

Express Mapping has conducted a diligent and good faith inquiry to determine whether the proposed Business Premises is located within any sensitive uses as specified in the Costa Mesa municipal code 13-200.93 of Ordinance No. 2021-08. All distances shall be measured in a straight line from the premises where the cannabis retail use is to be located to the closest property line of a K-12 school, playground, daycare, homeless shelter or youth center. All distances shall be measured without regard to the boundaries of the city and/or intervening structures or other barriers. Map needs to depict the subject location and all parcels within 1,200 of the proposed storefront premises.

I declare under the perjury of penalty under the laws of the State of California that the information presented in this form and its attachments is complete, true and correct to the best of my knowledge. I certify that the map identifies all sensitive uses as depicted in the City's provided map of sensitive uses based on the City's current records and information, as well as all sensitive uses observed during the preparer's inspection of uses within 1,000 feet of the proposed cannabis business.

The above premises **is not** located:

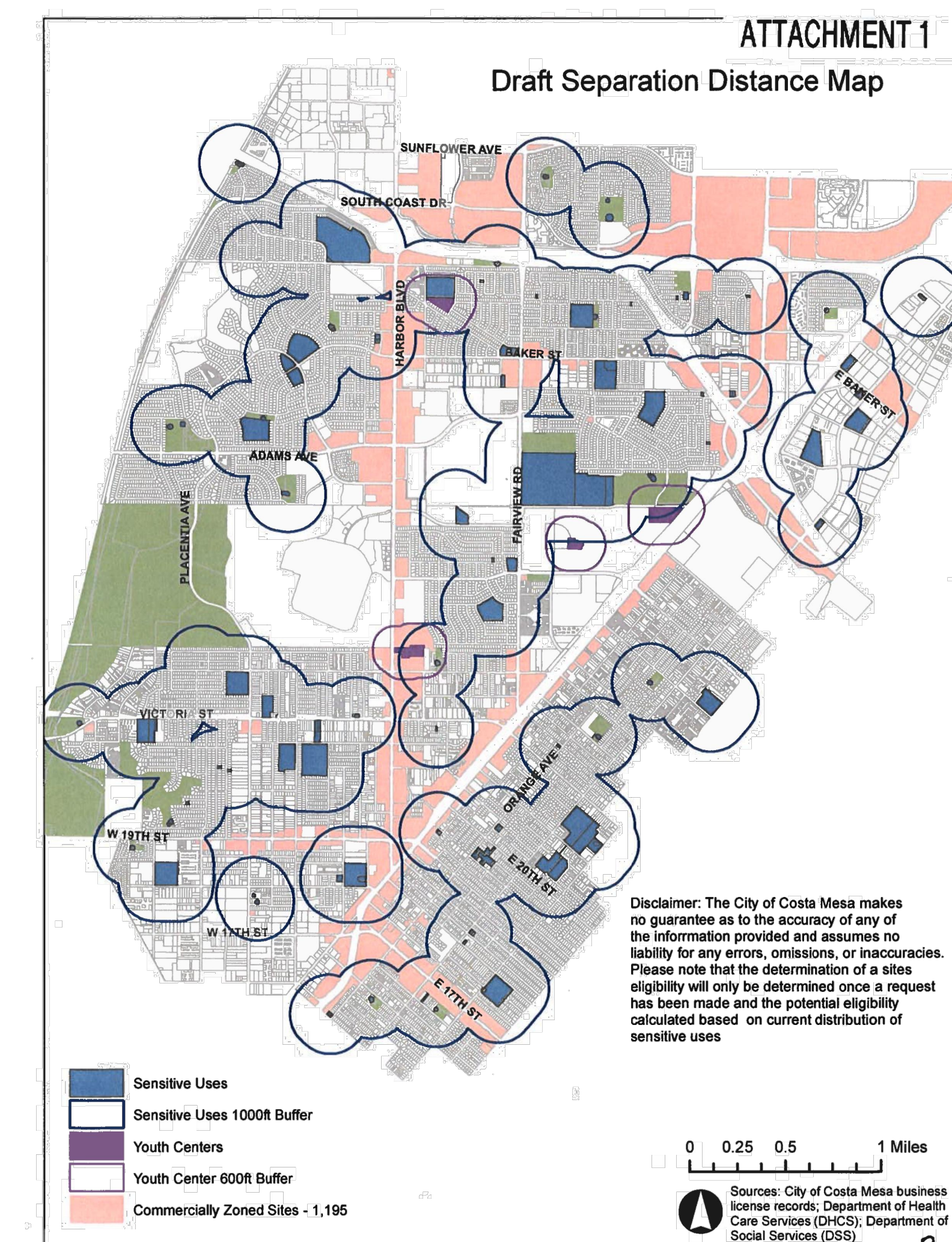
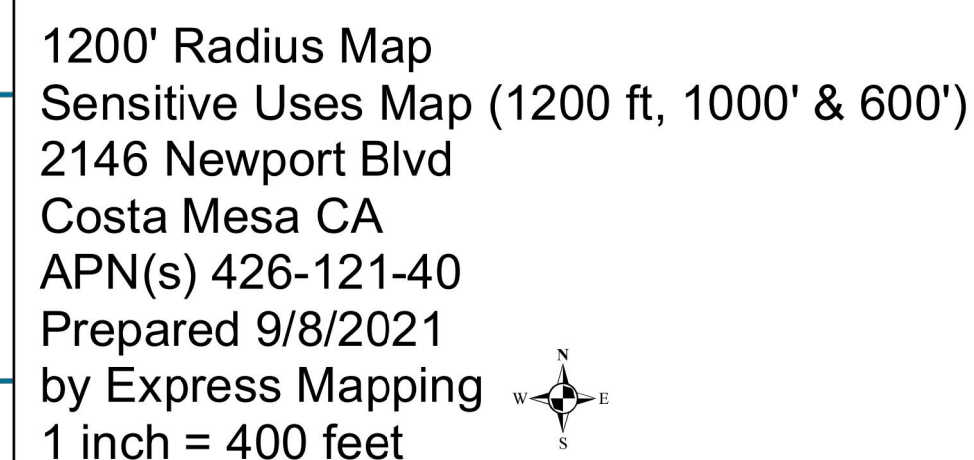
Within 1000 ft. from a K-12 school (public and private), playground (public and private), child daycare facilities, or homeless shelter, or within 600 ft. from a youth center.

Laura Emerson

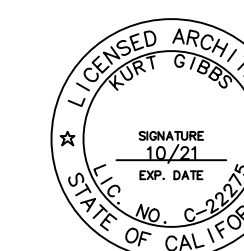
09/08/2021

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Date _____



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Revisions:

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Project Number: 31020078

Date:

File: 5 January 2023

Scale:	Scale As Noted
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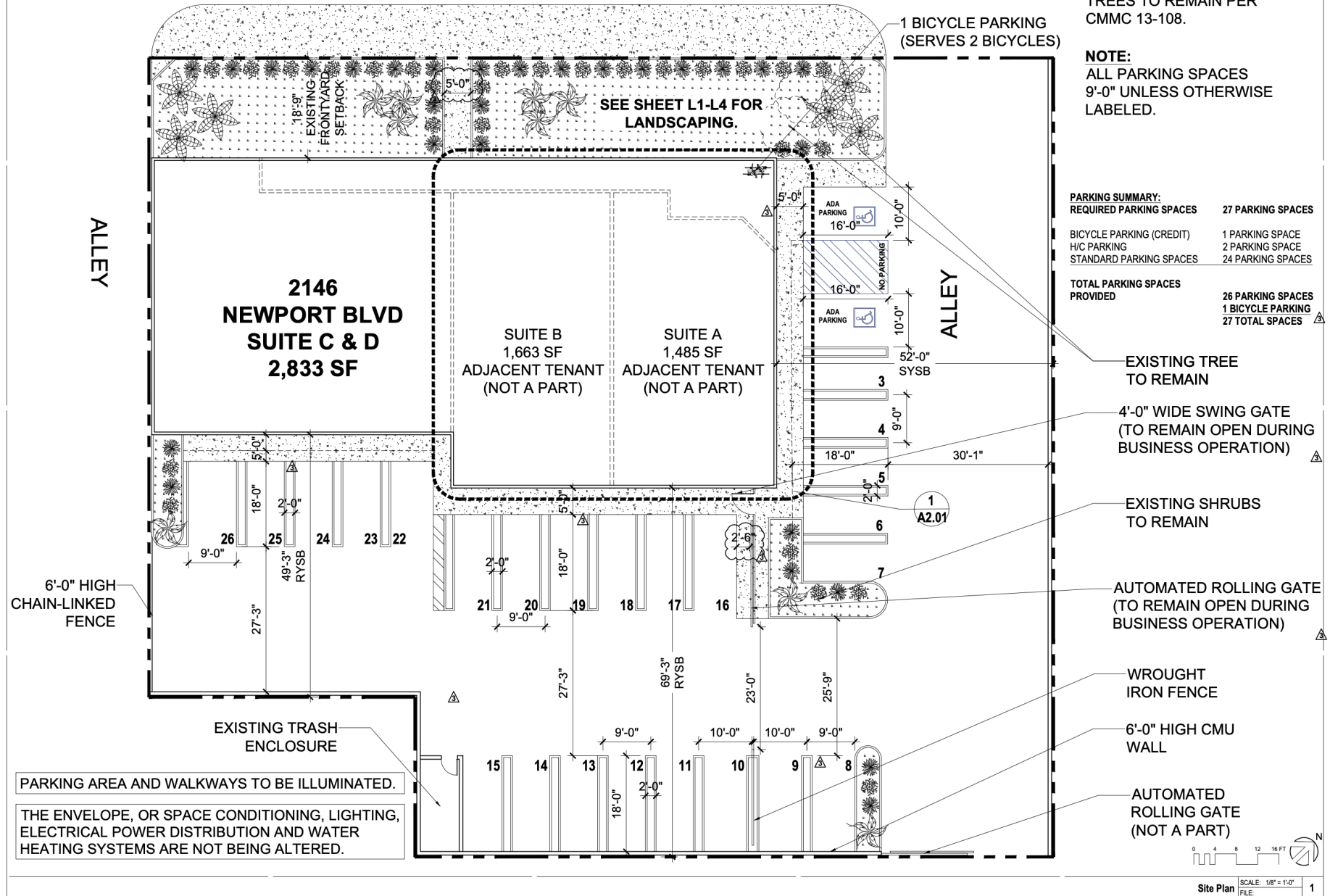
Sheet Title:

Radius Map

Drawing Number:

A1.00

NEWPORT BLVD



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18. ELECTRICAL 18.1. EXISTING RELOCATED DOWNLIGHT 18.2. EXISTING RELOCATED RECESSED GENERAL LIGHT 18.3. EXHAUST FAN TO VENT 18.4. DOOR CONTROL UNIT - AIR MEDIC PRO E 18.5. EXTERIOR LIGHT PER ELECTRICAL CONTRACTOR 18.6. INTERIOR LIGHT 18.7. ELECTRICAL DATA OUTLET(S) PER ELECTRICAL CONTRACTOR 18.8. LIGHT SWITCH PER ELECTRICAL CONTRACTOR 18.9. MOTOR CONTROL CENTER PER ELECTRICAL CONTRACTOR 19. ELECTRONIC SAFETY AND SECURITY 19.1. SMOKE ALARM - CARBON MONOXIDE ALARM 19.2. WALL MOUNTED MOTION SENSOR 19.3. EMERGENCY EXIT LIGHT 19.4. SECURITY ALARM KEYPAD 20. EARTHWORK 20.1. APPROVED COMPACT FILL PER GEO & SOILS REPORT 21. EXTERIOR IMPROVEMENTS 21.1. PARKING STRIP, STRIPING AS INDICATED 21.2. ON-TWO PLANTERS PER CIVIL DRAWINGS 21.3. SECURITY GATE PER SCHEDULE A & DETAIL 21.4. SECURITY STEEL FENCE 21.5. EXTERIOR AREA DRAINS PER SPECIFICATIONS, SEE PLUMBING & CIVIL DRAWINGS FOR PIPING 21.6. S.D. CATCH BASIN PER CIVIL DRAWINGS 21.7. FRENCH DRAIN PER CIVIL DRAWINGS 21.8. SUMP PUMP AND VAULT PER CIVIL DRAWINGS 22. UTILITIES 22.1. (N) WATER METER PER CIVIL DRAWINGS 22.2. (N) GAS METER PER CIVIL DRAWINGS 22.3. BACKFLOW PREVENTOR PER CIVIL DRAWINGS 22.4. IRRIGATION BACKFLOW PREVENTOR PER LANDSCAPE DRAWINGS 22.5. DOMESTIC WATER BACKFLOW PREVENTOR PER CIVIL DRAWINGS	14. CONVEYING EQUIPMENT 14.1. ELEVATOR PER SPECIFICATIONS 15. FIRE SUPPRESSION 15.1. FIRE SPRINKLER SYSTEM PER PLANS 15.2. FIRE SPRINKLER MAIN PER PLANS 15.3. FIRE ALARM MAIN PER PLANS 16. PLUMBING 16.1. S.S. SINK 16.2. FAUCET @ KITCHEN SINK 16.3. LAVATORY SINK 16.4. FAUCET @ LAVATORY 16.5. SINK - UTILITY 16.6. SINK - JANITOR 16.7. TOILET - LOW FLOW 16.8. URINAL - WALL MOUNTED 16.9. BIDET - WALL MOUNTED 16.10. S.BATH TUB 16.11. FAUCET @ TUB 16.12. SHOWER RECEPTOR 16.13. SHOWER FAUCET 16.14. SHOWER HEAD 16.15. WATER HEATER 16.16. NOT USED 17. HEATING, VENTILATING AND AIR-CONDITIONING 17.1. HVAC UNIT PER MECHANICAL CONTRACTOR 17.2. SUPPLY AIR REGISTER MECHANICAL CONTRACTOR 17.3. RETURN AIR REGISTER MECHANICAL CONTRACTOR 17.4. IF KITCHEN HOOD EXHAUST 17.5. BATHROOM EXHAUST FAN PER MECHANICAL CONTRACTOR 17.6. IF DIAMETER EXTERIOR EXHAUST FAN MECHANICAL CONTRACTOR 17.7. CUSTOM EXTERIOR EXHAUST S.S. VENT REGISTER 17.8. HVAC AIR DUCTS PER MECHANICAL CONTRACTOR 17.9. EXISTING FAU	19. SPECIALTIES 19.1. TEMPERED GLASS RAIL SYSTEM 19.2. S.S. CUSTOM MAIL SLOT @ EXTERIOR WALL 19.3. MIRROR 19.4. CLOSET 19.5. CLOSET ROD & SHELF 19.6. TOILET PAPER ROLL HOLDER PER ACCESSORY 19.7. MAIN SERVICE 19.8. TOWEL BAR PER ACCESSORY SCHEDULE 19.9. TOWEL HOOK PER ACCESSORY SCHEDULE 19.10. RETAIL DISPLAY CASE WITH SIDE LED LIGHTS AND SLIDING DOOR WITH KEY - BLACK 19.11. J.D. COMMERCIAL REFRIGERATOR 19.12. HYDROGUNG - HALO II ATM 19.13. CCTV CAMERA 19.14. DISHWASHER 19.15. 48" AIR CURTAIN MERCHANDISER MULTICUBE OPEN CHILLER 19.16. 8" LED TV 19.17. OVERHEAD CABINET 19.18. OVERHEAD PER EQUIPMENT SCHEDULE 19.19. WASHER 19.20. DRYER 19.21. 11.3.CE MARKER 19.22. FURNISHINGS 19.23. WINDOW TREATMENT BY SPECIALTY CONTRACTOR 19.24. NOT USED 19.25. SPECIAL CONSTRUCTION 19.26. SCREEN WALL PANEL 19.27. AUTOMATIC POOL COVER PER SPECIFICATIONS 19.28. BUILT-IN STEAM BATH PER SPECIFICATIONS 19.29. EXISTING FAU	8. OPENINGS 8.1. ALUMINUM WINDOW - REPLACE EXISTING 8.2. ALUMINUM STOREFRONT WINDOW, TYPICAL 8.3. H.W. WINDOW 8.4. H.W. DOOR & FRAME 8.5. RATED STEEL DOOR & FRAME 8.6. RATED WOOD DOOR & FRAME 8.7. EXISTING EXIST DOOR 8.8. ALUMINUM STOREFRONT DOOR 8.9. INTERIOR WOOD DOOR 8.10. CRL STEWARTS BATH ANDRIZED BULLET RESISTANT 34" HIGH - 36" WIDE EXTERIOR WINDOW WITH BREAK-THRU AND SHELF WITH DEAL TRAY FOR WALLS 4-7/8" THK 8.11. DOOR HARDWARE SET 8.12. SKYLIGHT 8.13. WEATHER STRIPPING 9. FINISHES 9.1. 7/8" INTEGRAL COLOR EXTERIOR / INTERIOR CEMENT PLASTER W/ PAPER-BACKED MATERIAL, LATH 9.2. METAL STUD BLOCKING 9.3. METAL STUD BLOCKING 9.4. INTERIOR PAINT - WASHABLE 9.5. 2" @ 4" WAVE SLATWALL PANEL W/ 6" GROOVES ON CENTER 9.6. 2" @ 4" WAVE SLATWALL PANEL W/ 6" GROOVES ON CENTER 9.7. 2" @ 4" WAVE SLATWALL PANEL W/ 6" GROOVES ON CENTER 9.8. 2" @ 4" WAVE SLATWALL PANEL W/ 6" GROOVES ON CENTER 9.9. FLOOR TILES PER FINISH SCHEDULE 9.10. HARDWOOD FLOOR 9.11. 4" VINYL WALL COVE BASE - WASHABLE 9.12. 5/8" DENSE ROCK ROOF BOARD @ PARAPET 9.13. EXTERIOR DECORING 9.14. 24" x 24" x 5/8" ACOUSTIC CEILING TILE - WASHABLE 9.15. SLIP RESISTANT CONCRETE SEALER	6. WOOD AND PLASTICS 6.1. WOOD POST 6.2. WOOD BEAM 6.3. WOOD WALL FRAME 6.4. WOOD SHEAR PANEL 6.5. WOOD JOIST FLOOR FRAMING 6.6. PLYWOOD FLOOR SHEATHING 6.7. WOOD JOIST ROOF FRAMING 6.8. PLYWOOD ROOF SHEATHING 6.9. WOOD STRINGER 6.10. WOOD VENEER WALL PANEL 6.11. 2X BLOCKING 6.12. 2X FURRING WALL 6.13. WOOD WALL BASE 6.14. WOOD VENEER CABINETS / SHELVES 6.15. S.S. LAM COUNTERTOP 7. THERMAL MOISTURE PROTECTION 7.1. NOT USED 7.2. INSULATION & SPECIFICATIONS 7.3. W/P MEMBRANE 7.4. (2) LAYERS #15 BUILDING PAPER, TYPICAL 7.5. CLASS #1 PROOFING & SPECIFICATIONS 7.6. ACRYLIC COOL ROOF PER SPECIFICATIONS 7.7. S.S. DOWNSPUT AND CONDUCTOR HEAD, PTD. 7.8. S.S. INTEGRAL GUTTER 7.9. S.S. OVERFLOW SCUPPER 7.10. S.S. CORING, PTD. 7.11. S.S. FLASHING W/ 5/8" CUP @ 24" O.C. 7.12. ROOF DRAIN PER SPECIFICATIONS & DETAIL 7.13. ROOF OVERFLOW DRAIN 7.14. PROVIDE CALLING PER SPECIFICATIONS 7.15. CLEAR WATER - REPELLENT COATING @ CMU WALL EXT. FACE	NOTE: ITEM IDENTIFIED ARE TYPICAL TO ALL LIKE ITEMS UNLESS NOTED OTHERWISE. 1. GENERAL REQUIREMENTS 2. NOT USED 3. CONCRETE 3.1. CONC. SLAB ON GRADE 3.2. CONC. TOPPING SLAB 3.3. CONC. DECK (S) 3.4. CONC. WALL 3.5. CONC. COLUMN 3.6. CONC. MAT FOUNDATION 3.7. CONC. FOOTING 3.8. CONC. STAIR 3.9. CONC. SIDEWALK PER CIVIL DRAWINGS 3.10. CONC. PLANTERS PER DSP DRAWINGS 3.11. COMPACT FILL DRAWINGS 4. MASONRY 4.1. CMU WALL & SPECIFICATIONS 4.2. NON-BEARING CMU FENCE WALL @ P.L. 5. METALS 5.1. STEEL COLUMN EXISTING WITH 2 HOUR INTUMESCENT PAINT 5.2. STEEL BEAM EXISTING 5.3. HSS POST 5.4. HSS BEAM 5.5. HSS STRINGER 5.6. STEEL CHANNEL STRINGER 5.7. HSS RAIL POST 5.8. HSS PIPE 5.9. WALL MOUNTED PIPE RAIL 5.10. 18 G.A. S.S. BACK-SPLASH FULL HEIGHT 5.11. 18 G.A. S.S. FLASHING @ WALL BASE 5.12. 18 G.A. SSB/FACIA COVER, PTD. TYP. 5.13. STL WINDOW BOX WITH CLEAR SEAL
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Notes 4

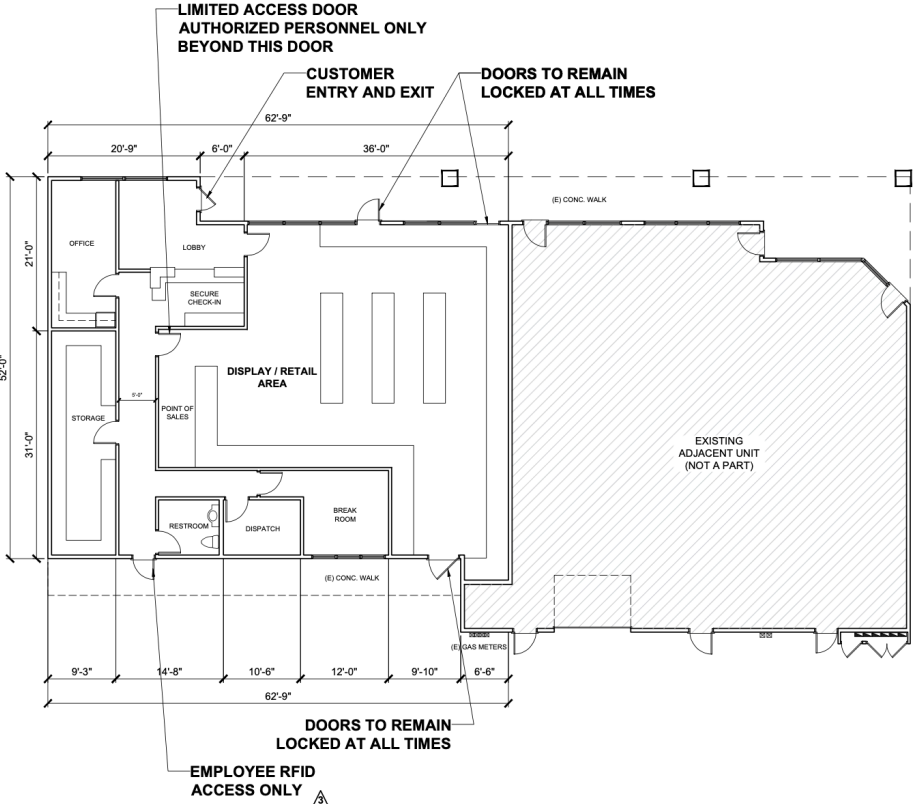
NO CHANGES IN EXTERIOR FACADE.

OPERATIONAL AREA	SQ FT
LOBBY / CHECK-IN	331.5
RETAIL SALES AREA	1493.2
STORAGE ROOM	286.8
OFFICE	194.3
EMPLOYEE BREAK ROOM	164
BATHROOM	93.4
HALLWAYS	169
DISPATCH	100.8
TOTAL	2,833

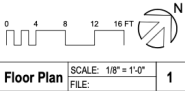
NOTES:
- PENETRATIONS OF FIRE-RESISTIVE WALLS, FLOOR-CEILINGS AND ROOF-CEILINGS SHALL BE PROTECTED AS REQUIRED IN (B) SECTION 714.
- ENTRANCES AND WINDOWS MUST BE ILLUMINATED DURING EVENING HOURS.
- FLOORS, WALLS, AND CEILINGS MUST BE OF A NON-ABSORBENT CLEANABLE MATERIAL AND FINISH.
- CAMERAS AND SURVEILLANCE SYSTEMS MUST MEET CITY REQUIREMENTS.
- EXITS AND EXIT ACCESS DOORS SHALL BE MARKED BY AN APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL. THE PATH OF EGRESS TRAVEL TO EXITS AND WITHIN EXITS SHALL BE MARKED BY READILY VISIBLE EXIT SIGNS TO CLEARLY INDICATE THE DIRECTION OF EGRESS TRAVEL. IN CASES WHERE THE EXIT OR THE PATH OF EGRESS TRAVEL IS NOT IMMEDIATELY VISIBLE TO THE OCCUPANTS, INTERVENING MEANS OF EGRESS DOORS WITHIN EXITS SHALL BE MARKED BY EXIT SIGNS. EXIT SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN AN EXIT ACCESS CORRIDOR OR EXIT PASSAGEWAY IS MORE THAN 10 FEET OR THE LISTED VIEWING DISTANCE FOR THE SIGN, WHICHEVER IS LESS, FROM THE NEAREST VISIBLE EXIT SIGN.
- SECURITY GATES, SECURED AUTOMATED VEHICLE GATES OR ENTRIES SHALL UTILIZE A COMBINATION OF A TOMBAL STROBESWITCH™, OR APPROVED EQUAL, AND AN APPROVED KNOX KEY ELECTRIC SWITCH WHEN REQUIRED BY THE FIRE CODE OFFICIAL. SECURED NON-AUTOMATED VEHICLE GATES OR ENTRIES SHALL UTILIZE AN APPROVED PADLOCK OR CHAIN (MAXIMUM LINK OR LOCK SHACKLE SIZE OF 1/4 INCH) WHEN REQUIRED BY THE FIRE CODE OFFICIAL.
- GATE ARMS SECURING PARKING LOTS AND PARKING STRUCTURES SHALL BE EQUIPPED WITH A FIRE DEPARTMENT APPROVED DUAL MEYED KNOX KEY ELECTRIC SWITCH WHEN ACTIVATED, THE ARM OR ARMS SHALL OPEN TO ALLOW FIRE AND LAW ENFORCEMENT ACCESS.
- APPROVED SECURITY GATES SHALL BE A MINIMUM OF 14 FEET IN UNOBSTRUCTED DRIVE WIDTH ON EACH SIDE WITH GATE IN OPEN POSITION.
- IN THE EVENT OF A POWER FAILURE, THE GATES SHALL BE DEFAULTED OR AUTOMATICALLY TRANSFERRED TO A FAIL SAFE MODE ALLOWING THE GATE TO BE PUSHED OPEN WITHOUT THE USE OF SPECIAL KNOWLEDGE OR ANY EQUIPMENT. IF A TWO-GATE SYSTEM IS USED, THE OVERRIDE SWITCH MUST OPEN BOTH GATES.
- IF THERE IS NO SENSING DEVICE THAT WILL AUTOMATICALLY OPEN THE GATES FOR EXITING, A FIRE DEPARTMENT APPROVED KNOX ELECTRICAL OVERRIDE SWITCH SHALL BE PLACED ON EACH SIDE OF THE GATE IN AN APPROVED LOCATION.
- A FINAL FIELD INSPECTION BY THE FIRE CODE OFFICIAL OR AN AUTHORIZED REPRESENTATIVE IS REQUIRED BEFORE ELECTRONICALLY CONTROLLED GATES MAY BECOME OPERATIVE. PRIOR TO FINAL INSPECTION, ELECTRONIC GATES SHALL REMAIN IN A LOCKED-OPEN POSITION.
- ADD NEW SUBSECTION 506.3, HEIGHT, TO READ AS FOLLOWS:
- THE NOMINAL HEIGHT OF KNOX LOCK BOX INSTALLATIONS SHALL BE 5 FEET ABOVE GRADE.

PROJECT INFORMATION:	
PROJECT ADDRESS	2146 NEWPORT BLVD
LOT AREA	24,000 SF
TOTAL BUILDING AREA	6,014 SF
AREA OF LICENSED PREMISE	2,833 SF
ZONING	C1
FAR	25.06%
LANDSCAPE AREA	2,939 SF
LANDSCAPE (%)	12.25 %

PARKING SUMMARY:	
STANDARD PARKING STALLS	24 STALLS
HC PARKING STALLS	2 STALLS
BICYCLE PARKING (CREDIT)	1 PARKING SPACE
TOTAL	27 TOTAL SPACES



THE ENVELOPE, OR SPACE CONDITIONING, LIGHTING, ELECTRICAL POWER DISTRIBUTION AND WATER HEATING SYSTEMS ARE NOT BEING ALTERED.



Floor Plan SCALE: 1/8" = 1'-0" FILE: 1

2146 Harbor Blvd,
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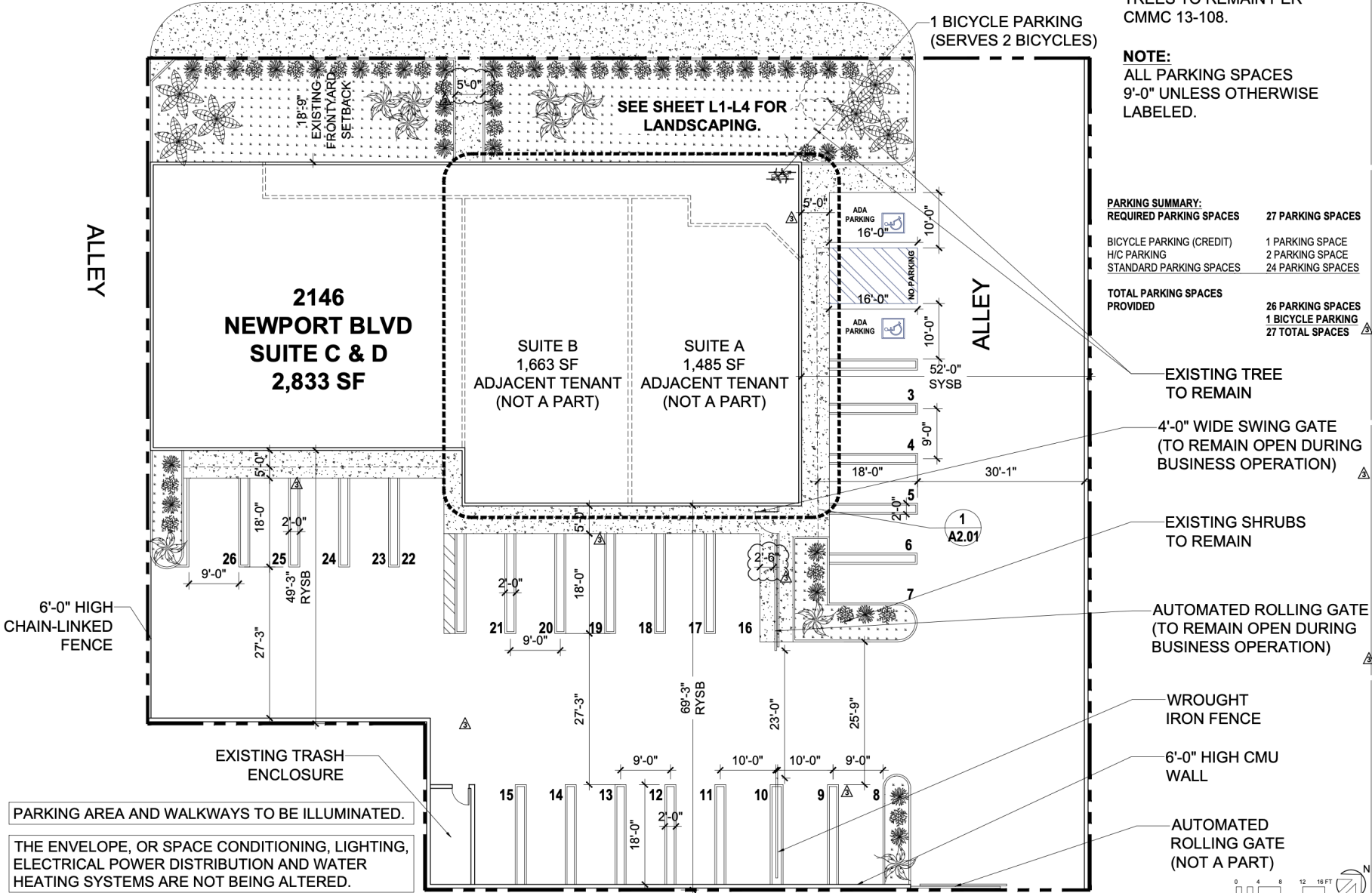
Revisions:		
No.	Issue	Date
1		
Project Number: 31020078		
Date:		
File: 5 January 2023		
Scale: Scale As Noted		
Sheet Title: Floor Plan		
Drawing Number: A2.01		

NEWPORT BLVD

2146
NEWPORT BLVD
SUITE C & D
2,833 SF

SUITE B
1,663 SF
ADJACENT TENANT
(NOT A PART)

SUITE A
1,485 SF
ADJACENT TENANT
(NOT A PART)

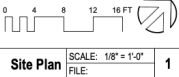


NOTE:
NEW LANDSCAPING TO BE PROVIDED. ALL MATURE TREES TO REMAIN PER CMMC 13-108.

NOTE:
ALL PARKING SPACES 9'-0" UNLESS OTHERWISE LABELED.

PARKING SUMMARY:	
REQUIRED PARKING SPACES	27 PARKING SPACES
BICYCLE PARKING (CREDIT)	1 PARKING SPACE
H/C PARKING	2 PARKING SPACE
STANDARD PARKING SPACES	24 PARKING SPACES
TOTAL PARKING SPACES PROVIDED	
26 PARKING SPACES	
1 BICYCLE PARKING	
27 TOTAL SPACES	

- EXISTING TREE TO REMAIN
- 4'-0" WIDE SWING GATE (TO REMAIN OPEN DURING BUSINESS OPERATION)
- EXISTING SHRUBS TO REMAIN
- AUTOMATED ROLLING GATE (TO REMAIN OPEN DURING BUSINESS OPERATION)
- WROUGHT IRON FENCE
- 6'-0" HIGH CMU WALL
- AUTOMATED ROLLING GATE (NOT A PART)



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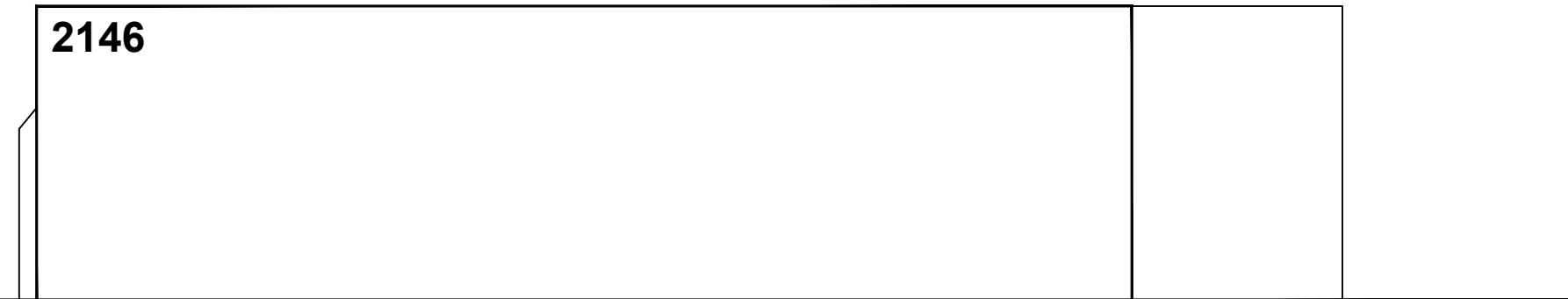


Revisions:		
No.	Issue	Date
1		

Project Number:	31020078
Date:	
File:	31 January 2023
Scale:	Scale As Noted
Sheet Title:	Site Plan
Drawing Number:	A1.01



NO CONSTRUCTION CHANGES IN EXTERIOR FACADE.



**EXTERIOR FACADE TO BE REHABILITATED ONLY.
EXTERIOR PAINT TO MATCH EXISTING.**

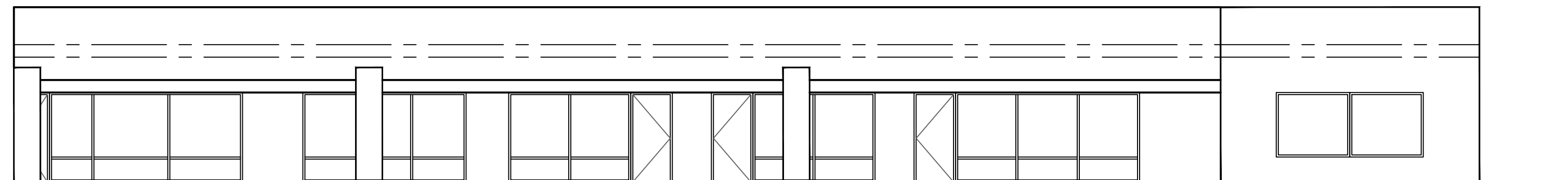
West Elevation

SCALE: 1/8" = 1'-0"
FILE:

4



NO CONSTRUCTION CHANGES IN EXTERIOR FACADE.



**EXTERIOR FACADE TO BE REHABILITATED ONLY.
EXTERIOR PAINT TO MATCH EXISTING.**

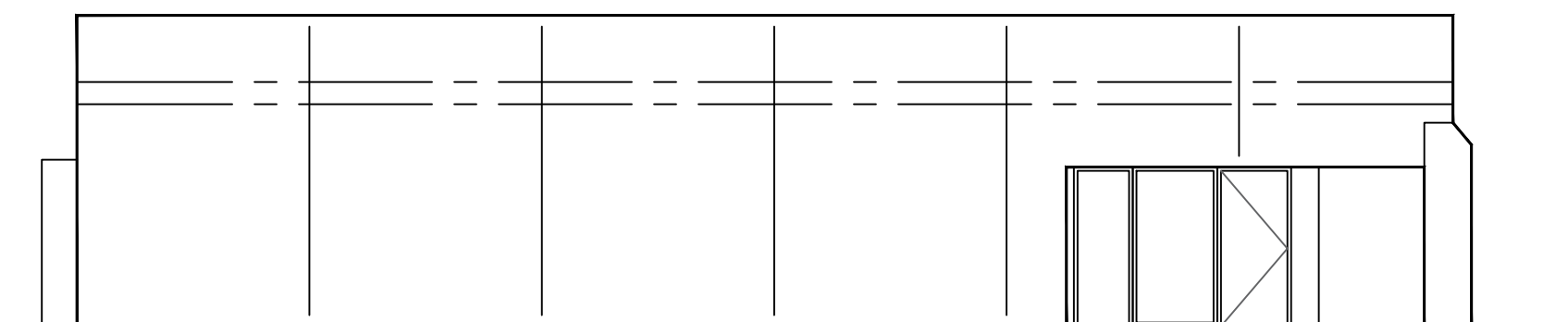
North Elevation

SCALE: 1/8" = 1'-0"
FILE:

3



NO CONSTRUCTION CHANGES IN EXTERIOR FACADE.



**EXTERIOR FACADE TO BE REHABILITATED ONLY.
EXTERIOR PAINT TO MATCH EXISTING.**

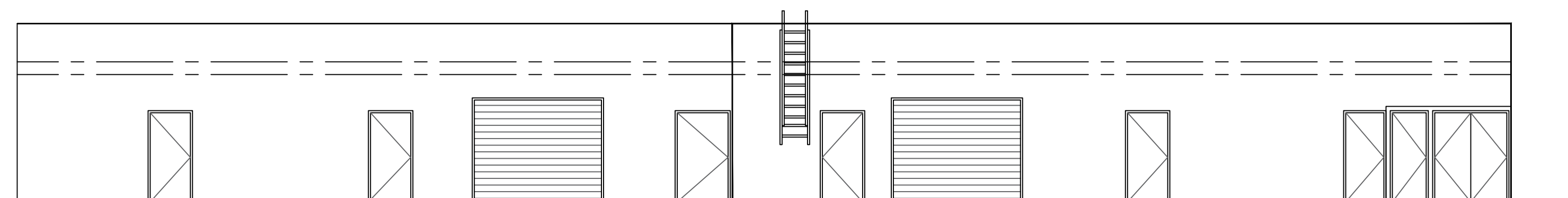
East Elevation

SCALE: 1/8" = 1'-0"
FILE:

2



NO CONSTRUCTION CHANGES IN EXTERIOR FACADE.



**EXTERIOR FACADE TO BE REHABILITATED ONLY.
EXTERIOR PAINT TO MATCH EXISTING.**

South Elevation

SCALE: 1/8" = 1'-0"
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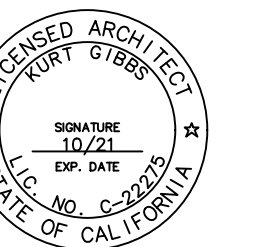
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Revisions:

[illegible]

Project Number:
31020078

Date:

File: 5 January 2023

Scale:	Scale As Noted
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Sheet Title:

Elevations

Drawing Number:

A3.01

HZ = Hydrozone		
Zone No.	15	Valve size
Flow rate in GPM	0.00	

TOTAL LANDSCAPE AREA: 2894 SF
WATER SUPPLY TYPE: Potable, MWDOC

IRRIGATION EQUIPMENT locations shown on this plan are approximate and schematic.
See architectural, mechanical, plumbing, and civil plans to verify placement on site.

IRRIGATION EQUIPMENT LEGEND		
SYMBOL	DESCRIPTION	PART NO
WM	DEDICATED LANDSCAPE IRRIGATION SUB-METER	1"
⊗	FEBCO BACKFLOW PREVENTER	MODEL 825Y
⊗	WILKINS PRESSURE REDUCING VALVE	600
⊗	HUNTER CONTROL ZONE VALVE KIT	PCZ-101
⊗	HUNTER RAIN SENSOR, CONDUIT MOUNT	SOLAR-SYNC
⊗	HUNTER I-CORE CONTROLLER	12C-800-M, eight station w/ x ICM-800 exp. module
⊗	HUNTER QUICK COUPLER - HOSE BIB	HQ3-RC
⊗	NIBCO GATE VALVE	SIZE PER LINE
—	SCHED. 40 PVC LATERAL LINE	3/4"
—M—	SCHED. 40 PVC MAIN LINE	

IRRIGATION VALVE LEGEND										
VALVE NO.	SYM.	DESCRIPTION	PART NO.	PRESSURE	GPM	APP. IN./HR.	QTY.	SPACING	SUBTOTAL	TOTAL GPM
1	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	331	16"	3.31	3.31
2	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	329	16"	3.29	3.29
3	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	310	16"	3.10	3.10
4	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	309	16"	3.09	3.09
5	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	317	16"	3.17	3.17
6	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	315	16"	3.15	3.15
7	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	254	16"	2.54	2.54
8	---	HUNTER HDL DRIP TUBING	HDL-06-12	40	0.01	0.72	125	16"	1.25	1.25

Weather based irrigation sensor
Verify location with owner

6'-0" HIGH
CHAIN-LINKED
FENCE

IRRIGATION SCHEDULING:

WATER DURING PLANT ESTABLISHMENT:
SHRUB AND GROUND COVER SYSTEMS:
10 MIN., 1X PER DAY, FOR FIRST 10 DAYS

SPRING WATERING AFTER PLANT ESTABLISHMENT:
TREE, SHRUB AND GROUND COVER SYSTEMS:
6 MIN., 3X PER WEEK

SUMMER WATERING AFTER PLANT ESTABLISHMENT:
SHRUB AND GROUND COVER SYSTEMS:
10 MIN., 3X PER WEEK

FALL WATERING AFTER PLANT ESTABLISHMENT:
TREE, SHRUB, AND GROUND COVER SYSTEMS:
6 MIN., 3X PER WEEK

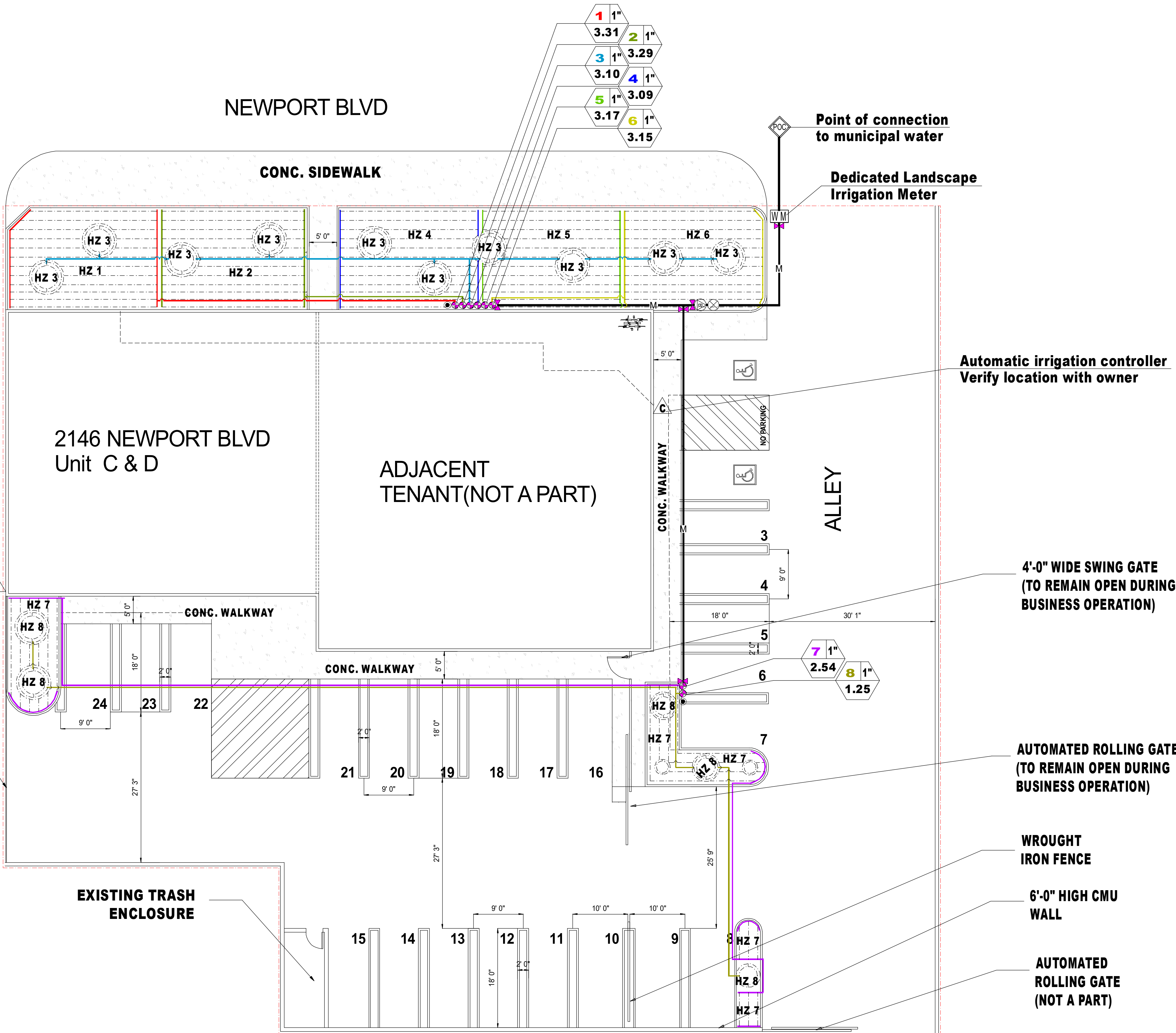
WINTER WATERING AFTER PLANT ESTABLISHMENT:
SHRUB AND GROUND COVER SYSTEMS:
10 MIN., 2X PER WEEK

ALL IRRIGATION SYSTEMS TO BE OPERATED IN
EARLY MORNING OR IN THE EVENING.

- 1) AUTOMATIC CONTROLLERS SHALL BE SET TO WATER BETWEEN 5 PM AND 10 AM TO REDUCE EVAPORATION.
- 2) A MINIMUM OF PVC SCHEDULE 40 OR EQUIVALENT SHALL BE USED FOR MAIN LINES AND UNDER DRIVEWAY AREAS, AND A MINIMUM OF PVC SCHEDULE 200 OR EQUIVALENT SHALL BE USED FOR LATERAL LINES.
- 3) THE IRRIGATION SYSTEM MUST COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS.
- 4) CONTRACTOR SHALL PROVIDE THE OWNER WITH A SET OF "AS-BUILT" PLANS.
- 5) IT IS THE INTENT OF THE DRAWINGS TO SHOW A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM. THE SYSTEM WAS DESIGNED BASED ON LANDSCAPE AND GRADING DRAWING IN EFFECT AT THIS TIME. ANY DISCREPANCIES, OMISSIONS, ERRORS, ETC., OR ON-SITE CHANGES DOES NOT RELIEVE THE IRRIGATION INSTALLER OF HIS RESPONSIBILITY TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- 6) IRRIGATION LINES, VALVES AND OTHER EQUIPMENT SHOWN IN PAVED OR PUBLIC AREAS ARE SCHEMATIC AND ARE FOR DIAGRAMATIC PURPOSES ONLY. LINES, VALVES, AND OTHER EQUIPMENT SHOWN IN PAVED OR PUBLIC AREAS ARE INTENDED TO BE LOCATED IN ADJACENT PLANTING AREAS.
- 7) ALL LINES TRAVERSING HARDSCAPE TO BE PLACED IN CONDUIT UNDER PAVING.

NOTES:

REFER TO CIVIL PLANS FOR LID AND DRAINAGE INFORMATION
MWLO CALCULATIONS ARE LOCATED ON SHEET L3



Pressure-regulating devices are required if water pressure is below or exceeds the recommended pressure of the specified irrigation devices.

Check valves or anti-drain valves are required on all sprinkler heads where low-point drainage could occur.

Recirculating water systems shall be used for water features.

Locks shall be installed on all publicly accessible exterior faucets and hose bibs.

A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

An irrigation audit report shall be completed at the time of final inspection.

I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans.

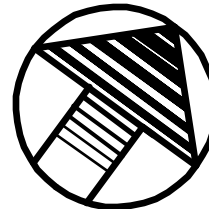
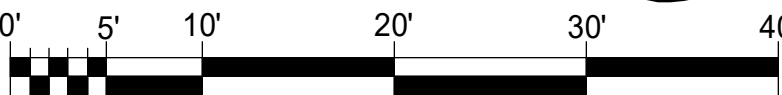
A Certificate of Completion shall be filled out and certified by either the signer of the landscape plans, the signer of the irrigation plans, or the licensed landscape contractor for the project.

For projects that include landscape work, Landscape Certification shall be completed prior to final inspection approval. (State Assembly Bill No. 1881, 5.304.1)

I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package.



Signed:



Harmony Gardens, Inc.
Paul E. Gagne, RLA #6223
6620 Murieta Avenue
Van Nuys, CA 91405
(818) 505-9783
Paul@Harmonygardens.net

REVISION LOG:

SUBMITTAL:
NO: DATE:

PROJECT ADDRESS:
2146 Newport Blvd
Units C & D
Costa Mesa, CA 92627

OWNER ADDRESS:
Norman Yousif
2146 Newport Blvd.
Units C & D
Costa Mesa, CA 92627

IRRIGATION
PLAN

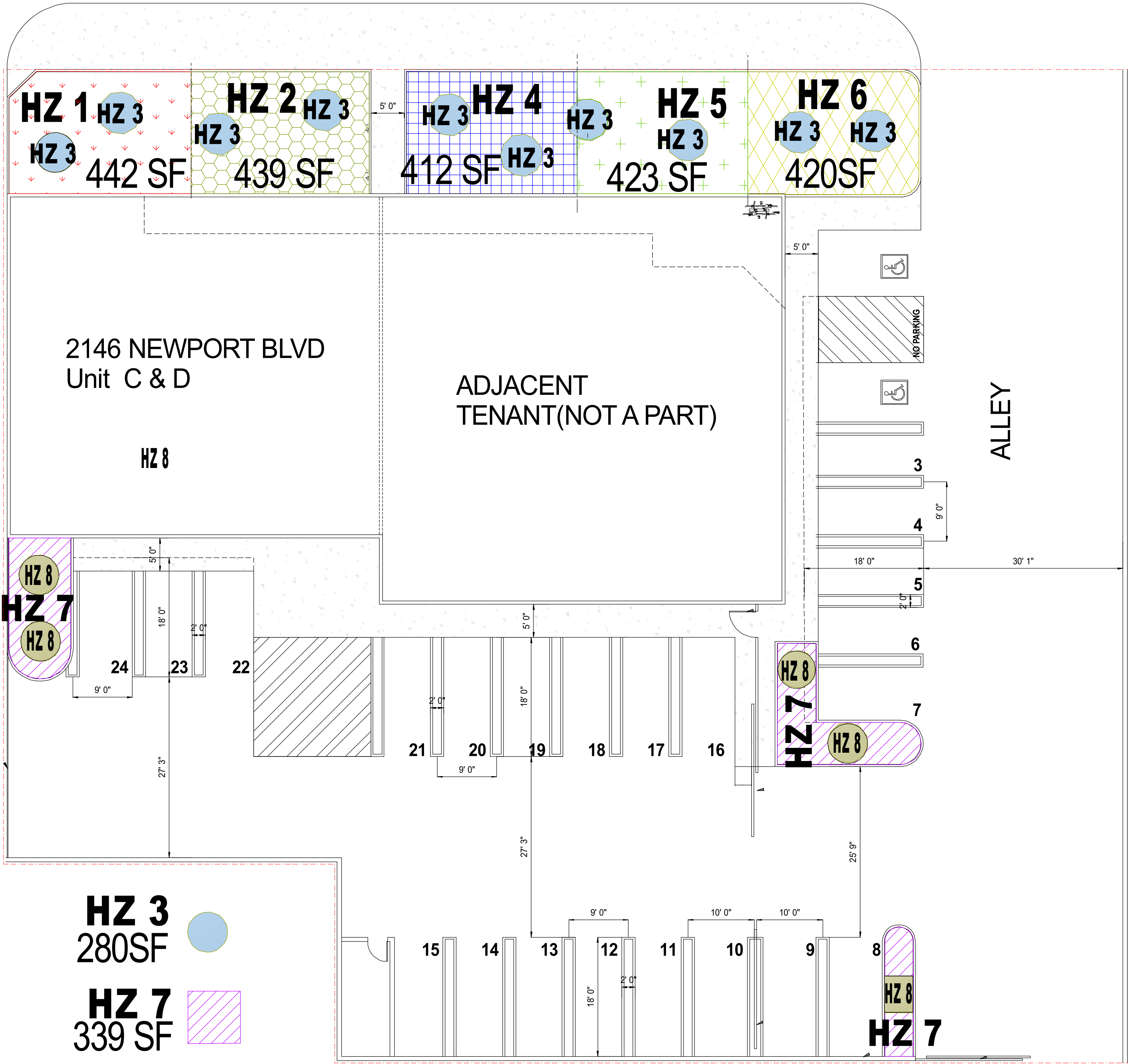
Date: 10/17/2022
Scale: 1/10" = 1'

Drawn By: PG

Sheet No.
L2
2 of 4

Water Efficient Landscape Worksheet									
Fill in all colored cells.									
Select your city:		Costa Mesa			Project name or address:		2146 Newport Blvd		
Reference Evapotranspiration (ET0):		45.6			Landscape Area Sector Type:		Non-Residential		
	Hydrozone #/Planting Description	Location	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq-ft)	ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Area									
1	Low water use plant	Front	0.2	Drip emitter	0.8	0.25	442	109	3,086
2	Low water use plant	Front	0.2	Drip emitter	0.8	0.25	439	108	3,065
3	Medium water use plant	Front	0.5	Drip emitter	0.8	0.62	280	173	4,887
4	Low water use plant	Front	0.2	Drip emitter	0.8	0.25	412	102	2,876
5	Low water use plant	Front	0.2	Drip emitter	0.8	0.25	423	104	2,953
6	Low water use plant	Front	0.2	Drip emitter	0.8	0.25	420	104	2,932
7	Low water use plant	Back	0.2	Drip emitter	0.8	0.25	339	84	2,367
8	Medium water use plant	Back	0.5	Drip emitter	0.8	0.62	136	84	2,374
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
add dropdown self decription location						Average	Total	Total	
						0.30	2,891	868	
						Average ETAF for Regular Landscape Areas:		In Compliance	
Special Landscape Area									
SLA-1	Select	Select							
SLA-2	---	---							
SLA-3	---	---							
SLA-4	---	---							
SLA-5	---	---							
						Totals	-	-	
						Total Landscape Area		2,891	
						Sitewide ETAF		0.30	
						ETWU Total		24,539	
						Maximum Allowed Water Allowance (MAWA)		36,783	

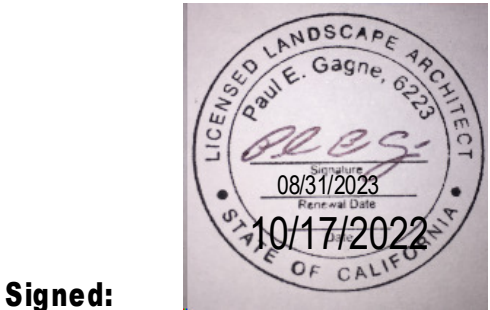
ALLEY



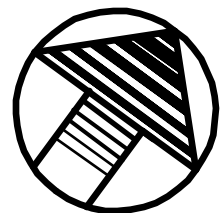
HYDROZONE MAP

NOTE: Refer to LID plans for LID and drainage systems

I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package.



Signed:



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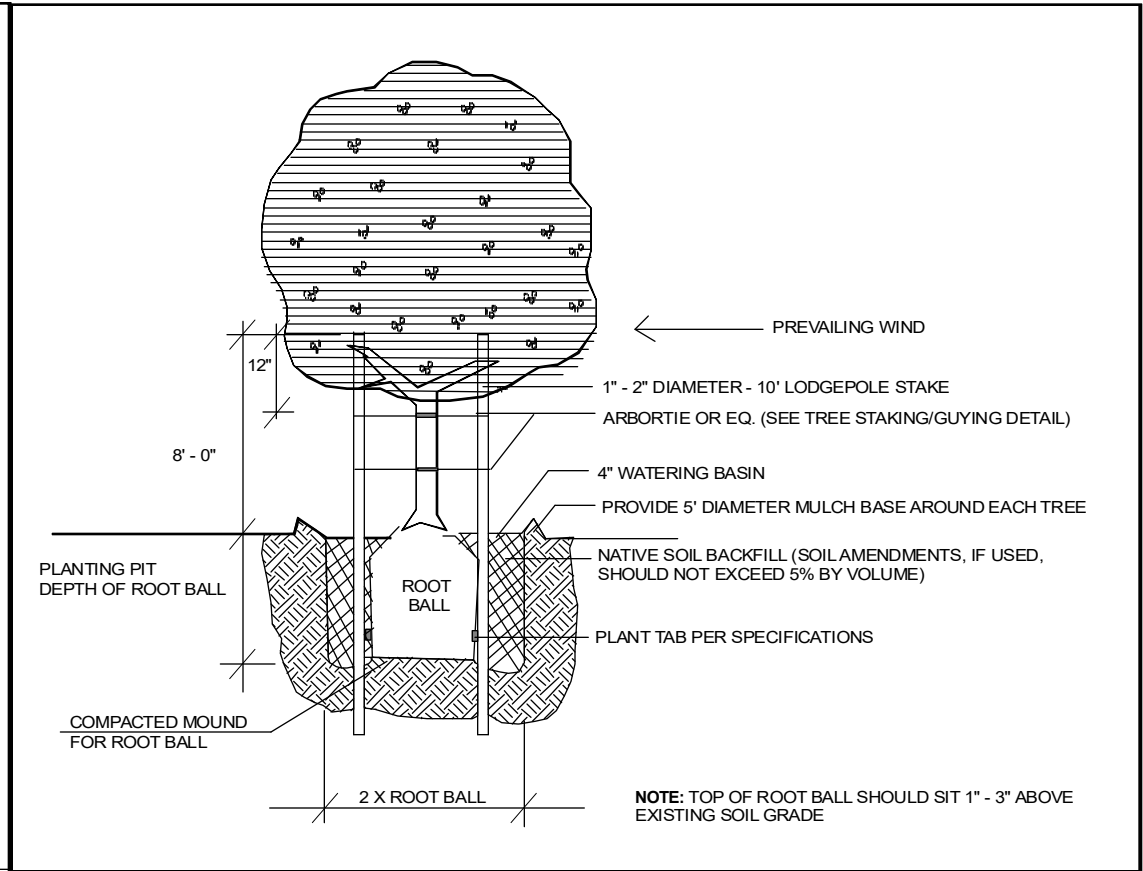
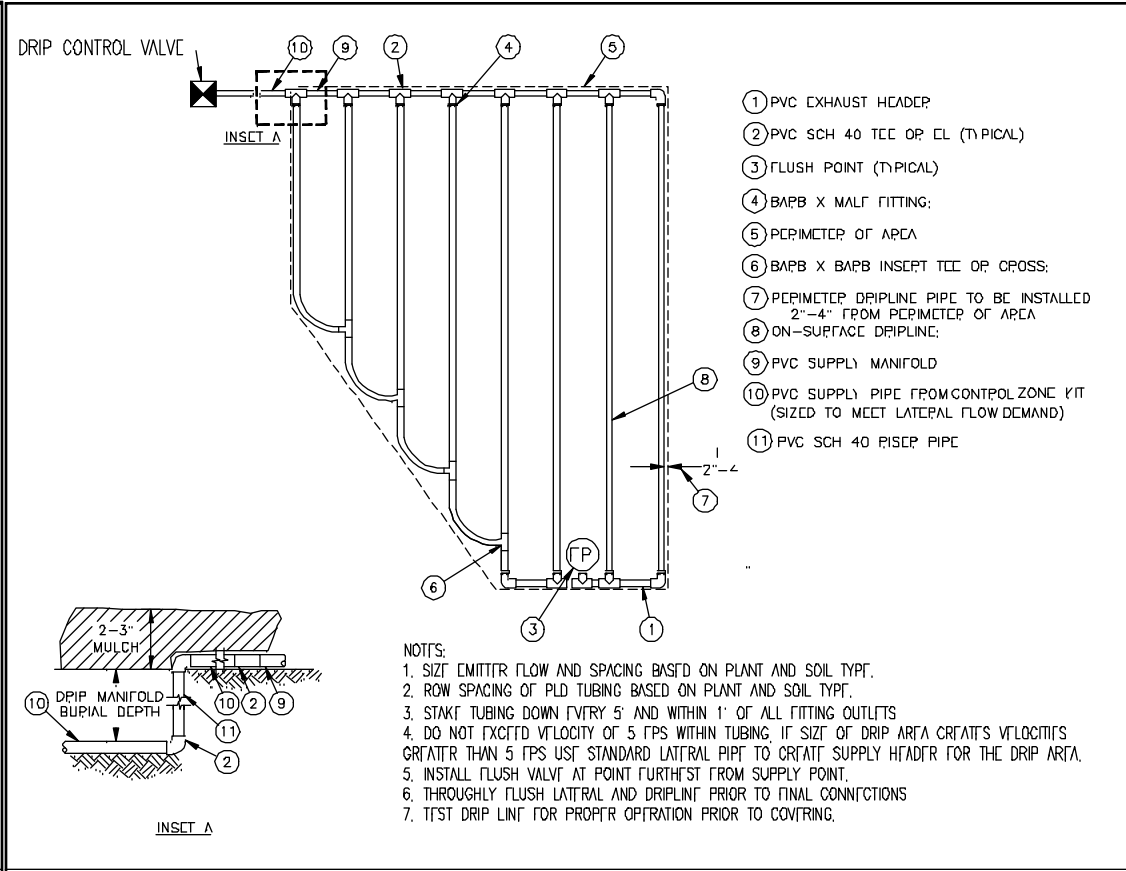
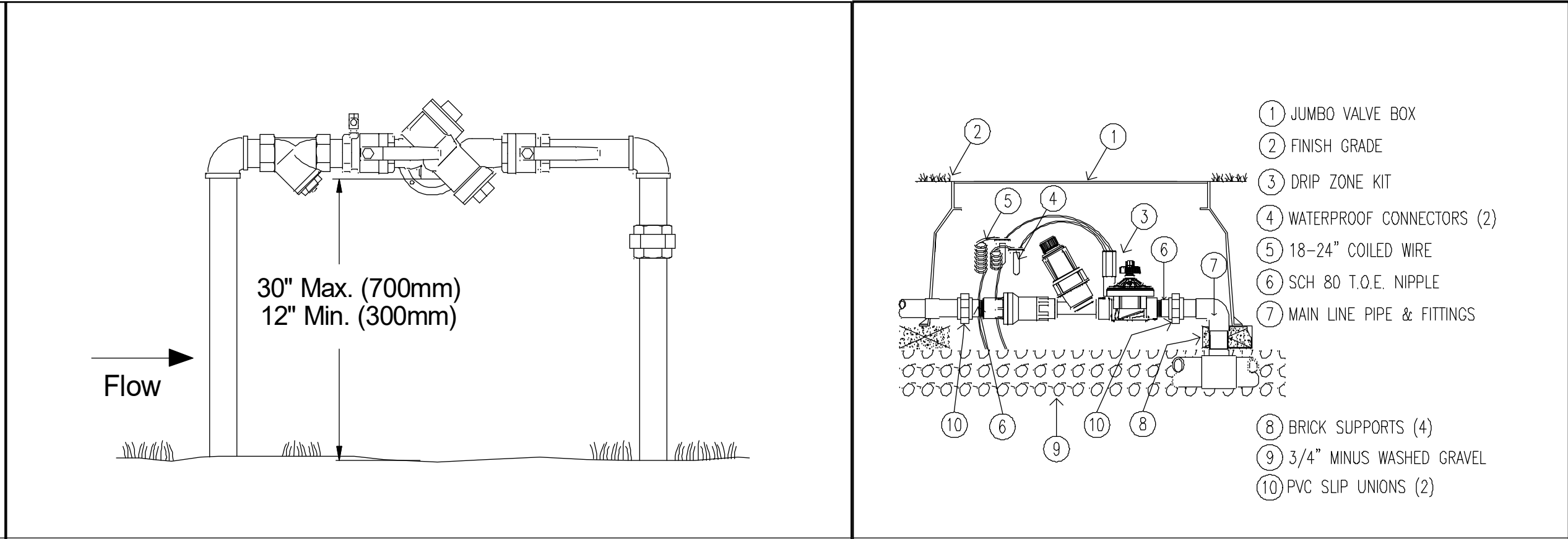
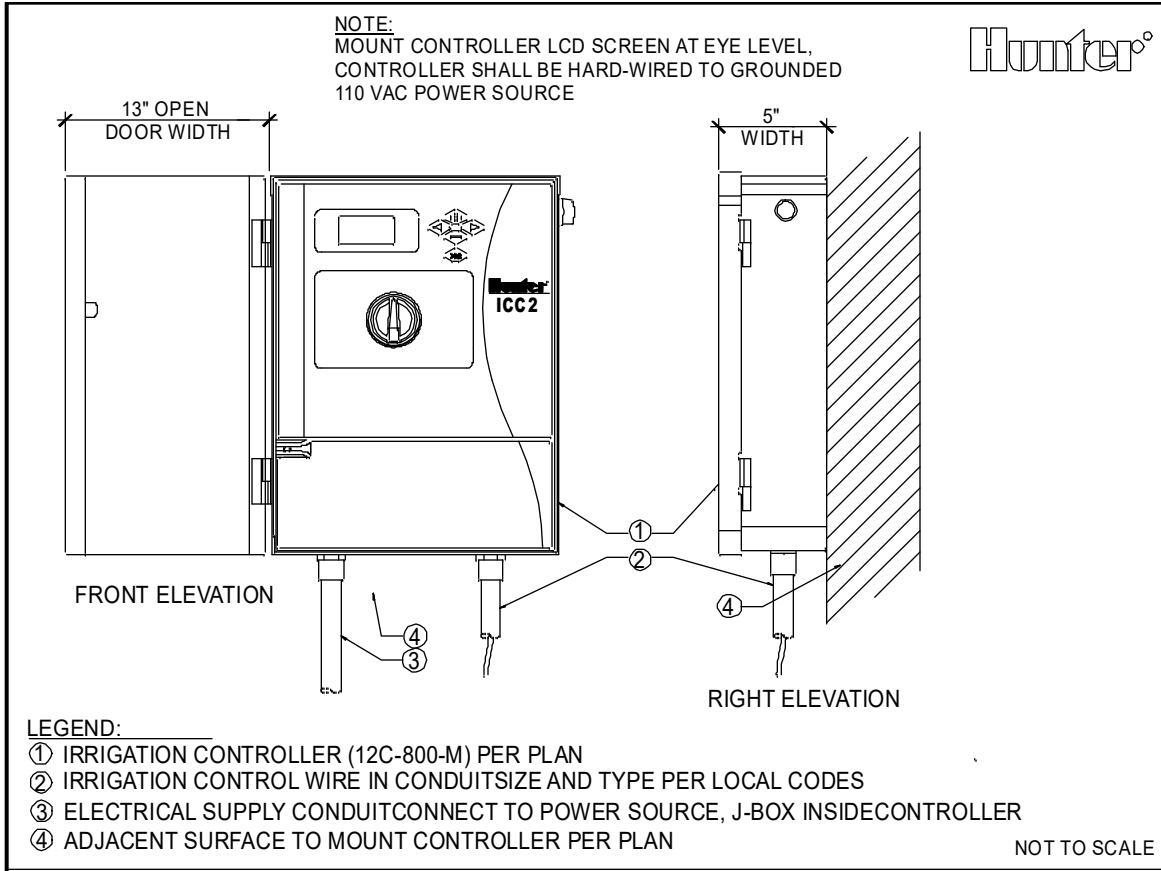
OWNER ADDRESS:
Norman Yousif
2146 Newport Blvd.
Units C & D
Costa Mesa, CA 92627

**HYDROZONES
AND MWEL
CALCULATIONS**

Date: 10/17/2022
Scale: 1/10" = 1'

Drawn By: PG

Sheet No.
L3
3 of 4



IRRIGATION CONTROLLER (12C-800-M)

PLANTING SPECIFICATIONS

Scope

A. The Contractor shall furnish and install plant materials as indicated on the drawings and as specified. Planting shall be performed by personnel familiar with planting procedures and under supervision of a qualified planting foreman adjudged by the Landscaping Architect to be capable of performing the same and scale of work contemplated.

B. General Contractor of Owner shall supply to Landscaping Contractor a grade condition of within 2% of 1 foot of finish grade.

Inspection

A. Inspections will be made by the Owner or Owner's Representative. Contractor shall be on the site when inspections are made. Request inspection by telephone at least 2 working days in advance of date desired. Contractor will not be permitted to initiate the succeeding steps of work until he has received approval to proceed by the inspector.

B. Contractor shall first out from the Owner or Owner's Representative if a soils test has been made and shall not begin work on the site until the results of such tests are known unless told otherwise by Owner. Contractor shall obtain soils test and send report to Owner or Owner's Representative if no such test exists and pay all costs for such reports. Soil amendments and general backfill mixes listed below are for bid purposes only. Contractor will be responsible for providing mixes as specified based on the results of soil tests.

C. Inspection is required for the following:

1. When trees and other plant material are spotted for planting, but before planting occurs.
2. When planting and all other specified work has been completed.

MATERIALS

A. Topsoil: Existing soil on the site shall be used as topsoil for planting purposes insofar as possible, but shall be free of debris, oil, weeds, plaster, concrete, gasoline, paint, solvents, or other foreign matter. Contaminated soil shall be removed and replaced with acceptable existing soil or imported soil.

B. Imported Topsoil

1. Imported topsoil shall be fertile, friable, clean, sanitary, free of weeds, rocks, gravel, debris and other deleterious matter. Soil shall contain sufficient quantities of available nitrogen, phosphorus, potassium, calcium, and magnesium to support normal plant growth.
2. Topsoil shall be subject to inspection at the source from which it is obtained before delivery, but such approval shall not impair the right of inspection and rejection at the site during delivery and progress of work. Rejected topsoil shall be removed immediately from the site.
3. Furnish the Owner or Owner's Representative with the following information 30 days prior to the importation of topsoil:
 - a. Specific location of topsoil source.
 - b. Contractor shall submit topsoil to soil testing Laboratory for conformance testing. Contractor shall have report sent to Owner or Owner's Representative and shall pay all costs.
 - c. Contractor shall amend imported topsoil according to soil testing specifications.
4. Soil Amendments: (For bid purposes only) All planting areas shall be prepared by incorporating the following amendments:
 - a. Amounts per 1,000 square feet: 100 lbs. of Geo-Power Plus 100 lbs. of Gypsum 3 cubic yards of nitrified shavings or Organic Alternative.
 - b. 2 cubic yards of Organic (no synthetic) Compost
 - c. Backfill
5. Backfill shall be the following: (For bid purposes only):
 - a. 5 parts by volume site soil
 - b. 4 parts by volume nitrified organic amendment
 - c. 5 lbs. Geo-Power Plus per cubic yard of mix
6. Backfill for Succulents, Cacti and other drought tolerant plants shall be the following:
 - a. 2 parts planter mix
 - b. 8 parts volcanic rock
 - c. 100 lbs. washed sands lbs. Geo-Power3 Backfill for Palms shall be the following: 100% coarse sand for at grade planting
7. On-site Planter mix shall be the following:
 - a. 33% Peat moss
 - b. 33% Vermiculite (coarse grade)
 - c. 33% Sand plus nutrients and minerals (triple super phosphate, potassium sulfate, urea/ureaformaldehyde, lime, gypsum and iron sulfate).

Contractor shall submit samples of the mix to soil testing laboratory for conformance testing. In addition, small amounts of the components (1 quart each bark and sand, 1 cup of each of other ingredients) should be delivered for lab to mix to specifications and compare. Contractor shall have report sent to Owner or Owner's Representative and shall pay all costs.

1. Quality and size of all plants shall conform to the California Standard Grading Code of Nursery Stock and shall be No. 1 grade. Plants shall be vigorous, of normal growth, free from disease, insects, insect eggs and larvae. All plants shall be equal or exceed in size to those specified in the plant list and shall be protected from sun and wind drying while being shipped and prior to planting.

2. Container stock shall have grown in containers for at least one year, but not over two years. Samples shall be shown to prove that no root bound conditions prevail. No container plants that have cracked or broken balls or earth when taken from containers shall be planted, except on special approval of the Owner or Owner's Representative.

3. Plants shall have been grown under climatic conditions comparable to those of the project site, unless otherwise specifically approved by the Owner or Owner's Representative.

4. Nomenclature conforms to customary usage. For clarification, the term "multi-trunk" defines a plant having a minimum of three trunks and a maximum of five trunks of nearly equal diameter.

5. Soil to be healthy and provided with good drainage and at least 12 months old. All soil to be protected from sun and wind drying while being shipped and prior to planting.

6. Inspection: Plants shall be subject to inspection and approval by the Owner or Owner's Representative at the place of growth or upon delivery, for quality, size and variety. Such approval shall not impair the right of inspection and rejection at the site, during progress of work, for size and condition of ball or roots, latent defects or injuries. Rejected plants shall be removed immediately from the site.

7. Protection: Plants shall be protected at all times from sun and drying wind, and shall be kept watered.

8. Identify each species and variety with a waterproof label.

9. Protection: Plants shall be protected at all times from sun and drying wind, and shall be kept watered.

10. Nursery Order Placement: Place plant material order sufficiently in advance of planting to availability of plant materials and sizes specified.

11. Names of Plants and Standards: All scaled dimensions shall conform to the standards as defined by the Association of Nurserymen.

12. Substitutions will not be permitted without proof of the unavailability of any specified material. In the event it is impossible to provide the quantities or varieties of plants specified, the Owner or Owner's Representative must be given notice in writing to submit a revised plant list. When substitutions are made, all requirements of the plant list shall be met, and in no case shall substitutions be made without approval of the Owner or Owner's Representative. The cost of substitute plants shall not exceed the original plants, except by the written approval of the Owner or Owner's Representative. Contractor may supply larger plants than those specified in the plant list at no additional cost, in which case, the root systems shall be proportional to the size of the component parts of the plants.

13. Verification of dimensions and quantities: All scaled dimensions are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner or Owner's Representative of any discrepancy between the drawings and/or specifications and actual conditions. No work shall be performed in any area where there is a discrepancy until Owner or Owner's Representative has given approval of it.

D. Tree Ties: Corded rubber ties as approved by Owner or Owner's Representative.

E. Tree Stakes: Tree stakes shall be black painted 1 1/2" Schedule 40 steel pipe (actual dimension) or as shown on detail. Wood bark mulch: Use 1/2" to 3/4" diameter wood bark. If not available in bulk quantity use bagged wood bark.

EXECUTION

Installation

A. Commencement of Work

1. The irrigation system shall have been installed and approved prior to soil preparation.
2. Within five days after notification by the Owner or Owner's Representative conduct operations continually to completion, unless weather conditions are unfavorable. All work shall conform to high standards of practice within the trade.
3. Site clearance: Clean up and remove from the planting areas weeds and grasses, including roots, and any minor accumulated debris and rubbish before commencing work. Existence of major amounts of construction debris shall be called to the attention of the General Contractor or Owner for removal.
4. Storage: Secure permission to store plants of the project site, and insure that they are protected from damage by sun, rain, wind and construction work.
5. Weed Control
6. Landscaping areas to receive an application of Surflan 75W and Devlinol following manufacturer's instructions for rate, method and sequence with planting.
7. Application is to be made by hand-applied granules.
8. Apply 1/2" to 1" water within two or three hours after applying this combination. This will incorporate the herbicides into the soil surface to control the susceptible weeds.

E. Equipment:

1. Add the recommended rate of Surflan 75W and Devlinol to the spray tank during the filling operation. Apply in enough water to assure adequate coverage, 50 to 250 gallons per acre.
2. Use any properly calibrated low-pressure boom-type herbicide sprayer with 50-mesh or coarser screens in strainers, nozzles and suction units. Spray equipment shall provide vigorous by-pass agitation during application.
3. Spray equipment shall be calibrated before use and checked frequently during application to insure a uniform spray pattern.

F. Caution:

1. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes and clothing. In case of contact, flush with water. Do not contaminate food.
2. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes.

G. Soil Preparation:

1. No soil preparation work shall occur when moisture content is so great that excessive compaction will occur, not when it is so dry that dust will form in the air, or that clods will not break readily. Apply water if necessary to provide ideal moisture content for filling and planting.
2. Prior to placing conditioners and fertilizer, aerify all planting areas, except slopes exceeding 2:1 to a depth of 12" below grade.
3. Grade all areas to be amended and lower, or fill areas not to grade.
4. Incorporate soil amendments into existing soil by means of a Rototiller to a depth of 6" using the soil amendments in paragraph 2.01C, thoroughly.

F. Planting

1. Planting
- a. Position plants as indicated in drawings. Secure city approval of plant locations if required by local authority, or call Owner or Owner's Representative prior to planting for inspection. Before excavating pits, make necessary adjustments if indicated. The irrigation system shall be operable and tested prior to any planting.
- b. Excavate pits with vertical sides for all plants. If hardpan or compacted soil is encountered, use a soil auger, digging bar, or posthole digger to loosen soil and remove drainage. Pits shall be twice the diameter and at a depth equal to the container or rootball. Dig 3-6 inches deeper around the edges of the holes bottom to create a plateau of undisturbed soil to support plant at proper depth. Where drainage is a problem, plant so the upper half of the root ball is above grade and add a ring of soil around root ball that gradually tapers down to the natural grade.
- c. Remove plants from container and inspect root ball. Cracks, matted, and knotted roots on outer surface should be trimmed away.
- d. Refill holes with backfill mixture about halfway up the rootball. Soil amendments, if used, should generally not exceed 5% by volume. Tamp mixture around root ball. Water sufficiently to thoroughly settle backfill. Allow water to drain from both sides to remaining soil. Tamp firmly and water again to settle. Make necessary water plant immediately. The top of the root ball should sit 1 to 3 inches above soil grade.
- e. Once a tree has been planted and thoroughly watered to settle soil, exposed soil to be covered with 2 to 3 in. wood mulch. Keep mulch 3 to 4 in. from the trunk.
- f. After planting has been completed, double stake all trees up to and including 2 1/2" boxes, as follows:
 1. On-grade trees: place stake in ground and drive stake one foot into solid ground. Plant trees as close to stake as possible without crowding roots. Fasten tree to stake in at least two places (preferably 6" below top of stake and 3 feet below first top using corded rubber ties). The ties loosely to permit crown to move to 6 to 8 in. in the wind. Stakes shall be black painted 1 1/2" steel pipe (actual dimension), not less than 8 feet in length. Stakes should be placed on right angles to prevailing winds, install 2' below finish grade.
 2. Finish grade all planting areas to a smooth and even condition making certain that no water pockets or irregularities remain. Remove and dispose of all foreign materials, clods and rocks over one and one-half inches in diameter. Final grade shall be one inch below existing walkways, sloping to drain to adjacent cement or asphalt surfaces, drain swale or catch basins. Surface drainage shall flow away from all building foundations.
- g. Groundcover shall be planted as specified in irregular configurations. After groundcover has been planted, water thoroughly.
- h. Wood Bark Mulch: Apply a minimum of 2" layer in all shrub areas without groundcover planting. Wood bark not be applied to groundcover areas.
- i. Clean Up
1. During the course of the work, remove surplus materials from the site and leave premises in a neat and clean condition.
2. Clean up and remove all remaining debris and surplus materials before leaving the premises neat and clean.
3. Remove all tags, labels, nursery stakes and ties from all plants.

MAINTENANCE

A. All work indicated on the drawings or herein specified has been completed, inspected and approved by the Owner or Owner's Representative, maintain all planted areas for a period of 90 days.

B. During the maintenance period specified above, all plants and planted areas shall be kept well watered at all times, weeds and grass shall be removed and disposed of, basins and depressions shall be maintained and cultivated and kept well formed around trees and shrubs; the water system will be maintained and repaired and the entire project shall be so cared for that a neat and clean condition will be presented at all times.

C. The Contractor shall maintain a sufficient number of men and adequate equipment to perform the maintenance work herein specified from the time of planting until completion of the maintenance period and acceptance by the Owner.

GUARANTEE

A. Within 15 days after notification by Owner, remove and replace all plant materials which for any reason fail to meet these requirements of the guarantee. All plant materials shall be the same as originally specified, as indicated in planting plan.

B. All trees, shrubs and plant material 15 gallon size and smaller shall be guaranteed for a period of 3 months, larger than 15 gallon shall be guaranteed for a period of one year. This includes replacement of material, which has been correctly maintained after final acceptance. This does not include replacement of material improperly maintained after final acceptance.

FBCO MODEL 825Y - REDUCED PRESSURE ASSEMBLY

IRIGATION SPECIFICATIONS

GENERAL

Scope

A. Includes, furnishing all labor, materials and equipment required to provide and install the irrigation system specified herein and required to complete the work per the plans. Contractor shall test water pressure to verify adequacy and inform Owner or Owner's Representative prior to irrigation system installation.

B. Scope includes backfilling and recompacting soil equal to adjacent undisturbed soil.

C. Owner shall provide a rough grade within 2% of 1 foot of finish grade prior to commencement of irrigation work.

D. The Irrigation Contractor shall be familiar with site conditions and shall coordinate work with General Contractor and other subcontractors for locating pipe sleeves through walls, under paving and coordinate with mechanical and electrical subcontractors for water and electrical supplies.

E. Water supply provided for by Owner.

F. Manual shut-off valves shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine maintenance.

Requirements of regulatory agencies

A. Comply with all local and state codes, ordinances, safety orders and regulations of all legally constituted authorities having jurisdiction over this work.

B. Obtain and pay for all plumbing permits and all inspections required by authorities stated above.

C. Notify the Landscaping Architect in the event any equipment or methods indicated on the drawings or in specifications conflicts with local codes, prior to installation. In the event this notification is not performed, the Contractor must assume full responsibility for revisions necessary.

Submittals

A. As-built Record Drawings:

1. The contractor shall maintain a complete and accurate set of "as-built" drawings. These drawings shall be kept up with the progress of the work. The Owner shall furnish a set of drawings on which to record "as-built" conditions.
2. The Contractor shall indicate clearly and correctly work installed differently from the shown on the contract drawings. By dimensioning from two permanent points of reference, show connection to existing water lines, gate valves, pressure supply pipe, control valves and control wiring.
3. Operations and Maintenance Manuals:
 - a. Prepare and deliver to the Owner within ten days by calendar prior to completion of construction, all required and necessary descriptive material in complete detail and sufficient quantity, property one bound copy of the operation and maintenance manuals. The manual shall describe the material installed and shall be in sufficient detail to permit operating personnel to understand, operate and maintain all equipment.
 - b. Spare parts lists and related manufacturer information shall be included for each equipment item installed. Each complete, bound manual shall include the following information:
 - i. Index sheet listing Contractor's address and telephone number.
 - ii. Duration of guarantee period.
 - iii. List of equipment with name and addresses of local Manufacturer Representative.
 - iv. Complete operating and maintenance instructions on all major equipment.
4. In addition to the above maintenance manuals, provide the maintenance personnel and Owner with instructions for major equipment.

Drawings

A. For purposes of legibility, sprinkler lines are essentially diagrammatic. Although size and location of sprinkler equipment are drawn to scale wherever possible, make use of all data in all of the contract documents and verify this information at the construction site. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features.

B. Irrigation lines shown adjacent to planter shall be located in planters. Wherever possible, locate lines in same trench.

Materials to be furnished

Prior to final inspection the Contractor shall furnish the following materials to the Owner:

1. Two wrenches for disassembling and adjusting each type of sprinkler head.
2. Two keys for automatic controller.

Materials and Equipment

A. All irrigation equipment shall be new and unused prior to installation, shall conform to the Irrigation Plan and Legend, and as specified. No substitution shall be allowed without prior written approval of Owner.

B. Equipment or materials installed or furnished without the prior approval of the Owner or Owner's Representative may be rejected and such materials removed from the site at no expense to the Owner.

Plastic Pipe and Fittings

A. All fittings shall be injection molded Schedule 80 of an approved P.V.C. fitting compound featuring high tensile strength, high chemical resistance, and high impact strength. In terms of the current ASTM Standard D-1784-69, the compound must meet the requirements described in cell classification 13454B. Where inlets are required in plastic fittings, these shall be injection molded also. All tees and elbows shall be side gaged.

B. All threaded pipe shall be standard schedule 40 or 80 black iron pipe.

C. All pipe and fittings shall be as manufactured by Lasco Co., Pacific Western or S.M. or approved equal.

D. Solvent weld pipe shall be injection molded P.V.C. virgin pipe compound featuring high tensile strength, high chemical resistance, and high impact strength. In terms of the current ASTM Standard D-1784, or D-2241, this compound shall meet the requirements of cell classification 12454B for pipe. This compound must have a 2,000 p.s.i. hydrostatic design stress rating.

E. All supply lines up to 2" diameter shall be Schedule 40 P.V.C. P.V.C. lines shall be manufactured by GSR, Johns Manville, Pacific Western Cleanse or approved equal.

Automatic Controller, Electrical

A. Automatic controller shall be fully automatic in operation and shall be capable of operating the number of stations of remote control valves as noted on the drawing.

B. Controller shall be wall mounted type (see plan), with a heavy duty waterproof case and locking, hinged cover.

C. Controller compounds shall be fused and chassis grounded.

D. All electrical wiring shall be in accordance with the National Electric Code, and shall be installed in a raceway, conduit, or other approved means.

E. The exact location of the controller shall be determined as noted on drawings and verified with Owner. The Irrigation Contractor will be responsible for coordinating the electrical work with the Landscaping Architect. In the event this notification is not performed, the Contractor shall assume full responsibility.

F. Electrical power and connections including 1-1/2" conduit sleeve, to automatic controller as per manufacturer's specifications.

Remote Control Valves, Electrical

A. Valve shall be of the diaphragm type, with brass or plastic body as specified on drawings.

B. Valve shall be capable of being operated in the field without electricity at the controller, by a bleeder valve.

C. Valve shall be installed in a trench area whenever possible and installed according to Manufacturer's instructions.

Wiring, Low Voltage

A. Unless otherwise specified, connections between the controller and remote control valves shall be made with direct burial AWG-1/2 type wire, installed in accordance with valve manufacturer's wire chart and specifications.

B. Wiring shall occupy a trench area whenever possible and installed along the same route as the pressure supply lines wherever possible, and shall be installed before pressure line wherever possible.

C. Where more than one wire is placed in a trench, the wiring shall be banded together at intervals of 10 feet.

D. Size of wire shall be according to manufacturer recommendations, in no case less than #14 in size.

E. Use a continuous wire between controller and remote control valves. Under no circumstances shall splices exist without prior approval. Any splices allowed shall be installed in an approved box.

F. All splices shall be made using Scotch Lok Unbreak waterproof sealing packets, Pen-Tite Connectors, or approved equal. An expansion loop of 12 inches shall be provided at each wire connection and/or directional turn.

G. Wire shall be white in color.

EXECUTION

Execution

A. 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 equipment usage or area dimensions exist that might not have been considered in the engineering. Such obstructions or differences shall be brought to the attention of the Owner or Owner's Representative. In the event this notification is not performed, the Contractor shall assume full responsibility.

B. Before starting work on sprinkler system, carefully check all grades to determine that work may safely proceed, keeping within the specified material depths.

C. The installation of all sprinkler materials, including pipe, shall be coordinated with the landscape drawings to avoid interfering with the trees, shrubs, or other plantings.

D. Layout sprinkler heads and make any minor adjustments required due to difference between site and drawings. Any such deviations in layout shall be approved in the intent of the original drawings, and without additional cost to the Owner. When directed by the Owner or Owner's Representative the layout shall be approved before installation. Check the proper drainage of sprinklers through lowest head shall be installed on every sprinkler head at a lower elevation than the control valve.

E. Contractor shall verify location of Controller. Contractor shall supply and install a rechargeable battery for controller back up, per manufacturer's instructions. Full piping or equipment shown diagrammatically on drawing outside of planting areas shall be installed inside planting area whenever possible.

F. Sprinklers with adjustable flow rate nozzles shall be adjusted by fully opening the sprinkler furthest from the control valve. The manual adjustment of the control valve shall be opened slightly to obtain a 1/2" high spray at the sprinkler mentioned above. After this condition has been met, all other sprinklers in the section shall be adjusted for equal height sprays, regulating the control valve as required to maintain this condition. With a pressure gauge on the sprinkler first opened, the control valve shall be adjusted to obtain the catalog rated pressure for the sprinkler installed. Individual heads shall be rotated and adjusted as required to keep sprays within the areas of lawn or shrubbery.

INSTALLATION

A. Water Supply: Connections shall be made to the water meter or existing pipe as shown at approximate location on drawings or to point of connection. Minor changes caused by actual site conditions shall be made without additional cost to Owner.

B. Assemblies

1. Routing of pressure supply lines as indicated on drawings is diagrammatic.
2. All plastic threaded pipe and fittings shall be assembled using Teflon dope or equivalent, applied to the male threads only.
3. Install all assemblies in accordance with manufacturer's instructions.
4. Line Clearance: All lines shall have a minimum clearance of 4 inches from each other, and 6 inches from all other trades. Parallel lines shall not be installed directly over one another.
5. Trenching:
 - a. Dig trench and support pipe continuously on bottom of ditch. Stake pipe in trench to an even grade. Trenching excavation shall follow layout indicated on drawings and as noted. Where lines occur under paved areas, these dimensions shall be considered below subgrade.
 - b. Provide minimum cover of 18 inches for all pressure supply lines 2 1/2" and smaller.
 - c. Provide minimum cover of 18 inches for all control wires.
 - d. Provide minimum cover of 18 inches for all other non-pressure lines.
6. Paved Areas:
 - a. Coordinate installation of sleeves under paved areas with General Contractor.
 - b. If the only piping installed is over 20 feet long, pressure testing is required for that section at the time of installation. Upon completion of piping installation, the entire system must be tested.
7. Backfill:
 - a. Backfill for trenching shall be compacted to a dry density equal to the adjacent undisturbed soil, and shall conform to the adjacent grades without dips, sunken areas, humps or other irregularities and be built on a firm granular material with no foreign matter larger than 1/2" size.
 - b. Trenches shall be backfilled promptly after the open trench inspection.
8. Finishing the System:
 - a. After all new sprinkler pipe lines and risers are in place and connected, all necessary diversion work has been completed, and prior to installation of sprinkler heads, the control valves shall be opened and the system a full bleed operation.
 - b. Sprinkler heads shall be installed only after flushing of the system has been accomplished to the complete satisfaction of the Owner's Representative.
9. Sprinkler Heads:
 - a. Install sprinkler heads as designated on the drawings.
 - b. Spacing of heads shall not exceed the maximum indicated on the drawings. In no case shall the spacing exceed the maximum recommended by the manufacturer.
 - c. Sprinkler heads in lawn or turf areas shall be elevated to a minimum of 5 inches above grade. Heads along curbs, walks, paving, etc., shall be placed 1/2 inch above finish grade or coordinated with adjacent shrub heights, adjust sprinkler heads within ten days after notification by Owner.

Adjusting the System

A. Adjust valves, alignment and coverage of all sprinkler heads.

B. If it is determined that adjustments in the irrigation equipment or nozzle changes will provide proper and more adequate coverage, make all necessary changes, without additional cost to the Owner, prior to any planting.

C. The entire system shall be operating properly before any planting operations commence.

Irrigation System Coverage Test

A. When the sprinkler system is completed, determine if the water coverage of planting areas is complete and adequate. Furnish all materials and perform all tests, required to correct any inadequacies of coverage due to deviations from plans. This test shall be accomplished when planting is complete.

Clean-up and Repair

A. Upon completion of the work, make the ground surface level, remove excess materials, rubbish, debris, etc., and remove construction and installation equipment from the premises.

Inspection of Work

A. Installations and operations must be approved by owner.

B. Prior to commencing work, the Contractor shall arrange a meeting with the Owner, at which time the Contractor will be informed of specific inspections required and the method of calling for such inspections as the individual work is completed.

C. In no event shall the Contractor cover up or otherwise removes from view any work under this contract without prior approval of the Owner. The Contractor at his expense shall open any work covered to inspection in view.

D. All hydrostatic tests shall be made only in the presence of the Landscaping Architect, or other duly authorized representative of the Owner. No pipe shall be backfilled until it has been inspected, tested, and approved in writing.

E. All pressure supply lines shall be tested under hydrostatic pressure of 150 pounds per square inch for a period of two hours.

F. Upon completion of the project, the Contractor shall transfer all information concerning the dimensions to a clear set of transparency prints of the drawings. The changes and dimensions shall be recorded in a legible and workmanlike manner to the satisfaction of the Owner. The Contractor shall, for this purpose, procure from the Owner a copy of the plan layout to mark all as-built dimensions and work that differs from the original plans.

G. Contractor shall instruct Owner on use of irrigation controller. Contractor shall consult with Owner and Landscaping Architect to establish appropriate watering program for the site.

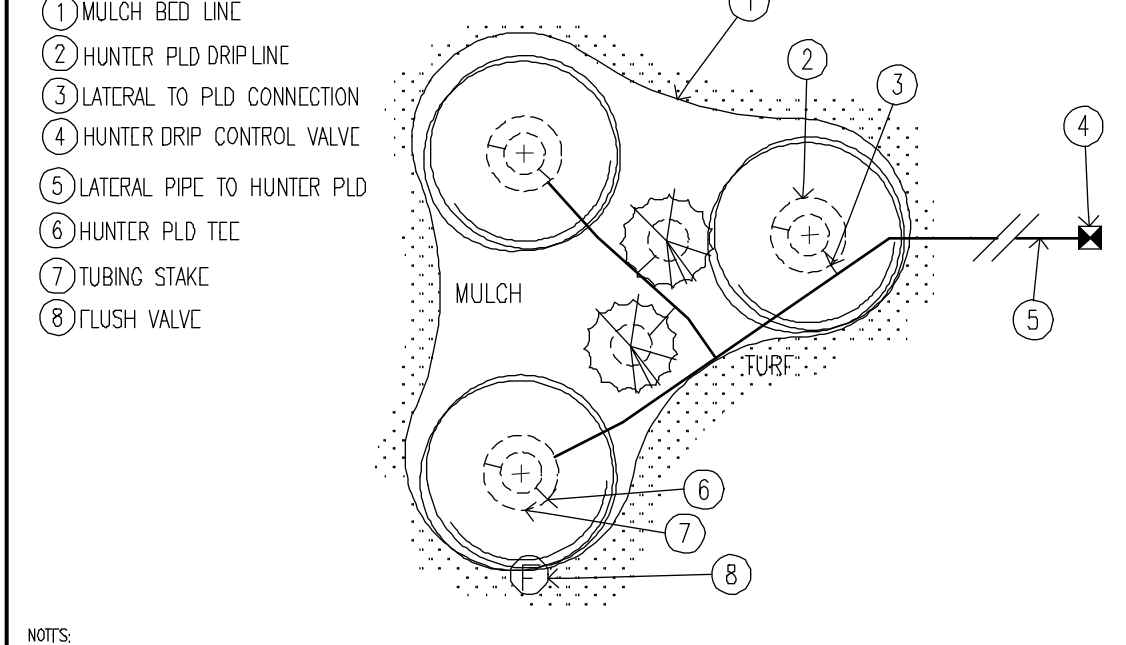
Guarantee

A. The entire sprinkler system shall be guaranteed for one year by the Contractor as to material and date of final acceptance of the work.

B. Should any trouble develop within the specified guarantee period, the inferior or faulty material and/or workmanship, the trouble shall be corrected without delay by the Contractor to the satisfaction and at no expense to the Owner.

C. Any and all damage to rain water drains, water supply lines, gas lines and/or other service lines shall be repaired and made good by the Contractor at no extra cost to the builder. It is the responsibility of the Contractor to be aware of the location of all utilities or other permanent or non-permanent installations and to protect these installations from any damages whatsoever.

DRIP IRRIGATION LAYOUT



NOTES

1. SIZE DRAINER FLOW AND SPACING BASED ON PLANT AND SOIL TYPE.

2. ROW SPACING OF PLO TUBING BASED ON PLANT AND SOIL TYPE.

3. STAKE TUBING DOWN EVERY 5' AND WITHIN 1' OF ALL FITTING OUTLETS.

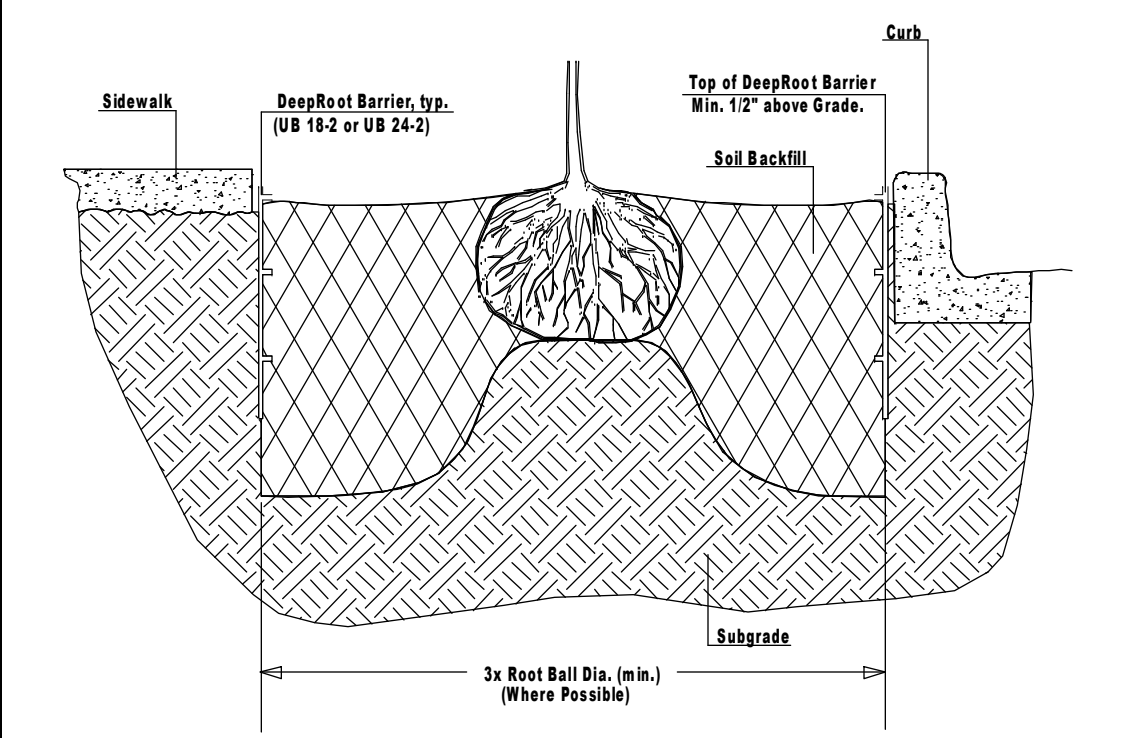
4. DO NOT EXCEED VELOCITY OF 5 FPS WITHIN TUBING. 1" SIZE OF DRAIN AREA CREATES VELOCITIES GREATER THAN 5 FPS. USE STANDARD LATERAL PIPE TO DRAIN SUPPLY HEADER FOR THE DRAIN AREA.

5. INSTALL FLUSH VALVE AT POINT FURTHEST FROM SUPPLY POINT.

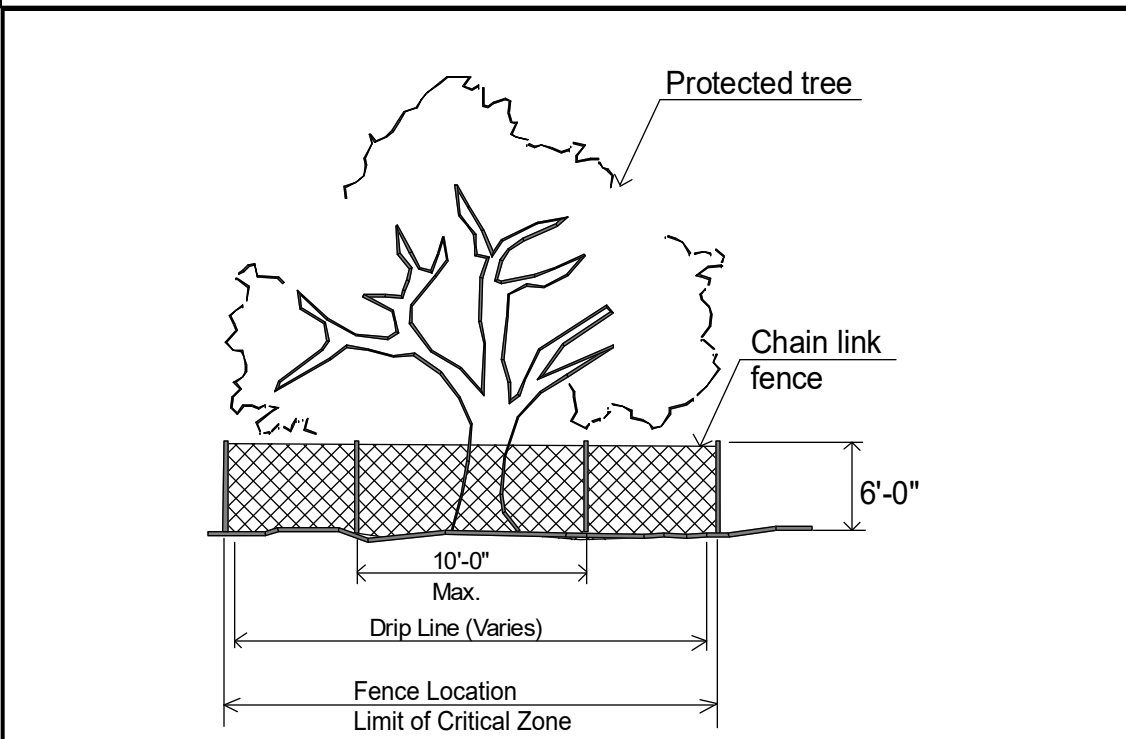
6. THROUGHOUT FLUSH LATERAL AND DRAINAGE PRIOR TO FINAL CONNECTIONS.

7. TEST DRAIN LINE FOR PROPER OPERATION PRIOR TO COVERING.

TREE IRRIGATION DETAIL



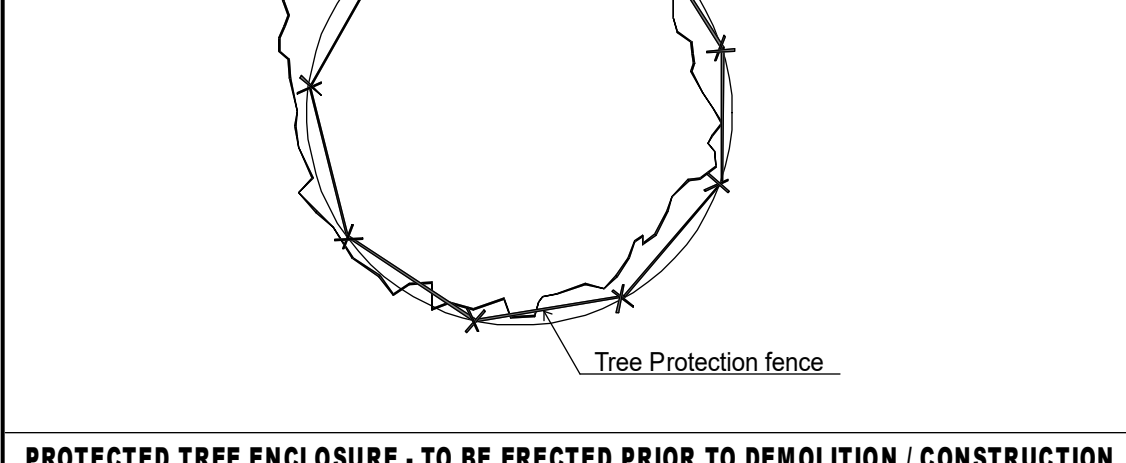
DEEPROOT UNIVERSAL BARRIER SURROUND DETAIL



SHRUB PLANTING DETAIL

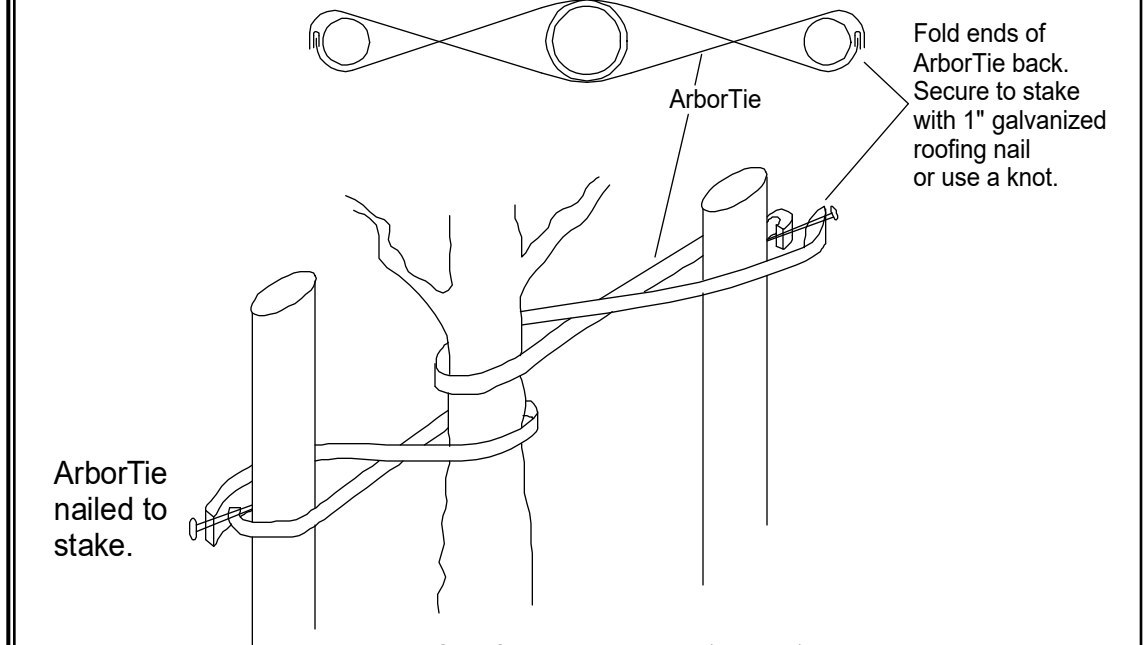


GROUND COVER PLANTING



PROTECTED TREE ENCLOSURE - TO BE ERECTED PRIOR TO DEMOLITION / CONSTRUCTION

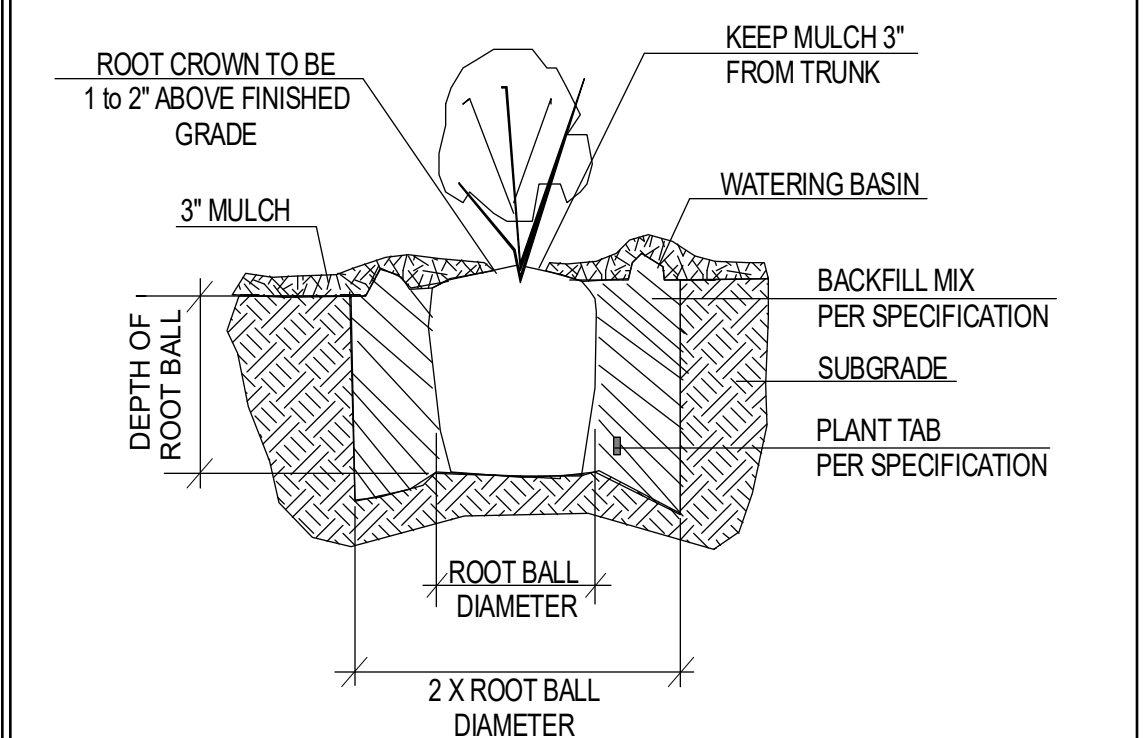
TREE PLANTING DETAIL



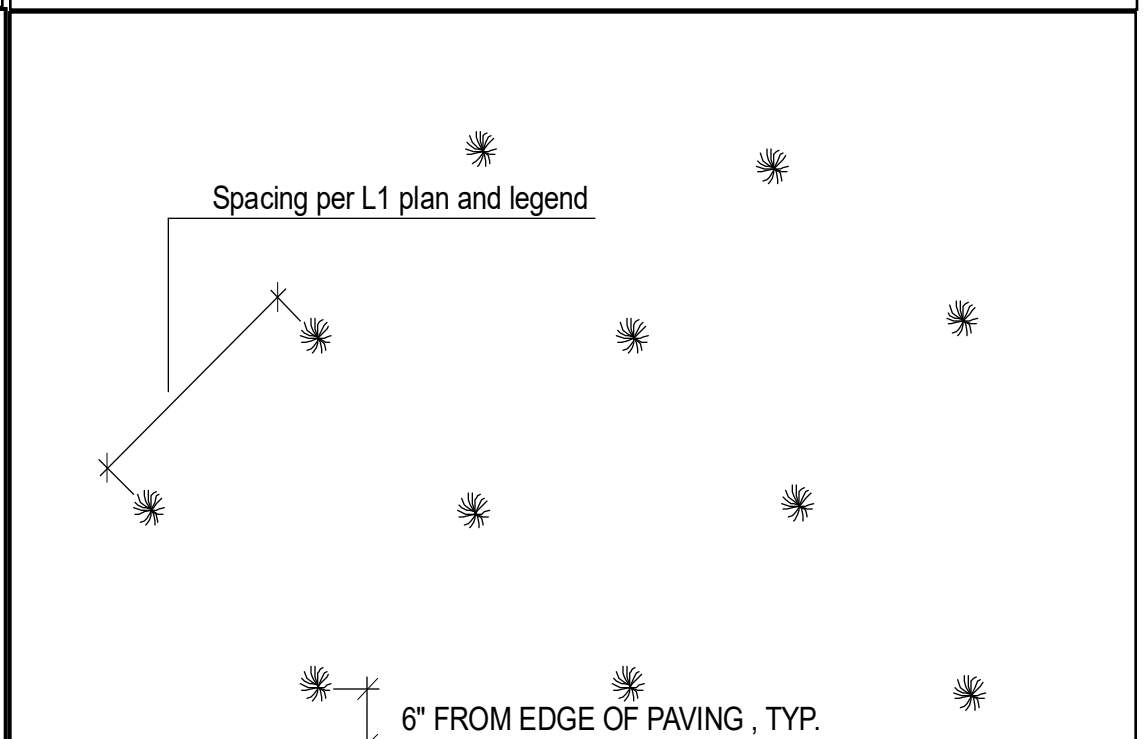
Specified ArborTie green (or white) staking and guying material is to be flat-woven polypropylene material, 3/4" (19.05mm) wide, 900 lb. break strength.

ArborTie shall be fastened to stakes in a manner that permits tree movement and supports the tree.

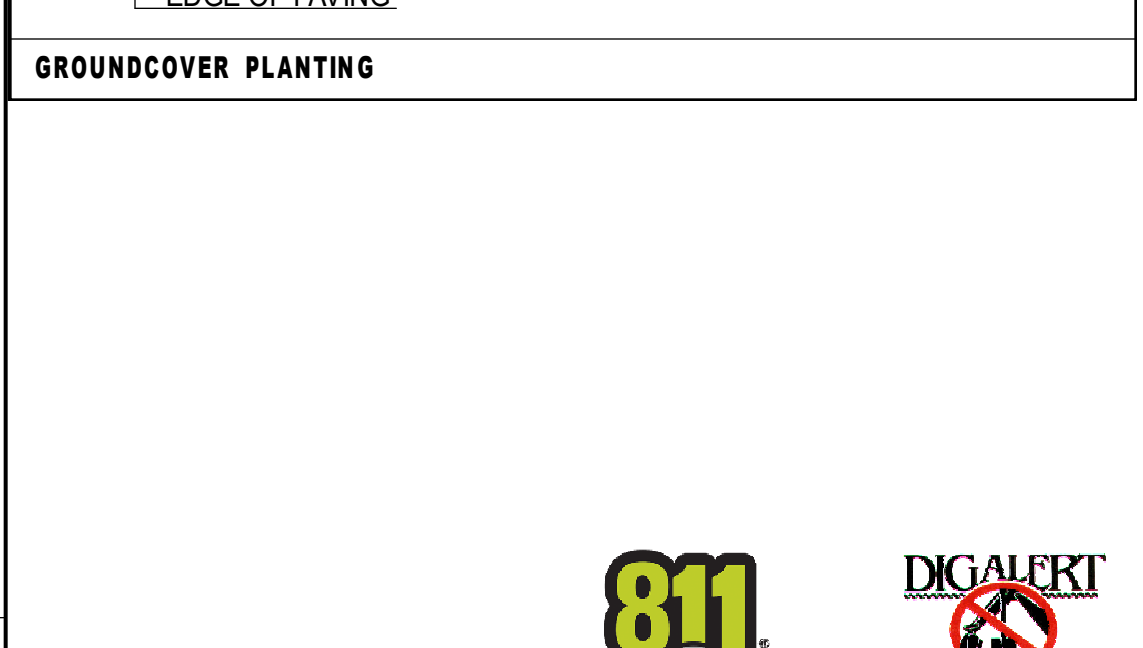
TREE STAKING/GUYING



SHRUB PLANTING DETAIL



GROUND COVER PLANTING



NEWPORT BLVD

PERIMETER LIGHTING SHALL BE EQUIPPED WITH LIGHT SHIELDING DEVICE TO PREVENT LIGHT SPILL INTO ADJACENT PROPERTIES.

PARKING AREA AND WALKWAYS TO BE ILLUMINATED.

THE ENVELOPE, OR SPACE CONDITIONING, LIGHTING, ELECTRICAL POWER DISTRIBUTION AND WATER HEATING SYSTEMS ARE NOT BEING ALTERED.

ALLEY

