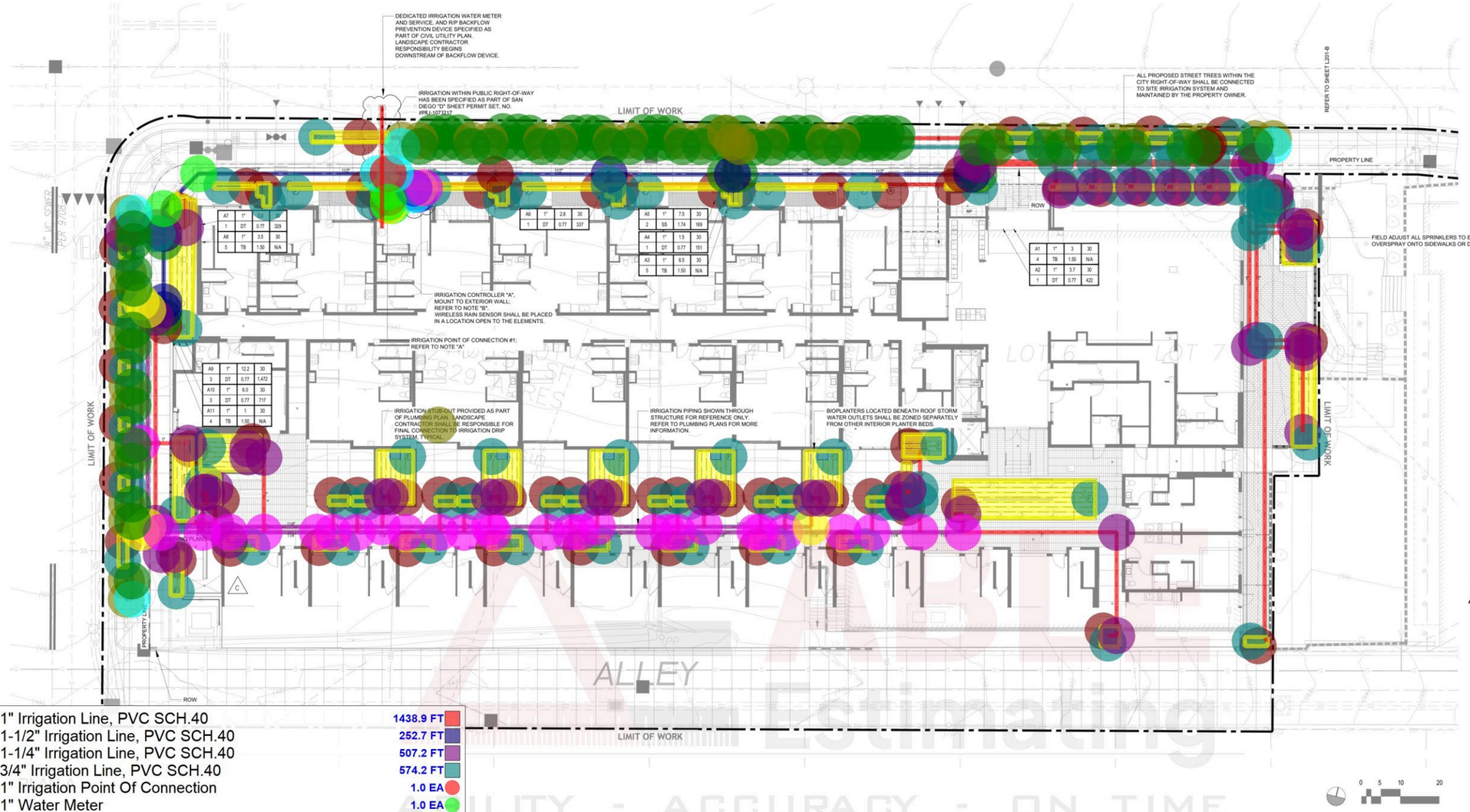

1" Irrigation Line, PVC SCH.40	1438.9 FT
1-1/2" Irrigation Line, PVC SCH.40	252.7 FT
1-1/4" Irrigation Line, PVC SCH.40	507.2 FT
3/4" Irrigation Line, PVC SCH.40	574.2 FT
1" Irrigation Point Of Connection	1.0 EA
1" Water Meter	1.0 EA
1" Backflow Device	1.0 EA
Controller: Rain Bird ESP-LXME2P Series	1.0 EA
Wireless Rain Sensor	1.0 EA
Air/Vacuum Relief Valve	67.0 EA
12" Pop-Up Shrub Head, Rain Bird RD-12-S-P30-FManuf...	46.0 EA
Root Watering System, Rain Bird RWS-B-C-1401	40.0 EA
Netafim TLCV6-12xx Subsurface Drip Tubing	3891.0 FT
4" Pop-Up Bubbler Head, Rain Bird RD-04-S-P30Manufac...	4.0 EA
Drip Flush / Indicator Nozzle	66.0 EA
Master Control ValveManufacturer: Rain BirdModel: 100-E...	1.0 EA
Flow Sensor	1.0 EA
Irrigation Controller	1.0 EA
Wireless Rain SensorManufacturer: Rain BirdModel: WR2...	1.0 EA
Electrical Power	1.0 EA
1-1/2" Slo-Close True-Union Ball ValveMaterial: SCH. 80 P...	2.0 EA
1" Quick Coupler Valve	3.0 EA
1" Remote Control Valve	5.0 EA
Plastic Drip Remote Control Valve AssemblyManufacturer:...	6.0 EA
1" PVC SCH 40 90 Degree Elbow	47.0 EA
1" PVC SCH 40 Tee	15.0 EA
1-1/2" PVC SCH 40 Tee	1.0 EA
1-1/2" PVC SCH 40 45 Degree Elbow	2.0 EA
1-1/2" PVC SCH 40 90 Degree Elbow	1.0 EA
1-1/4" PVC SCH 40 90 Degree Elbow	4.0 EA
1-1/4" To 1" PVC SCH 40 90 Degree Elbow	1.0 EA
1-1/4"x1"x1-1/4" PVC SCH 40 Tee	28.0 EA
1-1/4"x1"x1" PVC SCH 40 Tee	1.0 EA
3/4" PVC SCH 40 90 Degree Elbow	4.0 EA
3/4" PVC SCH 40 45 Degree Elbow	2.0 EA
3/4" PVC SCH 40 Tee	35.0 EA
3/4"x1"x3/4" PVC SCH 40 Tee	3.0 EA
Connection To Stub Out	1.0 EA

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ABILITY - ACCURACY - ON TIME

LEVEL 1 - IRRIGATION PLAN

Drawn: JA
Checked: NH
M|H Proj No.: A21.0057.00
Issue Date: AUG 25, 2022

L201

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3/4" To 1" Irrigation Connection	1.0 EA
1" Irrigation Line, PVC SCH.40	361.6 FT
Irrigation Controller	1.0 EA
Electrical Power	1.0 EA
1" SCH 40 PVC Gray Electrical Conduit	193.8 FT
Wireless Rain Sensor	1.0 EA
Drip Tubing Ring	3.0 EA
Drip Flush / Indicator Nozzle	3.0 EA
Air/Vacuum Relief Valve	3.0 EA
Netafim TLCV6-12xx Subsurface Drip Tubing	498.4 FT
Master Valve / Flow Sensor Assembly	1.0 EA
1" Low Flow Control Zone Kit	3.0 EA
1" PVC SCH 40 45 Degree Elbow	16.0 EA
1" PVC SCH 40 90 Degree Elbow	9.0 EA
1" PVC SCH 40 Tee	4.0 EA
Water Meter	1.0 EA
Backflow Prevention Device	1.0 EA

	AUG	SEP	OCT	NOV	DEC	Total / Avg.
	4.60	4.30	3.60	2.40	2.00	46.50
	0.18	0.14	0.12	0.08	0.06	0.13
	1	1	1	1	1	

	AUG	SEP	OCT	NOV	DEC	
	33.8	33.6	28.2	18.8	15.6	Min./Day/Zone
	67.6	67.3	56.3	37.5	31.3	Total Min./Day
	96.3	74.0	61.9	41.3	34.4	Min./Day/Zone
	96.3	74.0	61.9	41.3	34.4	Total Min./Day
	183.9	141.2	118.2	78.8	65.7	Total Min./Day
	3.1	2.4	2.0	1.3	1.1	Total Hrs./Day
	0.0	0.0	0.0	0.0	0.0	Total Hrs./Day

ent landscape ordinance. These calculations
mpleted during the specific watering window allowed,
al irrigation days, or specific slope position. It is solely
rect amount of irrigation water for the landscape. All
ller provided ET data, soil moisture sensors, and rain
abinet prior to final turnover of the project to the

LEVEL 3 - IRRIGATION PLAN

Drawn: JA
Checked: NH
MJH Proj No.: A21.0057.00
Issue Date: AUG 25, 2022

L202

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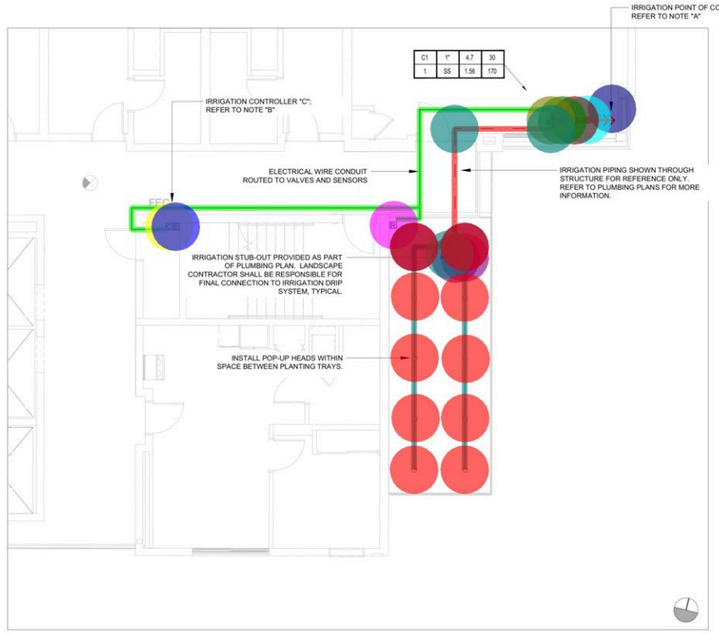
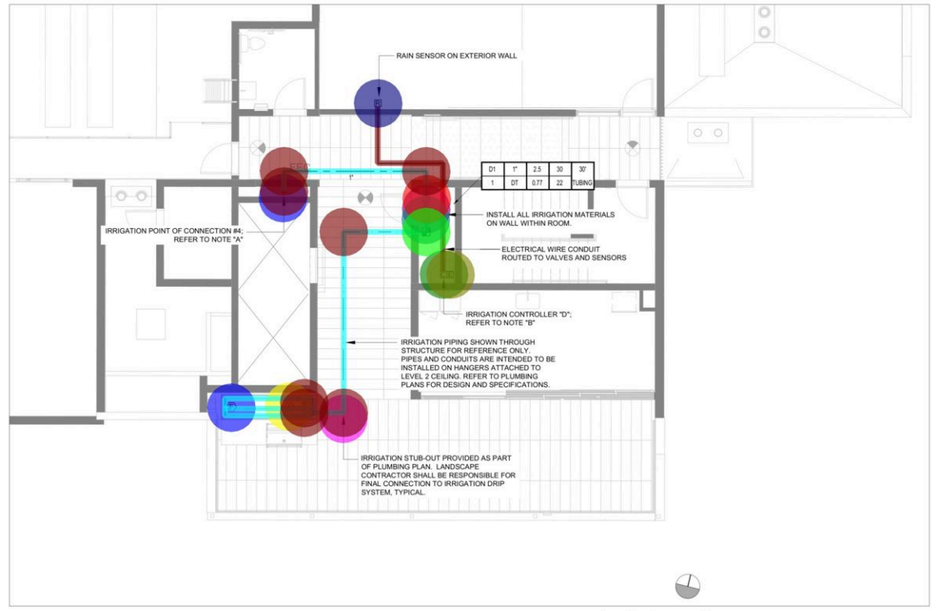


LEVEL 4 GREENROOF IRRIGATION PLAN

SCALE: 1"=5'

0 2.5 5 10



LEVEL 8 IRRIGATION PLAN

SCALE: 1"=5'

0 2.5 5 10

IRRIGATION CONTROLLER RUN TIMES

Controller		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total / Avg.
C	ETo / Month (inches):	2.10	2.40	3.40	4.60	5.10	5.30	5.70	5.60	4.30	3.60	2.40	2.00	46.50
	ETo / Day (inches):	0.07	0.08	0.11	0.15	0.16	0.17	0.18	0.18	0.14	0.12	0.08	0.06	6.13
	Irrigation Days / Week:	1	1	1	1	1	1	1	1	1	1	1	1	

Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Shrubs	0.40	0.77	0.90	16.4	18.8	26.6	36.0	39.9	41.4	44.6	43.8	33.6	28.2	18.8	15.6	Min./Day/Zone
Inline Drip	Number of Zones:		1	**16.4**	**18.8**	**26.6**	**36.0**	**39.9**	**41.4**	**44.6**	**43.8**	**33.6**	**28.2**	**18.8**	**15.6**	**Total Min./Day**
	Total Number of Zones:		1	16.4	18.8	26.6	36.0	39.9	41.4	44.6	43.8	33.6	28.2	18.8	15.6	Total Min./Day
	Total Sequential Run Time:			0.3	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.6	0.5	0.3	0.3	Total Hrs./Day

IRRIGATION CONTROLLER RUN TIMES

Controller		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total / Avg.
D	ETo / Month (inches):	2.10	2.40	3.40	4.60	5.10	5.30	5.70	5.60	4.30	3.60	2.40	2.00	46.50
	ETo / Day (inches):	0.07	0.08	0.11	0.15	0.16	0.17	0.18	0.18	0.14	0.12	0.08	0.06	6.13
	Irrigation Days / Week:	1	1	1	1	1	1	1	1	1	1	1	1	

Plant / Irrig. Type	AKc	Pr Rate	IE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Shrubs	0.40	0.77	0.90	16.4	18.8	26.6	36.0	39.9	41.4	44.6	43.8	33.6	28.2	18.8	15.6	Min./Day/Zone
Inline Drip	Number of Zones:		1	**16.4**	**18.8**	**26.6**	**36.0**	**39.9**	**41.4**	**44.6**	**43.8**	**33.6**	**28.2**	**18.8**	**15.6**	**Total Min./Day**
	Total Number of Zones:		1	16.4	18.8	26.6	36.0	39.9	41.4	44.6	43.8	33.6	28.2	18.8	15.6	Total Min./Day
	Total Sequential Run Time:			0.3	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.6	0.5	0.3	0.3	Total Hrs./Day

Note: These schedules are intended only for compliance with local municipal codes and the water efficient landscape ordinance. These calculations represent the maximum reasonable run times and are used to ensure that all irrigation may be completed during the specific watering window allowed. These schedules do not include rainfall, site soil types, specific exposures (shade versus sun), actual irrigation days, or specific slope position. It is solely the responsibility of the irrigation contractor to program the controller as required to apply the correct amount of irrigation water for the landscape. All smart controllers shall be programmed using the specified ET or weather sensing equipment, satellite provided ET data, soil moisture sensors, and rain shut off devices as required. Contractor shall provide a controller schedule inside the controller cabinet prior to final turnover of the project to the owner.

WATER PRESSURE LOSS CALCULATIONS LEVEL 4&8

WATER METER NUMBER	8	WATER METER SIZE (Inches)	0.75
HYDRAULIC GRADE LINE (FT)	0	WATER METER ELEVATION (FT)	0
ELEVATION DIFFERENCE (FT)	14	STATIC PRESSURE (PSI)	55.0
REMOTE CONTROL VALVE #	D1	REMOTE CONTROL VALVE SIZE (In.)	1.00
R.C.V. DEMAND (GPM)	1.4	TOTAL DEMAND (GPM)	1.4
HIGHEST HEAD SERVED (FT)	0	STATIC PRESSURE AT HIGHEST HEAD	0.0

PRESSURE LOSS CALCULATION IS PROVIDED FOR THIS PROJECT UNAUTHORIZED USE BY ANY OTHER PERSON, COMPANY OR PROJECT IS FORBIDDEN WITHOUT WRITTEN PERMISSION.

SIZE (Inches)	DESCRIPTION	FLOW	#	LOSS	
1.00	SERVICE LINE (50 FT OF TYPE K COPPER)	1.4	1	0.09	PSI
0.75	WATER METER (DISC TYPE)	1.4	2	0.10	PSI
0.75	BACKFLOW PREVENTER (D/C TYPE)	1.4	3	6.00	PSI
1.00	BFD ASSEMBLY PIPING (BRASS W/ 4 ELLS)	1.4	4	0.11	PSI
1.00	MASTER CONTROL VALVE	1.4	5	0.20	PSI
1.00	FLOW SENSOR	1.4	6	0.50	PSI
1.00	ISOLATION VALVES (BALL TYPE)	1.4	7	0.50	PSI
1.00	20' FEET OF MAINLINE, TYPE L COPPER	1.4	8	0.11	PSI
1.00	3 - 90 DEGREE ELBOWS	1.4	9	0.15	PSI
1.00	REMOTE CONTROL VALVE ASSEMBLY	1.4	10	0.20	PSI
10%	LATERAL LINE LOSSES	1.4	11	3.00	PSI
20%	FITTING LOSS (IN ADDITION TO ELBOWS SHOWN)	N/A	12	0.60	PSI
0.00	ELEVATION CHANGE (P.O.C. TO HIGHEST HEAD)	N/A	13	0.00	PSI
TOTAL SYSTEM PRESSURE LOSS (SUM OF #1 THRU #14)			14	11.6	PSI
PRESSURE REQUIRED AT HEAD (OPERATING PRESSURE)			15	30.0	PSI
TOTAL PRESSURE REQUIRED (SUM OF #13 AND #16)			16	41.6	PSI
STATIC WATER PRESSURE (FROM ABOVE)			17	55.0	PSI
RESIDUAL PRESSURE (SUBTRACT #17 FROM #18)			18	13.4	PSI

3/4" Irrigation Line Connection	1.0 EA
Connection To Stub Out	1.0 EA
3/4" Irrigation Line, PVC SCH.40	49.0 FT
1" Irrigation Line, PVC SCH.40	30.3 FT
1" SCH 40 PVC Gray Electrical Conduit	61.0 FT
Irrigation Controller	1.0 EA
Electrical Power	1.0 EA
Wireless Rain Sensor	1.0 EA
Backflow Prevention Device	1.0 EA
Master Control Valve	1.0 EA
Flow Sensor	1.0 EA
Drip Remote Control Valve Assembly	1.0 EA
3/4" PVC SCH 40 90 Degree Elbow	2.0 EA
3/4"x1"x3/4" PVC SCH 40 Tee	1.0 EA
1" PVC SCH 40 90 Degree Elbow	3.0 EA
Sprinkler Head	10.0 EA
3/4" Irrigation Line Connection	1.0 EA
Connection To Stub Out	1.0 EA
1" Irrigation Line, PVC SCH.40	53.7 FT
1" SCH 40 PVC Gray Electrical Conduit	22.7 FT
Irrigation Controller	1.0 EA
Electrical Power	1.0 EA
Wireless Rain Sensor	1.0 EA
Backflow Prevention Device	1.0 EA
Master Control Valve	1.0 EA
Water Meter	1.0 EA
Drip Remote Control Valve Assembly	1.0 EA
Air/Vacuum Relief Valve	1.0 EA
Drip Flush / Indicator Nozzle	1.0 EA
Netafim TLCV6-12xx Subsurface Drip Tubing	29.4 FT
1" PVC SCH 40 90 Degree Elbow	7.0 EA

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ABILITY - ACCURACY - ON TIME

LEVEL 4 & 8 - IRRIGATION PLAN

Drawn: JA
Checked: NH
MJH Proj No.: A21.0057.00
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L203

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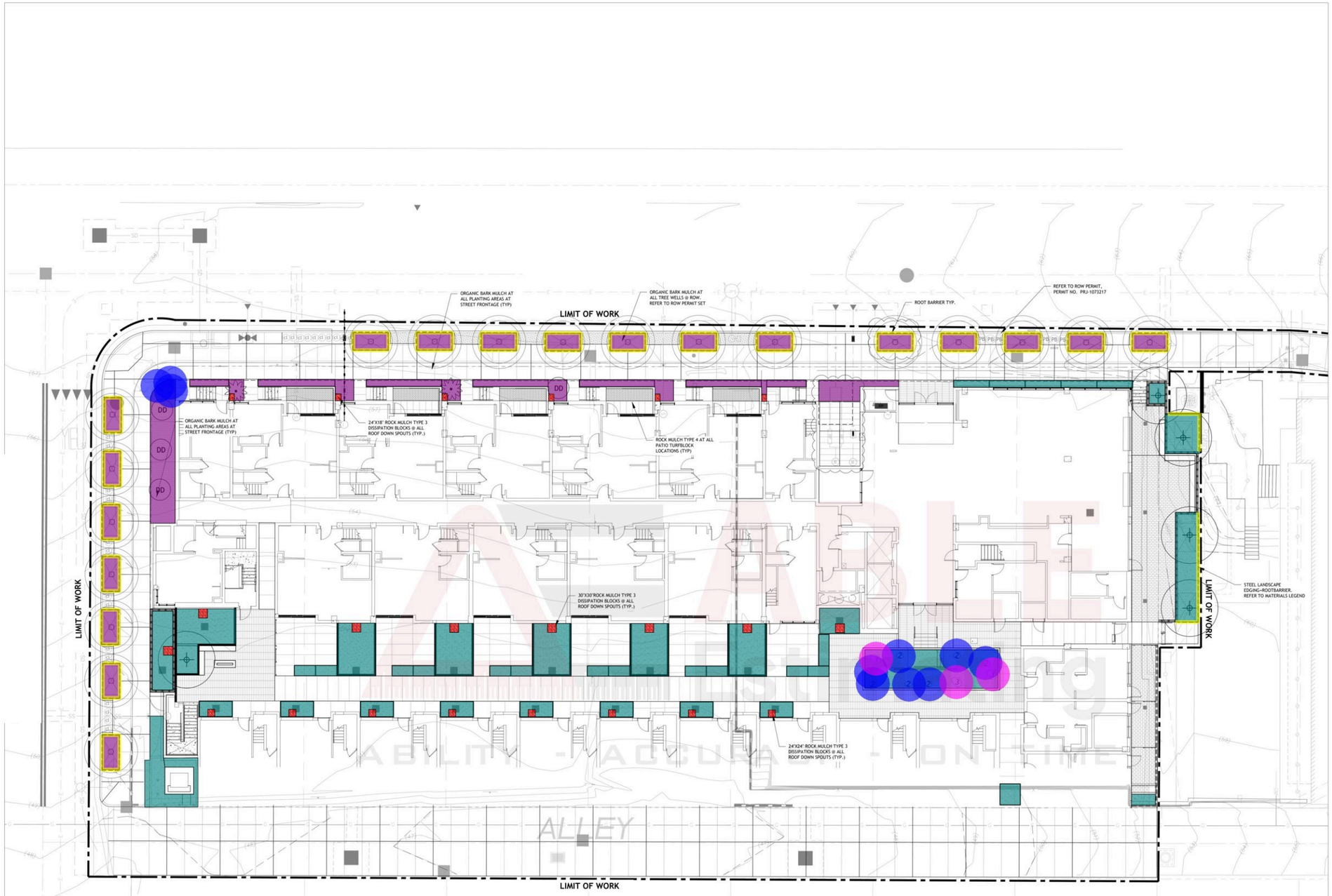

Mulch: Organic Bark Mulch Type 1 @ Row	1684.2 SQ FT
Mulch: Rock Mulch Type 1, @ All Onsite Planting Areas	2785.7 SQ FT
Mulch: Rock Mulch Type 3, Medium, @ 30"X30" Splash Pads / Dissipator Blocks @ All Downspout Locations	101.1 SQ FT
Root Barrier	620.7 FT
Boulders, Angular Various Sizes, Summer Crunch, Decorative Stone Solutions, 2'-0" Size	10.0 EA
Boulders, Angular Various Sizes, Summer Crunch, Decorative Stone Solutions, 3'-0" Size	3.0 EA

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ABILITY - ACCURACY - ON TIME

LEVEL 1 - MULCH PLAN

Drawn: JA
Checked: NH
MJH Proj No.: A21.0057.00
Issue Date: AUG 25, 2022

L301A

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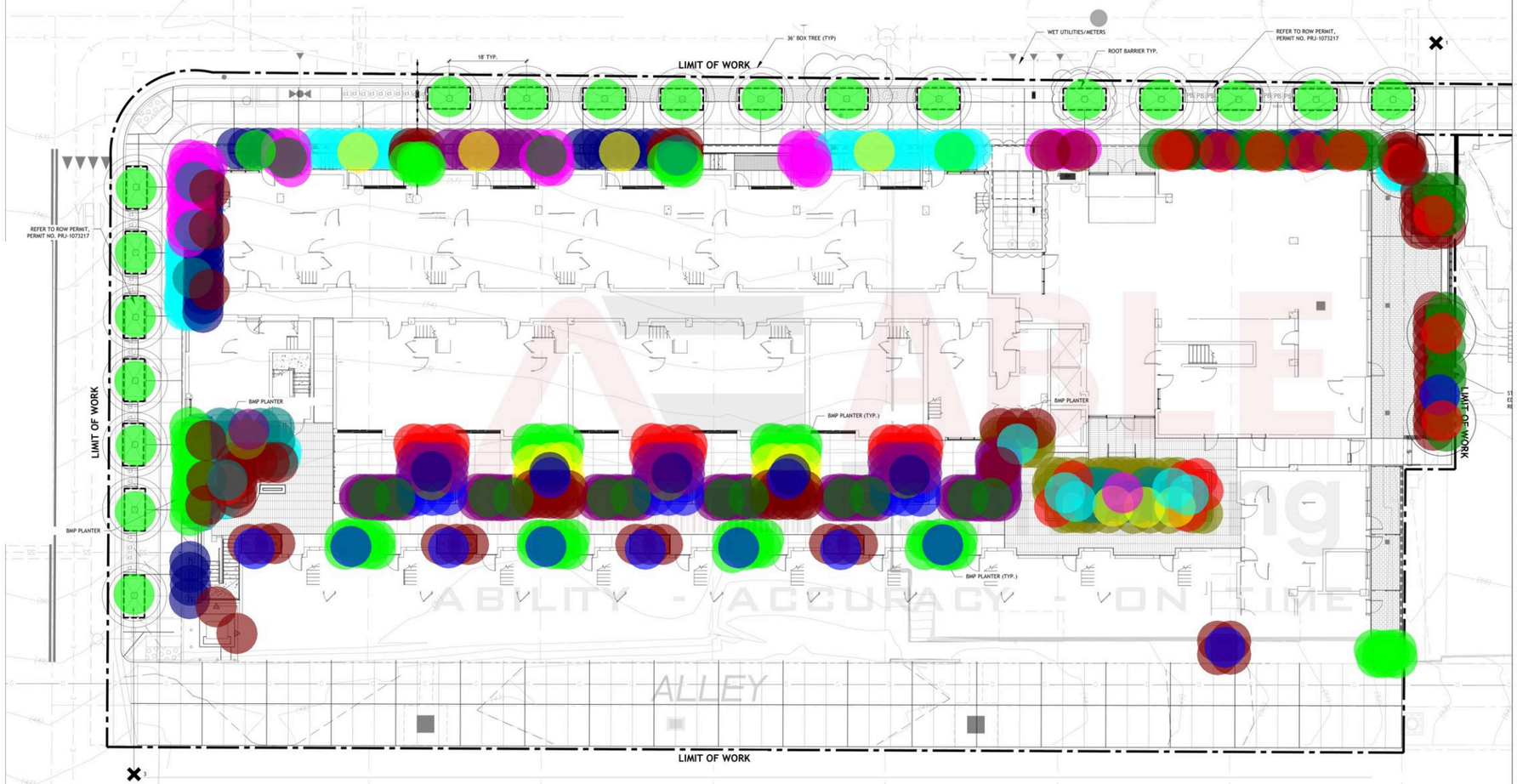
ABILITY - ACCURACY - ON TIME



- Plant: Pennisetum Spathiolatum 'Fairy Tales' 68.0 EA
- Plant: Rosmarinus Officinalis Prostratus 17.0 EA
- Plant: Salvia Microphylla 'Hotlips' 11.0 EA
- Plant: Polystichum Munitum 35.0 EA
- Plant: Rosmarinus Officinalis 'Huntington Car... 24.0 EA
- Plant: Sansevieria Trifasciata 108.0 EA
- Plant: Chondropetalum Tectorum 14.0 EA
- Plant: Dianella Cassa Blue 27.0 EA
- Plant: Dietes Iridioides 73.0 EA
- Plant: Lomandra Longifolia Breeze 10.0 EA
- Plant: Agave Attenuata 'Ray Of Light' 15.0 EA
- Plant: Agave Blue Flame 4.0 EA
- Plant: Aloe Always Red 18.0 EA
- Plant: Aloe Barbadensis 43.0 EA
- Plant: Aloe Blue ElfCommon Name: Blue Elf ... 15.0 EA
- Plant: Aloe Ferox 4.0 EA
- Plant: Anigozanthos Big Red 17.0 EA
- Plant: Asparagus Densiflorus Meyersi 26.0 EA
- Plant: Aspidistra Elatior 11.0 EA
- Plant: Asplenium Nidus 6.0 EA
- Plant: Bouteloua Gracilis Blonde Ambition 10.0 EA
- Plant: Cycas Revoluta 3.0 EA
- Plant: Furcraea Mediopicta Alba Variegated 3.0 EA
- Plant: Lomandra Platinum BeautyCommon N... 34.0 EA
- Plant: Monstera Deliciosa 4.0 EA
- Plant: Philodendron Xanadu 19.0 EA
- Tree 2.0 EA
- Tree 4.0 EA
- Tree 5.0 EA
- Tree 19.0 EA
- Vines 12.0 EA
- (4'-4"x9'-4") BMP Planter 8.0 EA
- (5'-9"x6'-0") BMP Planter 1.0 EA
- (38'-6"x11'-10") BMP Planter (Assumed) 1.0 EA
- (7'-0"x11'-2") BMP Planter 1.0 EA
- (3'-0"x9'-0") BMP Planter (Assumed) 1.0 EA
- (3'-0"x6'-0") BMP Planter (Assumed) 12.0 EA
- (11'-0"x14'-11") BMP Planter 5.0 EA
- (10'-4"x17'-2") BMP Planter 1.0 EA
- (6'-10"x8'-4") BMP Planter 1.0 EA
- (2'-0"x10'-1 1/2") BMP Planter (Assumed) 5.0 EA
- (2'-0"x11'-2") BMP Planter (Assumed) 1.0 EA
- (2'-0"x11'-0") BMP Planter (Assumed) 1.0 EA
- (2'-0"x21'-3") BMP Planter (Assumed) 3.0 EA
- (2'-0"x21'-8") BMP Planter (Assumed) 1.0 EA

TREE REQUIREMENTS PER COMPLETE COMMUNITIES HOUSING SOLUTIONS: 22 REQ'D @ ROW

"AT LEAST ONE 24" BOX CANOPY FORM TREE IS REQUIRED FOR EACH 20 FEET OF STREET FRONTAGE, EXCLUDING CURB CUTS AND REQUIRED CLEARANCES FOR DESIGNATED BUS STOPS":

288' OF STREET FRONTAGE - 288' / 20' = 14.4. (14) TREES REQUIRED. (13) TREES PROVIDED @ ROW WITH UTILITY CLEARANCES AND STREET OFFSETS.

123' OF STREET FRONTAGE - 123' / 20' = 6.15. (6 TREES REQUIRED). (7) TREES PROVIDED @ ROW WITH UTILITY CLEARANCES.

NET CANOPY TREE GAIN:

PREVIOUSLY EXISTING TREE TOTAL PROW (WILL BE REMOVED PER GRADING PLANS, DWG #)	0
PREVIOUSLY EXISTING TREE TOTAL WITHIN PROPERTY (WILL BE REMOVED PER GRADING PLANS, DWG #)	4
NEW PROPOSED STREET TREE TOTAL	19
NEW PROPOSED	3
SITE TREE GAIN TOTAL	22

IRRIGATION NOTES:

ORNAMENTAL LANDSCAPE AREAS SHALL BE SERVED BY A PERMANENT, AUTOMATIC, ELECTRICALLY CONTROLLED IRRIGATION SYSTEM AS REQUIRED BY LDC §142.0403(C) FOR PROPER IRRIGATION, DEVELOPMENT, AND MAINTENANCE OF THE VEGETATION IN A HEALTHY, DISEASE-RESISTANT CONDITION. THE DESIGN OF THE SYSTEM SHALL PROVIDE ADEQUATE SUPPORT FOR THE VEGETATION SELECTED. THIS SYSTEM WILL USE LOW PRECIPITATION HEADS. SEGREGATED BASED ON PLANT MATERIAL TYPE AND ASPECT, AND BE DESIGNED TO MINIMIZE OVERSPRAY ONTO ANY NATIVE AREAS, HARDSCAPE SURFACE. RECYCLED WATER MAY BE USED, IF AVAILABLE. ALL PROPOSED IRRIGATION SYSTEMS WILL USE AN APPROVED RAIN SENSOR SHUTOFF DEVICE. REVEGETATAION/RESTORATION AREAS SHALL BE SERVED WITH OVERHEAD SPRAY IRRIGATION AND SHALL REMAIN OPERATIONAL ONLY FOR THE DURATION OF PLANT ESTABLISHMENT. IRRIGATION SYSTEM TYPES REFER TO L1.6 IRRIGATION PLAN.

GRADING NOTES:

1. PERMANENT REVEGETATION - ALL GRADED, DISTRIBUTED, OR ERODED AREAS THAT WILL NOT BE PERMANENTLY PAVED OR COVERED BY STRUCTURES SHALL BE PERMANENTLY REVEGETATED AND IRRIGATED AS SHOWN IN TABLE 142-04F AND IN ACCORDANCE WITH THE STANDARDS IN THE LAND DEVELOPMENT MANUAL.

2. TEMPORARY REVEGETATION - GRADED, DISTURBED, OR ERODED AREAS THAT WILL NOT BE PERMANENTLY PAVED, COVERED BY STRUCTURE, OR PLANTED FOR A PERIOD OVER 90 CALENDAR DAYS SHALL BE TEMPORARILY REVEGETATED WITH A NON-IRRIGATED HYDROSEED MIX, GROUND COVER, OR EQUIVALENT MATERIAL. TEMPORARY IRRIGATION SYSTEMS MAY BE USED TO ESTABLISH THE VEGETATION.

3. ALL REQUIRED REVEGETATION AND EROSION CONTROL SHALL BE COMPLETED WITHIN 90 CALENDAR DAYS OF THE COMPLETION OF GRADING OR DISTURBANCE.

CITY NOTES:

AN AUTOMATIC, ELECTRICALLY CONTROLLED IRRIGATION SYSTEM SHALL BE PROVIDED AS REQUIRED BY LDC §142.0403(C) FOR PROPER IRRIGATION, DEVELOPMENT, AND MAINTENANCE OF THE VEGETATION IN A HEALTHY, DISEASE-RESISTANT CONDITION. THE DESIGN OF THE SYSTEM SHALL PROVIDE ADEQUATE SUPPORT FOR THE VEGETATION SELECTED.

ALL LANDSCAPE AND IRRIGATION SHALL CONFORM TO THE STANDARDS OF THE CITY-WIDE LANDSCAPE REGULATIONS AND THE CITY OF SAN DIEGO LANDSCAPE DEVELOPMENT MANUAL LANDSCAPE STANDARDS AND ALL OTHER LANDSCAPE RELATED CITY AND REGIONAL STANDARDS.

TREE ROOT BARRIERS SHALL BE INSTALLED WHERE TREES ARE PLACED WITHIN 5 FEET OF PUBLIC IMPROVEMENTS INCLUDING WALKS, CURBS, OR STREET PAVEMENTS OR WHERE NEW PUBLIC IMPROVEMENTS ARE PLACED ADJACENT TO EXISTING TREE. THE ROOT BARRIER WILL NOT WRAP AROUND ROOT BALL.

IF ANY REQUIRED LANDSCAPE INDICATED ON THE APPROVED CONSTRUCTION DOCUMENT PLANS IS DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED AND/OR REPLACED IN KIND AND EQUIVALENT SIZE PER THE APPROVED DOCUMENTS TO THE SATISFACTION OF THE DEVELOPMENT SERVICES DEPARTMENT WITHIN 30 DAYS OF DAMAGE.

ALL REQUIRED LANDSCAPE AREAS AS SHOWN ON THESE PLANS, INCLUDING IN THE RIGHT-OF-WAY, SHALL BE MAINTAINED BY [PLEASE SPECIFY; I.E. OWNER, PROJECT ASSOCIATION, OTHER]. THE LANDSCAPE AREAS SHALL BE MAINTAINED FREE OF DEBRIS AND LITTER, AND ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION. DISEASED OR DEAD PLANT MATERIAL SHALL BE SATISFACTORILY TREATED OR REPLACED WITHIN 30 DAYS AND PRIOR TO FINAL LANDSCAPE INSPECTION.

ALL PRUNING SHALL COMPLY WITH THE STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) FOR TREE CARE OPERATIONS AND THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) FOR TREE PRUNING. TOPPING OF TREES IS NOT PERMITTED."

0 5 10 20

SHALL HAVE A MINIMUM 40 SQUARE FEET OF AIR-AND-WATER, PERMEABLE AREA.

5. INSTALL ALL APPROVED LANDSCAPE AND OBTAIN ALL REQUIRED LANDSCAPE INSPECTION FORMS AND OBTAIN A NO FEE STREET TREE PERMIT FOR ALL STREET TREES. COPIES OF THESE APPROVED DOCUMENTS MUST BE SUBMITTED TO THE CITY.

6. IMPROVEMENTS SUCH AS DRIVEWAYS, UTILITIES, DRAINS, AND WATER/SEWER LATERALS SHALL BE DESIGNED SO AS NOT TO PROHIBIT THE PLACEMENT OF STREET TREES. ALL TO THE SATISFACTION OF THE CITY.

7. TREE ROOT BARRIERS SHALL BE INSTALLED WHERE TREES ARE PLACED WITHIN 5 FEET OF PUBLIC IMPROVEMENTS INCLUDING WALKS, CURBS, OR STREET PAVEMENT OR WHERE NEW PUBLIC IMPROVEMENTS ARE PLACED ADJACENT TO EXISTING TREES. ROOD BARRIERS WILL NOT WRAP AROUND THE ROOT BALL.

8. A MINIMUM ROOT ZONE OF 40 SQ. FT. IN AREA SHALL BE PROVIDED FOR ALL TREES. THE MINIMUM DIMENSION FOR THIS AREA SHALL BE 5 FEET, PER SDMC §142.0403(B)(5).

9. TREES SHALL BE MAINTAINED SO THAT ALL BRANCHES OVER PEDESTRIAN WALKWAYS ARE A FEET ABOVE THE WALKWAY GRADE AND BRANCHES OVER VEHICULAR TRAVEL WAYS ARE 16 FEET ABOVE THE GRADE OF THE TRAVEL WAY PER THE SAN DIEGO MUNICIPAL CODE §142.0403(B)(10).

10. EXISTING TREES TO REMAIN ON SITE WITHIN THE AREA OF WORK WILL BE PROTECTED IN PLACE. THE FOLLOWING PROTECTION MEASURES WILL BE PROVIDED:
    A. A BRIGHT YELLOW OR ORANGE TEMPORARY FENCE WILL BE PLACED AROUND EXISTING TREES AT ALL DRIP LINE.
    B. STOCKPILING, TOPSOIL DISTURBANCE, VEHICLE USE, AND MATERIAL STORAGE OF ANY KIND IS PROHIBITED WITHIN THE DRIP LINE.
    C. A TREE WATERING SCHEDULE WILL BE MAINTAINED AND DOCUMENTED DURING CONSTRUCTION.
    D. ALL DAMAGED TREES WILL BE REPLACED WITH ONE OF EQUAL OR GREATER SIZE.

11. IF ANY REQUIRED LANDSCAPE INDICATED ON THE APPROVED CONSTRUCTION DOCUMENT PLANS IS DAMAGED OR REMOVED DURING DEMOLITION OR CONSTRUCTION, IT SHALL BE REPAIRED AND/OR REPLACED IN KIND AND EQUIVALENT SIZE PER THE APPROVED DOCUMENTS TO THE SATISFACTION OF THE DEVELOPMENT SERVICES DEPARTMENT WITHIN 30 DAYS OF DAMAGE.

12. MULCH: ALL REQUIRED PLANTING AREAS SHALL BE COVERED WITH MULCH TO MINIMUM DEPTH OF 3 INCHES, EXCLUDING SLOPES REQUIRING REVEGETATION AND AREAS PLANTED WITH GROUND COVER. ALL EXPOSED SOIL AREAS WITHOUT VEGETATION SHALL ALSO BE MULCHED TO THIS MINIMUM DEPTH.

13. NO TREES OR SHRUBS EXCEEDING THREE FEET IN HEIGHT AT MATURITY MAY BE LOCATED WITHIN TEN FEET OF ANY SEWER FACILITIES.

LEVEL 1 - PLANTING PLAN

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Mulch: Rock Mulch Type 1, @ All Onsite Planting Areas	477.9 SQ FT
Mulch: Rock Mulch Type 3, Medium, @ 30"X30" Splash Pads / Dissipator Blocks @ All Downspout Locations	13.6 SQ FT

0 5 10 20

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LEVEL 3 - MULCH PLAN

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Plant: Dianella Cassa Blue	28.0 EA
Plant: Chondropetalum TectorumCommon Nam...	6.0 EA
Plant: Dianella Tasmanica	18.0 EA
Plant: Bouteloua Gracilis Blonde Ambition	9.0 EA
Plant: Agave Blue FlameCommon Name: Blue F...	9.0 EA
Plant: Asparagus Densiflorus Meyersi	6.0 EA
Plant: Aloe Always Red	11.0 EA
TreeBotanical Name: Aloe ThraskiiCommon Na...	2.0 EA
Tree	1.0 EA
(6'-0"x7'-0") Tree Planter	1.0 EA
(2'-10"x31'-4") BMP Planter	1.0 EA
BMP Planter	117.8 FT

0 5 10 20

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LEVEL 3 - PLANTING PLAN

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Drawn: JA
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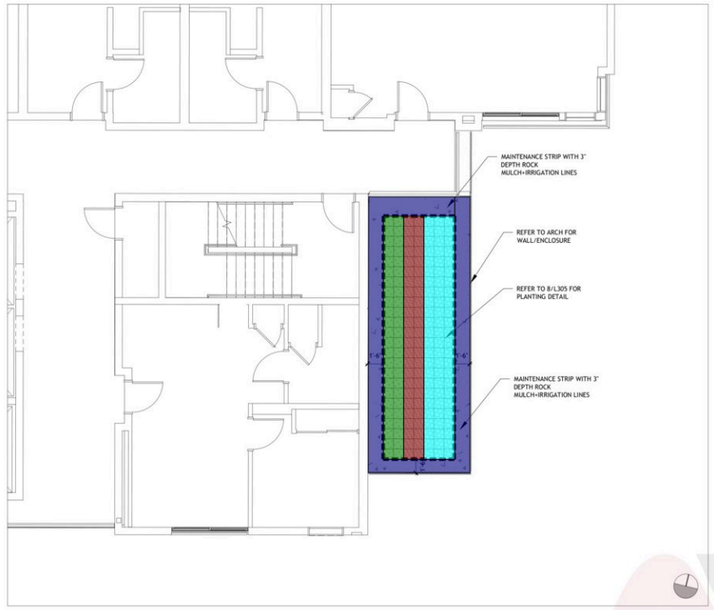


LEVEL 4 LIVEROOF PLANTING

SYMBOL	BOTANICAL NAME	COMMON NAME	BASE LAYER	LIVEROOF MODULE
	ROOF			
	PENNISETUM SPATHIOLATUM + SESLERIA AUTUMNALIS	SLENDER VELDT GRASS + AUTUMN MOOR GRASS	SESLERIA AUTUMNALIS	LIVEROOF DEEP MODULE 8" DEPTH
	ALOE BLUE ELF'	BLUE ELF' ALOE	BLUE ELF' ALOE	LIVEROOF DEEP MODULE 8" DEPTH
	SENECIO MANDRALISCAE	BLUE CHALKSTICKS	SENECIO MANDRALISCAE	LIVEROOF DEEP MODULE 8" DEPTH
	OTHER			
	8" METAL EDGE	LIVEROOF ROOFEDGE, ANODIZED,BLACK COLOR. WWW.LIVEROOF.COM	8" BLACK	ANODIZED
	MULCH			
	MAINTENANCE STRIPS WITH IRRIGATION LINES	GRAVEL TYPE $\frac{3}{8}$" PEA GRAVEL - 'CHANNEL PEBBLE'		IRRIGATION PIPE PER IRRIGATION PLANS; SEE DETAIL FOR GRAVEL INFILL
NOT SHOWN FOR CLARITY	SMALL ROCK MULCH	GRAVEL TYPE $\frac{3}{8}$" DECORATIVE GRAVEL- 'SUMMER CRUNCH'		INFILL AROUND PLANTS WHERE NEEDED

NOTES:

1. 'LIVEROOF' GREEN ROOF TRAY: FULLY-GROWN, 8" DEPTH MODULE TRAY (1' X 1' TRAY SIZE WITH CUSTOM SOIL MIX). TRAYS TO BE FILLED WITH 7 1/2" SOIL COVERED WITH 1" ROCK MULCH IN THE FIELD.
2. ALL GREEN ROOF PLANTING SHALL REQUIRE IRRIGATION. ROOF IRRIGATION ASSUME MULTI-STREAM ROTARY NOZZLE. LOCATE 3 VALVES ON ROOF, COORDINATE IRRIGATION CONNECTION WITH PLUMBING ENGINEER.
3. PEA GRAVEL AROUND IRRIGATION LATERALS, COVER LINES WITH MINIMUM 2" LAYER OF ROCK. PEA GRAVEL HEIGHT TO BE LEVEL WITH LIVE ROOF SOIL
4. FILTER FABRIC - SEE DETAILS FOR PLACEMENT; WHITE PVC LINES SHOULD NOT BE VISIBLE THROUGH ROCK.
5. LEAD TIME FOR LIVEROOF MODULES FOR REQUIRED 95% PLANT COVERAGE- 5-7 MONTHS DEPENDENT ON TIME OF YEAR AND MODULE PRODUCTION.
6. REFER TO SPEC SECTION 07 3363 VEGETATED ROOF, FOR ADDITIONAL INFORMATION
7. MAINTENANCE STRIPS WITH IRRIGATION LINES TO BE FILLED WITH 3/8" PEA GRAVEL
8. 'LIVEROOF' GREEN ROOF TRAY LAYOUT MUST BE REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

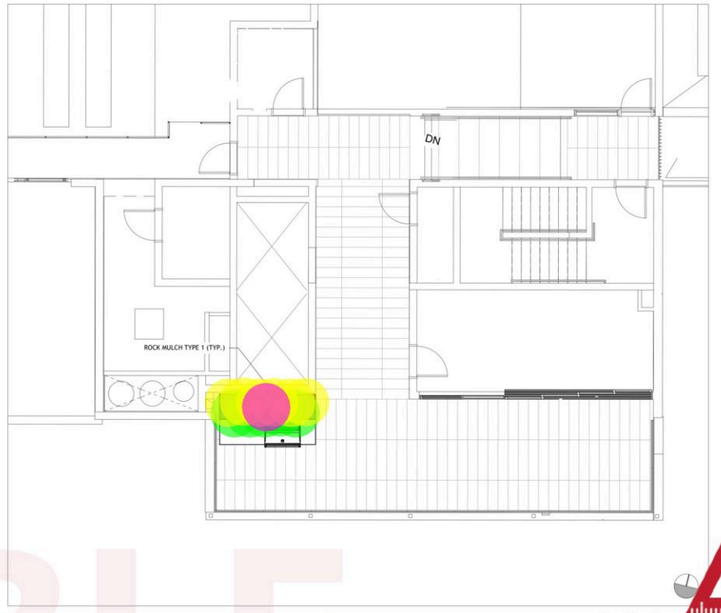
CONTACT INFO FOR SOUTHERN CALIFORNIA: LIVEROOF REP. @ FLORASOURCE LTD. 949.498.1131 SAN CLEMENTE, CA

*REFER TO SHEET L304 FOR FULL LEGEND

LEVEL 4 GREENROOF PLANTING PLAN

SCALE: 1"=5'

0 2.5 5 10



LEVEL 8 PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
⊕	ALOE BLUE ELF'	BLUE ELF ALOE	5 GALLON	18' O.C.
⊖	SANSEVIERIA TRIFASCIATA	VARIEGATED MOTHER-IN-LAW'S TONGUE	5 GALLON	2' O.C.

MULCH LEGEND

SYMBOL	MULCH	SIZE & COLOR
NOT SHOWN	ROCK MULCH TYPE 1 - SMALL	'DRIFT' PEBBLE 50% 3/4" SIZE, 50% 3/8" SIZE.

*REFER TO SHEET L304 FOR FULL LEGEND

LEVEL 8 PLANTING PLAN

SCALE: 1"=5'

0 2.5 5 10

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Plant	73.3 SQ FT
Plant	48.1 SQ FT
Plant	48.0 SQ FT
Maintenance Strip w/ 3" Depth Rock, Mulch+Irrigation Lines, Gravel Type 3/8" Pea Gravel "Channel Pebble"	103.9 SQ FT
Plant: Aloe Blue Elf	5.0 EA
Plant: Sansevieria Trifasciata	6.0 EA
Mulch: Rock Mulch Type 1, @ All Onsite Planting Areas	22.7 SQ FT
(2'-6"x9'-") BMP Planter (Assumed)	1.0 EA

LEVEL 4 & 8 - PLANTING PLAN

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