DRAWING		
FOB	FACE of BUILDING	SCD	SEE CIVIL DRAWING		
FOW	FACE of WALL	SED	SEE ELECTRICAL DRAWING		
FFE	FINISH FLOOR ELEVATION	SIDD	SEE INTERIOR DESIGN DRAWING		
FG	FINISH GRADE	SL	SCORE LINE		
FL	FLOW LINE	SMB	SEE MATERIAL BOARD		
FS	FINISH SURFACE	SMD	SEE MECHANICAL DRAWING		
FTG	FOOTING	SP	SEE PLAN		
GC	GROUND COVER	SPD	SEE PLUMBING DRAWING		
HORIZ.	HORIZONTAL	SPS	SEE PAVING SCHEDULE		
HP	HIGH POINT	SQ	SQUARE		
ID	INSIDE DIAMETER	SSD	SEE STRUCTURAL DRAWING		
INV.	INVERT (ELEVATION)	SWD	SEE WATERPROOF DRAWING		
LA	LANDSCAPE ARCHITECT				

NOTE:

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF MJS DESIGN GROUP (A CALIFORNIA CORPORATION) AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY WRITTEN AUTHORIZATION FROM MJS DESIGN GROUP. WRITTEN DIMENSIONS TAKE PREFERENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF MJS DESIGN GROUP PRIOR TO COMMENCEMENT OF ANY WORK.

LEGAL DESCRIPTION

PROPERTY ADDRESS

1905 & 1885 SEBASTOPOL ROAD SANTA ROSA, CA 95407

NOTES

SHEETS:

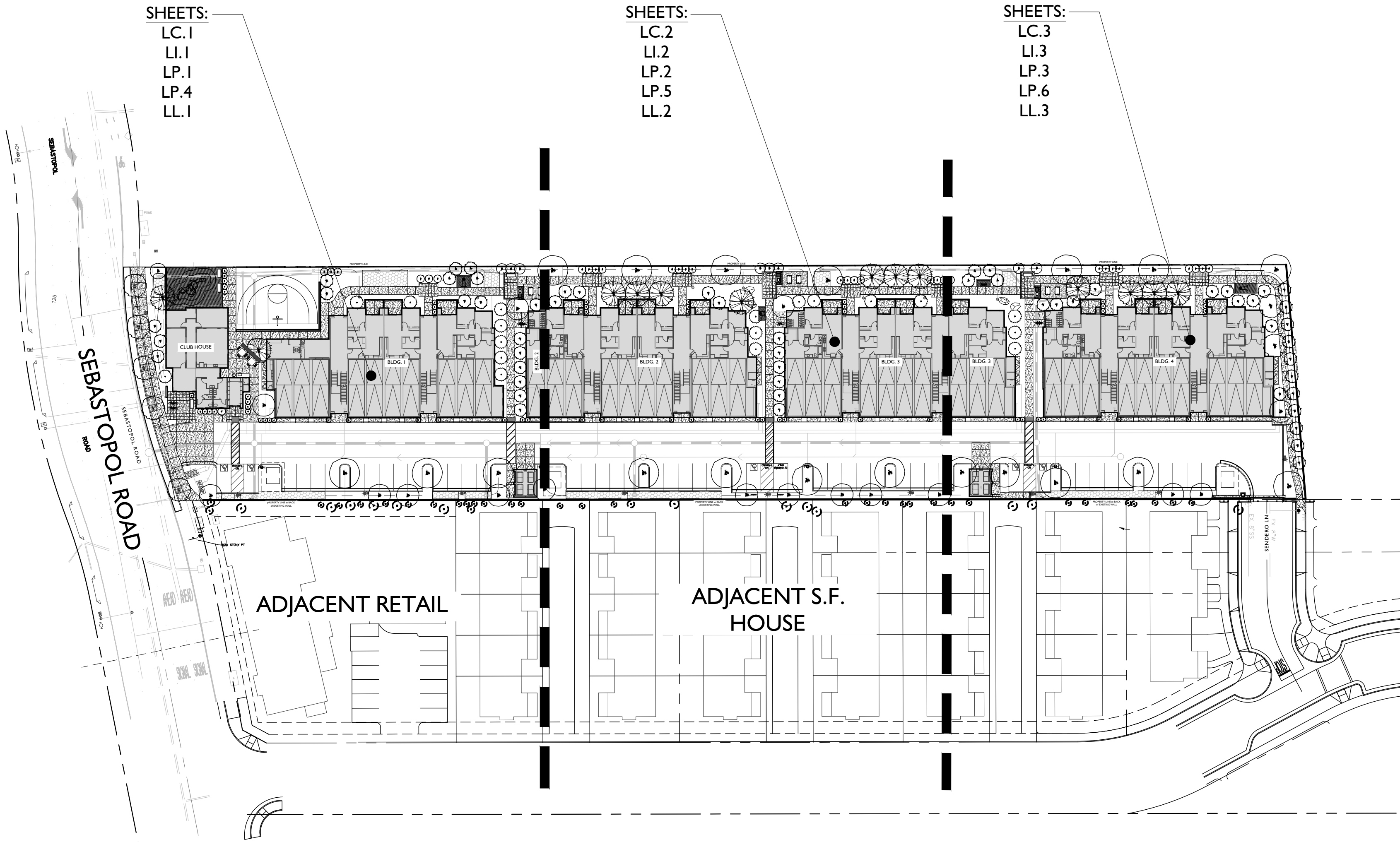
LC.1
LI.1
LP.1
LP.4
LL.1

SHEETS:

LC.2
LI.2
LP.2
LP.5
LL.2

SHEETS:

LC.3
LI.3
LP.3
LP.6
LL.3



SITE MAP

SCALE: 1" = 50'



LT.0	COVER SHEET
LUC.1 thru LUC.3	UTILITY COORDINATION PLAN
LC.A LC.B	CONSTRUCTION FINISH SCHEDULE and NOTES MATERIALS BOARD
LC.1 thru LC.3 LCD.4 thru LCD.9 LC.10	LANDSCAPE CONSTRUCTION PLANS LANDSCAPE CONSTRUCTION DETAILS LANDSCAPE CONSTRUCTION SPECIFICATIONS
NOT INCLUDED	STRUCTURAL LANDSCAPE DETAILS
LI.1 thru LI.3 LI.4 LI.5 LI.6 thru LI.7 LI.8 thru LI.9	IRRIGATION PLANS IRRIGATION LEGEND IRRIGATION NOTES & CALCULATIONS IRRIGATION DETAILS IRRIGATION SPECIFICATIONS
LP.1 thru LP.3 LP.4 thru LP.6 LP.7 LP.8	TREE PLANTING PLAN SHRUB PLANTING PLAN PLANTING DETAILS PLANTING SPECIFICATIONS
LL.1 thru LL.3	LANDSCAPE SITE LIGHTING "FOR COORDINATION ONLY"



VICINITY MAP

GOVERNING AGENCIES

OWNER:

MILESTONE HOUSING GROUP, LLC.
481 N SANTA CRUZ AVE.
LOS GATOS, CA 95030
PH: (727) 204-8128
CONTACT: MARCUS GRIFFIN
MARCUS@MILESTONEHOUSING.COM

STRUCTURAL & MEP:

GOUVIS ENGINEERING CONSULTING GROUP INC.
15 STUDEBAKER
IRVINE, CA 92618
PH: (949) 752-1612
CONTACT: HUAN NGUYEN
HNGUYEN@GOUVISGROUP.COM

ELECTRICAL:

GOUVIS ENGINEERING CONSULTING GROUP INC.
15 STUDEBAKER
IRVINE, CA 92618
PH: (949) 752-1612
CONTACT: MEDHI HOSSEINZADEH
MEDHI@GOUVISGROUP.COM

ARCHITECT:

KTGY GROUP, INC.
17911 VON KARMAN AVE.
IRVINE, CA 92614
PH: (949) 851-2133
CONTACT: MICHAEL SAENZ
MSAENZ@KTGY.COM

CIVIL ENGINEER:

CIVIL DESIGN CONSULTANTS, INC.
2200 RANGE AVE. SUITE 204
SANTA ROSA, CA 95403
PH: (707) 542-4820
CONTACT: DUSTIN MAXAM
DUSTIN@CIVILDESIGNCONSULTANTS.COM

INTERIOR:

PARISIS PORTFOLIO
616 SOUTH EL CAMINO REAL, #A
SAN CLEMENTE, CA 92672
PH: (858) 259-0031
CONTACT: JENNIFER GIFFEN
JENNY@PARISIPORTFOLIO.COM

CONSULTANT DIRECTORY

TOTAL SITE ACREAGE: 107,055 SQ. FT. = 2.46 ACRES
TOTAL HARDSCAPE AREA: 81,910 SQ. FT. = 1.80 ACRES
TOTAL LANDSCAPE AREA: 24,145 SQ. FT. = 0.58 ACRES

MAINTENANCE RESPONSIBILITY:

1. ALL LANDSCAPE AREAS TO BE OWNER MAINTAINED
2. LANDSCAPE CONTRACTOR TO PROVIDE MAINTENANCE SCHEDULE FOR COMMON AREAS

Issued for:

03/15/21 100% DESIGN DEVELOPMENT

Revisions:



NOT FOR
CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

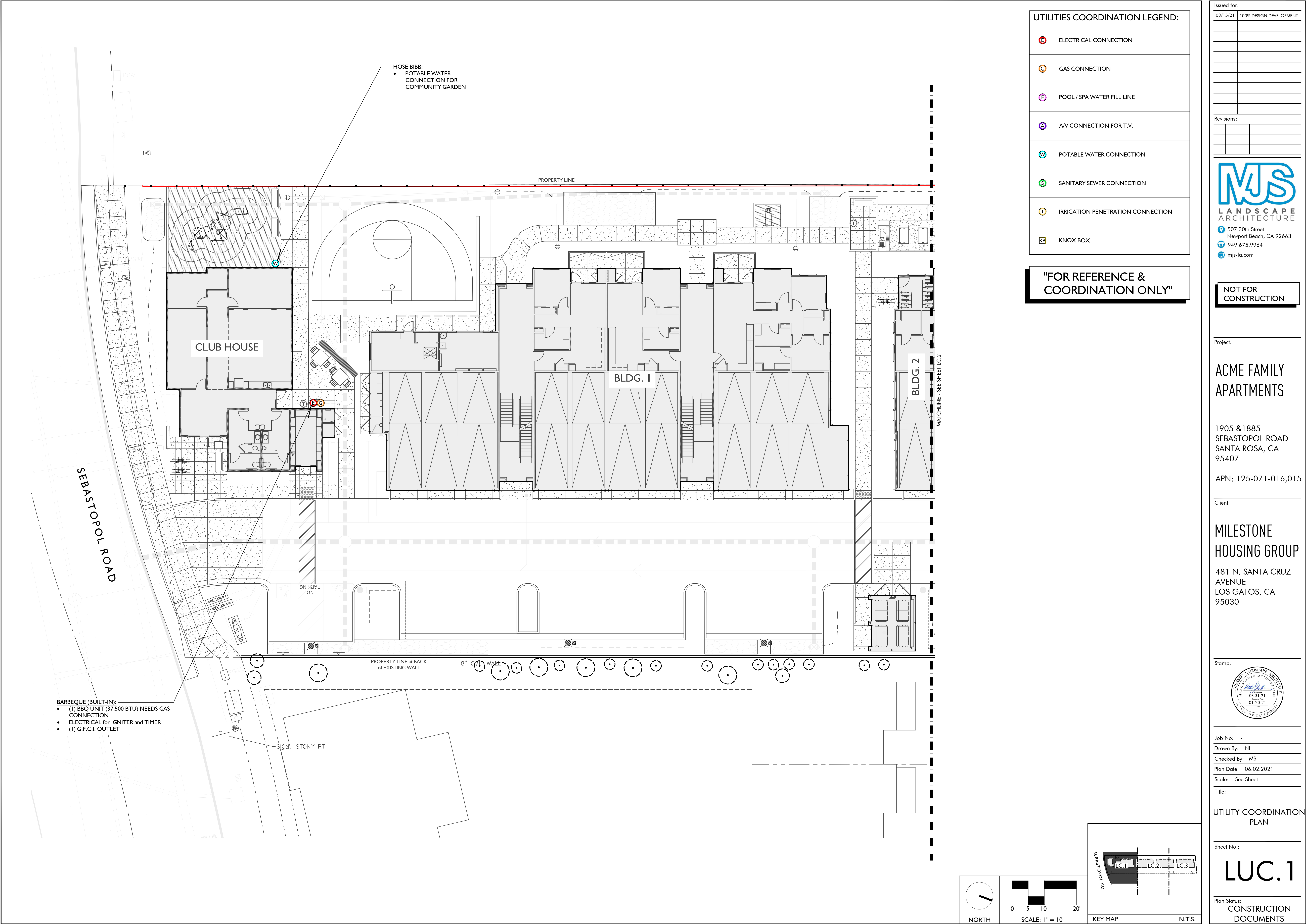
Title:

COVER SHEET

Sheet No.:

LT.0

Plan Status:
CONSTRUCTION
DOCUMENTS



Issued for:

03/15/21	100% DESIGN DEVELOPMENT

Revisions:

MJS

LANDSCAPE ARCHITECTURE

507 30th Street
Newport Beach, CA 92663

949.675.9964

mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA
95030

Stamp:

LEGEND LANDSCAPE ARCHITECTURE
MILESTONE HOUSING GROUP
03-31-21
01-20-21
N.T.S.

Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

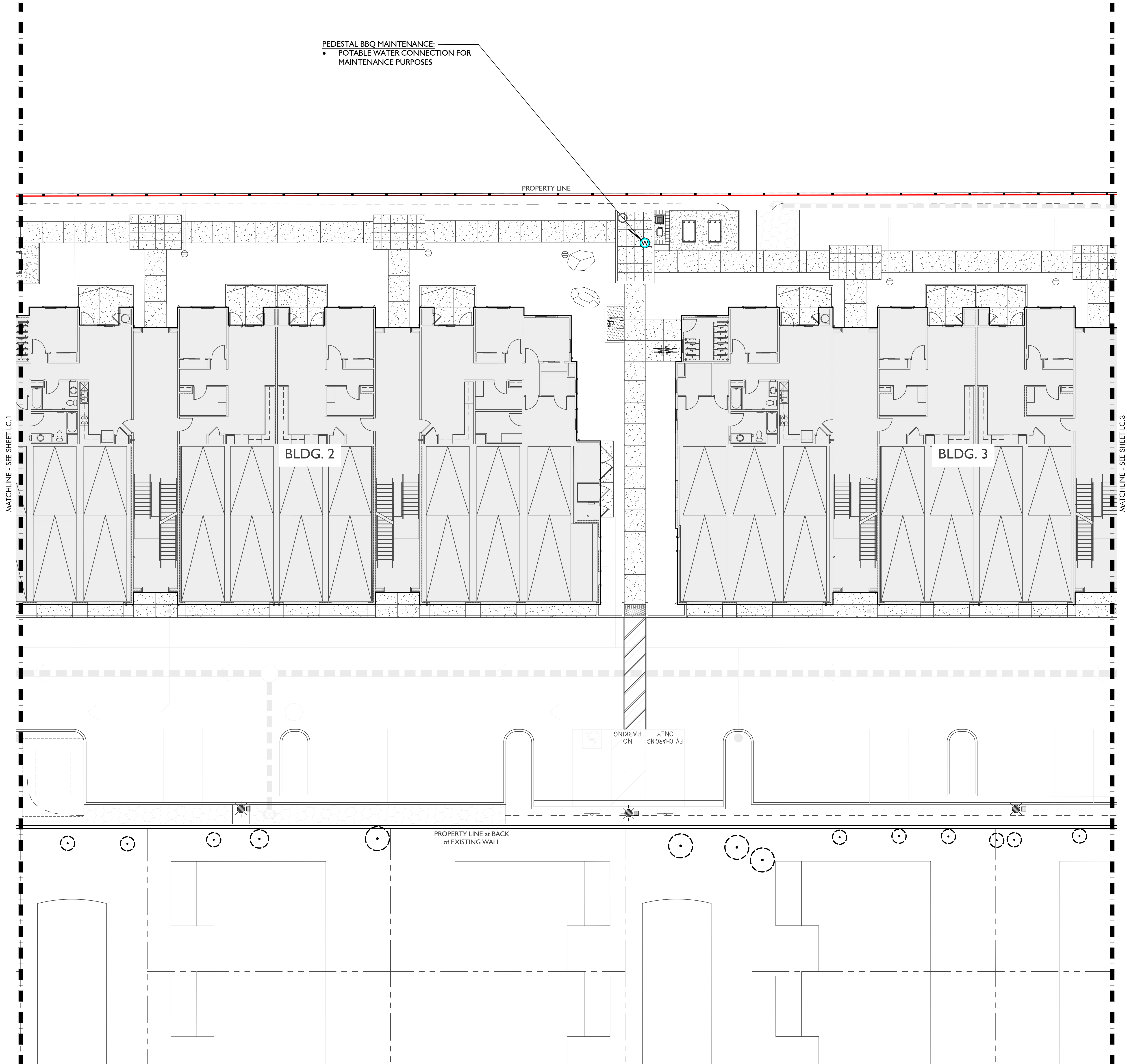
Title:

UTILITY COORDINATION PLAN

Sheet No.:

LUC.1

Plan Status:
CONSTRUCTION DOCUMENTS



UTILITIES COORDINATION LEGEND:

E	ELECTRICAL CONNECTION
G	GAS CONNECTION
F	POOL / SPA WATER FILL LINE
A	A/V CONNECTION FOR T.V.
W	POTABLE WATER CONNECTION
S	SANITARY SEWER CONNECTION
I	IRRIGATION PENETRATION CONNECTION
KB	KNOX BOX

"FOR REFERENCE &
COORDINATION ONLY"

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030



Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

UTILITY COORDINATION
PLAN

Sheet No.:

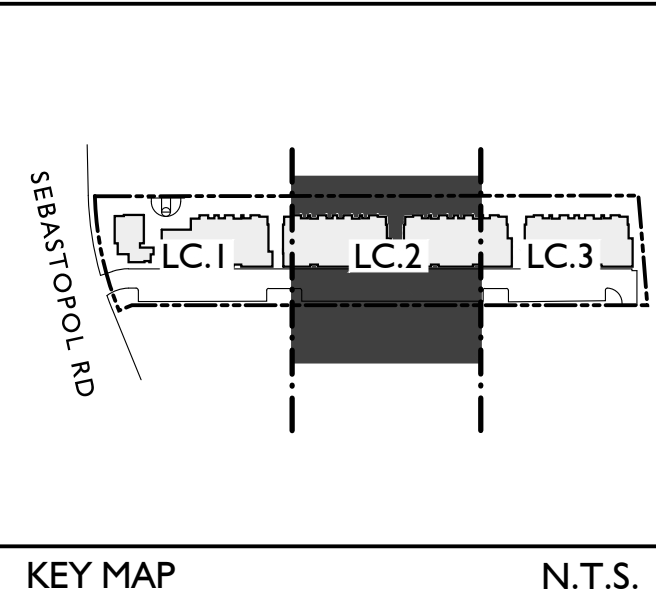
LUC.2

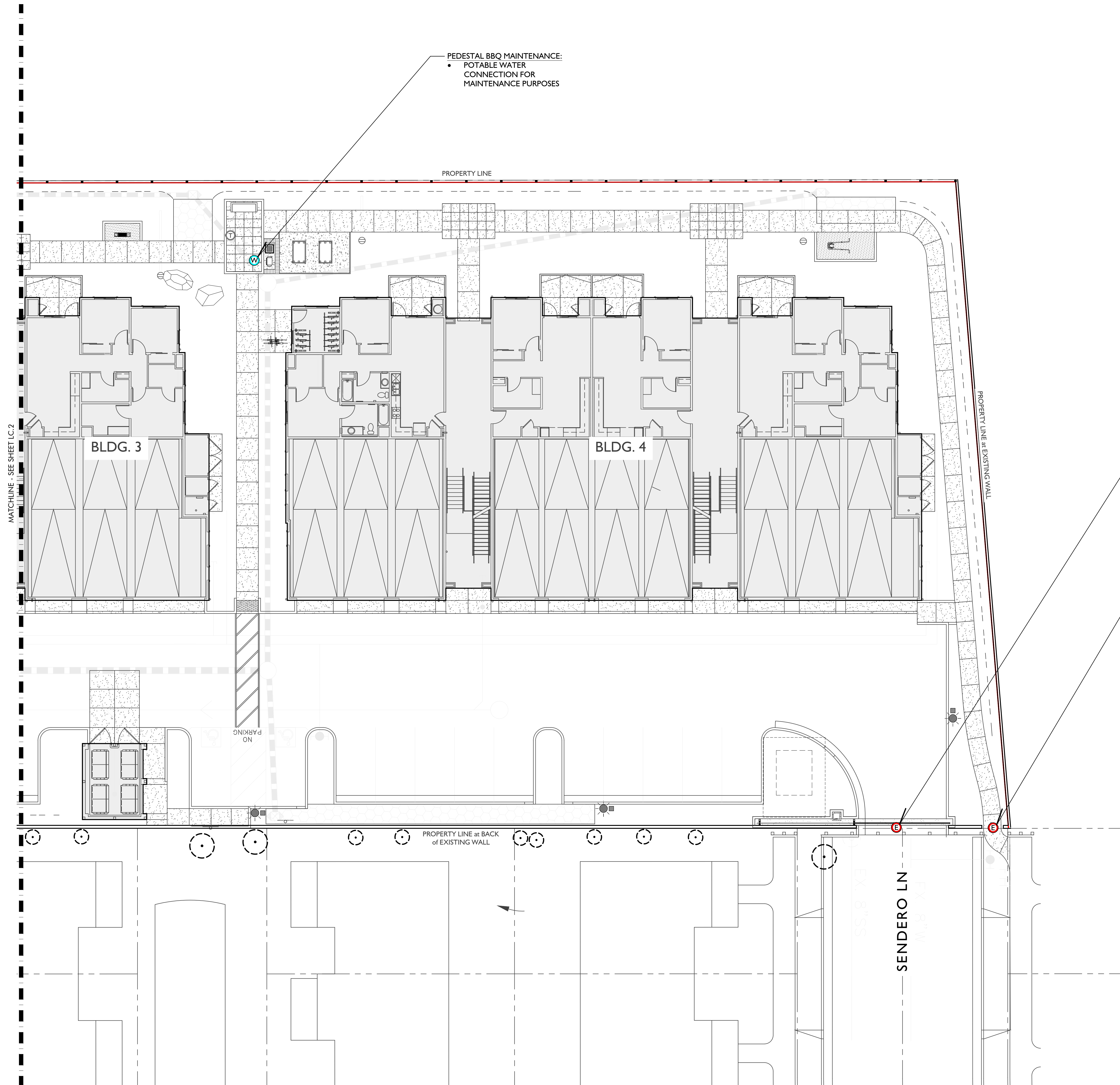
Plan Status:
CONSTRUCTION
DOCUMENTS

NORTH

SCALE: 1" = 10'

0 5' 10' 20'





UTILITIES COORDINATION LEGEND:

E	ELECTRICAL CONNECTION
G	GAS CONNECTION
F	POOL / SPA WATER FILL LINE
A	AV CONNECTION FOR T.V.
W	POTABLE WATER CONNECTION
S	SANITARY SEWER CONNECTION
I	IRRIGATION PENETRATION CONNECTION
KB	KNOX BOX

"FOR REFERENCE &
COORDINATION ONLY"

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

MJS
LANDSCAPE
ARCHITECTURE
507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

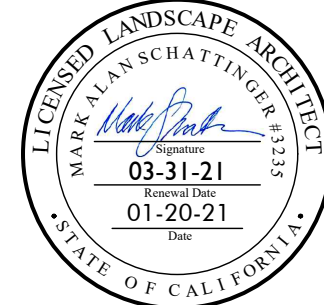
APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

UTILITY COORDINATION
PLAN

Sheet No.:

LUC.3

Plan Status:
CONSTRUCTION
DOCUMENTS

NORTH
SCALE: 1" = 10'
0 5' 10' 20'

KEY MAP
N.T.S.

CONSTRUCTION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL NOT WILFULLY PROCEED WITH CONSTRUCTION WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND / OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNERS AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
3. CONTRACTOR SHALL OBTAIN A CURRENT STRUCTURAL SOILS REPORT. THIS SOILS REPORT SHALL SUPERSEDE THE RECOMMENDATIONS AND DETAILS SHOWN ON THESE PLANS AND SPECIFICATIONS.
4. THE LOCATION OF FEATURES TO BE CONSTRUCTED, NOT SPECIFICALLY DIMENSIONED MAY BE DETERMINED BY SCALE. VERIFY ALL SUCH CONDITIONS WITH OWNERS REPRESENTATIVE.
5. ALL CURVE-TO-CURVE AND CURVE-TO-TANGENT LINES SHALL BE NEAT, TRIM, SMOOTH, AND UNIFORM.
6. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL SLEEVES AS INDICATED ON THE IRRIGATION PLANS WITH PAVING CONTRACTOR.
7. ALL FORMS AND ALIGNMENT OF HARDSCAPE ITEMS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO POURING. (CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO THE INSPECTION.)

MASONRY WALL NOTES

1. THE CONTRACTOR SHALL GROUT ALL CELLS WITH STEEL REINFORCING SOLID. IF RETAINING SOIL GROUT ALL CELLS SOLID.
2. THE CONTRACTOR SHALL CONSTRUCT WALLS PLUMB AND TRUE, STEP FOOTINGS IN EVEN BLOCK INCREMENTS.
3. THE CONTRACTOR SHALL ALLOW FOR ADJOINING CONSTRUCTION.
4. ALL FOOTINGS SHALL BE POURED ON UNDISTURBED NATURAL SOIL. ON COMPACTED FILL, PREPARE PER STRUCTURAL SOILS REPORT.
5. ALL FREESTANDING WALLS SHALL HAVE A MINIMUM OF 40 BAR DIAMETERS OVERLAP AT SPLICES. ALL RETAINING WALL SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS.
6. DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO VERTICAL BARS UNLESS OTHERWISE NOTED.
7. REFER TO FINISH SCHEDULE FOR ALL WALL FINISHES.

PAVER NOTES:

PAVER LAYOUT SHALL BE DETERMINED BY LIMITING THE AMOUNT OF CUTS MADE TO THE LONG SIDE OF THE PAVER. IN ORDER TO MINIMIZE "SLIVER" PIECES.

PAVER SHALL BE CLEAN AND FREE FROM FOREIGN MATERIALS BEFORE INSTALLATION.

INSTALLATION SHOULD START FROM A CORNER OR STRAIGHT EDGE AND PROCEED FORWARD OVER THE UNDISTURBED SAND LAYING COURSE.

PAVING WORK SHALL BE PLUMB, LEVEL, AND TRUE TO LINE GRADE; SHALL BE INSTALLED PROPERLY, COINCIDE AND ALIGN, WITH ADJACENT WORK AND ELEVATIONS.

PAVING STONES SHOULD BE INSTALLED HAND TIGHT ON THE UNDISTURBED SAND LAYING COURSE. STRING LINES SHOULD BE USED TO HOLD PATTERN LINES TRUE.

GAPS BETWEEN THE EDGE OF THE PAVER SURFACE SHALL BE FILLED WITH STANDARD PAVERS OR WITH PAVERS CUT TO FIT. CUT PAVERS SHOULD BE NO SMALLER THAN ONE THIRD THE SIZE OF FULL PAVERS. CARE SHOULD BE TAKEN WHEN ESTABLISHING THE LAYING PATTERN TO INSURE THAT LESS THAN ONE THIRD PAVERS ARE MINIMIZED.

PAVERS ARE SET INTO THE SAND LAYING COURSE BY ROLLER OR PLATE VIBRATOR CAPABLE OF 3,000 TO 5,000 COMPACTION FORCE. VIBRATION SHALL BE CONDUCTED IN CROSSING PATHS UNTIL THE PAVEMENT SURFACE IS SMOOTH AND REQUIRED ELEVATION IS ACHIEVED. GAPS BETWEEN PAVERS SHOULD AT THIS POINT SHOULD BE FILLED TO ABOUT TWO THIRDS OF THE PAVERS FULL HEIGHT. GAPS BETWEEN EDGES SHOULD BE NO MORE THAN 3/16" WIDE AFTER VIBRATION. GAPS GREATER THAN 3/16" SUGGEST THAT LESS THAN SATISFACTORY INTERLOCK WILL BE ACHIEVED. PAVERS WITHIN THREE FEET OF UNRESTRAINED EDGES MUST NOT BE COMPACTED.

ONCE PAVERS ARE VIBRATED INTO PLACE. CLEAN, DRY SAND SHALL BE BROOMED OVER THE PAVEMENT SURFACE AND VIBRATED ONCE MORE INTO THE REMAINING UNFILLED GAPS BETWEEN PAVERS TO THE HEIGHT OF THE JOINT BEVEL. SURPLUS SAND SHOULD BE SWEPT FROM THE PAVEMENT SURFACE AND DISPOSED OF.

THE COMPLETED PAVING STONE INSTALLATION SHOULD BE WASHED DOWN AND CLEANED TO PROVIDE A CLEAN FINISHED WORKMANLIKE INSTALLATION.

LIST OF INSPECTIONS





- THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE 48 HOURS IN ADVANCE OF, AND COORDINATE, THE FOLLOWING INSPECTIONS (BUT NOT LIMITED TO):
1. PRE-JOB CONFERENCE.
2. AT COMPLETION OF FINISH GRADING.
3. LAYOUT OF SHOVEL CUTS BUT PRIOR TO INSTALLATION.
4. LAYOUT OF PAVING BUT PRIOR TO INSTALLATION.
5. LAYOUT OF WALLS AND PILASTERS BUT PRIOR TO INSTALLATION.
6. DURING ENTIRE IRRIGATION INSTALLATION TO VERIFY AND INSPECT THE FOLLOWING (BUT NOT LIMITED TO):

a. POINT OF CONNECTIONS
b. BACKFLOW PREVENTION DEVICES
c. TRENCHING FOR PIPES
d. ELECTRICAL CONNECTIONS
e. CONTROL VALVES
f. COVERAGE
7. AT DELIVERY OF ALL PLANT MATERIALS TO THE SITE.
8. WHEN TREES AND SHRUBS ARE SPACED FOR PLANTING BUT BEFORE HOLES ARE EXCAVATED.
9. AT PRE-MAINTENANCE INSPECTION.
10. AT FINAL INSPECTION.

PAVING NOTES

1. THE CONTRACTOR SHALL VERIFY WITH PROJECT STRUCTURAL SOILS ENGINEER THE NEED FOR REINFORCING, BASE MATERIALS, PRESATURATION, AND OTHER REQUIREMENTS FOR PAVING AREAS.
2. ALL CONCRETE PAVING SECTIONS SHALL BE A MINIMUM OF 3 1/2" THICK UNLESS OTHERWISE NOTED.
3. PAVING AND CONCRETE CONTRACTOR(S) SHALL COORDINATE HIS WORK WITH ELECTRICIAN, DRAIN LINE CONTRACTOR AND IRRIGATION CONTRACTOR FOR SLEEVING, PIPING, AND CONDUIT UNDER ALL PAVING AS REQUIRED.
4. THE CONTRACTOR SHALL HOLD FINISH GRADE (1") INCH BELOW FINISH SURFACE.
5. THE CONTRACTOR SHALL SLOPE ALL FINISH SURFACE AREAS A MINIMUM OF ONE PERCENT. UNLESS NOTED OTHERWISE.
6. ALL WALKS SHALL HAVE CROSS FALL OF ONE PERCENT MINIMUM.
7. REFER TO FINISH SCHEDULE FOR CONCRETE FINISH.
8. ALL WALK INTERSECTIONS SHALL BE 90 DEGREES UNLESS NOTED OTHERWISE.
9. ALL RADII AT WALK INTERSECTIONS SHALL BE 36" UNLESS NOTED OTHERWISE.
10. FULL DEPTH EXPANSION JOINTS ARE TO BE SPACED AT MAXIMUM 20' O.C., SCORE LINES TO BE MAXIMUM 10' O.C.
11. ALL FORMS AND ALIGNMENT OF PAVING SHALL BE INSPECTED AND CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO INSPECTION.
12. REFER TO PRECISE GRADING PLAN FOR FINISH GRADES AND DRAINAGE.

PAVING SCHEDULE

SYMBOL	ITEM	MANUFACTURER	COLOR / FINISH	COMMENTS	IMAGE
A	CONCRETE PAVING	N.A.	COLOR: NATURAL GRAY FINISH: TOPCAST 3	<ul style="list-style-type: none">INSTALL PER MANUFACTURER'S RECOMMENDATIONSSAWCUTS PER PLAN	
B	SYNTHETIC TURF IMPERIAL FESCUE	IMPERIAL SYNTHETIC TURF CONTACT: HENRY VAN ANTWERP 561.346.5973	IMPERIAL FESCUE 47	<ul style="list-style-type: none">SEE DETAIL FOR ASSEMBLY - INSTALL PER MANUFACTURER'S RECOMMENDATIONS INCLUDING FILL.INSTALL PER DETAIL F, LCD.4	
C	BASKETBALL COURT SURFACING	DECO TURF PH. (978) 623 - 9980	COLOR: ROYAL BLUE ADOBE TAN (LINES) FINISH: STANDARD	<ul style="list-style-type: none">INSTALL PER MANUFACTURER'S RECOMMENDATIONSSEE DETAIL D, LCD.7SEAL PER MANUFACTURERS RECOMMENDATIONS	
D	STABILIZED DECOMPOSED GRANITE	SOUTHWEST BOULDER & STONE PH.: (760) 451 - 3333 CONTACT: ERIKA TREPTOW	DESERT GOLD DECOMPOSED GRANITE	<ul style="list-style-type: none">INSTALL per MANUFACTURER'S RECOMMENDATIONS	

NOTES: CONTRACTOR TO PROVIDE 5' X 5' MOCK-UP OF ALL PAVING FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:



LANDSCAPE
ARCHITECTURE

 507 30th Street
Newport Beach, CA 92663

 949.675.9964

 mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 &1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:

Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

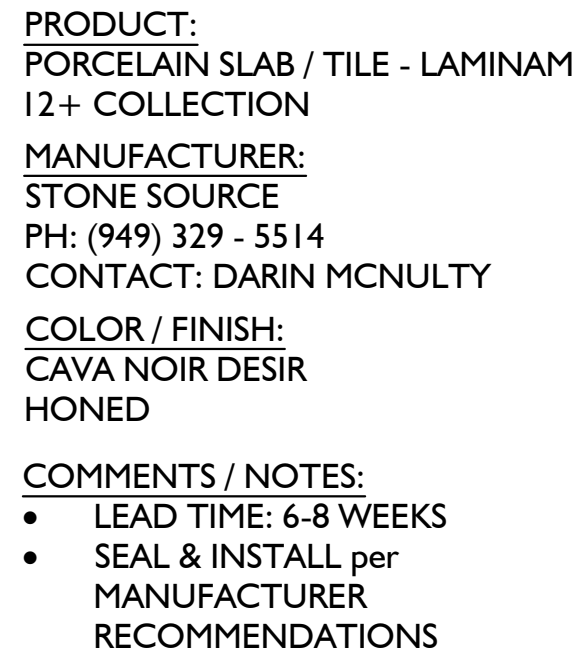
Title:

CONSTRUCTION NOTES
& PAVING SCHEDULE

Sheet No.:

LC.A

Plan Status:
CONSTRUCTION
DOCUMENTS

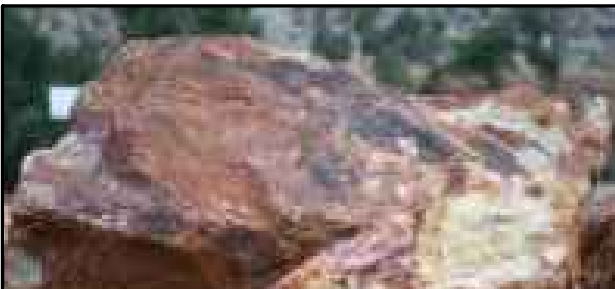


PRODUCT:
WOOD FENCE COLOR FINISH

MANUFACTURER:
SHERWIN - WILLIAMS

COLOR / FINISH:
SEALSKIN SW 7675

Ⓐ WOOD FENCE COLOR



PRODUCT:
3" BOULDER

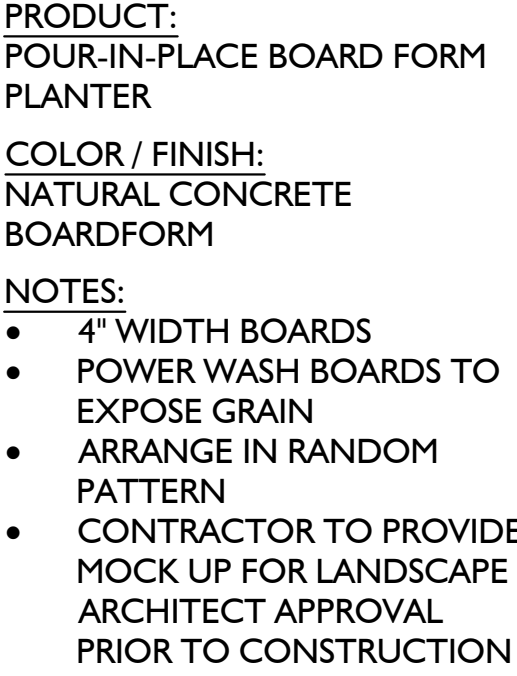
MANUFACTURER:
SOUTHWEST BOULDER & STONE

COLOR / FINISH:
BAJA CRESTA BOULDER

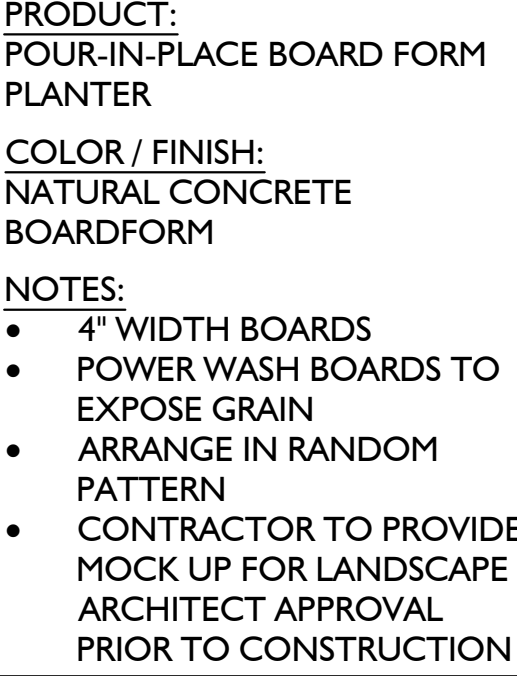
NOTES:

- LEAD TIME: 8 - 10 WEEKS
- INSTALL PER DETAIL F, LCD.7
- PRODUCT TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION

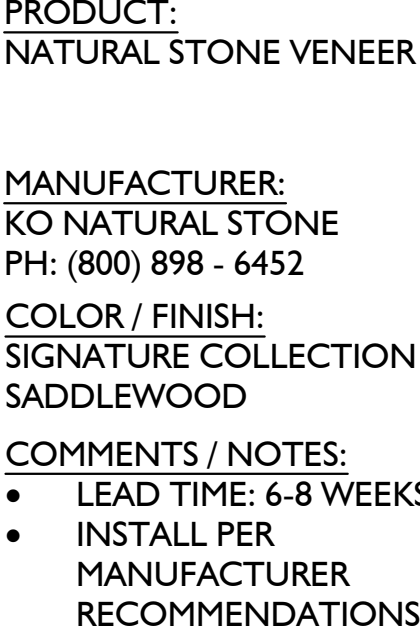
Ⓑ BOULDERS



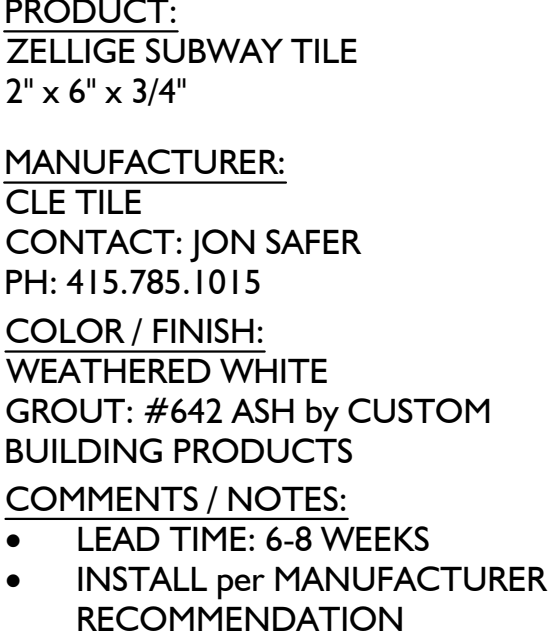
© CONCRETE WALL FINISH at
PEDESTAL BBQ



④ RETAINING WALL FINISH at BASKETBALL COURT



ISH



⑦ TILE CLADDING at BBQ

Revisions:		



NOT FOR
CONSTRUCTION

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

MILESTONE HOUSING GROUP

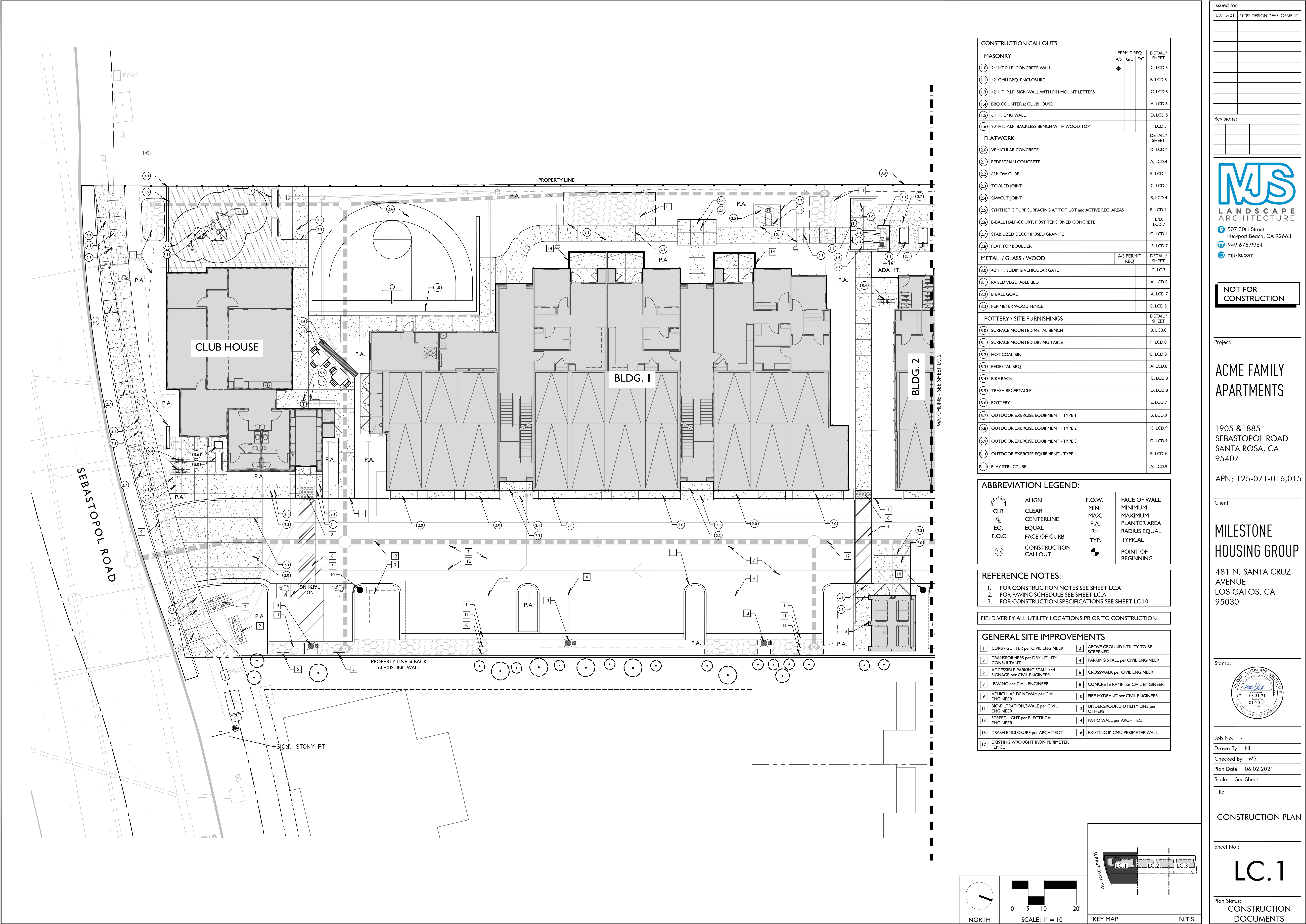
481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Title:

MATERIALS BOARD

LC.B

Plan Status:
CONSTRUCTION
DOCUMENTS



CONSTRUCTION CALLOUTS:			
MASONRY			PERMIT REQ A/S G/C E/C
(10)	24" HT P.I.P. CONCRETE WALL	*	G, LCD.5
(11)	42" CMU BBQ ENCLOSURE		B, LCD.5
(13)	42" HT. P.I.P. SIGN WALL WITH PIN MOUNT LETTERS		C, LCD.5
(14)	BBQ COUNTER at CLUBHOUSE		A, LCD.6
(15)	6" HT. CMU WALL		D, LCD.5
(16)	20" HT. P.I.P. BACKLESS BENCH WITH WOOD TOP		F, LCD.5
FLATWORK			DETAIL/ SHEET
(20)	VEHICULAR CONCRETE		D, LCD.4
(21)	PEDESTRIAN CONCRETE		A, LCD.4
(22)	6" MOW CURB		E, LCD.4
(23)	TOOLED JOINT		C, LCD.4
(24)	SAWCUT JOINT		B, LCD.4
(25)	SYNTHETIC TURF SURFACING AT TOT LOT and ACTIVE REC. AREAS		F, LCD.4
(26)	B-BALL HALF-COURT, POST TENSIONED CONCRETE		B/D, LCD.7
(27)	STABILIZED DECOMPOSED GRANITE		G, LCD.4
(28)	FLAT TOP BOULDER		F, LCD.7
METAL / GLASS / WOOD			A/S PERMIT REQ
(30)	42" HT. SLIDING VEHICULAR GATE		C, LC.7
(31)	RAISED VEGETABLE BED		A, LCD.5
(32)	B-BALL GOAL		A, LCD.7
(33)	PERIMETER WOOD FENCE		E, LCD.5
POTTERY / SITE FURNISHINGS			DETAIL/ SHEET
(50)	SURFACE MOUNTED METAL BENCH		B, LCD.8
(51)	SURFACE MOUNTED DINING TABLE		F, LCD.8
(52)	HOT COAL BIN		E, LCD.8
(53)	PEDESTAL BBQ		A, LCD.8
(54)	BIKE RACK		C, LCD.8
(55)	TRASH RECEPTACLE		D, LCD.8
(56)	POTTERY		E, LCD.7
(57)	OUTDOOR EXERCISE EQUIPMENT - TYPE 1		B, LCD.9
(58)	OUTDOOR EXERCISE EQUIPMENT - TYPE 2		C, LCD.9
(59)	OUTDOOR EXERCISE EQUIPMENT - TYPE 3		D, LCD.9
(60)	OUTDOOR EXERCISE EQUIPMENT - TYPE 4		E, LCD.9
(61)	PLAY STRUCTURE		A, LCD.9

ABBREVIATION LEGEND:			
	ALIGN CLR C EQ. F.O.C.		FACE OF WALL MINIMUM MAX. P.A. R= TYP. POINT OF BEGINNING
	CONSTRUCTION CALLOUT		

REFERENCE NOTES:	
1.	FOR CONSTRUCTION NOTES SEE SHEET LC.A
2.	FOR PAVING SCHEDULE SEE SHEET LC.A
3.	FOR CONSTRUCTION SPECIFICATIONS SEE SHEET LC.10

FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION

GENERAL SITE IMPROVEMENTS			
1	CURB / GUTTER per CIVIL ENGINEER	2	ABOVE GROUND UTILITY TO BE SCREENED
3	TRANSFORMERS per DRY UTILITY CONSULTANT	4	PARKING STALL per CIVIL ENGINEER
5	ACCESSIBLE PARKING STALL and SIGNAGE per CIVIL ENGINEER	6	CROSSWALK per CIVIL ENGINEER
7	PAVING per CIVIL ENGINEER	8	CONCRETE RAMP per CIVIL ENGINEER
9	VEHICULAR DRIVEWAY per CIVIL ENGINEER	10	FIRE HYDRANT per CIVIL ENGINEER
11	BIO-FILTRATION/SWALE per CIVIL ENGINEER	12	UNDERGROUND UTILITY LINE per OTHERS
13	STREET LIGHT per ELECTRICAL ENGINEER	14	PATIO WALL per ARCHITECT
15	TRASH ENCLOSURE per ARCHITECT	16	EXISTING 8" CMU PERIMETER WALL
17	EXISTING WROUGHT IRON PERIMETER FENCE		

NORTH

SCALE: 1" = 10'

KEY MAP

N.T.S.

Issued for:

03/15/21	100% DESIGN DEVELOPMENT

Revisions:

MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

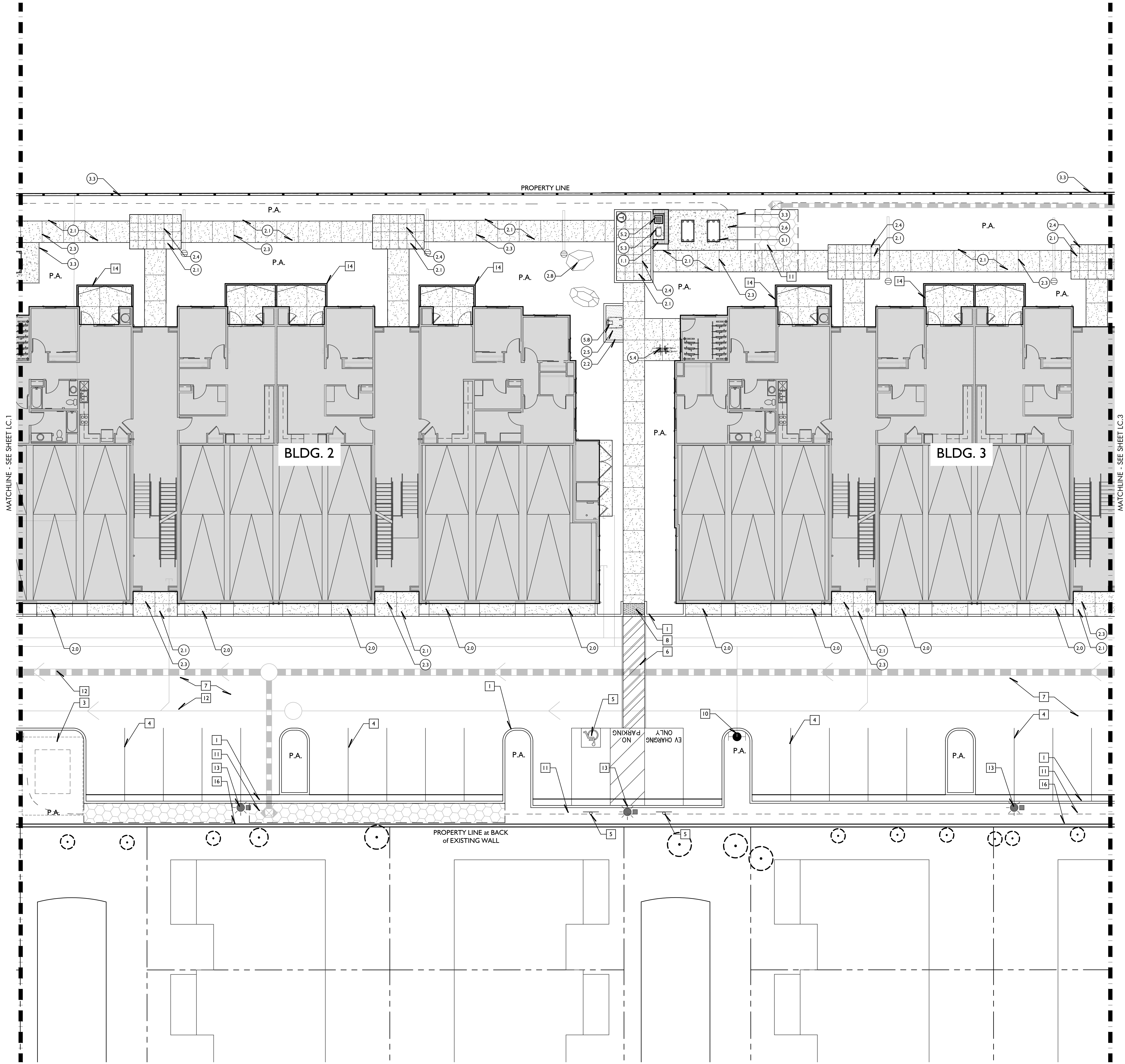
Stamp:

Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

CONSTRUCTION PLAN

Sheet No.:
LC.1

Plan Status:
CONSTRUCTION
DOCUMENTS



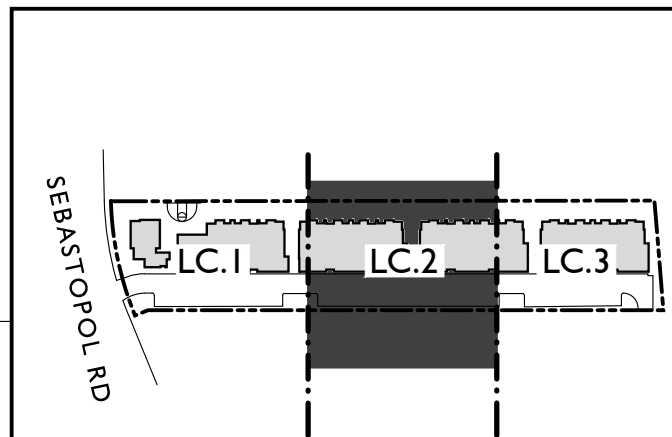
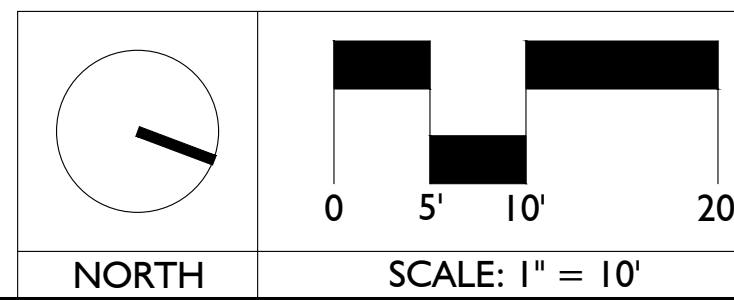
CONSTRUCTION CALLOUTS:			
MASONRY			DETAIL / SHEET
(10)	24' HT P.I.P. CONCRETE WALL	A/S	G, LCD.5
(11)	42' CMU BBQ ENCLOSURE	*	B, LCD.5
(13)	42' HT. P.I.P. SIGN WALL WITH PIN MOUNT LETTERS		C, LCD.5
(14)	BBQ COUNTER at CLUBHOUSE		A, LCD.6
(15)	6' HT. CMU WALL		D, LCD.5
(16)	20' HT. P.I.P. BACKLESS BENCH WITH WOOD TOP		F, LCD.5
FLATWORK			DETAIL / SHEET
(20)	VEHICULAR CONCRETE		D, LCD.4
(21)	PEDESTRIAN CONCRETE		A, LCD.4
(22)	6' MOW CURB		E, LCD.4
(23)	TOOLED JOINT		C, LCD.4
(24)	SAWCUT JOINT		B, LCD.4
(25)	SYNTHETIC TURF SURFACING AT TOT LOT and ACTIVE REC. AREAS		F, LCD.4
(26)	B-BALL HALF-COURT, POST TENSIONED CONCRETE		B/D, LCD.7
(27)	STABILIZED DECOMPOSED GRANITE		G, LCD.4
(28)	FLAT TOP BOULDER		F, LCD.7
METAL / GLASS / WOOD			DETAIL / SHEET
(30)	42' HT. SLIDING VEHICULAR GATE	A/S PERMIT REQ	C, LC.7
(31)	RAISED VEGETABLE BED		A, LCD.5
(32)	B-BALL GOAL		A, LCD.7
(33)	PERIMETER WOOD FENCE		E, LCD.5
POTTERY / SITE FURNISHINGS			DETAIL / SHEET
(50)	SURFACE MOUNTED METAL BENCH		B, LCD.8
(51)	SURFACE MOUNTED DINING TABLE		F, LCD.8
(52)	HOT COAL BIN		E, LCD.8
(53)	PEDESTAL BBQ		A, LCD.8
(54)	BIKE RACK		C, LCD.8
(55)	TRASH RECEPTACLE		D, LCD.8
(56)	POTTERY		E, LCD.7
(57)	OUTDOOR EXERCISE EQUIPMENT - TYPE 1		B, LCD.9
(58)	OUTDOOR EXERCISE EQUIPMENT - TYPE 2		C, LCD.9
(59)	OUTDOOR EXERCISE EQUIPMENT - TYPE 3		D, LCD.9
(60)	OUTDOOR EXERCISE EQUIPMENT - TYPE 4		E, LCD.9
(61)	PLAY STRUCTURE		A, LCD.9

ABBREVIATION LEGEND:			
CLR	ALIGN	F.O.W.	FACE OF WALL
C	CLEAR CENTERLINE	MIN.	MINIMUM
EQ.	EQUAL	MAX.	MAXIMUM
F.O.C.	FACE OF CURB	P.A.	PLANTER AREA
5.4	CONSTRUCTION CALLOUT	R=	RADIUS EQUAL
		TYP.	TYPICAL
			POINT OF BEGINNING

REFERENCE NOTES:	
1.	FOR CONSTRUCTION NOTES SEE SHEET LC.A
2.	FOR PAVING SCHEDULE SEE SHEET LC.A
3.	FOR CONSTRUCTION SPECIFICATIONS SEE SHEET LC.10

FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION

GENERAL SITE IMPROVEMENTS			
1	CURB / GUTTER per CIVIL ENGINEER	2	ABOVE GROUND UTILITY TO BE SCREENED
3	TRANSFORMERS per DRY UTILITY CONSULTANT	4	PARKING STALL per CIVIL ENGINEER
5	ACCESSIBLE PARKING STALL and SIGNAGE per CIVIL ENGINEER	6	CROSSWALK per CIVIL ENGINEER
7	PAVING per CIVIL ENGINEER	8	CONCRETE RAMP per CIVIL ENGINEER
9	VEHICULAR DRIVEWAY per CIVIL ENGINEER	10	FIRE HYDRANT per CIVIL ENGINEER
11	BIO-FILTRATION/SWALE per CIVIL ENGINEER	12	UNDERGROUND UTILITY LINE per OTHERS
13	STREET LIGHT per ELECTRICAL ENGINEER	14	PATIO WALL per ARCHITECT
15	TRASH ENCLOSURE per ARCHITECT	16	EXISTING 8" CMU PERIMETER WALL
17	EXISTING WROUGHT IRON PERIMETER FENCE		



Issued for:

03/15/21 100% DESIGN DEVELOPMENT

Revisions:



NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

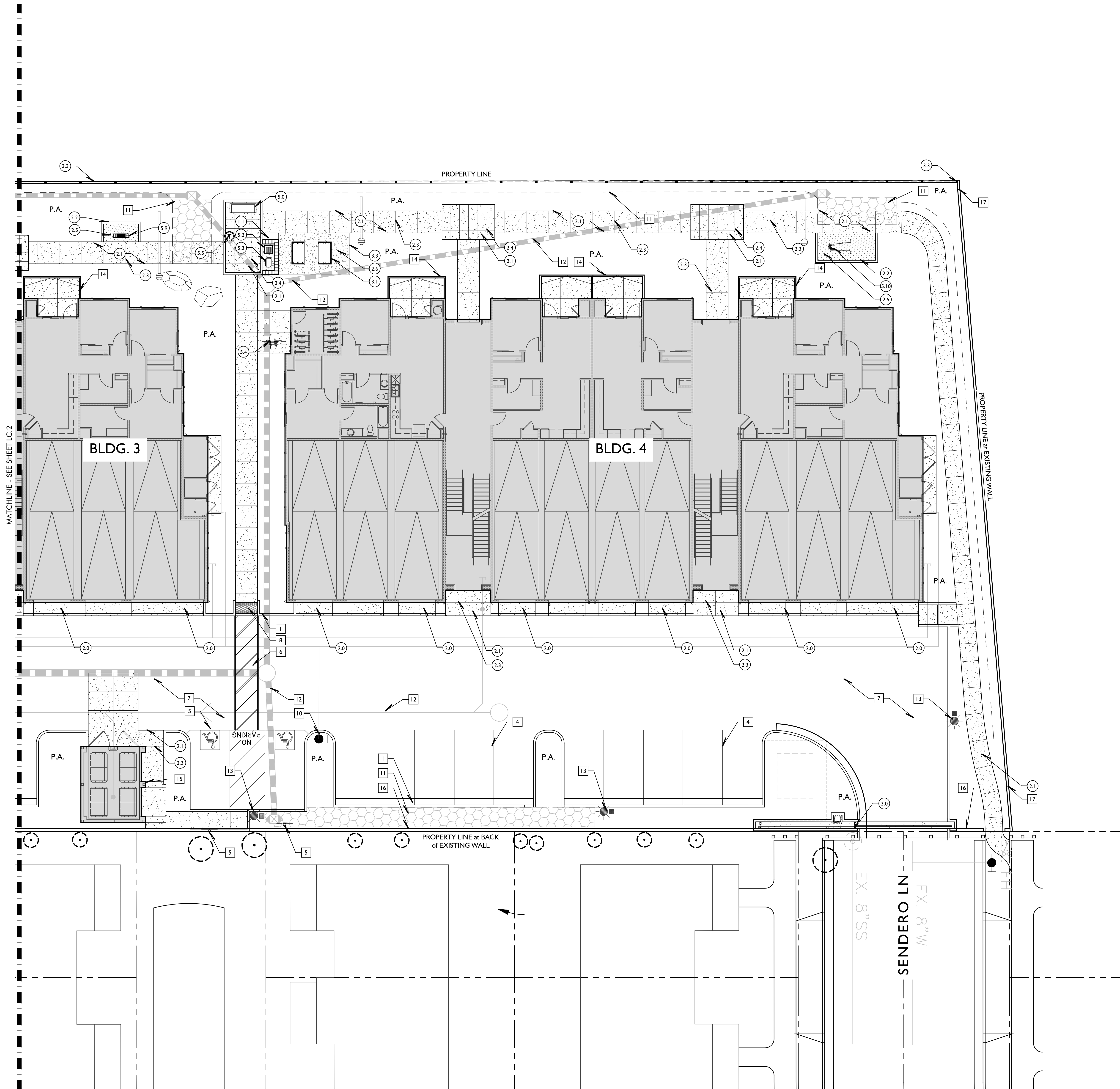
Title:

CONSTRUCTION PLAN

Sheet No.:

LC.2

Plan Status:
CONSTRUCTION DOCUMENTS



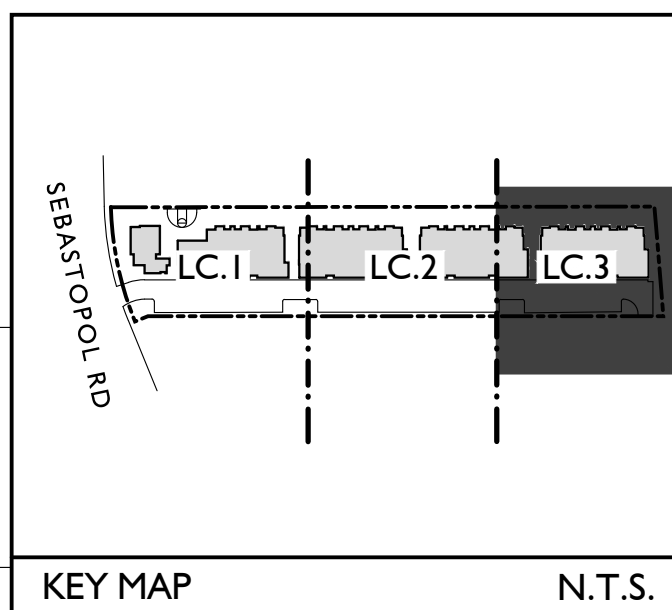
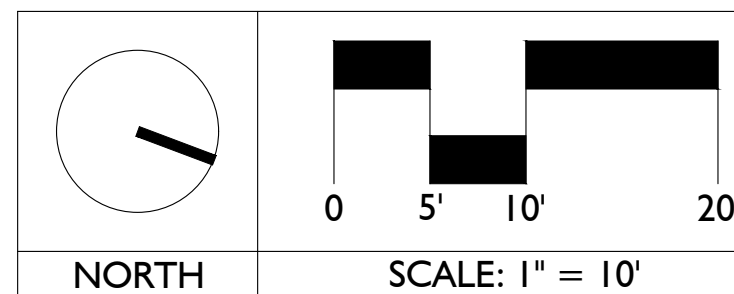
CONSTRUCTION CALLOUTS:			
MASONRY			PERMIT REQ A/S G/C E/C
(10)	24" HT P.I.P. CONCRETE WALL	*	
(11)	42" CMU BBQ ENCLOSURE		
(13)	42" HT. P.I.P. SIGN WALL WITH PIN MOUNT LETTERS		
(14)	BBQ COUNTER at CLUBHOUSE		
(15)	6' HT. CMU WALL		
(16)	20" HT. P.I.P. BACKLESS BENCH WITH WOOD TOP		
FLATWORK			DETAIL/ SHEET
(20)	VEHICULAR CONCRETE		
(21)	PEDESTRIAN CONCRETE		
(22)	6" MOW CURB		
(23)	TOOLED JOINT		
(24)	SAWCUT JOINT		
(25)	SYNTHETIC TURF SURFACING AT TOT LOT and ACTIVE REC. AREAS		
(26)	B-BALL HALF-COURT, POST TENSIONED CONCRETE		
(27)	STABILIZED DECOMPOSED GRANITE		
(28)	FLAT TOP BOULDER		
METAL / GLASS / WOOD			A/S PERMIT REQ
(30)	42" HT. SLIDING VEHICULAR GATE		
(31)	RAISED VEGETABLE BED		
(32)	B-BALL GOAL		
(33)	PERIMETER WOOD FENCE		
POTTERY / SITE FURNISHINGS			DETAIL/ SHEET
(50)	SURFACE MOUNTED METAL BENCH		
(51)	SURFACE MOUNTED DINING TABLE		
(52)	HOT COAL BIN		
(53)	PEDESTAL BBQ		
(54)	BIKE RACK		
(55)	TRASH RECEPTACLE		
(56)	POTTERY		
(57)	OUTDOOR EXERCISE EQUIPMENT - TYPE 1		
(58)	OUTDOOR EXERCISE EQUIPMENT - TYPE 2		
(59)	OUTDOOR EXERCISE EQUIPMENT - TYPE 3		
(610)	OUTDOOR EXERCISE EQUIPMENT - TYPE 4		
(611)	PLAY STRUCTURE		

ABBREVIATION LEGEND:			
	ALIGN	F.O.W.	FACE OF WALL
	CLR	MIN.	MINIMUM
	EQ	MAX.	MAXIMUM
	F.O.C.	P.A.	PLANTER AREA
		R=	RADIUS EQUAL
		TYP.	TYPICAL
	CONSTRUCTION CALLOUT		POINT OF BEGINNING

REFERENCE NOTES:	
1.	FOR CONSTRUCTION NOTES SEE SHEET LC.A
2.	FOR PAVING SCHEDULE SEE SHEET LC.A
3.	FOR CONSTRUCTION SPECIFICATIONS SEE SHEET LC.10

FIELD VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION

GENERAL SITE IMPROVEMENTS			
1	CURB / GUTTER per CIVIL ENGINEER	2	ABOVE GROUND UTILITY TO BE SCREENED
3	TRANSFORMERS per DRY UTILITY CONSULTANT	4	PARKING STALL per CIVIL ENGINEER
5	ACCESSIBLE PARKING STALL and SIGNAGE per CIVIL ENGINEER	6	CROSSWALK per CIVIL ENGINEER
7	PAVING per CIVIL ENGINEER	8	CONCRETE RAMP per CIVIL ENGINEER
9	VEHICULAR DRIVEWAY per CIVIL ENGINEER	10	FIRE HYDRANT per CIVIL ENGINEER
11	BIO-FILTRATION/SWALE per CIVIL ENGINEER	12	UNDERGROUND UTILITY LINE per OTHERS
13	STREET LIGHT per ELECTRICAL ENGINEER	14	PATIO WALL per ARCHITECT
15	TRASH ENCLOSURE per ARCHITECT	16	EXISTING 8" CMU PERIMETER WALL
17	EXISTING WROUGHT IRON PERIMETER FENCE		



Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	



NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

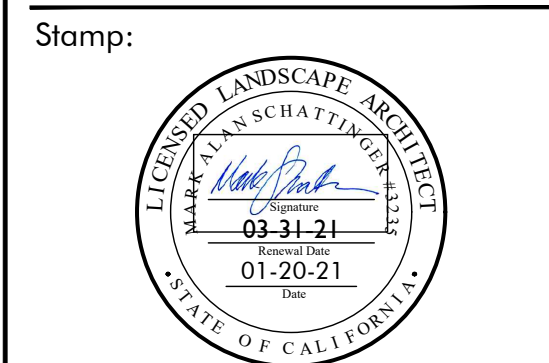
1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030



Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

CONSTRUCTION PLAN

Sheet No.:

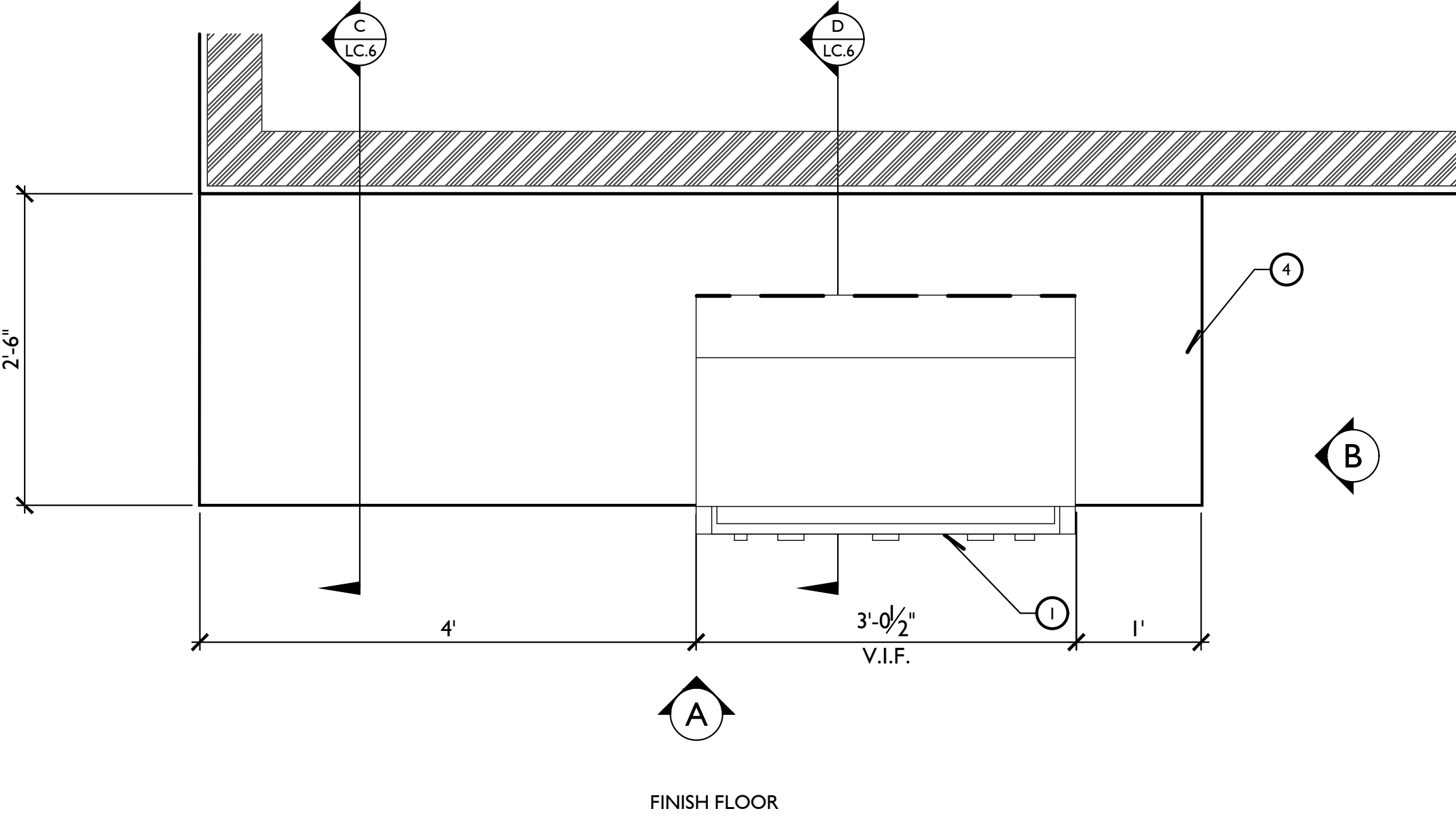
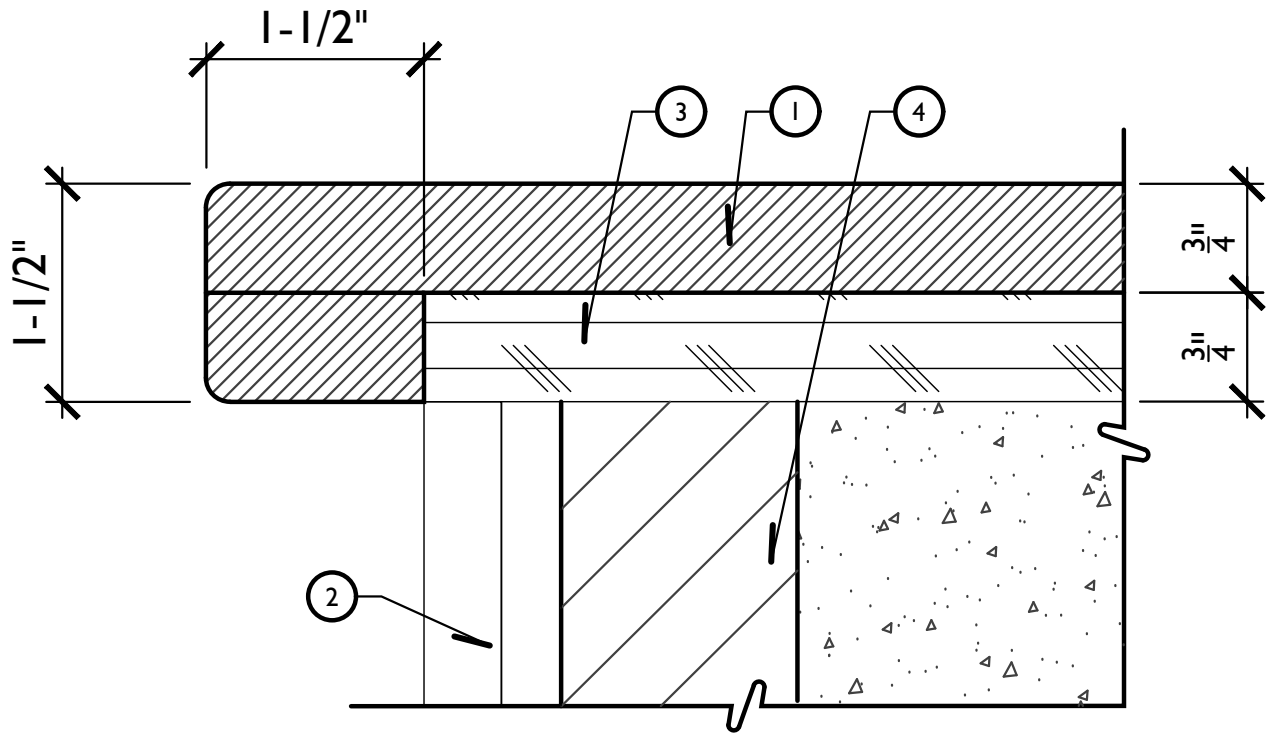
LC.3

Plan Status:
CONSTRUCTION
DOCUMENTS



LEGEND:

1. 3/4" THK. ENGINEERED STONE COUNTERTOP. SEE MATERIAL BOARD SHEET LC.B . BULLNOSE WITH 1/8" BASED EDGE, SECURE TO PLYWOOD SUBSTRATE WITH NON-STAINING SILICONE ADHESIVE
2. TILE CLADDING. SEE MATERIAL BOARD SHEET LC.B
3. 3/4" THICK PRESSURE TREATED PLYWOOD BACKING BOARD. EPOXY TO CMU BLOCK
4. CMU BLOCK WALL PER DETAIL SECTION



PLAN VIEW



LEGEND:

1. 26" PGS LEGACY GAS GRILL by AEI CORPORATION. MODEL: S36T. SEE CUT SHEET FOR CUTOUT DIMENSIONS. CONTRACTOR TO VERIFY REQUIRED CUTOUT PRIOR TO CONSTRUCTION. INSTALL PER MANUFACTURERS' SPECIFICATIONS. CONTACT INFORMATION FOR AEI: (949) 474-3070.
2. STAINLESS STEEL SINGLE ACCESS LOUVERED DOORS. MANUF: FIRE MAGIC / MODEL: 43914-SR / SIZE: 14"x20"
3. G.F.C.I. WEATHERPROOF OUTLET AND COVER, TYP. PER ELECTRICAL ENGINEER
4. 3/4" THK. ENGINEERED STONE COUNTERTOP. SEE MATERIAL BOARD SHEET LC.B. FOR PRODUCT INFO.
5. TILE CLADDING. SEE MATERIAL BOARD SHEET LC.B FOR PRODUCT INFO.
6. STAINLESS STEEL LOUVERED VENT PANEL - AVAILABLE THRU FIRE MAGIC (877)474-5578 / PRODUCT - 4" x 13" STAINLESS STEEL VENTING PANEL / MODEL #S510-01
7. FINISH GRADE/FINISH FLOOR PER PLANS
8. 8"x8"x16" CMU BLOCK REINFORCEMENT per STRUCTURAL ENGINEER
9. #4 REBAR HORIZONTAL at 12" O.C.
11. #4 REBAR VERTICAL at 12" O.C. with STANDARD HOOK INTO FOOTING
11. VOID SPACE
12. BUILDING WALL PER ARCHITECT

NOTES:

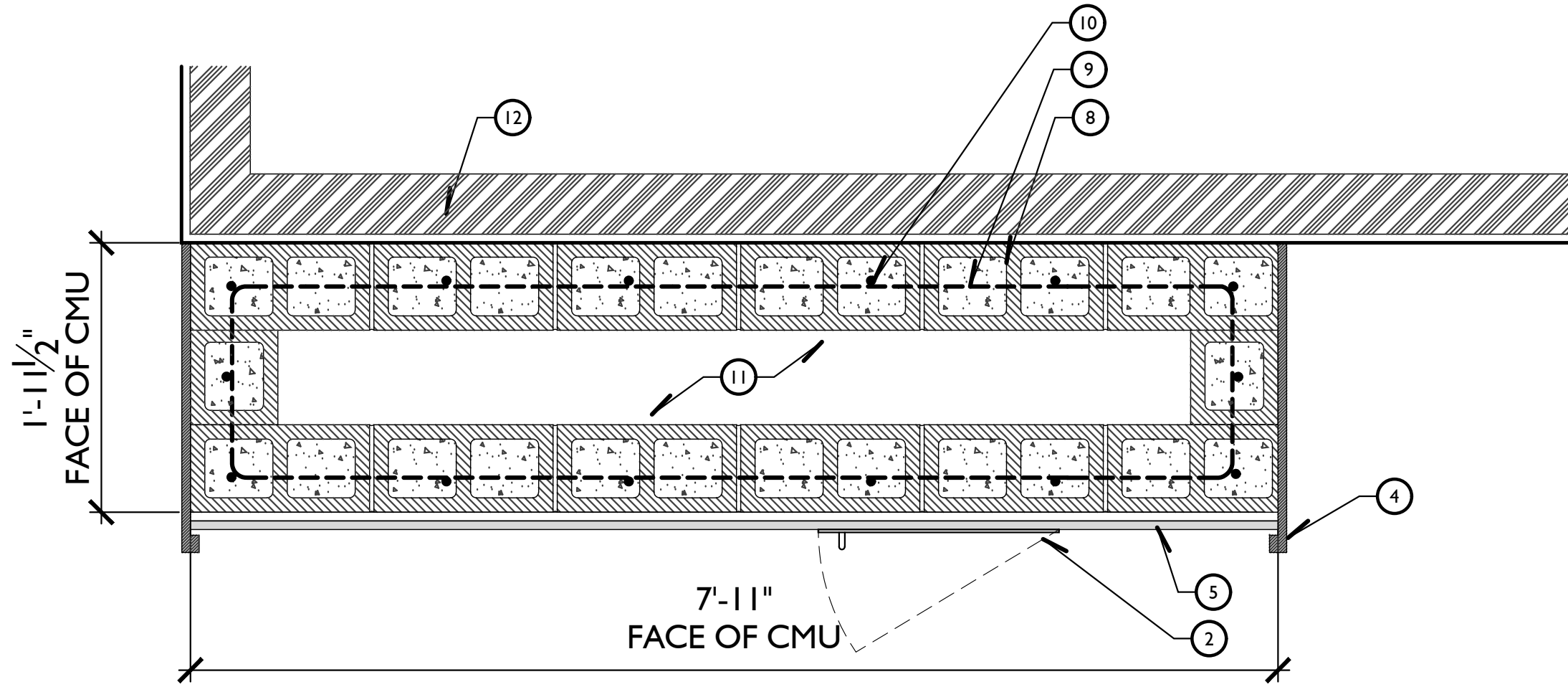
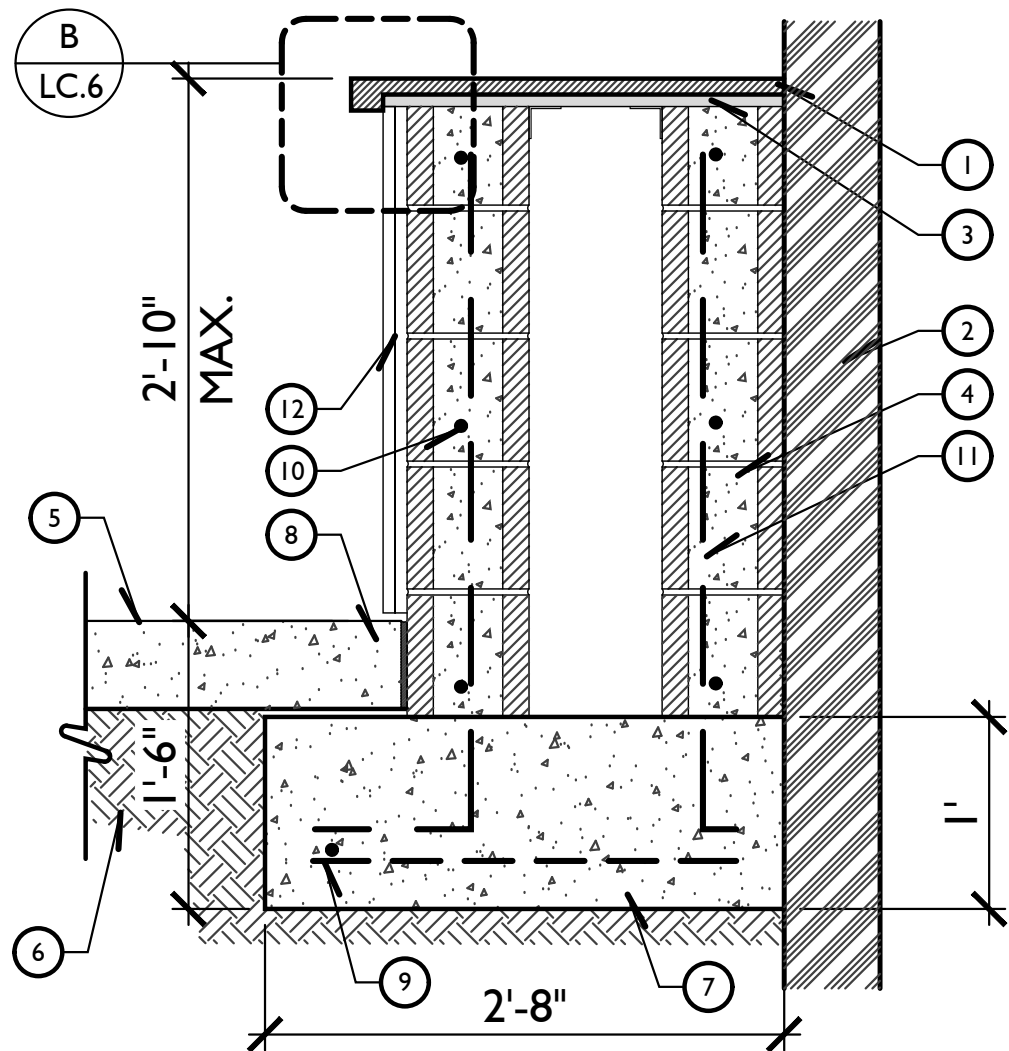
- A. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL BUILT-IN BBQ FABRICATION TO THE LANDSCAPE ARCHITECT FOR APPROVAL
- B. GROUT SOLID CMU BLOCK
- C. REFER TO STRUCTURAL DETAILS FOR REINFORCEMENT

COUNTERTOP ENLARGEMENT

N.T.S.

LEGEND:

1. 3/4" THICK COUNTERTOP ENGINEERED SURFACE. SEE MATERIAL BOARD SHEET LC.B. for PRODUCT INFO
2. ADJACENT BUILDING WALL PER ARCHITECTURE
3. 3/4" THICK PRESSURE TREATED PLYWOOD BACKING BOARD. EPOXY TO CMU BLOCK.
4. 8" x 8" x 16" C.M.U. BLOCK.REINFORCEMENT PER STRUCTURAL ENGINEER.
5. FINISH SURFACE / FINISH GRADE
6. RECOMPACTED SUBGRADE PER GEOTECH REPORT
7. CONCRETE FOOTING PER STRUCTURAL ENGINEER.
8. ADJACENT PAVING. SEE CONSTRUCTION PLAN
9. #4 REBAR REINFORCEMENT EACH WAY
10. #4 HORIZ. REBAR REINFORCEMENT at 24" O.C. SPACING (MIN. 3)
11. #4 VERT. REBAR REINFORCEMENT at 24" O.C. SPACING. HOOK to CONCRETE FOOTING
12. TILE CLADDING. SEE MATERIAL BOARD DETAIL SHEET LC.B



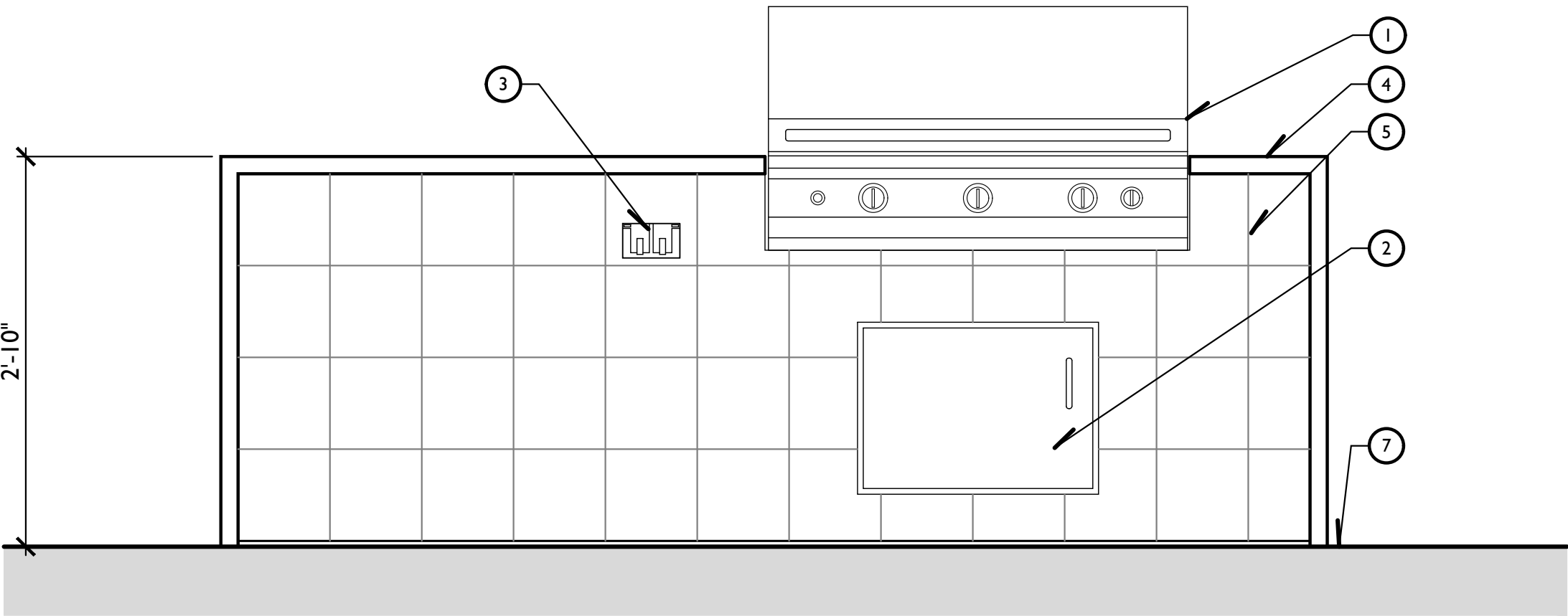
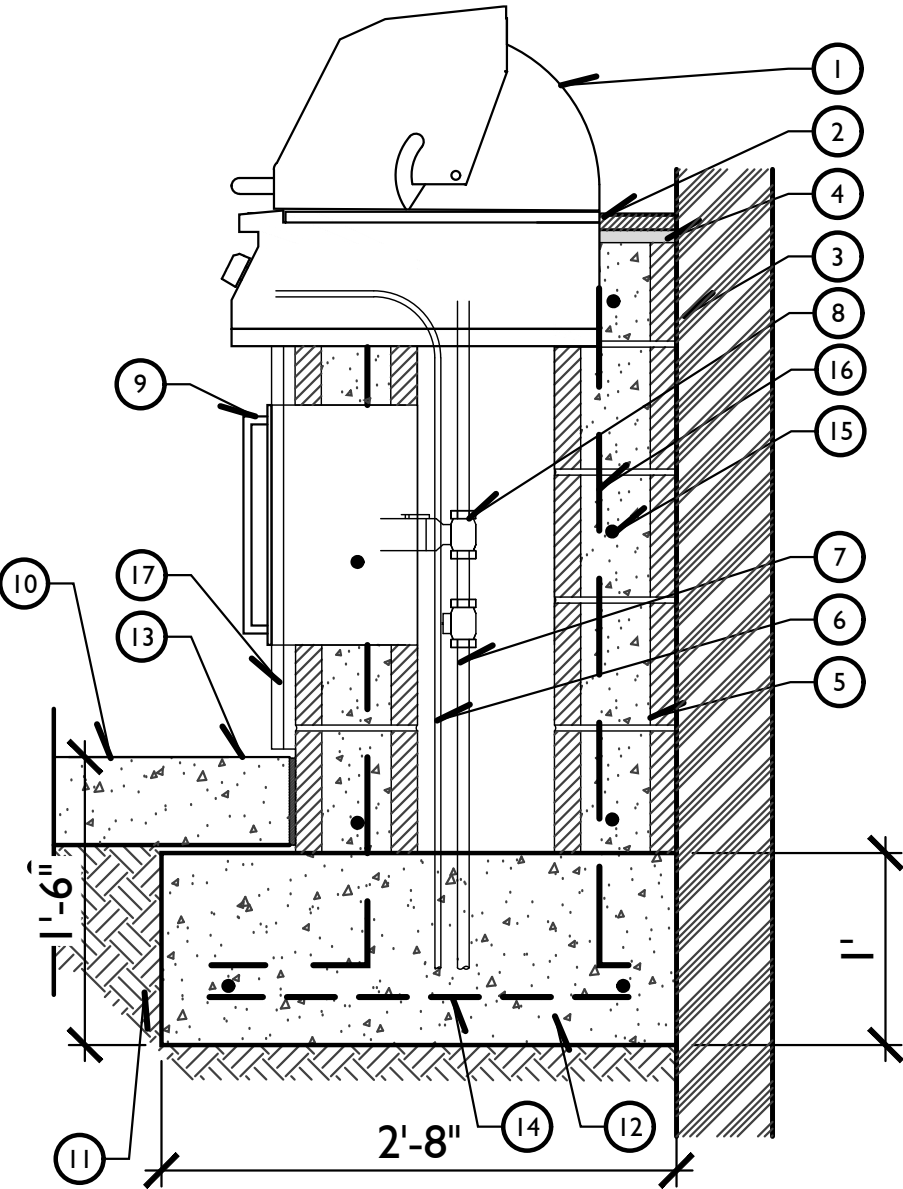
SECTION - D

TYPICAL COUNTERTOP - SECTION

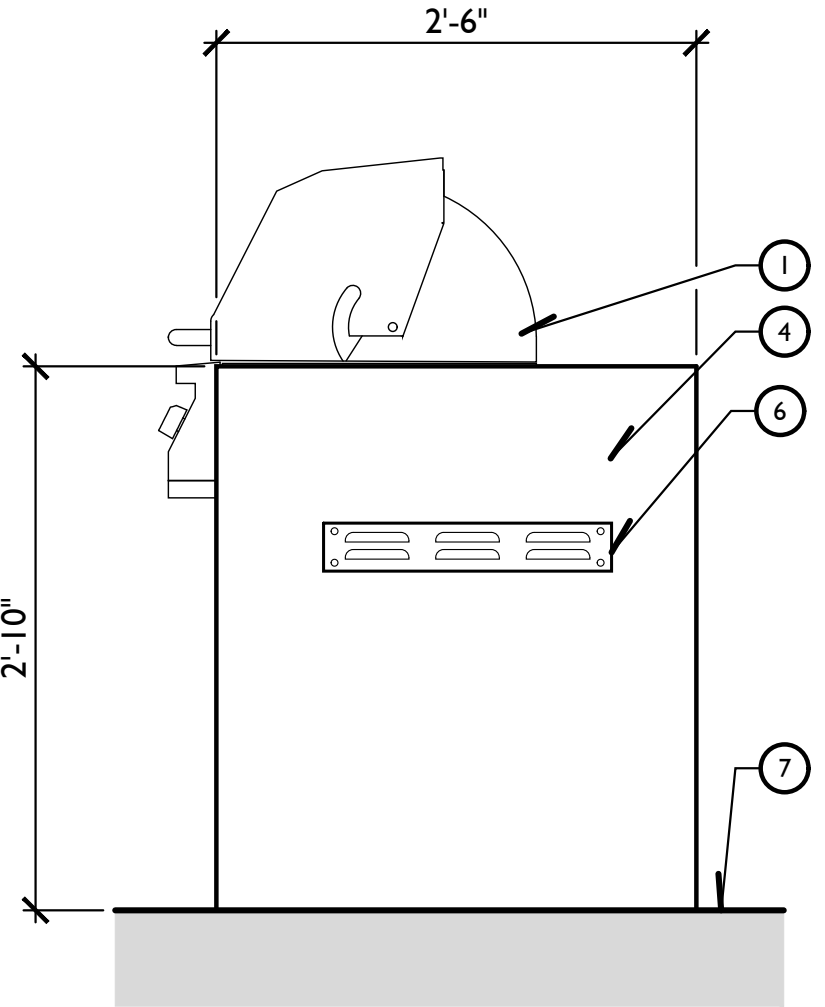
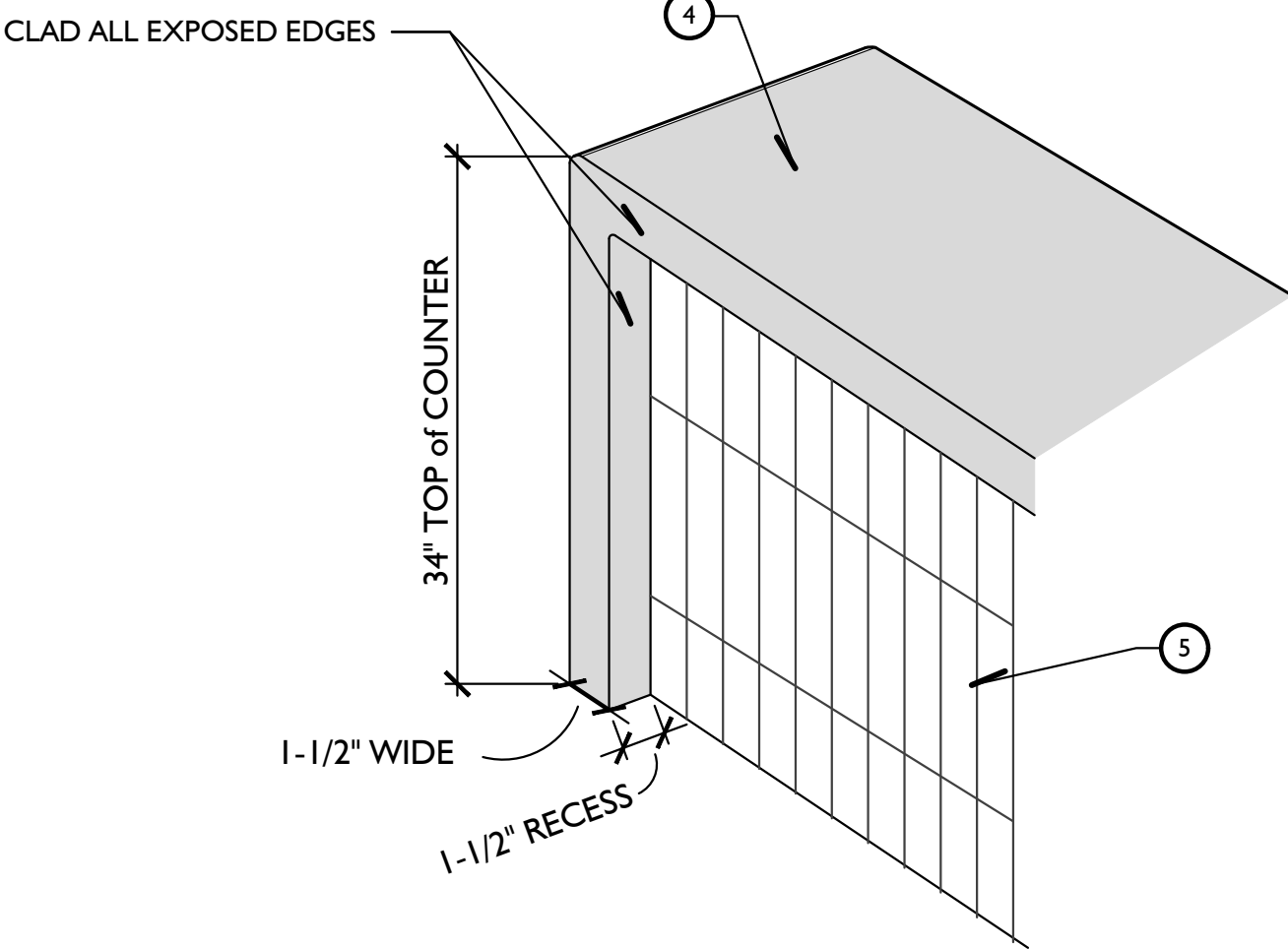
1" = 1'-0"

LEGEND:

1. BBQ GAS GRILL by AEI CORPORATION, INC. MODEL: S36. CONTRACTOR TO VERIFY REQUIRED CUTOUT PRIOR TO CONSTRUCTION. INSTALL PER MANUFACTURERS' SPECIFICATIONS.
2. 3/4" THICK COUNTERTOP ENGINEERED SURFACE. SEE MATERIAL BOARD SHEET LC.B FOR PRODUCT INFO
3. ADJACENT BUILDING WALL PER ARCHITECTURE
4. 3/4" THICK PRESSURE TREATED PLYWOOD BACKING BOARD. EPOXY TO CMU BLOCK.
5. 8" x 8" x 16" C.M.U. BLOCK.REINFORCEMENT PER STRUCTURAL ENGINEER.
6. ELECTRICAL CONDUIT PER OTHERS
7. GAS SERVICE LINE PER OTHERS
8. EMERGENCY GAS SHUT OFF
9. STAINLESS STEEL SINGLE ACCESS DOORS
10. FINISH SURFACE / FINISH GRADE
11. RECOMPACTED SUBGRADE PER GEOTECH REPORT
12. CONCRETE FOOTING PER STRUCTURAL ENGINEER.
13. ADJACENT PAVING. SEE CONSTRUCTION PLAN
14. #4 REBAR REINFORCEMENT EACH WAY
15. #4 HORIZ. REBAR REINFORCEMENT at 24" O.C. SPACING (MIN. 3)
16. #4 VERT. REBAR REINFORCEMENT at 24" O.C. SPACING. HOOK to CONCRETE FOOTING
17. TILE CLADDING. SEE MATERIAL BOARD SHEET LC.B



ELEVATION - A



ELEVATION - B

TYPICAL BBQ - SECTION

1" = 1'-0"

BBQ GRILL COUNTERTOP at CLUBHOUSE

1" = 1'-0"

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:



NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 &1885 SEBASTOPOL ROAD
SANTA ROSA, CA 95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA 95030

Stamp:



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet


Title:

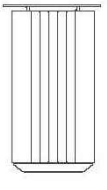
CONSTRUCTION DETAILS

Sheet No.:

LCD.6

Plan Status: CONSTRUCTION DOCUMENTS




	Top Open	23.25"	39.5"	111 lbs
---	----------	--------	-------	---------

SUPPLIER/MANUFACTURER:	LANDSCAPE FORMS
MODEL:	GENERATION 50 LITTER RECEPTACLE
COLOR/OPTIONS:	IPE WOOD EXTERIOR FINISH WITH STORMCLOUD POWDERCOATED METAL
NOTES:	ALLOW 8-10 WEEK LEAD TIME. INSTALL PER MANUF. REC.
QTY:	4

*OR EQUAL - APPROVED BY OWNER

Ⓓ TRASH / RECYCLING RECEPTACLE

N.T.S.

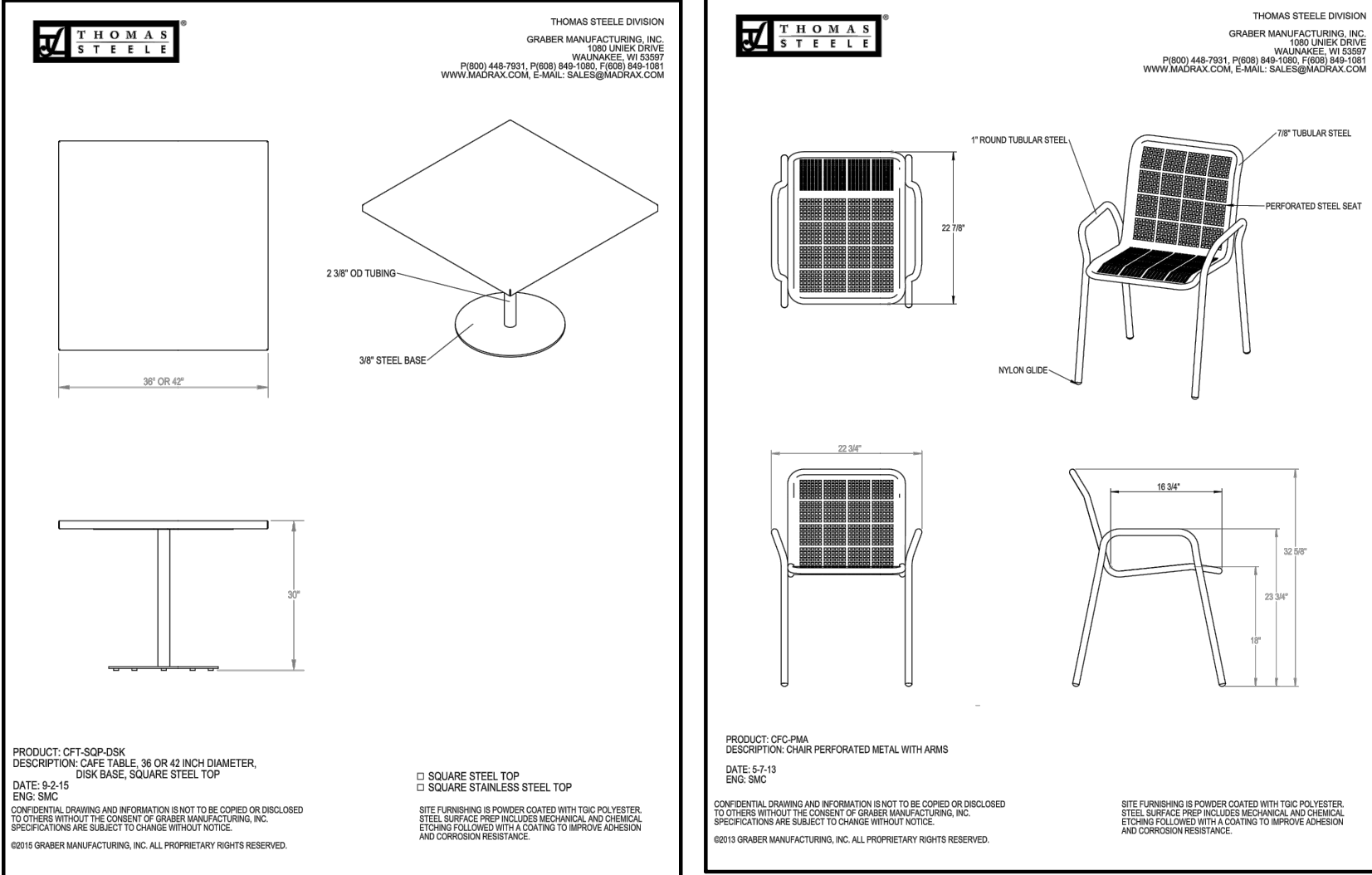


SUPPLIER/MANUFACTURER:	PILOTROCK JR THOMAS MFG CO. INC.
MODEL:	HCB-1 HOT COAL BIN
COLOR/OPTIONS:	HIGH HEAT BLACK ENAMEL
NOTES:	ALLOW 6-8 WEEK LEAD TIME. INSTALL PER MANUF. REC.
QTY:	3

*OR EQUAL - APPROVED BY OWNER

Ⓔ HOT COAL BIN

N.T.S.




SUPPLIER/MANUFACTURER:	SPRUCE & GANDER (760.566.4603) CONTACT: NIKKI QUINONEZ
MODEL:	36" SQUARE SOLID CAFE TABLE - DISK BASE & CAFE CHAIR
COLOR/OPTIONS:	STORM METALLIC
NOTES:	ALLOW 6 WEEKS LEAD TIME. INSTALL PER MANUFACTURERS RECOMMENDATIONS
QTY:	2TABLES / 6 CHAIRS

OR EQUAL - APPROVED BY OWNER

Ⓕ TABLE with SEATING


N.T.S.


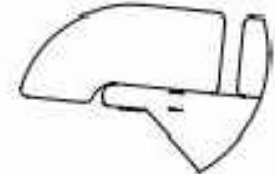


SUPPLIER/MANUFACTURER:	PILOTROCK JR THOMAS MFG CO. INC.
MODEL:	J-20 SERIES CHARCOAL GRILL
COLOR/FINISH:	HIGH HEAT BLACK ENAMEL
NOTES:	INSTALL per MANUF. RECOMMENDATIONS ALLOW 6-8WEEK LEAD TIME
QTY:	3

Ⓐ PEDESTAL MOUNTED BBQ

N.T.S.





	Traditional Backed with (2) Arms	26"	72"	33"	139 lbs
	Curved				

SUPPLIER/MANUFACTURER:	LANDSCAPE FORMS
MODEL:	GENERATION 50 TRADITIONAL BENCH with 2 ANGLED ARMS
COLOR/FINISH:	FRAME - STORMCLOUD POWDERCOATED METAL BENCH - IPE WOOD w/ EXTERIOR FINISH
NOTES:	INSTALL per MANUF. RECOMMENDATIONS ALLOW 8-10 WEEK LEAD TIME
QTY:	5

Ⓑ BENCH

N.T.S.



	bike rack	14"	36"	31"	25 lb
---	-----------	-----	-----	-----	-------

SUPPLIER/MANUFACTURER:	LANDSCAPE FORMS
MODEL:	LOOP BIKE RACK
COLOR/FINISH:	STORMCLOUD POWDERCOATED METAL
NOTES:	INSTALL per MANUF. RECOMMENDATIONS ALLOW 8-10 WEEK LEAD TIME
QTY:	5

Ⓒ BIKE RACK

N.T.S.

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT
Revisions:	



507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 &1885 SEBASTOPOL ROAD
SANTA ROSA, CA 95407


APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA 95030

Stamp:



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

CONSTRUCTION DETAILS

Sheet No.:

LCD.8

Plan Status:

CONSTRUCTION DOCUMENTS

1. **BIDDING:** IT SHALL BE THE OWNER'S RESPONSIBILITY IN INVITING AND OBTAINING BIDS, SETTING ITS PROVISIONS AND INSTRUCTIONS TO BIDDERS, SECURING THEIR BONDS AND WORKERS COMPENSATION AND PROVIDING CERTIFICATION OF FLY TO ENSURE THE QUALITY AND TIMELY COMPLETION OF THE PROJECT.

SCOPE OF WORK: CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO FURNISH AND INSTALL ALL ELEMENTS AS SHOWN ON THE DRAWING AND SPECIFIED HEREIN.

3. **PLAN VERIFICATION:** THE DRAWING AND SPECIFICATIONS REPRESENT THE FINISH CONSTRUCTION PRODUCT. THESE DOCUMENTS MAY CONTAIN ERRORS, OMISSIONS, CONTRADICTIONS, ETC. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS THOROUGHLY AND SHALL NOTIFY THE LANDSCAPE ARCHITECT AND OWNER IMMEDIATELY UPON ANY SUCH DISCREPANCY. GOVERNING CODES SHALL THEN APPLY.

1. **BIDDING:** IT SHALL BE THE OWNER'S RESPONSIBILITY IN INVITING AND OBTAINING BIDS, SETTING ITS PROVISIONS AND INSTRUCTIONS TO TIMELY SECURING THEIR BONDS AND WORKERS COMPENSATION INSURANCE CERTIFICATES, ETC. TO FULLY ENSURE THE QUALITY AND RIDERS COMPLETION OF THE PROJECT.
2. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO FURNISH AND INSTALL ALL ELEMENTS AS SHOWN ON THE DRAWING AND SPECIFIED HEREIN.
3. **PLAN VERIFICATION:** THE DRAWING AND SPECIFICATIONS REPRESENT THE FINISH CONSTRUCTION PRODUCT. THESE DOCUMENTS MAY CONTAIN ERRORS, OMISSIONS, CONTRADICTIONS, ETC. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS THOROUGHLY AND, SHALL NOTIFY THE LANDSCAPE ARCHITECT AND OWNER IMMEDIATELY UPON ANY SUCH DISCREPANCY. GOVERNING CODES SHALL THEN APPLY.
4. **LICENSE:** THE CONTRACTOR SHALL BE A CALIFORNIA LICENSED CONTRACTOR.
5. **UNIFORM BUILDING CODE:** ALL CONSTRUCTION WITHIN THESE DRAWINGS SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING CODES AND ORDINANCES.
6. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
7. **DIMENSIONS:** ALL SCALE DIMENSIONS ARE APPROXIMATE. WRITTEN DIMENSIONS ON DETAILS AND PLANS TAKE PRECEDENCE OVER SCALE DIMENSIONS.
8. **METHODS OF CONSTRUCTION:** THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, SEQUENCES, PROCEDURES AND TECHNIQUES. THE LANDSCAPE ARCHITECTURAL FIRM IS NOT LIABLE FOR CONSTRUCTION METHODS.
9. **UTILITIES:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES, ELECTRICAL, GAS, SEWERS, AND IRRIGATION LINES PRIOR TO ANY CONSTRUCTION, SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DAMAGE SUCH IMPROVEMENTS.
10. **PERMITS AND INSPECTIONS:** THE CONTRACTOR SHALL OBTAIN, COORDINATE AND PAY FOR ALL PERMITS, FEES AND AGENCY INSPECTIONS AS REQUIRED.
11. **SHOP DRAWINGS:** SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE CLARIFICATION OF ALL DESIGN CONCEPT DETAILS, IF REQUIRED BY OWNER OR GOVERNING AUTHORITY.
12. **LIABLE FOR DAMAGE:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE CAUSED BY ITS OPERATIONS TO UTILITIES, PLANTING, CONSTRUCTION, PERSONS, PROPERTY, ETC. AND SHALL PROVIDE PROTECTIVE MEANS TO GUARD AGAINST DAMAGE.
13. **LIABLE FOR ENCROACHMENT:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ENCROACHMENT ONTO ADJACENT PROPERTY, RIGHTS-OF-WAY, EASEMENTS, SETBACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.
14. **SITE MAINTENANCE:** CONTRACTOR SHALL KEEP THE PROJECT SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. ALL DEBRIS SHALL BE REMOVED FROM SITE PER LOCAL CODE AND ORDINANCES.
15. **SAFETY:** THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS DURING CONSTRUCTION.
16. **MATERIALS:** ALL MATERIALS AND EQUIPMENT SPECIFIED IN THESE DRAWINGS SHALL BE NEW AND IN PERFECT CONDITION WHERE INSTALLED. CONTRACTOR SHALL ALLOW AT LEAST 6 WEEKS FROM TIME OF PLACEMENT OF ORDER UNTIL DELIVERY ON ANY SPECIFIED ITEM UNLESS OTHERWISE NOTED ON PLANS.
17. **SUBSTITUTIONS:** DESIGN, MATERIAL, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED OR INDICATED ON DRAWINGS MAY BE CONSIDERED FOR USE ONLY IF THE SUBSTITUTIONS SHALL BE OBTAINED FROM THE OWNER AND LANDSCAPE ARCHITECT. ALL SUBSTITUTIONS SHALL CONFORM TO LOCAL CODES AND ORDINANCES.
18. **GUARANTEE:** ALL WORK PERFORMED BY CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION AS DIRECTED BY OWNER, OR UNLESS OTHERWISE SPECIFIED HEREIN.

REQUIRED FIELD OBSERVATION WORK: THESE PLANS WERE PREPARED WITH THE UNDERSTANDING THAT THE OWNER OF SAID PLANS WILL BE PROVIDING FIELD OBSERVATION SERVICES TO THE PROJECT, INCLUDING FIELD OBSERVATION SERVICES DURING CONSTRUCTION, FAILURE TO USE HIS DESIGN GROUP TO PROVIDE AND COMPLETE THE REQUIRED FIELD OBSERVATION SERVICES MAY BE CONSIDERED TO INCREASE THE MISINTERPRETATION OF THE INTENT OF THE DESIGN, UNAUTHORIZED MODIFICATIONS THERETO, AND FAILURE TO DETECT AND COMMISSION CORRECTIONS TO THE DESIGN PRIOR TO WHEN THEY BECOME COSTLY MISTAKES BUILT INTO THE PROJECT. THEREFORE, IN THE EVENT THAT HIS DESIGN GROUP IS OTHERWISE PRECLUDED FROM COMPLETING THE FIELD OBSERVATION SERVICES REQUIRED HEREIN, IT ONLY AGREES TO PROVIDE THESE SERVICES TO INDIVIDUALS OR CORPORATIONS WHO HAVE PURCHASED THESE PLANS WITH THE PROJECT, AGREES TO HOLD HARMLESS, INDEMNIFY, AND DEFEND HIS DESIGN GROUP AND ITS CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS.

1. **REQUIRED FIELD OBSERVATION WORK:** THESE PLANS WERE PREPARED WITH THE UNDERSTANDING THAT THE OWNER OF SAID PLANS WILL PROVIDE A FIELD OBSERVATION GROUP TO MONITOR THE PROJECT DURING THE INCLUDING FIELD OBSERVATION SERVICES DURING CONSTRUCTION, FAILURE TO USE HIS DESIGN GROUP TO PROVIDE AND COMPLETE THE FIELD OBSERVATION SERVICES SET FORTH HEREIN WILL SIGNIFICANTLY INCREASE THE RISK OF THE PROJECT TO THE CONTRACTOR. THE CONTRACTOR, UNAUTHORIZED MODIFICATIONS THERETO, AND FAILURE TO DETECT ERRORS AND OMISSIONS IN THE PLANS AND SPECIFICATIONS BEFORE THE PROJECT COSTS ARE INCURRED INTO THE PROJECT. THEREFORE, IN THE EVENT THAT HIS DESIGN GROUP IS OTHERWISE PRECLUDED FROM COMPLETING THE FIELD OBSERVATION SERVICES SET FORTH HEREIN, THE OWNER, OR SUBSEQUENT OWNER (INDIVIDUAL OR CORPORATION), SHALL BE RESPONSIBLE FOR THESE PLANS WITH THE PROJECT, AGREES TO HOLD HARMLESS, INDEMNIFY, AND DEFEND HIS DESIGN GROUP AND THEIR CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS.
2. **FIELD OBSERVATION COORDINATION:** THE FOLLOWING OBSERVATIONS SHALL BE INITIATED BY THE CONTRACTOR AND CONDUCTED THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE OWNER (JO SUPERINTENDENT) AND LANDSCAPE ARCHITECT NOT LESS THAN FORTY- EIGHT (48) HOURS IN ADVANCE OF ANY OBSERVATION. CONTINUED WORK WITHOUT FIELD OBSERVATION COORDINATION SHALL BE AT THE CONTRACTOR'S RISK, WITH ANY REQUIRED CHANGES OR MODIFICATIONS TO BE AT CONTRACTOR'S EXPENSE. THE OWNER (JO SUPERINTENDENT) SHALL INFORM THE LANDSCAPE ARCHITECT AS TO THE DATE AND TIME OF THE OBSERVATION. FORTY- EIGHT (48) HOURS IN ADVANCE.

- A. PRE-JOB MEETING ON SITE - PRIOR TO COMMENCEMENT OF WORK
- B. DURING SOIL PREPARATION FOR PLANTING AND IRRIGATION.
- C. CONSTRUCTION STAKING AND LAYOUT OBSERVATION.
- D. ROUGH CONSTRUCTION PROGRESS OBSERVATION (FORMING, ETC.).
- E. AT COMPLETION OF SOIL PREPARATION.
- F. PRESSURE TEST IRRIGATION, MAINS AND LATERALS.
- G. COVERAGE OF IRRIGATION SYSTEM.
- H. COMPLETION OF WEED CONTROL.
- I. PLANT MATERIAL SPOTTING CHECK.
- J. GRADING CHECK PRIOR TO GROUND COVER.
- K. COMPLETION OF PLANTING.
- L. 30, 60 & 90-DAY MAINTENANCE INSPECTIONS.
- M. FINAL OBSERVATION/PROJECT CERTIFICATION.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES FOR THE INSTALLATION OF A SUBSURFACE DRAINAGE SYSTEM.
2. **LICENSE:** THE DRAINAGE CONTRACTOR SHALL BE A C-27 LICENSED LANDSCAPE CONTRACTOR OR LICENSED PER APPROPRIATE LOCAL CODES.
3. **UNIFORM BUILDING CODE:** ALL DRAINAGE CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.

- APPROVALS / CERTIFICATIONS: THE CONTRACTOR SHALL INITIATE AND COORDINATE THROUGH THE OWNER ALL REQUIRED AGENCY APPROVALS, PERMITS, ETC. AND COOPERATE WITH THE OWNER AND OWNER'S ENGINEER FOR LINE AND GRADE INSPECTION.
5. FIELD VERIFICATION: CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. UTILITIES: CONTRACTOR SHALL LOCATE AND TAKE ALL PRECAUTIONS NECESSARY TO PREVENT UNDERMINING AND DAMAGE TO EXISTING UTILITIES.
7. COORDINATION: CONTRACTOR SHALL COORDINATE WITH APPROPRIATE TRADES TO LOCATE PIPE (IRRIGATION, EXISTING DRAINAGE, ETC.) CONTRACTOR SHALL COOPERATE WITH DRAIN AND DRAIN LINES LOCATIONS BEFORE STARTING WORK.
8. TRENCHING: PIPE TRENCH SHALL BE EXCAVATED STRAIGHT AND TRUE TO GRADE. IN GENERAL, THE TRENCH WIDTH SHOULD NOT EXCEED THE DIAMETER OF THE PIPE PLUS TWO FEET. TRENCH BOTTOM SHALL BE GRADED AND PREPARED TO PROVIDE A FIRM AND UNIFORM BEARING SURFACE THROUGHOUT ENTIRE LENGTH OF PIPE.
9. SUBGRADE: ALL SUBGRADE STABILIZERS FOR SUBSURFACE DRAINAGE SYSTEM SHALL BE PER STRUCTURAL SOILS REPORT.
10. SWALES: SWALE LINE SHALL HAVE A 2% MINIMUM PITCH CONTINUALLY TO THE DRAIN INLET TO THE CATCH BASIN OR DISCHARGE POINT. SWALES SHALL HAVE A GENTLE UNIFORM CROSS PITCH WITHOUT ANY UNEVEN OR ABRUPT TRANSITIONS.
11. DRAINS: DRAIN INLETS OR CATCH BASIN SHALL BE LOCATED AT SWALE LOW POINTS. ALL AREA DRAINS, CATCH BASINS, ETC. SHALL CONFORM TO ALL APPLICABLE CODES AND RECOMMENDATIONS INSTALLATION PROCEDURES OF MANUFACTURER.
12. DRAIN LINES: ALL DRAIN LINES SHALL BE 60" UNLESS OTHERWISE SPECIFIED BY OWNER SUD-35, OR APPROVED BY LANDSCAPE ARCHITECT NON-PERFORATED TUBING, SOLVENT WELD ALL CONNECTIONS. ALL DRAIN LINES ON SLOPES TO BE SCHEDULE 40 PVC OR HDPE. ALL DRAIN LINES ON FLATS SHALL BE DRAINAGE PIPE AS INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL CHANGES IN DIRECTION IN THE DRAIN LINE SHALL BE WITH 45° ANGLE FITTINGS. INSTALL DRAIN LINE 12" BELOW FINISH GRADE MINIMUM, EXCEPT WHERE THE DRAIN LINE IS LOCATED UNDER A CURB BASIN. CURB BASIN SHALL BE LOCATED MINIMUM OF 1' ABOVE GUTTER FLOW LINE. AND SHALL HAVE A MINIMUM CLEARANCE OF 2" TOP OF CURB AND TERMINATE AT LEAST 1' BACK OF CURB FACE. DRAIN LINES SHALL BE INSTALLED WITH A 1% SLOPE FROM THE DRAIN INLET TO THE DRAIN OUTLET.
13. CONNECTIONS: ALL SUBSURFACE AND SURFACE DRAINAGE SYSTEMS SHALL BE CONTAINED WITHIN THE PROPERTY IT SERVES. ALL DRAIN INLETS SHALL BE CONNECTED TO A CENTRALIZED SYSTEM WITH DRAIN OUTLET WHICH EXITS AT CURB FACE OR CONNECTS INTO STORM DRAIN SYSTEM PER CIVIL ENGINEER.
14. BACKFILLING: ALL BACKFILLING SHALL BE DONE IN ACCORDANCE WITH STRUCTURAL SOILS REPORT.
15. INSTALLATION UPKEEP: INTERIOR OF PIPE SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER PRIOR TO, DURING AND AFTER INSTALLATION. CONTRACTOR SHALL MAINTAIN THE PROJECT SITE THROUGHOUT THE PROGRESS OF THE WORK IN A REASONABLE, DRY WORKABLE CONDITION FREE OF SURFACE WATER.
16. DEFECTS: ALL DEFECTS IN DRAINAGE SYSTEM SHALL BE CORRECTED THROUGHOUT THE GUARANTEE PERIOD SPECIFIED HEREIN AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES FOR THE INSTALLATION OF ALL CONCRETE FLATWORK INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **LICENSE:** THE CONCRETE CONTRACTOR SHALL BE A C-8 CALIFORNIA LICENSED CONTRACTOR, OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF CONCRETE IS APPURTENANT TO LANDSCAPE WORK.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR THE INSTALLATION OF ALL CONCRETE FLOWLINE INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **LICENSE:** THE CONCRETE CONTRACTOR SHALL BE A C-8 CALIFORNIA LICENSED CONTRACTOR, OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF CONCRETE IS APPURTENANT TO LANDSCAPE WORK.
4. **UNIFORM BUILDING CODE:** ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.
5. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. **COORDINATION:** CONTRACTOR SHALL COORDINATE WITH APPROPRIATE TRADES TO LOCATE PIPE SLEEVES, (IRRIGATION, DRAINAGE, ELECTRICAL, ETC.), BENEATH OR EMBEDDED IN CONCRETE BEFORE STARTING WORK.
7. **SOIL PREPARATION:** ALL EXCAVATION, GRADING, COMPACTION, ETC. SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE STRUCTURAL SOILS SPECIALIST. ALL SOIL MODIFICATIONS SHALL BE UNDER THE SUPERVISION OF A SOILS ENGINEER.
8. **SUBGRADE:** ALL SUBGRADE MATERIAL, SAND, CRUSHED AGGREGATE, ETC., AND THEIR COMPACTION SHALL BE PER STRUCTURAL SOILS ENGINEER SPECIFICATIONS.

18. **CONCRETE FINISH:** FINISH COURSE SHALL BE BROUGHT TO THE PROPER GRADE AND TO A UNIFORM SURFACE. CONCRETE COLORS AND FINISHES WILL BE PER CONSTRUCTION PLAN. ALL NATURAL CONCRETE WITH MEDIUM BROOM FINISH.

19. **BROOM FINISH:** BROOM FINISH (WHERE INDICATED ON DRAWINGS), AFTER FINISH TROWELING, DRAW THE FOLLOWING BROOM TYPES ACROSS PERPENDICULAR TO TRAFFIC FLOW OR IN THE DIRECTION AS INDICATED ON THE DRAWING.

- FINE BROOM - FINE OR SOFT TEXTURED BRISTLES
- MEDIUM BROOM - MEDIUM STIFF BRISTLES
- HEAVY BROOM - COARSE OR STIFF BRISTLES

18. **CONCRETE FINISH:** FINISH COURSE SHALL BE BROUGHT TO THE PROPER GRADE AND TO A UNIFORM SURFACE. CONCRETE COLORS AND FINISHES WILL BE PER CONSTRUCTION PLAN. ALL NATURAL CONCRETE WITH MEDIUM BROOM FINISH.
19. **BROOM FINISH:** BROOM FINISH (WHERE INDICATED ON DRAWINGS), AFTER FINISH TROWELING, DRAW THE FOLLOWING BROOM TYPES AT ANGLES PERPENDICULAR TO TRAFFIC FLOW OR IN THE DIRECTION AS INDICATED ON THE DRAWINGS:
 - FINE BROOM - FINE OR SOFT TEXTURED BRISTLES
 - MEDIUM BROOM - MEDIUM STIFF BRISTLES
 - HEAVY BROOM - COARSE OR STIFF BRISTLES
20. **ROCK SALT FINISH:** APPLY ROCK SALT EVENLY OVER ENTIRE SURFACE PRIOR TO FINISH TROWELING. PRESS SALT INTO THE SURFACE WITH TROWEL OR ROLLER SO THAT SALT IS EMBEDDED JUST BELOW SURFACE LEAVING THE TOPS OF THE CRYSTALS EXPOSED. ALLOW CONCRETE TO CURE. FINISH SHALL BE LIGHT, MEDIUM OR HEAVY PER DIRECTION OF LANDSCAPE ARCHITECT
21. **RETARDANT FINISH:** CONCRETE SURFACE SHALL BE EXPOSED USING LITHOCHROME CONCRETE COLORWAX. RETARDANT OR IMPROVED EQUAL APPLY IN ACCORDANCE TO ALL SPECIFICATIONS AND RECOMMENDED INSTALLATION PROCEDURES OF MANUFACTURE. AGGREGATE FOR CONCRETE 60-40 PEA GRAVEL BLEND.
22. **COLORLED CONCRETE:** COLORS PER CONSTRUCTION PLAN OR FINISH SCHEDULE. COLORS SHALL BE OF THE INTEGRAL TYPE MANUFACTURED BY L.M. FOLEY LTD. RETARDANT OR IMPROVED EQUAL SURFACE DIRECTED BY LANDSCAPE ARCHITECT SHALL BE SEALED WITH LITHOCHROME COLORWAX OR APPROVED EQUAL. APPLY IN ACCORDANCE TO ALL SPECIFICATIONS AND RECOMMENDED INSTALLATION PROCEDURES OF MANUFACTURE
23. **STAMPED CONCRETE:** CONTRACTOR SHALL INSTALL STAMP CONCRETE PATTERNS TO CONFORM TO ALL SPECIFICATIONS AND RECOMMENDED INSTALLATION AND AT INSIDE CORNERS, EXPANSION JOINTS AND AT 4' MAXIMUM SPACING. CONTRACTOR SHALL USE MANUFACTURER'S RECOMMENDED PATTERNS, TOOLS AND FORMS. CONTRACTOR SHALL USE RUBBER STAMPS OR AS APPROVED BY LANDSCAPE ARCHITECT. COLOR HARDENER SHALL MATCH CONCRETE COLOR AND BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS RELEASE AGENTS, AS PER PLANS, SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
24. **CONCRETE SAMPLE:** CONTRACTOR SHALL PROVIDE OWNER WITH A 2' x 2' SAMPLE OF ALL CONCRETE FINISHES & STAMP PATTERNS AS PER PLANS. SAMPLES SHALL BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT PRIOR TO POURING FLATWORK.
25. **CURING:** CURE CONCRETE IN ACCORDANCE WITH REQUIREMENTS OF THE CURRENT AC MANUAL OF CONCRETE PRACTICE.
26. **POSITIVE DRAINAGE:** CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DRAINAGE, WITHOUT PONDING ON ALL CONCRETE SURFACES. ALL CONCRETE SHALL BE DRAINAGE SLOPED MINIMUM 1% AWAY FROM BUILDINGS, WALLS, ETC., IN THE DIRECTION OF SITE DRAINAGE.
27. **CONCRETE JOINTS:** CONTRACTOR SHALL INSTALL JOINTS AS NOTED OR PER STRUCTURAL ENGINEER SPECIFICATIONS.
 - **CONCRETE WALKS (LESS THAN 8' - 0''): A TOOLED CONCRETE JOINT, AT 1/4 DEPTH OF CONCRETE, SHALL BE PLACED 5' - 0" O.C. MAX., AT ALL CHANGES IN DIRECTION AND AT 4' INSIDE CORNERS. EXPANSION JOINTS WITH PREMOLEDED 3/8" ASPHALTIC JOINT OR ETHAFOAM FLEX AS PER OWNERS SPECIFICATIONS, SHALL BE PLACED 20' - 0" O.C. MAX.**
 - **CONCRETE DRIVING:** CONCRETE SHALL BE PLACED AT A DEPTH OF CONCRETE, SHALL BE PLACED AT PLUS/MINUS 40 SO, FEET MAXIMUM, ALL CHANGES IN DIRECTION AND AT ALL INSIDE CORNERS. EXPANSION JOINTS WITH PREMOLEDED 3/8" ASPHALTIC JOINT OR ETHAFOAM FLEX AS PER OWNERS SPECIFICATIONS, SHALL BE PLACED AT ± 160 SQ. FT. MAX.
28. **ADJOINING EXISTING CONCRETE SURFACES:** CONCRETE DESIGNATED ON PLANS TO MEET ALL EXISTING CONCRETE WALKS, DRIVEWAYS ETC. SHALL BE FLUSH AND INCLUDE AN EXPANSION JOINT BETWEEN THE SURFACES.
29. **DEFECTS:** ALL DEFECTS IN CONCRETE WORK SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES TO CONSTRUCT MASONRY STRUCTURES INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **LICENSE:** THE MASONRY CONTRACTOR SHALL BE A C-29 CALIFORNIA LICENSED MASONRY CONTRACTOR, OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF MASONRY IS APPURTENANT TO LANDSCAPE WORK.
4. **UNIFORM BUILDING CODE:** ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE, MASONRY DESIGN MANUAL AND ALL APPLICABLE GOVERNING AGENCIES.

- SCOPE OF WORK: CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES TO COMPLETE MASONRY STRUCTURES INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **LICENSE:** THE MASONRY CONTRACTOR SHALL BE A C-29 CALIFORNIA LICENSED MASONRY CONTRACTOR, OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF MASONRY IS APPURTENANT TO LANDSCAPE WORK.
4. **UNIFORM BUILDING CODE:** ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE, MASONRY DESIGN MANUAL AND ALL APPLICABLE GOVERNING AGENCIES.
5. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. **COORDINATION:** CONTRACTOR SHALL COORDINATE WITH APPROPRIATE TRADES TO LOCATE PIPE SLEEVES, IRRIGATION, DRAINAGE, ELECTRICAL ETC., BENEATH OR EMBEDDED IN MASONRY WALLS, BEFORE STARTING WORK.
7. **SOIL PREPARATION:** ALL EXCAVATION, GRADING, COMPACTION, ETC., SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE STRUCTURAL SOILS REPORT. ALL SOIL MODIFICATIONS SHALL BE UNDER THE DIRECTION OF A SOILS ENGINEER.
8. **ROCK AND SAND SPECIFICATIONS:** SAND AND AGGREGATE FOR MASONRY SHALL BE GENERAL STANDARD MATERIALS CONFORMING TO ASTM DESIGNATION C-144 AND C-404.
9. **WATER:** WATER FOR CONCRETE SHALL BE CLEAN AND FREE FROM DELETERIOUS SUBSTANCES.
10. **CEMENT:** CEMENT SHALL BE PORTLAND CEMENT TO CONFORMING TO CURRENT REQUIREMENTS OF ASTM C-150, TYPE I OR TYPE II.
11. **CONCRETE BLOCK:** MASONRY UNITS SHALL BE TYPE II UNITS CONFORMING TO ASTM C-90 AND IN ADDITION THE REQUIREMENTS OF THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION OF CALIFORNIA. SIZE, TEXTURE & COLOR SHALL BE SHOWN ON DRAWINGS.
12. **EXECUTION:** LAY MASONRY IN STRAIGHT COURSES IN RUNNING BOND. TRUE TO PLANE AND PLUMB WITHIN 1/8" IN 10 FEET. FACES OF MASONRY UNITS SHALL BE ALL IN ONE PLANE, MAKE HORIZONTAL AND VERTICAL JOINTS TO WITHIN 3/8" THICK. TOOL ALL JOINTS FLUSH. CUT UNITS WITH MASONRY SAW.

24. **MASONRY REINFORCING STEEL:** STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A-618 EXCEPT THAT 1/4" BARS MAY BE PLAIN BARS. WIRE REINFORCEMENT SHALL CONFORM TO ASTM A-82.
17. **REBAR:** ACCURATELY PLACE REINFORCING STEEL AS SHOWN ON THE DRAWING. REBAR STRUCTURAL REINFORCEMENT SHALL BE POSITIVELY SECURED AND SUPPORTED, NOT EXCEEDING 200 BAR DIAMETERS. IN SUCH A MANNER THAT NO MOVEMENT OCCURS WHEN GROUT IS POURED. REINFORCING AND THE WIRES SHALL BE EMBEDDED IN THE GROUT. LENGTH OF LAP SPICE SHALL BE A MINIMUM OF 40 BAR DIAMETERS FOR TENSION, 30 BAR DIAMETERS FOR COMPRESSION, OR AS PER STRUCTURAL ENGINEER RECOMMENDATIONS. THE THICKNESS OF THE GROUT BETWEEN MASONRY UNITS AND REINFORCEMENT SHALL BE A MINIMUM OF 1/4" FOR FINE GROUT AND 1/2" MINIMUM FOR COARSE GROUT.
18. **FOOTINGS:** CONCRETE FOOTINGS SHALL BE OF THE SIZE AND TYPE AS INDICATED ON DRAWINGS OR AS PER STRUCTURAL ENGINEER'S SPECIFICATIONS. EARTHFORMS MAY BE USED FOR FOOTINGS ONLY WHERE SOIL IS FIRM AND STABLE AND CONCRETE WILL NOT BE EXPOSED.
19. **WELDING:** WELDING OF REINFORCING STEEL SHALL CONFORM TO AWS D12.1 AND REQUIREMENTS OF THE AMERICAN WELDING SOCIETY.
20. **GROUTING:** ALL MASONRY SHALL BE REINFORCED, GROUT SOLID ALL CELLS WHICH CONTAIN REBAR, BOLTS ETC.. GROUT CELLS BELOW GRADE SOLID. ALL REINFORCEMENT, BOLTS ETC. IN MASONRY SHALL HAVE A MINIMUM GROUT COVERAGE OF 3/4".
21. **BELOW GRADE CONSTRUCTION:** MASONRY CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILLING ALL WALLS TO GRADES PER PLAN (OR PER CIVIL ENGINEER), FINISH GRADE FOR RUNOFF SWALE BEHIND ALL WALLS, PERFORATED DRAIN LINES COMPLETE AND CONNECTED TO DRAINAGE DITCH OR STREET, WATERPROOFING ALL WALLS BELOW GRADE AND ALL EXCAVATION NECESSARY FOR THE EXECUTION OF MASONRY WORK. FILL SOIL PER STRUCTURAL ENGINEER WALLS. ALL RETAINING WALLS SHALL BE ADEQUATELY SHORED DURING BACKFILL OPERATION.
22. **EXPANSION JOINTS:** CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT 10' MAXIMUM AND AT 30' - 0" ON CENTER OR AS REQUIRED BY GOVERNING AGENCY.
23. **SURPLUS SOIL:** MASONRY CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING ALL SPOILS OR SURPLUS SOIL ON SITE AS A RESULT OF MASONRY WORK.
24. **MASONRY SAMPLE:** CONTRACTOR SHALL SUBMIT TO OWNER A 4' X 5' SAMPLE PANEL OF ALL MASONRY WALL TYPES ON PLANS. SAMPLES SHALL BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
25. **STUCCO APPLICATION:** ALL STUCCO WORK SHALL CONFORM TO LATHING AND PLASTERING REFERENCE SPECIFICATIONS OF THE CALIFORNIA LATHING AND PLASTERING CONTRACTORS ASSOCIATION, INC. AND ALL STUCCO WORK SHALL BE DONE IN CONSTRUCTION. STUCCO APPLICATION SHALL CONFORM TO ALL SPECIFICATIONS AND RECOMMENDED INSTALLATION PROCEDURES OF MANUFACTURER.
26. **PLASTER PROPORTIONS:** PLASTER FINISH TO INCLUDE:
 - SCRATCH COAT - 3/8" THICK 1 PART PORTLAND CEMENT PLASTER AND 4 PARTS DAMP BRICK DUST
 - KEY COAT - 3/8" THICK 1 PART PORTLAND CEMENT PLASTER AND 5 PARTS DAMP LOOSE SAND AND COLOR FINISH COAT - 1/8" THICK PORTLAND CEMENT PLASTER MIX WITH WATER ONLY
 - PORTLAND CEMENT PLASTER MIX INCLUDES: 1 PART PORTLAND CEMENT AND 4 PARTS HYDRATED LIME WATERPROOFING ADMIXTURE (PER MANUFACTURERS SPECS)
27. **PLASTER FINISH:** ALL PLASTER FINISHES, TEXTURES AND COLORS SHALL MATCH REFERENCED ARCHITECTURE AND BE APPROVED BY OWNER. CONTRACTOR SHALL SUPPLY A 2' X 2' SAMPLE OF ALL PLASTER FINISHES FOR OWNERS APPROVAL.
28. **WATER SEAL:** APPLY WATER SEALER TO ALL PLASTER FINISHES UNLESS OTHERWISE APPROVED IN WRITING BY OWNER.
29. **MASONRY VENEER/TILE:** ALL TILE, BRICKS, PAVERS, PRECAST CONCRETE VENEER AND CAPS SPECIFIED ON PLANS TO BE APPLIED PER MANUFACTURERS RECOMMENDATIONS.
30. **SPECIAL MASONRY WALL MATERIALS:** ALL SPECIAL WALL MATERIALS, FOAM ETC. SHALL CONFORM TO ALL SPECIFICATIONS AND RECOMMENDED INSTALLATION PROCEDURES OF MANUFACTURER.
31. **DEFECTS:** ALL DEFECTS IN MASONRY WORK SHALL BE CORRECTED THROUGH THE GUARANTEE PERIOD SPECIFIED HEREIN AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER.

1. **PLAN VERIFICATION** - THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
2. **LICENSE** - THE CARPENTRY CONTRACTOR SHALL BE A C-29 CALIFORNIA LICENSED CARPENTRY CONTRACTOR OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF CARPENTRY IS APPURTENANT TO LANDSCAPE WORK.
3. **UNIFORM BUILDING CODE**: ALL CARPENTRY CONSTRUCTION SHALL CONFORM TO THE APPLICABLE EDITION OF THE UNIFORM BUILDING CODE AND ALL GOVERNING AGENCY CODES.

1. **PLAN VERIFICATION :** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS;
2. **LICENSE :** THE CARPENTRY CONTRACTOR SHALL BE A C-29 CALIFORNIA LICENSED CARPENTRY CONTRACTOR OR A C-27 LICENSED LANDSCAPE CONTRACTOR IF CARPENTRY IS APPURTENANT TO LANDSCAPE WORK.
3. **UNIFORM BUILDING CODE :** ALL CARPENTRY CONSTRUCTION SHALL CONFORM TO THE APPLICABLE EDITION OF THE UNIFORM BUILDING CODE AND ALL GOVERNING AGENCY CODES.
4. **FIELD VERIFICATION :** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
5. **DELIVERY AND STORAGE :** ALL MATERIALS, IN SO FAR AS IS PRACTICAL, SHALL BE DELIVERED TO THE SITE IN THE MANUFACTURER'S ORIGINAL CONTAINERS AND SHALL BEAR THE TRADEMARKS AND NAMES THEREON. GRADE MARK SHALL BE STAMPED ON ALL STANDARD PLY- RAY-DIMENSION LUMBER OR CERTIFIED FOR COMPLIANCE. EACH PIECE OF TREATED LUMBER SHALL BE STAMPED. LUMBER SHALL BE CAREFULLY STACKED TO PREVENT WARPING AND SHALL BE KEPT DRY.
6. **CONNECTIONS :** MEMBERS SHALL BE ACCURATELY CUT AND FITTED AND SOLIDLY FASTENED TOGETHER TO PRODUCE PLUMB, LEVEL AND RIGID CONNECTION. SLICING OFFRAMPING MEMBERS BETWEEN SUPPORTS OR PROHIBITED. ALL OF MEMBERS SHALL BE INSTALLED IN EVEN TRUE PLANES. NAILING, SPIKING AND BOLTING SHALL BE DONE IN ACCORDANCE WITH UNIFORM BUILDING CODE. METAL CONNECTORS AND JOIST HANGERS SHALL BE LOCATED WHERE SPECIFIED FOR UNIFORM BUILDING CODE. DRILLS FOR BOLTS SHALL BE THE SAME DIAMETER AS THE BOLT SHANK PLUS 1/16". PROVIDE WASHER UNDER BOLT HEADS AND NUTS. ALL THROUGH BOLTS LENGTHS ARE TO BE WIDTH OF MEMBERS PLUS 1" OR SIZE PER PLAN. LENGTHS ARE NOT TO BE LESS THAN 12" TO 14" FOR LAGS FIRST TO DIAMETER AND DEPTH OF THREAD, FOLLOWED BY DRILLING TO 75% OF SHANK DIAMETER AND DEPTH OF THREAD. WOOD SCREWS SHALL NOT BE PROVIDED. SUB-DRIILLED HOLES FOR ALL SCREWS OR USE SELF-DRILLING SCREWS. TIGHTEN BOLTS AND SCREWS AT INSTALLATION AND RETIGHTEN JUST PRIOR TO COMPLETION OF PROJECT. ALL CONNECTIONS NOT DESIGNATED ON PLANS SHALL BE PER UNIFORM BUILDING CODE §19 NAIL AND CONNECTION SCHEDULES.
7. **LUMBER QUALITY :** ALL LUMBER TO BE DOUGLAS FIR, GRADE NO. 1, SIKKING, WITH NOTH FOR KNOTS, UNLESS OTHERWISE NOTED ON PLANS. ALL LUMBER SHALL BE IDENTIFIED TO SPECIES AND GRADE AND STAMPED BY WEST COAST LUMBER INSPECTION BUREAU.

1. SCOPE OF WORK: CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES FOR THE INSTALLATION OF ALL TUBULAR STEEL / METAL WORK INDICATED ON THESE PLANS.
2. PLAN VERIFICATION: THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. LICENSE: THE TUBULAR STEEL CONTRACTOR SHALL BE A C-23 CALIFORNIA LICENSED TUBULAR STEEL FENCE CONTRACTOR.
4. UNIFORM BUILDING CODE: ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES FOR THE INSTALLATION OF ALL TUBULAR STEEL / METAL WORK INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **LICENSE:** THE TUBULAR STEEL CONTRACTOR SHALL BE A C-23 CALIFORNIA LICENSED TUBULAR STEEL FENCE CONTRACTOR.
4. **UNIFORM BUILDING CODE:** ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.
5. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
6. **WORKSMANSHIP:** ALL TUBULAR STEEL WORK SHALL BE PLUMB, STRAIGHT AND TO LINE AND HEIGHT. LEVEL WITH ACCURATE ANGLES AND SURFACES AS INDICATED ON DRAWINGS.
7. **MATERIAL STANDARDS:** ALL METAL WORK SHALL BE FREE OF DEFECTS WHICH IMPAIR STRENGTH, DURABILITY AND APPEARANCE. STEEL, BARS, PLATES, ETC. SHALL CONFORM TO ASTM A-36.
8. **WELDING:** WELDING OF TUBULAR STEEL SHALL CONFORM TO AWS D1.1 AND REQUIREMENTS OF THE AMERICAN WELDING SOCIETY. ALL WELD CONNECTIONS CONTINUOUS AND SOUND. GRIND ALL WELDS SMOOTH.
9. **FOOTINGS:** CONCRETE FOOTINGS SHALL BE OF THE SIZE AND TYPE AS INDICATED ON DRAWINGS OR AS PER STRUCTURAL ENGINEER'S SPECIFICATIONS. EARTHWORK MAY BE USED FOR FOOTINGS ONLY WHEN SOIL IS FIRM AND STABLE AND CONCRETE WILL NOT BE EXPOSED.
10. **CAPS:** CONTRACTOR SHALL CAP ALL EXPOSED ENDS OF TUBING.
11. **PAINT:** ALL EXPOSED SURFACES TO BE PAINTED WITH 1 COAT OXBLEND BASE PRIMER AND PAINTED WITH 2 COATS OF RUST INHIBITING ENAMEL PAINT. COLOR AND FINISH PER DRAWINGS.
12. **CLEANING:** AFTER ERECTION, CLEAN OFF ALL RUST, SCALE AND OIL. CLEAN FIELD WELDS, BOLTS AND ABRADED AREAS. TOUCH UP ALL AREAS OF THE STEEL MARKED BY THE OWNER OR THE SHOP COAT LEAVING ALL SURFACES READY TO RECEIVE FINISH COATS.
13. **DEFECTS:** ALL DEFECTS IN TUBULAR STEEL/METAL WORK SHALL BE CORRECTED THROUGHOUT THE GUARANTEE PERIOD HEREIN, AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL EQUIPMENT AND SERVICES FOR THE SANDING, PRIMING, PAINTING OR STAINING OF ALL MATERIALS INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE IMMEDIATELY AFTER ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **UNIFORM BUILDING CODE:** ALL PAINTING AND STAINING SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.
4. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
5. **MATERIALS:** ALL PAINTS AND STAINS SHALL BE AS INDICATED ON DRAWING AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. ALL PAINT SHALL MEET THE REQUIREMENTS OF THE APPROPRIATE AIR POLLUTION CONTROL DISTRICT. PAINT SHALL BE HOMOGENEOUS, FREE OF CONTAMINANTS AND OF A CONSISTENCY AS INDICATED ON DRAWING. IF SPECIFIED, THE PIGMENT SHALL BE PROPERLY DISPERSED THROUGHOUT THE MATERIAL, SUCH THAT THE PIGMENT DOES NOT SETTLE APPLICABLY. DOES NOT CAKE OR THICKEN IN THE CONTAINER, OR BECOME GRANULAR OR CURDLED.

1. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL EQUIPMENT AND SERVICES FOR THE SANDING, PRIMING, PAINTING OR STAINING OF ALL MATERIALS INDICATED ON THESE PLANS.
2. **PLAN VERIFICATION:** THE CONTRACTOR SHALL NOTIFY OWNER AND LANDSCAPE IMMEDIATELY ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS ON ALL DRAWINGS.
3. **UNIFORM BUILDING CODE:** ALL PAINTING AND STAINING SHALL CONFORM TO THE CURRENT EDITION OF THE UNIFORM BUILDING CODE AND ALL APPLICABLE GOVERNING AGENCIES.
4. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. OWNER AND LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
5. **MATERIALS:** ALL PAINTS AND STAINS SHALL BE AS INDICATED ON DRAWING AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. ALL PAINT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING: ALL PAINT SHALL BE OF THE BRAND AND TYPE OF PAINT THAT IS HOMOGENEOUS, FREE OF CONTAMINANTS AND OF A CONSISTENCY SUITABLE FOR THE USE FOR WHICH IT IS SPECIFIED. THE PIGMENT SHALL PROPERLY DISPERSED THROUGHOUT THE MATERIAL SUCH THAT THE "WET" COAT NOT BE OVERLY THICK OR THIN. IT SHALL NOT BE TOO THICK OR THIN, OVERLY CONTAINED, OR BECOME GRANULAR OR CURDLED.
6. **DELIVERY:** PAINT MATERIALS SHALL BE DELIVERED TO THE WORK SITE IN NEW UNOPENED, ARTICULATED CONTAINERS OF APPROXIMATELY 5 GALLONS WITH THE MANUFACTURER'S NAME, DATE OF MANUFACTURE, TYPE OF PAINT OR PAINT MATERIAL A AND LOT OR BATCH NUMBER.
7. **EXECUTION:** PAINT SHALL BE APPLIED ONLY ON THOROUGHLY DRY SURFACES AND DURING PERIODS OF FAVORABLE WEATHER. SURFACES TO BE PAINTED OR STAINED SHALL BE FREE FROM DUST, GREASE, OR OTHER DELETERIOUS SUBSTANCES THAT WOULD PREVENT BONDING.
8. **APPLICATION:** PAINTING SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL CODES AND REGULATIONS. UNLESS OTHERWISE SPECIFIED, PAINT SHALL BE APPLIED BY BRUSH, ROLL OR SPRAY. METHODS, SUCH AS BRUSHING, SHALL BE USED FOR WIRE AND OTHER DEFECTS (DIRTS, RUNS BRUSH MARKS, THINK AREAS, ETC.).
9. **PAINTING LUMBER:** UNLESS OTHERWISE SPECIFIED, ALL NEW LUMBER RECEIVING PAINTING SHALL CONSIST OF APPROXIMATELY TWO FINISH COATS FOR WOOD STRUCTURES. WOOD SURFACES DESIGNATED TO BE PAINTED SHALL BE CLEANED, WHEN PERMITTED BY THE JOB SUPERINTENDENT, TO FIRST COAT OF PAINT MAY BE APPLIED PRIOR TO ERECTION. AFTER THE FIRST COAT HAS DRIED AND THE LUMBER IS IN PLACE, ALL CRACKS, CHIPS, HOLES, ETC., SHALL BE REPAIRED WITH FLUSH WITH THE SURFACE AND ALLOWED TO DRY BEFORE THE SECOND COAT IS APPLIED. SPLICES, CHORDS, THIN AREAS OR OTHER DEFECTS IN ANY ONE COAT OF PAINT SHALL CORRECTED BEFORE THE SUCCEEDING COAT IS APPLIED. THE SURFACE, ANY THAT BEING COVERED SHALL BE FREE OF DELETERIOUS MATERIAL BEFORE ADDITIONAL PAINT IS APPLIED.
10. **SURFACE PREPARATION FOR PAINTING GALVANIZED SURFACES:** GALVANIZED SURFACES SHALL BE PREPARED FOR PAINTING BY HAND SCRAPPING OR WIRE BRUSHING. AFTER HAND CLEANING, ALL GALVANIZED SURFACES SHALL BE CLEANED BY SOLVENT CLEANING PROCEDURES FOR REMOVING DERIVATIONAL FOREIGN MATERIAL SUCH AS OIL, GREASE, SOIL, OR OTHER WASHING. ALL SURFACES SHALL BE CLEANED BY THE WIRE BRUSHING OR BLASTING. GALVANIZING SHALL NOT BE REMOVED BY THIS OPERATION.
11. **EXISTING WOOD SURFACE PREPARATION:** WOOD SURFACES SHALL BE PREPARED FOR PAINTING BY REMOVING ALL CRACKED OR PEELED PAINT. LOOSE CHALKY PAINT, DIRT AND OTHER FOREIGN MATTER BY WIRE BRUSHING, SCRAPPING, SANDING OR OTHER APPROVED MEANS IMMEDIATELY PRIOR TO PAINTING. ALL SURFACES SHALL BE WIPED OR DRY BRUSHED TO REMOVE ANY DUST OR DEBRIS. ALL SURFACES SHALL BE RESULT FROM CLEANING OPERATIONS. ALL WOOD DESIGNATED TO BE PAINTED SHALL THOROUGHLY DRY BEFORE PAINT IS APPLIED.
12. **FINISH SAMPLE:** CONTRACTOR SHALL PROVIDE OWNER WITH A SAMPLE ALL PAINTS AND STAINS COLORS AS PER PLANS. SAMPLES SHALL BE APPROVED BY OWNER AND LANDSCAPE ARCHITECT.
13. **DEFECTS:** THE CONTRACTOR SHALL PROTECT ALL PARTS OF THE STRUCTURE OR ADJACENT IMPROVEMENTS AGAINST DISFIGUREMENT AS RESULT OF ITS PAINTING OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY ITS OPERATIONS TO VEHICLES OR PERSONS OR PROPERTY AND SHALL BE RESPONSIBLE AT ITS EXPENSE TO PROVIDE REPAIRS TO ANY DAMAGE TO ANY PROPERTY OR PERSONS. THE CONTRACTOR MEANS TO GUARD AGAINST SUCH DAMAGE.

Issued for:		
03/15/21	100% DESIGN DEVELOPMENT	
Revisions:		



NOT FOR
CONSTRUCTION

Project:

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client: _____

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp: _____



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

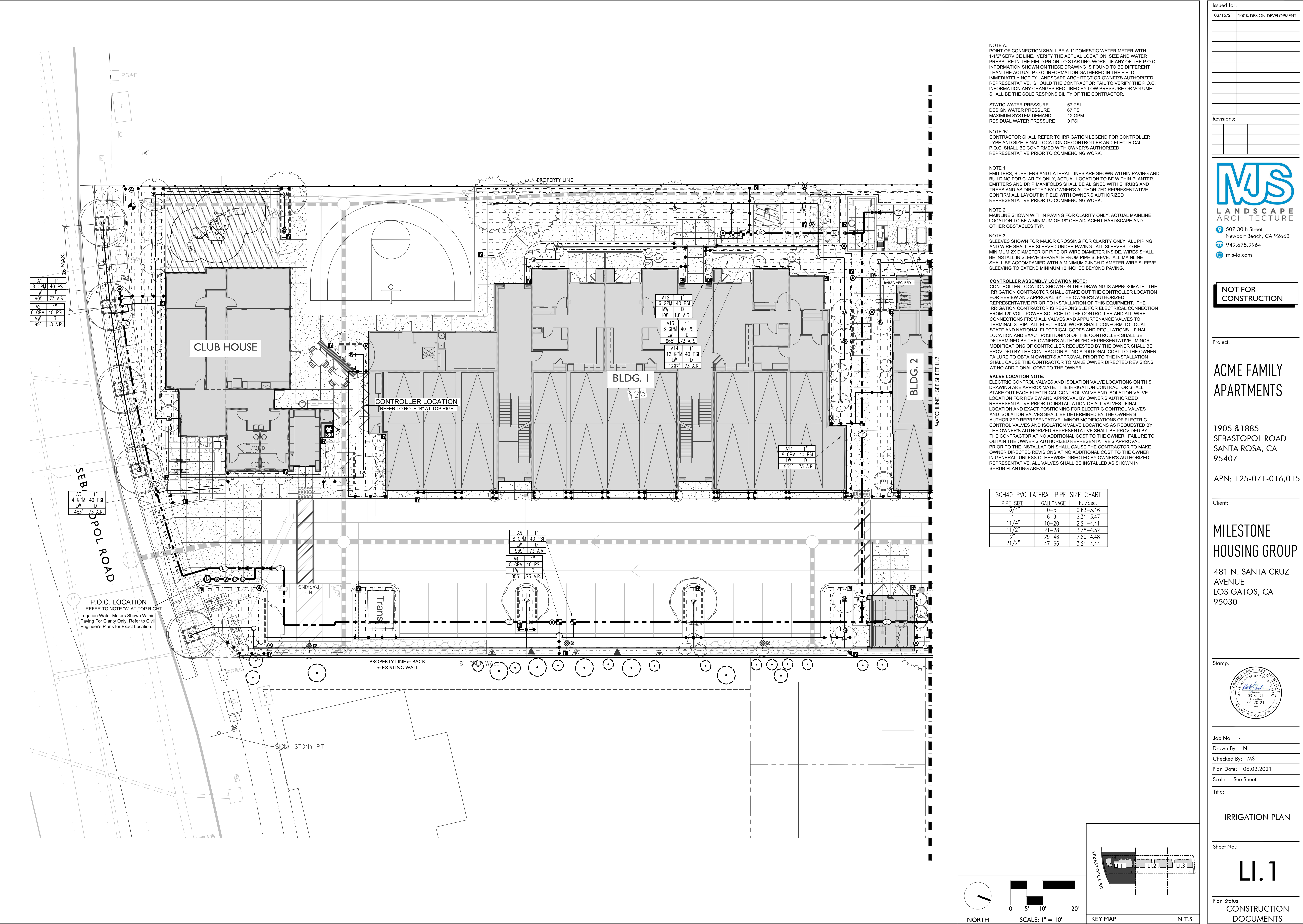
Title:

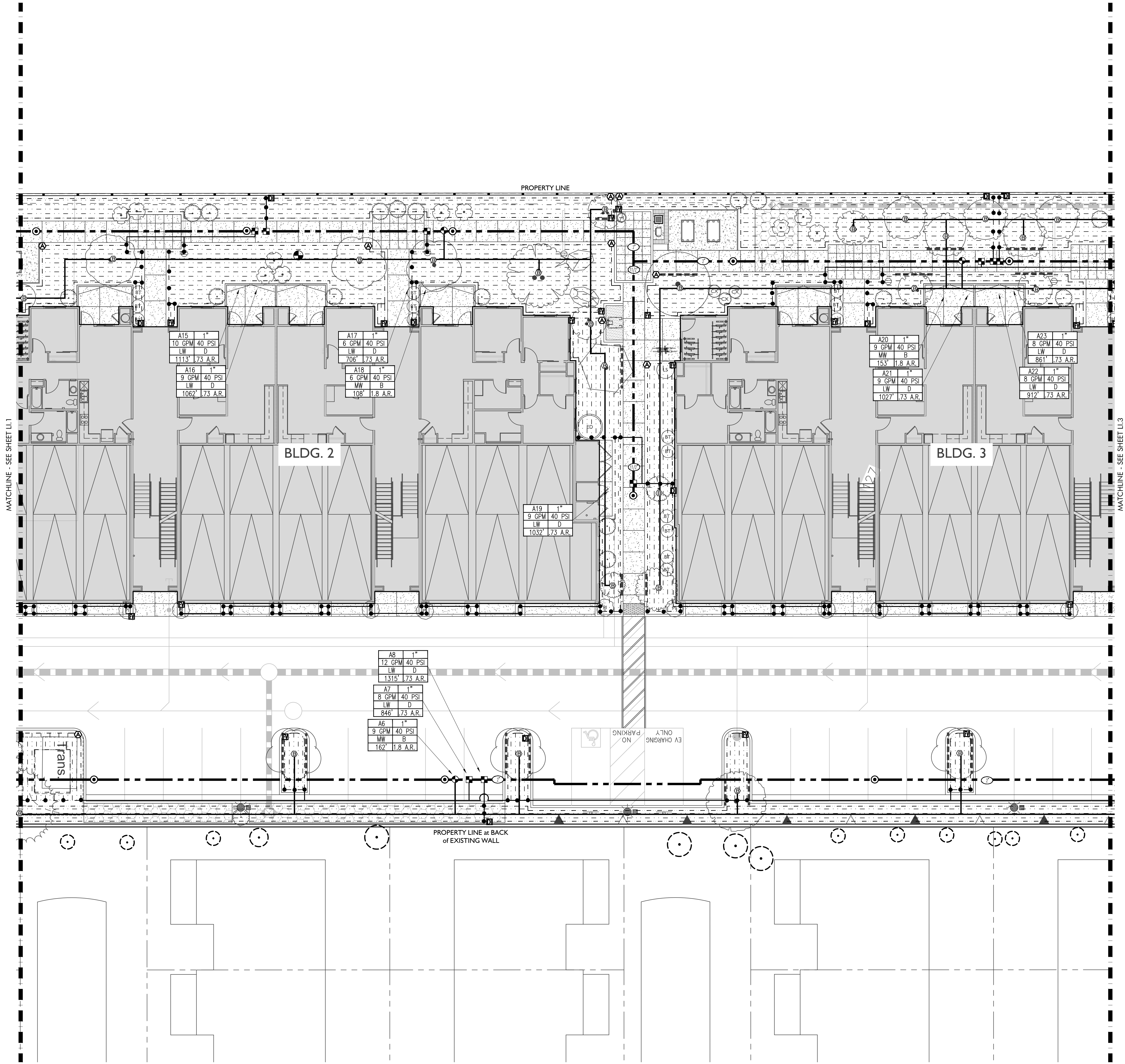
CONSTRUCTION SPECIFICATIONS

Sheet No.:

LC.10

Plan Status:
CONSTRUCTION
DOCUMENTS





NOTE 1:
EMITTERS, BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING AND BUILDING FOR CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER. EMITTERS AND DRIP MANIFOLDS SHALL BE ALIGNED WITH SHRUBS AND TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

NOTE 2:
MAINLINE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL MAINLINE LOCATION TO BE A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE 3:
SLEEVES SHOWN FOR MAJOR CROSSING FOR CLARITY ONLY. ALL PIPING AND WIRE SHALL BE SLEEVED UNDER PAVING. ALL SLEEVES TO BE MINIMUM 2X DIAMETER OF PIPE OR WIRE DIAMETER INSIDE. WIRES SHALL BE INSTALL IN SLEEVE SEPARATE FROM PIPE SLEEVE. ALL MAINLINE SHALL BE ACCOMPANIED WITH A MINIMUM 2-INCH DIAMETER WIRE SLEEVE. SLEEVING TO EXTEND MINIMUM 12 INCHES BEYOND PAVING.

VALVE LOCATION NOTE:
ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS ON THIS DRAWING ARE APPROXIMATE. THE IRRIGATION CONTRACTOR SHALL STAKE OUT EACH ELECTRICAL CONTROL VALVE AND ISOLATION VALVE LOCATION FOR REVIEW AND APPROVAL BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION OF ALL VALVES. FINAL LOCATION AND EXACT POSITIONING FOR ELECTRIC CONTROL VALVES AND ISOLATION VALVES SHALL BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. MINOR MODIFICATIONS OF ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS AS REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. FAILURE TO OBTAIN THE OWNER'S AUTHORIZED REPRESENTATIVE'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER. IN GENERAL, UNLESS OTHERWISE DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE, ALL VALVES SHALL BE INSTALLED AS SHOWN IN SHRUB PLANTING AREAS.

SCH40 PVC LATERAL PIPE SIZE CHART		
PIPE SIZE	GALLONAGE	Ft./Sec.
3/4"	0-5	0.63-3.16
1"	6-9	2.31-3.47
1 1/4"	10-20	2.21-4.41
1 1/2"	21-28	3.38-4.52
2"	29-46	2.80-4.48
2 1/2"	47-65	3.21-4.44

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

507 30th Street
Newport Beach, CA 92663

949.675.9964

mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:

Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

IRRIGATION PLAN

Sheet No.:

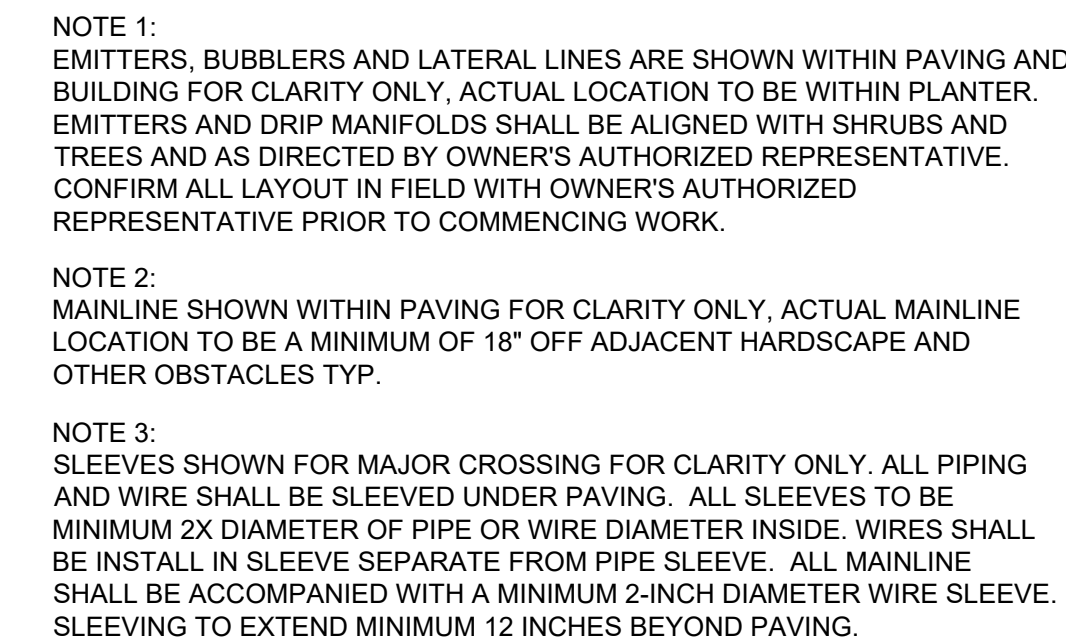
LI.2

Plan Status:
CONSTRUCTION
DOCUMENTS

SCALE: 1" = 10'

KEY MAP

N.T.S.



PIPE SIZE	GALLONAGE	Ft./Sec.
3/4"	0-5	0.63-3.16
1"	6-9	2.31-3.47
1 1/4"	10-20	2.21-4.41
1 1/2"	21-28	3.38-4.52
2"	29-46	2.80-4.48
2 1/2"	47-65	3.21-4.44

VALVE LOCATION NOTE:
ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS ON THIS DRAWING ARE APPROXIMATE. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL CRITICAL CONTROL VALVES AND ISOLATION VALVES FOR LOCATION FOR REVIEW AND APPROVAL BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION OF ALL VALVES. FINAL LOCATION AND EXACT POSITIONING FOR ELECTRIC CONTROL VALVES AND ISOLATION VALVES SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE. MINOR MODIFICATIONS OF ELECTRIC CONTROL VALVES AND ISOLATION VALVE LOCATIONS AS REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR AT HIS OWN RISK. THE CONTRACTOR SHALL OBTAIN THE OWNER'S AUTHORIZED REPRESENTATIVE'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER. IN GENERAL, UNLESS OTHERWISE DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE, VALVE SHALL BE INSTALLED AS SHOWN IN SHRUB PLANTING AREAS.

PIPE SIZE	GALLONAGE	Ft./Sec.
3/4"	0-5	0.63-3.16
1"	6-9	2.31-3.47
1 1/4"	10-20	2.21-4.41
1 1/2"	21-28	3.38-4.52
2"	29-46	2.80-4.48
2 1/2"	47-65	3.21-4.44

[illegible]

Revisions:		



NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client: _____

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp: _____



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

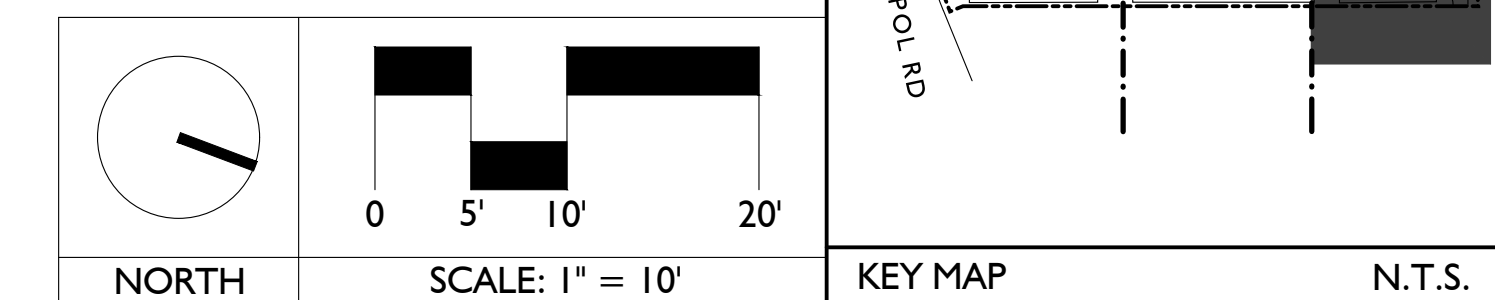
Title: _____


IRRIGATION PLAN

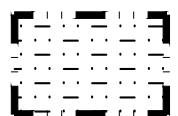
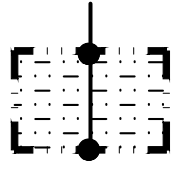



Sheet No.:




LI.3

Plan Status:
**CONSTRUCTION
DOCUMENTS**



SYMBOL	MFR.	MODEL NO. / DESCRIPTION				DETAIL
TREE / PALM IRRIGATION						
	HUNTER	PROS-06-PRS30-CV, W/ MSBN-25Q BUBBLER NOZZLE	GPM	RADIUS	PSI	PREC. RATE
			.25 (.50)	N/A	30	2.5
		NOTE: SINGLE SYMBOL ON PLANS REPRESENTS MINIMUM TWO (2) BUBBLERS PER TREE				
		(2) BUBBLERS REQUIRED FOR 24" BOX TREES AND SMALLER				
		(3) BUBBLERS REQUIRED FOR 36" BOX TREES				
		(4) BUBBLERS REQUIRED FOR PALMS AND 48" BOX TREES				










SUBSURFACE SHRUB IRRIGATION						
	HUNTER	SHRUB PLANTING AREAS: LINES SHOWN ARE A DIAGRAMMATIC HATCH PATTERN ONLY. SUB-SURFACE DRIP TUBING, PRESSURE COMPENSATING WITH CHECK VALVE, MODEL HDL-06-18-pc-CV (0.60 GPH EMITTERS, 18" ON CENTER). INSTALL TUBING ROWS MAXIMUM OF 16"-18" APART IN SHRUB AREAS. FOR LARGE SLOPES, INSTALL PARALLEL TO SLOPE AT ALL TIMES. CONTRACTOR SHALL DETERMINE ACTUAL ROW SPACING IN THE FIELD AFTER REVIEW OF PLANT SPACING FOR EACH PLANTER. EACH AND EVERY SHRUB SHALL RECEIVE WATER FROM A MINIMUM OF TWO INLINE EMITTERS. AREAS OF TIGHTLY SPACED GROUND COVER WILL REQUIRE CLOSER ROW SPACING. FOR ANY 'SINGLE' OR 'DOUBLE' ROW TYPE PLANTINGS, INSTALL DRIP TUBING ON BOTH SIDES OF THE SHRUB ROW TO IRRIGATE SHRUBS ON EACH SIDE. ALL TUBING SHALL BE INSTALLED 6" BELOW FINISH SOIL. GRADE ANCHORED WITH 9" GALVANIZED WIRE STAKES. INSTALLED FOUR FEET O.C. (JUTE MESH OR OTHER STEEL 'U' STAKES SHALL NOT BE USED OR INSTALLED AT ANY TIME). CONTRACTOR SHALL FIELD VERIFY PRIOR TO STARTING WORK AND BEFORE BACKFILLING THAT FINAL LAYOUT AND SPACING WILL PROVIDE ADEQUATE WATER TO ALL PLANTS. CONTACT HUNTER REPRESENTATIVE, CHRIS ROESINK, (760) 703-2474 FOR ADDITIONAL INFORMATION.	PSI			
			40			LI.7/D,E,H,I,L
	HUNTER	MODEL PLD-LOC CONNECTION FITTINGS BETWEEN PVC LATERAL LINES AND DRIPLINE TUBING FOR CENTER FEED SYSTEMS: PLD-LOC 050, 1/2" SCH 40 PVC TEE WITH 1/2" THREADED OUTLET AND SCH 80 RISER. CONNECTION FITTINGS BETWEEN PVC SUPPLY OR EXHAUST HEADER PIPE AND DRIPLINE TUBING: PLD-LOC 050 WITH 1/2 " SCH 40 ELBOW WITH SCH 80 RISER.			40	LI.7/D,E,H,I,L
NO SYMBOL	HUNTER	ALL CONNECTIONS BETWEEN 1/2" DRIPLINE TUBING SHALL BE MADE USING HUNTER BARBED INSERT FITTINGS.				
<div><div>A. FOR ALL AREAS INSTALL PERIMETER TUBING MAXIMUM 9" FROM PERIMETER EDGE FOR GROUND COVER AREAS OR AT FIRST LINE OF SHRUBS. INSTALL PARALLEL TO SLOPE AT ALL TIMES. CONTRACTOR SHALL DETERMINE MINIMUM ROW SPACING IN THE FIELD AFTER REVIEW OF PLANT SPACING FOR EACH PLANTER. EACH AND EVERY SHRUB SHALL RECEIVE WATER FROM A MINIMUM OF TWO INLINE EMITTERS. AREAS OF TIGHTLY SPACED GROUND COVER WILL REQUIRE CLOSER ROW SPACING. FOR ANY 'SINGLE' OR 'DOUBLE' ROW TYPE PLANTINGS, INSTALL DRIP TUBING ON BOTH SIDES OF THE SHRUB ROW TO IRRIGATE SHRUBS ON EITHER SIDE. DUE TO SOIL STRATA DIFFERENCES AND POSSIBLE COMPACTION CONTRACTOR SHALL FIELD VERIFY PRIOR TO STARTING WORK AND BEFORE BACKFILLING THAT THE FINAL LAYOUT AND ROW SPACING WILL PROVIDE ADEQUATE WATER TO ALL PLANTS.</div><div>B. FOR LARGE SLOPES CONTRACTOR SHALL ALWAYS FOLLOW AND ROUTE, PARALLEL TO GRADE, ANY INLINE DRIP TUBING LAYOUT. ALWAYS LAY DRIPLINES ACROSS SLOPE. DIRECTIONAL LAYOUT AS SHOWN IN THE PLANS MAY NOT BE EXACTLY ACROSS SLOPE. HATCH PATTERNS SHOWN IN PLANS DRIP AREAS ARE DIAGRAMMATIC ONLY.</div><div>C. FOR ALL INLINE DRIP TUBING AREAS ON SLOPE THE CONTRACTOR SHALL BE HELD ACCOUNTABLE FOR CREATING A TRIANGULAR WETTING PATTERN ACROSS ANY SLOPE. OFFSET THE EMITTERS BY HALF THE EMITTER SPACING WHEN INSTALLING TUBING TO CREATE A TRIANGULAR WETTING PATTERN ACROSS THE SLOPE. DO NOT INSTALL TUBING WHERE THE EMITTERS ARE DIRECTLY IN LINE (PERPENDICULAR) WITH EACH OTHER.</div></div>						
	HUNTER	MODEL AFV-T AUTOMATIC, FOR FLUSHING PVC EXHAUST MANIFOLD PIPE. INSTALL FLUSH VALVE INSIDE 7" ROUND VALVE BOX. AT MINIMUM ONE AT THE END OF EACH AND EVERY DRIPLINE TUBING RUN IN EACH DIRECTION. INSTALL FLUSH VALVES APPROXIMATELY WHERE SHOWN ON PLANS. MULTIPLE FLUSH VALVES MAY BE REQUIRED WITHIN A SINGLE ZONE. INSTALL AT LOCATIONS 18" FROM PAVING FOR EASE OF MAINTENANCE.				LI.7/G
	HUNTER	MODEL: AVR-075 AIR/VACUUM RELIEF VALVE INSTALLED WITH PLD-050-TB-TEE. INSTALL AIR RELIEF ASSEMBLY INSIDE 7" ROUND VALVE BOX AT THE HIGH POINT OF EACH PLANTER. MIN 1 ARV PER 500' OF DISTRIBUTION TUBING. USING AIR RELIEF LATERAL. CONNECT AIR RELIEF VALVE TO ALL DRIP LINE LATERALS WITHIN ELEVATED AREA. INSTALL AIR RELIEF VALVES APPROXIMATELY WHERE SHOWN ON PLANS. MULTIPLE ARV'S MAY BE REQUIRED PER RCV WITHIN UNDULATING AREAS. VERIFY QUANTITY AND UNDULATING AREAS PRIOR TO START OF WORK. INSTALL AT LOCATIONS 18" FROM PAVING FOR EASE OF MAINTENANCE.				LI.7/F
	HUNTER	ECO-ID: SPRINKLER BODY WITH VISIBLE YELLOW STEM INDICATES ZONE IS IN OPERATION. INSTALL ONE UNIT WITHIN EACH AND EVERY PLANTER WITHIN A ZONE. FOR TREE ZONES INSTALL AT END OF ZONE RUN IN EACH DIRECTION. ATTACH TO POLY OR PVC VIA 1/2" MPT CONNECTION. INSTALL UNIT AT HIGH POINT OF EACH PLANTER OR USE HUNTER'S MANUALLY INSTALLED CHECK VALVE P/N 462237SP.				N/A






IRRIGATION CONTROLLER AND RELATED EQUIPMENT						
	HUNTER	STAINLESS STEEL WALL MOUNTED 32 STATION HUNTER ICORE CONTROLLER, MODEL: IC-3200-SS/PED-SS WITH ROAM XL REMOTE. ALLOW (2) EXTRA AVAILABLE STATIONS MINIMUM INCLUDING MASTER VALVE AND FLOW SENSOR STATIONS. CONTRACTOR SHALL VERIFY EXACT CONTROLLER LOCATION AND CONNECTIONS WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO BID OF WORK. CONTACT HUNTER REPRESENTATIVE, CHRIS ROESINK, (760) 703-2474 FOR ADDITIONAL INFORMATION.				LI.7/A
	HUNTER	WIRED ET/ RAIN/ FREEZE SENSOR. MODEL WIRED SOLAR SYNC. INSTALL PER MANUFACTURER'S SPECIFICATION. INSTALL ON BUILDING EYE/ROOF WALL, OR POST. CONTRACTOR SHALL CONFIRM EXACT LOCATION AND MOUNTING PROCEDURES WITH OWNER'S AUTHORIZED REPRESENTATIVE BEFORE INSTALLING SENSOR. INSTALL SENSOR IN OPEN LOCATION WITH 360 DEGREE VIEW OF SKY WITHOUT INTERFERENCE OR INFLUENCE FROM BUILDINGS, TREES, OR OTHER OBSTRUCTIONS SO AS TO NEGATIVELY IMPACT RAINFALL ON THE UNIT, AND WITH EASY ACCESS FOR MAINTENANCE. CONTRACTOR SHALL INSTALL WIRED CONDUIT ALONG BUILDING WALL TO SENSOR. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SIGNAL AND PROPER OPERATION BETWEEN CONTROLLER AND SENSOR UNIT.				LI.7/A
NO SYMBOL	N/A	CONTRACTOR SHALL COORDINATE ALL CONNECTIONS, CONDUITS, SWEEPS, SLEEVES, AND CABLE ROUTING WITH GENERAL CONTRACTOR AND ANY AFFECTED ON-SITE TRADES AS REQUIRED THROUGHOUT PROJECT.				N/A
	BY OTHERS	120 VOLT ELECTRICAL POWER, PROVIDED BY ELECTRICIAN. CONTRACTOR SHALL COORDINATE AND VERIFY CONTROLLER WALL MOUNT LOCATION IN FIELD WITH ELECTRICIAN. ELECTRICIAN SHALL ROUTE AND INSTALL ALL CONDUIT AND CONDUCTORS TO WITHIN THE CONTROLLER WALL MOUNT LOCATION. IRRIGATION CONTRACTOR SHALL CONNECT IRRIGATION CONTROLLER TO ELECTRICAL STUB-OUT. CONTROLLER CIRCUIT SHALL BE SUPPLIED FROM A DEDICATED BREAKER FROM THE POWER SOURCE.				N/A

PIPE SIZE CHART LEGEND

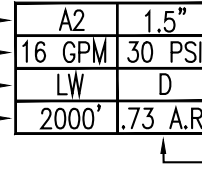
LATERAL PIPE SIZING CHART		
0 TO 5	GPM	3/4" SCH. 40 PVC PIPE
5 TO 10	GPM	1" SCH. 40 PVC PIPE
10 TO 15	GPM	1-1/4" SCH. 40 PVC PIPE
15 TO 25	GPM	1-1/2" SCH. 40 PVC PIPE
25 TO 35	GPM	2" SCH. 40 PVC PIPE
35 TO 50	GPM	2-1/2" SCH. 40 PVC PIPE

DRIPLINE INTAKE/EXHAUST HEADER PIPE SIZING CHART		
INTAKE/EXHAUST HEADER MINIMUM SIZE OF 3/4 INCH		
FLOW RANGE	MINIMUM SIZE OF EXHAUST HEADER	
0 THROUGH 5 GPM	MINIMUM SIZE SHALL BE 3/4 INCH	
6 THROUGH 10 GPM	MINIMUM SIZE SHALL BE 1 INCH	
11 THROUGH 15 GPM	MINIMUM SIZE SHALL BE 1-1/4 INCH	
16 THROUGH 25 GPM	MINIMUM SIZE SHALL BE 1-1/2 INCH	
26 THROUGH 50 GPM	MINIMUM SIZE SHALL BE 2 INCH	
NOTE: CONTRACTOR SHALL SIZE ALL DRIPLINE INTAKE/EXHAUST HEADERS PER PIPE SIZING CHART. IN NO INSTANCE SHALL PIPE SIZE EXCEED DESIGNATED GPM RANGE.		

SYMBOL	MFR.	MODEL NO. / DESCRIPTION	DETAIL
IRRIGATION UTILITIES			
	P.O.C.	CONNECTION TO 1" WATER METER AND 1-1/2" SERVICE LINE. CONTRACTOR SHALL SUPPLY ALL HARDWARE AND FITTINGS REQUIRED TO CONNECT IRRIGATION MAINLINE TO METER. CONTRACTOR SHALL VERIFY METER LOCATION, SIZE, SERVICE LINE SIZE, AND STATIC WATER PRESSURE BEFORE COMMENCING WORK.	N/A
	FEBCO	1" REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY: MODEL 825YA, INSTALL WITH WYE STRAINER #650A, INSTALL CENTERED ON A 30"x36"x4" POURED-IN-PLACE CONCRETE PAD. UNIT TO BE INSTALLED WITHIN V.I.T. STAINLESS STEEL ENCLOSURE. CONTRACTOR SHALL DETERMINE EXACT LOCATION WITH THE OWNER'S AUTHORIZED REPRESENTATIVE BEFORE INSTALLATION. SEE PRESSURE CALCULATION.	LI.6/G
NO SYMBOL	V.I.T.	BACKFLOW ASSEMBLY ENCLOSURE: MODEL SB8C-22SS. INSTALL ON CONCRETE PAD WITH BF ASSEMBLY CENTERED. CONCRETE PAD TO EXTEND 6" BEYOND OUTSIDE DIMENSIONS OF ENCLOSURE. REFER TO MANUFACTURER'S INSTALLATION DETAIL AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION INFORMATION.	LI.6/G
	HUNTER	IBV-101G-FS 1" MASTER CONTROL VALVE: NORMALLY CLOSED. INSTALL PER MANUFACTURERS SPECIFICATIONS	LI.6/B
	HUNTER	HFS-FCT-100, 1" FLOW SENSOR. INSTALL AND WIRE TO CONTROLLER PER MANUFACTURER'S SPECIFICATIONS.	LI.6/C
	LASCO	MAINLINE ISOLATION VALVE: MODEL VXX101N-SC, PVC <u>SLO-CLOSE</u> FULL BLOCK TRUE UNION 'SOCKET' BALL VALVE WITH EPDM O-RINGS. VALVE TO MATCH MAINLINE SIZE.	LI.6/E
NO SYMBOL	LASCO	MANIFOLD ISOLATION VALVE: <u>SLO-CLOSE</u> FULL BLOCK TRUE UNION 'SOCKET' PVC BALL VALVE WITH EPDM O-RINGS. MODEL VXX101N-SC. CONTRACTOR SHALL INSTALL ALL RCVS/QCV'S ON MANIFOLDS. VALVE TO MATCH MANIFOLD SIZE. VALVE MANIFOLDS WITH ISOLATION VALVE ARE NOT SHOWN ON PLANS FOR CLARITY. CONTRACTOR SHALL INSTALL MANIFOLDS PER DETAIL.	LI.6/E
	HUNTER	3/4" QUICK COUPLER VALVE: MODEL HQ-3RC. CONTRACTOR SHALL SUPPLY 3 QC KEYS, MODEL HK-33 WITH ARROWHEAD BRASS (CHAMPION) UPWARD 3/4"x 3/4" BENT-NOSE HOSE BIB, MODEL 975, ATTACHED. CONTRACTOR SHALL TURN OVER KEYS TO OWNER'S REPRESENTATIVE AT COMPLETION OF MAINTENANCE PERIOD.	LI.6/D
	HUNTER	ICV-101 G-FS OR ICV-151 G-FS, SERIES (1" OR 1-1/2") PLASTIC REMOTE CONTROL VALVE, SEE SIZE AS SHOWN ON PLAN.	LI.6/A; LI.7/B,K LI.6/H; LI.7/B,K
	HUNTER	ICZ-101-40 / ICZ-101-LF-40 / ICZ-151XL-40, SERIES (1" OR 1-1/2") DRIP CONTROL ZONE KIT, SEE SIZE AS SHOWN PLAN. INSTALL ICZ-101-LF-40, 1" VALVE FOR GPM DEMANDS 0.5 - 14 GPM. INSTALL ICZ-101-40, 1" VALVE FOR DEMANDS 15 - 20 GPM. INSTALL ICZ-151XL-40, 1-1/2" VALVE FOR DEMANDS 20 GPM AND GREATER.	
	EZ FLO	EZ-003-CX-CBV-250-FERTH-MAXX STARTER-25, 2.5 GALLON FERTILIZING SYSTEM WITH 90 DAY SUPPLY OF 25 LB BAGS STARTER FERTILIZER. USE ALL EZ FLO FITTINGS "CBV" AS NEEDED. INSTALL IN A 10" X 12" VALVE BOX.	LI.6/I

IRRIGATION PIPE/SLEEVE			
	AS APRVD	PVC PIPE, SCH 40, 3/4" - 2", AS LATERAL LINES. 12" BELOW GRADE. SEE 'PIPE SIZE TABLES' FOR SIZES.	LI.7/J
NO SYMBOL	AS APRVD	PVC PIPE, SCH 40, AS DRIP MANIFOLD PIPE (HEADERS/FOOTERS), MINIMUM SIZES FOR SUB-SURFACE DRIP ZONES: USE 3/4" PIPE: FOR INDIVIDUAL, OR CONNECTED PLANTERS WITHIN A ZONE, WITH A TOTAL OF 460' OR LESS TOTAL LIN. FT. TUBING USE 1" PIPE: FOR INDIVIDUAL, OR CONNECTED PLANTERS WITHIN A ZONE, WITH 461'-1050' TOTAL LIN. FT. TUBING USE 1-1/4" PIPE: FOR INDIVIDUAL, OR CONNECTED PLANTERS WITHIN A ZONE, WITH 1051'-2250' TOTAL LIN. FT. TUBING USE 1-1/2" PIPE: FOR INDIVIDUAL, OR CONNECTED PLANTERS WITHIN A ZONE, WITH 2251'-3750' TOTAL LIN. FT. TUBING	LI.7/J
	N/A	CONNECTION LOCATION SYMBOL OF PVC LATERAL PIPE TO DRIPLINE HEADER AND/OR FOOTER. CONTRACTOR SHALL USE APPROPRIATE FITTINGS AS REQUIRED. PVC PIPE SCH 40, 3/4" - 1-1/2", AS DRIPLINE HEADER/FOOTER, 12" BELOW GRADE.	N/A
	AS APRVD	PVC PIPE, SCH 40, 1/2" - 1-1/2", (THICK LINE) AS LATERAL LINES FOR TREE ZONES ONLY. 12" BELOW GRADE. SEE PLAN FOR SIZES.	LI.7/J
	AS APRVD	PVC PIPE, SCH 40, AS MAINLINES, 24" BELOW GRADE. REFER TO PLAN FOR SIZE.	LI.7/J
NO SYMBOL	AS APRVD	PVC PIPE, SCH 40, SIZE AS REQUIRED, FOR RCV/QCV MANIFOLDS, 18" BELOW GRADE. MANIFOLDS AND PIPE ARE NOT SHOWN ON PLAN FOR CLARITY. MANIFOLD PIPE SIZE SHALL BE SAME AS LARGEST LATERAL SIZE IN MANIFOLD. USE 1-1/4" FOR QCV MANIFOLD.	LI.7/J
	AS APRVD	PIPE AND WIRE SLEEVES, PURPLE PVC PIPE, SCH 40, MINIMUM TWICE THE DIAMETER OF PIPE AND WIRE CARRIED, MINIMUM 1-1/2" FOR WIRE. PLACE SLEEVES BELOW ALL DRIVEWAYS, WALKWAYS, ANY PAVING, HARDSCAPE, ETC, AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. ALL SLEEVES REQUIRED MAY NOT SHOWN ON PLAN FOR DRAWING CLARITY.	LI.7/J

IRRIGATION MISCELLANEOUS			
NO SYMBOL	LASCO	PVC SCH 80 FITTINGS MUST BE USED ON ALL SOLVENT WELD MAINLINE FITTINGS, 2-INCH AND LARGER. WHEN A FITTING HAS A THREADED FEMALE OR MALE COMPONENT THE FITTING SHALL ALWAYS BE PVC SCH 80. ALL THREADED PLASTIC NIPPLES SHALL BE PVC SCH 80 TYPE	N/A
NO SYMBOL	RAIN BIRD	MODELS VB-STD, VB-JMB, VB-SPR, VB-10RND, VB-6RND IRRIGATION VALVE BOXES FOR IRRIGATION EQUIPMENT	LI.7/B,K
NO SYMBOL	3M	WIRE SPLICE CONNECTOR, MODEL DBR/Y-6 FOR RCV WIRE CONNECTIONS	LI.7/C
NO SYMBOL	AS APPROVED	IRRIGATION WIRE #14 AWG UF DIRECT BURIAL (U.L. APPROVED) FOR RCV 'CONTROL' WIRES IRRIGATION WIRE #14 AWG UF DIRECT BURIAL (U.L. APPROVED) FOR RCV 'COMMON' WIRES	LI.7/J
NO SYMBOL	T. CHRISTY	TA-DT-3-BLU 3" WIDE METALLIC POTABLE WATER DETECTABLE MARKER TAPE SHALL BE INSTALLED 6" ABOVE ALL IRRIGATION MAINLINES	N/A
NO SYMBOL	T. CHRISTY	ALL REMOTE CONTROL VALVES SHALL BE OUTFITTED WITH A ID TAG INDICATING THE CONTROLLER AND VALVE NUMBER.	LI.6/A,H

IRRIGATION VALVE IDENTIFICATION			
CONTROLLER LETTER / VALVE NUMBER			
			VALVE SIZE
		GALLONS PER MINUTE G.P.M.	OPERATING PRESSURE (P.S.I.)
		HYDROZONE PLANT FACTOR	HYDROZONE / IRRIGATION TYPE - SEE
		LANDSCAPE HYDROZONE AREA	HYDROZONE LEGEND (BELOW)
		SQUARE FOOTAGE	APPLICATION RATE IN INCHES PER HOUR

HYDROZONE LEGEND			
Hydrozone Number		Plant Factor (Water Use) - from WUCOLS Selected based on type of plants in hydrozones:	IE - Irrigation Efficiency
(1) Drip - Low Water / Plants		VLW = 0.1 - Very Low Water Use Plants	S = Spray .71
(2) Drip - Moderate Water / Plants		LW = 0.1 - 0.3 - Low Water Use Plants	M = Micro Spray .73
(3) Rotator - Low Water / Plants		MW = 0.4 - 0.6 - Moderate Water Use Plants	R = Rotator .78
(4) Rotator - Low Water / Plants			B = Bubbler .77
(5) Bubbler - Low Water / Trees			D = Drip .81
(6) Bubbler - Moderate Water / Trees		HW = 0.7 - 0.9 - High Water Use Plants	

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:		



MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663

949.675.9964

mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 &1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

IRRIGATION LEGEND

Sheet No.:

LI.4

Plan Status:
CONSTRUCTION
DOCUMENTS

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROCURE AN ORIGINAL SET OF THESE PRINTED IRRIGATION PLANS FOR BIDDING AND CONSTRUCTION.
2. XEROX COPIES OF THESE PLANS ARE NOT ALLOWED FOR BIDDING AND CONSTRUCTION AS THEY MAY NOT SHOW IRRIGATION SYMBOLS, LINE WEIGHTS, OR LINE TYPES CLEARLY.
3. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CAPED TO BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS, PROPERTY LINES, DIMENSIONS AND THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SITE CONDITIONS PRIOR TO BIDDING AND COMMENCING WORK.
5. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
6. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
7. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.
8. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SYMBOL SIZES ARE SHOWN FOR DESIGN CLARITY ONLY. CONTRACTOR SHALL MEASURE ALL DISTANCES AND SPACING FROM CENTER OF SYMBOLS ON THE PLAN AND TRANSFER THOSE DISTANCES TO THE INTENDED FIELD MEASURING DEVICE SUCH AS A MEASURE TAPE OR WHEEL.
9. THE CONTRACTOR UNDERSTANDS IT IS THE INTENT OF THESE DRAWINGS TO IRRIGATE ALL NEW PLANT MATERIAL, AND EXISTING PLANT MATERIAL AS REQUIRED, UNLESS SPECIFICALLY NOTATED IN THE DRAWINGS THAT A PLANT MATERIAL IS A NON-IRRIGATED TYPE. WHEN PLANT MATERIAL IS SHOWN IN THESE DRAWINGS TO NOT HAVE IRRIGATION SUBSCRIBED TO IT, THE CONTRACTOR SHALL CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE AND/OR THE LANDSCAPE ARCHITECT THROUGH THE PROJECT REQUEST FOR INFORMATION (R.F.I.) PROCESS FOR CLARIFICATION AND FURTHER INSTRUCTIONS TO THE INTENT OF THE NEW PLANT MATERIAL RECEIVE A MINIMUM OF 100% IRRIGATION COVERAGE FROM TWO ADJACENT SPRINKLERS WHEN OVERHEAD SYSTEMS ARE USED, AND AT LEAST ONE OR MORE EMITTER POINTS PER PLANT, AS DIRECTED IN THE DRIP EMITTER LEGEND, WHEN IRRIGATION DRIP SYSTEMS ARE USED. IF THE CONTRACTOR FAILS TO NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE AND/OR THE LANDSCAPE ARCHITECT OF THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IRRIGATION TO THE PLANT MATERIAL. IRRIGATION SHALL BE OF THE SAME TYPE AS THE SURROUNDING JOCCA UTMATIC. IT IS RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE IRRIGATION TO EVERY PLANT THAT IS INSTALLED UNDER HIS SUPERVISION.

10. VERIFY THE ACTUAL, STATIC STRIKE WATER PRESSURE IN THE FIELD AT THE P.O.C. CONNECTION POINT PRIOR TO STARTING WORK. THE STATIC PRESSURE SHALL READ NO LESS THAN 60 PSI OR NO GREATER THAN 90 PSI AT THE P.O.C. CONNECTION. SHOULD THE CONTRACTOR FAIL TO VERIFY THE STATIC WATER PRESSURE INFORMATION AND NOTIFY THE LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL BE MADE TO THE IRRIGATION SYSTEM BECAUSE OF LOW SYSTEM PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. VERIFY THE ACTUAL LOCATION AND SIZE OF WATER METER AND STATIC WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE P.O.C INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO VERIFY THE P.O.C. INFORMATION AND NOTIFY THE ABOVE. ANY ADDITIONAL COSTS INCURRED BY CHANGES REQUIRED TO BE MADE TO THE IRRIGATION SYSTEM BECAUSE OF LOW OR HIGH PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
12. P.O.C. EQUIPMENT LAYOUT INCLUDING, BUT NOT LIMITED TO, IRRIGATION WATER METER, BACKFLOW ASSEMBLY, MASTER VALVE, AND FLOW SENSOR IS DIAGRAMMATIC DUE TO THE SCALE OF THE DRAWING. LOCATIONS MAY BE SHOWN WITHIN 10' OF THE ACTUAL LOCATION. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EACH EQUIPMENT FOR EACH EQUIPMENT BY OTHERS WITHIN VICINITY OF P.O.C. CONTRACTOR SHALL VERIFY SPECIFIC LAYOUT ORIENTATION AND ACTUAL EQUIPMENT LOCATIONS WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION OF EQUIPMENT.
13. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTION DEVICE AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE. CONTRACTOR SHALL CONTACT REPRESENTATIVE BEFORE COMMENCING WORK.
14. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT WHERE SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT THE EQUIPMENT IS NOT INDICATED ON THE PLANS. SUCH CONDITIONS MAY HAVE BEEN UNKNOWN AND NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK. SHOULD THE CONTRACTOR FAIL TO NOTIFY THE ABOVE, ANY ADDITIONAL COSTS INCURRED BY ANY CHANGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
15. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL OWNER, COUNTY, AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.

16. CONTRACTOR SHALL REFER TO IRRIGATION LEGEND FOR CONTROLLER TYPE. FINAL LOCATION OF CONTROLLER AND ELECTRICAL P.O.C. SHALL BE CONFIRMED WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
17. CONTRACTOR SHALL COORDINATE AND VERIFY CONTROLLER PEDESTAL LOCATION IN FIELD WITH ELECTRICIAN FOR CONTROLLER POWER CIRCUIT ROUTING.
18. CONNECTION OF IRRIGATION CONTROLLER TO THE PROVIDED ELECTRICAL STUB-OUT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR AND INSTALLATION THEREOF SHALL BE PER LOCAL CODE REQUIREMENTS. CONTRACTOR MAY CHOOSE, IF SO DESIRED, TO SUB THIS WORK TO THE ELECTRICAL CONTRACTOR.
19. CONTROLLER POWER SOURCE SHALL BE SUPPLIED FROM A "CONTROLLER DEDICATED" CIRCUIT BREAKER.
20. CONTRACTOR SHALL ROUTE **TWO** ADDITIONAL "CONTROL" WIRES AND **ONE** ADDITIONAL "COMMON WIRE ALONG ENTIRE MAINLINE ROUTE AND ALONG EACH AND EVERY LGE OF MAINLINE ROUTE. ROUTE WIRES INTO EACH AND EVERY R VALVE BOX, WHERE VALVE BOXES ARE GROUPED INTO A MANHOLE. ROUTE WIRES INTO FIRST VALVE BOX ON MANHOLE ONLY. "SPARE" CONTROL WIRES SHALL BE OF A DIFFERENT COLOR THAN THOSE USED ON THE PROJECT. "COMMON WIRE SHALL BE OF A DIFFERENT COLOR THAN THAT USED ON THE PROJECT, OR WHITE WITH A STRIPE.
21. CONTRACTOR SHALL INSTALL FLOW SENSOR/METER WIRE WITHIN 1" SCH 40 PVC ELECTRICAL CONDUIT.

22. CONTRACTOR SHALL BE RESPONSIBLE FOR GROUNDING CONTROLLER PER MANUFACTURERS REQUIREMENTS. CONTRACTOR SHOULD CONTACT CONTROLLER MANUFACTURER FOR GROUNDING INSTALLATION INFORMATION. IT SHALL BE CONTRACTORS RESPONSIBILITY TO PROVIDE THE CORRECT INFORMATION TO THE CONTROLLER MANUFACTURER TO PROVIDE ADEQUATE GROUNDING AS DETERMINED BY CONTROLLER MANUFACTURER.

23. CONTRACTOR SHALL USE U.L. APPROVED GROUND ROD AND GROUND PLATE WITH CATHODE 'ONE-SHOT' CONNECTION PROCESS FOR CONNECTING THE #6 AWG GROUND WIRE FROM THE CONTROLLER GROUND LUG TO THE ROD. MAXIMUM GROUND RESISTANCE SHALL BE PER CONECTORS FORM FOR ADDITIONAL WORK SPECIFICATIONS, BUT NOT GREATER THAN 10 OHMS. CONTACT VINCE NOLLETT, PAIGE ELECTRIC, FRESNO, CA (559) 431-2574 FOR ADDITIONAL CONTROLLER GROUNDING INSTALLATION INFORMATION.

24. CONTRACTOR SHALL REFER TO DETAILS '1/5'F, 'G' FOR SYSTEM GROUNDING INSTALLATION. CONTACT VINCE NOLLETT, PAIGE ELECTRIC, FRESNO, CA (559) 431-2574 FOR ADDITIONAL CONTROLLER GROUNDING INSTALLATION INFORMATION. CONTRACTOR SHALL CONTACT CONTROLLER ASSEMBLY MANUFACTURER FOR ADDITIONAL CONTROLLER GROUNDING INSTALLATION INFORMATION.

25. REMOTE CONTROL VALVES AND ISOLATION VALVE LOCATIONS ON THIS DRAWING ARE APPROXIMATE. THE LANDSCAPE CONTRACTOR SHALL STAKE OUT EACH ELECTRICAL CONTROL VALVE AND ISOLATION VALVE LOCATION FOR REVIEW AND APPROVAL, BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION OF ALL VALVES. FINAL LOCATION AND POSITION FOR EACH VALVE SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. MINOR MODIFICATIONS TO REMOTE CONTROL VALVES AND ISOLATION VALVE LOCATIONS AS REQUESTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. FAILURE TO OBTAIN OWNER'S APPROVAL PRIOR TO THE INSTALLATION SHALL CAUSE THE CONTRACTOR TO MAKE PROJECT DESIGN REVISIONS AT THE OWNER'S ADDITIONAL COST TO THE OWNER. IN ADDITION, ALL VALVES SHALL BE INSTALLED WITHIN THREE FEET FROM EDGE OF HARDSCAPE, WALK OR CURB IN SHRUB PLANTING AREAS.

27. ALL RCVS AND OCVS SHALL BE INSTALLED ON A SUB-MAIN MANIFOLD AS SHOWN IN DETAIL "L106/D". RCV AND OCV SYMBOLS ARE SHOWN DIAGRAMMATICALLY ON TOP OF MAINLINE FOR CLARITY ONLY. PLAN DOES NOT SHOW THE MANIFOLD FOR CLARITY PURPOSES.
28. ALL QUICK COUPLER VALVES SHALL BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER VALVES SHALL BE INSTALLED AS SHOWN IN THE INSTALLATION DETAILS. INSTALL QUICK COUPLERS WITHIN 18 INCHES OF HARDSCAPE. CONTRACTOR SHALL TIE OFF OF MAINLINE WITH 1 1/4" INCH MAINLINE PIPE WHERE APPLICABLE TO LOCATE QUICK COUPLER VALVE WITHIN ADJACENT SHRUB OR GROUND COVER AREAS AND/OR 18 INCHES FROM HARDSCAPE.

29. MAINLINE LAYOUT IS DIAGNOSTIC DUE TO THE SCALE OF THE DRAWINGS. ROUTING MAY BE SHOWN WITHIN BUILDINGS AND/OR PAVING FOR CLARITY ONLY. ACTUAL MAINLINE LOCATION TO BE WITHIN PLANTER A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYPE. CONTRACTOR SHALL ADJUST MAINLINE ROUTING TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY BE ENCOUNTERED, INCLUDING BUT NOT LIMITED TO TREES, LIGHT POLES, BOLLARDS, FIRE HYDRANTS, DRINKING FOUNTAINS, CONCRETE FOOTINGS, ETC.
30. MAINLINE AND/OR LATERAL PIPE ROUTING SHOWN OUTSIDE PROPERTY LINE AND/OR L.O.W. IS DIAGNOSTIC AND FOR CLARITY ONLY. CONTRACTOR SHALL ROUTE MAINLINE WITHIN PROPERTY LINE AND/OR L.O.W.
31. ALL PIPE MATERIAL AND INSTALLATION LABOR REQUIRED FOR MAINLINE OR LATERAL LINE ADJUSTMENTS DUE TO ACCOMMODATIONS IN THE FIELD SHALL BE INCLUDED WITHIN CONTRACTED PRICE AND MAY NOT BE SUBMITTED AS A CHANGE ORDER TO THE ORIGINAL BID.
32. NO PVC PIPE MAINLINES SHALL BE ROUTED OR ALLOWED CLOSER THAN 12 FEET FROM ANY TREE TRUNK AT ANY TIME. PIPE ROUTING AS SHOWN ON PLANS IS FOR DIAGNOSTIC PURPOSES ONLY. WHEN PIPE MUST BE ROUTED CLOSER THAN 12 FEET BECAUSE OF HARDSCAPE CONSTRAINTS OR OTHER OBSTACLES CONTRACTOR SHALL, INSTALL MAINLINE PIPE WITHIN 12 FEET OF THE TRUNK AND INDICATE WITHIN 12 FEET OF THE TRUNK AND SO INDICATE THE PIPE ROUTING AND SLEEVE LOCATIONS ON THE AS-BUILT DRAWINGS.
33. SLEEVES AND THEIR LOCATIONS ARE DIAGNOSTICALLY SHOWN FOR CLARITY ONLY. ALL IRRIGATION SLEEVES MAY NOT BE SHOWN FOR CLARITY PURPOSES. CONTRACTOR SHALL INSTALL SLEEVES BELOW ALL PAVING, HARDSCAPE, ETC. AND AS DIRECTED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. ALL PIPE UNDER PAVED AREAS SHALL BE INSTALLED IN A SLEEVE. AT MINIMUM TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL SLEEVES TO BE MINIMUM 12" MINIMUM DEPTH AS SHOWN ON THE PIPE/SLEEVE DETAIL. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.

34. ALL SLEEVE ENDS MUST BE SEALED WITH FOAM SEALANT INSIDE PIPE TO MINIMIZE DEBRIS INTRUSION
35. LATERAL LINES MAY BE SHOWN WITHIN BUILDINGS AND/OR PAVING FOR CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER.
36. ALL CONVENTIONAL CONTROL WIRE UNDER HARDSCAPE AND/OR PAVED AREAS SHALL BE INSTALLED WITHIN A SLEEVE OR CONDUIT. SEE LEGEND FOR TYPE. MINIMUM SIZE: 1-1/2 INCH- FOR UP TO 15 WIRES (#14 GAUGE); 2 INCH- FOR 16-20 WIRES (#14 GAUGE); 3 INCH- FOR 21-55 WIRES (#14 GAUGE). ALL SLEEVES TO BE INSTALLED A MINIMUM DEPTH AS SHOWN ON THE PIPE/SLEEVEING DETAIL. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.

37. ALL MAINLINES AND LATERAL LINES SHALL BE THOROUGHLY FLUSHED CLEAN BEFORE DRIP MANIFOLD ASSEMBLIES AND/OR DRIP TUBING CONNECTIONS ARE MADE. ALL DRIP TUBING LINES SHALL BE FLUSHED CLEAN BEFORE BACKFILLING.

38. ALL LATERAL LINES FOR DRIP ZONES SHALL BE PVC SCH 40 PIPE.

39. DRIPLINE SYSTEMS RUN TIMES SHALL ALWAYS BE PROGRAMMED TO USE THE CONTROLLER'S 'CYCLE AND SOAK' FUNCTION FOR 'PULSE IRIGATION' PROGRAMMING. AFTER DETERMINING TOTAL ZONE RUN TIME CONTRACTOR SHALL BREAK THE RUN TIME INTO A MINIMUM OF 3-4 CYCLES. INEFFICIENT IRRIGATION OCCURS WHEN ONLY ONE CYCLE IS USED. THERE WILL BE IRRIGATION OF PLANTS NEAR THE TRUNK OF TREES OR PLANTS VIA 'GRAVITY FLOW'. SHORT RUN TIMES ALLOW WATER TO SPREAD THROUGHOUT AREA MORE EFFICIENTLY.

40. ALL DRIPLINE TUBING LAYOUT SHALL FOLLOW AND ROUTE PARALLEL TO GRADE, EXCEPT WHERE A LONGITUDE LAYOUT MAY BE FEASIBLE TO FOLLOW PLANTER LINES WHICH ARE NOT PARALLEL TO GRADE FOR CONSTRUCTIBLE PURPOSES. LAYOUT AS SHOWN IN THE PLANS DOES NOT ALWAYS DEPICT ACTUAL LAYOUT DIRECTION. HATCH PATTERNS OF DRIP AREAS AS SHOWN IN PLAN ARE DIAGRAMMATICAL ONLY.

41. DUE TO REQUIREMENT OF MAXIMUM SYSTEM EFFICIENCY ALL DRILLINE TUBING SHALL LAY LEVEL WITHIN TRENCH. TRENCHES SHALL BE LEVELED ACROSS BOTTOM OF TRENCH, AT NO TIME SHALL BOTTOM OF TRENCH UNULATE.
42. CONTRACTOR SHALL COMPACT ALL DRILLINE TRENCHES TO 95% SOIL COMPACTION. CONSISTENT COMPACTION IS REQUIRED TO PROVIDE EFFICIENT AND EVEN WATERING OF TURF OR SHRUB PLANT MATERIAL.
43. CONTRACTOR SHALL AND IS REQUIRED TO USE THE RAIN BIRD INSERT TOOL, MODEL FITNS-TOOL FOR INSTALLATION OF RAIN BIRD DRILLINE INSERT FITTINGS. CONTRACTOR SHALL ALWAYS INSERT FITTING UNTIL THE FITTING 'STOP' IS ABUTTED TO TUBING.
44. FOR DRILLINE SYSTEMS IN TURF: IT IS RECOMMENDED TO INSTALL ONE OR TWO DRIP LINES AT A TIME DUE TO THE CLOSE PROXIMITY OF THE 12" SPACING OF ADJACENT LINES. INSTALLATION OF ONLY ONE OR TWO LINES ALLOWS FOR PROPER TRENCHING AND SOIL COMPACTION THAT IS REQUIRED.
45. FOR ALL AREAS ON SLOPES INSTALLED WITH DRILLINE TUBING THE CONTRACTOR SHALL BE HELD ACCOUNTABLE FOR CREATING A TRIANGULAR WETTING PATTERN ACROSS ALL SLOPES. OFFSET THE EMITTERS BY HALF THE EMITTER SPACING WHEN INSTALLING TUBING TO CREATE A TRIANGULAR WETTING PATTERN ACROSS THE SLOPE. DO NOT INSTALL TUBING WHERE THE EMITTERS ARE DIRECTLY IN LINE (PERPENDICULAR) WITH EACH OTHER.
- DRIP/LOW VOLUME SYSTEMS: POINT SOURCE DRIP NOTES:**
46. VERIFY THE ACTUAL PLANT QUANTITIES AND SIZES FROM THE LANDSCAPE PLANS PRIOR TO BIDDING OR COMMENCING WORK. CONTRACTOR TO PROVIDE THE QUANTITY OF EMITTERS, BASED ON THE ACTUAL PLANT COUNT WITH REFERRAL TO THE EMITTER TABLE SHOWN IN THE LEGEND.
47. CONTRACTOR TO PROVIDE THE QUANTITY OF EMITTERS BASED ON THE ACTUAL SHRUB AND TREE COUNT AND THE EMITTER SIZE. ANY REFERENCE TO TOTAL EMITTER QUANTITIES ON THESE PLANS IS FOR DESIGN USE ONLY. VERIFY THE ACTUAL SHRUB AND TREE QUANTITIES AND SIZES FROM THE LANDSCAPE PLANS PRIOR TO BIDDING OR COMMENCING WORK.
48. THE EMITTER TABLE IN LEGEND IS ESTIMATED EMITTER QUANTITIES AND FLOWS. CONTRACTOR SHALL INSTALL EMITTERS AS SHOWN IN THE TABLE AT INITIAL INSTALLATION.
49. SUB-LATERAL PIPING AS SHOWN IN DETAIL '1.1/5.E' SHALL BE 1/2" SCH 40 PIPE. 'BACKBONE' LATERALS SHALL BE PER PLAN SIZE.
50. FOR MULTI-OUTLET DRIP MANIFOLDS: UNITS SHALL BE ALIGNED WITH TREES AS SHOWN IN THE DETAILS. CONFIRM ALL PROPOSED LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.
51. TREE/PALM DRIP SYSTEM HAS BEEN DESIGNED TO ACCOMMODATE THE UP-SIZING OF EMITTERS TO COMPENSATE FOR FUTURE PLANT GROWTH. MAINTENANCE PERSONNEL SHALL UPSIZE EMITTERS AND QUANTITIES AS REQUIRED TO PROVIDE ADEQUATE WATER FOR HEALTHY PLANT GROWTH.
52. WHEN DIFFERENT SPECIES OF TREES/PALMS ARE TIED TO THE SAME ZONE VALVE CONTRACTOR SHALL BE REQUIRED TO MAKE ADJUSTMENTS TO SIZE OF EMITTERS (FOR QUANTITY OF WATER PURPOSES) FOR EACH SPECIES OF TREE/PALM IN THE ZONE AS NEEDED TO PROVIDE PROPER AND ADEQUATE AMOUNT OF WATER AS REQUIRED BY EACH SPECIES. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR INFORMATION REGARDING PROPER AND ADEQUATE AMOUNT OF WATER AS REQUIRED BY EACH SPECIES.
53. POST PLANT INSTALLATION: IT SHALL BE THE RESPONSIBILITY OF LANDSCAPE CONTRACTOR TO REVISE EMITTER SIZES AS

Irrigation Pressure Calculation	
Meter No:	1
Minimum Static Water Pressure PSI Required:	67 psi
Valve No:	A29
Valve Demand	10 GPM
Maximum System Demand	12 GPM
Elevation Change P.O.C. to Highest Head:	0 FT
Number of Valves Concurrent	1
Losses:	
1" Water Meter	1.0 psi
1 1/2" Service Line	1.5 psi
1" RP Backflow Device	12.0 psi
1" Master Valve	2.5 psi
1" Flow Sensor	2.0 psi
Isolation Valves	2.5 psi
1" R.C.V.	3.0 psi
750' Feet of 2" Mainline CL 200	2.5 psi
Fitting Loss 10%	2.7 psi
Lateral Loss 10%	3.0 psi
Loss to Highest Head	0.0 psi
Total Losses:	33 psi
Head Operating Pressure:	34 psi
Total Pressure Required:	67 psi
Min. Static Pressure Required:	67 psi
Residual Pressure:	0 psi

California Water Efficient Landscape Ordinance Worksheet															
City: Santa Rosa	Milestone ACME		42.0				0.55								
Reference Evapotranspiration (ET _a) Hydrozone # / Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	Project Type ETAF (PF/IE)	Residential Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d								
Regular Landscape Areas															
LOW water use-Planting	0.30	Drip		0.81	0.37	8435	3124								
MOD water use-Planting	0.40	Drip		0.81	0.49	12652	6248								
MOD water use-Trees	0.50	Overhead		0.75	0.67	792	528								
Totals						21879	9900								
Special Landscape Areas															
N/A				1		0	0								
				1		0	0								
Totals						0	0								
						ETWU Total	257795								
Maximum Annual Water Allowance (MAWA) ^e							313351								
ETAF Calculations															
Regular Landscape Areas															
Total ETAF x Area	9900														
Total Area	21879														
Average ETAF	0.45														
<div style="border: 1px solid black; padding: 10px;"> Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas. </div>															
								All Landscape Areas							
								Total ETAF x Area	9900						
								Total Area	21879						
Average ETAF	0.45														

Revisions:		



1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

Client: _____

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

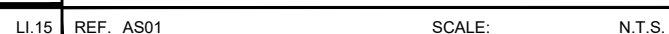
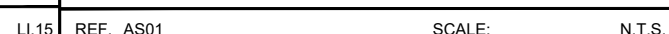
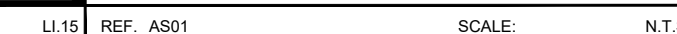
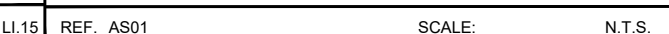
Job No: -
 Drawn By: NL
 Checked By: MS
 Plan Date: 06.02.2021
 Scale: See Sheet
 Title:

IRRIGATION NOTES & CALCULATIONS

Sheet No.: _____

Plan Status:

CONSTRUCTION
DOCUMENTS



Revisions:		



ACME FAMILY APARTMENTS

Client:

MILESTONE
 HOUSING GROUP

481 N. SANTA C
AVENUE
LOS GATOS, CA
95030

Stamp:



Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

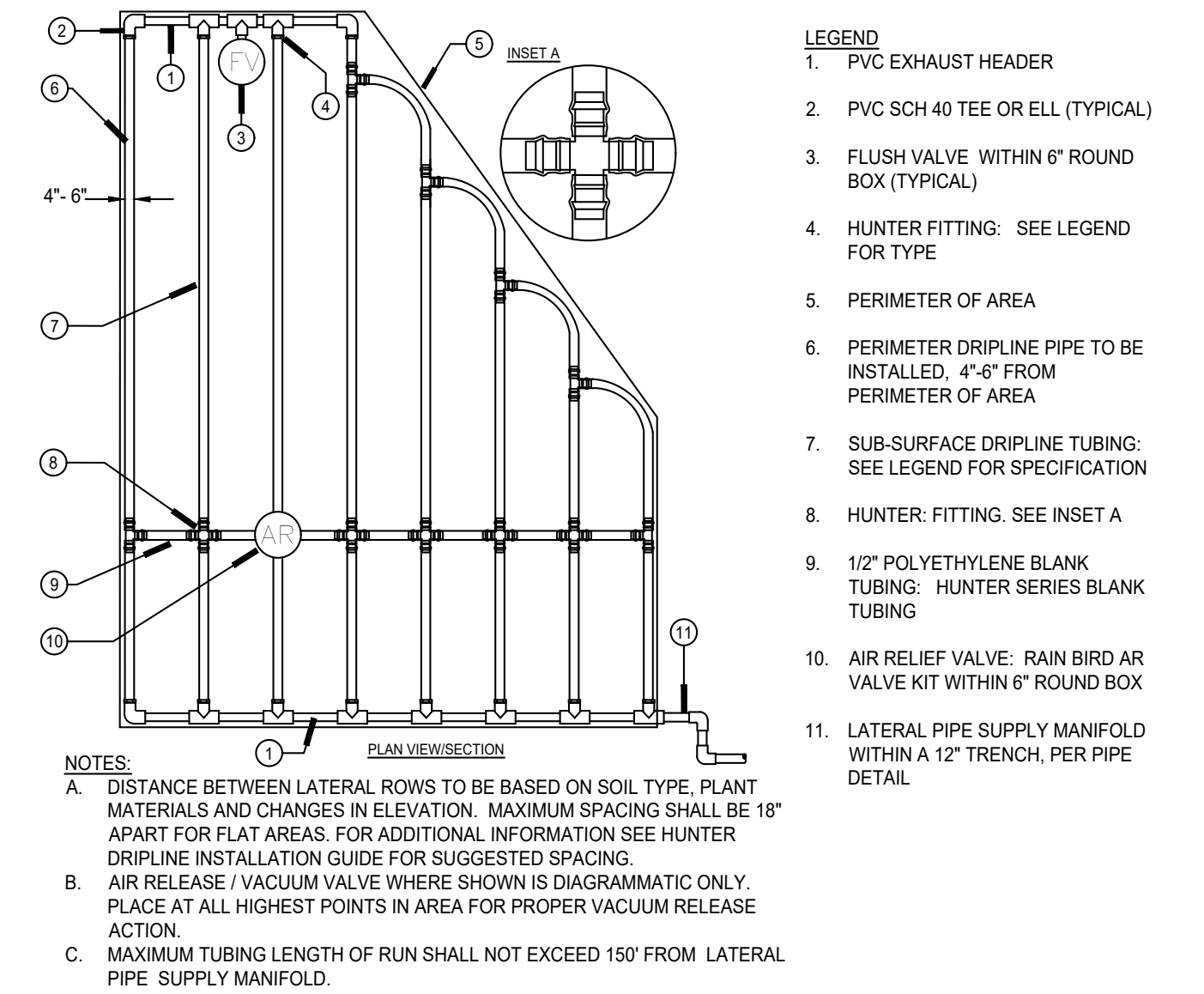
Title:

IRRIGATION DETAILS

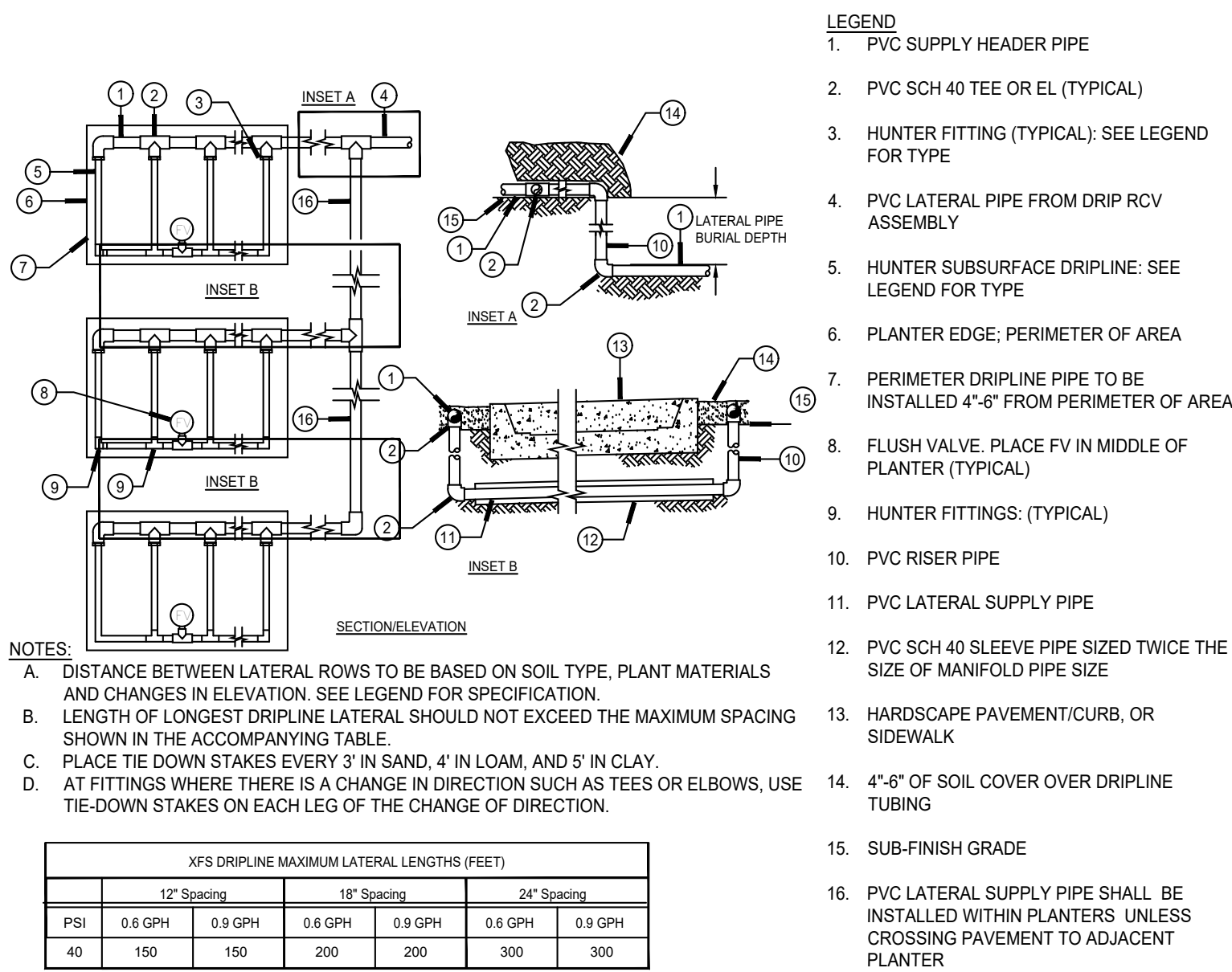
Sheet No.:

LI.6

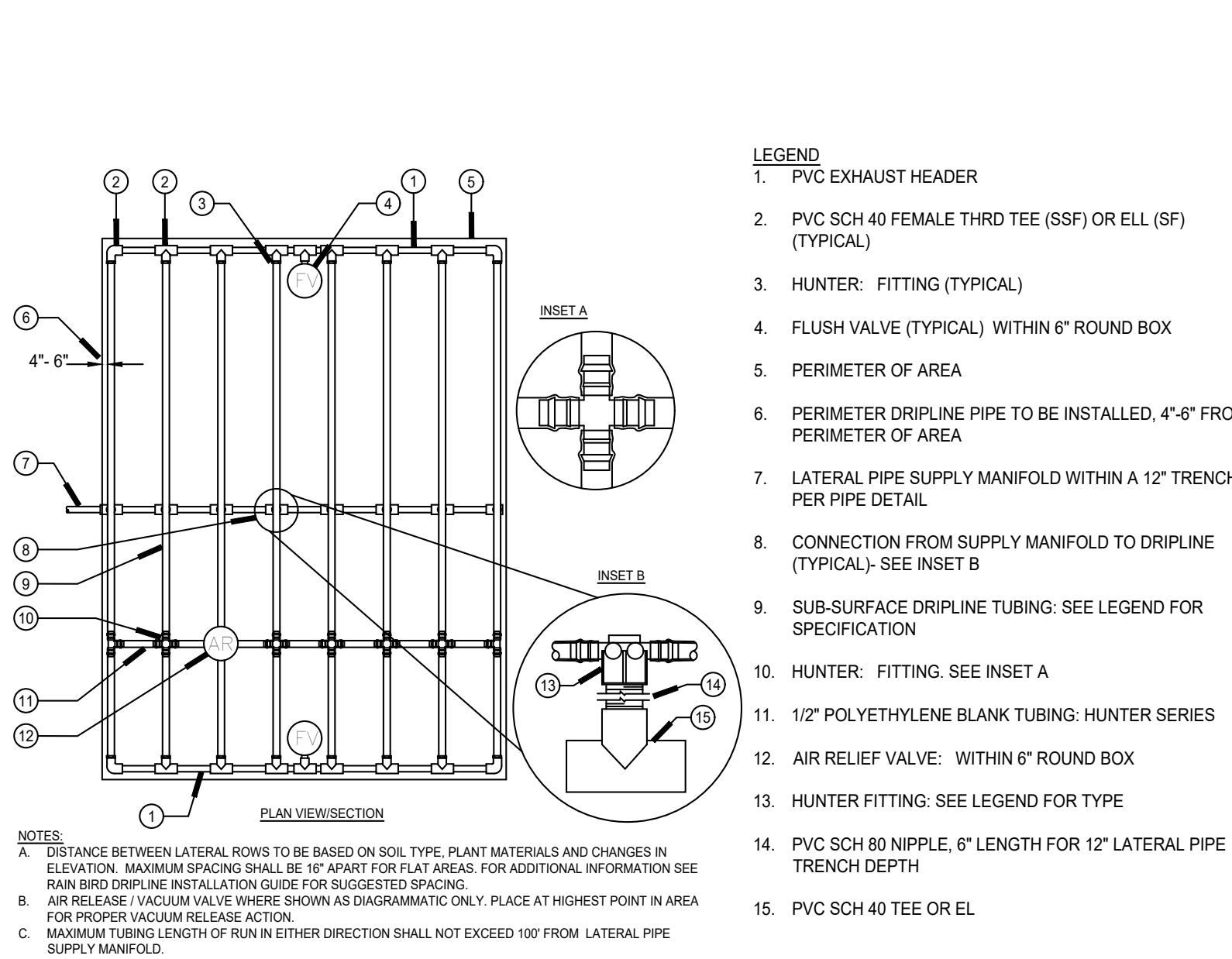
Plan Status:
CONSTRUCTION
DOCUMENTS



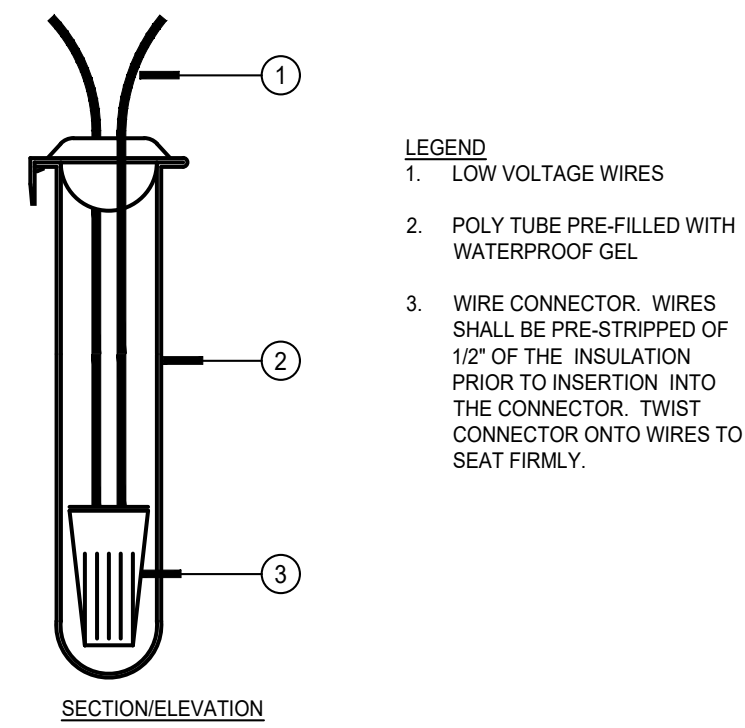
D | DRIPLINE- IRREGULAR FEED LAYOUT



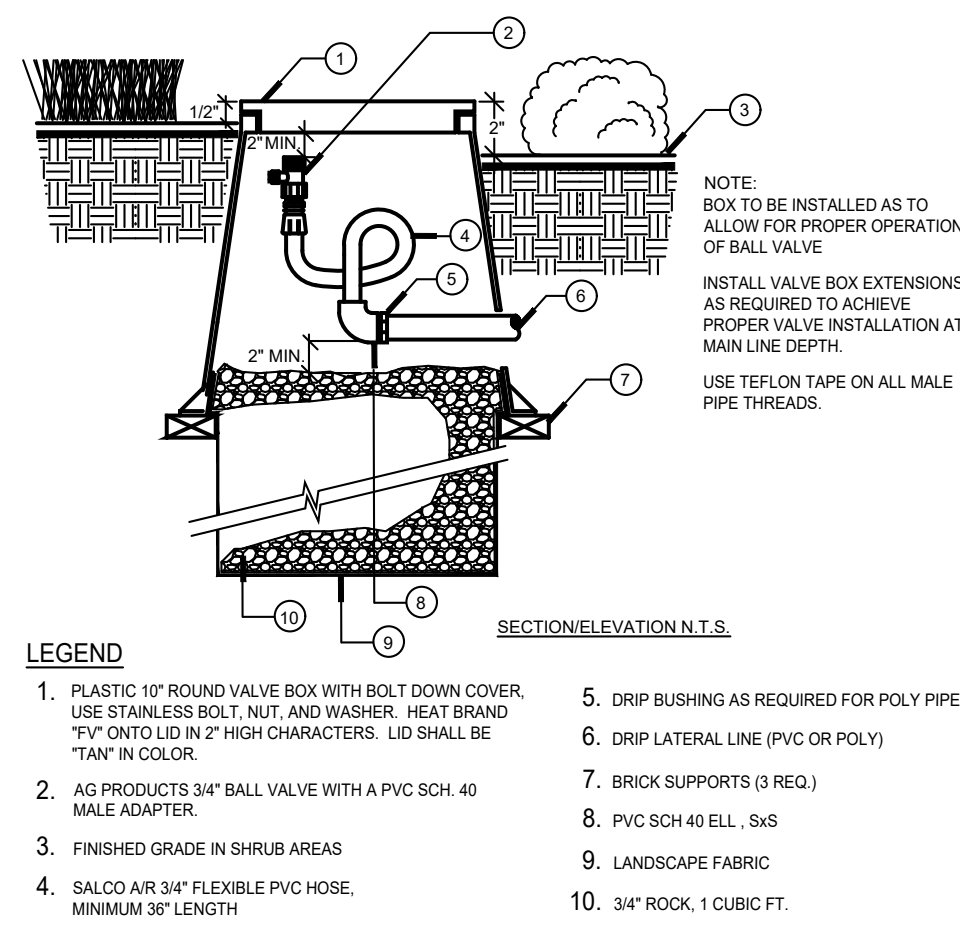
H | DRIPLINE- MULTIPLE PLANTERS LAYOUT



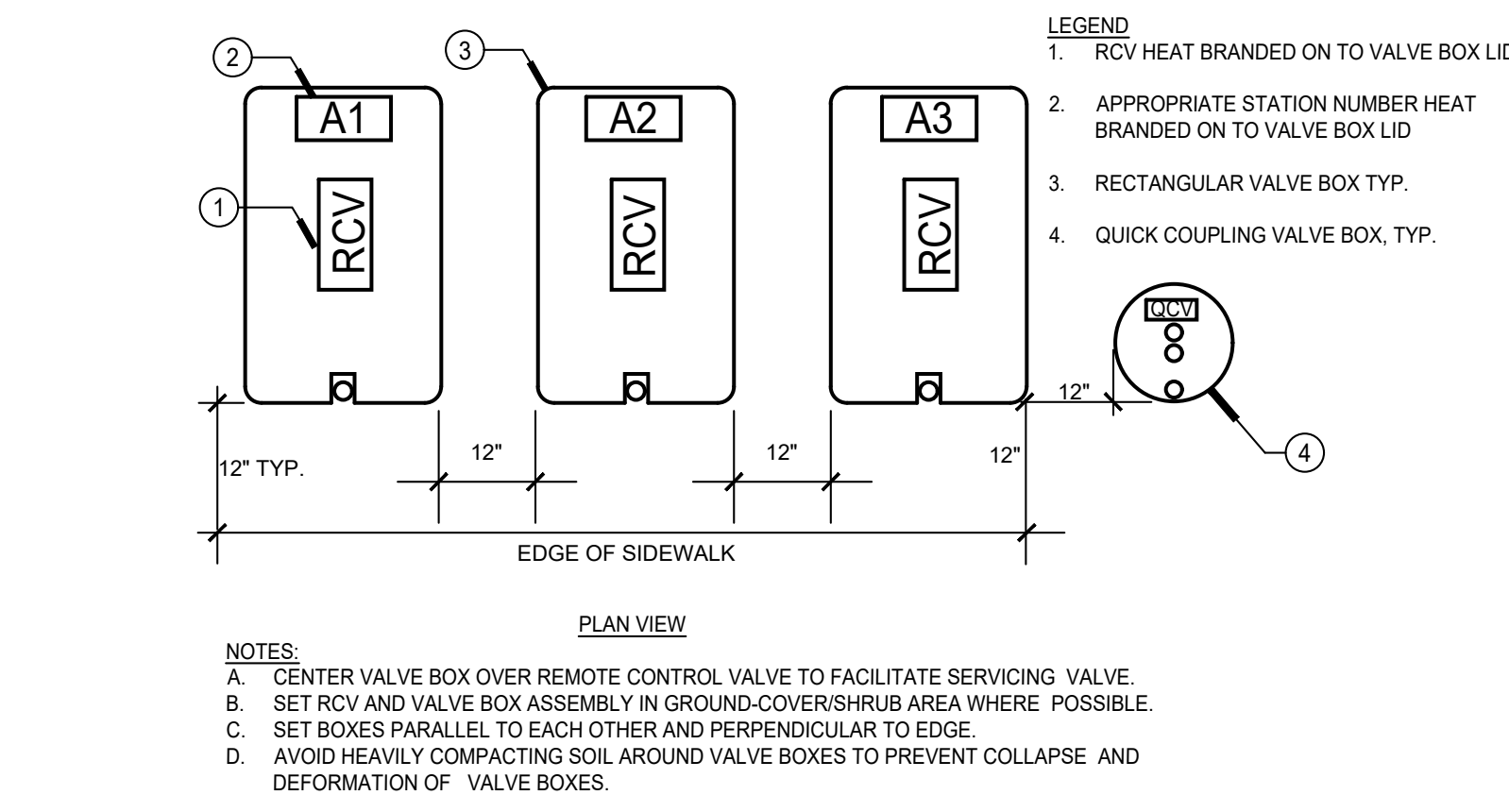
L | DRIPLINE- CENTER FEED LAYOUT



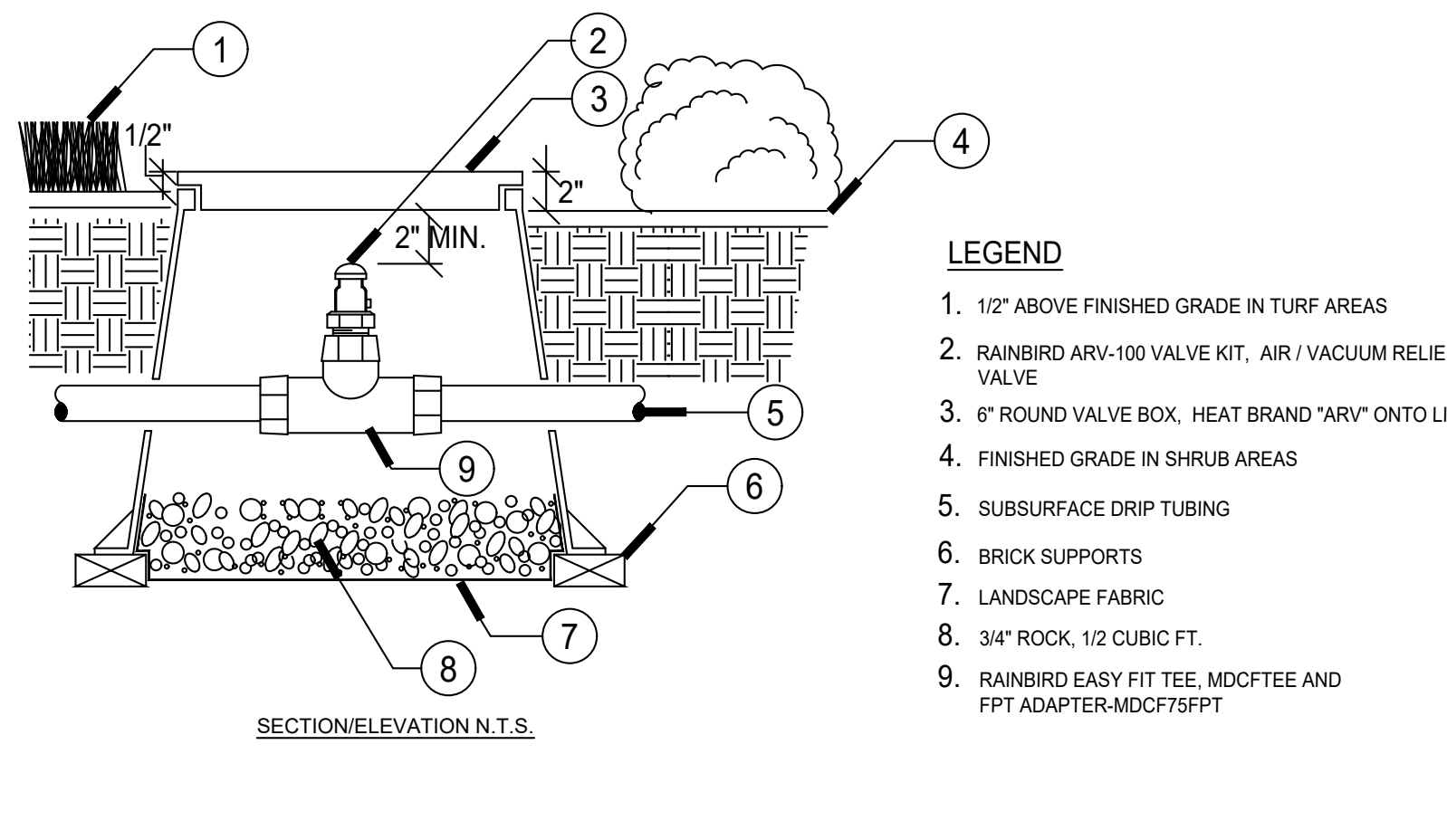
C | WIRE CONNECTION



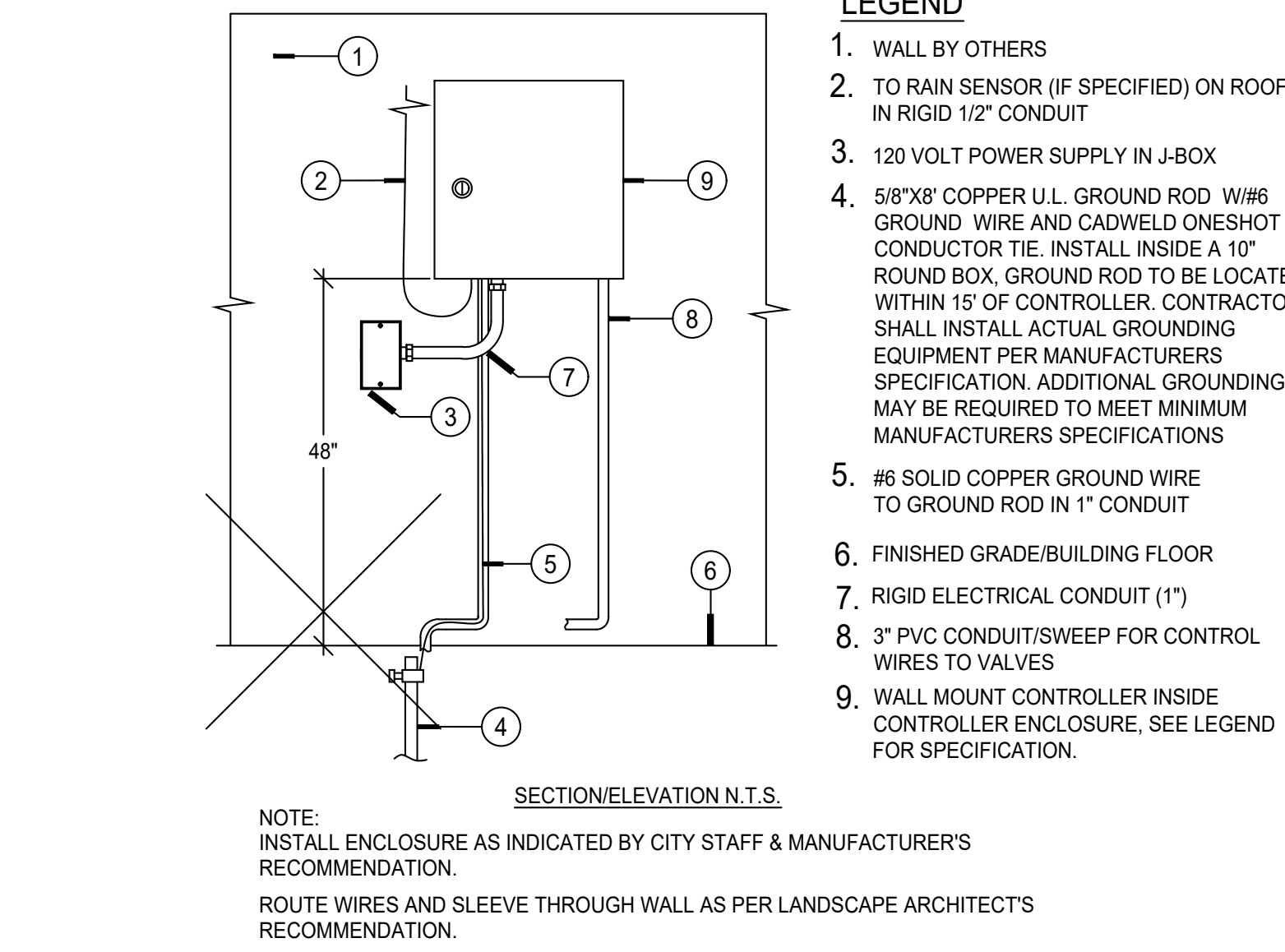
G | FLUSH VALVE



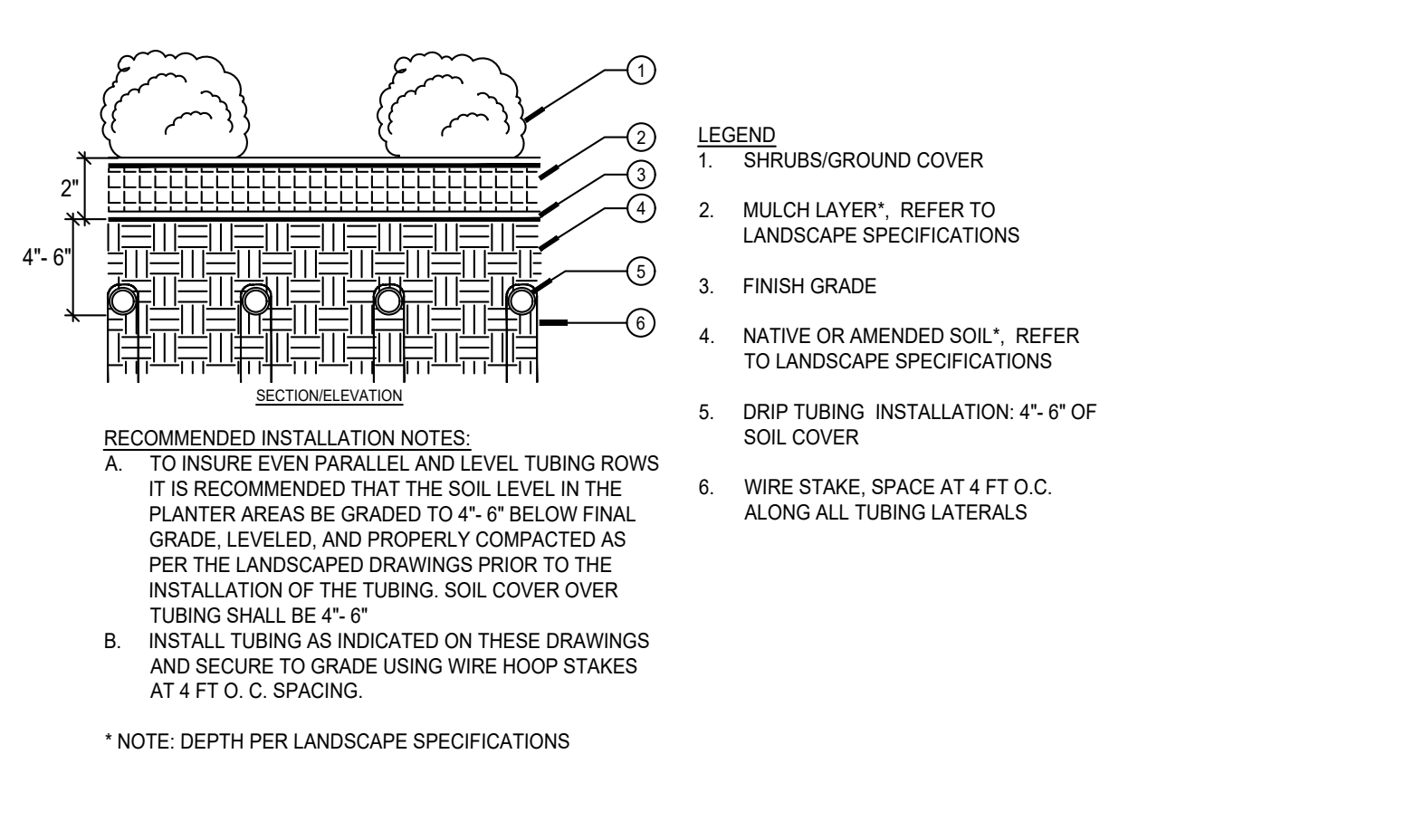
B | VALVE BOX LOCATION



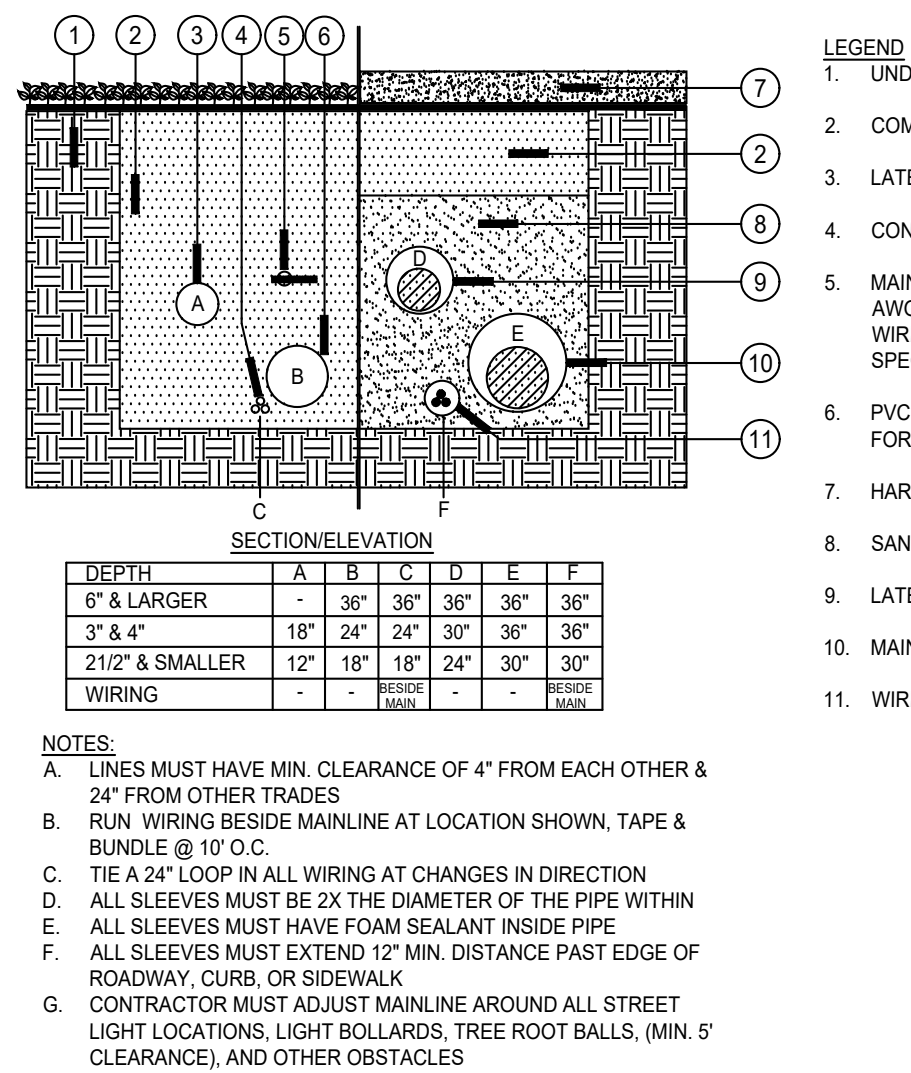
F | AIR RELIEF VALVE



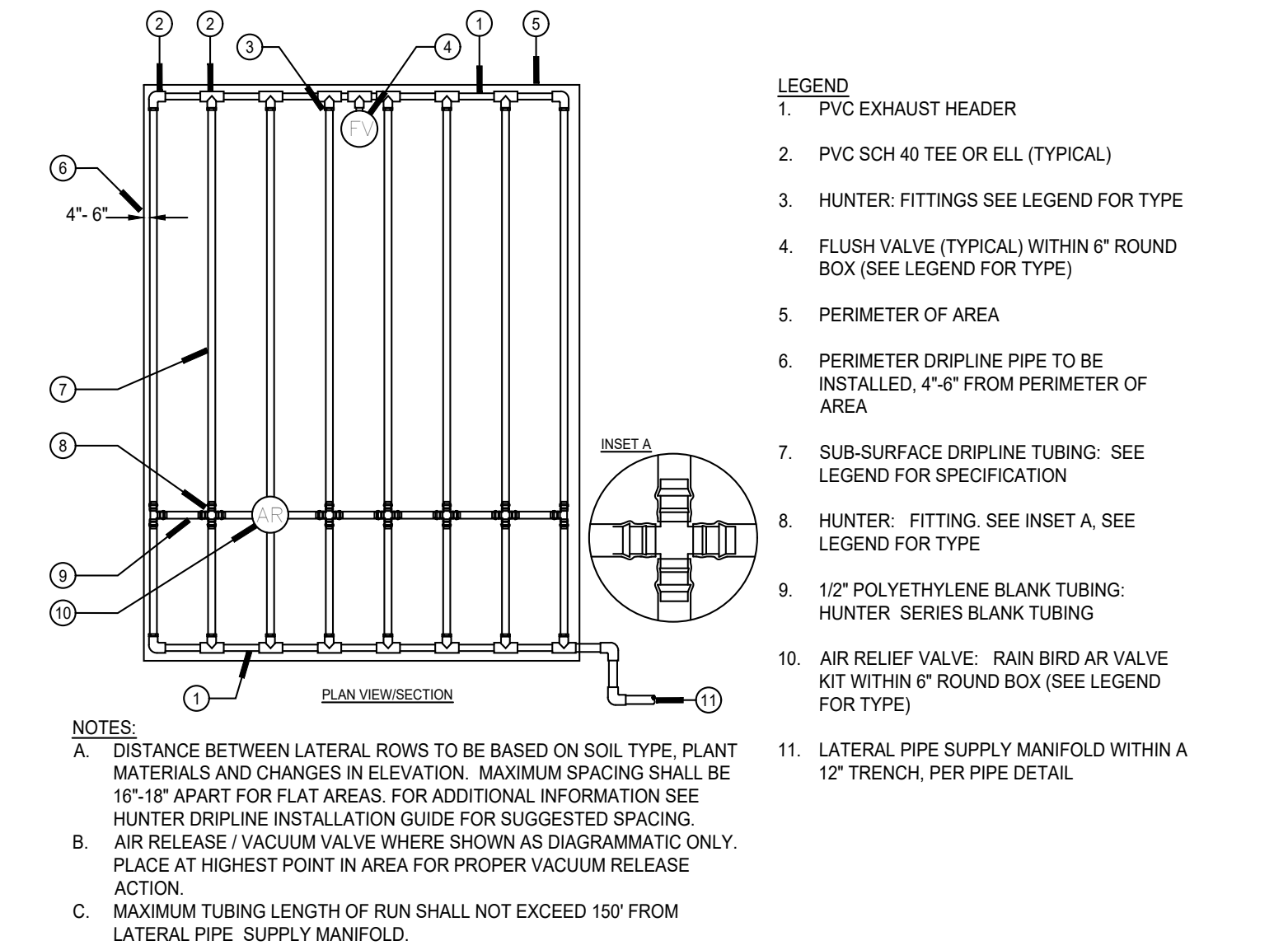
A | WALL MOUNTED CONTROLLER



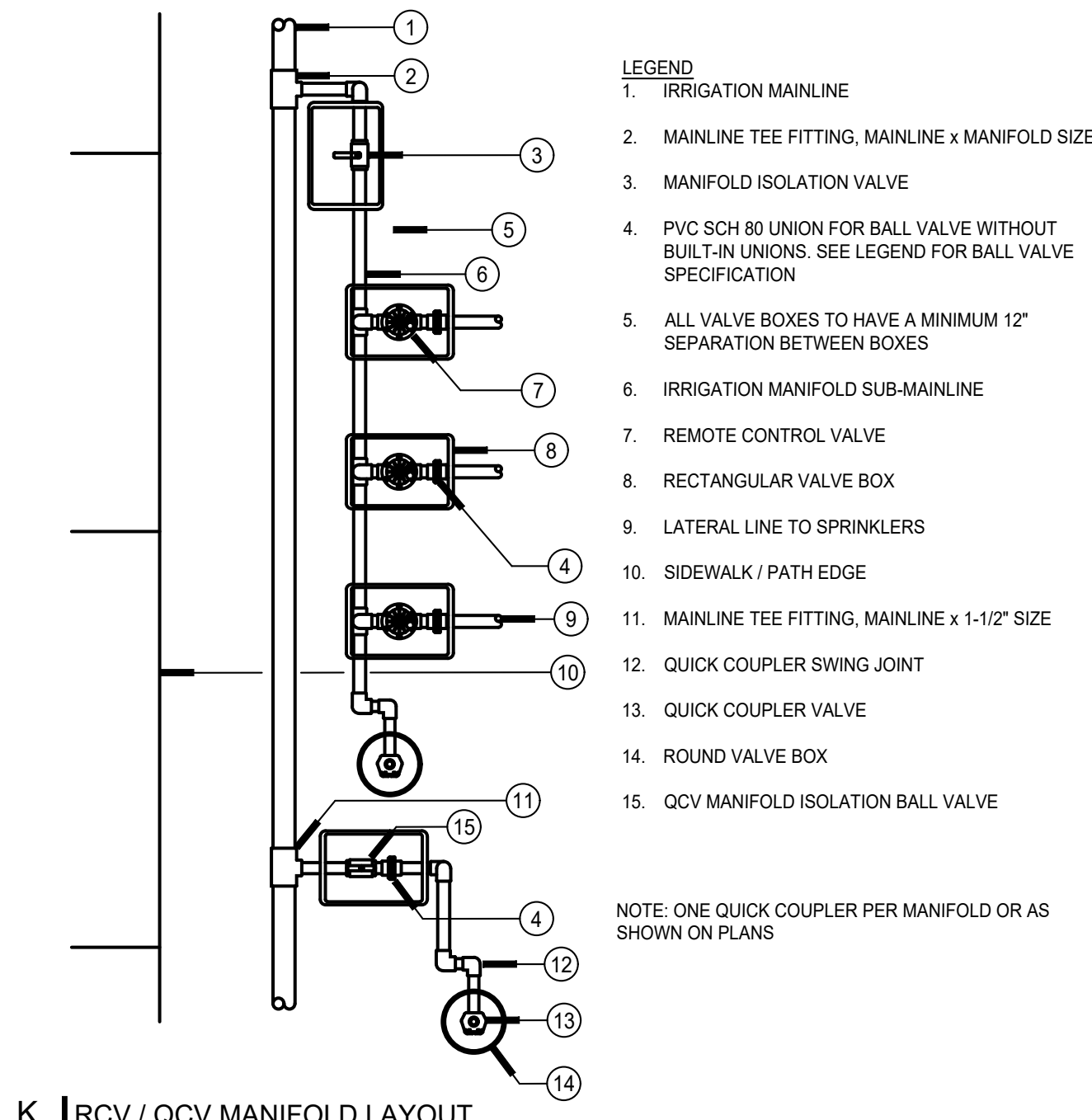
E | DRIPLINE INSTALLATION



J | PIPE/SLEEVE INSTALLATION



I | DRIPLINE- END FEED LAYOUT



K | RCV / QCV MANIFOLD LAYOUT

Issued for:

03/15/21	100% DESIGN DEVELOPMENT

Revisions:

MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-ls.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

IRRIGATION DETAILS

Sheet No.:

LI.7

Plan Status:
CONSTRUCTION
DOCUMENTS

SECTION 02810
IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. FURNISH ALL MATERIALS, LABOR, TRANSPORTATION, SERVICES, AND EQUIPMENT NECESSARY TO INSTALL LANDSCAPE IRRIGATION AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN.

1.2 DEFINITIONS

- A. THE OWNER'S AUTHORIZED REPRESENTATIVE IN THIS SECTION WILL REFER TO THE LANDSCAPE ARCHITECT.

1.3 REQUIREMENTS OF REGULATORY AGENCIES

- A. ALL LOCAL, MUNICIPAL AND STATE LAWS, AND RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THIS SPECIFICATION, AND ITS PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. ANYTHING CONTAINED IN THIS SPECIFICATION SHALL NOT BE CONSTRUED TO CONFLICT WITH ANY OF THE ABOVE RULES AND REGULATIONS OR REQUIREMENTS OF THE SAME. HOWEVER, WHEN THE DRAWINGS AND SPECIFICATIONS CALL FOR OR DESCRIBE MATERIALS, WORKMANSHIP, OR CONSTRUCTION OF A BETTER QUALITY, HIGHER STANDARD, OR LARGER SIZE THAN IS REQUIRED BY THE ABOVE RULES AND REGULATIONS, THE PROVISIONS OF THE DRAWINGS AND SPECIFICATIONS SHALL TAKE PRECEDENCE.

1.4 QUALITY CONTROL

- A. MANUFACTURER'S DIRECTIONS
1. THE MANUFACTURER'S DIRECTIONS AND DRAWINGS SHALL BE FOLLOWED IN ALL CASES WHERE THE MANUFACTURERS OF ARTICLES USED IN THIS SPECIFICATION, FURNISH DIRECTIONS COVERING POINTS NOT SHOWN IN THE DRAWINGS AND SPECIFICATIONS.
- B. PERMITS, FEES, BONDS AND INSPECTIONS
1. THE CONTRACTOR SHALL PAY FOR ANY AND ALL PERMITS, FEES, BONDS AND INSPECTIONS NECESSARY TO PERFORM AND COMPLETE HIS PORTION OF THE WORK.
- C. EXPLANATION OF THE DRAWINGS
1. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF HIS WORK AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC. AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. THE DRAWINGS ARE DIAGRAMATIC ONLY AND ARE INDIICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTING, AND ARCHITECTURAL FEATURES.
 2. ALL WORK CALLED FOR ON THE DRAWINGS BY NOTES OR DETAILS SHALL BE FURNISHED AND INSTALLED WHETHER OR NOT SPECIFICALLY MENTIONED IN THIS SPECIFICATION.
 3. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DISCREPANCIES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.

1.5 SUBMITTALS

- A. MATERIALS LIST
1. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS, OR PROCESSES SPECIFIED BY NAME IN THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
 2. COMPLETE MATERIAL LIST SHALL BE SUBMITTED PRIOR TO PERFORMING ANY WORK. MATERIAL LIST SHALL INCLUDE THE MANUFACTURER, MODEL NUMBER AND DESCRIPTION OF ALL MATERIALS AND EQUIPMENT TO BE USED. ALTHOUGH MANUFACTURER AND OTHER INFORMATION MAY BE DIFFERENT, THE FOLLOWING IS A GUIDE TO PROPER SUBMITTAL FORMAT:

ITEM NO. DESCRIPTION
MANUFACTURER MODEL NO.
1. BACKFLOW ASSEMBLY FEBCO 825Y
2. GATE VALVE NIBCO T-113
3. ETC. ETC. ETC.
THE IRRIGATION SUBMITTAL LIST MUST BE SPECIFIC AND COMPLETE. ALL ITEMS MUST BE LISTED AND SHOULD INCLUDE SOLVENT/PRIMER, WIRE, WIRE CONNECTORS, VALVE BOXES, ETC. NO COPIES OF MANUFACTURER'S LITERATURE (CATALOG CUTS) ARE REQUIRED AS SUBMITTAL INFORMATION.
3. THE CONTRACTOR MAY SUBMIT SUBSTITUTIONS FOR EQUIPMENT AND MATERIALS LISTED ON THE DRAWINGS BY FOLLOWING PROCEDURES AS OUTLINED IN SECTION 1.6 OF THIS SPECIFICATION.

4. EQUIPMENT OR MATERIALS INSTALLED OR FURNISHED WITHOUT PRIOR APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE MAY BE REJECTED AND THE CONTRACTOR REQUIRED TO REMOVE SUCH MATERIALS FROM THE SITE AT NO COST TO THE OWNER.
 5. APPROVAL OF ANY ITEM, ALTERNATE OR SUBSTITUTE INDICATES ONLY THAT THE PRODUCT OR PRODUCTS APPARENTLY MEET THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS ON THE BASIS OF THE INFORMATION OR SAMPLES SUBMITTED.
 6. THE MANUFACTURER'S WARRANTIES SHALL NOT RELIEVE THE CONTRACTOR OF HIS LIABILITY UNDER THE GUARANTEE. SUCH WARRANTIES SHALL ONLY SUPPLEMENT THE GUARANTEE.
- B. RECORD DRAWINGS OR "AS-BUILTS"
1. THE CONTRACTOR SHALL PROVIDE AND KEEP UP TO DATE AT ALL TIMES, A COMPLETE RECORD SET "AS-BUILTS" OF BLUE LINE OZALID PRINTS WHICH SHALL BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND SPECIFICATIONS AND THE EXACT INSTALLED LOCATIONS, SIZES, AND KINDS OF EQUIPMENT. PRINTS FOR THIS PURPOSES MAY BE OBTAINED FROM THE OWNER'S AUTHORIZED REPRESENTATIVE AT THE CONTRACTOR'S COST. "AS-BUILTS" SHALL BE KEPT ON THE SITE AND SHALL BE USED ONLY AS A RECORD SET.
 2. "AS-BUILTS" SHALL ALSO SERVE AS WORK PROGRESS SHEETS AND SHALL BE THE BASIS FOR MEASUREMENT AND PAYMENT FOR WORK COMPLETED. "AS-BUILTS" SHALL BE AVAILABLE AT ALL TIMES FOR OBSERVATION AND SHALL BE KEPT IN A LOCATION EASILY ACCESSIBLE TO THE OWNER'S AUTHORIZED REPRESENTATIVE. SHOULD THE "AS-BUILT" PROGRESS SHEETS NOT BE AVAILABLE FOR REVIEW OR NOT CURRENT AT THE TIME OF ANY SITE VISIT BY THE OWNER'S AUTHORIZED REPRESENTATIVE, IT WILL BE ASSUMED NO WORK HAS BEEN COMPLETED AND THE CONTRACTOR WILL BE ASSESSED THE COST OF THAT SITE VISIT AT THE CURRENT BILLING RATE OF THE OWNER'S AUTHORIZED REPRESENTATIVE. NO OTHER SITE OBSERVATIONS SHALL TAKE PLACE WITHOUT PRIOR PAYMENT OF THIS ASSESSMENT.
 3. THE CONTRACTOR SHALL MAKE NEAT AND LEGIBLE NOTATIONS ON THE "AS-BUILT" PROGRESS SHEETS DAILY AS THE WORK PROCEEDS, SHOWING THE WORK AS ACTUALLY INSTALLED. FOR EXAMPLE, SHOULD A PIECE OF EQUIPMENT BE INSTALLED IN A LOCATION THAT DOES NOT MATCH THE DRAWINGS, THE CONTRACTOR MUST INDICATE THAT EQUIPMENT HAS BEEN RELOCATED IN A GRAPHIC MANNER SO AS TO MATCH THE ORIGINAL SYMBOLS AS INDICATED IN THE IRRIGATION LEGEND. THE RELOCATED EQUIPMENT AND DIMENSIONS WILL THEN BE TRANSFERRED TO THE ORIGINAL "AS-BUILTS" AT THE PROPER TIME.
 4. BEFORE THE DATE OF THE FINAL WALKTHROUGH, THE CONTRACTOR SHALL TRANSFER ALL INFORMATION FROM THE "AS-BUILT" PRINTS TO SEPIA MYLAR PLANS PROCURED FROM THE OWNER'S AUTHORIZED REPRESENTATIVE AT THE CONTRACTOR'S COST. ALL DRAFTING SHALL BE DONE WITH WATERPROOF TECHNICAL PEN INK AND APPLIED TO THE SEPIA MYLAR BY TECHNICAL DRAFTING PENS MADE EXPRESSLY FOR USE ON MYLAR SURFACES. DIMENSIONS SHALL BE MADE ON THE SEPIA MYLAR SO AS TO BE EASILY READABLE EVEN ON THE FINAL IRRIGATION CONTROLLER CHART. THE ORIGINAL SEPIA MYLAR "AS-BUILTS" SHALL BE SUBMITTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR APPROVAL PRIOR TO THE MAKING OF THE IRRIGATION CONTROLLER CHARTS.
 5. THE CONTRACTOR SHALL DIMENSION FROM TWO (2) PERMANENT POINTS OF REFERENCE, BUILDING CORNERS, SIDEWALK, OR ROAD INTERSECTIONS, ETC., THE LOCATION OF THE FOLLOWING ITEMS:
 - a. CONNECTION TO EXISTING WATER LINES.
 - b. CONNECTION TO EXISTING ELECTRICAL POWER.
 - c. GATE VALVES.
 - d. ROUTING OF SPRINKLER PRESSURE LINES.
 - e. SPRINKLER CONTROL VALVES.
 - f. ROUTING OF CONTROL WIRING.
 - g. QUICK COUPLING VALVES.
 - h. BACKFLOW PREVENTER.
 - i. OTHER RELATED EQUIPMENT.
 6. ON OR BEFORE THE DATE OF THE FINAL WALKTHROUGH, THE CONTRACTOR SHALL DELIVER THE CORRECTED AND COMPLETED SEPIA MYLAR "AS-BUILTS" TO THE OWNER'S AUTHORIZED REPRESENTATIVE. DELIVERY OF THE SEPIA "AS-BUILTS" WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING REQUIRED INFORMATION THAT MAY BE OMITTED FROM THE "AS-BUILTS."
- C. IRRIGATION CONTROLLER CHARTS
1. "AS-BUILT" DRAWINGS SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE BEFORE IRRIGATION CONTROLLER CHARTS ARE PREPARED.
 2. PROVIDE ONE IRRIGATION CONTROLLER CHART FOR EACH IRRIGATION CONTROLLER SUPPLIED.

3. EACH IRRIGATION CONTROLLER CHART SHALL SHOW THE AREA CONTROLLED BY THAT IRRIGATION CONTROLLER AND SHALL BE THE MAXIMUM SIZE OF WHICH THE IRRIGATION CONTROLLER DOOR WILL ALLOW.
 4. THE IRRIGATION CONTROLLER CHART IS TO BE A REDUCED DRAWING OF THE ACTUAL INSTALLED IRRIGATION SYSTEM. IN THE EVENT THAT THE IRRIGATION CONTROLLER CHART IS NOT LEGIBLE WHEN THE CHART IS REDUCED, IT MAY BE ENLARGED TO A SIZE THAT WILL BE READABLE WHEN REDUCED.
 5. THE IRRIGATION CONTROLLER CHART SHALL BE A 11" X 17" XEROX BOND REDUCTION WITH EACH VALVE STATION REPRESENTED BY A DIFFERENT COLOR.
 6. WHEN COMPLETED, HERMETICALLY SEAL THE IRRIGATION CONTROLLER CHART BETWEEN TWO PIECES OF 3 MIL PLASTIC WITH A 1/8" EDGE OVERLAP.
 7. IRRIGATION CONTROLLER CHARTS SHALL BE COMPLETED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO THE FINAL WALK-THROUGH.
- D. OPERATION AND MAINTENANCE MANUALS
1. PREPARE AND DELIVER TO THE OWNER'S AUTHORIZED REPRESENTATIVE WITHIN 10 CALENDAR DAYS PRIOR TO COMPLETION OF IRRIGATION INSTALLATION, TWO (2) - 3 RING HARD COVER BINDERS EACH CONTAINING THE FOLLOWING INFORMATION:
 - a. INDEX SHEETS STATING THE CONTRACTOR'S ADDRESS AND TELEPHONE NUMBER AND A LIST OF EQUIPMENT WITH THE NAME AND ADDRESSES OF LOCAL MANUFACTURER'S REPRESENTATIVES.
 - b. CATALOG AND PART SHEETS ON EVERY MATERIAL AND EQUIPMENT INSTALLED UNDER THIS CONTRACT.
 - c. GUARANTEE STATEMENT.
 - d. COMPLETE OPERATING AND MAINTENANCE INSTRUCTION ON ALL MAJOR EQUIPMENT.
 2. IN ADDITION TO THE ABOVE MENTIONED MAINTENANCE MANUAL, PROVIDE THE OWNER WITH ON-SITE INSTRUCTIONS FOR MAJOR EQUIPMENT AND SHOW EVIDENCE IN WRITING TO THE OWNER'S AUTHORIZED REPRESENTATIVE AT THE CONCLUSION OF THE PROJECT THAT THIS SERVICE WAS RENDERED.
- E. EQUIPMENT TO BE FURNISHED
1. SUPPLY AS A PART OF THIS CONTRACT THE FOLLOWING TOOLS:
 - a. TWO (2) SETS OF SPECIAL TOOLS REQUIRED FOR REMOVING, DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER AND VALVE SUPPLIED ON THE PROJECT.
 - b. TWO (2) FIVE-FOOT VALVE KEYS FOR OPERATION OF GATE VALVES.
 - c. TWO (2) KEYS FOR EACH AUTOMATIC CONTROLLER AND IRRIGATION CONTROLLER ENCLOSURE.
 - d. ONE (1) QUICK COUPLER KEY AND MATCHING HOSE SWIVEL FOR EVERY FIVE (5), OR FRACTION THEREOF, OF EACH TYPE OF QUICK COUPLING VALVE INSTALLED.
 2. THE ABOVE MENTIONED EQUIPMENT SHALL BE TURNED OVER TO THE OWNER AT THE CONCLUSION OF THE PROJECT. BEFORE THE FINAL WALK-THROUGH SHALL BE PERFORMED, EVIDENCE THAT THE OWNER HAS RECEIVED THIS MATERIAL MUST BE SHOWN TO THE OWNER'S AUTHORIZED REPRESENTATIVE.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. HANDLING OF PVC PIPE AND FITTINGS
1. THE CONTRACTOR IS CAUTIONED TO EXERCISE CARE IN HANDLING, LOADING, UNLOADING, AND STORING OF PVC PIPE AND FITTINGS. ALL PVC PIPE SHALL BE TRANSPORTED IN A VEHICLE WHICH ALLOWS THE LENGTH OF PIPE TO LIE FLAT SO AS NOT TO SUBJECT IT TO UNDUE BENDING OR CONCENTRATED EXTERNAL LOAD AT ANY POINT. ANY SECTION OF PIPE THAT HAS BEEN DENTED OR DAMAGED WILL BE DISCARDED AND, IF INSTALLED, SHALL BE REPLACED WITH NEW PIPING AT NO COST TO THE OWNER.

1.7 SUBSTITUTIONS

- A. IF THE CONTRACTOR WISHES TO SUBSTITUTE ANY EQUIPMENT OR MATERIALS FOR THOSE EQUIPMENT OR MATERIALS LISTED ON THE DRAWINGS AND SPECIFICATIONS, HE MAY DO SO BY PROVIDING THE FOLLOWING INFORMATION TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR APPROVAL:
1. PROVIDE A STATEMENT INDICATING THE REASON FOR MAKING THE SUBSTITUTION. USE A SEPARATE SHEET OF PAPER FOR EACH ITEM TO BE SUBSTITUTED.
 2. PROVIDE DESCRIPTIVE CATALOG LITERATURE, PERFORMANCE CHARTS AND FLOW CHARTS FOR EACH ITEM TO BE SUBSTITUTED.
 3. PROVIDE THE AMOUNT OF COST SAVINGS IF THE SUBSTITUTED ITEM IS APPROVED.
- B. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL HAVE THE SOLE RESPONSIBILITY IN ACCEPTING OR REJECTING ANY SUBSTITUTED ITEM AS AN APPROVED EQUAL TO THOSE EQUIPMENT AND MATERIALS LISTED ON THE DRAWINGS AND SPECIFICATIONS.

1.8 PRIOR TO START OF THE LANDSCAPE MAINTENANCE PERIOD

- A. THE CONTRACTOR SHALL SUBMIT PROOF OF WARRANTY TO THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO THE START OF THE LANDSCAPE MAINTENANCE PERIOD. ALL COMPUTERIZED IRRIGATION CONTROL SYSTEM MATERIALS EXCEPT INTERCONNECT CONDUCTORS SHALL HAVE A FIVE-YEAR WARRANTY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY WARRANTY INSPECTIONS FROM THE EQUIPMENT SUPPLIER. NO INSTALLATIONS WILL BE ACCEPTED WITHOUT PROOF OF WARRANTY.
- A. THE GUARANTEE FOR THE IRRIGATION SYSTEM SHALL BE MADE IN ACCORDANCE WITH THE ATTACHED FORM.
- B. A COPY OF THE GUARANTEE FORM SHALL BE INCLUDED IN THE OPERATIONS AND MAINTENANCE MANUAL.
- C. THE GUARANTEE FORM SHALL BE RE-TYPED ONTO THE CONTRACTOR'S LETTERHEAD AND CONTAIN THE FOLLOWING INFORMATION:

1.10 GUARANTEE FOR SPRINKLER IRRIGATION SYSTEM

- A. WE HEREBY GUARANTEE THAT THE SPRINKLER IRRIGATION SYSTEM WE HAVE FURNISHED AND INSTALLED IS FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP, AND THE WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, ORDINARY WEAR AND TEAR AND UNUSUAL ABUSE, OR NEGLECT EXCEPTED. WE AGREE TO REPAIR OR REPLACE ANY DEFECTS IN MATERIAL OR WORKMANSHIP WHICH MAY DEVELOP DURING THE PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE AND ALSO TO REPAIR OR REPLACE ANY DAMAGE RESULTING FROM THE REPAIRING OR REPLACING OF SUCH DEFECTS AT NO ADDITIONAL COST TO THE OWNER. WE SHALL MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN A REASONABLE TIME, AS DETERMINED BY THE OWNER, AFTER RECEIPT OF WRITTEN NOTICE. IN THE EVENT OF OUR FAILURE TO MAKE SUCH REPAIRS OR REPLACEMENTS WITHIN A REASONABLE TIME AFTER RECEIPT OF WRITTEN NOTICE FROM THE OWNER, WE AUTHORIZE THE OWNER TO PROCEED TO HAVE SAID REPAIRS OR REPLACEMENTS MADE AT OUR EXPENSE AND WE WILL PAY THE COSTS AND CHARGES THEREFORE UPON DEMAND.

PROJECT:

LOCATION:

SIGNED:

ADDRESS:

PHONE:

DATE OF ACCEPTANCE:

1.11 RULES AND REGULATIONS

- A. WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, THE UNIFORM PLUMBING CODE AS PUBLISHED BY THE WESTERN PLUMBING OFFICIALS ASSOCIATION, AND APPLICABLE LAWS AND REGULATIONS OF THE GOVERNING AUTHORITIES.

1.12 PROTECTION OF WORK AND MATERIALS

- A. THE CONTRACTOR SHALL PROTECT HIS WORK AND WORK OF OTHERS FOR THE DURATION OF THE CONTRACT. HE SHALL PROTECT PIPES AND FITTINGS FROM DIRECT SUNLIGHT, AND AVOID UNDUE BENDING AND ANY CONCENTRATED EXTERNAL LOADING. PIPE OR FITTINGS THAT HAVE BEEN DAMAGED SHALL NOT BE USED.
- B. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. DAMAGE TO UTILITIES WHICH ARE CAUSED BY CONTRACTOR'S OPERATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- C. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT SITE CONDITIONS AND PLANT MATERIAL THAT IS TO REMAIN. SHOULD DAMAGE TO INCURRED, CONTRACTOR SHALL REPAIR DAMAGE TO ITS ORIGINAL CONDITION OR FURNISH AND INSTALL EQUAL REPLACEMENTS.
- D. ALL EXISTING IRRIGATION SYSTEMS SHALL BE KEPT IN OPERATION AT ALL TIMES. IF THE EXISTING SYSTEM IS DAMAGED BY CONTRACTOR, HE SHALL BE RESPONSIBLE FOR IMMEDIATE REPAIR OF SUCH DAMAGE. AFTER EACH REPAIR, ALL HEADS OF THE REPAIRED SYSTEM SHALL BE REMOVED SO THAT THE LINES CAN BE CLEARED OF ALL DIRT AND FOREIGN MATTER.

1.13 CORRECTION OF WORK

- A. ANY AND ALL DISCREPANCIES OF UNSATISFACTORY WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CORRECTION OF WORK SHALL BE FINISHED WITH A REASONABLE PERIOD MUTUALLY AGREED UPON BETWEEN THE OWNER AND CONTRACTOR.

PART 2 - PRODUCTS

2.1 GENERAL

- A. USE ONLY NEW MATERIALS OF BRANDS AND TYPES NOTED ON THE DRAWINGS OR SPECIFICATIONS.

2.2 PVC PRESSURE MAIN LINE PIPE AND FITTINGS

- A. CLASS 315 PIPE SHALL BE MADE FROM AN NSF APPROVED TYPE I, GRADE I, PVC COMPOUND CONFORMING TO ASTM COMPOUND SPECIFICATION D1784. ALL PIPE MUST MEET REQUIREMENTS AS SET FORTH IN ASTM D2241 (SOLVENT-WELD CLASS PIPE), WITH AN APPROPRIATE STANDARD DIMENSION (S.D.R.). SCHEDULE 40 PIPE SHALL BE MADE FROM NSF APPROVED TYPE I, GRADE I PVC COMPOUND CONFORMING TO ASTM COMPOUND SPECIFICATION D1784. ALL PIPE MUST MEET REQUIREMENTS AS SET FORTH IN ASTM D1785 (SOLVENT-WELD SCHEDULE PIPE).
- C. PVC SOLVENT-WELD FITTINGS SHALL BE SCHEDULE 40, 1-2, III NSF APPROVED CONFORMING TO ASTM TEST PROCEDURE D2466.
- D. SOLVENT CEMENT AND PRIMER FOR PVC SOLVENT-WELD PIPE AND FITTINGS SHALL BE OF TYPE AND INSTALLATION METHODS PRESCRIBED BY THE MANUFACTURER.
- E. ALL PVC PIPE MUST BEAR THE FOLLOWING MARKINGS:
1. MANUFACTURER'S NAME.
 2. NOMINAL PIPE SIZE.
 3. SCHEDULE OR CLASS.
 4. PRESSURE RATING IN PSI.
 5. NSF (NATIONAL SANITATION FOUNDATION) APPROVAL.
 6. DATE OF EXTRUSION.
 7. ALL FITTINGS SHALL BEAR THE MANUFACTURER'S NAME OR TRADEMARK, MATERIAL DESIGNATION, SIZE, APPLICABLE IPS SCHEDULE AND NSF SEAL OF APPROVAL.

2.3 PVC NON-PRESSURE LATERAL LINE PIPING

- A. NON-PRESSURE BURIED LATERAL LINE PIPING SHALL BE PVC CLASS 200 WITH SOLVENT-WELDED JOINTS.
- B. NON-PRESSURE LATERAL LINE PIPING INSTALLED UNDER PAVED AREAS SHALL BE INSTALLED IN A PVC SCHEDULE 40 SLEEVE.
- C. PIPE SHALL BE MADE FROM NSF APPROVED, TYPE I, GRADE II PVC COMPOUND CONFORMING TO ASTM COMPOUND SPECIFICATION D1784. ALL PIPE MUST MEET REQUIREMENTS SET FORTH IN ASTM D2241 (SOLVENT-WELD CLASS PIPE) WITH AN APPROPRIATE STANDARD DIMENSION RATIO. EXCEPT AS NOTED IN PARAGRAPHS A, B, C AND D OF SECTION 2.2, ALL REQUIREMENTS FOR NON-PRESSURE LATERAL LINE PIPE AND FITTINGS SHALL BE THE SAME AS FOR SOLVENT-WELD PRESSURE MAIN LINE PIPE AND FITTINGS AS SET FORTH IN THIS SPECIFICATION.

2.4 BRASS PIPE AND FITTINGS

- A. WHERE INDICATED ON THE DRAWINGS, USE RED BRASS SCREWED PIPE CONFORMING TO FEDERAL SPECIFICATION #WW-P-351.
- B. FITTINGS SHALL BE RED BRASS CONFORMING TO FEDERAL SPECIFICATION #WW-P-460.

2.5 BALL VALVES

- A. BALL VALVES 2" AND SMALLER SHALL BE 125 LB. SWP PLASTIC BALL VALVE WITH BLOW-OUT PROTECT AND FULL PORT.
- B. BALL VALVES 2" AND SMALLER SHALL HAVE THREADED ENDS. REFER TO LEGEND FOR TYPE.
- C. ALL BALL VALVES SHALL BE INSTALLED PER IRRIGATION INSTALLATION DETAILS.

2.6 QUICK COUPLING VALVES

- A. QUICK COUPLING VALVES SHALL HAVE A BRASS ONE-PIECE BODY DESIGNED FOR A WORKING PRESSURE OF 150 PSI, OPERABLE WITH QUICK COUPLER. KEY SIZE AND TYPE SHALL BE AS INDICATED ON THE DRAWINGS.

2.7 BACKFLOW PREVENTION UNITS

- A. BACKFLOW PREVENTION UNITS SHALL BE OF SIZE AND TYPE INDICATED ON THE DRAWINGS. INSTALL BACKFLOW PREVENTION UNITS IN ACCORDANCE WITH THE DRAWINGS.
- B. WYE STRAINERS AT BACKFLOW PREVENTION UNITS SHALL HAVE A BRONZED SCREWED BODY WITH 60 MESH STAINLESS STEEL SCREEN AND SHALL BE SIMILAR TO THE BAILEY #100B OR APPROVED EQUAL.
- C. ALL PRESSURE MAINLINE PIPING BETWEEN THE POINT OF CONNECTION AND THE BACKFLOW PREVENTER SHALL BE INSTALLED AS REQUIRED BY LOCAL CODE. THE CONTRACTOR SHALL VERIFY WITH THE LOCAL GOVERNING BODY AS TO MATERIAL TYPE AND INSTALLATION PROCEDURES PRIOR TO START OF CONSTRUCTION. SUBMIT SHOP DRAWING FOR APPROVAL.

2.8 CHECK VALVES

- A. SWING CHECK VALVES 2" AND SMALLER SHALL BE 200 POUND WOG BRONZE CONSTRUCTION WITH REPLACEABLE COMPOSITION NEOPRENE OR RUBBER DISC AND SHALL MEET OR EXCEED FEDERAL SPECIFICATION WW-V-51D, CLASS A, TYPE IV.
- B. CHECK VALVES SHALL BE OF HEAVY DUTY VIRGIN PVC CONSTRUCTION WITH FIP THREADED INLETS AND OUTLETS. INTERNAL PARTS SHALL BE STAINLESS STEEL AND NEOPRENE. CHECK VALVES SHALL BE FIELD ADJUSTABLE AGAINST DRAW-OUT FROM 5 TO 40 FEET OF HEAD. CHECK VALVES SHALL BE SIMILAR TO THE KING BROS. INDUSTRIES "CV" SERIES, OR EQUAL.

2.9 CONTROL WIRE

- A. CONNECTIONS BETWEEN THE AUTOMATIC CONTROLLERS AND THE ELECTRIC CONTROL VALVES SHALL BE MADE WITH DIRECT BURIAL COPPER WIRE AWG-U.F. 600 VOLT. CONTROL WIRES SHALL BE SHALL BE #14 GAUGE AND A DIFFERENT WIRE COLOR FOR EACH AUTOMATIC CONTROLLER. COMMON WIRES SHALL BE #14 GAUGE AND WHITE IN COLOR WITH A DIFFERENT COLOR STRIPE FOR EACH AUTOMATIC CONTROLLER. INSTALL WIRES IN ACCORDANCE WITH VALVE MANUFACTURER'S SPECIFICATIONS AND WIRE CHARTS. IN NO CASE SHALL WIRE SIZE BE LESS THAN #14 GAUGE. WIRE COLOR SHALL BE CONTINUOUS OVER ITS ENTIRE LENGTH.
- B. WIRING SHALL OCCUPY THE SAME TRENCH AND SHALL BE INSTALLED ALONG THE SAME ROUTE AS PRESSURE SUPPLY OR LATERAL LINES WHEREVER POSSIBLE.
- C. WHERE MORE THAN ONE (1) WIRE IS PLACED IN A TRENCH, THE WIRING SHALL BE TAPED TOGETHER AT INTERVALS OF 10 FEET.
- D. AN EXPANSION CURL SHALL BE PROVIDED WITHIN THREE (3) FEET OF EACH WIRE CONNECTION. EXPANSION CURL SHALL BE OF SUFFICIENT LENGTH AT EACH SPLICE CONNECTION AT EACH ELECTRIC CONTROL, SO THAT IN CASE OF REPAIR, THE VALVE BONNET MAY BE BROUGHT TO THE SURFACE WITHOUT DISCONNECTING THE CONTROL WIRES. CONTROL WIRES SHALL BE LAID LOOSELY IN THE TRENCH WITHOUT STRESS OR STRETCHING OF THE CONTROL WIRE CONDUCTORS.
- E. ALL SPLICES SHALL BE MADE WITH EITHER 3M DBYR CONNECTOR OR RAIN BIRD SNAP-TITE WIRE CONNECTOR, OR APPROVED EQUAL. USE ONE SPLICE PER CONNECTOR SEALING PACK.
- F. FIELD WIRE SPLICES BETWEEN THE AUTOMATIC CONTROLLER AND THE ELECTRICAL CONTROL VALVES SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
- G. WHEN CONTROL WIRING IS TRENCHED SEPARATELY FROM MAINLINE TRENCHES A CONTINUOUS WARNING TAPE SHALL BE INSTALLED WITH THE WIRING. WARNING TAPE: INERT PLASTIC FILM HIGHLY RESISTANT TO ALKALIS, ACIDS, OR OTHER DESTRUCTIVE CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS. THREE INCHES WIDE, COLORED YELLOW, AND IMPRINTED WITH "CAUTION: BURIED ELECTRIC LINE BELOW."
- H. PROVIDE A 36-INCH EXCESS LENGTH OF WIRE IN AN 8-INCH DIAMETER LOOP AT EACH 90 DEGREE CHANGE OF DIRECTION, AT BOTH ENDS OF SLEEVES, AND AT 100-FOOT INTERVALS ALONG CONTINUOUS RUNS OF WIRING. DO NOT TIE WIRING LOOP.
- I. INSTALL COMMON GROUND WIRE AND ONE CONTROL WIRE FOR EACH REMOTE CONTROL VALVE. MULTIPLE VALVES ON A SINGLE CONTROL WIRE ARE NOT PERMITTED. INSTALL ONE COMMON WIRE FOR EACH CONTROLLER. MULTIPLE CONTROLLERS WITH ONE COMMON WIRE WILL NOT BE PERMITTED.
- J. CONTRACTOR SHALL ROUTE **TWO** ADDITIONAL "CONTROL" WIRES AND **ONE** ADDITIONAL "COMMON" WIRE ALONG ENTIRE MAINLINE ROUTE AND ALONG EACH AND EVERY LEG OF MAINLINE ROUTE. ROUTE WIRES INTO EACH AND EVERY RCV VALVE BOX. WHERE VALVE BOXES ARE GROUPED INTO A MANIFOLD, ROUTE WIRES INTO FIRST VALVE BOX ON MANIFOLD ONLY.

2.10 AUTOMATIC IRRIGATION CONTROLLERS

- A. AUTOMATIC IRRIGATION CONTROLLERS SHALL BE OF THE SIZE AND TYPE AS THAT INDICATED ON THE DRAWINGS.
- B. FINAL LOCATION OF AUTOMATIC IRRIGATION CONTROLLERS SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- C. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE 120 VOLT ELECTRICAL POWER TO THE AUTOMATIC IRRIGATION CONTROLLER SHALL BE FURNISHED BY OTHERS. THE FINAL ELECTRICAL HOOK-UP SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- D. THE AUTOMATIC IRRIGATION CONTROLLER SHALL BE INCLUDED AS A PART OF THE IRRIGATION CONTROLLER ENCLOSURE ASSEMBLY.

2.11 ELECTRICAL CONTROL VALVES

- A. ALL ELECTRIC CONTROL VALVES SHALL BE THE SAME MANUFACTURER AS THE AUTOMATIC CONTROLLERS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- B. ALL ELECTRIC CONTROL VALVES SHALL HAVE A MANUAL FLOW ADJUSTMENT.
- C. PROVIDE AND INSTALL ONE (1) CONTROL VALVE BOX FOR EACH ELECTRIC CONTROL VALVE.

2.12 VALVE BOXES

- A. USE A 10" DIAMETER SPECIFICATION ROUND VALVE BOX FOR GATE VALVES, BALL VALVES, CONTROL WIRE SPLICES, AND QUICK COUPLING VALVES AS MANUFACTURED BY RAIN BIRD, MODEL #VB-RND WITH GREEN OR BLACK COVER. EXTENSION SLEEVES SHALL BE 6" MINIMUM PVC PIPING MATERIAL.
- B. USE A RECTANGULAR SPECIFICATION GRADE VALVE BOX FOR ELECTRICAL CONTROL VALVES, MASTER VALVES, FLOW SENSORS, AND CONTROL WIRE PULL BOXES, AS MANUFACTURED BY RAIN BIRD, MODEL #VB-STD WITH A GREEN OR BLACK COVER.
- C. USE A JUMBO RECTANGULAR SPECIFICATION GRADE VALVE BOX FOR DRIP ZONE ASSEMBLY CONTROL VALVES, AS MANUFACTURED BY RAIN BIRD, MODEL #VB-JMB WITH A GREEN OR BLACK COVER.
- D. VALVE BOXES SHALL BE A MINIMUM OF ONE (1) FOOT APART WHEN ARRANGED IN A GROUP OR SIDE BY SIDE, OR UNLESS NOTED OTHERWISE IN THE DRAWINGS.

2.13 SPRINKLER HEADS

- A. ALL SPRINKLER HEADS SHALL BE OF THE SAME SIZE, TYPE, AND DELIVER THE SAME RATE OF PRECIPITATION WITH THE DIAMETER (OR RADIUS) OF THROW, PRESSURE, AND DISCHARGE AS SHOWN ON THE DRAWINGS AND IN THIS SPECIFICATION.
- B. SPRAY HEADS SHALL HAVE A SCREW ADJUSTMENT.
- C. RISER UNITS SHALL BE FABRICATED IN ACCORDANCE WITH THE DRAWINGS.
- D. RISER NIPPLES FOR ALL SPRINKLER HEADS SHALL BE THE SAME SIZE AS THE RISER OPENING IN THE SPRINKLER BODY.
- E. ALL SPRINKLER HEADS OF THE SAME TYPE SHALL BE FROM THE SAME MANUFACTURER.

2.14 IDENTIFICATION TAGS

- A. IDENTIFICATION TAGS FOR ELECTRICAL CONTROL VALVES, AND OTHER EQUIPMENT ASSEMBLIES AS DESIGNATED ON DRAWINGS, SHALL BE MANUFACTURED FROM POLYURETHANE BEHR DESOPAN. USE CHRISTY'S STANDARD TAG HOT STAMPED WITH BLACK LETTERS ON YELLOW BACKGROUND. THE TAGS SHALL BE NUMBERED TO MATCH STATION IDENTIFICATION AS INDICATED ON DRAWINGS. PROVIDE ONE (1) TAG FOR EACH ELECTRIC CONTROL VALVE.
- B. SPECIAL ORDER TAGS FROM T. CHRISTY ENTERPRISES. (714)771-4142.

2.15 SLEEVING

- A. INSTALL SEPARATE SLEEVE BENEATH PAVED AREAS TO ROUTE EACH RUN OF IRRIGATION PIPE OR WIRING BUNDLE.
- B. SLEEVING MATERIAL BENEATH PEDESTRIAN PAVEMENTS - ASTM D3034 PVC GRAVITY SEWER PIPE.
- C. SLEEVING BENEATH STREETS AND DRIVES - ASTM D3034 PVC GRAVITY SEWER PIPE.
- D. SLEEVING DIAMETER - EQUAL TO TWICE THAT OF THE PIPE OR WIRING BUNDLE. MINIMUM SLEEVING DIAMETER SHALL BE 2 INCHES.
- E. MARKING STAKES - 2" X 2" X 24" WOOD STAKES.

2.16 OTHER COMPONENTS

- A. TOOLS AND SPARE PARTS
1. PROVIDE OPERATING KEYS, SERVICING TOOLS, TEST EQUIPMENT, OTHER ITEMS, AND SPARE PARTS AS INDICATED IN OTHER AREAS OF THIS SPECIFICATION.
- B. OTHER MATERIALS
1. PROVIDE OTHER MATERIALS OR EQUIPMENT NOT INDICATED ON THE DRAWINGS OR REFERENCED IN THIS SPECIFICATION, AS NECESSARY, TO COMPLETE THE INSTALLATION OF THE IRRIGATION SYSTEM.

Issued for:

03/15/21	100% DESIGN DEVELOPMENT

Revisions:



507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

IRRIGATION
SPECIFICATIONS

Sheet No.:

LI.8

Plan Status:
CONSTRUCTION
DOCUMENTS

PART 3 - EXECUTION

3.1 GENERAL

- A. ALL SCALED DIMENSIONS ARE APPROXIMATE. THE CONTRACTOR SHALL CHECK AND VERIFY ALL SIZE DIMENSIONS AND RECEIVE THE OWNER'S AUTHORIZED REPRESENTATIVE'S APPROVAL PRIOR TO PROCEEDING WITH ANY WORK UNDER THIS SPECIFICATION. CONTRACTOR SHALL LOCATE WITH 2" X 2" WOOD STAKES WITH IDENTIFYING MARKINGS FOR ALL PROPOSED LOCATIONS OF ELECTRICAL CONTROL VALVE BOXES, GATE VALVE BOXES AND QUICK COUPLER BOXES FOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE. AFTER LOCATING ALL THESE ITEMS CONTACT THE OWNER'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND APPROVAL. MINOR ADJUSTMENTS TO THE STAKE LOCATIONS MAY BE REQUESTED OF THE CONTRACTOR BY THE OWNER'S AUTHORIZED REPRESENTATIVE AT THAT TIME.
- B. EXERCISE EXTREME CARE IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO THESE UTILITIES WHICH ARE CAUSED BY HIS OPERATIONS. CHECK EXISTING UTILITY DRAWINGS FOR EXISTING UTILITY LOCATIONS.
- C. COORDINATE INSTALLATION OF SPRINKLER IRRIGATION MATERIALS INCLUDING PIPE, SO THAT THERE SHALL BE NO INTERFERENCE WITH UTILITIES, CONSTRUCTION ELEMENTS, OR THE PLANTING OF TREES, SHRUBS, AND GROUND COVERS.
- D. THE CONTRACTOR SHALL CAREFULLY CHECK ALL FINISH GRADES TO SATISFY HIMSELF THAT HE MAY SAFELY PROCEED BEFORE STARTING WORK ON THE IRRIGATION SYSTEM.
- E. REPORT IRREGULARITIES TO OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO BEGINNING WORK. BEGINNING OF WORK IMPLIES ACCEPTANCE OF EXISTING CONDITIONS.

3.2 SITE PREPARATION

- A. PHYSICAL LAYOUT
1. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL STAKE OUT ALL PRESSURE AND NON-PRESSURE SUPPLY LINES AND THE LOCATION OF ALL SPRINKLER HEADS.
2. ALL LAYOUT SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
- B. WATER SUPPLY POINT-OF-CONNECTIONS
1. WATER SUPPLY POINTS OF CONNECTION ARE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS.
2. THE SPRINKLER IRRIGATION SYSTEM SHALL BE CONNECTED TO WATER SUPPLY POINTS OF CONNECTION AS INDICATED ON THE DRAWINGS.
- C. ELECTRICAL SUPPLY POINT-OF-CONNECTIONS
1. ELECTRICAL SUPPLY POINT-OF-CONNECTIONS FOR THE AUTOMATIC IRRIGATION CONTROLLERS ARE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS.
2. CONNECTIONS SHALL BE MADE AT APPROXIMATE LOCATIONS AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MINOR CHANGES CAUSED BY ACTUAL SITE CONDITIONS.

3.3 INSTALLATION

- A. TRENCHING
1. DIG TRENCHES STRAIGHT AND SUPPORT PIPE CONTINUOUSLY ON BOTTOM OF TRENCH. LAY PIPE TO AN EVEN GRADE. TRENCHING EXCAVATION SHALL FOLLOW THE LAYOUT AS INDICATED ON THE DRAWINGS.
2. PROVIDE A MINIMUM SOIL COVER OF 18 INCHES FOR ALL PRESSURE SUPPLY LINES.
3. PROVIDE A MINIMUM SOIL COVER OF 12 INCHES FOR ALL NON-PRESSURE LINES.

4. PROVIDE A MINIMUM SOIL COVER OF 18 INCHES FOR ALL CONTROL WIRE. WHERE PIPING IS INDICATED UNDER PAVED AREAS, BUT RUNNING PARALLEL AND ADJACENT TO PLANTING AREAS, INSTALL THE PIPING IN THE PLANTED AREAS. IRRIGATION HEAD SPACING AS INDICATED ON THE DRAWINGS SHALL NOT BE EXCEEDED.

B. BACKFILLING

1. THE TRENCHES SHALL NOT BE BACKFILLED UNTIL ALL REQUIRED TESTS ARE PERFORMED. TRENCHES SHALL BE CAREFULLY BACKFILLED WITH THE EXCAVATED MATERIALS APPROVED FOR BACKFILLING, CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND, OR OTHER APPROVED MATERIALS, FREE FROM LARGE CLOUDS OF EARTH OR STONES. BACKFILL SHALL BE MECHANICALLY COMPACTED LANDSCAPED AREAS TO A DRY DENSITY EQUAL TO ADJACENT UNDISTURBED SOIL IN PLANTING AREAS. BACKFILL SHALL CONFORM TO ADJACENT GRADES WITHOUT DIPS, SUNKEN AREAS, HUMPS OR OTHER SURFACE IRREGULARITIES.
2. A FINE GRANULAR MATERIAL BACKFILL SHALL BE INITIALLY PLACED OVER ALL LINES. NO FOREIGN MATTER LARGER THAN ONE-HALF INCH IN SIZE WILL BE PERMITTED IN THE INITIAL BACKFILL.
3. FLOODING OF TRENCHES WILL BE PERMITTED ONLY WITH THE APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
4. IF SETTLEMENT OCCURS AND SUBSEQUENT ADJUSTMENTS IN PIPE, VALVES, SPRINKLER HEADS, PLANTING, OR OTHER CONSTRUCTION ELEMENTS ARE NECESSARY, THE CONTRACTOR SHALL MAKE ALL REQUIRED ADJUSTMENTS WITHOUT COST TO THE OWNER.

C. TRENCHING AND BACKFILLING UNDER PAVING

1. TRENCHES LOCATED UNDER AREAS WHERE ASPHALTIC CONCRETE OR CONCRETE PAVING OCCUR, SHALL BE BACKFILLED WITH SAND (A LAYER SIX (6) INCHES BELOW THE PIPE AND THREE (3) INCHES ABOVE THE PIPE) AND COMPACTED IN LAYERS TO 95% COMPACTION. USING MANUAL OR MECHANICAL TAMPING DEVICES. TRENCHES FOR PIPING SHALL BE COMPACTED TO EQUAL THE COMPACTION OF THE EXISTING ADJACENT UNDISTURBED SOIL AND SHALL BE LEFT IN A FIRM UNYIELDING CONDITION. ALL TRENCHES SHALL BE LEFT FLUSH WITH ADJOINING FINISH GRADE. THE CONTRACTOR SHALL SET IN PLACE, CAP AND PRESSURE TEST ALL PIPING UNDER PAVING PRIOR TO THE PAVING WORK.
2. GENERALLY PIPING UNDER EXISTING WALKS IS DONE BY JACKING, BORING OR HYDRAULIC DRIVING, BUT WHERE ANY CUTTING OR BREAKING OF CONCRETE IS NECESSARY, IT SHALL BE DONE AND REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. PERMISSION TO CUT OR BREAK CONCRETE SHALL BE OBTAINED FROM THE OWNER'S AUTHORIZED REPRESENTATIVE. NO HYDRAULIC DRIVING WILL BE PERMITTED UNDER CONCRETE PAVING.
3. PROVIDE A MINIMUM SOIL COVER OF 18 INCHES BETWEEN THE TOP OF THE PIPE AND THE BOTTOM OF THE AGGREGATE BASE FOR ALL PRESSURE AND NON-PRESSURE PIPING INSTALLED UNDER ASPHALTIC CONCRETE PAVING.
4. THE CONTRACTOR SHALL MAKE ALL REQUIRED ADJUSTMENTS WITHOUT COST TO THE OWNER.

D. ASSEMBLIES

1. ROUTING OF IRRIGATION LINES AS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC ONLY. INSTALL LINES AND VARIOUS ASSEMBLIES IN SUCH A MANNER AS TO CONFORM WITH THE DRAWINGS.
2. INSTALL NO MULTIPLE ASSEMBLIES IN PLASTIC LINES. PROVIDE EACH ASSEMBLY WITH ITS OWN OUTLET.

3. INSTALL ALL ASSEMBLIES SPECIFIED HEREIN IN ACCORDANCE WITH THEIR RESPECTIVE DETAILS. IN ABSENCE OF DRAWINGS OR SPECIFICATIONS PERTAINING TO SPECIFIC ITEMS REQUIRED TO COMPLETE THIS WORK, PERFORM SUCH WORK IN ACCORDANCE WITH BEST STANDARD PRACTICE WITH PRIOR APPROVAL OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
4. PVC PIPE AND FITTINGS SHALL BE THOROUGHLY CLEANED OF DIRT, DUST AND MOISTURE BEFORE INSTALLATION. INSTALLATION AND SOLVENT WELDING METHODS SHALL BE AS RECOMMENDED BY THE PIPE AND FITTING MANUFACTURER.
5. ON PVC TO METAL CONNECTIONS WORK THE METAL CONNECTIONS FIRST. TEFLON TAPE OR APPROVED EQUAL, SHALL BE USED ON ALL THREADED PVC TO PVC AND THREADED PVC TO METAL JOINTS. APPLY A LIGHT WRENCH PRESSURE ONLY. WHERE THREADED PVC CONNECTIONS ARE REQUIRED, USE THREADED PVC ADAPTERS INTO WHICH THE PIPE MAY BE SOLVENT WELDED.

E. ASSEMBLING PIPE AND FITTINGS:

1. INSPECT ALL PIPE AND FITTINGS BEFORE INSTALLATION.
2. KEEP PIPE FREE FROM DIRT AND PIPE SCALE. CUT PIPE ENDS SQUARE AND DEBUR. CLEAN PIPE ENDS OF LOOSE PIPE SHAVINGS.
3. KEEP ENDS OF ASSEMBLED PIPE CAPPED. REMOVE CAPS ONLY WHEN NECESSARY TO CONTINUE ASSEMBLY.
4. INSTALL PIPE WITH ALL MARKINGS UP FOR VISUAL INSPECTION AND VERIFICATION.
5. ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF SIX (6) INCHES FROM EACH OTHER AND FROM LINES OF OTHER TRADES. PARALLEL LINES SHALL NOT BE INSTALLED DIRECTLY OVER ONE ANOTHER.
6. MAINTAIN 10 FOOT MINIMUM HORIZONTAL SEPARATION FROM ALL POTABLE WATER PIPING. WHERE RECLAIMED AND POTABLE WATER PRESSURE MAIN LINE PIPING CROSS, THE RECLAIMED WATER PIPING SHALL BE INSTALLED BELOW THE POTABLE WATER PIPING IN SCHEDULE 40 PVC WHICH EXTENDS A MINIMUM OF FIVE (5) FEET ON EITHER SIDE OF THE POTABLE WATER PIPING. PROVIDE A MINIMUM VERTICAL CLEARANCE OF SIX (6) INCHES.
7. USE ONLY STRAP-TYPE FRICTION WRENCHES FOR THREADED PLASTIC PIPE.
8. SNAKE PIPE FROM SIDE TO SIDE WITHIN THE TRENCH.

F. LINE CLEARANCE

1. ALL LINES SHALL HAVE A MINIMUM CLEARANCE OF SIX (6) INCHES FROM EACH OTHER AND FROM LINES OF OTHER TRADES. PARALLEL LINES SHALL NOT BE INSTALLED DIRECTLY OVER ONE ANOTHER.

G. IRRIGATION CONTROLLER INSTALLATION

1. INSTALL THE IRRIGATION CONTROLLER PER THE MANUFACTURER'S INSTRUCTIONS. REMOTE CONTROL VALVES SHALL BE CONNECTED TO THE IRRIGATION CONTROLLER IN NUMERICAL SEQUENCE AS INDICATED ON THE DRAWINGS.

H. ELECTRIC CONTROL VALVE INSTALLATION

1. INSTALL ELECTRIC CONTROL VALVES AS INDICATED ON THE DRAWINGS. WHEN GROUPED TOGETHER, ALLOW AT LEAST TWELVE INCHES BETWEEN ELECTRIC CONTROL VALVES. INSTALL EACH ELECTRIC CONTROL VALVE IN A SEPARATE VALVE BOX. EACH ELECTRIC CONTROL VALVE NUMBER SHALL BE HEAT-BRANDED ON VALVE BOX TOP WITH 2" TALL LETTERS.
2. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL APPROVE ELECTRIC CONTROL VALVE AND QUICK COUPLING VALVE BOX LOCATIONS PRIOR TO FINAL INSTALLATION.

I. VALVE BOX INSTALLATION

1. INSTALL VALVE BOXES AS INDICATED ON THE DRAWINGS. WHEN GROUPED TOGETHER, ALLOW AT LEAST TWELVE INCHES BETWEEN VALVE BOXES.
2. HEAT BRAND VALVE BOX IDENTIFICATION AS INDICATED ON DRAWINGS. HEAT BRANDING UNIT AVAILABLE FROM HYDRO-SCAPE PRODUCTS, INC., PHONE NUMBER (714) 639-1850.

J. SYSTEM FLUSHING

1. AFTER ALL PIPE LINES AND RISERS ARE IN PLACE AND CONNECTED AND ALL NECESSARY DIVERSION WORK HAS BEEN COMPLETED, AND PRIOR TO INSTALLATION OF SPRINKLER HEADS, THE CONTROL VALVES SHALL BE OPENED AND A FULL HEAD OF WATER USED TO FLUSH OUT THE SYSTEM. SPRINKLER HEADS SHALL BE INSTALLED ONLY AFTER FLUSHING OF THE SYSTEM HAS BEEN PERFORMED.

K. SPRINKLER HEAD INSTALLATION

1. INSTALL THE SPRINKLER HEADS AS INDICATED ON THE DRAWINGS.
2. SPACING OF SPRINKLER HEADS SHALL NOT EXCEED THE MAXIMUM SPACING AS INDICATED ON THE DRAWINGS. IN NO CASE SHALL THE SPACING EXCEED THE MAXIMUM RECOMMENDED BY THE MANUFACTURER.
3. INSTALL CHECK VALVES ON SPRINKLER HEADS THAT DRAIN WATER AFTER THE CONTROL VALVE IS TURNED OFF. "LOW HEAD" DRAINAGE WILL NOT BE ALLOWED ON SPRINKLER HEADS.

L. SLEEVING

1. EXTEND SLEEVE ENDS A MINIMUM OF 12 INCHES BEYOND THE EDGE OF THE PAVED SURFACE. COVER PIPE ENDS AND MARK WITH STAKES. ROUTE WIRE THROUGH AND TIE AT EACH END TO STAKES

3.4 TEMPORARY REPAIRS

- A. THE OWNER RESERVES THE RIGHT TO MAKE TEMPORARY REPAIRS AS NECESSARY TO KEEP THE IRRIGATION SYSTEM IN OPERATING CONDITION. THE EXERCISE OF THIS RIGHT BY THE OWNER SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES UNDER THE TERMS OF THE GUARANTEE AS HEREIN.

3.5 EXISTING TREES

- A. WHERE IT IS NECESSARY TO EXCAVATE ADJACENT EXISTING TREES, THE CONTRACTOR SHALL USE ALL POSSIBLE CARE TO AVOID INJURY TO TREES AND THEIR ROOTS. EXCAVATION IN AREAS WHERE TWO (2) INCH AND LARGER ROOTS OCCUR SHALL BE DONE BY HAND. ALL ROOTS TWO (2) INCHES AND LARGER IN DIAMETER, EXCEPT DIRECTLY IN THE PATH OF PIPE OR CONDUIT, SHALL BE TUNNELED UNDER AND SHALL BE HEAVILY WRAPPED WITH BURLAP, TO PREVENT SCARRING OR EXCESSIVE DRYING. WHERE A DITCHING MACHINE IS RUN CLOSE TO TREES HAVING ROOTS SMALLER THAN TWO (2) INCHES IN DIAMETER, THE WALL OF THE TRENCH ADJACENT TO THE TREE SHALL BE HAND TRIMMED. ROOTS ONE (1) INCH AND LARGER IN DIAMETER SHALL BE PAINTED WITH TWO COATS OF AN APPROVED TREE SEAL. TRENCHES ADJACENT TO EXISTING TREES SHOULD BE CLOSED WITHIN 24 HOURS. WHERE THIS IS NOT POSSIBLE, THE SIDE OF THE TRENCH ADJACENT TO THE EXISTING TREE SHALL BE KEPT SHADED WITH BURLAP OR CANVAS.

3.6 FIELD QUALITY CONTROL

- A. ADJUSTMENT OF THE IRRIGATION SYSTEM

1. FLUSH AND ADJUST ALL SPRINKLER HEADS FOR OPTIMUM PERFORMANCE AND TO REDUCE OVERSPRAY ONTO WALKS, ROADWAYS, AND BUILDINGS AS MUCH AS POSSIBLE.
2. IF IT IS DETERMINED THAT ADJUSTMENTS TO THE SPRINKLER HEADS WILL PROVIDE PROPER AND MORE ADEQUATE COVERAGE, THE CONTRACTOR SHALL MAKE SUCH ADJUSTMENTS PRIOR TO ANY PLANTING. ADJUSTMENTS MAY ALSO INCLUDE CHANGES IN NOZZLE SIZES AND DEGREES OF ARC AS REQUIRED.

3. LOWERING RAISED SPRINKLER HEADS BY THE CONTRACTOR SHALL BE ACCOMPLISHED WITHIN 10 DAYS AFTER NOTIFICATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
4. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

B. IRRIGATION SYSTEM TESTING

1. THE CONTRACTOR SHALL REQUEST THE PRESENCE OF THE OWNER'S AUTHORIZED REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE OF IRRIGATION SYSTEM TESTING.
2. TEST ALL PRESSURE LINES UNDER HYDROSTATIC PRESSURE OF 150 PSI FOR A PERIOD OF TWO (2) HOURS.

NOTE: TESTING OF PRESSURE MAINLINE SHALL OCCUR PRIOR TO INSTALLATION OF ANY ELECTRIC CONTROL VALVES.

3. IF DURING THE PRESSURE TEST, A PRESSURE DROP OCCURS - INDICATING A LEAK, REPLACE THE FAULTY JOINTS AND REPEAT THE PRESSURE TEST UNTIL THE ENTIRE SYSTEM IS PROVEN WATERTIGHT.
4. ALL HYDROSTATIC TESTS SHALL BE MADE ONLY IN THE PRESENCE OF THE OWNER'S AUTHORIZED REPRESENTATIVE. NO PIPE SHALL BE BACKFILLED UNTIL IT HAS BEEN OBSERVED, TESTED AND APPROVED IN WRITING.
5. THE CONTRACTOR IS TO FURNISH THE NECESSARY FORCE PUMP AND ALL OTHER TEST EQUIPMENT FOR THE HYDROSTATIC PRESSURE TEST.
6. WHEN THE IRRIGATION SYSTEM PASSES THE HYDROSTATIC PRESSURE TEST AND IS COMPLETED, PERFORM A SPRINKLER COVERAGE TEST IN THE PRESENCE OF THE OWNER'S AUTHORIZED REPRESENTATIVE. DETERMINE IF THE WATER COVERAGE IS COMPLETE AND ADEQUATE. FURNISH ALL MATERIALS AND PERFORM ALL WORK NECESSARY TO CORRECT ANY INADEQUACIES OF WATER COVERAGE DUE TO DEVIATIONS FROM THE DRAWINGS. OR WHERE THE IRRIGATION SYSTEM HAS BEEN WILLFULLY INSTALLED AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUSLY INADEQUATE, WITHOUT BRINGING THIS TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THIS TEST SHALL BE ACCOMPLISHED BEFORE ANY GROUND COVER OR TURF IS PLANTED.
7. UPON COMPLETION OF EACH PHASE OF WORK, THE ENTIRE SYSTEM SHALL BE COVERAGE TESTED AND ADJUSTED TO MEET SPECIFIC SITE REQUIREMENTS.

3.7 IRRIGATION SYSTEM MAINTENANCE

- A. THE ENTIRE IRRIGATION SYSTEM SHALL BE UNDER FULL, AUTOMATIC OPERATION FOR A PERIOD OF SEVEN (7) DAYS PRIOR TO BEGINNING ANY PLANTING. THE OWNER RESERVES THE RIGHT TO WAIVE OR SHORTEN THIS OPERATION PERIOD.

3.8 CLEAN UP

- A. CLEAN UP SHALL BE MADE AS EACH PORTION OF WORK PROGRESSES. REFUSE AND EXCESS DIRT SHALL BE REMOVED FROM THE SITE, ALL WALKS AND PAVING SHALL BE BROOM SWEEP OR WASHED DOWN, AND ANY DAMAGE SUSTAINED TO THE WORK OF OTHER CONTRACTORS SHALL BE REPAIRED TO ORIGINAL CONDITIONS AT NO COST TO THE OWNER.
- B. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SMOOTH ALL GROUND SURFACES. REMOVE EXCESS MATERIALS SUCH AS RUBBISH, DEBRIS AND SWEEP ADJACENT STREETS, CURBS, GUTTERS, WALKWAYS AND TRAILS. REMOVE CONSTRUCTION EQUIPMENT FROM THE PREMISES.

3.9 FINAL WALK-THROUGH PRIOR TO ACCEPTANCE

- A. THE CONTRACTOR SHALL OPERATE THE IRRIGATION SYSTEM IN ITS ENTIRETY FOR THE OWNER'S AUTHORIZED REPRESENTATIVE AT TIME OF THE FINAL WALK THROUGH. ANY ITEMS DEEMED NOT ACCEPTABLE BY THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL BE REWORKED TO THE HIS COMPLETE SATISFACTION.

- B. THE CONTRACTOR SHALL SHOW EVIDENCE TO THE OWNER'S AUTHORIZED REPRESENTATIVE THAT THE OWNER HAS RECEIVED ALL ACCESSORIES, CHARTS, "AS-BUILT DRAWINGS", AND EQUIPMENT AS REQUIRED BEFORE THE FINAL WALK THROUGH WILL BE PERFORMED.

3.10 SITE VISIT OBSERVATION SCHEDULE

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER'S AUTHORIZED REPRESENTATIVE IN ADVANCE OF THE FOLLOWING SITE VISITS:
1. PRE-JOB OR "KICK-OFF" MEETING - 7 DAYS.
2. PRESSURE SUPPLY LINE INSTALLATION AND TESTING - 2 DAYS.
3. AUTOMATIC CONTROLLER INSTALLATION - 2 DAYS.
4. CONTROL WIRE INSTALLATION - 2 DAYS.
5. LATERAL LINE AND SPRINKLER HEAD INSTALLATION - 2 DAYS.
6. SPRINKLER COVERAGE TEST - 2 DAYS.
7. FINAL WALKTHROUGH - 7 DAYS
- B. WHEN SITE VISITS ARE CONDUCTED BY OTHER THAN THE OWNER'S AUTHORIZED REPRESENTATIVE, SHOW EVIDENCE IN WRITING OF WHEN AND BY WHOM THESE SITE VISITS WERE MAD
- C. NO SITE VISITS WILL COMMENCE WITHOUT "AS-BUILTS". IN THE EVENT THE CONTRACTOR SCHEDULES A SITE VISIT WITHOUT "AS-BUILTS" OR WITHOUT COMPLETING PREVIOUSLY NOTED CORRECTIONS, OR WITHOUT PREPARING THE SYSTEM FOR SAID VISIT, THE CONTRACTOR BE RESPONSIBLE FOR REIMBURSING THE OWNER'S AUTHORIZED REPRESENTATIVE AT HIS CURRENT BILLING RATE PER HOUR PORTAL TO PORTAL (PLUS TRANSPORTATION COSTS) FOR THIS INCONVENIENCE. NO FURTHER SITE VISITS WILL BE PERFORMED BY THE OWNER'S AUTHORIZED REPRESENTATIVE UNTIL THIS CHARGE HAS BEEN PAID AND RECEIVED.

PART 4 - DRIP IRRIGATION SYSTEM: GENERAL

4.1 GENERAL CONDITIONS

- A. THE REQUIREMENTS OF THE "GENERAL CONDITIONS OF THE CONTRACT" AND OF DIVISION "1, "GENERAL REQUIREMENTS", SHALL APPLY TO ALL WORK IN THIS SECTION WITH THE SAME FORCE AND EFFECT AS THOUGH REPEATED IN FULL HEREIN.

4.2 SUMMARY

- A. CONDITIONS WITHIN IRRIGATION SYSTEM SPECIFICATION SECTION 02810 SHALL APPLY TO THIS SECTION.
- B. THIS SECTION INCLUDES THE INSTALLATION OF LOW VOLUME IRRIGATION COMPONENTS INCLUDING CONTROL ZONE KITS AND INLINE DRIP TUBING.

PART 5 - DRIP IRRIGATION PRODUCTS

5.1 CONTROL ZONE KITS

- A. GENERAL
1. CONTROL ZONE KIT ASSEMBLIES FOR DRIP IRRIGATION ZONES MUST INCLUDE A VALVE, FILTRATION AND PRESSURE REGULATION TO MEET THE FLOW REQUIREMENTS OF THE ZONE. WHERE NECESSARY A CHECK VALVE SHALL ALSO BE INSTALLED.
2. CONTROL ZONE KITS SHALL BE RAIN BIRD CONTROL ZONE KITS AS INDICATED ON CONSTRUCTION DRAWINGS.
3. COMPONENTS SHALL BE SIZED ACCORDING TO THE HYDRAULIC DEMANDS OF THE SYSTEM.
- B. RAIN BIRD CONTROL ZONE KIT
1. COMMERCIAL CONTROL ZONE KIT FOR ZONES WITH FLOWS FROM 0.25 TO 9.0 GPM
- a. CONTROL ZONE KIT SHALL INCLUDE A 1" PESB VALVE, BASKET FILTER WITH 200-MESH (75 MICRON) SCREEN WITH A BUILT-IN 40 PSI PRESSURE REGULATOR, OR APPROVED EQUIVALENT.
- b. THE CONTROL ZONE KIT SHALL HAVE A 1" ISOLATION BALL VALVE.

2. COMMERCIAL CONTROL ZONE KIT FOR ZONES WITH FLOWS FROM 10.0 TO 18.0 GPM
- a. CONTROL ZONE KIT SHALL INCLUDE A 1-1/2" PESB VALVE, TWO (2) BASKET FILTERS WITH 200-MESH (75 MICRON) SCREEN WITH A BUILT-IN 40 PSI PRESSURE REGULATOR, OR APPROVED EQUIVALENT.
- b. THE CONTROL ZONE KIT SHALL HAVE A 1-1/2" ISOLATION BALL VALVE.

C. BASKET FILTER

- a. THE FILTER SHALL HAVE A 1" INLINE QUICK CHECK BASKET FILTER BODY CONSTRUCTED OF HEAVY-DUTY, GLASS-FILLED, UV RESISTANT POLYPROPYLENE CAPABLE OF WITHSTANDING PRESSURES OF NOT LESS THAN 150 PSI (10.3 BARS). THE DESIGN SHALL BE A BASKET STYLE BODY WITH JAR-TOP CAP. THE CAP SHALL INCORPORATE AN INDICATOR THAT GOES FROM GREEN TO RED DURING OPERATION WHEN THE FILTER ELEMENT NEEDS CLEANING. THE DIMENSIONS FOR THE FILTER SHALL NOT EXCEED THE FOLLOWING: HEIGHT: 6½" (16.5 CM), LENGTH: 6½" (16.5 CM), WIDTH: 3½" (8.9 CM). THE FILTER ELEMENT SHALL BE CONSTRUCTED OF A DURABLE STAINLESS STEEL MESH ATTACHED TO A PROPYLENE FRAME AND SHALL BE 200-MESH (75 MICRON). THE SCREEN SHALL BE SERVICEABLE FOR CLEANING PURPOSES BY UNSCREWING THE CAP FROM THE BODY AND REMOVING THE FILTER ELEMENT.

D. PRESSURE REGULATOR

- a. THE CONTROL ZONE KIT SHALL HAVE THE PRESSURE REGULATOR BUILT INTO THE BASKET FILTER. THE PRESSURE REGULATING DEVICE IS A NORMALLY OPEN DEVICE THAT ALLOWS FULL FLOW WITH LITTLE PRESSURE LOSS UNLESS THE INLET PRESSURE IS GREATER THAN THE PRESET LEVEL. AS THE INLET PRESSURE INCREASES ABOVE THE PRESET LEVEL IT COMPRESSES A SPRING AND BEGINS TO REDUCE THE FLOW AND DOWNSTREAM PRESSURE. THE INLINE PRESSURE REGULATOR SHALL HAVE A PRESET OUTLET PRESSURE OF APPROXIMATELY 40 PSI (2.8 BAR).

E. REMOTE CONTROL VALVE

- a. THE CONTROL ZONE KIT SHALL HAVE AN AUTOMATIC IRRIGATION CONTROL VALVE. THE VALVE PRESSURE RATING NOT TO BE LESS THAN 200 PSI (13.8 BAR). THE VALVE BODY AND BONNET SHALL BE CONSTRUCTED OF HIGH-IMPACT, WEATHER-RESISTANT GLASS FILLED NYLON, STAINLESS STEEL AND OTHER CHEMICAL/UV RESISTANT MATERIALS. THE VALVE SHALL HAVE A DIAPHRAGM CONSTRUCTED OF A DURABLE BUNA-N RUBBER MATERIAL REINFORCED WITH NYLON.

5.3 POINT SOURCE DRIP EMISSION DEVICE

A. EMITTERS

1. 1/2 GPH EMITTER, MODEL XB-05PC-1032, SHALL BE BLUE IN COLOR.
2. 1 GPH EMITTER, MODEL XB-10PC-1032, SHALL BE BLACK IN COLOR.
3. 2 GPH EMITTER, MODEL XB-20PC-1032, SHALL BE RED IN COLOR.
4. EACH EMITTER SHALL HAVE A 1032 THREADED INLET FOR ATTACHMENT TO A PFR-FRA POLY FLEX RISER.
5. EACH EMITTER SHALL BE PRESSURE COMPENSATING FROM 15-50 PSI.

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:



507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

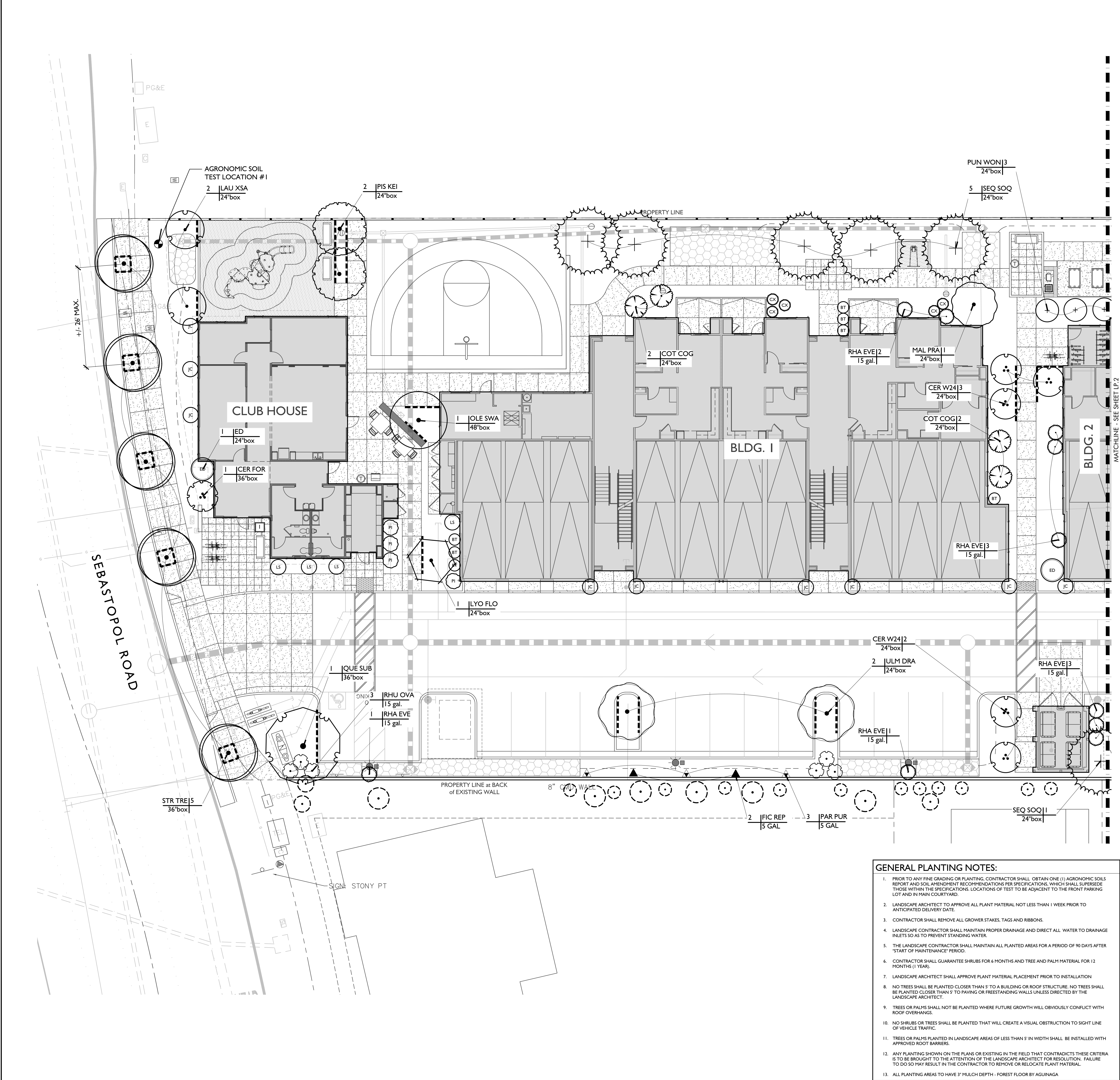
Title:

IRRIGATION
SPECIFICATIONS

Sheet No.:

LI.9

Plan Status:
CONSTRUCTION
DOCUMENTS



PLANT SCHEDULE				
TREES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
ARB HYB	ARBUTUS X 'MARINA' HYBRID STRAWBERRY TREE -STD	36"BOX	LOW	10
CER FOR	CERCIS CANADENSIS 'FOREST PANSY' TM FOREST PANSY REDBUD	36"BOX	LOW	6
CER W24	CERCIS OCCIDENTALIS WESTERN REDBUD MULTI-TRUNK	24"BOX	LOW	9
CX	CHAENOMELES X SUPERBA 'DOUBLE TAKE PEACH' FLOWERING QUINCE	5 GAL	LOW	16
COT COG	COTINUS COGGYGRIA SMOKE TREE	24"BOX	LOW	10
DIO HAC	DIOSPYROS KAKI 'HACHIYA' JAPANESE PERSIMMON	15 GAL	MEDIUM	2
ED	ELAEOCARPUS DECIPENS 'LITTLE EMPEROR' DWARF JAPANESE BLUEBERRY TREE	24"BOX	LOW	6
GIN BIL	GINKGO BILOBA 'PRINCETON SENTRY' PRINCETON SENTRY MAIDENHAIR TREE	36"BOX	MEDIUM	5
JC	JUNIPERUS CHINENSIS 'BLUE POINT' BLUE POINT JUNIPER	15 GAL	LOW	15
LAG WHI	LAGERSTROEMIA INDICA X FAURIEI 'NATCHEZ' NATCHEZ GRAPE MYRTLE MULTI-TRUNK	24"BOX	MEDIUM	5
LS	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - COL.	15 GAL.	LOW	12
LAU XSA	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - STD	24"BOX	LOW	2
LYO FLO	LYONOTHAMNUS FLORIBUNDUS ASPLENIFOLIUS FERNLEAF CATALINA IRONWOOD	24"BOX	LOW	8
MAG MLB	MAGNOLIA X SOULANGEANA 'BLACK TULIP' SAUCER MAGNOLIA MULTI-TRUNK	48"BOX	MEDIUM	1
MAL PRA	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRAB APPLE	24"BOX	MEDIUM	3
OLE SWA	OLEA EUROPAEA 'SWAN HILL' TM SWAN HILL OLIVE	48"BOX	LOW	2
PIS KEI	PISTACIA CHINENSIS 'KEITH DAVEY' KEITH DAVEY CHINESE PISTACHE	24"BOX	MEDIUM	4
PI	PODOCARPUS ELONGATUS 'ICEE BLUE' TM ICEE BLUE YELLOW WOOD	15 GAL.	MEDIUM	14
BT	PRUNUS CAROLINIANA 'BRIGHT 'N TIGHT' TM BRIGHT 'N TIGHT CAROLINA LAUREL	15 GAL.	MEDIUM	34
PUN WON	PUNICA GRANATUM 'WONDERFUL' WONDERFUL POMEGRANATE	24"BOX	MEDIUM	3
QUE SUB	QUERCUS SUBER CORK OAK	36"BOX	LOW	3
RHA EVE	RHAMNUS CALIFORNICA 'EVE CASE' CALIFORNIA COFFEEBERRY	15 GAL.	LOW	49
RHU OVA	RHUS OVATA SUGAR BUSH	15 GAL.	LOW	27
SEQ SOQ	SEQUOIA SEMPERVIRENS 'SOQUEL' COAST REDWOOD	24"BOX	HIGH	7
STR TRE	STREET TREE TO BE COORDINATED WITH PUBLIC WORKS	36"BOX	MEDIUM	5
ULM DRA	ULMUS PARVIFOLIA 'DRAKE' DRAKE LACEBARK ELM	24"BOX	LOW	3
VINES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
▲	FICUS REPENS CREEPING FIG	5 GAL	MEDIUM	11
△	MACFADYENA UNGUIS-CATI YELLOW TRUMPET VINE	5 GAL	LOW	4
▲△	PARTHENOCISSUS QUINQUEFOLIA 'PURPLE FALLS' VIRGINIA CREEPER	5 GAL	MEDIUM	8

QUANTITIES NOTE:
CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOTIFY THE LANDSCAPE ARCHITECT OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS NOTE:
WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

TREE ROOT BARRIER NOTE:	SYMBOL:
ROOT BARRIERS ARE REQUIRED WHERE TREES ARE PLANTED WITHIN FIVE (5) FEET OF SIDEWALK, WALLS, BUILDINGS, STRUCTURES, CURBS, PAVING, PUBLIC IMPROVEMENTS WITHIN R.O.W. (TYP.). WATER, SEWER, STORM DRAIN, ETC. ROOT BARRIER SHALL BE INSTALLED AT HARDSCAPE EDGE WITH PERCOLATION TESTS OR UTILIZE STRUCTURAL SOIL. BARRIER SHALL BE THE LENGTH OF THE ULTIMATE CANOPY OF THE TREE. LOCATIONS OF ROOT BARRIER ON PLAN ARE FOR REFERENCE ONLY. VERIFY TREE DISTANCES FROM AFOREMENTIONED STRUCTURES IN THE FIELD.	-----

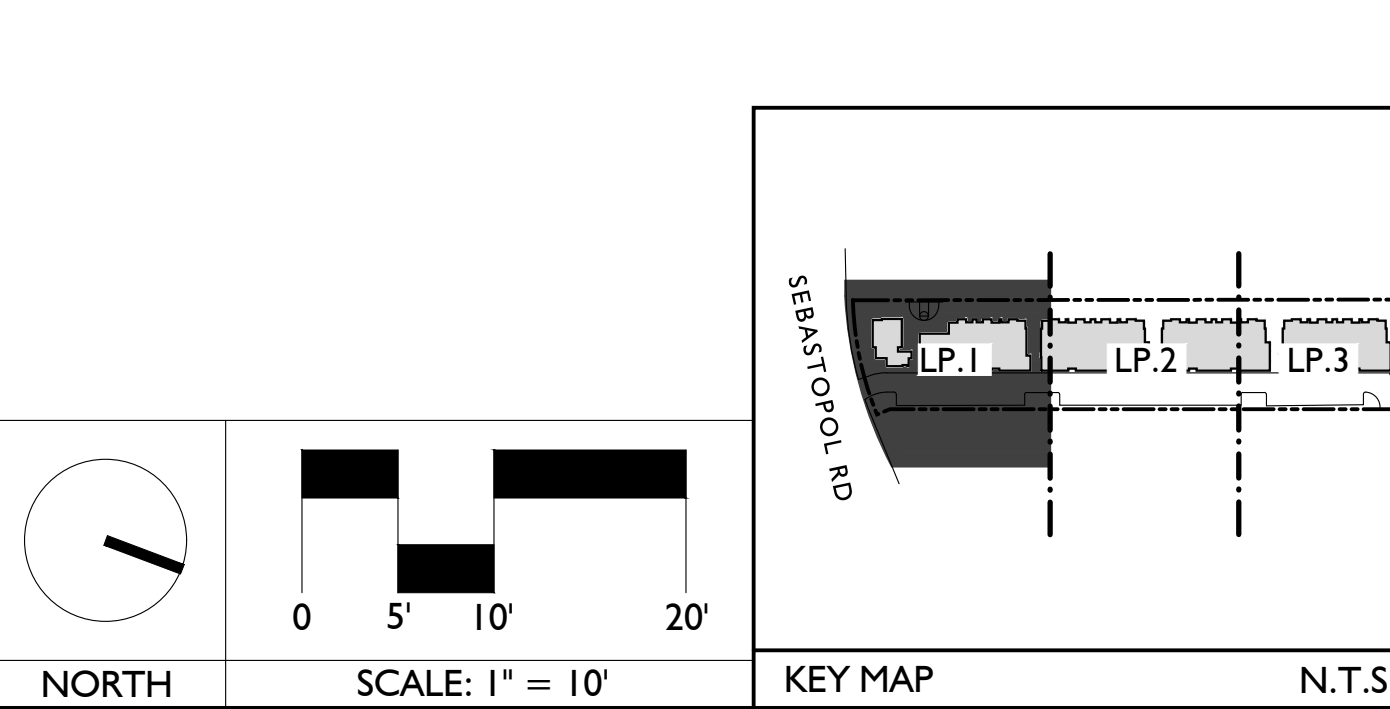
TREE PLACEMENT NOTE:
CONTRACTOR TO LOCATE ALL DRAINLINES IN FIELD PRIOR TO THE INSTALLATION OF TREES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT WITH TREE LOCATIONS WITH DRAIN LINES.

REFERENCE NOTE:
FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

- GENERAL PLANTING NOTES:**
- PRIOR TO ANY FINE GRADING OR PLANTING, CONTRACTOR SHALL OBTAIN ONE (1) AGRONOMIC SOILS REPORT AND SOIL AMENDMENT RECOMMENDATIONS PER SPECIFICATIONS, WHICH SHALL SUPERSEDE THOSE WITHIN THE SPECIFICATIONS. LOCATIONS OF TEST TO BE ADJACENT TO THE FRONT PARKING LOT AND IN MAIN COURTYARD.
 - LANDSCAPE ARCHITECT TO APPROVE ALL PLANT MATERIAL NOT LESS THAN 1 WEEK PRIOR TO ANTICIPATED DELIVERY DATE.
 - CONTRACTOR SHALL REMOVE ALL GROWER STAKES, TAGS AND RIBBONS.
 - LANDSCAPE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AND DIRECT ALL WATER TO DRAINAGE INLETS SO AS TO PREVENT STANDING WATER.
 - THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTED AREAS FOR A PERIOD OF 90 DAYS AFTER 'START OF MAINTENANCE' PERIOD.
 - CONTRACTOR SHALL GUARANTEE SHRUBS FOR 6 MONTHS AND TREE AND PALM MATERIAL FOR 12 MONTHS (1 YEAR).
 - LANDSCAPE ARCHITECT SHALL APPROVE PLANT MATERIAL PLACEMENT PRIOR TO INSTALLATION.
 - NO TREES SHALL BE PLANTED CLOSER THAN 5' TO A BUILDING OR ROOF STRUCTURE. NO TREES SHALL BE PLANTED CLOSER THAN 5' TO PAVING OR FREESTANDING WALLS UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT.
 - TREES OR PALMS SHALL NOT BE PLANTED WHERE FUTURE GROWTH WILL OBVIOUSLY CONFLICT WITH ROOF OVERHANGS.
 - NO SHRUBS OR TREES SHALL BE PLANTED THAT WILL CREATE A VISUAL OBSTRUCTION TO SIGHT LINE OF VEHICLE TRAFFIC.
 - TREES OR PALMS PLANTED IN LANDSCAPE AREAS OF LESS THAN 5' IN WIDTH SHALL BE INSTALLED WITH APPROVED ROOT BARRIERS.
 - ANY PLANTING SHOWN ON THE PLANS OR EXISTING IN THE FIELD THAT CONTRADICTS THESE CRITERIA IS TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO DO SO MAY RESULT IN THE CONTRACTOR TO REMOVE OR RELOCATE PLANT MATERIAL.
 - ALL PLANTING AREAS TO HAVE 3" MULCH DEPTH - FOREST FLOOR BY AGUINAGA.

POT and PLANT SCHEDULE GROUND LEVEL				
SYMBOL	QTY	IRRIGATION	DESCRIPTION	COLOR / FINISH
1	1	SELF WATERING	SAVANNAH SQUARE 28" SQ X 32" H QS-SAV2832P	COLOR: FRENCH GREY

- NOTES:**
- ALL POTS TO RECEIVE 2" THICK ROCK COBBLE - TBD
 - ALLOW FOR 8-10 WEEKS LEAD TIMES ON ALL POTS
 - ALL POTS TO RECEIVE SELF WATERING SYSTEM TO BE CWI or CWM CLASSIC BY PLANTER TECHNOLOGY OR EQUAL



Issued for:
03/15/21 100% DESIGN DEVELOPMENT

Revisions:

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA
95030

Stamp:

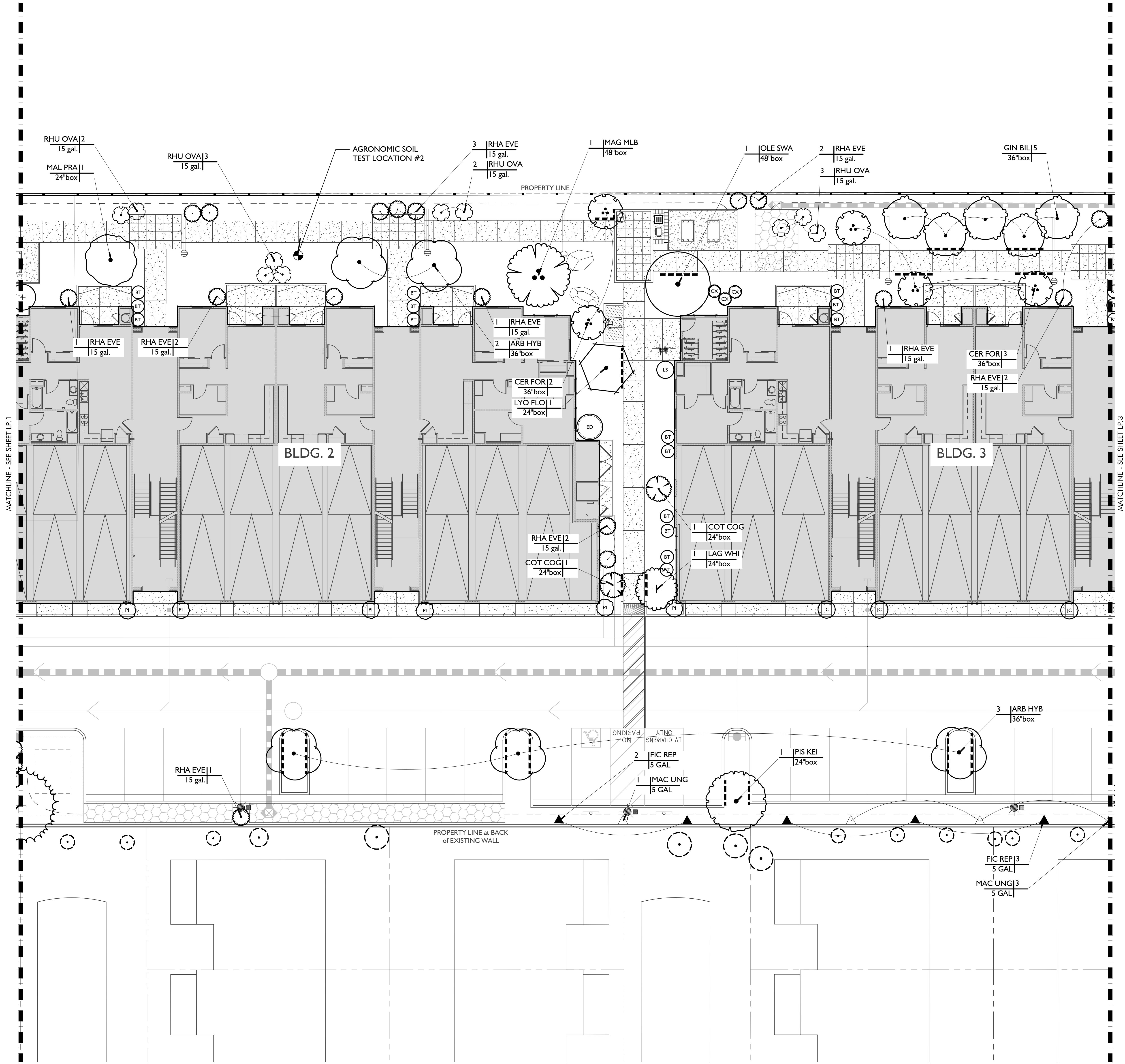
Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

TREE PLANTING PLAN

Sheet No.:

LP.1

Plan Status:
CONSTRUCTION DOCUMENTS



PLANT SCHEDULE				
TREES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
ARB HYB	ARBUTUS X 'MARINA' HYBRID STRAWBERRY TREE -STD	36"BOX	LOW	10
CER FOR	CERCIS CANADENSIS 'FOREST PANSY' TM FOREST PANSY REDBUD	36"BOX	LOW	6
CER W24	CERCIS OCCIDENTALIS WESTERN REDBUD MULTI-TRUNK	24"BOX	LOW	9
CX	CHAENOMELES X SUPERBA 'DOUBLE TAKE PEACH' FLOWERING QUINCE	5 GAL	LOW	16
COT COG	COTINUS COGGYGRIA SMOKE TREE	24"BOX	LOW	10
DIO HAC	DIOSPYROS KAKI 'HACHIYA' JAPANESE PERSIMMON	15 GAL	MEDIUM	2
ED	ELAEOCARPUS DECIPiens 'LITTLE EMPEROR' DWARF JAPANESE BLUEBERRY TREE	24"BOX	LOW	6
GIN BIL	GINKGO BILOBA 'PRINCETON SENTRY' PRINCETON SENTRY MAIDEN-HAIR TREE	36"BOX	MEDIUM	5
JC	JUNIPERUS CHINENSIS 'BLUE POINT' BLUE POINT JUNIPER	15 GAL	LOW	15
LAG WHI	LACERSTROEMIA INDICA X FAURIEI 'NATCHEZ' NATCHEZ GRAPE MYRTLE MULTI-TRUNK	24"BOX	MEDIUM	5
LS	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - COL.	15 GAL.	LOW	12
LAU XSA	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - STD	24"BOX	LOW	2
LYO FLO	LYONOTHAMNUS FLORIBUNDUS ASPLENIFOLIUS FERNLEAF CATALINA IRONWOOD	24"BOX	LOW	8
MAG MLB	MAGNOLIA X SOULANGEANA 'BLACK TULIP' SAUCER MAGNOLIA MULTI-TRUNK	48"BOX	MEDIUM	1
MAL PRA	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRAB APPLE	24"BOX	MEDIUM	3
OLE SWA	OLEA EUROPAEA 'SWAN HILL' TM SWAN HILL OLIVE	48"BOX	LOW	2
PIS KEI	PISTACIA CHINENSIS 'KEITH DAVEY' KEITH DAVEY CHINESE PISTACHE	24"BOX	MEDIUM	4
PI	PODOCARPUS ELONGATUS 'ICEE BLUE' TM ICEE BLUE YELLOW WOOD	15 GAL.	MEDIUM	14
BT	PRUNUS CAROLINIANA 'BRIGHT 'N TIGHT' TM BRIGHT 'N TIGHT' CAROLINA LAUREL	15 GAL.	MEDIUM	34
PUN WON	PUNICA GRANATUM 'WONDERFUL' WONDERFUL POMEGRANATE	24"BOX	MEDIUM	3
QUE SUB	QUERCUS SUBER CORK OAK	36"BOX	LOW	3
RHA EVE	RHAMNUS CALIFORNICA 'EVE CASE' CALIFORNIA COFFEEBERRY	15 GAL.	LOW	49
RHU OVA	RHUS OVATA SUGAR BUSH	15 GAL.	LOW	27
SEQ SOQ	SEQUOIA SEMPERVIRENS 'SOQUEL' COAST REDWOOD	24"BOX	HIGH	7
STR TRE	STREET TREE TO BE COORDINATED WITH PUBLIC WORKS	36"BOX	MEDIUM	5
ULM DRA	ULMUS PARVIFOLIA 'DRAKE' DRAKE LACEBARK ELM	24"BOX	LOW	3
VINES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
▲	FICUS REPENS CREEPING FIG	5 GAL	MEDIUM	11
△	MACFADYENA UNGUIS-CATI YELLOW TRUMPET VINE	5 GAL	LOW	4
▲△	PARTHENOCISSUS QUINQUEFOLIA 'PURPLE FALLS' VIRGINIA CREEPER	5 GAL	MEDIUM	8

QUANTITIES NOTE:

CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOT RELY ON THE ACCURACY OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS NOTE:

WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

TREE ROOT BARRIER NOTE:

ROOT BARRIERS ARE REQUIRED WHERE TREES ARE PLANTED WITHIN FIVE (5) FEET OF SIDEWALK, WALLS, BUILDINGS, STRUCTURES, CURBS, PAVING, PUBLIC IMPROVEMENTS WITHIN R.O.W. (TYP.). WATER, SEWER, STORM DRAIN, ETC. ROOT BARRIER SHALL BE INSTALLED AT HARDSCAPE EDGE WITH PERCOLATION TESTS OR UTILIZE STRUCTURAL SOIL. BARRIER SHALL BE THE LENGTH OF THE ULTIMATE CANOPY OF THE TREE. LOCATIONS OF ROOT BARRIER ON PLAN ARE FOR REFERENCE ONLY. VERIFY TREE DISTANCES FROM AFOREMENTIONED STRUCTURES IN THE FIELD.

SYMBOL:

TREE PLACEMENT NOTE:

CONTRACTOR TO LOCATE ALL DRAINLINES IN FIELD PRIOR TO THE INSTALLATION OF TREES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT WITH TREE LOCATIONS WITH DRAIN LINES.

REFERENCE NOTE:

FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:



MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR
CONSTRUCTION

Project:

ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

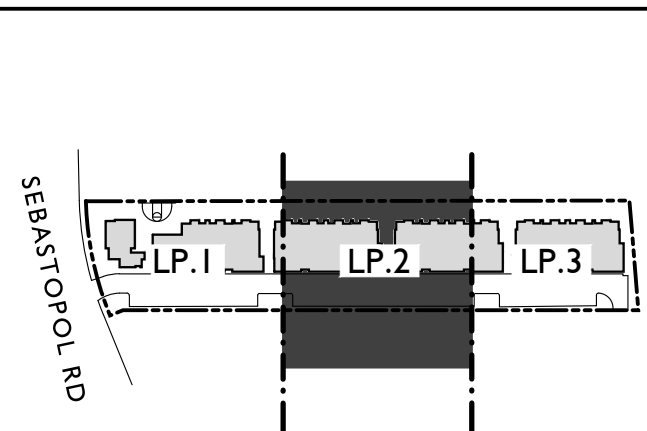
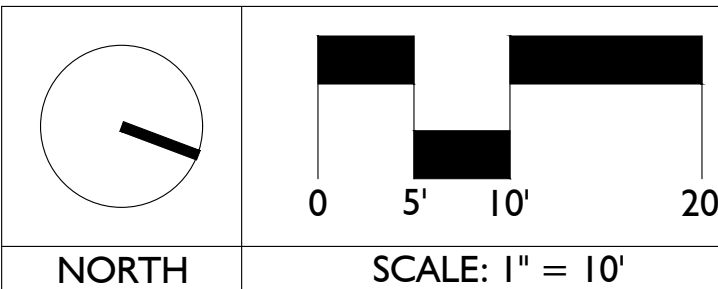
Title:

TREE PLANTING PLAN

Sheet No.:

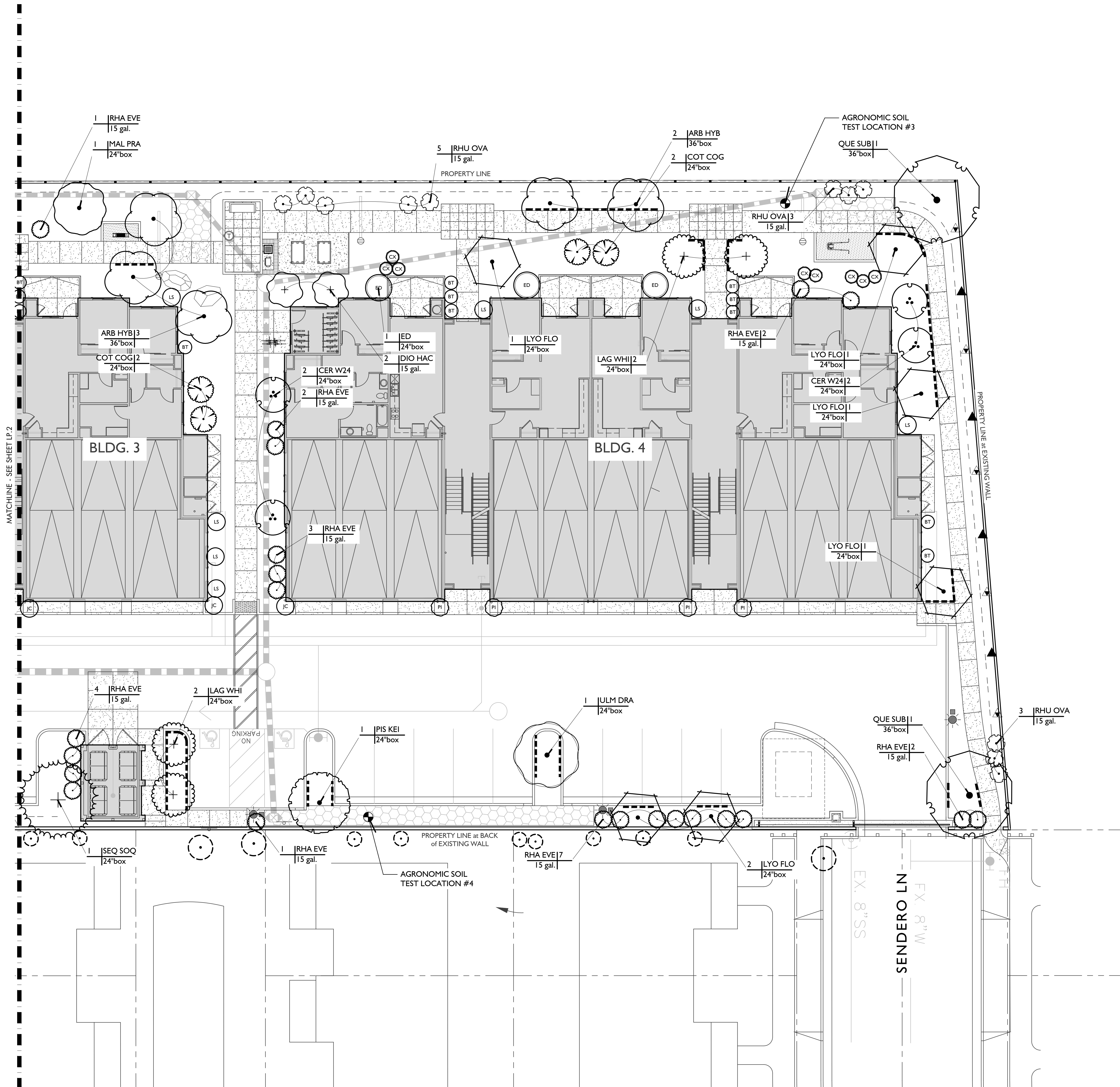
LP.2

Plan Status:
CONSTRUCTION
DOCUMENTS



KEY MAP

N.T.S.



PLANT SCHEDULE				
TREES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
ARB HYB	ARBUTUS X 'MARINA' HYBRID STRAWBERRY TREE -STD	36"BOX	LOW	10
CER FOR	CERCIS CANADENSIS 'FOREST PANSY' TM FOREST PANSY REDBUD	36"BOX	LOW	6
CER W24	CERCIS OCCIDENTALIS WESTERN REDBUD MULTI-TRUNK	24"BOX	LOW	9
CX	CHAENOMELES X SUPERBA 'DOUBLE TAKE PEACH' FLOWERING QUINCE	5 GAL	LOW	16
COT COG	COTINUS COGGYRIA SMOKE TREE	24"BOX	LOW	10
DIO HAC	DIOSPYROS KAKI 'HACHIYA' JAPANESE PERSIMMON	15 GAL	MEDIUM	2
ED	ELAEOCARPUS DECIPENS 'LITTLE EMPEROR' DWARF JAPANESE BLUEBERRY TREE	24"BOX	LOW	6
GIN BIL	GINKGO BILOBA 'PRINCETON SENTRY' PRINCETON SENTRY MAIDEN-HAIR TREE	36"BOX	MEDIUM	5
JC	JUNIPERUS CHINENSIS 'BLUE POINT' BLUE POINT JUNIPER	15 GAL	LOW	15
LAG WHI	LACERSTROEMIA INDICA X FAURIEI 'NATCHEZ' NATCHEZ GRAPE MYRTLE MULTI-TRUNK	24"BOX	MEDIUM	5
LS	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - COL.	15 GAL.	LOW	12
LAU XSA	LAURUS X 'SARATOGA' SARATOGA HYBRID LAUREL - STD	24"BOX	LOW	2
LYO FLO	LYONOTHAMNUS FLORIBUNDUS ASPLENIFOLIUS FERNLEAF CATALINA IRONWOOD	24"BOX	LOW	8
MAG MLB	MAGNOLIA X SOULANGEANA 'BLACK TULIP' SAUCER MAGNOLIA MULTI-TRUNK	48"BOX	MEDIUM	1
MAL PRA	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRAB APPLE	24"BOX	MEDIUM	3
OLE SWA	OLEA EUROPAEA 'SWAN HILL' TM SWAN HILL OLIVE	48"BOX	LOW	2
PIS KEI	PISTACIA CHINENSIS 'KEITH DAVEY' KEITH DAVEY CHINESE PISTACHE	24"BOX	MEDIUM	4
PI	PODOCARPUS ELONGATUS 'ICEE BLUE' TM ICEE BLUE YELLOW WOOD	15 GAL.	MEDIUM	14
BT	PRUNUS CAROLINIANA 'BRIGHT 'N TIGHT' TM BRIGHT 'N TIGHT CAROLINA LAUREL	15 GAL.	MEDIUM	34
PUN WON	PUNICA GRANATUM 'WONDERFUL' WONDERFUL POMEGRANATE	24"BOX	MEDIUM	3
QUE SUB	QUERCUS SUBER CORK OAK	36"BOX	LOW	3
RHA EVE	RHAMNUS CALIFORNICA 'EVE CASE' CALIFORNIA COFFEEBERRY	15 GAL.	LOW	49
RHU OVA	RHUS OVATA SUGAR BUSH	15 GAL.	LOW	27
SEQ SOQ	SEQUOIA SEMPERVIRENS 'SOQUEL' COAST REDWOOD	24"BOX	HIGH	7
STR TRE	STREET TREE TO BE COORDINATED WITH PUBLIC WORKS	36"BOX	MEDIUM	5
ULM DRA	ULMUS PARVIFOLIA 'DRAKE' DRAKE LACEBARK ELM	24"BOX	LOW	3

VINES	BOTANICAL / COMMON NAME	SIZE	WUCOLS	QTY
▲	FICUS REPENS CREEPING FIG	5 GAL	MEDIUM	11
△	MACFADYENA UNGUIS-CATI YELLOW TRUMPET VINE	5 GAL	LOW	4
▲△	PARTHENOCISSUS QUINQUEFOLIA 'PURPLE FALLS' VIRGINIA CREEPER	5 GAL	MEDIUM	8

QUANTITIES NOTE:
CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOT RELY ON THE ACCURACY OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS NOTE:
WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

TREE ROOT BARRIER NOTE:	SYMBOL:
ROOT BARRIERS ARE REQUIRED WHERE TREES ARE PLANTED WITHIN FIVE (5) FEET OF SIDEWALK, WALLS, BUILDINGS, STRUCTURES, CURBS, PAVING, PUBLIC IMPROVEMENTS WITHIN R.O.W. (TYP.). WATER, SEWER, STORM DRAIN, ETC. ROOT BARRIER SHALL BE INSTALLED AT HARDSCAPE EDGE WITH PERCOLATION TESTS OR UTILIZE STRUCTURAL SOIL. BARRIER SHALL BE THE LENGTH OF THE ULTIMATE CANOPY OF THE TREE. LOCATIONS OF ROOT BARRIER ON PLAN ARE FOR REFERENCE ONLY. VERIFY TREE DISTANCES FROM AFOREMENTIONED STRUCTURES IN THE FIELD.	-----

TREE PLACEMENT NOTE:
CONTRACTOR TO LOCATE ALL DRAINLINES IN FIELD PRIOR TO THE INSTALLATION OF TREES. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT WITH TREE LOCATIONS WITH DRAIN LINES.

REFERENCE NOTE:
FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

MJS

LANDSCAPE ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 &1885 SEBASTOPOL ROAD
SANTA ROSA, CA 95407
APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA 95030

Stamp:

LANDSCAPE ARCHITECT
03-31-21
01-20-21
STATE OF CALIFORNIA

Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

TREE PLANTING PLAN

Sheet No.:
LP.3

Plan Status:
CONSTRUCTION DOCUMENTS

NORTH

0 5' 10' 20'

SCALE: 1" = 10'

SEBASTOPOL RD
LP.1 LP.2 LP.3

KEY MAP

N.T.S.



ALL SHRUB AREAS	ALL SHRUB AREAS TO RECEIVE MINIMUM 3" THICK "FOREST FLOOR" MULCH BY AGUINAGA GREEN. 877.OC.MULCH
-----------------	--

CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOT RELY ON THE ACCURACY OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

03/15/21	100% DESIGN DEVELOPMENT
----------	-------------------------



ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE
HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

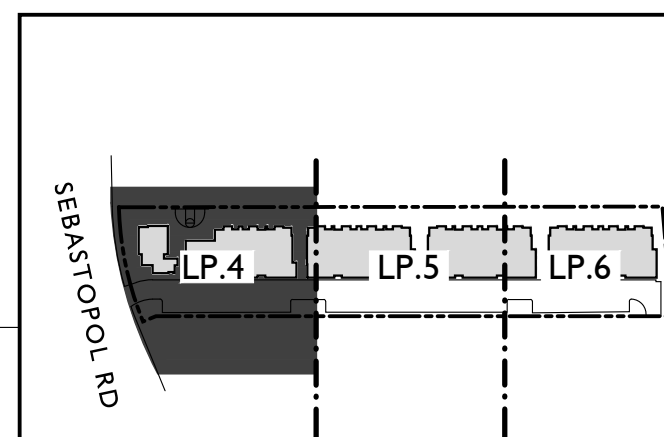
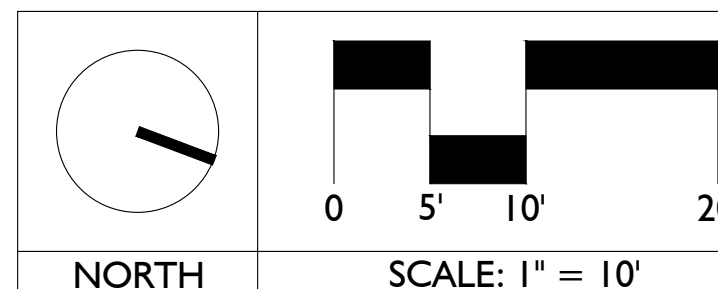
Title:

SHRUB PLANTING PLAN

Sheet No.:

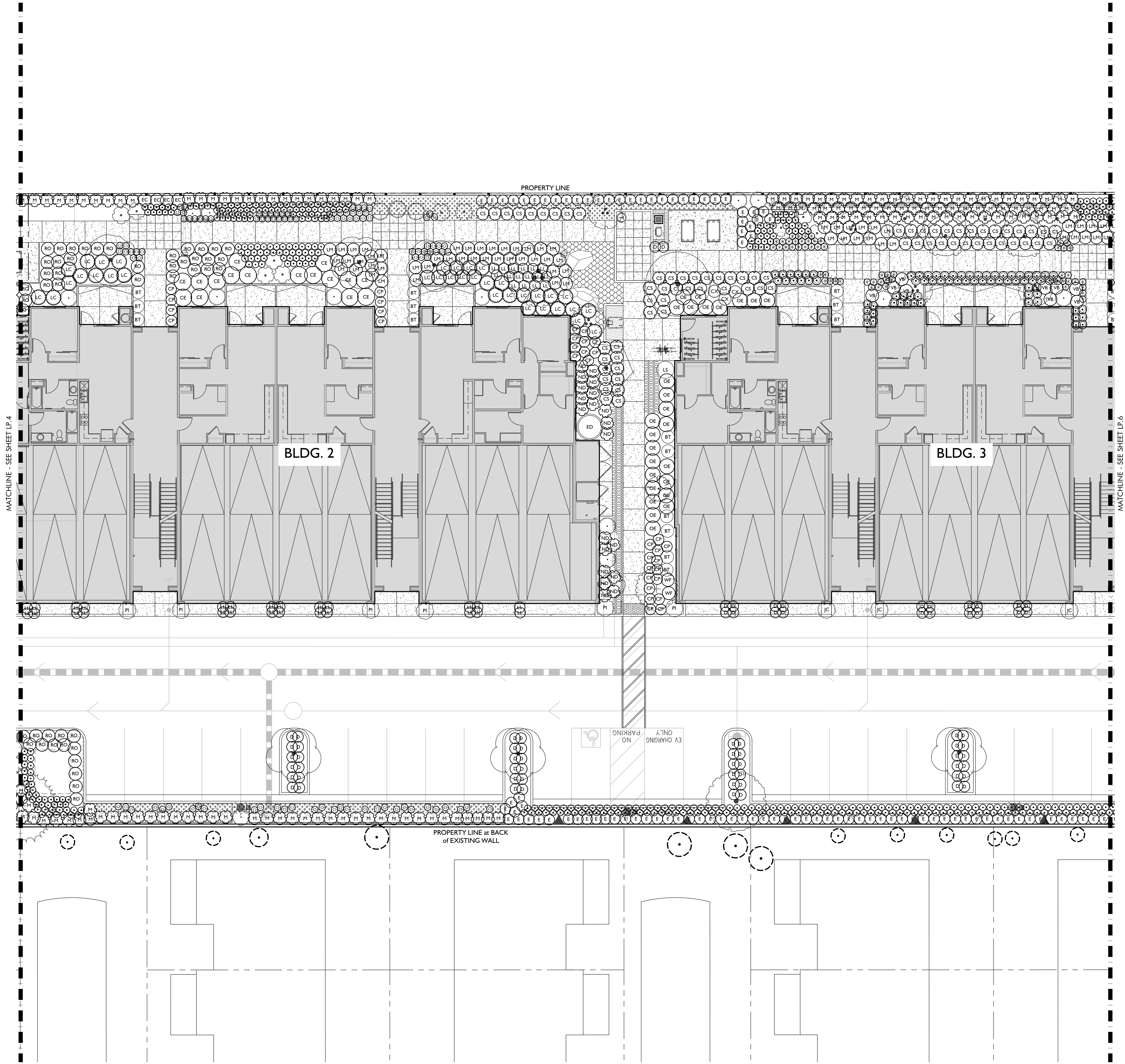
LP.4

Plan Status:
CONSTRUCTION
DOCUMENTS



KEY MAP

N.T.S.



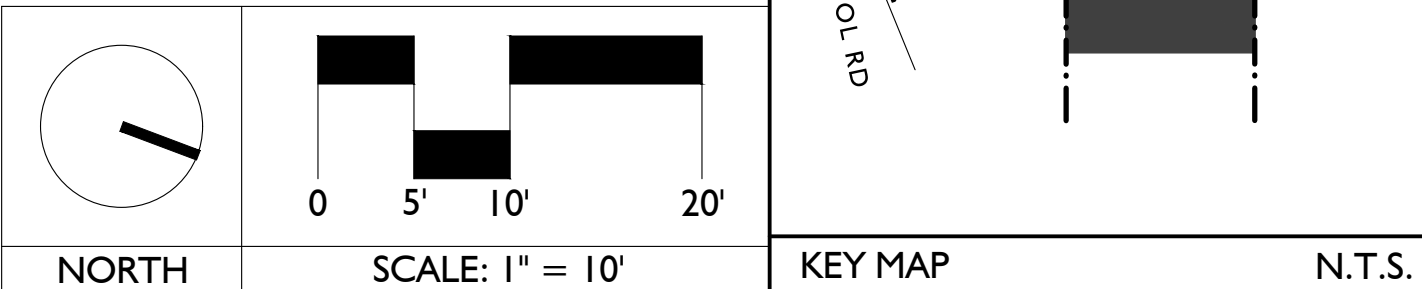
PLANT SCHEDULE					
SHRUBS	BOTANICAL / COMMON NAME	SIZE	WUCOLS	SPACING	QTY
⊕	ACHILLEA MILLEFOLIUM 'TERRA COTTA' TERRA COTTA COMMON YARROW	1 GAL	LOW		268
⊙	CEANOTHUS GRISEUS HORIZONTALIS 'YANKEE POINT' YANKEE POINT CARMEL CREEPER	5 GAL	LOW		21
⊙	CEANOTHUS X 'SKYLARK' SKYLARK WILD LILAC	5 GAL	LOW		31
⊙	CISTUS SALVIFOLIUS ROCKROSE SAGELEAF	5 GAL	LOW		115
⊙	CORREA PULCHELLA 'PINK EYRE' PINK EYRE AUSTRALIAN FUCHSIA	5 GAL	LOW		109
⊙	DIETES IRIDIODES FORTNIGHT LILY	5 GAL	LOW		157
⊙	EPILOBIUM CANUM 'CATALINA' CATALINA CALIFORNIA FUCHSIA	5 GAL	LOW		50
⊙	ERIOGONUM FASCICULATUM COMMON BUCKWHEAT	5 GAL	LOW		240
⊙	JUNCUS PATENS CALIFORNIA GRAY RUSH	1 GAL	LOW		979
⊙	LANTANA MONTEVIDENSIS 'ALBA' WHITE TRAILING LANTANA	5 GAL	LOW		97
⊙	LIMONIUM PEREZII STATICE	5 GAL	LOW		37
⊙	LOMANDRA LONGIFOLIA MAT RUSH	5 GAL	LOW		313
⊙	LOROPETALUM CHINENSE 'SIZZLING PINK' SIZZLING PINK FRINGE FLOWER	5 GAL	LOW		49
⊙	MAHONIA REPENS CREEPING MAHONIA	5 GAL	LOW		16
⊙	MUHLENBERGIA DUBIA PINE MUHLY	5 GAL	LOW		119
⊙	MUHLENBERGIA RIGENS DEER GRASS	5 GAL	LOW		356
⊙	NANDINA DOMESTICA 'GULF STREAM' GULF STREAM HEAVENLY BAMBOO	5 GAL	LOW		87
⊙	OLEA EUROPAEA 'LITTLE OLLIE' TM LITTLE OLLIE OLIVE	5 GAL	LOW		49
⊙	ROSMARINUS OFFICINALIS 'HUNTINGTON' CARPET HUNTINGTON CARPET ROSEMARY	5 GAL	LOW		158
⊙	TEUCRIUM CHAMAEDRYS GERMANDER	5 GAL	LOW		212
⊙	VERBENA BONARIENSIS PURPLETOP VERVAIN	5 GAL	LOW		23
⊙	WESTRINGIA FRUTICOSA 'MORNING LIGHT' MORNING LIGHT COAST ROSEMARY	5 GAL	LOW		67
GROUND COVERS	BOTANICAL / COMMON NAME	CONT	WUCOLS	SPACING	QTY
⊕	CAREX TUMULICOLA FOOTHILL SEDGE	1 GAL	LOW	12" o.c.	2,156
⊕	FESTUCA RUBRA RED FESCUE	PLUGS	LOW	6" o.c.	1,127
⊕	LOMANDRA LONGIFOLIA 'STEELY SLIM' STEELY SLIM MAT RUSH	1 GAL	LOW	12" o.c.	283

MULCH NOTE:
ALL SHRUB AREAS
ALL SHRUB AREAS TO RECEIVE MINIMUM 3" THICK "FOREST FLOOR"
MULCH BY AGUINAGA GREEN, 877.O.C.MULCH

QUANTITIES NOTE:
CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOT RELY ON THE ACCURACY OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS NOTE:
WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

REFERENCE NOTE:
FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8



Issued for:
03/15/21 100% DESIGN DEVELOPMENT

Revisions:

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885 SEBASTOPOL ROAD
SANTA ROSA, CA 95407
APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA 95030

Stamp:

Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

SHRUB PLANTING PLAN

Sheet No.:

LP.5

Plan Status:
CONSTRUCTION DOCUMENTS



ALL SHRUB AREAS	ALL SHRUB AREAS TO RECEIVE MINIMUM 3" THICK "FOREST FLOOR" MULCH BY AGUINAGA GREEN. 877.OC.MULCH
-----------------	--

CONTRACTOR TO NOTE THAT THE QUANTITIES ON LEGEND AND PLANT CALLOUTS HAVE BEEN PROVIDED FOR QUICK REFERENCE ONLY. IT IS RECOMMENDED THAT THE CONTRACTOR NOT RELY ON THE ACCURACY OF THESE QUANTITIES AND PROVIDE THEIR OWN PLANT MATERIAL COUNTS AT THE TIME OF PREPARING BID. ANY DISCREPANCY IN THE PLANT QUANTITIES AND SIZES SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE LANDSCAPE ARCHITECT.

WUCOLS, WATER USE CLASSIFICATION OF LANDSCAPE SPECIES, IS A UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION PUBLICATION AND IS A GUIDE TO THE WATER NEEDS OF LANDSCAPE PLANTS.

FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

FOR PLANTING DETAILS SEE SHEET LP.7
FOR GENERAL PLANTING NOTES & SPECIFICATIONS SEE SHEET LP.8

[illegible]



ACME FAMILY
APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

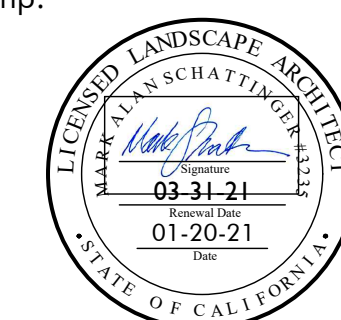
APN: 125-071-016,015

Client:

MILESTONE
 HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

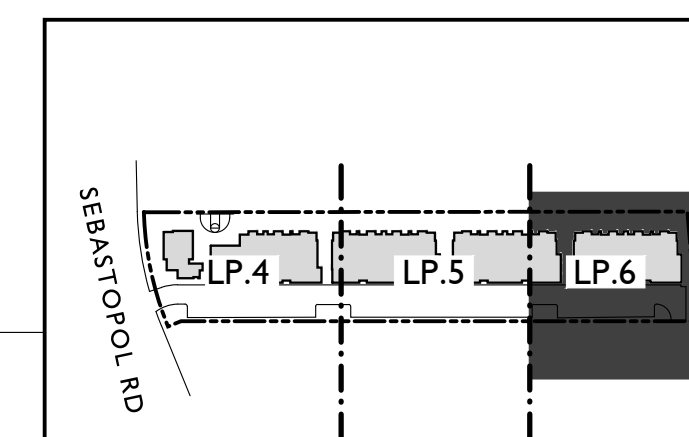
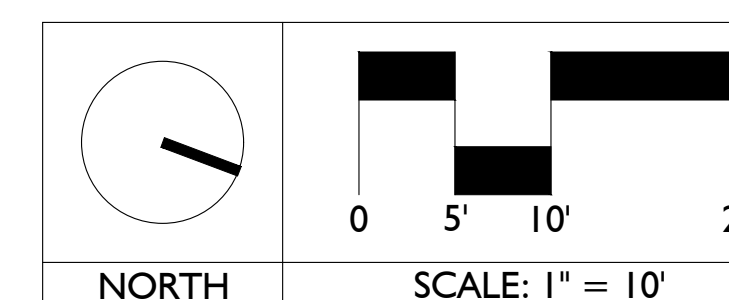
Title:

SHRUB PLANTING PLAN

Sheet No.:

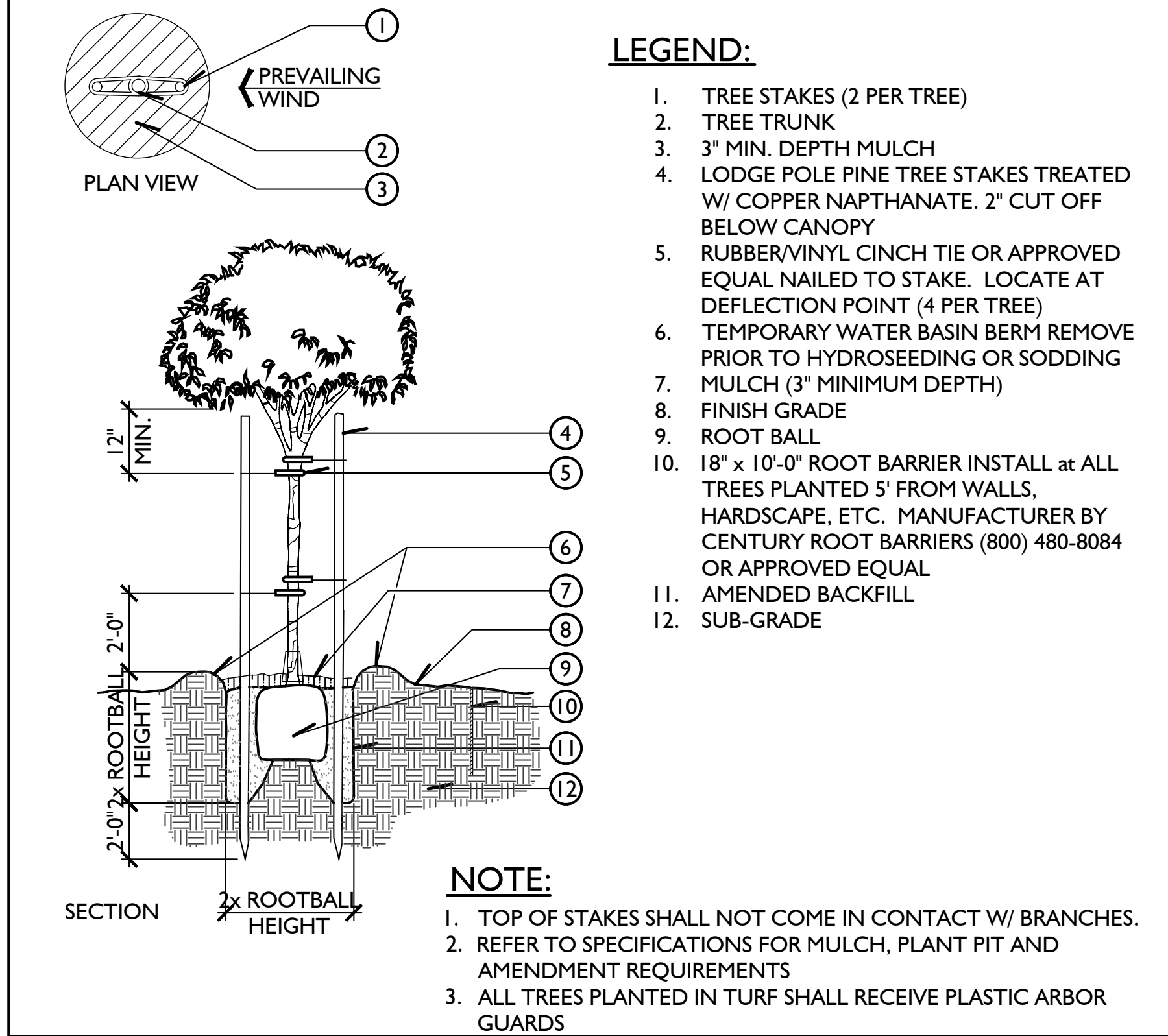
LP.6

Plan Status:
CONSTRUCTION
DOCUMENTS

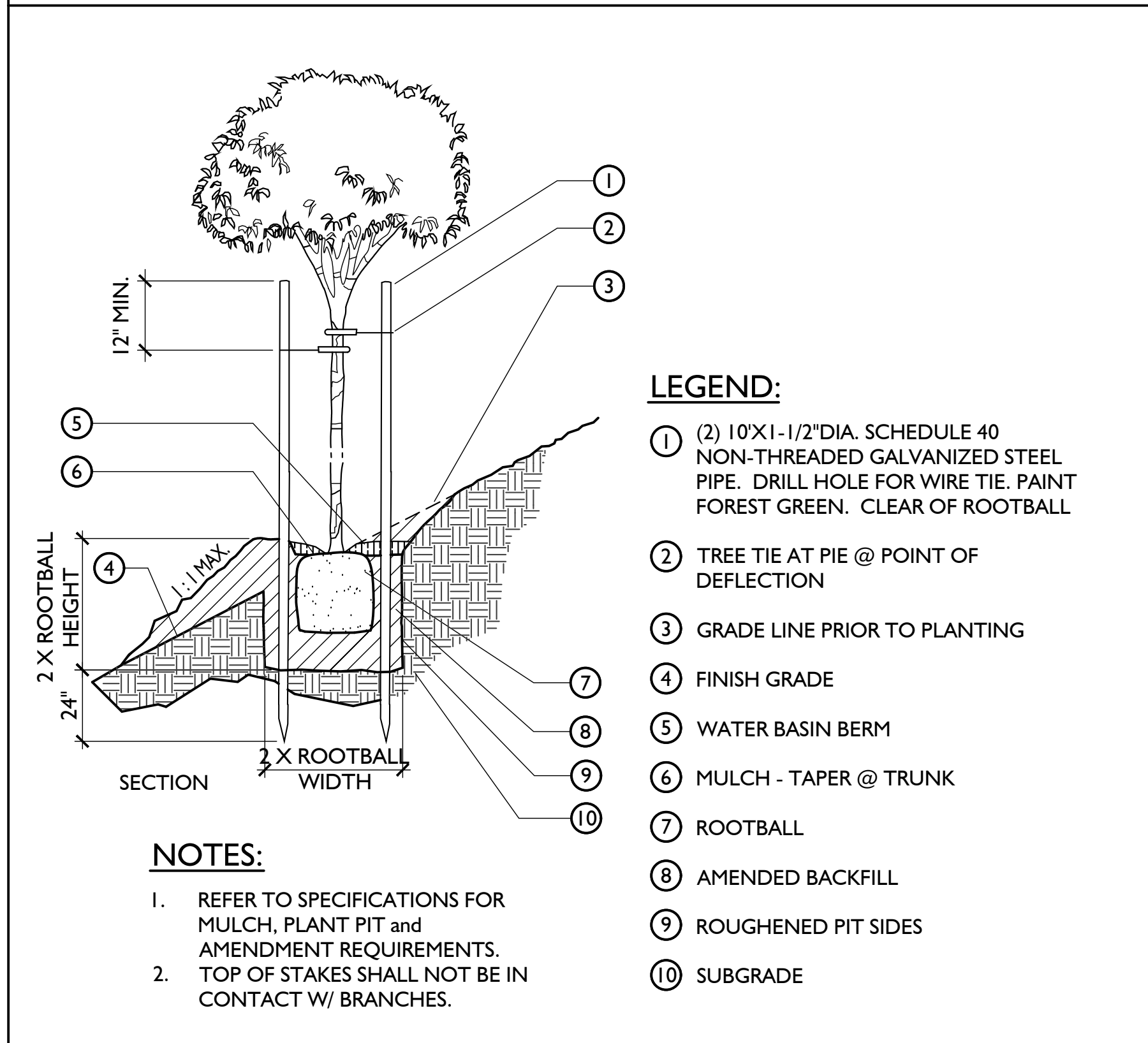


KEY MAP

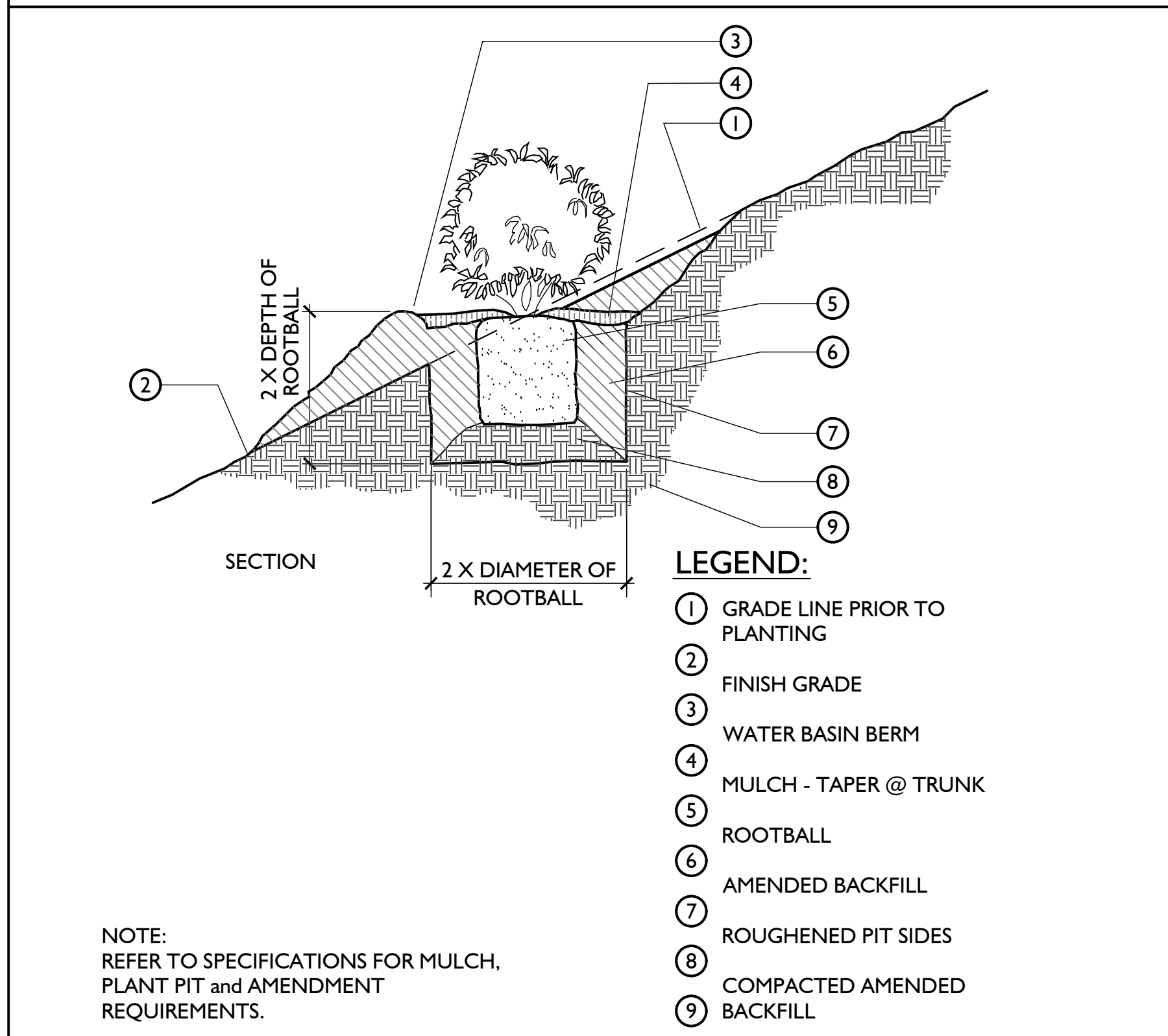
N.T.S.



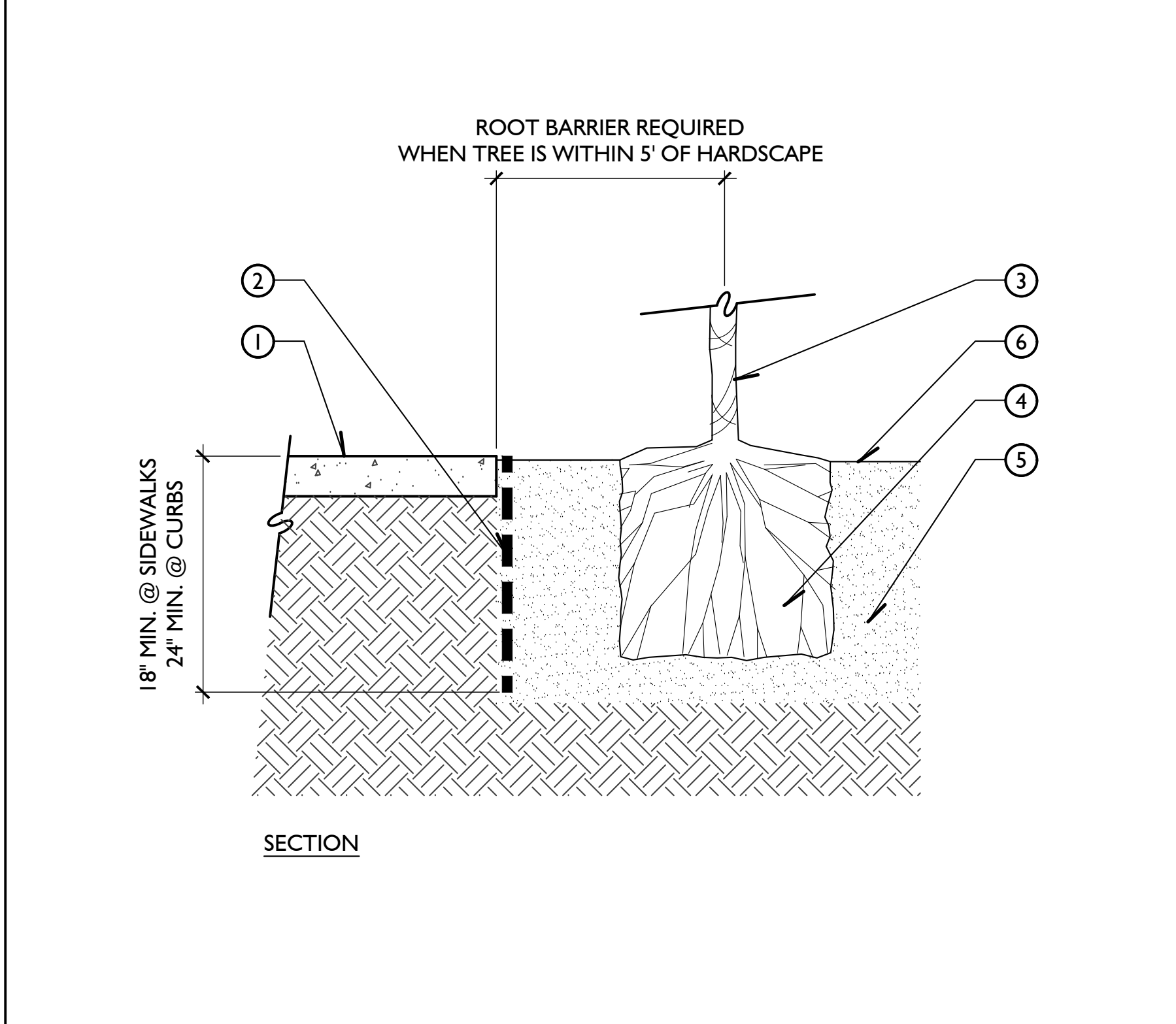
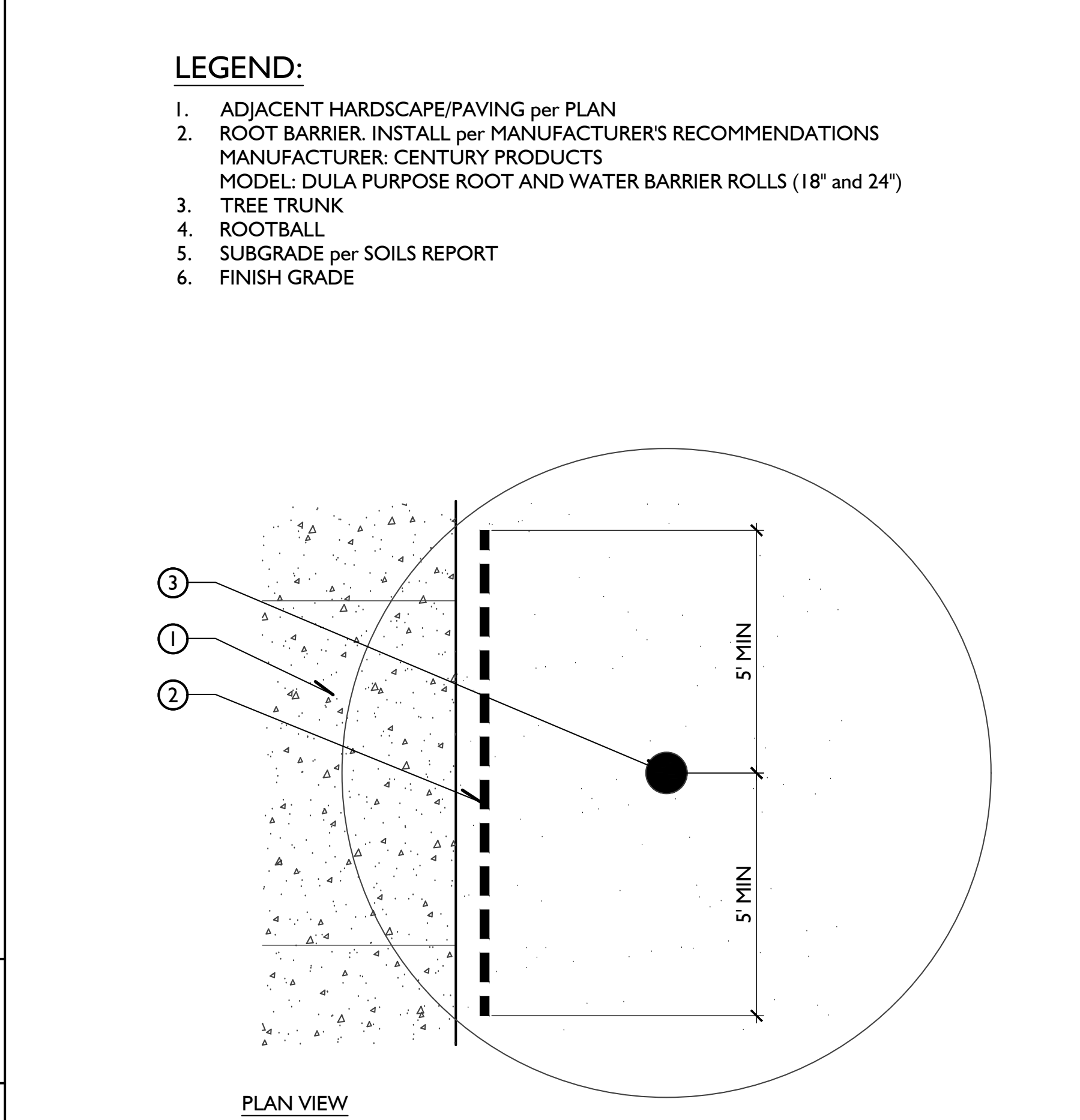
C 24", 36", BOX TREE PLANTING (DBL. STAKING)



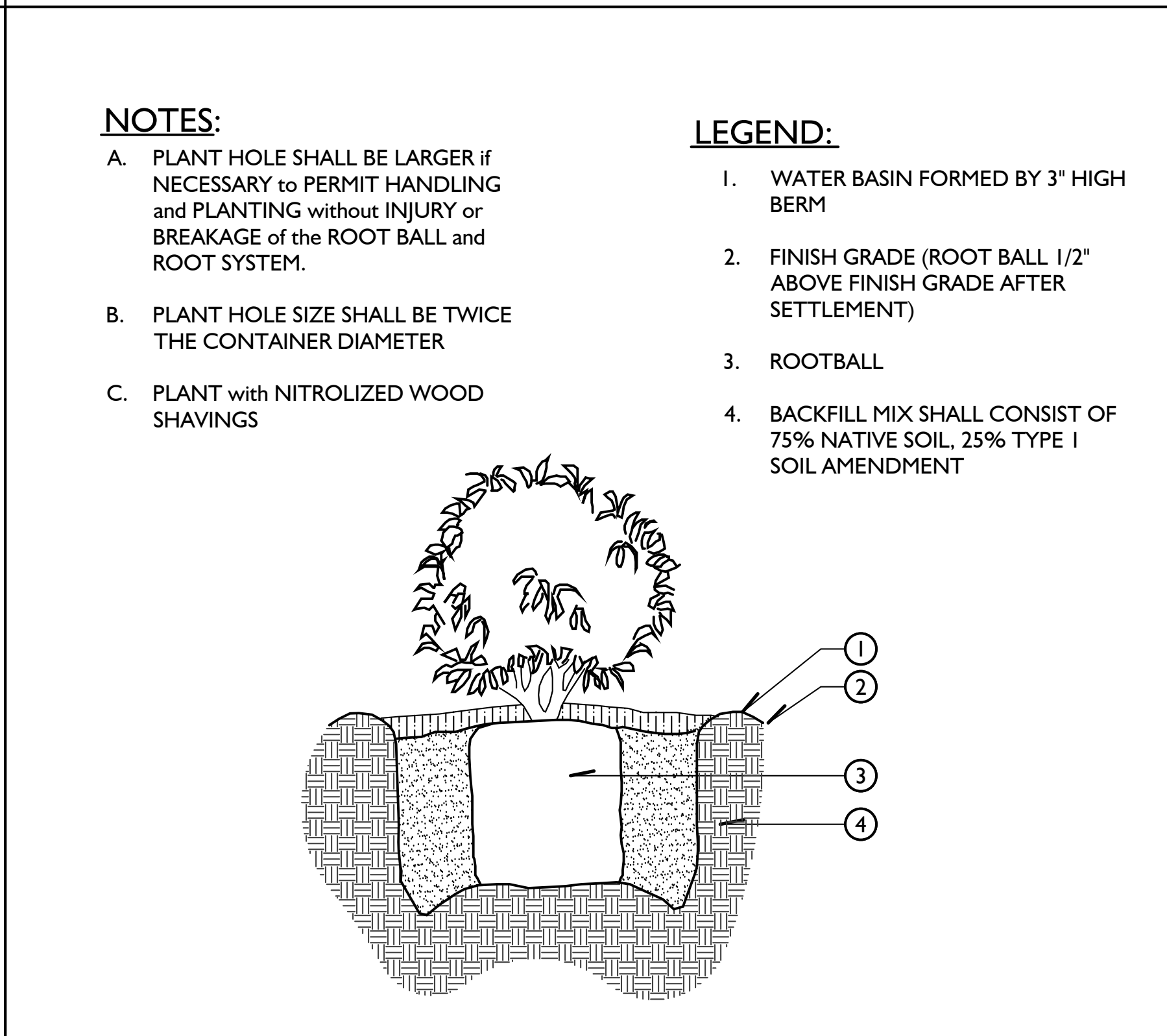
D TREE PLANTING ON SLOPE (DBL. STAKING)



E SHRUB PLANTING ON SLOPE



A ROOT BARRIER



B SHRUB PLANTING

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663

949.675.9964

mjs-la.com

**NOT FOR
CONSTRUCTION**

Project:

**ACME FAMILY
APARTMENTS**

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

**MILESTONE
HOUSING GROUP**

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:

LANDSCAPE ARCHITECT
MJS
03-31-21
01-20-21
STATE OF CALIFORNIA

Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

PLANTING DETAILS

Sheet No.:

LP.7

Plan Status:
**CONSTRUCTION
DOCUMENTS**

A. GENERAL NOTES

1. **BIDDING:** IT SHALL BE THE OWNER'S RESPONSIBILITY IN INVITING AND OBTAINING BIDS, SETTING ITS PROVISIONS AND INSTRUCTIONS TO BIDDERS, SECURING THEIR BONDS AND WORKERS COMPENSATION INSURANCE CERTIFICATES, ETC. TO FULLY ENSURE THE QUALITY AND TIMELY COMPLETION OF THE PROJECT.

2. **SCOPE OF WORK:** CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO FURNISH AND INSTALL A COMPLETE ALL LANDSCAPING PER THE DRAWINGS AND SPECIFIED WITHIN.

3. **PLAN VERIFICATION:** THESE DOCUMENTS MAY CONTAIN ERRORS, OMISSIONS, CONTRADICTIONS, ETC. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS THOROUGHLY AND SHALL NOTIFY THE LANDSCAPE ARCHITECT AND OWNER IMMEDIATELY UPON ANY SUCH DISCOVERY OF DISCREPANCY. GOVERNING CODES SHALL THEN APPLY.

4. **LICENSE:** THE CONTRACTOR SHALL BE A C-27 CALIFORNIA STATE LICENSED LANDSCAPE CONTRACTOR.

5. **ORDINANCES AND REGULATIONS:** ALL LANDSCAPE PLANTING WITHIN THESE DRAWINGS AND SPECIFICATIONS SHALL CONFORM TO ALL APPLICABLE GOVERNING CODES AND ORDINANCES (LOCAL, COUNTY & STATE).

6. **PERMITS AND INSPECTIONS:** THE CONTRACTOR SHALL OBTAIN, COORDINATE AND PAY FOR ALL PERMITS, FEES AND AGENCY INSPECTIONS AS REQUIRED.

7. **FIELD VERIFICATION:** CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE NOTIFIED IMMEDIATELY UPON ANY DISCOVERY OF DISCREPANCIES. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE LANDSCAPE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

8. **LIABLE FOR ENCROACHMENT:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ENCROACHMENT ONTO ADJACENT PROPERTY, RIGHT-OF-WAYS, EASEMENTS, SET-BACKS OR ANY OTHER LEGAL PROPERTY RESTRICTIONS EITHER MARKED OR UNMARKED.

9. **METHODS OF CONSTRUCTION:** THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, SEQUENCES, PROCEDURES AND TECHNIQUES. THE LANDSCAPE ARCHITECTURAL FIRM IS NOT LIABLE FOR CONSTRUCTION METHODS.

10. **SAFETY:** THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS DURING CONSTRUCTION.

11. **UTILITIES:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES, ELECTRICAL CABLES, CONDUITS, AND IRRIGATION LINES PRIOR TO ANY CONSTRUCTION, SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DAMAGE SUCH IMPROVEMENTS.

12. **INSURANCE:** THE CONTRACTOR SHALL OBTAIN (AND KEEP IN FORCE DURING THE PERIOD OF THE CONTRACT) PUBLIC LIABILITY, WORKMAN'S COMPENSATION AND PROPERTY DAMAGE INSURANCE, AS REQUIRED BY ALL APPLICABLE CODES AND REGULATIONS.

13. **LIABLE FOR DAMAGE:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY ITS OPERATIONS TO UTILITIES, EXISTING PLANTING, CONSTRUCTION, PERSONS, PROPERTY, ETC. AND SHALL PROVIDE PROTECTIVE MEANS TO GUARD AGAINST DAMAGE.

14. **COORDINATION:** CONTRACTOR SHALL COORDINATE ALL LANDSCAPE CONSTRUCTION WITH APPROPRIATE TRADES THROUGH THE OWNER BEFORE STARTING WORK.

15. **PLANTING PLANS:** THE PLANTING PLANS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS DURING INSTALLATION TO AVOID CONFLICTS BETWEEN, EXISTING IRRIGATION, EXISTING PLANTING, ARCHITECTURAL FEATURES AND UTILITIES.

16. **DIMENSIONS:** ALL SCALE DIMENSIONS ARE APPROXIMATE. WRITTEN DIMENSIONS ON DETAILS AND PLANS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

17. **PLANTING NOTES:** SEE GENERAL NOTES ON THE DRAWINGS FOR ADDITIONAL WORK REQUIRED, BUT NOT SPECIFICALLY MENTIONED IN THESE SPECIFICATIONS. ALL WORK CALLED FOR ON THE DRAWINGS BY NOTES SHALL BE FURNISHED AND INSTALLED WHETHER OR NOT SPECIFICALLY MENTIONED IN THE SPECIFICATIONS AND/OR DETAILS.

18. **MATERIALS:** ALL MATERIALS AND EQUIPMENT SPECIFIED IN THESE DRAWINGS SHALL BE NEW AND IN PERFECT CONDITION OR THE BEST GRADE OF THEIR RESPECTIVE KINDS WHERE INSTALLED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

19. **SUBSTITUTIONS:** DESIGN, MATERIAL, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED OR INDICATED ON DRAWINGS MAY BE CONSIDERED FOR USE. WRITTEN APPROVAL FOR SUBSTITUTIONS SHALL BE OBTAINED FROM THE OWNER AND LANDSCAPE ARCHITECT. ALL SUBSTITUTIONS SHALL CONFORM TO LOCAL CODES AND ORDINANCES. ANY EQUIPMENT OR MATERIALS INSTALLED WITHOUT APPROVAL BY THE OWNER OR LANDSCAPE ARCHITECT MAY BE REJECTED AND REMOVED AT CONTRACTOR'S EXPENSE.

20. **NOTICE OF COMPLETION:** THE COMPLETION OF THE CONTRACT SHALL BE ACCEPTED, AND NOTICE OF COMPLETION RECORDED ONLY WHEN THE ENTIRE CONTRACT IS COMPLETED TO THE SATISFACTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.

21. **SITE MAINTENANCE:** CONTRACTOR SHALL KEEP THE PROJECT SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. ALL DEBRIS SHALL BE REMOVED FROM SITE PER LOCAL CODE AND ORDINANCES.

22. **MAINTENANCE INSTRUCTIONS:** AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL INSTRUCT THE OWNER'S AUTHORIZED REPRESENTATIVE ON HOW TO PROPERLY MAINTAIN AND CARE FOR LANDSCAPE PLANTINGS.

23. **GUARANTEE:** THE ENTIRE LANDSCAPE INCLUDING ALL WORK DONE UNDER THIS CONTRACT, SHALL BE GUARANTEED AGAINST ALL DEFECTS AND FAULT OF MATERIAL AND WORKMANSHIP, AND SHALL BE IN PERFECT WORKING ORDER FOR 90 DAYS FROM DATE OF COMPLETION BY THE CONTRACTOR WITHOUT EXPENSE TO THE OWNER. TREES SHALL BE GUARANTEED FOR ONE (1) YEAR. ALL MATERIALS USED SHALL CARRY A MANUFACTURER'S GUARANTEE OF MINIMUM ONE (1) YEAR. ANY SETTLING OF TREES/SHRUB WELLS WHICH MAY OCCUR DURING THE 90 DAY PERIOD FINAL ACCEPTANCE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION BY THE CONTRACTOR WITHOUT EXPENSE TO THE OWNER. INCLUDING THE COMPLETE RESTORATION OF ALL DAMAGED PLANTING, PAVING OR OTHER IMPROVEMENTS OF ANY KIND.

B. FIELD OBSERVATIONS

1. **REQUIRED FIELD OBSERVATION WORK:** THESE PLANS WERE PREPARED WITH THE UNDERSTANDING THAT THE OWNER OF SAID PLANS WILL USE MJS DESIGN GROUP TO PROVIDE FULL CONTRACT SERVICES INCLUDING FIELD OBSERVATION SERVICES DURING CONSTRUCTION. FAILURE TO USE MJS DESIGN GROUP TO PROVIDE AND COMPLETE THE FIELD OBSERVATION SERVICES SET FORTH HEREIN WILL SIGNIFICANTLY INCREASE THE MISINTERPRETATION OF THE INTENT OF THE DESIGN. ANY UNAUTHORIZED MODIFICATIONS THERETO, AND FAILURE TO DETECT ERRORS AND OMISSIONS IN THE PLANS AND SPECIFICATIONS CAN BECOME COSTLY MISTAKES BUILT INTO THE PROJECT. THEREFORE, IN THE EVENT THAT MJS DESIGN GROUP IS OTHERWISE PRECLUDED FROM COMPLETING THE FIELD OBSERVATION SERVICES SET FORTH HEREIN, THE OWNER, OR SUBSEQUENT OWNER (INDIVIDUALS OR CORPORATIONS WHO HAVE PURCHASED THESE PLANS WITH THE PROJECT), AGREES TO HOLD HARMLESS, INDEMNIFY, AND DEFEND MJS DESIGN GROUP AND THEIR CONSULTANTS FROM AND AGAINST ANY AND ALL CLAIMS.

2. **FIELD OBSERVATION COORDINATION:** THE FOLLOWING OBSERVATIONS SHALL BE INITIATED BY THE CONTRACTOR AND COORDINATED THROUGH THE OWNER (JOB SUPERINTENDENT). THE CONTRACTOR SHALL NOTIFY THE OWNER (JOB SUPERINTENDENT) AND LANDSCAPE ARCHITECT NOT LESS THAN FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY OBSERVATION. CONTINUED WORK WITHOUT OBSERVATION OF ANY REQUIRED CHANGES OR MODIFICATIONS TO BE AT THE CONTRACTOR'S EXPENSE. THE OWNER (JOB SUPERINTENDENT) SHALL INFORM THE LANDSCAPE ARCHITECT AS TO THE PURPOSE AND TIME OF THE OBSERVATION FORTY-EIGHT (48) HOURS IN ADVANCE.

3. **CLOSING OF NOT INSPECTED WORK:** THE CONTRACTOR SHALL NOT ALLOW NOR CAUSE ANY OF THE WORK TO BE COVERED OR ENCLOSED UNTIL IT HAS BEEN INSPECTED, TESTED AND APPROVED BY THE CONSULTING ENGINEER OR AUTHORIZED REPRESENTATIVE AND/OR GOVERNMENTAL AUTHORITY HAVING JURISDICTION OVER THE WORK. SHOULD ANY OF THE WORK BE ENCLOSED OR COVERED BEFORE SUCH INSPECTION AND TEST, HE SHALL UNCOVER HIS WORK AT HIS OWN EXPENSE. AFTER IT HAS BEEN INSPECTED, TESTED AND APPROVED, THE CONTRACTOR SHALL MAKE ALL REPAIRS NECESSARY TO THE OWNER'S SATISFACTION.

4. **JOB SITE MEETINGS AND REQUIRED INSPECTIONS:**

- A. PRE-JOB MEETING ON SITE - PRIOR TO COMMENCEMENT OF WORK
- B. DURING SOIL PREPARATION
- C. AT COMPLETION OF SOIL PREPARATION
- D. COMPLETION OF WEED CONTROL
- E. PLANT MATERIAL INSPECTION
- F. GRADING CHECK PRIOR TO GROUND COVER
- G. PROGRESS/INSTALLATION INSPECTION
- H. COMPLETION OF PLANTING
- I. 30, 60, & 90-DAY MAINTENANCE INSPECTIONS

5. **COMPLETION:** WORK SHALL BE COMPLETED UPON FINAL APPROVAL BY OWNER AND LANDSCAPE ARCHITECT. A FINAL INSPECTION SHALL BE HELD UPON THE COMPLETION OF THE WORK PROVIDING THE CONTRACTOR HAS COMPLETED THE INSTALLATION OF ALL PHASES OF THE CONTRACT AND CONFORMED TO ALL REQUIREMENTS OF THESE SPECIFICATIONS.

C. MATERIAL NOTES

1. **GENERAL:** THE FOLLOWING LIST COMPRISES THE PRINCIPLE MATERIALS BUT DOES NOT SET THE LIMITATION FOR MATERIALS REQUIRED. IT SHALL BE UP TO THE CONTRACTOR TO SHOW THAT AMPLE QUANTITIES OF THE REQUIRED MATERIALS WERE USED AND INSTALLED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.

2. **SCOPE OF WORK:** WORK SHALL CONSIST OF FURNISHING ALL MATERIALS, SERVICES AND EQUIPMENT NECESSARY TO COMPLETELY INSTALL ALL LANDSCAPE WORK AS INDICATED ON THE DRAWINGS AND HEREIN SPECIFIED.

3. **PLANT MATERIALS:** ALL PLANTS SHALL BE HEALTHY, WELL ESTABLISHED NURSERY STOCK, FREE FROM INSECTS AND THEIR EGGS AND DISEASES. PLANTS SHALL BE FURNISHED IN THE QUANTITIES REQUIRED TO COMPLETE THE WORK AS INDICATED ON THE DRAWINGS AND SHALL BE OF THE SPECIES AND SIZES INDICATED ON THE PLANT LIST. ALL PLANTS SHALL BE INSPECTED AND APPROVED PRIOR TO PLANTING.

4. **REJECTION OF PLANT MATERIAL:** THE OWNER OR LANDSCAPE ARCHITECT MAY REJECT ANY PLANT MATERIAL REGARDED AS UNSUITABLE AT ANY TIME AT NO ADDITIONAL COST TO THE OWNER.

5. **HANDLING/STORAGE:** ALL PLANTS SHALL BE HANDLED AND STORED SO THEY ARE ADEQUATELY PROTECTED FROM DRYING OUT, SUN, WIND BURN, VANDALISM OR ANY OTHER INJURY.

6. **TREE TAGGING:** ALL SPECIMEN TREES CALLED OUT ON PLAN TO BE TAGGED SHALL BE SELECTED BY LANDSCAPE ARCHITECT.

7. **TREE STAKES AND GUYS:** TREE STAKES SHALL BE LODGE POLE PINE OR CONSTRUCTION HEART REDWOOD. FURNISH AND INSTALL AS INDICATED ON DETAILS.

8. **TREE TIES:** SHALL BE FLEXIBLE NON-DETERIORATING SELF-FASTENING BLACK VINYL TREE TIES OF THE SIZES REQUIRED TO PROPERLY SUPPORT TREES, "CINCH TIES" OR EQUAL.

9. **ROOT BARRIERS:** CONTRACTOR SHALL INSTALL APPROVED ROOT BARRIERS ON ALL TREES WITHIN FIVE (5) FEET OF HARDSCAPE, STRUCTURES, ETC.

10. **SOD:** SOD VARIETY SHALL BE PER PLANS. SOD SHALL BE SUPPLIED BY PACIFIC SOD OR APPROVED EQUAL, PURCHASED FROM A RECOGNIZED TURF NURSERY, FIRST QUALITY, FRESH AND CLEAN.

11. **AGRIFORM PLANTING TABLETS:** SHALL BE 20-10-5 ANALYSIS PROLONGED RELEASE NITROGEN. 1 PER 1 GALLON, 2 PER 5 GALLON, 4 PER 15 GALLON, AND 6 PER BOX FOR SPECIMENS LARGER THAN 15 GALLON OR PER DRAWINGS.

12. **COMMERICAL FERTILIZER:** SHALL BEAR THE MANUFACTURER'S GUARANTEED STATEMENT OF ANALYSIS ND SHALL BE CONTROLLED RELEASE TYPE FERTILIZER WITH THE FOLLOWING MINIMUM REQUIREMENTS:

16% NITROGEN - 7% PHOSPHORIC ACID - 12% POTASH (+ IRON)

13. **REDWOOD SHAVINGS:** SHALL BE PURE REDWOOD SAWDUST AND SHAVINGS OR NITROGEN FORTIFIED FIR RESULTING FROM MILLING OPERATIONS AND SHALL NOT CONTAIN STICKS, BLOCKS OF WOOD, OR OTHER FOREIGN MATTER. SOURCES OF SHAVINGS SHALL BE APPROVED BY LANDSCAPE ARCHITECT.

14. **SOIL SULFUR:** STANDARD COMMERCIAL BRAND, GUARANTEED ANALYSIS OF 99% SULFUR (EXPRESSED AS ELEMENTAL) SUPPLIED IN UNOPENED BAGS WITH ANALYSIS ATTACHED.

15. **BONE MEAL:** SHALL BE FINE GROUND, STEAMED, DRY MATERIAL WITH A MINIMUM ANALYSIS OF 18% NITROGEN - 30% PHOSPHORIC ACID - 69.5% UNDILUTED BONE.

16. **SAMPLES:** SAMPLES OF REDWOOD SHAVINGS, STEER MANURE, FERTILIZER AND SEED SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE STORED ON THE SITE UNTIL FURNISHING OF MATERIALS IS COMPLETED.

17. **CERTIFICATES:** CERTIFICATES FOR EACH DELIVERY OF BULK MATERIAL SHALL BE FURNISHED TO THE LANDSCAPE ARCHITECT BY THE CONTRACTOR. CERTIFICATES SHALL STATE THE SOURCE, QUANTITY AND TYPE OF MATERIAL AND DATE AND ADDRESS OF THE LOCATIONS IT WAS DELIVERED TO.

D. LANDSCAPE GRADING NOTES

1. **SITE PREPARATION:** THE CONTRACTOR SHALL REMOVE ALL WEEDS, ROCKS, DEBRIS, AND OTHER EXTRANEIOUS MATERIALS FROM THE JOB SITE PRIOR TO PROCEEDING WITH ANY WORK.

2. **SOIL PREPARATION:** ALL SOIL PREPARATION SHALL BE INSTALLED AS PER THE SOIL AGRONOMY REPORT TO BE PROVIDED AND PAID FOR BY THE OWNER. SOILS REPORT SHALL CONTAIN FULL SOIL AMENDMENT RECOMMENDATIONS. THE REPORT SHALL BE IMMEDIATELY FORWARDED TO THE LANDSCAPE ARCHITECT AND CITY OF WESTMINSTER UPON COMPLETION.

3. **SOIL AMENDMENTS:** THE SOIL AMENDMENTS SPECIFIED ARE FOR BIDDING PURPOSES ONLY. THE OWNER SHALL PROVIDE FOR A SOILS AGRONOMY REPORT FROM AN APPROVED SOILS LABORATORY AND/OR ANY ADDITIONAL SPECIFICATION PROVIDED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS.

4. **CULTIVATION DEPTH:** ALL LANDSCAPE AREAS SHALL BE CULTIVATED TO A DEPTH OF 6".

5. **AMENDMENT MIX:** INCORPORATE THE FOLLOWING SOIL AMENDMENTS PER SOILS REPORT. IN THE UPPER 6" OF ALL TILLING OR DISKING UNTIL ALL POCKETS AND LAYERS OF SOIL AND SOIL CONDITIONERS ARE ELIMINATED.

REDWOOD SHAVINGS 6 YARDS PER 1000 SQ. FT.
COMMERCIAL FERTILIZER 20 LBS. PER 1000 SQ. FT.
GYPSUM 100 LBS. PER 1000 SQ. FT.
* FOR BID PURPOSES ONLY

6. **FINISH GRADE:** FINISH GRADES SHALL BE THOSE INDICATED ON THE DRAWINGS OR AS MAY BE CONTROLLED BY EXISTING INSTALLATIONS. GRADES NOT OTHERWISE INDICATED SHALL BE UNIFORM. STRAIGHT LEVELS BETWEEN POINTS WHERE ELEVATIONS ARE DETERMINED. FINISH GRADES SHALL BE SMOOTH AND EVEN OF A UNIFORM PLANE WITH AN ABRUPT CHANGES IN THE SURFACE. MINOR MODELING OF THE GROUND SURFACE MAY BE REQUIRED. GRADES SHALL PROVIDE FOR THE NATURAL RUN-OFF OF WATER WITHOUT LOW SPOTS OR POCKETS. FLOW LINES SHALL BE SET BY INSTRUMENT AND SHALL BE THE MAXIMUM GRADIENT POSSIBLE.

7. **DRAINAGE:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR POSITIVE DRAINAGE IN ALL PLANTING AREAS IN ACCORDANCE WITH THE PLANS, DETAILS AND SPECIFICATIONS OR AS SPECIFIED BY THE OWNER.

8. **FINISH GRADE AT TURF AREAS:** FINISH GRADE OF ALL TURF AREAS SHALL BE ONE INCH BELOW THE GRADE OF ADJACENT WALKS, PAVEMENTS, CURBS, ETC.

9. **FINISH GRADE AT SHRUB AREAS:** FINISH GRADE OF ALL SHRUBBERY AND GROUND COVER AREAS SHALL BE TWO INCHES BELOW THE GRADE OF ADJACENT WALKS, PAVEMENTS, CURBS, ETC., EXCEPT WHERE WATER FLOWS ACROSS SAME.

E. TREE AND SHRUB PLANTING NOTES

1. **PLANT DEPTH:** PLANT ALL PLANTS AT THEIR NATURAL GROWING DEPTH PER DETAIL, IN THE LOCATIONS SHOWN ON THE DRAWINGS.

2. **EXCAVATED PITS:** EXCAVATE PITS WITH SQUARE AND VERTICAL SIDES, 2 TIMES THE DIAMETER, AND 12" GREATER IN DEPTH THAN THE SIZE OF THE PLANT CONTAINER.

3. **BACKFILL MIXTURE:** BACKFILL TO BOTTOM OF ROOT BALL WITH PREPARED BACKFILL MIXTURE. TAP FIRMLY. SET PLANT IN CENTER OF PIT IN A VERTICAL POSITION, CROWN LEVEL WITH FINISH GRADE. BACKFILL BALANCE OF PIT WITH THE FOLLOWING PREPARED MIXTURE OR PER SOILS REPORT:

10 PARTS TOP SOIL
5 PARTS REDWOOD SHAVINGS
1/4 LB. BONE MEAL
AGRIFORM PLANT TABLETS, 1 PER GALLON, 2 PER 5 GALLON, 4 PER 15 GALLON, AND 6 PER BOX FOR SPECIMENS LARGER THAN 15 GALLON.
* FOR BID PURPOSES ONLY

4. **TREE LOCATIONS:** TREE LOCATIONS TAKE PRECEDENCE OVER IRRIGATION LINES. CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NECESSARY.

5. **WATER BASIN:** CONSTRUCT A SIX INCH DEEP WATER BASIN. MULCH WITH A TWO INCH LAYER OF REDWOOD SHAVINGS, AND WATER THOROUGHLY, BACKFILLING WITH ADDITIONAL MIX WHERE VOIDS APPEAR.

6. **TREE STAKES:** ALL NURSERY STAKES SHALL BE REMOVED AND ALL TREES SHALL BE INSTALLED WITH LODGE POLE STAKES DRIVEN 3 FEET INTO THE GROUND. TREE STAKES SHALL NOT PIERCE THE ROOTBALL AND NOT INJURE TREE ROOTS. SEE TREE PLANTING DETAILS.

7. **TREE TIES:** TREE TIES SHALL BE FASTENED TO THE TREE AND STAKE BY LOOPING THE TIES IN FIGURE 8'S WITH THE INSIDE OF THE TREE TRUNK. FASTEN TIE TO THE STAKE WITH ONE GALVANIZED ROOFING NAIL.

8. **DEFECTS:** ALL DEFECTS IN TREE AND SHRUB PLANTING SHALL BE CORRECTED THROUGH THE GUARANTEE PERIOD SPECIFIED HEREIN AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

F. VINE PLANTING NOTES

1. **GENERAL:** ALL VINES SHALL BE PLANTED PER THE VINE PLANTING DETAIL, AND THE WOOD SUPPORT STAKE SHALL BE CAREFULLY REMOVED WITHOUT DAMAGE TO THE ROOTBALL.

2. **WOOD FENCES:** VINES ATTACHED TO WOOD FENCES SHALL BE SECURED WITH GALVANIZED NAILS OR GALVANIZED EYE SCREWS AND HEAVY DUTY VINE TIES.

3. **MASONRY WALLS:** ON MASONRY WALLS ATTACH WITH ADHESIVE TYPE VINE SUPPORTS WITH SILICONE ADHESIVE OR GALVANIZED EYE SCREWS AND WIRE (PER DETAIL). ATTACH VINE WITH HEAVY DUTY VINE TIES

G. MAINTENANCE NOTES

1. **MAINTENANCE PERIOD:** THE MAINTENANCE PERIOD SHALL BE FOR 90 CALENDAR DAYS BEGINNING ON THE DAY OF THE CHECK INSPECTION AFTER ALL WORK HAS BEEN INSTALLED AND APPROVED BY THE LANDSCAPE ARCHITECT. THE MAINTENANCE PERIOD MAY BE EXTENDED TO INCLUDE ANY ADDITIONAL TIME THAT MAY BE REQUIRED TO MEET THE REQUIREMENTS OF THE WORK SPECIFIED.

2. **GENERAL:** THE GENERAL CARE AND MAINTENANCE OF ALL AREAS SHALL CONSIST OF PROPER WATERING, FERTILIZATION, WEEDING, RODENT CONTROL, CLEANUP, ETC.

3. **SAFETY:** ALL PLANT MATERIALS SHALL BE CHECKED AND MAINTAINED AS REQUIRED IN AN ONGOING PROGRAM TO ASSURE A SAFE ENVIRONMENT.

4. **WATERING:** WATER ALL PLANTINGS TO ASSURE COMPLETE GERMINATION OF ALL SEEDED AREAS AND CONTINUED GROWTH OF THE PLANTS. AREAS THAT DO NOT HAVE ADEQUATE IRRIGATION COVERAGE OR WHICH MAY REQUIRE ADDITIONAL DEEP WATERING SHALL BE WATERED BY HAND AS REQUIRED.

5. **IRRIGATION COVERAGE:** ADJUST ALL IRRIGATION HEADS IN EACH AREA AND ZONE OF EXPOSURE SO THAT THE OPTIMUM AMOUNT OF WATER IS APPLIED AT THE PROPER TIMES WITHOUT OVERTHROW ONTO WALLS, WALKS, ETC.

6. **CULTIVATING AND WEEDING:** CULTIVATE AND WEED ALL PLANTED AREAS AT REGULAR INTERVALS NOT TO EXCEED 15 DAYS. EXERCISE CARE WHEN CULTIVATING TO AVOID DAMAGE TO ROOTS OF THE GROWING PLANTS.

7. **CHEMICAL HERBICIDES:** A CERTIFIED TECHNICIAN SHALL APPLY CHEMICAL HERBICIDES TO CONTROL WEEDS AT THE OPTION OF THE CONTRACTOR AND UPON PRIOR APPROVAL BY THE LANDSCAPE ARCHITECT.

8. **PEST AND DISEASE CONTROL:** A CERTIFIED TECHNICIAN SHALL SPRAY AS NECESSARY TO CONTROL ALL INFESTATIONS.

9. **RODENT CONTROL:** THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO ELIMINATE ANY RODENTS ENCOUNTERED ON SITE.

10. **PRUNING:** ALL PRUNING SHALL BE IN ACCORDANCE WITH ARBORS GUIDELINES. DAMAGED, DEAD OR DRYING BRANCHES SHALL BE REMOVED BACK TO A POINT OF GROWTH.

11. **PLANT REPLACEMENTS:** DURING THE MAINTENANCE PERIOD, SHOULD ANY PLANT SHOW WEAKNESS AND PROBABILITY OF DYING, IT SHALL BE REPLACED BY THE CONTRACTOR WITHIN 5 DAYS OF NOTIFICATION TO DO SO. AT THE END OF THE MAINTENANCE PERIOD, ALL PLANT MATERIAL SHALL BE IN A HEALTHY, GROWING CONDITION.

12. **TURF AREAS:** AT THE END OF EACH THIRTY DAY PERIOD OF MAINTENANCE, THE CONTRACTOR SHALL DO THE FOLLOWING. OVERSEED ALL SPOTS OR AREAS WHERE NORMAL SOD ESTABLISHMENT IS NOT EVIDENT. REMOVE ALL ROCKS OR OTHER DEBRIS THAT CONSTITUTE A HINDRANCE TO MOWING. FILL ALL DEPRESSIONS AND ERODED CHANNELS WITH SUFFICIENT TOP SOIL TO RAISE TO PROPER GRADE. COMPACT LIGHTLY AND RESOD THE FILLED AREAS.

13. **TURF WEED CONTROL:** TURF AREAS SHALL BE TREATED WITH A BROADLEAF WEED KILLER APPLIED PER MANUFACTURER'S RECOMMENDATIONS.

14. **TURF FERTILIZER:** FERTILIZE ALL TURF AREAS WITH COMMERCIAL FERTILIZER, 16-6-8 MINIMUM ANALYSIS, AT THE RATE OF TEN (10) POUNDS PER 1000 SQ. FT. OF AREA.

15. **MOWING:** MOW ALL TURF AREAS BEFORE THEY REACH A HEIGHT OF THREE INCHES WITH MOWER SET AT TWO INCHES. MAINTAIN ALL TURF AREAS AT A TWO INCH HEIGHT THROUGHOUT THE MAINTENANCE PERIOD.

16. **RE-HYDROSEEDING:** THE CONTRACTOR SHALL RE-HYDROSEED ALL HYDROSEEDED AREAS ERODED OR NON-GERMINATING AT THE END OF EACH THIRTY DAYS.

17. **CLEAN UP:** DURING THE COURSE OF THE MAINTENANCE WORK, THE CONTRACTOR SHALL REMOVE SURPLUS MATERIALS AND DEBRIS FROM THE SITE AND SHALL MAINTAIN THE PREMISES IN A NEAT AND CLEAN CONDITION AT ALL TIMES.

18. **FINAL INSPECTION:** WILL BE HELD AT THE END OF THE 90-DAY MAINTENANCE PERIOD.

H. POST INSTALLATION MAINTENANCE GUIDELINES

A SCHEDULE FOR ONGOING MAINTENANCE SHALL BE PREPARED AND SHOWN ON THE PLANTING PLAN USING THE FOLLOWING GUIDELINES.

1. ANY ALTERATIONS TO THE LANDSCAPE MUST BE APPROVED BY THE DIRECTOR OF PLANNING AND COMMUNITY DEVELOPMENT.

2. CONTROL ALL HARMFUL DISEASES AND PESTS. ALL CHEMICAL APPLICATIONS MUST BE PER STATE LICENSED ADVISORS AND APPLICATIONS.

3. PRUNING SHALL BE DONE TO KEEP PLANTS WITHIN SPECIAL LIMITATIONS, REMOVAL OF DEADWOOD, CROSS-BRANCHING, ETC., PER INTERNATIONAL SOCIETY OF ARBORICULTURE STANDARDS (ISA). PLANTS SHALL NEVER BE SHEARED UNLESS SPECIFIED ON THE APPROVED PLAN. TREES ARE TO BE ALLOWED TO GROW TO THE DESIGNED SIZE TO PROVIDE MAXIMUM SHADING OF PAVED AREAS.

4. WATER SHALL BE APPLIED FOR OPTIMUM PLANT GROWTH WITH MINIMAL RUNOFF OR OVERSPRAY.

5. ADJUST CONTROLLERS PER CURRENT CALIFORNIA IRRIGATION MANAGEMENT INFORMATION SYSTEM (CIMIS) DATE (805) 664-4921.

6. ALWAYS REPLACE HEADS WITH SAME KIND OR MATCHING PRECIPITATION RATE.

7. BACKFLOW DEVICE SHALL BE TESTED AND CERTIFIED ANNUALLY BY THE LOCAL HEALTH DIVISION.

8. INSPECT TREE SUPPORTS FREQUENTLY AND REMOVE AS SOON AS PLANTS WILL STAND WITHOUT SUPPORT AND WILL BE ABLE TO RESIST WIND DAMAGE. NEVER ALLOW SUPPORT MATERIALS TO GIRDL E TRUNK OF BRANCHES.

9. LANDSCAPE IRRIGATION SHALL BE SCHEDULED DURING THE NIGHT OR EARLY MORNING HOURS.

10. A REGULAR MAINTENANCE SCHEDULE SHALL INCLUDE CHECKING, ADJUSTING, AND REPAIRING THE IRRIGATION EQUIPMENT; AERATING AND DETACHING TURF AREAS; REPLENISHING MULCH; FERTILIZATION; PRUNING, WEEDING, AND REMOVING LITTER IN ALL LANDSCAPED AREAS.

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:



507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ
AVENUE
LOS GATOS, CA
95030

Stamp:



Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

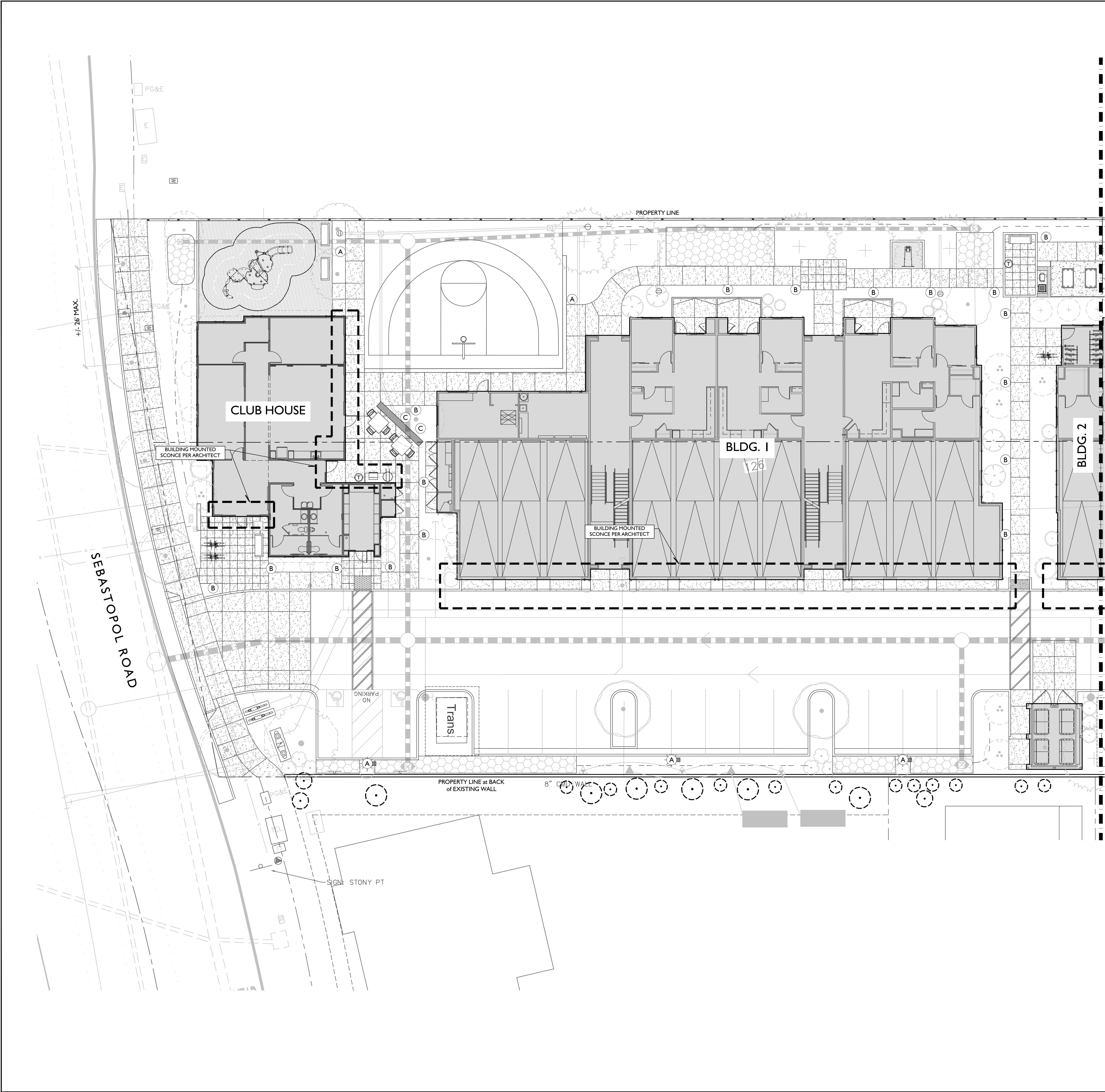
Title:

PLANTING SPECIFICATIONS

Sheet No.:

LP.8

Plan Status:
CONSTRUCTION DOCUMENTS



LIGHT FIXTURE LEGEND:				
SYMBOL	TYPE / LOCATION	MANUFACTURER / MODEL #	LAMP	ACCESSORIES / NOTES
(A)	POLE LIGHT	LIGMAN: UAD-200 11-W30-02-120v	82 W LED 3000K	14 FT POLE OR APPROVED EQUAL DARK GREY FINISH
(B)	PEDESTRIAN WALKWAY BOLLARD	LIGMAN: UPRA-10012-T3-W30-02-120v	14 W LED 3000K	SURFACE MOUNT DARK GREY FINISH
(C)	STAKE MOUNTED TREE UPLIGHT	FX LUMINAIRE: NP-9LED-LS-FB OR APPROVED EQUAL	10 W LED	13" STAKE. REQUIRES A REMOTE TRANSFORMER.
(D)	SIGN LIGHT	LINEAR SIGN LIGHT	-	-
⊖	WEATHERPROOF GFCI OUTLET WITH COVER	-	-	COORDINATE locations WITH OWNER and PROPERTY MANAGER

ELECTRICAL COORDINATION NOTE:
FOR PERMIT AND CONSTRUCTION PLANS FOR FIXTURE CIRCUITING AND LOADS SEE PLANS PREPARED BY ELECTRICAL ENGINEER.

- GENERAL LANDSCAPE LIGHTING NOTES:**
- CONTRACTOR SHALL STUB OUT ELECTRICAL CONDUIT TO SPECIMEN TREES/PALMS PRIOR TO PLANTING. ALL FIXTURES SHALL BE MOUNTED AFTER INSTALLATION OF TREES AND PALMS.
 - ALL LIGHTING FIXTURES AND ELECTRICAL INSTALLATION SHALL BE IN CONFORMANCE WITH CITY OF SANTA ROSA, THE NATIONAL ELECTRICAL CODES AND LOCAL GOVERNMENT AGENCY AND PLANS PREPARED BY ELECTRICAL CONSULTANT.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE HELD LIABLE FOR ALL DAMAGES INCURRED.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
 - ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT UNIFORM BUILDING CODES, PERMIT REQUIREMENTS AND STATE AND HEALTH SAFETY REQUIREMENTS.
 - ALL ELECTRICAL FIXTURES ARE SHOWN SCHEMATICALLY FOR LOCATIONS AND QUANTITIES REQUIRED. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND INSTALL FIXTURES PER MANUFACTURERS SPECIFICATIONS AND PLANS PREPARED BY ELECTRICAL ENGINEER CONSULTANT.
 - CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY CONDUIT UNDER PAVING PRIOR TO CONSTRUCTION.

REFERENCE NOTE:
PLANS ARE FOR REFERENCE ONLY. SEE ELECTRICAL PLANS PREPARED BY ELECTRICAL ENGINEER.

"FOR REFERENCE & COORDINATION ONLY"

NORTH

05'10'20'

SCALE: 1" = 10'

SEBASTOPOL RD

KEY MAP

N.T.S.

Issued for:
03/15/21100% DESIGN DEVELOPMENT

Revisions:

MJS

LANDSCAPE ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885 SEBASTOPOL ROAD
SANTA ROSA, CA 95407
APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA 95030

Stamp:

LANDSCAPE ARCHITECT
03-31-21
01-20-21
STATE OF CALIFORNIA

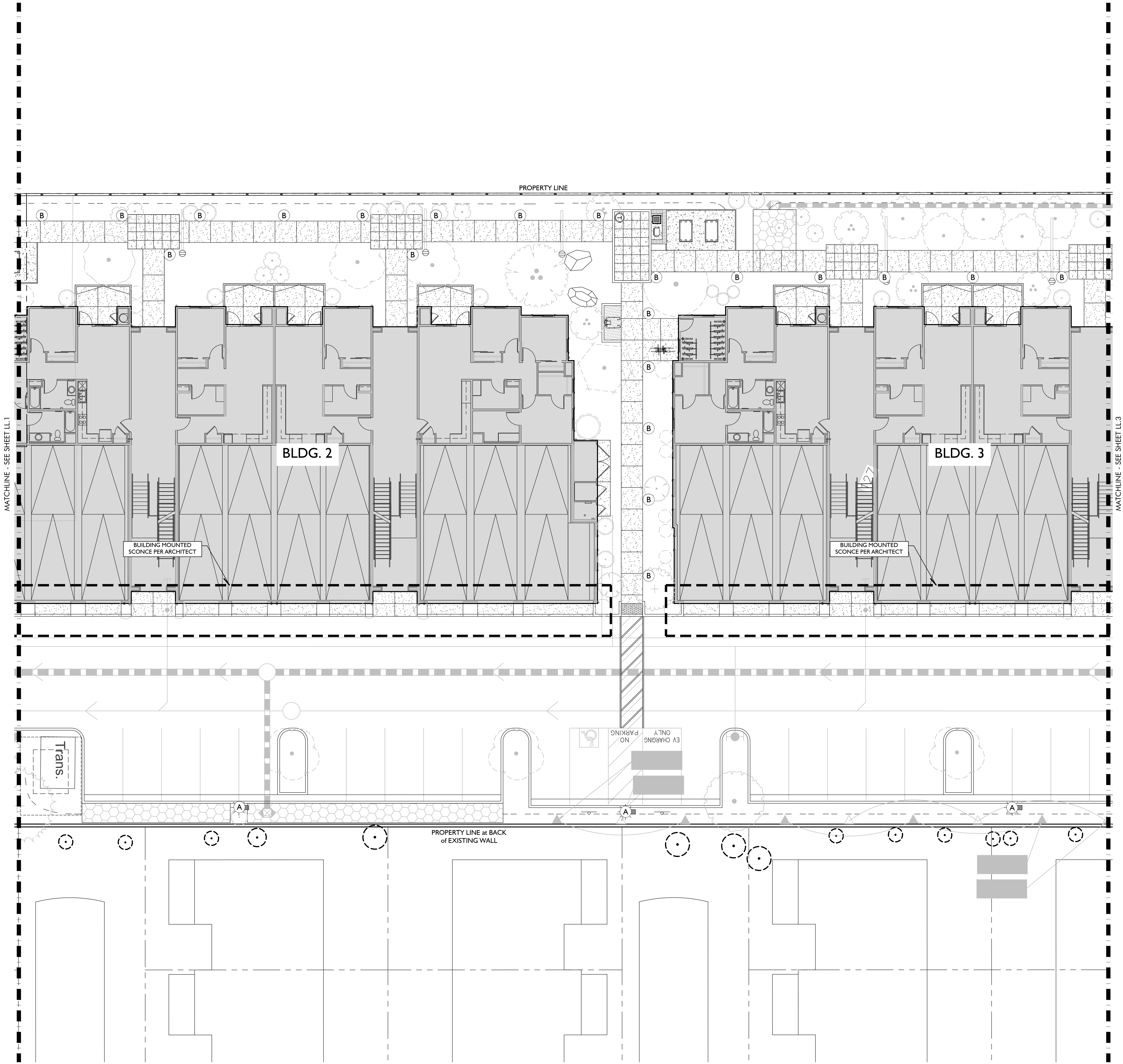
Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

LANDSCAPE LIGHTING PLAN

Sheet No.:

LL.1

Plan Status:
CONSTRUCTION DOCUMENTS



LIGHT FIXTURE LEGEND:				
SYMBOL	TYPE / LOCATION	MANUFACTURER / MODEL #	LAMP	ACCESSORIES / NOTES
(A)	POLE LIGHT	LIGMAN: UAD-20011-W30-02-120v	82 W LED 3000K	14 FT POLE OR APPROVED EQUAL DARK GREY FINISH
(B)	PEDESTRIAN WALKWAY BOLLARD	LIGMAN: UPRA-10012-T3-W30-02-120v	14 W LED 3000K	SURFACE MOUNT DARK GREY FINISH
(C)	STAKE MOUNTED TREE UPLIGHT	FX LUMINAIRE: NP-9LED-LS-FB OR APPROVED EQUAL	10 W LED	13' STAKE. REQUIRES A REMOTE TRANSFORMER.
(D)	SIGN LIGHT	LINEAR SIGN LIGHT	-	-
⊖	WEATHERPROOF GFCI	OUTLET WITH COVER	-	COORDINATE locations WITH OWNER and PROPERTY MANAGER

ELECTRICAL COORDINATION NOTE:
FOR PERMIT AND CONSTRUCTION PLANS FOR FIXTURE CIRCUITING AND LOADS SEE PLANS PREPARED BY ELECTRICAL ENGINEER.

- GENERAL LANDSCAPE LIGHTING NOTES:**
- CONTRACTOR SHALL STUB OUT ELECTRICAL CONDUIT TO SPECIMEN TREES/PALMS PRIOR TO PLANTING. ALL FIXTURES SHALL BE MOUNTED AFTER INSTALLATION OF TREES AND PALMS.
 - ALL LIGHTING FIXTURES AND ELECTRICAL INSTALLATION SHALL BE IN CONFORMANCE WITH CITY OF SANTA ROSA, THE NATIONAL ELECTRICAL CODES AND LOCAL GOVERNMENT AGENCY AND PLANS PREPARED BY ELECTRICAL CONSULTANT.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE HELD LIABLE FOR ALL DAMAGES INCURRED.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
 - ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT UNIFORM BUILDING CODES, PERMIT REQUIREMENTS AND STATE AND HEALTH SAFETY REQUIREMENTS.
 - ALL ELECTRICAL FIXTURES ARE SHOWN SCHEMATICALLY FOR LOCATIONS AND QUANTITIES REQUIRED. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND INSTALL FIXTURES PER MANUFACTURERS SPECIFICATIONS AND PLANS PREPARED BY ELECTRICAL ENGINEER CONSULTANT.
 - CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY CONDUIT UNDER PAVING PRIOR TO CONSTRUCTION.

REFERENCE NOTE:
PLANS ARE FOR REFERENCE ONLY. SEE ELECTRICAL PLANS PREPARED BY ELECTRICAL ENGINEER.

"FOR REFERENCE & COORDINATION ONLY"

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT

Revisions:	

MJS
LANDSCAPE ARCHITECTURE
507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:
ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:
MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA
95030

Stamp:

Job No: -
Drawn By: NIL
Checked By: MS
Plan Date: 06.02.2021
Scale: See Sheet
Title:

LANDSCAPE LIGHTING PLAN

Sheet No.:
LL.2

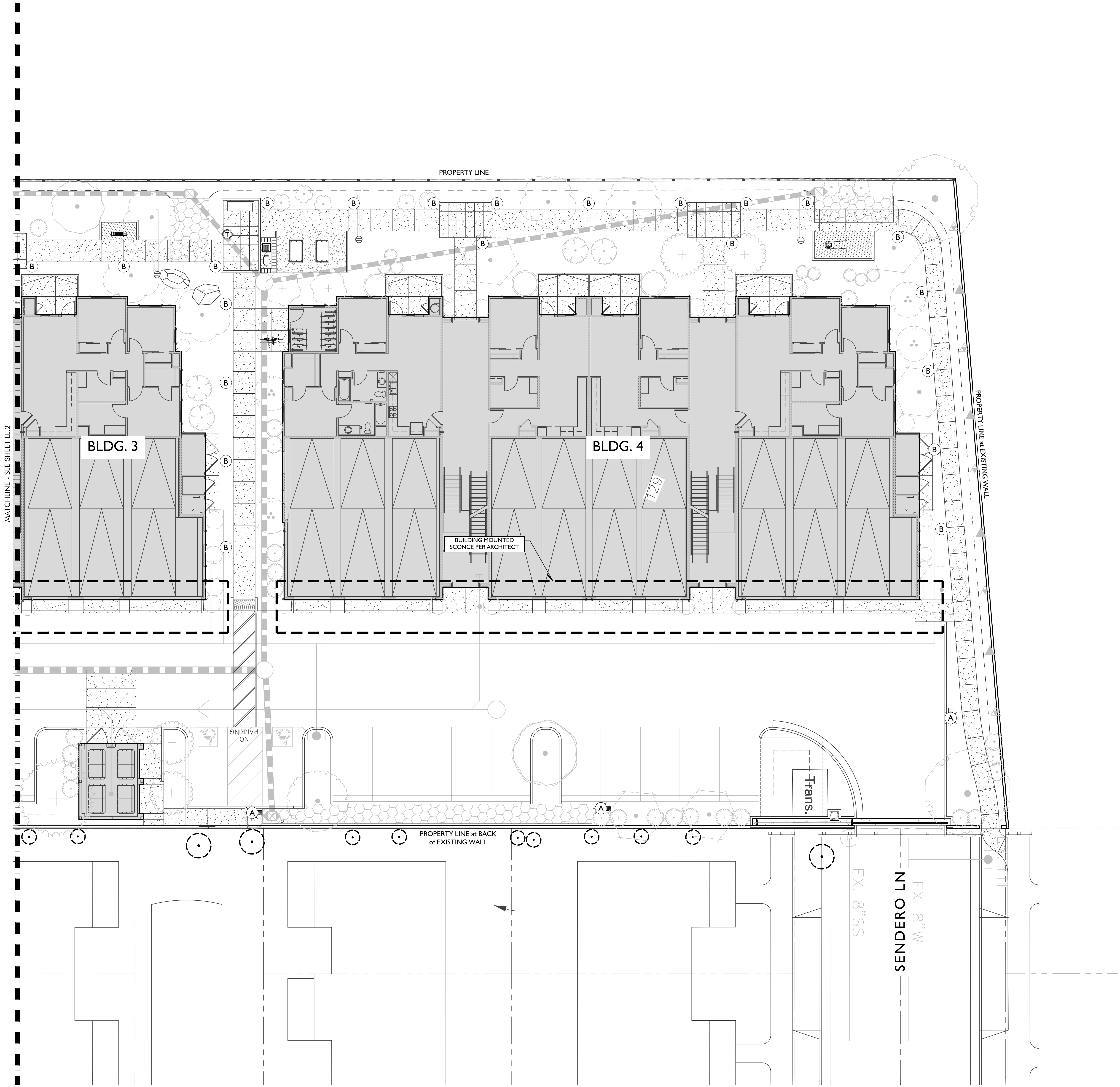
Plan Status:
CONSTRUCTION DOCUMENTS

NORTH

SCALE: 1" = 10'

KEY MAP

N.T.S.



LIGHT FIXTURE LEGEND:				
SYMBOL	TYPE / LOCATION	MANUFACTURER / MODEL #	LAMP	ACCESSORIES / NOTES
(A)	POLE LIGHT	LIGMAN: UAD-20011-W30-02-120v	82 W LED 3000K	14 FT POLE OR APPROVED EQUAL DARK GREY FINISH
(B)	PEDESTRIAN WALKWAY BOLLARD	LIGMAN: UPRA-10012-T3-W30-02-120v	14 W LED 3000K	SURFACE MOUNT DARK GREY FINISH
(C)	STAKE MOUNTED TREE UPLIGHT	FX LUMINAIRE: NP-9LED-L5-FB OR APPROVED EQUAL	10 W LED	13" STAKE. REQUIRES A REMOTE TRANSFORMER.
(D)	SIGN LIGHT	LINEAR SIGN LIGHT	-	-
⊖	WEATHERPROOF GFCI	OUTLET WITH COVER	-	COORDINATE locations WITH OWNER and PROPERTY MANAGER

ELECTRICAL COORDINATION NOTE:
FOR PERMIT AND CONSTRUCTION PLANS FOR FIXTURE CIRCUITING AND LOADS SEE PLANS PREPARED BY ELECTRICAL ENGINEER.

- GENERAL LANDSCAPE LIGHTING NOTES:**
- CONTRACTOR SHALL STUB OUT ELECTRICAL CONDUIT TO SPECIMEN TREES/PALMS PRIOR TO PLANTING. ALL FIXTURES SHALL BE MOUNTED AFTER INSTALLATION OF TREES AND PALMS.
 - ALL LIGHTING FIXTURES AND ELECTRICAL INSTALLATION SHALL BE IN CONFORMANCE WITH CITY OF SANTA ROSA, THE NATIONAL ELECTRICAL CODES AND LOCAL GOVERNMENT AGENCY AND PLANS PREPARED BY ELECTRICAL CONSULTANT.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE HELD LIABLE FOR ALL DAMAGES INCURRED.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
 - ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT UNIFORM BUILDING CODES, PERMIT REQUIREMENTS AND STATE AND HEALTH SAFETY REQUIREMENTS.
 - ALL ELECTRICAL FIXTURES ARE SHOWN SCHEMATICALLY FOR LOCATIONS AND QUANTITIES REQUIRED. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND INSTALL FIXTURES PER MANUFACTURERS SPECIFICATIONS AND PLANS PREPARED BY ELECTRICAL ENGINEER CONSULTANT.
 - CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY CONDUIT UNDER PAVING PRIOR TO CONSTRUCTION.

REFERENCE NOTE:
PLANS ARE FOR REFERENCE ONLY. SEE ELECTRICAL PLANS PREPARED BY ELECTRICAL ENGINEER.

"FOR REFERENCE & COORDINATION ONLY"

NORTH

SCALE: 1" = 10'

KEY MAP

N.T.S.

Issued for:	
03/15/21	100% DESIGN DEVELOPMENT
Revisions:	

MJS
LANDSCAPE
ARCHITECTURE

507 30th Street
Newport Beach, CA 92663
949.675.9964
mjs-la.com

NOT FOR CONSTRUCTION

Project:

ACME FAMILY APARTMENTS

1905 & 1885
SEBASTOPOL ROAD
SANTA ROSA, CA
95407

APN: 125-071-016,015

Client:

MILESTONE HOUSING GROUP

481 N. SANTA CRUZ AVENUE
LOS GATOS, CA
95030

Stamp:

03-31-21
01-20-21

Job No: -

Drawn By: NIL

Checked By: MS

Plan Date: 06.02.2021

Scale: See Sheet

Title:

LANDSCAPE LIGHTING PLAN

Sheet No.:

LL.3

Plan Status:

CONSTRUCTION DOCUMENTS