



MURRAY CITY CORPORATION

COMMUNITY & ECONOMIC DEVELOPMENT

Building Division 801-270-2400

Planning Division 801-270-2420

MCCD DESIGN REVIEW COMMITTEE
Zoom Video Conference

Notice of Public Meeting

Public Notice is hereby given that this meeting will occur electronically without an anchor location in accordance with Utah Code 52-4-207(4), due to infectious disease COVID-19 Novel Coronavirus. The Design Review Committee Chair has determined that conducting a meeting with an anchor location presents substantial risk to the health and safety of those who may be present at the anchor location because physical distancing measures may be difficult to maintain.

To view or listen to the meeting electronically, please register at <https://tinyurl.com/mccd122920> or contact the Planning Division at 801-270-2420 or planning@murray.utah.gov so we can make arrangements to accommodate your participation.

Meeting Date: Tuesday, December 29, 2020
Meeting Time: 5:30 p.m.

AGENDA:

DESIGN REVIEW

1. The Vine Apartments
184 East Vine Street
Mixed Use Development

Project #: 20-110

OTHER BUSINESS

Special accommodations for the hearing or visually impaired will be upon a request to the office of the Murray City Recorder (801-264-2660). We would appreciate notification two working days prior to the meeting. TTY is Relay Utah at #711.

Committee members may choose to participate via telephonic communication or teleconferencing so that all other Committee members and all other persons present in the room will be able to hear all discussions.

On the 23rd day of December 2020, before 5 pm, a copy of the foregoing Notice of Meeting was posted in accordance with Section 10-9a-201 through 209 and Section 52-4-202, U.C.A.



Jared Hall, Planning Division Manager

Murray City Center District Committee Meeting Opening Statement

As the chair of the Murray City Center District Design Review Committee, I, C.J. Kulp, have determined that due to infectious disease COVID-19 Novel Coronavirus, holding an in-person meeting with an anchor location presents a substantial risk to the health and safety of those in attendance.

Under these circumstances, Utah Code 52-4-207(4), allows for electronic meetings to be held without an anchor location so long as the public has an opportunity to view the meeting and submit public comments.

We are holding tonight's Design Review Committee meeting via video conference. If you have a public comment to submit to the Design Review Committee, please do so via email at planning@murray.utah.gov.

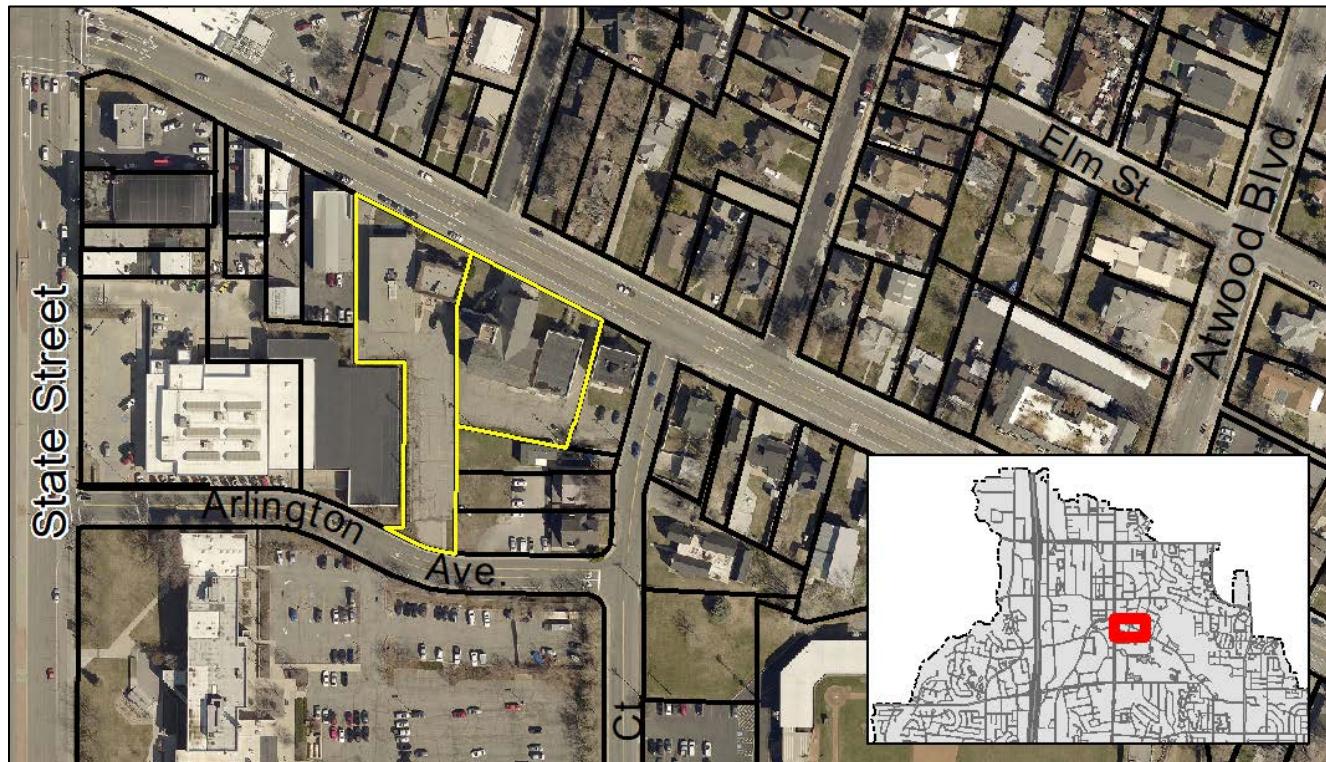


C.J. Kulp
Chair



AGENDA ITEM #1

ITEM TYPE:	Design Review to allow a mixed-use building		
ADDRESS:	184 East Vine Street	MEETING DATE:	December 29, 2020
APPLICANT:	Joe Johnsen, Sync Development	STAFF:	Zachary Smallwood, Associate Planner
PARCEL ID:	22-07-157-042	PROJECT NUMBER:	20-110
ZONE:	MCCD, Murray City Center District		
SIZE:	1.39 Acre Site 159,539 ft ² Building 6,600 ft ² commercial 130 residential units		
REQUEST:	The applicant is requesting Design Review approval to allow the construction of a new mixed-use building.		



I. LAND USE ORDINANCE

Section 17.170.040 of the Murray City Land Use Ordinance outlines the process for review of applications located within the Murray City Center District (MCCD). New construction within the zone requires Design Review Approval by the Planning Commission after obtaining a recommendation from the MCCD Design Review Committee.

II. BACKGROUND

Project Location

The subject property is located east of State Street along the south side of Vine Street. It was the location of the Murray First Ward building and the Murray Carnegie Library. The buildings have been removed by the property owner.

Surrounding Land Use and Zoning

<u>Direction</u>	<u>Land Use</u>	<u>Zoning</u>
North	Single Family Residential	MCCD & R-M-15
South	Government	MCCD
East	Multi-Family Residential	MCCD
West	Government	MCCD

Project Description

The applicants are proposing a seven (7) story mixed-use building at the subject property. It would include retail uses on the ground floor along Vine Street with multi-family residential on floors three through seven. The second floor will be used for the mechanical area and bike storage. The parking is largely provided within the envelope of the building and includes a second level of structured parking.

Area, Width, Frontage and Yard Regulations

Section 17.170.050 of the Land Use Ordinance states that main entries to a building should provide a strong connection to the street. Proposed developments must be set back a minimum of twelve feet (12') from the property facing curb and gutter. The applicants have shown the installation of the MCCD requirements of five feet (5') of park strip and seven feet (7') of sidewalk along Vine Street. The City Engineer has asked the applicant to shift the building back to allow for the doors to the commercial and lobby space to not swing into the public right of way. This has set the building approximately five additional feet back. The 17' setback proposed meets the ordinance requirement that 80% of the building is located within twenty-five feet (25') from the back of curb.

The applicants have not shown the improvements to the Arlington Avenue frontage. These improvements are required and are listed as a condition of approval.

Public Improvements and Street Character

The applicants have proposed to mark the street frontage along Vine Street as a fire lane and for loading/unloading for potential deliveries (see figure 1). The Murray City Fire Department and Engineering Division have asked for additional space to be able to park emergency vehicles without impeding traffic on Vine Street. Planning Division staff has spoken to the applicant and they are looking into ways to provide for emergency vehicle access.

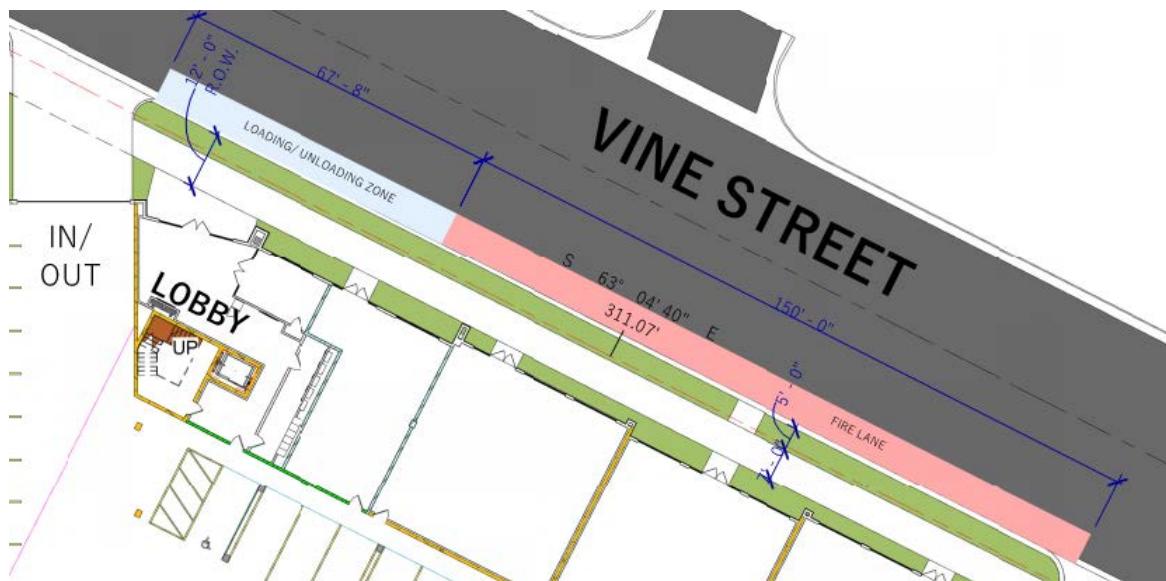


Figure 1: Proposed Fire Lane and loading/unloading zone

As stated above, the applicants have shown the installation of the required public right-of-way improvements along Vine Street. The Site Plan will need to be amended to show the improvements along the Arlington Frontage. The applicants will need to install city standard street furniture such as benches and garbage collection containers that have been previous installed on other projects within the district. The applicant will need to provide an improvements plan showing where they propose to include the street furniture and including specifications of the proposed street furnishings for review.

Building Design, Scaling and Density

The applicants are required to have functional entries at seventy-five feet (75') on average. The proposed plans indicate entries at approximately thirty-six feet (36') on average. Staff does not have any concerns with the number of entries for this building.

Functional entries must be oriented towards the street. Staff does not see any concerns with the way the building is oriented. The building faces Vine Street as the primary street. There is an access on Arlington that will be used largely as a vehicular entry. Though it is primarily being used as a vehicular entry into the development pedestrian improvements will need to be installed.

The Land Use Ordinance requires that blank walls not occupy over 50% of the principal frontage and that windows not be tinted to such a degree that block visibility. Staff has reviewed these requirements with the applicant and they have stated that the windows will not be tinted.

Commercial uses are required on the ground floors of multi-story residential buildings facing a public street for a minimum depth of forty feet (40'). The applicants have met this requirement by creating up to four possible tenant spaces on the ground floor.

Residential density in the Murray City Center District is allowed up to 100 units per acre. The subject property is approximately 1.39 acres resulting in an allowed 139 units. The applicants have proposed 130, representing a residential density of 94 units per acre.

Building Materials

The applicants have proposed a mix of materials for this project. The base is largely grey brick cladding with stone and metal paneling accents. The residential floors above the commercial space is a mix of grey and white stucco with aluminum paneling and wood fiber board accents.

The applicants have provided ample windows throughout the site for visibility by the commercial tenants and prospective residential tenants. A materials package is included with this staff report for review.

Height Regulations

Section 17.170.120 prescribes height requirements for the MCCD Zone. For buildings that are located within sixty feet (60') of a residential district height is limited to fifty feet (50'). Staff has measured the distance from the proposed building to the R-M-15 Zone to the north across Vine Street and found it is approximately seventy-seven feet (77'). Using this measurement, the allowed building heights are up to ten (10) stories or 135' whichever is less. The applicants have proposed a seventy-five foot (75') building which is within the requirements of the Land

Use Ordinance.

Lighting Standards

Staff has reviewed the proposed photometric plan that is attached to this report. The proposed lighting meets the standards of the Land Use Ordinance. Staff recommends that the applicants work with Murray City Power to provide the appropriate streetlights that will be required to be installed during the construction.

Parking Regulations

Square footage of commercial space indicated on the plans is 6,600 ft² of total space. The Land Use Ordinance states that parking should be calculated based on net usable space. Staff has calculated that amount to be 5,280 ft². This results in a commercial requirement of eleven (11) parking stalls. The applicants have indicated the parking immediately behind the commercial areas will be marked for that use. There are 53 spaces indicated in this area, 18 of which are directly adjacent to the rear of the commercial units.

Residential parking is calculated at a minimum of one (1) space per unit up to a maximum of 1.25 (2 bedrooms or less) or 1.4 (more than 2 bedrooms). This results in a minimum parking requirement of 130 parking spaces for the residential component, with a maximum of 163 spaces allowed.

Within the MCCD Zone there is a bike parking requirement. 5% of the total number of spaces required must also be provided for bicycles. This results in seven (7) required bicycle parking spaces. Additionally, there is a provision for a reduction in vehicular parking spaces if additional bicycle parking is provided. This provision allows up to a 10% reduction or twelve (12) spaces. The applicants have proposed an additional fifty-three bicycle parking spaces resulting in an allowed reduction of ten (10) vehicular parking spaces.

The above information is referenced in the table below:

	Min Required	Max Allowed	Provided
Commercial	11	20	11
Residential	130	163	132
Bicycle	7	N/A	60 (53 used for 10 vehicular reduction)
Total Vehicular	141	183	143
Total with Bicycle Reduction	131	173	143

Subsection (A)(7) requires that buildings greater than four stories in height have at least 50% of the parking located within the exterior walls of the building or within parking structures. The proposed plan provides 101 parking spaces within the building envelope, which equates to 71% of the total parking. This meets the Land Use Ordinance requirement.

A traffic impact study has been provided to the City Engineer. The study states that the potential traffic that would be generated with this project will largely remain the same. The main recommendation applies to west bound Vine Street as it intersects with State Street. The recommendation is to convert the existing right turn only lane and bike lane into a turn and through lane with a bicycle “sharrow”. The Executive Summary and Summary of Key Findings/Recommendations are included as an attachment to this report for review.

Loading and Service Areas

Mechanical space has largely been provided on the second floor of the building above the commercial spaces along Vine Street. There is also a generator that is located in the parking area, underneath the ramp to the mezzanine level. The applicants have proposed to locate the garbage collection on the east side of the property behind the parking gate. Staff does not have any concerns with this location because it is adequately screened.

Open Space & Landscaping

Section 17.170.160(A) states that there the proposal must include a system of pedestrian walkways and sidewalks that provide access to building entrances. The building largely faces Vine Street and has great access to that street. The applicants have proposed a walkway from Arlington Avenue to the building for additional pedestrian access.

15% of the site area must be landscaping and amenity space. The applicants indicate a total property square footage of 56,675 ft². This requires 8,502 ft² of open space. The applicant has provided a total of 11,293 ft² (20%) which includes 2,433 ft² of landscaping and 8,860 ft² of roof deck amenity. The applicant meets this requirement, no additional open space is required. Full landscaping plans meeting the requirements of Section 17.68 will be required for Planning Commission review.

Signage

The applicant has not provided any proposed signage for the project. Any signage will go through the building permitting process.

III. DESIGN REVIEW STANDARDS REVIEW

Section 17.170.040(2)(c) outlines the following standards for review for Design Review Approval.

A. The project is in general conformance with the current Murray City General Plan.

With compliance to city regulations, the proposed use is desirable and will be in conformance with the current Murray City General Plan. Initiative 1 of the 2017 General Plan indicates that development of the Downtown area is desired. This project provides new commercial and residential uses in the area. This allows for additional people to call Murray home and patronize local businesses within the Murray City Center District.

B. The project is in general conformance with the specific area plan, if any, adopted for the area.

There are no specific area plans in this area.

C. The project conforms to the requirements of the applicable sections of the Land Use Ordinance.

With conditions, the proposed building will conform with the applicable standards of the Murray City Center District section of the Murray City Land Use Ordinance as outlined in the staff review.

D. The project does not jeopardize the health, safety, or welfare of the public.

With conditions the proposed building will not jeopardize the health, safety, or welfare of the public. The proposed project will bring much needed investment in the area and provide opportunities for additional commercial spaces to be used by all residents within the MCCD and neighboring communities.

E. The Project is in harmony with the purpose of the MCCD zone and adheres to the principles of the design guidelines.

The applicants have proposed a project that will be desirable for this location and is in harmony with the purpose of the MCCD Zone and meets the principles laid out in the Design Guidelines.

The Murray City Design Guidelines reference development goals. One goal is providing vibrant neighborhoods, this proposed project with its new mix of commercial and residential space will increase the people in the area to help foster renewed interest in the area.

Additionally, the guidelines call for attractive architecture and streetscape. The proposed project will develop a vacant site and install public improvements that contribute to a more walkable and livable downtown by increasing the buffer between pedestrians and vehicles.

The proposed project addresses “Capitalize on Transit Opportunities” by providing ample space for bicycles to be stored. This project is close to Murray City Park and shopping at the Pointe at 53rd. This will allow people to walk to obtain food, electronics, and a variety of other services in the area.

IV. CITY DEPARTMENT REVIEW

The Murray City Planning Division distributed the applicant’s relevant materials to various departments for review and comment on November 16, 2020. The following comments have been provided in response:

Engineering Division:

1. Meet City storm drainage requirements, on-site retention of the 80th percentile storm is required. Implement Low Impact Development (LID) practices.
2. Dedicate right-of-way along Vine Street and Arlington and install MCCD street improvements (sidewalk & park strip).
3. Building and doorways should be setback several feet from the sidewalk to allow proper building access and building doors should not swing into the public way.
4. The parking access should be setback from the sidewalk to allow adequate line of sight for pedestrian and vehicular cross traffic.
5. On-street parking needs to be avoided near the drive accesses to allow adequate line of sight for vehicular access onto Vine Street.
6. Avoid using the public right-of-way for staging during construction.
7. Develop a curb side management plan that addresses the proposed commercial space parking, deliveries, service vehicles, emergency vehicles, moving trucks and dumpster service – determine where vehicles will park when accessing and servicing the building. The proposed Loading Zone/Fire Lane will impede line of sight for drivers exiting the parking lot. Dumpsters should not be wheeled out to the sidewalk or street for service.
8. The pedestrian path connection to Arlington will likely need to be retained due to the grade difference between the parking lot and the post office parking structure opening. A fence or handrail may also be needed.
9. The development may meet the minimum MCCD parking requirement, but I highly recommend increasing parking count to at least one stall per bedroom to avoid

parking bleed into surrounding neighborhoods. The commercial parking stalls should also be shared parking after business hours. Vine Street, Jones Court and Arlington Street will not accommodate much on-street parking.

10. Provide a UDOT level II Traffic Impact Study and implement recommendations.
11. Develop a site SWPPP and obtain a Land Disturbance Permit prior to beginning any site work.
12. Obtain a City Excavation Permit for work in the City right-of-way.

Fire Department

1. Fire Department does not see any access besides the road.
2. Applicant must either provide a pullout on Vine Street or provide a drive that connects the front and rear of the property without going through the garage.
3. Fire access must be provided to allow for Fire Department Connection and building access points.
4. Be aware of the height requirement for installing a fire pump for the riser.

Power Department

1. Some power line relocations are necessary
2. Meet all Power Department requirements

Water Division

1. There are water disconnects in the street that will need to be made.

Waste Water Division

1. Sewer will need to tie into Vine Street.
2. Sewer main on Vine is approximately 9.6 feet deep.
3. There is a shared lateral for 5000-5006 Jones Ct that runs down the east side footprint of the new building. This will have to be kept in service during construction.

V. FINDINGS

Based on the analysis of the Design Review application to allow a mixed-use building and a survey of the surrounding area, staff concludes the following:

1. The proposed use for a mixed-use building is allowed in the MCCD Zoning District subject to Design Review by the Murray City Design Review Committee and Planning Commission.
2. With conditions as outlined in the staff report, the proposed use and property will comply with the standards of the Murray City Land Use Ordinance.
3. The proposed use is in harmony with the goals and objectives of the Murray City General

Plan in this area.

VI. CONCLUSION & RECOMMENDATION

Staff recommends that the Design Review Committee review the proposed building for Design Review Approval and forward a recommendation to approve the proposed mixed-use building located at the property 184 East Vine Street subject to the following conditions:

1. The applicant shall meet Murray City Engineering requirements including the following:
 - a) Meet City storm drainage requirements, on-site retention of the 80th percentile storm is required. Implement Low Impact Development (LID) practices.
 - b) Dedicate right-of-way along Vine Street and Arlington and install MCCD street improvements (sidewalk & park strip).
 - c) Building and doorways should be setback several feet from the sidewalk to allow proper building access and building doors should not swing into the public way.
 - d) The parking access should be setback from the sidewalk to allow adequate line of sight for pedestrian and vehicular cross traffic.
 - e) On-street parking needs to be avoided near the drive accesses to allow adequate line of sight for vehicular access onto Vine Street.
 - f) Avoid using the public right-of-way for staging during construction.
 - g) Develop a curb side management plan that addresses the proposed commercial space parking, deliveries, service vehicles, emergency vehicles, moving trucks and dumpster service – determine where vehicles will park when accessing and servicing the building. The proposed Loading Zone/Fire Lane will impede line of sight for drivers exiting the parking lot. Dumpsters should not be wheeled out to the sidewalk or street for service.
 - h) The pedestrian path connection to Arlington will likely need to be retained due to the grade difference between the parking lot and the post office parking structure opening. A fence or handrail may also be needed.
 - i) The development may meet the minimum MCCD parking requirement, but I highly recommend increasing parking count to at least one stall per bedroom to avoid parking bleed into surrounding neighborhoods. The commercial parking stalls should

also be shared parking after business hours. Vine Street, Jones Court and Arlington Street will not accommodate much on-street parking.

- j) Provide a UDOT level II Traffic Impact Study and implement recommendations.
- k) Develop a site SWPPP and obtain a Land Disturbance Permit prior to beginning any site work.
- l) Obtain a City Excavation Permit for work in the City right-of-way.

2. The applicant shall meet all Murray City Fire Department requirements including the following:
 - a) Applicant must either provide a pullout on Vine Street or provide a drive that connects the front and rear of the property without going through the garage.
 - b) Fire access must be provided to allow for Fire Department Connection and building access points.
 - c) Be aware of the height requirement for installing a fire pump for the riser.
3. The applicant shall relocate any power lines that may be required by the Murray City Power Department.
4. The applicant shall meet all Murray City Power Department requirements.
5. The applicant shall with the Murray City Water Division to ensure all water disconnects are made.
6. Sewer connections to the development shall tie into Vine Street.
7. The shared sewer lateral for 5000-5006 Jones Court shall be kept in service during construction.
8. The applicant shall meet all the standards of Section 17.170 (Murray City Center District) of the Murray City Land Use Ordinance.
9. The applicant shall provide an updated Site Plan that shows the public improvements along the Arlington Avenue frontage.
10. The applicant shall provide an Improvements Plan that indicates locations of benches, and trash cans within the public right of way.
11. The applicant shall obtain a sign permit for any proposed signage.

12. The applicant shall ensure that any commercial tenants obtain a Murray City Business License prior to the operation of any business.

MURRAY CITY CENTER DISTRICT APPLICATION

Type of Application (check all that apply):

Minor Alteration Significant Building
 Major Alteration New Construction
 Demolition

Subject Property Address: 184 E. VINE ST. MURRAY, UT 84107

Parcel Identification (Sidwell) Number: 22-07-157-042, 22-07-157-029

Parcel Area: 56,666 SF Current Use: VACANT Zoning Classification: MCCD

Floor Area: 135,841 SF Retail/Office/Storage Area: 6574 SF

Applicant Name: SYNC DEVELOPMENT

Mailing Address: 1946 E. CLAYBORNE AVE.

City, State, ZIP: SLC, UT 84106

Daytime Phone #: 801-913-1420 Fax #: _____

Email joe.johnsen@gmail.com

Business Name (If applicable): _____

Property Owner's Name (If different): DS VINE INVESTMENTS, LLC

Property Owner's Mailing Address: SAME AS ABOVE

City, State, Zip: _____

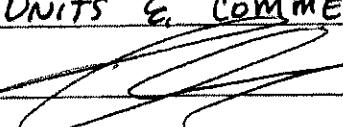
Daytime Phone #: _____ Fax #: _____

Email _____

Describe your request in detail (use additional page if necessary): APPLICANT IS

SUBMITTING FOR DRC Review WHICH IS COMPRISED OF

130 DWELLING UNITS & COMMERCIAL SPACE PER MCCD ZONING.

Authorized Signature:  Date: 9-24-20

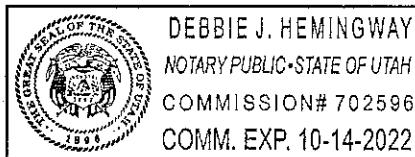
Property Owners Affidavit

I (we) JOE JOHNSON, being first duly sworn, depose and say that I (we) am (are) the current owner of the property involved in this application: that I (we) have read the application and attached plans and other exhibits and are familiar with its contents; and that said contents are in all respects true and correct based upon my personal knowledge.

Owner's Signature

Owner's Signature (co-owner if any)

Subscribed and sworn to before me this 27th day of Sept., 2020.



Notary Public

Residing in 54 C. M.

My commission expires: 10/14/22

Agent Authorization

I (we), _____, the owner(s) of the real property located at _____

_____, in Murray City, Utah, do hereby appoint

_____, as my (our) agent to represent me (us) with regard to this application affecting the above described real property, and authorize

I, [REDACTED] to appear on my (our) behalf before any City board or commission considering this application.

Owner's Signature

Owner's Signature (co-owner if any)

On the 10 day of January, 2018, personally appeared before me

the signer(s) of the above *Agent Authorization* who duly acknowledge to me that they executed the same.

Notary Public
Residing in _____
My commission expires:

THE VINE APARTMENTS

184 E VINE STREET
MURRAY, UTAH



THE VINE APARTMENTS



MAIN FLOOR AREAS

Category	Area (SF)
COMMERCIAL	6600 SF
LOBBY	992 SF
MECH	44 SF
PARKING	26075 SF
R-2	413 SF
R-2	334 SF
R-2	238 SF
TRASH	279 SF
TRASH	155 SF
TOTAL:	35129 SF



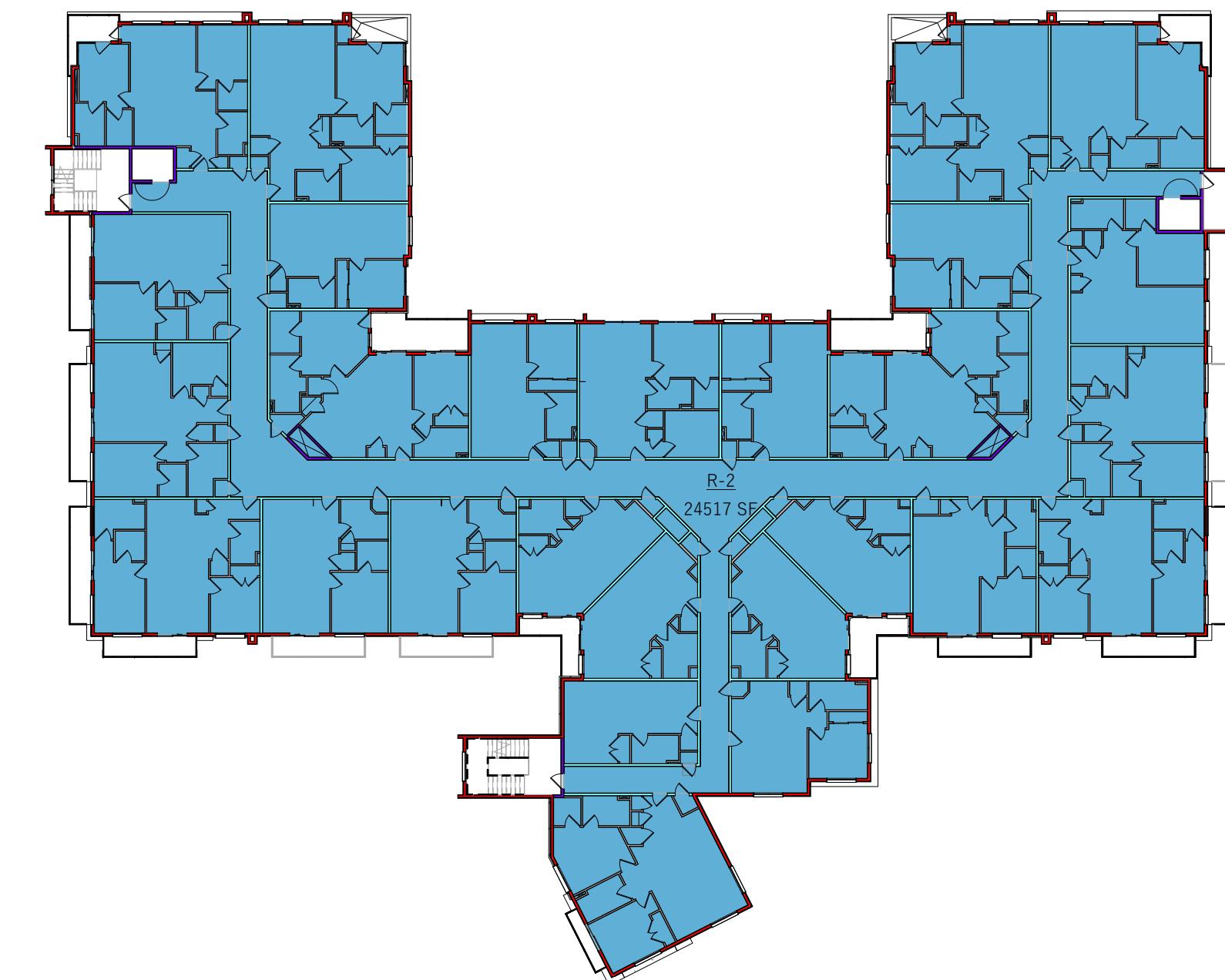
PARKING MEZZANINE - AREAS

Category	Area (SF)
BIKE STORAGE	1287 SF
MECH	1707 SF
PARKING	18307 SF
R-2	322 SF
STORAGE	161 SF
TOTAL:	21783 SF



LEVEL 2 AREAS

Category	Area (SF)
AMENITIES DECK	5976 SF
FITNESS ROOM	755 SF
GAME ROOM	559 SF
R-2	23342 SF
TOTAL:	30632 SF

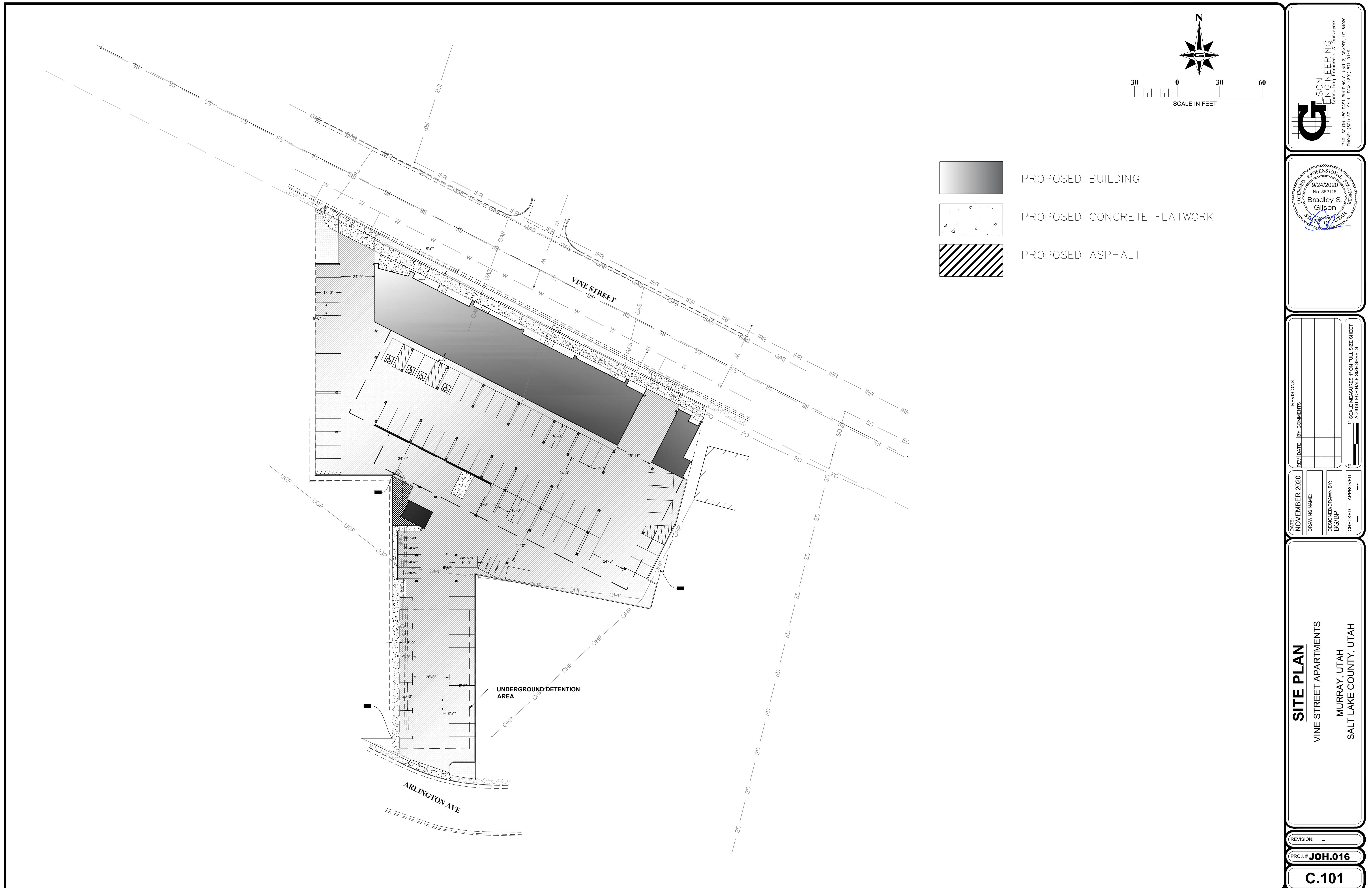


BUILDING AREA TOTALS

Category	Area (SF)	
GROUND LEVEL	COMMERCIAL	6600 SF
GROUND LEVEL	PARKING	26075 SF
GROUND LEVEL	LOBBY	992 SF
GROUND LEVEL	TRASH	279 SF
GROUND LEVEL	TRASH	155 SF
GROUND LEVEL	R-2	413 SF
GROUND LEVEL	MECH	44 SF
GROUND LEVEL	R-2	334 SF
GROUND LEVEL	R-2	238 SF
PARKING MEZZANINE LEVEL	BIKE STORAGE	1287 SF
PARKING MEZZANINE LEVEL	STORAGE	161 SF
PARKING MEZZANINE LEVEL	MECH	1707 SF
PARKING MEZZANINE LEVEL	R-2	322 SF
PARKING MEZZANINE LEVEL	PARKING	18307 SF
2ND LEVEL	FITNESS ROOM	755 SF
2ND LEVEL	GAME ROOM	559 SF
2ND LEVEL	R-2	23342 SF
3RD LEVEL	R-2	24517 SF
4TH LEVEL	R-2	24517 SF
5TH LEVEL	R-2	24517 SF
6TH LEVEL	R-2	24517 SF
TOTAL:		179636 SF

DR.01
AREA PLANS
THE VINE APARTMENTS

JZW
ARCHITECTS



BUILDING OCCUPANCIES
BUSINESS GROUP B (COMMERCIAL SPACE TO BE FINISHED IN FUTURE T.J.)
RESIDENTIAL GROUP R-2
LOW HAZARD STORAGE GROUP S-2 (OPEN PARKING GARAGE AREA)

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY
GROUP R-2
SEPARATION WALLS BETWEEN DWELLING UNITS TO HAVE A 1 HR RATING
FLOOR ASSEMBLIES BETWEEN DWELLING UNITS TO HAVE A 1 HR RATING
AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.2 TO BE PROVIDED

HORIZONTAL BUILDING SEPARATION ALLOWANCE

1. HORIZONTAL SEPARATION ASSEMBLY (PODUM) TO BE 3 HR
2. BUILDING BELOW SEPARATION TO BE CONSTRUCTION TYPE IA:
EXTERIOR BEARING WALLS = 3 HR
INTERIOR BEARING WALLS = 1 HR
EXTERIOR NONBEARING WALLS = FSD < 30' = 1 HR
FSD ≥ 30' = NO RATING
INTERIOR NON BEARING WALLS = 0 HR
FLOORS = 2 HR
ROOFS = 0 HR
3. BUILDING ABOVE SEPARATION TO BE CONSTRUCTION TYPE IIB:
EXTERIOR BEARING WALLS = 2 HR
INTERIOR BEARING WALLS = 0 HR
EXTERIOR NONBEARING WALLS = FSD < 30' = 1 HR
FSD ≥ 30' = 0 HR
INTERIOR NON BEARING WALLS = 0 HR
FLOORS = 0 HR
ROOFS = 0 HR

BUILDING AREA
BELOW PODUM: UNLIMITED SF ALLOWED
ABOVE PODUM:
ALLOWABLE AREA PER LEVEL (R-2) = 48,000 SF ALLOWED
LEVEL 2 AREA = 34,409 SF
LEVELS 3-6 AREA = 24,498 SF

MAXIMUM BUILDING HEIGHT (SHALL NOT EXCEED SMALLER ALLOWABLE BUILDING HEIGHT)
ALLOWED = 75 FEET
ACTUAL = 75 FEET

STORIES (THE NUMBER OF ALLOWABLE MEASURED ABOVE THE PODIUM)
NUMBER OF STORIES ALLOWED (R-2): 5 STORIES
NUMBER OF STORIES ABOVE PODIUM: 5 STORIES

OCCUPANT LOAD:

MAIN LEVEL OCCUPANCY

USE	AREA	OCC. LOAD FACTOR	OCCUPANTS
PARKING GARAGE (OPEN)	24,911 SF	200 SF GROSS	124.55 OCC.
OFFICE (UNFINISHED)	N/A	N/A	N/A
RESIDENTIAL (R-2)	2,012 SF	200 SF GROSS	10.06 OCC.
MECH (S-2)	507 SF	300 SF GROSS	1.69 OCC.
TOTAL:			137 OCCUPANTS

*NOTE: ANY A-3 OCCUPANCY THAT IS UNDER 750 SF AND OR LESS THAN 50 OCCUPANTS IS RECLASSIFIED AS GROUP B AS PER IBC 303.1.1 AND 303.1.2.

**NOTE: ANY ACCESSORY STORAGE SPACE IS CLASSIFIED AS THE OCCUPANCY THAT IT IS ACCESSORY TO (GROUP B) AS PER IBC 311.1.1

2ND LEVEL OCCUPANCY

USE	AREA	OCC. LOAD FACTOR	OCCUPANTS
AMENITIES (S-2)	9,941 SF	TBD	TBD
RESIDENTIAL (R-2)	23,850 SF	200 SF GROSS	119.25 OCC.
EXERCISE (R-2)	599 SF	50 SF GROSS	11.98 OCC.
TOTAL:			132 OCCUPANTS

PARKING MEZZANINE OCCUPANCY

USE	AREA	OCC. LOAD FACTOR	OCCUPANTS
PARKING GARAGE (OPEN)	17,333 SF	200 SF GROSS	86.67 OCC.
STORAGE (S-2)	1,265 SF	300 SF GROSS	4.22 OCC.
RESIDENTIAL (R-2)	184 SF	200 SF GROSS	0.92 OCC.
MECH (S-2)	2,807 SF	300 SF GROSS	9.36 OCC.
TOTAL:			102 OCCUPANTS

3RD - 6TH LEVEL OCCUPANCIES

USE	AREA	OCC. LOAD FACTOR	OCCUPANTS
RESIDENTIAL (R-2)	24,498 SF	200 SF GROSS	122.49 OCC.
TOTAL:			123 OCCUPANTS

TOTAL BUILDING OCCUPANCY

LEVEL	OCCUPANTS
MAIN LEVEL	137
PARKING MEZZANINE	102
2ND LEVEL	132 + AMENITIES
3RD LEVEL	123
4TH LEVEL	123
5TH LEVEL	123
6TH LEVEL	123
TOTAL:	863 OCCUPANTS



MAIN LEVEL - SEPARATION DISTANCES

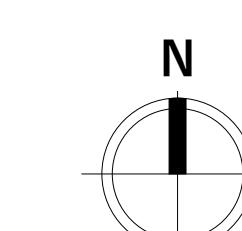
1" = 30'-0"

6
DR0.02



DR0.02
BASIC CODE ANALYSIS
THE VINE APARTMENTS

JZ
ARCHITECTS



SITE LAYOUT

1" = 30' 0"

LINETYPE LEGEN

- — — — — PROPERTY LINE
- — — — — PERIMETER OF PARKING MEZZANINE ABOVE
- — — — — SITE FEATURES
- — — — — PERIMETER OF PODIUM ABOVE
- — — — — MURRAY CITY POWER EASEMENT

<u>PROJECT UNIT TOTALS</u>	
STUDIO	(575 SF)
1 BED JR	(616 SF)
1 BED	(700 - 777 SF)
1 BED + OFFICE	(835-870 SF)
2 BED	(900 - 975 SF)
2 BED PREMIUM	(1,034 - 1,057 SF)
TOTAL:	130

PARKING REQUIRED:

APARTMENTS (2 BED OR LESS)	1 STALL/UNIT (MIN)	1.25 STALLS/UNIT (MAX)	= 130 STALLS(MIN) - 163 STALLS (MAX)
COMMERCIAL (6,600 SF)	1 STALL/265(MAX)- 500(MIN) SF NET		= 13 STALLS(MIN) - 25 STALLS(MAX)
CAR PARKING REDUCTION (1 FOR EVERY 5 EXTRA BIKE SPACES, 14 MAX):			= -10 SPACES
STALLS REQUIRED:			134 STALLS (MIN)

<u>PARKING PROVIDED</u>	<u>ADA</u>	<u>REG.</u>	<u>COMPACT</u> (<15% AS PER 17.170.140.6)	<u>EV</u>	<u>CARPOOL</u>	<u>PARALLEL</u>
GROUND LEVEL	4	68	10	6	3	5
MEZZANINE LEVEL	2	36	6	3	0	0
TOTAL STALLS PROVIDED						143 STALLS

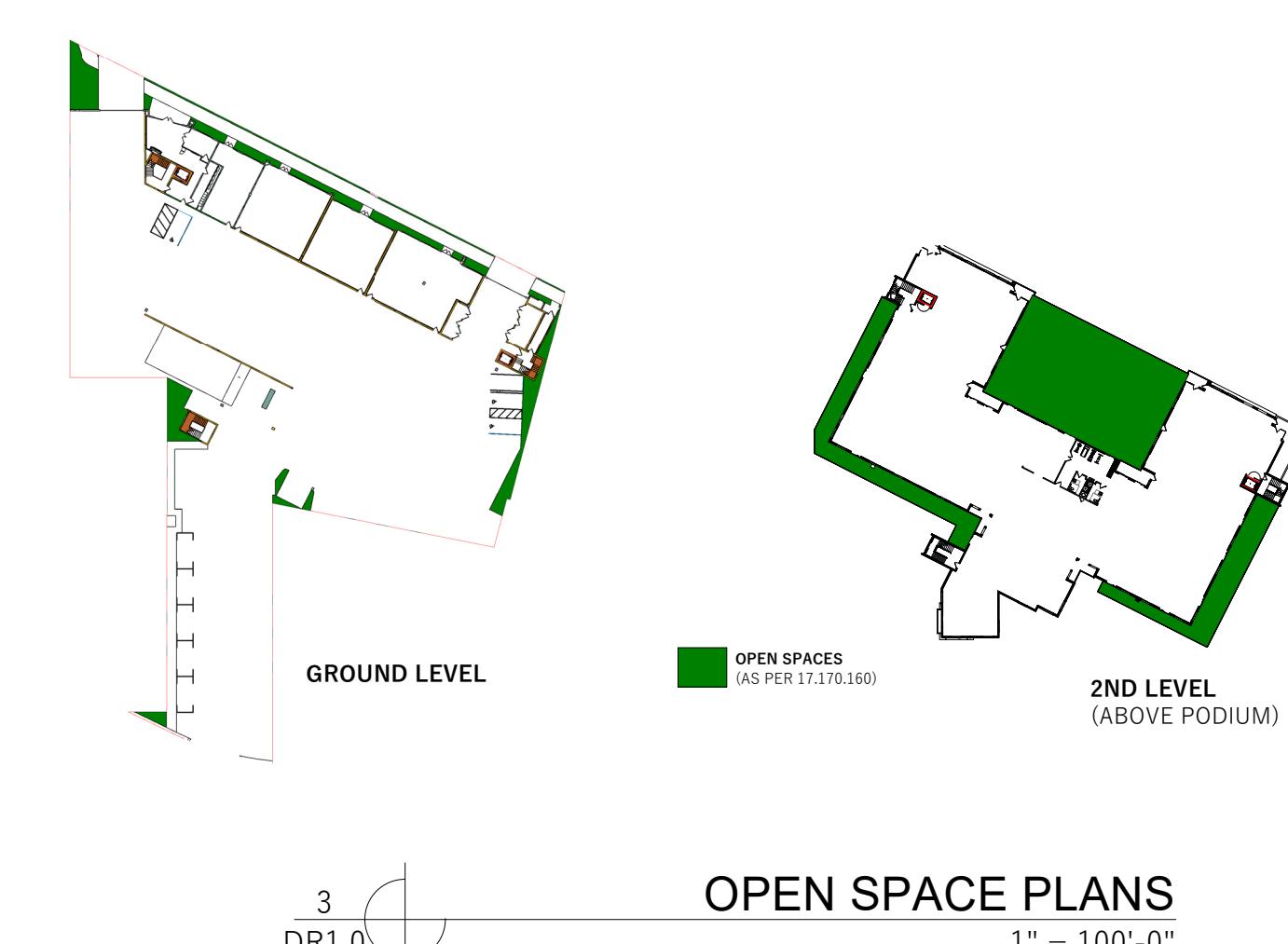
PARKING INSIDE AND OUTSIDE BUILDING:

PARKING WITHIN BUILDING ENVELOPE:

PARKING OUTSIDE PARKING ENVELOPE ARE

BIKE PARKING:
REQUIRED (5% OF REQUIRED CAR PARKING):
PROVIDED PARKING:
NON-REQUIRED SPACES PROVIDED:
CAR PARKING REDUCTION (1 FOR EVERY 5 EXTRA BIKE SPACES, 14 MAX)

<u>OPEN SPACE REQUIREMENT:</u>	
TOTAL LOT SQUARE FOOTAGE:	56,675 SF
TOTAL OPEN SPACE REQUIRED (%15):	8,502 SF
PROVIDED OPEN SPACE:	
ROOF DECKS/ AMENITIES:	8,860 SF
LANDSCAPING:	2,433 SF
OPEN SPACE TOTAL:	11,293 SF

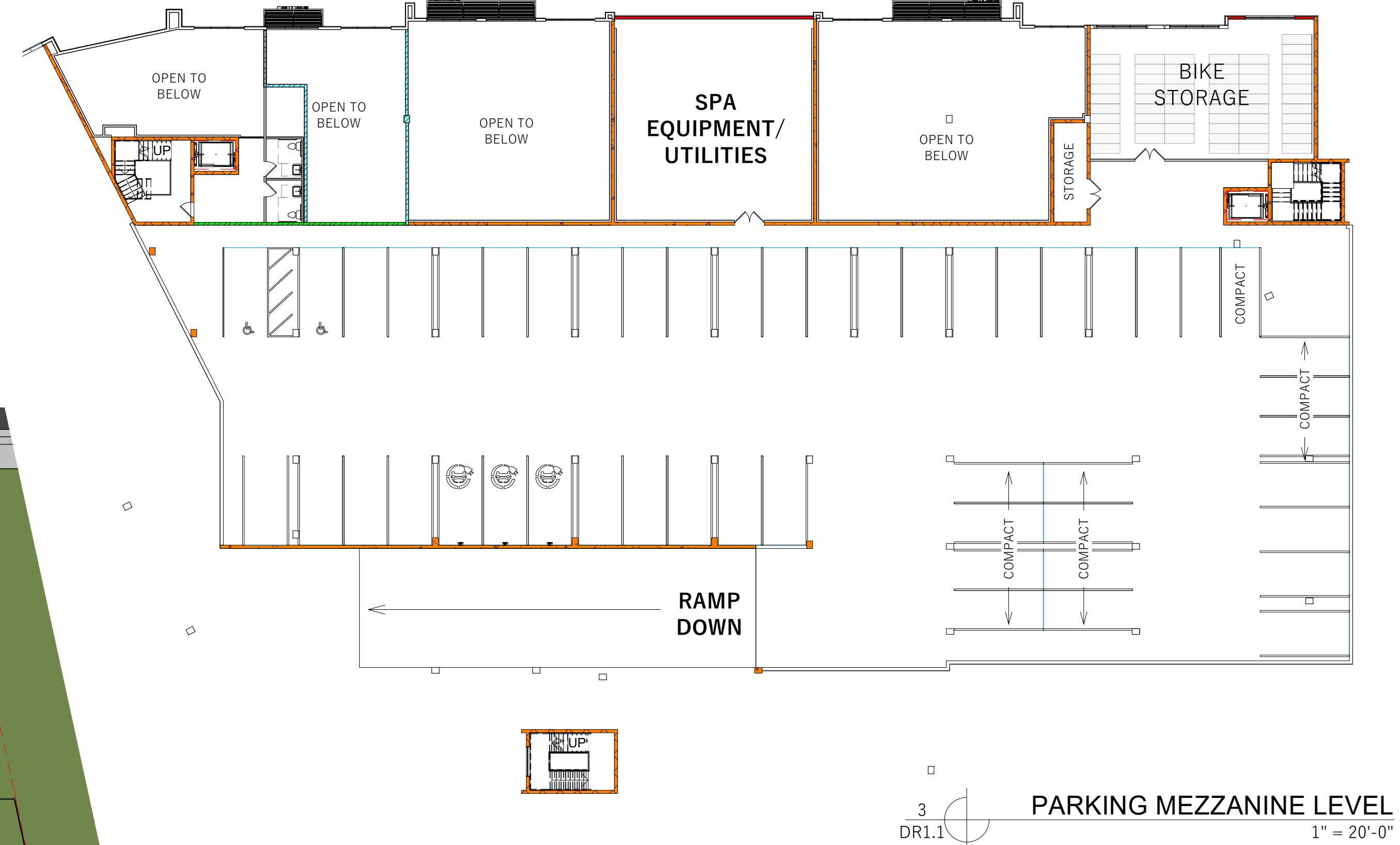
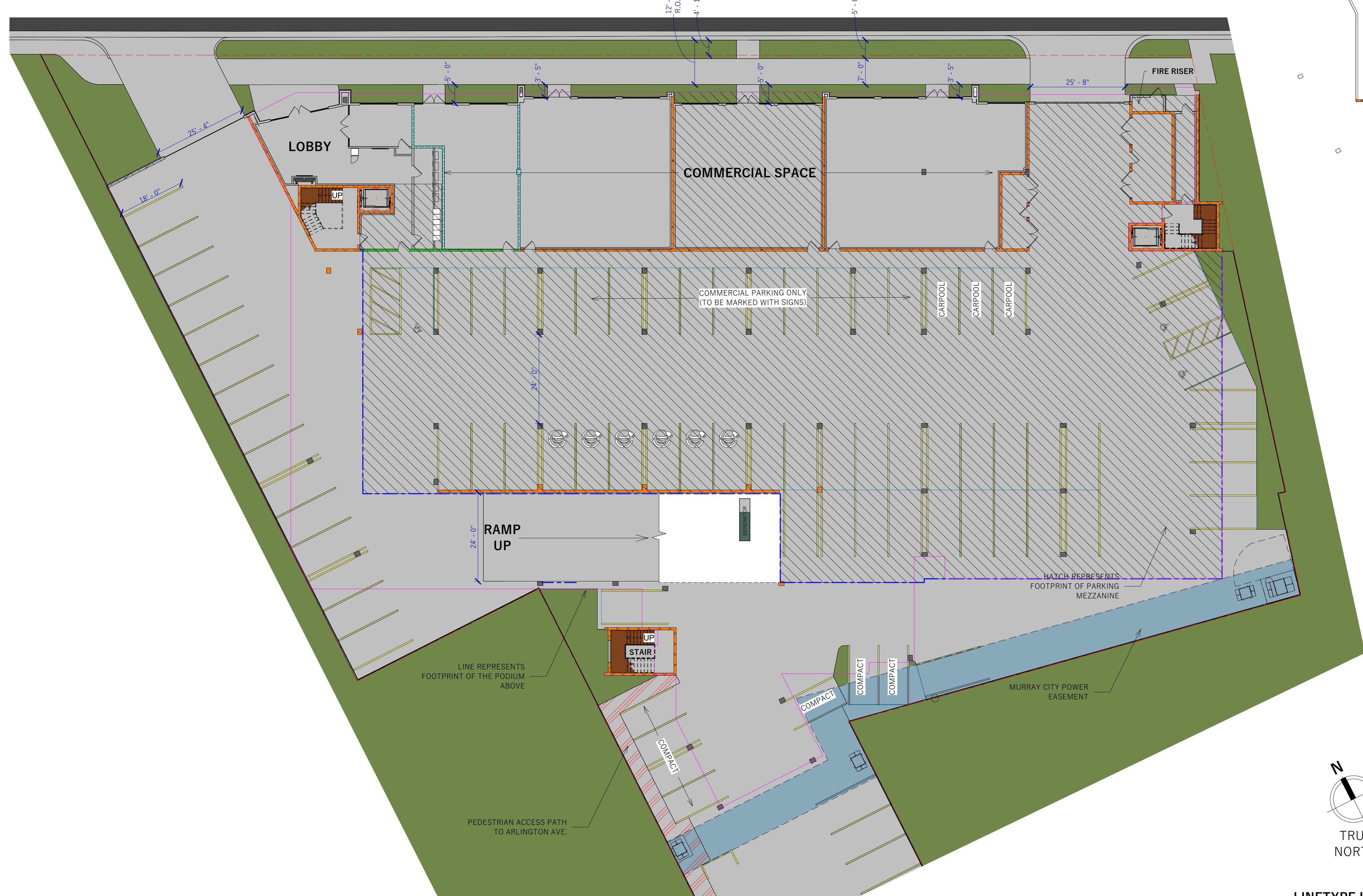


OPEN SPACE PLANS

DR1.0

SITE PLAN

THE VINE APARTMENTS



<u>PROJECT UNIT TOTALS</u>	
STUDIO (575 SF)	23 (18%)
1 BED JR (616 SF)	24 (19%)
1 BED (700 - 777 SF)	29 (22%)
1 BED + OFFICE (835-870 SF)	11 (8%)
2 BED (900 - 975 SF)	39 (30%)
2 BED PREMIUM (1,034 - 1,057 SF)	4 (3%)
TOTAL:	120 UNITS

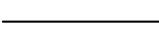
<u>PARKING REQUIRED:</u>	
APARTMENTS (2 BED OR LESS)	1 STALL/UNIT (MIN) 1.25 STALLS/UNIT (MAX) = 130 STALLS(MIN) - 163 STALLS (MAX)
COMMERCIAL (6,600 SF)	1 STALL/265(MAX)- 500(MIN) SF NET = 13 STALLS(MIN) - 25 STALLS(MAX)
CAR PARKING REDUCTION (1 FOR EVERY 5 EXTRA BIKE SPACES, 14 MAX):	= -10 SPACES
STALLS REQUIRED:	134 STALLS (MIN)

PARKING INSIDE AND OUTSIDE BUILDING:

BIKE PARKING:
REQUIRED (5% OF REQUIRED CAR PARKING):
PROVIDED PARKING:
NON-REQUIRED SPACES PROVIDED:

OPEN SPACE REQUIREMENT:	
TOTAL LOT SQUARE FOOTAGE:	56,675 SF
TOTAL OPEN SPACE REQUIRED (%15):	8,502 SF
PROVIDED OPEN SPACE:	
ROOF DECKS/ AMENITIES:	8,860 SF
LANDSCAPING:	2,433 SF
OPEN SPACE TOTAL:	11,293 SF

INFOTYPE LEGEND

- — — — — PROPERTY LINE
- — — — — PERIMETER OF PARKING MEZZANINE ABOVE
- — — — — SITE FEATURES
- — — — — PERIMETER OF PODIUM ABOVE
-  MURRAY CITY POWER EASEMENT

DR1.1

1ST LEVEL

THE VINE APARTMENTS

The logo for JZA Architects features the letters 'JZA' in a large, bold, sans-serif font. The 'J' and 'Z' are a dark grey color, while the 'A' is orange. Below the letters, the word 'ARCHITECTS' is written in a smaller, thin, black, all-caps, sans-serif font. The letters are arranged with 'J' and 'Z' on the left and 'A' on the right, with a small gap between 'Z' and 'A'. The 'ARCHITECTS' text is centered below the letters.



2ND LEVEL UNIT TOTAL	
STUDIO	5
1 BED JR	4
1 BED	9
1 BED + OFFICE	1
2 BED	6
2 BED PREMIUM	0
TOTAL:	25

PROJECT UNIT TOTALS	
STUDIO (575 SF)	23 (18%)
1 BED JR (616 SF)	24 (19%)
1 BED (700 - 777 SF)	29 (22%)
1 BED + OFFICE (835-870 SF)	11 (8%)
2 BED (900 - 975 SF)	39 (30%)
2 BED PREMIUM (1,034 - 1,057 SF)	4 (3%)
TOTAL:	130 UNITS

N
TRUE
NORTH

N
PROJECT
NORTH



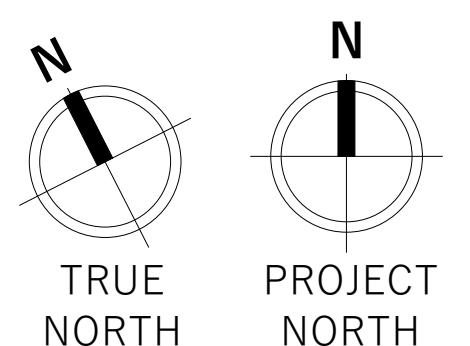
3RD & 4TH LEVEL UNIT TOTALS	
STUDIO	5
1 BED JR	6
1 BED	5
1 BED + OFFICE	3
2 BED	8
2 BED PREMIUM	0
TOTAL:	27 (EACH LEVEL)

PROJECT UNIT TOTALS	
STUDIO (575 SF)	23 (18%)
1 BED JR (616 SF)	24 (19%)
1 BED (717 SF)	29 (22%)
1 BED + OFFICE (835-870 SF)	11 (9%)
2 BED (900 - 975 SF)	39 (30%)
2 BED PREMIUM (1,034 - 1,057 SF)	4 (3%)
TOTAL:	130 UNITS

LINETYPE LEGEND

- PROPERTY LINE
- PERIMETER OF PARKING MEZZANINE ABOVE
- SITE FEATURES
- PERIMETER OF PODIUM ABOVE
- MURRAY CITY POWER EASEMENT

3RD - 4TH LEVELS
DR1.3
1/16" = 1'-0"



DR1.3
3RD & 4TH LEVELS
THE VINE APARTMENTS

JZ
ARCHITECTS

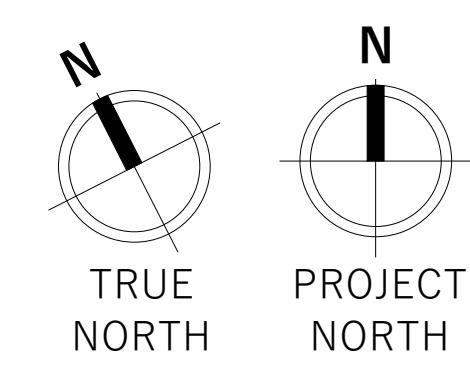


5TH LEVEL
1/16" = 1'-0"

5TH LEVEL UNIT TOTALS	
STUDIO	5
1 BED JR	4
1 BED	5
1 BED + OFFICE	2
2 BED	8
2 BED PREMIUM	2
TOTAL:	26

PROJECT UNIT TOTALS	
STUDIO (575 SF)	23 (18%)
1 BED JR (616 SF)	24 (19%)
1 BED (700 - 777 SF)	29 (22%)
1 BED + OFFICE (835-870 SF)	11 (8%)
2 BED (900 - 975 SF)	39 (30%)
2 BED PREMIUM (1,034 - 1,057 SF)	4 (3%)
TOTAL:	130 UNITS

DR1.4
5TH LEVEL
THE VINE APARTMENTS



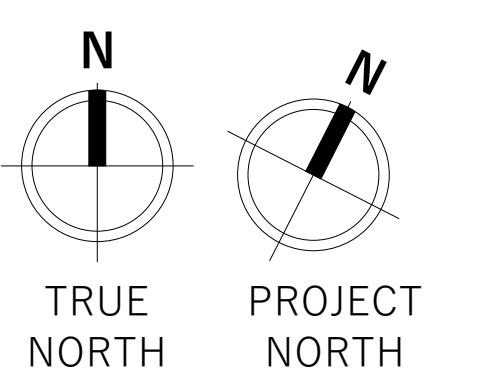
JZ
ARCHITECTS



6TH LEVEL UNIT TOTALS	
STUDIO	3
1 BED JR	4
1 BED	5
1 BED + OFFICE	2
2 BED	9
2 BED PREMIUM	2
TOTAL:	25

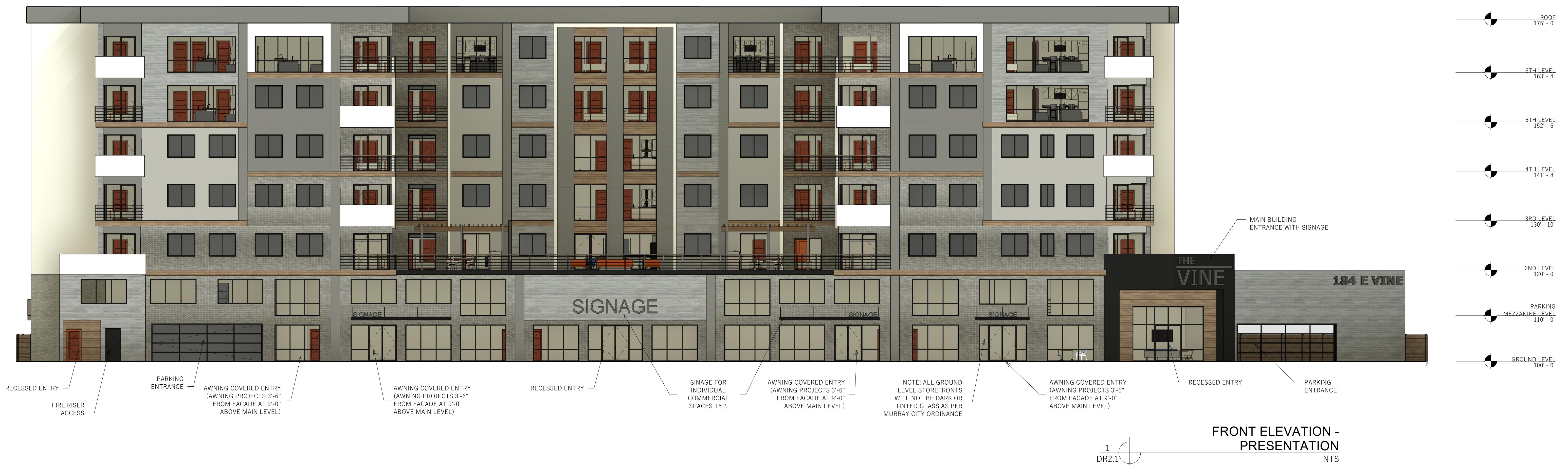
PROJECT UNIT TOTALS	
STUDIO (575 SF)	23 (18%)
1 BED JR (616 SF)	24 (19%)
1 BED (700 - 777 SF)	29 (22%)
1 BED + OFFICE (835-870 SF)	11 (8%)
2 BED (900 - 975 SF)	39 (30%)
2 BED PREMIUM (1,034 - 1,057 SF)	4 (.3%)
TOTAL:	130 UNITS

6TH LEVEL
1/16" = 1'-0"



DR1.5
6TH LEVEL
THE VINE APARTMENTS

JZ
ARCHITECTS





REAR ELEVATION -
PRESENTATION
NTS

1
DR2.2

DR2.2
ELEVATIONS
THE VINE APARTMENTS



LEFT SIDE ELEVATION -
PRESENTATION
NTS

1
DR2.3

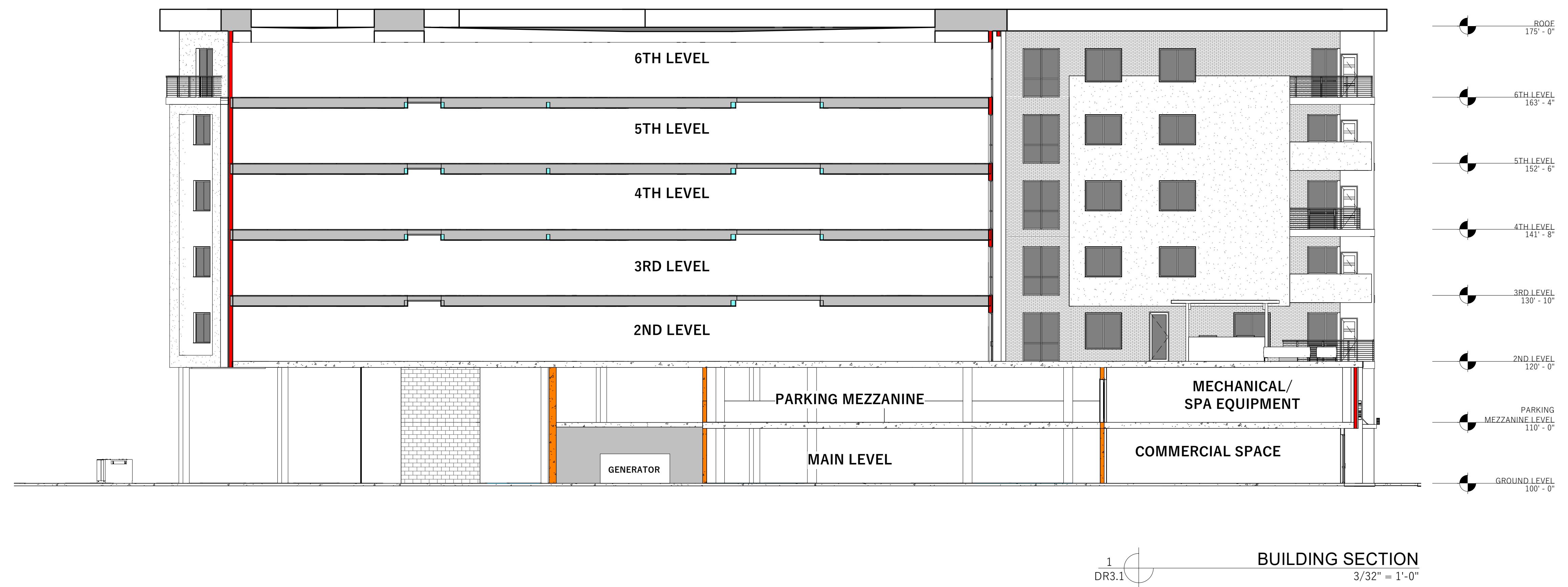
DR2.3
ELEVATIONS
THE VINE APARTMENTS



RIGHT SIDE ELEVATION -
PRESENTATION

1
DR2.4

NTS

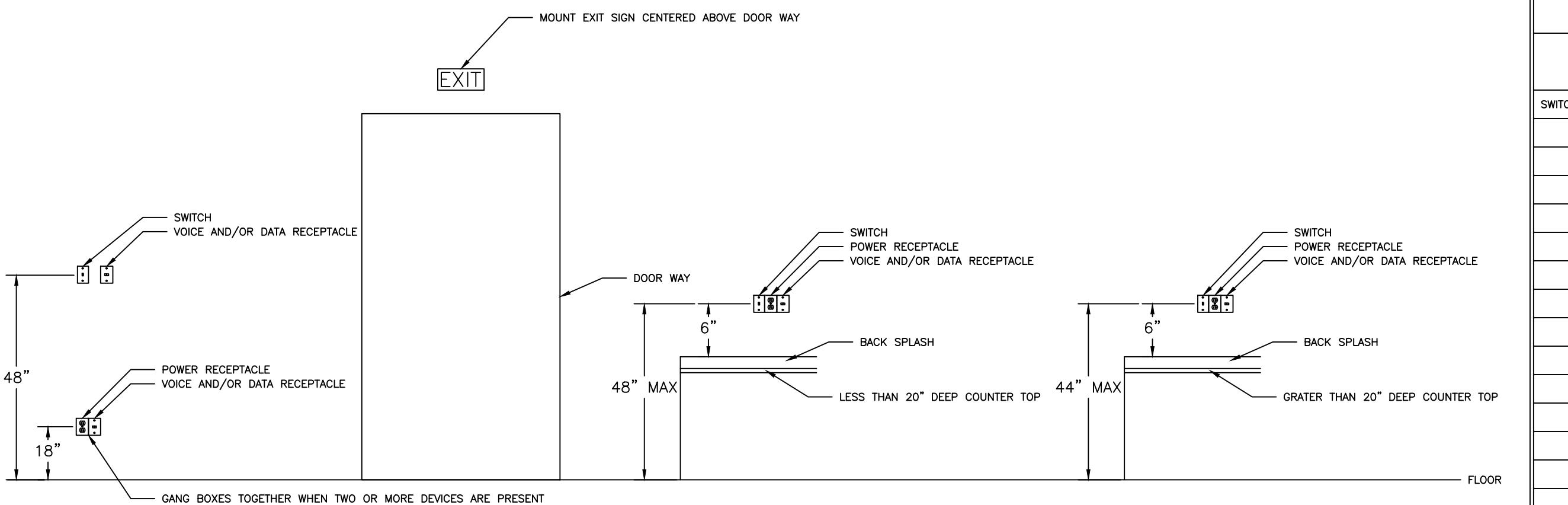


DR3.1

BUILDING SECTION

THE VINE APARTMENTS

The logo for JZL Architects features the letters 'JZL' in a large, bold, dark grey sans-serif font. The 'Z' is stylized with a diagonal cut. To the right of 'JZL' is a vertical orange bar. Below 'JZL' is a smaller, orange, upward-pointing triangle. At the bottom of the image, the word 'ARCHITECTS' is written in a smaller, thin, black sans-serif font, with each letter having a thin vertical line extending downwards from its baseline.



ELECTRICAL TYPICAL DEVICE MOUNTING HEIGHT DETAIL

SCALE: NONE

ELECTRICAL DEVICE SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
SWITCHES	
\$	SINGLE POLE SWITCH
\$2	TWO POLE SWITCH
\$3	THREE WAY SWITCH
\$4	FOUR WAY SWITCH
\$D	DIMMER SWITCH (PROVIDE DIMMER COMPATIBLE WITH LIGHT(S) BEING CONTROLLED)
\$DD	DIMMER THREE WAY SWITCH (PROVIDE DIMMER COMPATIBLE WITH LIGHT(S) BEING CONTROLLED)
\$M	MASTER OVERRIDE SWITCH
\$TM	ELECTRIC TIMER SWITCH
\$P	SWITCH WITH RED PILOT LIGHT IN HANDLE
\$MS	MANUAL MOTOR STARTER WITH HEATER ELEMENTS
\$K	SWITCH WITH KEYED LOCK OPERATION
\$J	SWITCH WITH JANITORIAL KEY LOCK OPERATION
\$OS	WALL MOUNTED OCCUPANCY SENSOR SWITCH (DUAL TECHNOLOGY)
\$VS	WALL MOUNTED VACANCY SENSOR SWITCH (DUAL TECHNOLOGY)
@@	CEILING MOUNTED OCCUPANCY SENSOR (DUAL TECHNOLOGY)
@@	CEILING MOUNTED VACANCY SENSOR (DUAL TECHNOLOGY)
@@	DAYLIGHT SENSOR (CLOSED LOOP)
@@	POWER PACK FOR OCCUPANCY / VACANCY / DAYLIGHT SENSOR (MOUNTED IN ACCESSIBLE CEILING)
RC	PROGRAMMABLE LIGHTING ROOM CONTROLLER (MOUNTED IN ACCESSIBLE CEILING)
PC	PHOTOCELL SENSOR
POWER RECEPTACLES & DEVICES	
○	SINGLE RECEPTACLE
○○	DUPLEX RECEPTACLE
○C	RECEPTACLE MOUNTED ABOVE COUNTER (COORDINATE WITH ARCHITECTURAL DRAWINGS)
○H	HALF SWITCH RECEPTACLE (LABEL ON FACE PLATE FOR EACH OUTLET)
○D	DOUBLE DUPLEX RECEPTACLE
○EWC	ELECTRIC WATER COOLER GFCI RECEPTACLE (COORDINATE WITH PLUMBING CONTRACTOR)
○GFCI	GROUND FAULT CURRENT INTERRUPTER DUPLEX RECEPTACLE
○GFCI	GROUND FAULT CURRENT INTERRUPTER DUPLEX RECEPTACLE IN WEATHER PROOF ENCLOSURE
○IG	ISOLATED GROUND DUPLEX RECEPTACLE
○S	SPECIAL PURPOSE OUTLET (TYPE SPECIFIED IN CD)
○S	SPECIAL PURPOSE OUTLET (TYPE SPECIFIED IN CD)
○P	POWER RECEPTACLE LOCATED IN FLOOR (TYPE SPECIFIED IN CD)
○B	POWER RECEPTACLE LOCATED IN CEILING
○W	WALL FURNITURE CONNECTION (USE SEALIGHT FROM WALL TO FURNITURE)
○C	FLOOR FURNITURE CONNECTION (USE SEALIGHT TO FURNITURE, TYPE SPECIFIED IN CD)
○C	CEILING FURNITURE CONNECTION (POLE PROVIDED BY FURNITURE VENDOR UNO)
TELECOMMUNICATION DEVICES	
▼	VOICE OUTLET (# INDICATES THE NUMBER OF CAT6 CABLES, MINIMUM OF 1)
▼	DATA OUTLET (# INDICATES THE NUMBER OF CAT6 CABLES, MINIMUM OF 1)
▼	VOICE & DATA OUTLET (# INDICATES THE NUMBER OF CAT6 CABLES FOR EACH, MINIMUM OF 1)
▼	COAX OUTLET (# INDICATES THE NUMBER OF RG6 CABLES, MINIMUM OF 1)
▼	SPECIAL OUTLET (TYPE SPECIFIED IN CONSTRUCTION DOCUMENTS)
▼	TELECOMMUNICATION OUTLET LOCATED IN FLOOR (TYPE SPECIFIED IN CD)
▼	TELECOMMUNICATION OUTLET LOCATED IN CEILING
○W	WALL FURNITURE CONNECTION (USE SEALIGHT FROM WALL TO FURNITURE)
○C	FLOOR FURNITURE CONNECTION (USE SEALIGHT TO FURNITURE, TYPE SPECIFIED IN CD)
○C	CEILING FURNITURE CONNECTION (POLE PROVIDED BY FURNITURE VENDOR UNO)

ELECTRICAL ANNOTATION SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
RACEWAY AND CONDUCTORS	
→	ONE CIRCUIT, 2#12 THWN (CU), 1#12 THWN (CU) GND
→	TWO CIRCUITS (SHARED NEUTRAL), 3#12 THWN (CU), 1#12 THWN (CU) GND
→	THREE CIRCUITS (SHARED NEUTRAL), 4#10 THWN (CU), 1#10 THWN (CU) GND
→	ONE CIRCUIT, 2#12 THWN (CU), 1#12 THWN (CU) GROUND, 1#12 THWN (CU) ISO GND
→	TWO CIRCUITS (DEDICATE NEUTRALS), 4#12 THWN (CU), 1#12 THWN (CU) GND
→	THREE CIRCUITS (DEDICATE NEUTRALS), 6#12 THWN (CU), 1#12 THWN (CU) GND
—	RACEWAY AND/OR CONDUCTORS CONCEALED BELOW FLOOR OR BELOW FINISHED GRADE
~~~~	FLEXIBLE CONDUIT, STEEL OR SEALIGHT
<b>ABBREVIATIONS</b>	
F.B.O.	FURNISHED BY OTHERS
F.&B.O.	FURNISHED & INSTALLED BY OTHERS
F.V.M.H.	FIELD VERIFY MOUNTING HEIGHT
A/R	AS REQUIRED
N/A	NOT APPLICABLE OR NOT AVAILABLE
W	MOUNT 48" FROM THE FINISHED FLOOR TO THE CENTER OF DEVICE
C	MOUNT COUNTER HEIGHT (FIELD VERIFY MOUNTING HEIGHT)
CD	CONSTRUCTION DOCUMENT(S)
CU	COPPER
AL	ALUMINUM
WP	WEATHERPROOF
NL	NIGHTLIGHT
E	EMERGENCY
ISO	ISOLATED
GND	GROUND
UNO	UNLESS NOTED OTHERWISE
(D)	TO BE REMOVED OR DEMOLISHED
(E)	TO REMAIN OR EXISTING
(M)	TO BE MOVED OR RELOCATED
(N)	NEW
(V)	TO BE PROVIDED BY VENDOR
(O)	TO BE PROVIDED BY OWNER

ELECTRICAL LIGHTING SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
<b>LUMINAIRES (SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL DETAILS)</b>	
○ □ □	LUMINAIRES (APPROXIMATE SHAPE AND SIZED FOR CLARITY)
~~~~~	STRIP, NEON AND FIBER OPTIC LUMINAIRES
×	EXIT SIGN (NUMBER OF FACES (SHADED) AND ARROW(S) AS SHOWN)
↓	EMERGENCY LIGHT WITH BATTERY PACK
LUMINAIRE MOUNTING	
○ □ □	RECESSED LUMINAIRES
○ □ □	SUSPENDED LUMINAIRES
○ □ □	WALL MOUNTED LUMINAIRES
○ □ □	POLE TOP MOUNTED LUMINAIRES (ROUND OR SQUARE POLE)
○ □ □	POLE WITH ARM MOUNTED LUMINAIRES (ROUND OR SQUARE POLE)
○	GROUND OR FLOOR MOUNTED LUMINAIRES
○ ○ ○	TRACK MOUNTED (LENGTH DRAWN TO SCALE, LUMINAIRE TYPES AND QUANTITIES AS SHOWN)
LUMINAIRE OPTIC ORIENTATION	
○ □	HORIZONTAL ZERO LINE
○ □ □	PRIMARY LUMINAIRE ORIENTATION
○ →	DIRECTIONAL AIMING LINE (FROM PHOTOMETRIC CENTER TO TARGET)
LUMINAIRE ANNOTATION	
○ □ □	LUMINAIRES THAT PROVIDE EMERGENCY ILLUMINATION
○ EM □ EM	LUMINAIRES THAT PROVIDE EMERGENCY ILLUMINATION
○ NL □ NL	LUMINAIRES THAT PROVIDE NIGHT LIGHT ILLUMINATION
○ +48"	MOUNTING HEIGHT
○ A #	LUMINAIRE TAG (# INDICATES THE NUMBER OF LUMINAIRES IN THE AREA, ESTIMATE ONLY)
○ a #	LOWER CASE SUBSCRIPT INDICATES SWITCH IDENTIFICATION
○ H-1 □ L-1	UPPER CASE SUBSCRIPT INDICATES CIRCUIT IDENTIFICATION

ELECTRICAL MOTOR AND EQUIPMENT HOOK-UP SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
MOTOR AND EQUIPMENT HOOK-UP	
○	ELECTRIC MOTOR HOOK-UP (FURNISHED AND INSTALLED BY OTHERS UNLESS NOTED OTHERWISE)
○ ~~~	ELECTRIC EQUIPMENT HOOK-UP (JUNCTION BOX WITH FLEXIBLE CONDUIT, STEEL OR SEALIGHT)
XXAF S J	DISCONNECT SWITCH (NON-FUSIBLE) (AF = FRAME SIZE)
XXX J	DISCONNECT SWITCH (FUSIBLE) (AF = FRAME SIZE, AT = TRIP SETTING)
XXAF S B	DISCONNECT SWITCH (CIRCUIT BREAKER) (AF = FRAME SIZE, AT = TRIP SETTING)
STYLE S	MAGNETIC STARTER (STYLE = VNR, FVR, AFD, ETC)
XXAF S X	COMBINATION STARTER
STYLE S	CONTACTOR - SELF-ENCLOSED

ELECTRICAL GENERAL NOTES	
1.	ALL WORK SHALL COMPLY WITH ALL LOCALLY ADOPTED BUILDING CODES AND REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
2.	THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS, SHOP DRAWINGS, SUBMITTALS, ETC. PRIOR TO ROUGH-IN AND IMMEDIATELY NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES.
3.	THE CONTRACTOR SHALL BE EXPERIENCED IN THE TYPE OF CONSTRUCTION AND WITH THE MATERIALS AND SYSTEMS SPECIFIED.
4.	THE CONTRACTOR SHALL BE FAMILIAR WITH THE EXISTING SITE CONDITIONS.
5.	ALL ALTERNATES MUST BE APPROVED BY ENGINEER PRIOR TO BID DATE, INCLUDING ANY EQUIPMENT THAT HAS BEEN NOTED WITH A "FOR EQUIVALENT" STATEMENT. PROPOSED ALTERNATES MUST BE SUBMITTED TO ENGINEER AT LEAST ONE WEEK PRIOR TO BID DATE TO BE CONSIDERED.
6.	THE CONTRACTOR SHALL COORDINATE ALL UTILITIES PRIOR TO ROUGH-IN AND SHALL IMMEDIATELY NOTIFY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES.
7.	THE CONTRACTOR SHALL PROVIDE ALL UTILITY VAULTS & PADS AS REQUIRED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
8.	ALL MY SWITCHGEAR, SECTIONALIZING CABINETS AND MV TO LV STEP DOWN TRANSFORMERS SHALL BE PROVIDED AND INSTALLED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
9.	ALL MY CABLE SHALL BE PROVIDED AND INSTALLED BY THE UTILITY COMPANY UNLESS NOTED OTHERWISE.
10.	THE CONTRACTOR SHALL VERIFY ALL EQUIPMENT AND MATERIALS PROVIDED BY THE OWNER, ARCHITECT AND ENGINEER OF ANY DISCREPANCIES. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL FOR ALL ELECTRICAL, TELECOMMUNICATION AND OTHER ROOMS AS NOTED. SHOWING THE LAYOUT OF THE ELECTRICAL, TELECOMMUNICATION AND OTHER SYSTEMS EQUIPMENT USING ACTUAL EQUIPMENT DIMENSIONS AND REQUIRED CLEARANCES FOR PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT.
11.	THE CONTRACTOR SHALL USE COPPER CONDUCTORS UNLESS NOTED OTHERWISE.
12.	THE CONTRACTOR SHALL USE A PVC SCHEDULE 40 CONDUIT RACEWAY SYSTEM WITH RIDGED STEEL ELBOWS FOR ALL UNDERGROUND RACEWAY. LARGE RADIUS ELBOWS WILL BE REQUIRED ON ALL CONDUITS 1" AND LARGER. LARGE RADIUS FIBERGLASS ELBOWS ARE ACCEPTABLE ON UNDERGROUND RACEWAY WHERE APPROVED BY THE LOCAL UTILITY. THE CONTRACTOR SHALL USE A MINIMUM OF 1" CONDUIT FOR ALL UNDERGROUND RACEWAY EXTENDING BEYOND THE ENVELOPE OF THE BUILDING UNLESS NOTED OTHERWISE.
13.	THE CONTRACTOR SHALL USE A EMT CONDUIT RACEWAY SYSTEM IN ALL INTERIOR EXPOSED AREAS AND ON THE HOME RUNS IN CONCEALED AREAS. THE CONTRACTOR SHALL USE A MINIMUM SIZE OF 0.75" CONDUIT UNLESS NOTED OTHERWISE.
14.	THE CONTRACTOR SHALL BE PERMITTED TO USE MC CABLE AND THE FIRST BOX IN CONCEALED AREAS ALONG EXPOSED AREAS. THE CONTRACTOR SHALL BE PERMITTED TO USE MC CABLE FOR LIGHT FIXTURE WHIPS WHERE THE MC CABLE DOES NOT EXCEED 8'-0", UNLESS NOTED OTHERWISE.
15.	IN WAREHOUSE AREAS THE CONTRACTOR CAN USE MC CABLE ABOVE 15'-0" UNLESS NOTED OTHERWISE. RUNS MUST BE MADE SQUARE TO THE BUILDING AND INSTALLED IN A NEAT AND WORKMAN LIKE MANNER.
16.	THE CONTRACTOR SHALL BE PERMITTED TO USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT IN EXPOSED AREAS FOR FURNITURE OR MOTOR HOOK-UP WHERE THE LIQUIDTIGHT FLEXIBLE METAL CONDUIT DOES NOT EXCEED 6'-0" UNLESS NOTED OTHERWISE.
17.	THE CONTRACTOR SHALL BE PERMITTED TO USE FLEXIBLE METAL CONDUIT IN EXPOSED AREAS FOR MOTOR AND TRANSFORMER HOOK-UP WHERE THE FLEXIBLE METAL CONDUIT DOES NOT EXCEED 6'-0" UNLESS NOTED OTHERWISE.
18.	THE CONTRACTOR SHALL SEAL ALL RACEWAY PENETRATIONS OF THE BUILDING EXTERIOR WITH AN APPROVED METHOD FOR THE TYPE OF MATERIAL BEING PENETRATED AND MAINTAIN THE FIRE RATING.
19.	THE CONTRACTOR SHALL MAINTAIN ALL FLOOR, WALL, AND CEILING FIRE RATINGS. BOXES, OUTLETS, FLOOR BOXES, FURNITURE CONNECTIONS, ETC. THAT PERMEATE THE RATED FLOORS, WALLS AND CEILINGS SHALL BE SEALED WITH AN APPROVED LISTED MATERIAL TO MAINTAIN THE FIRE RATING OF THE FLOORS, WALLS AND CEILINGS.
20.	THE CONTRACTOR SHALL USE THE FOLLOWING COLOR CODING SCHEME FOR ALL CONDUCTORS: AC SYSTEM PHASE A PHASE B PHASE C NEUTRAL GROUND* 480V, 30, 4W BROWN ORANGE YELLOW GRAY GREEN 480V, 30, 3W BROWN ORANGE YELLOW N/A GREEN 240V, 30, 4W BROWN RED N/A GREEN 240V, 120V, 18, 3W BLACK RED N/A WHITE GREEN 240V, 120V, 34, 4W BLACK ORANGE BLUE WHITE GREEN 208V, 120V, 34, 4W BLACK RED WHITE GREEN *PHASE B SHALL BE WIRED AS THE 2ND LEG. **ALL ISOLATED GROUND CONDUCTORS SHALL BE GREEN WITH A YELLOW STRIPE.
21.	THE CONTRACTOR SHALL VERIFY ALL FLOOR LOAD CALCULATIONS BASED ON THE ACTUAL ROLL OF THE CONDUCTORS AND IF NEEDED FURNISH AND INSTALL LARGER WIRES TO MEET THE FOLLOWING REQUIREMENTS: MAXIMUM VOLTAGE DROP ALLOWANCE ON FEEDERS IS 2%, MAXIMUM VOLTAGE DROP ON BRANCH CIRCUITS IS 3% IF APPROVED BY THE ENGINEER A COMBINED VOLTAGE DROP OF 5% FOR THE FEEDER AND BRANCH CIRCUIT CAN BE USED.
22.	THE CONTRACTOR SHALL PROVIDE SEISMIC BRACING FOR ALL ELECTRICAL EQUIPMENT, RACEWAYS, CABLE TRAYS, BUSDUCCTS, LIGHT FIXTURES, ETC. PER THE REQUIREMENTS OF THE BUILDING CODE. AT A MINIMUM, LIGHT FIXTURES SHALL BE SUPPORTED WITH AT LEAST TWO (2) #12 AWG STEEL WIRE FROM OPPOSITE CORNERS OF THE LIGHT FIXTURE AND ALL ELECTRICAL DISTRIBUTION EQUIPMENT MUST BE SECURED PER THE MANUFACTURER'S RECOMMENDATIONS.
23.	THE CONTRACTOR SHALL LABEL ALL ELECTRICAL DISTRIBUTION EQUIPMENT INCLUDING BUT NOT LIMITED TO SWITCHGEAR, SWITCHES, PANELS, TRANSFORMERS, CIRCUIT BREAKERS, SAFETY SWITCHES, AUTOMATIC REACTORS, COUPERS, ATTS, MANUAL TRIP-SET SWITCHES (MATS), UNINTERFERABLE POWER SUPPLY (UPS), ETC. BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
24.	THE CONTRACTOR SHALL LABEL ALL DEVICES INCLUDING BUT NOT LIMITED TO SWITCHES, OUTLETS, FLOOR BOXES, FURNITURE CONNECTIONS, ETC. WITH THE NAMES OF THE SUPPLYING CIRCUITS ON THE FACE OF THE DEVICE BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
25.	THE CONTRACTOR SHALL LABEL ALL JUNCTION BOXES WITH THE NAME OF THE CIRCUIT(S) BY A MEANS THAT IS SUITABLE FOR THE ENVIRONMENT. IF HAND WRITTEN LABELS ARE NOT ACCEPTABLE, ALL HAND WRITING MUST BE LEGIBLE OTHERWISE HAND WRITTEN LABELS ARE NOT ACCEPTABLE.
26.	THE CONTRACTOR SHALL PROVIDE A CLEAN WORK AREA THROUGHOUT CONSTRUCTION, REMOVING ALL PACKAGING AND WASTE DUE TO THE INSTALLATION. THE CONTRACTOR SHALL ALSO CLEAN ALL ELECTRICAL EQUIPMENT (INTERNAL AND EXTERNAL), LIGHT FIXTURES, DEVICES, ETC. PRIOR TO SUBSTANTIAL COMPLETION.
27.	THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER COMPLETE RECORD OF ALL FIELD CHANGES NOT DOCUMENTED BY RFI, ADDENDUM, ETC. TO BE INCLUDED IN THE OWNERS RECORD DOCUMENTS.

TAFT
ENGINEERING
8610 South 3000 West, Suite #200
Sandy, Utah 84070
(801) 971-3724

JZW
ARCHITECTS

Professional Engineer
Expiration Date: 03-31-2021
Joseph W. Taft
License No. 6563034-2202
Dated: 10-26-2019
State of Utah

ELECTRICAL KEY NOTES:

Coordinate the exact location and orientation of the high voltage switchgear with Murray City Power prior to rough-in.

Coordinate the exact location and orientation of the high voltage transformer with Murray City Power prior to rough-in.

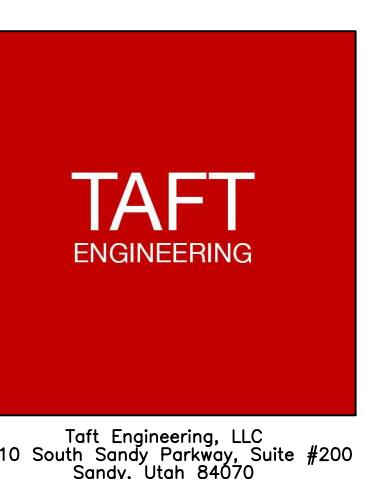
ISSUE DATE:
OCTOBER 28, 2020

REVISIONS:
No. Date

HAWTHORNE HOUSE
APARTMENTS
379 1st AVENUE N
SALT LAKE CITY, UT 84103

ELECTRICAL
SITE PLAN

E1.01

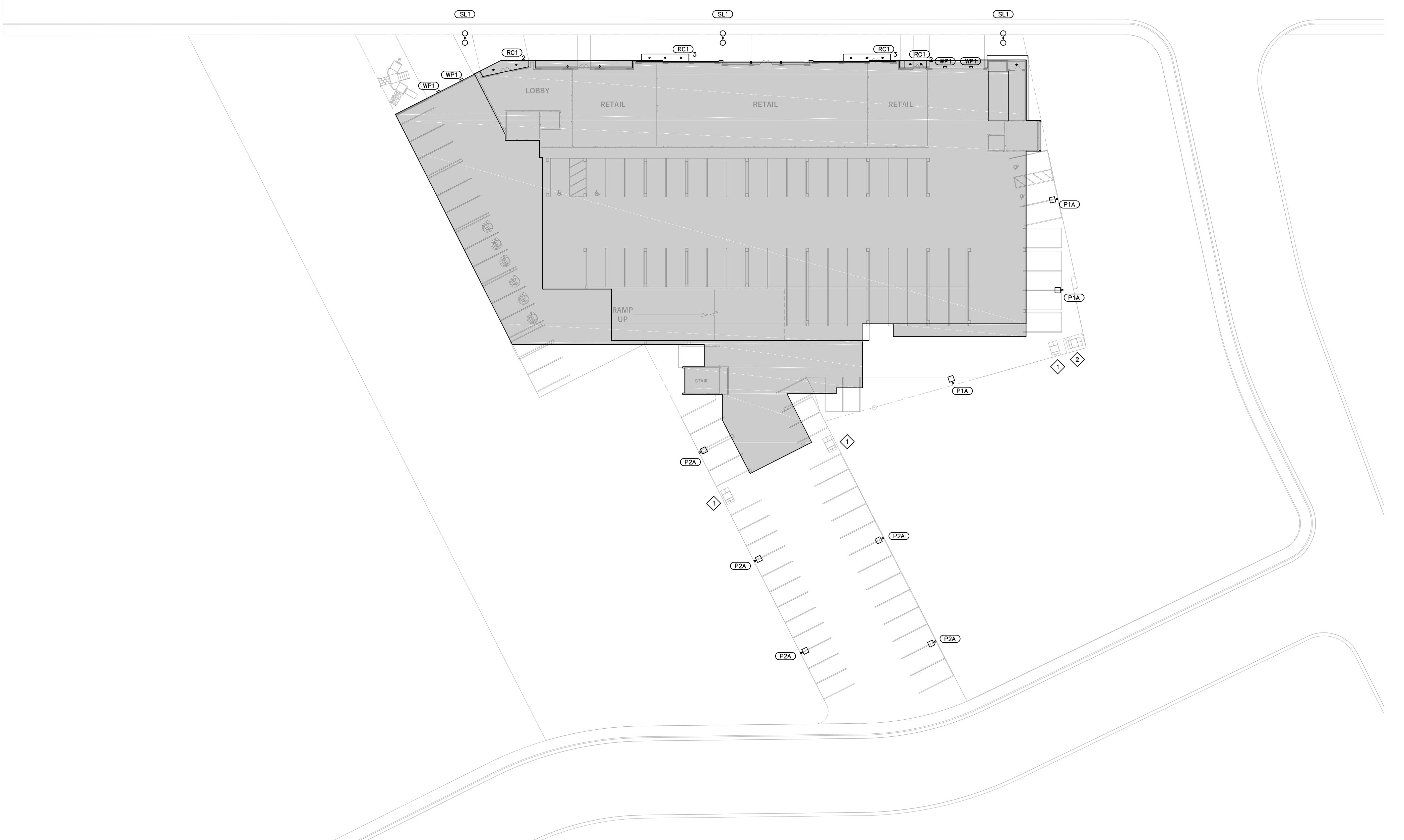


JZW
ARCHITECTS

ELECTRICAL LIGHT FIXTURE SCHEDULE (TYPE)									
TYPE	QUANTITY (ESTIMATE ONLY)	DESCRIPTION	MANUFACTURER(S)	CATALOG NUMBER(S)	LIGHT SOURCE	WATTS PER FIXTURE	VOLTAGE	MOUNTING	NOTES
SL1	2	TWO HEAD CITY STREET LIGHT	TBD		LED 10,000lm, 4000K, 70CRI	260	UNV	POLE MOUNTED FIXTURE	
P1A	1	ONE HEAD 10' POLE LIGHT	VISIONAIRE	VMX-II-T1-48LC-5-4K-UNV-AM-SCBA	LED 10,000lm, 4000K, 70CRI	260	UNV	POLE MOUNTED FIXTURE	
P2A	1	ONE HEAD 16' POLE LIGHT	VISIONAIRE	VMX-II-T1-64LC-7-4K-UNV-AM-SCBA	LED 18,000lm, 4000K, 70CRI	142	UNV	POLE MOUNTED FIXTURE	
RC1	1	6" RECESSED CAN LIGHT	LIGHTQUIER	6RA/Z6RDL30840WOVSZ10U	LED 3,000lm, 4000K, 80CRI	33	UNV	RECESSED	
WP1	1	FULL CUT OFF WALL PACK	VISIONAIRE					UNV	

NOTES:

1. OWNER / ARCHITECT TO DETERMINE FINISH OF FIXTURES
2. ALTERNATE MANUFACTURES ACCEPTABLE IF PRE-APPROVED BY ENGINEER BEFORE BID DATE. SEE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL DETAILS.



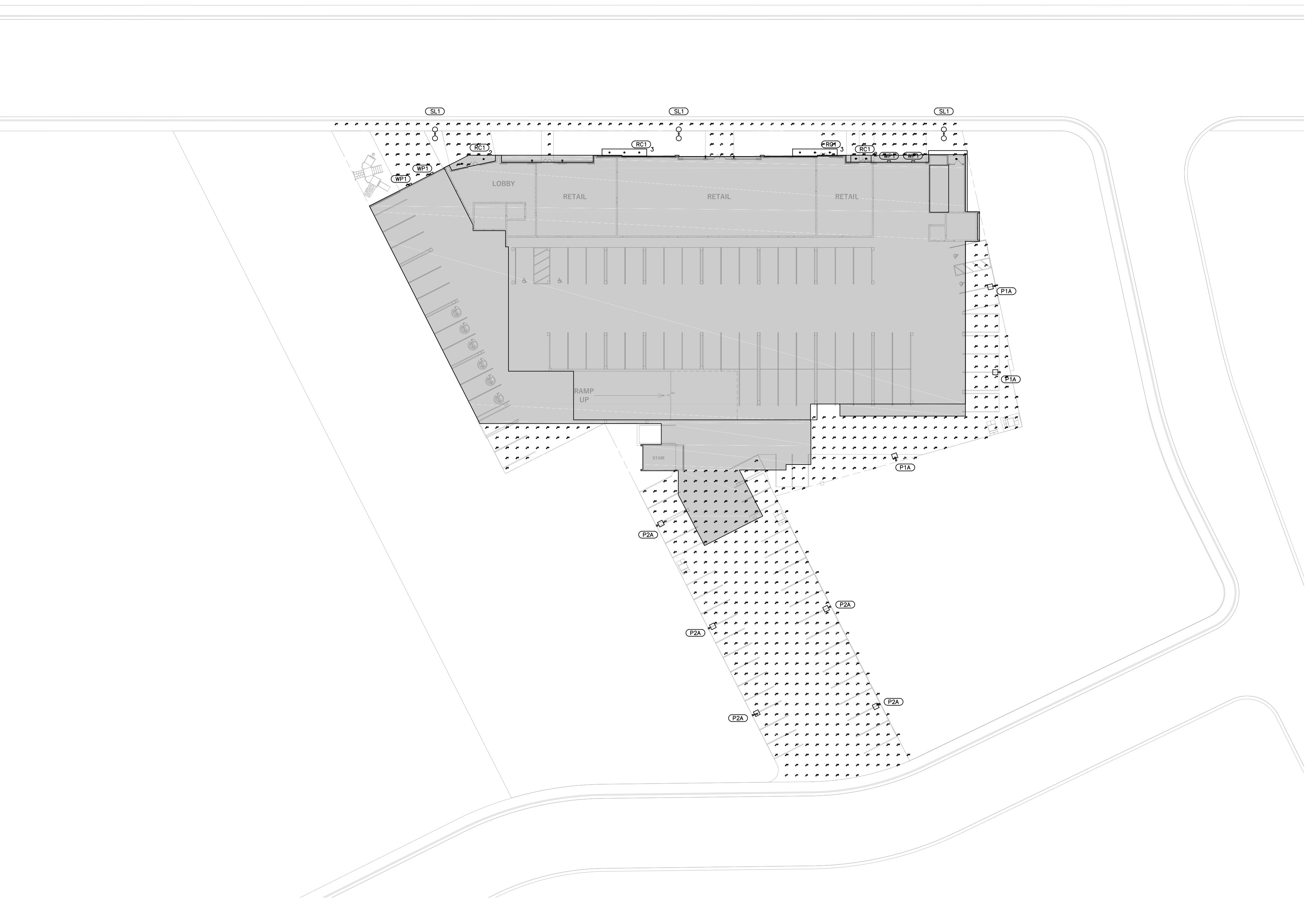
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ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

ELECTRICAL LIGHT FIXTURE SCHEDULE (TYPE)								
TYPE	QUANTITY (ESTIMATE ONLY)	DESCRIPTION	MANUFACTURER(S)	CATALOG NUMBER(S)	LIGHT SOURCE	WATTS PER FIXTURE	VOLTAGE	MOUNTING
SL1		TWO HEAD CITY STREET LIGHT	TBD		LED 10,000lm, 4000K, 70CRI	260	UNV	POLE MOUNTED FIXTURE
P1A		ONE HEAD 10' POLE LIGHT	VISIONAIRE	VMX-II-T1-48LC-5-4K-UNV-AM-SCBA	LED 10,000lm, 4000K, 70CRI	26	UNV	POLE MOUNTED FIXTURE
P2A		ONE HEAD 16' POLE LIGHT	VISIONAIRE	VMX-II-T1-64LC-7-4K-UNV-AM-SCBA	LED 18,000lm, 4000K, 70CRI	142	UNV	POLE MOUNTED FIXTURE
RC1		6" RECESSED CAN LIGHT	LIGHTQUIER	6RA/Z6RDL30840W0XZ10U	LED 3,000lm, 4000K, 80CRI	33	UNV	RECESSED
WP1		FULL CUT OFF WALL PACK	VISIONAIRE	VMX-II-T1-48LC-5-4K-UNV-WM-SCBA	LED 10,000lm, 4000K, 70CRI	78	UNV	WALL MOUNT AT 10'-0"

NOTES:
1. OWNER / ARCHITECT TO DETERMINE FINISH OF FIXTURES
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1

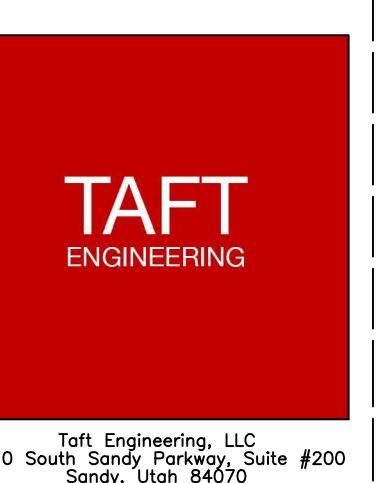
ELECTRICAL PHOTOMETRIC SITE PLAN

SCALE: 1" = 30'-0"

HAWTHORNE HOUSE
APARTMENTS
379 1st AVENUE N
SALT LAKE CITY, UT 84103

ELECTRICAL
PHOTOMETRIC
SITE PLAN

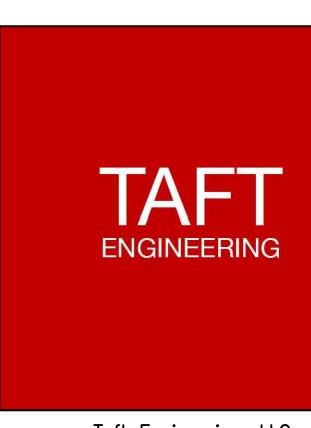
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JZW
ARCHITECTS



MASTER ELECTRICAL SPECIFICATION
GENERAL INSTRUCTIONS
1. The Architectural General and Special Conditions for the work of this project shall be part of the Electrical Specifications. The Electrical Contractor shall examine the General and Special Conditions before submitting a proposal.

2. The General Contractor shall be responsible for all of the work included in the section. The delegation of this work to the Electrical Contractor shall not release the Electrical Contractor of responsibility, the electrical Contractor and subcontractors who perform work under this section shall be responsible to the General Contractor.

3. The intent of the repetition of paragraphs under the General or Special Conditions is to call particular attention to, and it is not intended nor shall it be assumed that any other parts of the General or Special Conditions have been omitted if not repeated here.

4. The name of a manufacturer or brand with catalog number or other product information shall be preceded by the words "or equivalent" in the specification. The term "equivalent" shall mean a product of the same quality and performance as the item specified, they shall be interpreted as establishing a quality or performance standard for the material or product to be purchased. This shall indicate that the Electrical Contractor is not restricted to the use of the named and identified product if a substitute approved by the Architect/Engineer is used. However, when the name of a manufacturer or brand is preceded by the words "or equivalent" and the Architect/Engineer. No substitution of product shall be ordered, fabricated, shipped, or processed in any manner prior to the approval of the Architect/Engineer. The Electrical Contractor shall assume all responsibility for additional expenses as required to make changes from the original material or product specified. If a notice of substitution is not furnished to the Architect/Engineer within fifteen (15) days after the General Contract is awarded, then the materials or products named in the specification shall be purchased and used.

5. The Electrical Contractor shall furnish all drawings and specifications (S) required for the work to be performed. The drawings shall be fully informative of the extent and character of their specified work and be able to coordinate it while avoiding possible interference with the electrical work.

7. Before entering the bid, the Electrical Contractor shall visit the site and examine all adjoining existing buildings, equipment, and space conditions on which or to his or her work is in any way dependent to anticipate any possible space restrictions or constraints that could affect timely completion of the electrical work in accordance with the intent of the specifications and drawings. Electrical Contractor shall report to the Architect/Engineer any potential conflicts with the work of other trades or contractors. The Electrical Contractor shall be responsible for the electrical work being performed in the manner intended. No consideration or allowance will be granted to the Electrical Contractor for failure to visit the project site, or for any alleged misunderstanding of the materials to be furnished or work to be done.

Wiring Devices

1. The wiring devices listed below by manufacturer and catalog number include the quality and specification as required in the drawings. The manufacturer of the wiring device, the wiring devices manufactured in the same type and dimensions that comply with the same tests and codes may be used without approval by the Architect/Engineer. In cases where a device is specified with only one manufacturer and catalog of part number and without the phrase "or equivalent", substitutions shall be made only with the approval of the Architect/Engineer.

a. Wall-Mounted Switches. Where more than one flush wall switch is indicated in the same location, the switches shall be mounted in gangs under a common wallplate.

Single-Pole Switch, 20A, 120/277V Leviton 5621 or equivalent

Two-Pole Switch, 20A, 120/277V Leviton 5622 or equivalent

Three-Way Switch, 20A, 120/277V Leviton 5623 or equivalent

Four-Way Switch, 20A, 120/277V Leviton 5624 or equivalent

b. Wall-Mounted Receptacles. Where more than one flush wall-mounted receptacle is indicated in the same location, the receptacles shall be mounted in gangs under a common wallplate.

Single-Phase Receptacle, 20A, 120V Leviton 16241 or equivalent

Duplex Receptacle, 20A, 120V Leviton 16242 or equivalent

Duplex Receptacle (GFCI), 20A, 120V Leviton N2899 or equivalent

Duplex Receptacle (WP/GFCI), 20A, 120V Leviton W7899 or equivalent

Duplex Receptacle (USB), 20A, 120V Leviton TS832 or equivalent

c. The following wiring devices are specified by only one manufacturer and catalog number; substitutions may be made only with the approval of the Architect/Engineer.

Motion Sensors (Wall) Sensor Switch WSK-PST or equivalent

Motion Sensors (Ceiling) Sensor Switch CMR-DR9 or equivalent

2. The Electrical Contractor shall furnish and install appropriate wallplates for all receptacles, switches, control devices, communications, and telephone outlets.

a. The warehouse wallplates shall be made of stainless steel with a brushed finish.

b. The office wallplates shall be made of nylon with a satin finish, and shall be in the color specified by the architect in one of the standard colors.

c. Special wallplates shall be indicated on the drawings or in the specifications.

3. Where wiring devices are installed in outlet boxes exposed to weather, the boxes, wallplates, and covers shall be approved by the Architect/Engineer for those locations.

Electrical Identification

1. The Electrical Contractor shall maintain accurate records of all deviations in work as installed from work specified on the drawings or in the specifications. On completion of the project, two (2) complete sets of marked-up prints showing these deviations shall be delivered to the Architect/Engineer.

GENERAL

1. The Electrical Contractor shall furnish and install an electric service entrance, related distribution equipment, and an approved ground rod as shown in the drawings, and schedules shall comply with the current NEC, local and state building and electric codes, and electric utility specifications.

2. The Electrical Contractor shall furnish and install all required conduit, cable, and watthour meter and base provided by the Electric Utility and all equipment required by the Electric Utility for secondary service from the point of attachment to the main service panel.

3. The Electrical Contractor shall furnish and install a proper electrical ground as shown on the drawing that makes the approved ground rod available and correctly coping and a properly driven ground rod or rods as specified by the NEC or local electric codes, whichever is more stringent.

4. The conduit used for the service entrance shall be rigid, galvanized steel conduit unless otherwise indicated on the drawings.

5. The conductors for the service entrance shall be rigid, galvanized steel conduit RHW-2 rated at 194 degrees F (90 degrees C), unless otherwise indicated on the drawings.

Underground Service Connection

1. Where the Electric Utility's distribution facilities are in a zoned underground or network area, it will install, own, and maintain, at its own expense, the necessary cable system from the underground distribution line which is part of its distribution system to the Owner's point of service connection.

2. The Electrical Contractor shall contact the Electric Utility and determine the size and conductors to be installed by the Electric Utility and the location of the service entrance. The Electrical Contractor shall also determine the Electric Utility's recommended position for a service end box, as necessary, where the take to is made.

3. The Electrical Contractor shall furnish the matching cable and conduit necessary to extend the service lateral from the service end box to the point of connection to the building, as indicated on the drawings and specifications. The Owner shall maintain at or above the expected service entrance point of connection to the building, as indicated on the drawings and specifications.

4. Unless otherwise specified, the service lateral shall be three insulated conductors buried in a trench 2 to 4 feet deep below finished grade and a minimum of 4 inches wide.

5. The Electrical Contractor shall bury the watthour meter and base, plants and level to the distance above the finished grade specified on the drawings. The service lateral shall be 200 ampere service, the service entrance conductors shall be 2 inch galvanized steel pipe threaded into the meter base. Raintight threaded flange conduct connector shall be located as shown on the drawings, and the metal conduit shall be strapped to the supporting wall with conduit straps not more than 54 inches apart.

Service Entrance

1. The Electrical Contractor shall provide a service entrance system as shown on the drawings and described in the specifications. The Electrical Contractor shall calculate and verify the electrical demand requirements for the building prior to the installation of electric service.

2. The electrical systems shall be a 277/480-volt, 60-Hertz, three-phase, four-wire service.

Grounding

1. Unless otherwise specified or determined by local building code, the Electrical Contractor shall measure ground resistance with an approved Megger ground resistance tester to determine the requirement for more than one ground rod as specified in the current NEC.

2. In addition to the ground rod(s), the Electrical Contractor shall make approved connections to one other earth ground, a metal rod or pipe or as approved by the electric utility. In no case shall a gas pipe be used as an earth ground. The grounding wire shall be at least No. 6 AWG copper protected by PVC conduit if exposed above ground at any outdoor location. All ground clamps shall be approved for interior piping.

3. If a second ground rod is specified, it shall be separated at least 6 feet from the first, assuming vertical orientation of the rods.

Branch-Circuit Panelboards

1. Lighting and appliance branch-circuit panelboards shall be made from cold-rolled steel and shall be firmly bolted in the panelboards.

2. The branch-circuit panelboard shall be equipped with parallel bus bars with sufficient space to accept the number of circuit breakers specified for the project and room to spare for later expansion. The back can shall contain a rail for effective terminal spacing.

3. The branch-circuit panelboard shall be large enough to provide adequate gutter space around the busbars for the anticipated wire termination. The back can shall be large enough to provide adequate gutter space around the busbars for the anticipated wire termination. The back can shall be large enough to provide adequate gutter space around the busbars for the anticipated wire termination. The back can shall be large enough to provide adequate gutter space around the busbars for the anticipated wire termination. The back can shall be large enough to provide adequate gutter space around the busbars for the anticipated wire termination.

4. The branch-circuit panelboard shall be NEMA Type 1, unless noted otherwise, and as manufactured by Cutler-Hammer, Siemens, GE, Square-D or approved equivalent, and shall be fully assembled with all hot and neutral/ground bus bars, gutter posts, the bar, and other ancillary fittings. It shall be durability marked in accordance with the current NEC.

5. The Electrical Contractor shall make every reasonable effort to balance the load to the satisfaction of the Electric Utility. The Electrical Contractor shall compute the load board directly on the inner face of the front cover lightly to identify all circuits in a manner, as approved by the Owner.

Overcurrent Protective Devices

1. The Electrical Contractor shall furnish and install, where indicated on the drawings or as required by the current NEC, main and branch circuit breakers that shall capable of manual operation and opening all poles simultaneously. The tripping mechanism shall operate thermally, magnetically, or both, shall open instantaneously on short circuits, and have a time delay on the circuit breakers shall be of the type shown on the drawings called out in the protective device schedule.

Lighting

1. The Electrical Contractor shall furnish, install, and wire all permanent luminaires as shown on the drawings, or as listed in the luminaire schedule and shall install all recessed lamps, lenses, reflectors, protective covers, and decorative components.

2. Luminaires shall be of the types, and sizes, with the specified lamping, in the wattage ratings, shown on the drawings or as listed in the luminaire schedule. The Electrical Contractor may furnish luminaires that meet current commercial electrical and mechanical standards for the luminaire type. The electrical contractor shall submit the luminaire schedule from the product selection of different manufacturers. However, at the Architect/Engineer's request, the Electrical Contractor shall submit for approval one sample of each luminaire specified.

3. If a luminaire is specified only by a single manufacturer and model number for reasons of appearance, style, or specialized function, and the product is not available commercially, the Electrical Contractor may make a reasonable substitution only with the approval of the Architect/Engineer.

4. The material and workmanship of the luminaires shall be quality products in accordance with commercial standards. By mutual agreement with the Electrical Contractor, the Owner shall have the right to request replacements for any luminaire furnished that is damaged or defective. The electrical contractor shall make every reasonable effort to meet the quality standards for that grade of product, provided that the Electrical Contractor is notified prior to the installation of said luminaire.

5. The Electrical Contractor shall assemble custom-made luminaires furnished disassembled by others following approved assembly drawings.

6. The Electrical Contractor shall coordinate the furnishing and installation of luminaires with the condition of the project to avoid interference with the work of other trades, unless otherwise required by the specifications. The Electrical Contractor shall keep all luminaires delivered to the job site in their protective cartons or packages to protect them from dust or damage prior to installation.

Lamps

1. All luminaires shall be lamped as indicated in the lighting fixture schedule. All lamps shall be new and unused and shall have the style, shape, special properties, wattage ratings, and spectral colors specified.

2. Lamps shall be of the type, and sizes, with the specified lamping, in the wattage ratings, shown on the drawings or as listed in the luminaire schedule. The Electrical Contractor may furnish luminaires that meet current commercial electrical and mechanical standards for the luminaire type. The electrical contractor shall submit the luminaire schedule from the product selection of different manufacturers. However, at the Architect/Engineer's request, the Electrical Contractor shall submit for approval one sample of each luminaire specified.

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LANDSCAPE PLAN SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

A. This section includes landscape procedures for the Project including all labor, materials, and installation necessary, but not limited to, the following:

1. Soil Amendments
2. Fine Grading
3. Cultivation
4. Landscape Edging
5. Turf Planting
6. Furnish and Installing Plant
7. Maintenance
8. Moving
9. Weeding

1.2 SITE CONDITIONS

A. Examination: Before submitting a Bid, each Contractor shall carefully examine the Contract Documents; shall visit the site of the Work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the Bid the cost of all items required by the Contract Documents are at a variance with the applicable laws, building codes, rules, regulations, or contain obvious erroneous or uncoordinated information, the Contractor shall promptly notify the Project Representative and the necessary changes shall be accomplished by Addendum.

B. Protection: Contractor to conduct the Work in such a manner to protect all existing underground utilities or structures. Contractor to repair or replace any damaged utility or structure using identical materials to match existing at no expense to the Owner.

C. Irrigation System: Do not begin planting until the irrigation system is completely installed, is adjusted for full coverage and is completely operational.

1.3 PERMITS

A. Blue Stake/ Dig Line: When digging is required, "Blue Stake" or "Dig Line" the work site and identify the approximate location of all known underground utilities or structures.

1.4 PLANT DELIVERY, QUALITY, AND AVAILABILITY

A. Unauthorized substitutions will not be accepted. If proof is submitted that specific plants or plant sizes are unobtainable, written substitution requests will be considered for the nearest equivalent plant or size. All substitution requests must be made in writing and preferably before the bid due date.

1.5 FINAL INSPECTION

A. All plants will be inspected at the time of Final Inspection prior to receiving a Landscape Substantial Completion for conformance to specified planting procedures, and for general appearance and vitality. Any plant not approved by the Project Representative will be rejected and replaced immediately.

1.6 LANDSCAPE SUBSTANTIAL COMPLETION

A. A Substantial Completion Certificate will only be issued by the Project Representative for "landscape and irrigation" in their entirety. Substantial Completion will not be proportioned to be designated areas of a project.

1.7 MAINTENANCE

A. Plant Material: The Contractor is responsible to maintain all planted materials in a healthy and growing condition for 30 days after receiving a Landscape Substantial Completion at which time the Guarantee period commences. This maintenance is to include mowing, weeding, cultivating, fertilizing, monitoring water schedules, controlling insects and diseases, re-guying and staking, and all other operations of care necessary for the promotion of root growth and plant life so that all plants are in a condition satisfactory at the end of the guarantee period. The Contractor shall be held responsible for failure to maintain watering operations and shall replace any and all plant material that is lost due to improper application of water.

1.8 GUARANTEE

A. Guarantee: A guarantee period of one year shall begin from end of maintenance period and final acceptance for trees, shrubs, and ground covers. All plants shall grow and be healthy for the guarantee period and trees shall live and grow in acceptable upright position. Any plant not alive, in poor health, or in poor condition at the end of the guarantee period will be replaced immediately. Any plant will only need to be replaced once during the guarantee period. Contractor to provide documentation showing where each plant to be replaced is located. Any outside factors, such as vandalism or lack of maintenance on the part of the Owner, shall not be part of the guarantee.

PART II - PRODUCTS

2.1 LANDSCAPE MATERIALS

A. Tree Staking: All trees shall be staked for one year warranty period. All trees not plumbed shall be replaced. Staked trees shall use vinyl tree ties and tree stakes two (2) inch by two (2) by eight (8) foot common pine stakes used as shown on the details.

B. Tree Wrap: Tree wrap is not to be used.

C. Mulch/Rock: See Plans. All planter beds to receive a minimum 3" layer for trees, shrubs, and perennials and 1" for groundcovers.

D. Weed Barrier: DeWitt 5 oz. weed barrier fabric. Manufactured by DeWitt Company, dewittcompany.com or approved equal.

E. Tree, Shrub, and Grass Backfill Mixture: Backfill mixture to be 50% native soil and 50% topsoil, thoroughly mixed together prior to placement.

F. Topsoil: Required for turf areas, planter beds and Backfill Mixture. Acceptable topsoil shall meet the following standards:

a. PH: 5.5-7.5

b. EC (electrical conductivity): < 2.0 mmhos per centimeter

c. SAR (sodium absorption ration): < 3.0

d. OM (percent organic matter): >1%

e. Texture (particle size per USDA soil classification): Sand <70%; Clay < 30%; Silt < 70%; Stone fragments (gravel or any soil particle greater than two (2) mm in size) < 5% by volume.

G. Turf Sod: All sod shall be 18 month old as specified on plans (or approved equal) that has been cut fresh the morning of installation. Only sod that has been grown on a commercial sod farm shall be used. Only use sod from a single source.

H. Landscape Edging: Headers and Edging six (6) inches by four (4) inches extruded concrete curb made up of the following materials:

a. Washed mortar sand free of organic material.

b. Portland Cement (see concrete spec. below for type)

c. Reinforced fiber - Specifically produced for compatibility with aggressive alkaline environment of Portland cement-based composites.

d. Only potable water for mixing.

PART III - EXECUTION

3.1 GRADING
A. Topsoil Preparation: Grade planting areas according to the grading plan. Eliminate uneven areas and low spots. Provide for proper grading and drainage.
B. Topsoil Placement: Slope surfaced away from building at two (2) percent slope with no pockets of standing water. Establish finish grades of one (1) inches for planters below grade of adjacent paved surface. Provide neat, smooth, and uniform finish grades.
C. Compaction: compaction under hard surface areas (asphalt paths and concrete surfaces) shall be ninety-five (95) percent. Compaction under planting areas shall be between eighty-five (85) and ninety (90) percent.

3.2 TURF GRADING
A. The surface on which the sod is to be laid shall be firm and free from footprints, depressions, or undulations of any kind. The surface shall be free of all materials larger than 1/2" in diameter.
B. The finish grade of the topsoil adjacent to all sidewalks, mow-strips, etc. prior to the laying of sod, shall be set such that the crown of the grass shall be at the same level as the adjacent concrete or hard surface. No exceptions.

3.3 PLANTING OPERATIONS
A. Review the exact locations of all trees and shrubs with the Project Representative for approval prior to the digging of any holes. Prepare all holes according to the details on the drawings.
B. Water plants immediately upon arrival at the site. Maintain in moist condition until planted.
C. Before planting, locate all underground utilities prior to digging. Do not place plants on or near utility lines.
D. The tree planting hole should be the same depth as the root ball, and three times the diameter of the root ball.
E. Trees must be placed on undisturbed soil at the bottom of the planting hole.
F. The tree hole depth shall be determined so that the tree may be set slightly high of finish grade, 1" to 2" above the base of the trunk flare, using the top of the root ball as a guide.
G. Plant immediately after removal of container for container plants.
H. Set tree on soil and remove all burlap, wire baskets, twine, wrappings, etc. before beginning and backfilling operations. Do not use planting stock if the ball is cracked or broken before or during planting operation.
I. Apply vitamin B-1 root stimulator at the rate of one (1) tablespoon per gallon.
J. Upon completion of backfilling operation, thoroughly water tree to completely settle the soil and fill any voids that may have occurred. Use a watering hose, not the area irrigation system. If additional prepared topsoil mixture needs to be added, it should be a coarse mix as required to establish finish grade as indicated on the drawings.
K. The amount of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches. All cuts, scars, and bruises shall be properly treated according to the direction of the Project Representative. Proper pruning techniques shall be used. Do not leave stubs and do not cut the leader branch. Improper pruning shall be cause for rejection of the plant material.
L. Prepare a watering circle of 2' diameter around the trunk. For conifers, extend the watering well to the drip line of the tree canopy. Place mulch around the planted trees.

3.4 TURF - SOD LAYING

A. Top Soil Amendments: Prior to laying sod, commercial fertilizer shall be applied and incorporated into the upper four (4) inches of the topsoil at a rate of four pounds of nitrogen per one thousand (1,000) square feet. Adjust fertilization mixture and rate of application as needed to meet recommendations given by topsoil analysis. Include other amendments as required.
B. Fertilization: Three weeks after sod placement fertilize the turf at a rate of 1/2 pound of nitrogen per 1000 square feet. Use fertilizer specified above. Adjust fertilization mixture and rates to meet recommendations given by topsoil analysis.
C. Sod Availability and Condition: The Contractor shall satisfy himself as to the existing conditions prior to any construction. The Contractor shall be fully responsible for furnishing and lay sod required on the plans. He shall furnish new sod as specified above and lay it so as to completely satisfy the intent and meaning of the plans and specification at no extra cost to the owner. In the case of any discrepancy in the amount of sod to be removed or amount to be used, it shall be the Contractor's responsibility to report such to the Project Representative prior to commencing the work.
D. Sod Laying: The surface upon which the new sod to be laid will be prepared as specified above. Areas where sod is to be laid shall be cut, trimmed, or shaped to receive full width sod (minimum twelve (12) inches). No partial strip or pieces will be accepted.
E. Sod shall be tamped lightly as each piece is set to insure that good contact is made between edges and also the ground. Sod laid on any sloped areas shall be anchored with wooden dowels or other materials which are accepted by the grass sod industry.
F. Apply water directly after laying sod. Rainfall is not acceptable.
G. Watering of the sod shall be the complete responsibility of the Contractor by whatever means necessary to establish the sod in an acceptable manner to the end of the Maintenance period. If an irrigation system is in place on the site, but for whatever reason, water is not available in the system. It is the responsibility of the Contractor to water the sod by whatever means, until the sod is accepted by the Project Representative.
H. Protection of the newly laid sod shall be the complete responsibility of the Contractor. The Contractor shall provide acceptable visual barriers, to include barricades set appropriate distances with strings or tape between barriers, as an indication of new work. The Contractor is to restore any damaged areas caused by others (including vehicular traffic), erosion, etc, until such time as the lawn is accepted by the Owner.
I. All sod that has not been laid within 24 hours shall be deemed unacceptable and will be removed from the site.

3.5 WEED BARRIER
A. Cut a slit or x at each plant location no larger than necessary to install plant.
B. Overlap rows of fabric min. 6".
C. Stable fabric edges and overlaps to ground.

END OF SECTION

LANDSCAPE GENERAL NOTES

INSTALLER RESPONSIBILITIES AND LIABILITIES

1. THESE PLANS ARE FOR BASIC DESIGN LAYOUT AND INFORMATION. THE INSTALLER IS REQUIRED TO REFER TO THE INDIVIDUAL TRADE - SCOPE OF WORK. OWNER ASSUMES NO LIABILITIES FOR INADEQUATE ENGINEERING CALCULATIONS, MANUFACTURER PRODUCT DEFECTS, INSTALLATION OF ANY LANDSCAPING AND COMPONENTS, OR TIME EXECUTION.
2. THE INSTALLER OF ALL LANDSCAPING AND IRRIGATION SYSTEMS ARE LIABLE AND RESPONSIBLE FOR ALL JURISDICTIONAL AND CODE REQUIREMENTS, TIME EXECUTIONS, AND INSTALLED PRODUCTS AND MATERIALS.

GRADING AND DRAINAGE REQUIREMENTS

1. ALL GRADING IS TO SLOPE AWAY FROM THE STRUCTURE PER CODE.
2. FINISHED GRADE IS NOT PERMITTED BY CODE TO DRAIN ON NEIGHBORING PROPERTIES
3. 6" MIN FOUNDATION LEFT EXPOSED AT ALL CONDITIONS
4. LANDSCAPE CONTRACTOR IS TO IMPROVE EXISTING FINAL GRADE AND PROPER DRAINAGE ESTABLISHED BY THE EXCAVATOR FOR FINAL GRADE ACTIVITIES INCLUDING AND MAINTENANCE, PRESERVATION, OR EXAGGERATION OF SLOPES, BERMS, AND SWALES.
5. IF ANY SWALE, BERM, OR GRADE HAS BEEN DAMAGED OR IS INCORRECT TO ENSURE CORRECT WATER FLOW THE TRADE CONTRACTOR IS RESPONSIBLE TO FIX STATED ISSUE.
6. ROOF RUN-OFF DEVICES SHOULD BE INSTALLED TO COLLECT AND DISCHARGE ALL ROOF RUNOFF A MINIMUM OF 10 FEET FROM FOUNDATION ELEMENTS OR BEYOND THE LIMITS OF BACKFILL AROUND THE FOUNDATION WALLS, WHICHEVER DISTANCE IS GREATER.
7. THE GROUND SURFACE WITHIN 10 FEET OF THE FOUNDATIONS SHOULD BE SLOPED TO DRAIN AWAY FROM THE STRUCTURE WITH A MINIMUM FALL OF 6 INCHES.

LANDSCAPING REQUIREMENTS

1. ALL LANDSCAPING IS TO BE INSTALLED PER ALL GOVERNING JURISDICTIONS I.E. INTERNATIONAL BUILDING CODE, CITY CODES.
2. NO COMPLIANCE TO ALL GOVERNING JURISDICTION REQUIREMENTS AND REGULATION ARE THE RESPONSIBILITY OF THE LANDSCAPING INSTALLER.
3. ALL PLANTED LANDSCAPING IS TO BE INSTALLED ACCORDING TO THE NURSERY CARE AND INSTALLATION INSTRUCTIONS WHERE PURCHASED AND BASED ON INDIVIDUAL SOIL CONDITIONS AND SITE CONDITIONS.

8. CONTRACTOR TO PROVIDE NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED IN ALL LANDSCAPE AREAS. ALL LAWN AREA TO RECEIVE 100% HEAD TO HEAD COVERAGE WITH SPRAY AND ROTARY SPRINKLER HEADS. ALL PLANTER AREAS NEED TO RECEIVE A FULL Drip SYSTEM TO EACH TREE AND SHRUB ON PROJECT. SEE IRRIGATION PLAN.

LANDSCAPE NOTES

1. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF ALL MATERIALS FOR BIDDING AND INSTALLATION PURPOSES. IF DISCREPANCIES EXIST, THE PLAN SHALL DICTATE QUANTITIES TO BE USED.
2. PLANT MATERIAL TO BE INSTALLED PER PLANT LEGEND. IF SUBSTITUTIONS ARE WANTED, PROPOSED LANDSCAPE CHANGES MUST BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PLANTING.

3. NEW LAWN AREAS TO BE SODDED WITH DROUGHT TOLERANT VARIETY. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD.

4. SANDY LOAM TOPSOIL TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 6" TOPSOIL (WITH 2" HUMUS MIXED INTO TOPSOIL PRIOR TO SPREADING) IN ALL NEW PLANTER AREAS AND 4" IN ALL NEW LAWN AREAS. PLANTER BEDS TO BE EXCAVATED AS NECESSARY IN ORDER TO ACCOMMODATE NEW TOPSOIL AND/OR PLANTER BED MULCH TO REACH FINISHED GRADE.

5. 4"X6" EXTRUDED CONCRETE MOW CURB TO BE INSTALLED BETWEEN ALL LAWN AND PLANTER AREAS PER PLAN. ANY TREES LOCATED IN LAWN MUST HAVE A 4" CONCRETE CURBING.

6. DeWitt 5 OZ. WEED BARRIER FABRIC TO BE INSTALLED IN ALL PLANTER AREAS EXCEPT UNDER ANNUAL PLANTING AREAS AS SHOWN ON PLAN.

7. ROCK MULCH TO BE IMPLEMENTED AT THE FOLLOWING DEPTHS: 3" IN ALL TREE, SHRUB, AND PERENNIAL PLANTER AREAS; ANNUAL PLANTING AREAS AS SHOWN ON PLAN TO RECEIVE 4" OF SOIL ADD MATERIAL. PULL BARK MULCH MIN. 3" AWAY FROM BASE OF ALL PERENNIALS AND SHRUBS AND MIN. 6" AWAY FROM ALL TREES.

8. CONTRACTOR TO PROVIDE NEW AUTOMATIC UNDERGROUND IRRIGATION SYSTEM TO BE INSTALLED IN ALL LANDSCAPE AREAS. ALL LAWN AREA TO RECEIVE 100% HEAD TO HEAD COVERAGE WITH SPRAY AND ROTARY SPRINKLER HEADS. ALL PLANTER AREAS NEED TO RECEIVE A FULL Drip SYSTEM TO EACH TREE AND SHRUB ON PROJECT. SEE IRRIGATION PLAN.

LANDSCAPE ARCHITECT / PLANNER

Developer / Property Owner:

JOE JOHNSEN
JOE.JOHNSON@GMAIL.COM

Client / Engineer:

JZW-ARCHITECTS
849 WEST HILLFIELD RD, STE 204
LAYTON, UTAH 84041
801-936-1343

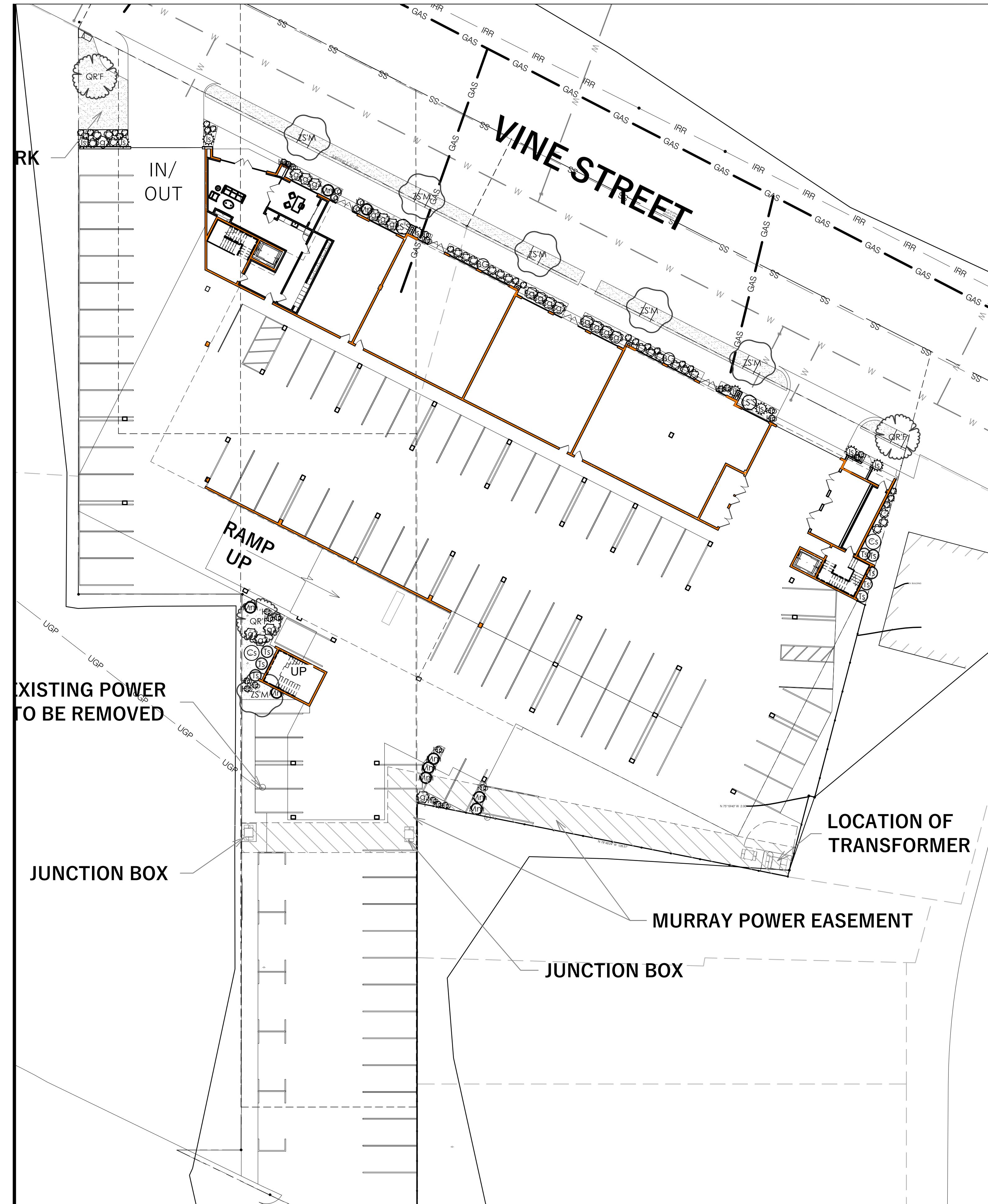
Landscaping Architect / Planner:

PLANT SCHEDULE

CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
LS'S	2	Liquidambar styraciflua 'Slender Silhouette' Columnar Sweet Gum	15 gal	
QR/F	3	Quercus robur 'Fastigiatum' Pyramidal English Oak	B & B	2' Cal
ZSM	6	Zelkova serrata 'Musashino' Sawleaf Zelkova	2' Cal	
SHRUBS				
Bg2	9	Buxus microphylla 'Winter Gem' Globe Winter Gem Boxwood	5 gal	
BG	2	Buxus 'Green Mountain' Green Mountain Boxwood	5 gal	
CS	2	Cornus stolonifera 'Arctic Fire' Arctic Fire Dogwood	5 gal	
IS	8	Ilex crenata 'Sky Pencil' Sky Pencil Japanese Holly	5 gal	
Sg2	10	Spirea x bumalda 'Goldflame' Goldflame Spirea	5 gal	
Ts	8	Thuja occidentalis 'Smaragd' Emerald Green Arborvitae	5 gal	
ANNUALS/PERENNIALS				
HP	22	Heuchera x 'Pardon Me' Pardon Me Daylily	1 gal	
Lg	4	Liatris Gayfeather	1 gal	
S2	21	Sedum x 'Autumn Fire' Autumn Fire Sedum	1 gal	
GRASSES				
C	19	Calamagrostis acutiflora 'Karl Foerster' Feather Reed Grass	2 gal	
Mm	9	Miscanthus sinensis 'Morning Light' Morning Light Eulalia Grass	2 gal	

REFERENCE NOTES SCHEDULE

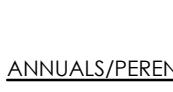
SYMBOL	LANDSCAPE DESCRIPTION	QTY
I-01	SODDED LAWN AREA LAWN AREAS SHALL BE SODDED. NEW LAWN AREAS TO BE SODDED WITH 18% BLUE	



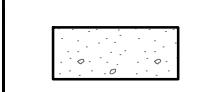
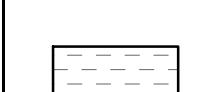
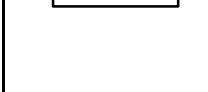
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11-02-2020	UT20111	 811 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC 1-800-662-4111 www.bluestakes.org	VINE STREET APARTMENTS 184 E VINE ST. MURRAY, UTAH	Developer / Property Owner: JOE JOHNSEN JOE.JOHNSON@GMAIL.COM	 PKJ DESIGN GROUP Landscape Architecture / Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com	PM: JTA DRAWN: KBA CHECKED: SAV PLOT DATE: 11/2/2020	
NO.	REVISION	DATE		Client / Engineer: JZW-ARCHITECTS 849 WEST HILLFIELD RD, STE 204 LAYTON, UTAH 84041 801-936-1343			
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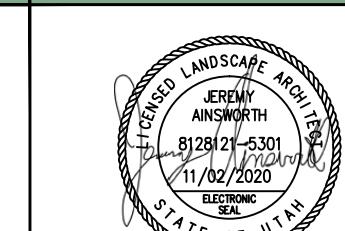
GRAPHIC SCALE: 1" = 20'

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL
	LS'S	2	Liquidambar styraciflua 'Slender Silhouette' Columnar Sweet Gum	15 gal	
	QR/F	3	Quercus robur 'Fastigiatum' Pyramidal English Oak	B & B	2' Cal
	ZSM	6	Zelkova serrata 'Musashino' Sawleaf Zelkova		2' Cal
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Bg2	9	Buxus microphylla 'Winter Gem' Globe Winter Gem Boxwood	5 gal	
	BG	2	Buxus x 'Green Mountain' Green Mountain Boxwood	5 gal	
	Cs	2	Cornus stolonifera 'Arctic Fire' Arctic Fire Dogwood	5 gal	
	Is	8	Ilex crenata 'Sky Pencil' Sky Pencil Japanese Holly	5 gal	
	Sg2	10	Spirea x bumalda 'Goldflame' Goldflame Spirea	5 gal	
	Ts	8	Thuja occidentalis 'Smaragd' Emerald Green Arborvitae	5 gal	
ANNUALS/PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	Hp	22	Hemerocallis x 'Pardon Me' Pardon Me Daylily	1 gal	
	Lg	4	Liatris Gayfeather	1 gal	
	S2	21	Sedum x 'Autumn Fire' Autumn Fire Sedum	1 gal	
GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	
	C	19	Calamagrostis x acutiflora 'Karl Foerster' Feather Reed Grass	2 gal	
	Mm	9	Miscanthus sinensis 'Morning Light' Morning Light Eulalia Grass	2 gal	

REFERENCE NOTES SCHEDULE

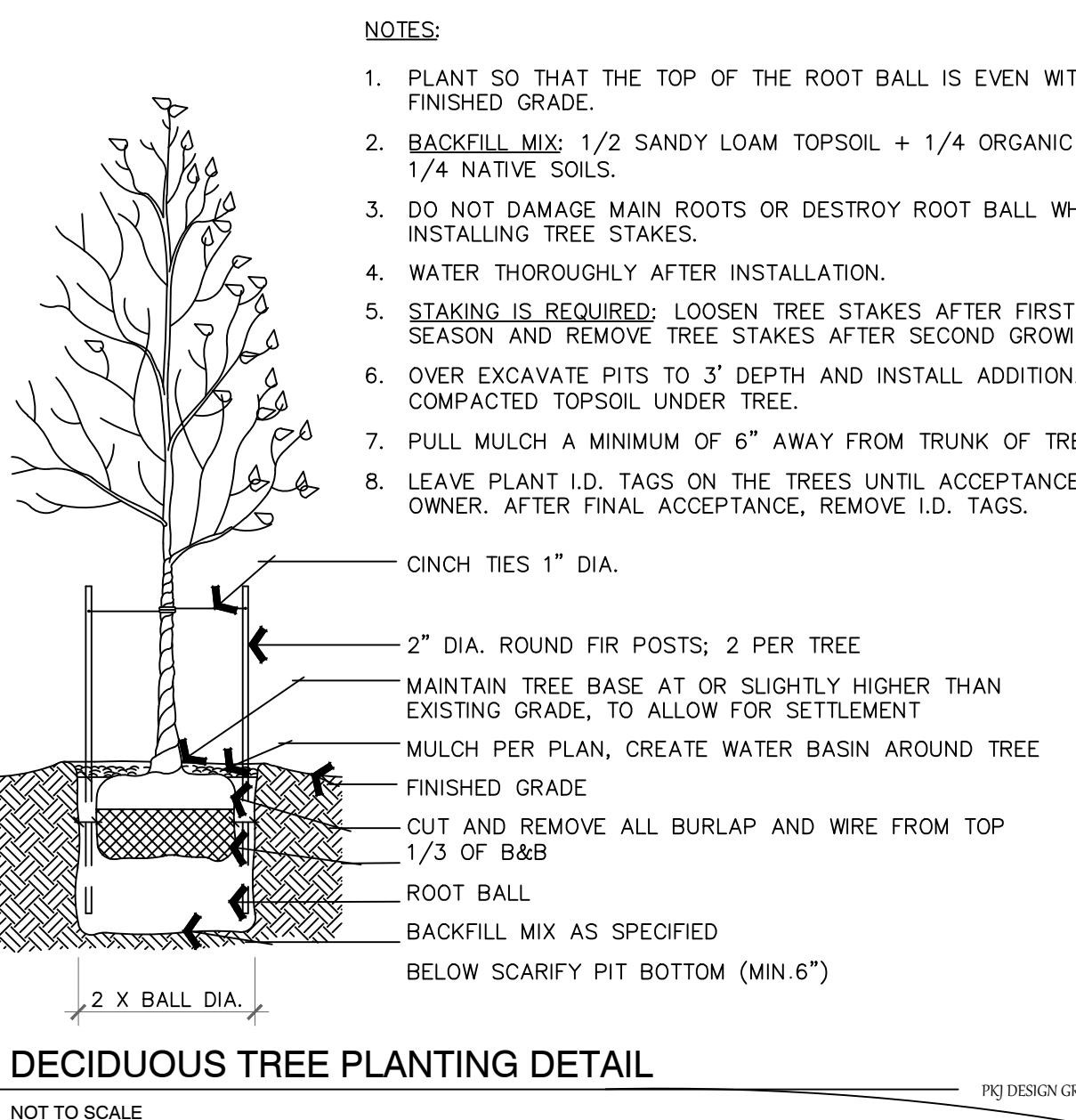
SYMBOL	1. LANDSCAPE DESCRIPTION	QTY
	1-01 SODDED LAWN AREA LAWN AREAS SHALL BE SODDED. NEW TURF AREAS TO BE SODDED WITH 18% BLUEGRASS, 19% KENTUCKY BLUEGRASS, 19% TURFGRASS, 10% FINE LEAF KENTUCKY BLUEGRASS, 10% TURFGRASS, 12% ACCENT PERENNIAL RYEGRASS OR APPROVED EQUAL AT A RATE OF 220 LBS. PER ACRE. FINE LEVEL ALL AREAS PRIOR TO LAYING SOD. ALL LAWN AREAS SHALL BE IRRIGATED WITH 100% COVERAGE BY POP-UP SPRAY HEADS AND GEAR-DRIVEN ROTORS. ALL DECIDUOUS AND CONIFER TREES PLANTED WITHIN SOD AREAS SHALL HAVE A FOUR FOOT(4') DIAMETER TREE RING COVERED WITH CHOCOLATE BROWN BARK MULCH. NO SHREDDED FINES. SUBMIT SAMPLES TO BE APPROVED BY LANDSCAPE ARCHITECT AND OWNER BEFORE INSTALLATION.	1,404 sf
	1-03 1.5" COPPER CANYON ROCK (STAKER PARSONS) OR APPROVED EQUAL: 3" DEPTH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE SOIL QUALITY FOR PROPOSED PLANTINGS.	1,438 sf
	1-08 5.5" DEEP STEEL EDGING - INSTALL PER MANUFACTURER SPECIFICATION.	106 lf
	1-12 1" DARK GRAY ROCK: 3" DEPTH PLANTING AREAS TO RECEIVE MIN. 6" DEPTH OF QUALITY TOPSOIL. IF TOPSOIL IS PRESENT ON SITE, PROVIDE SOIL TEST TO DETERMINE APPROPRIATE SOIL QUALITY FOR PROPOSED PLANTINGS.	131 sf



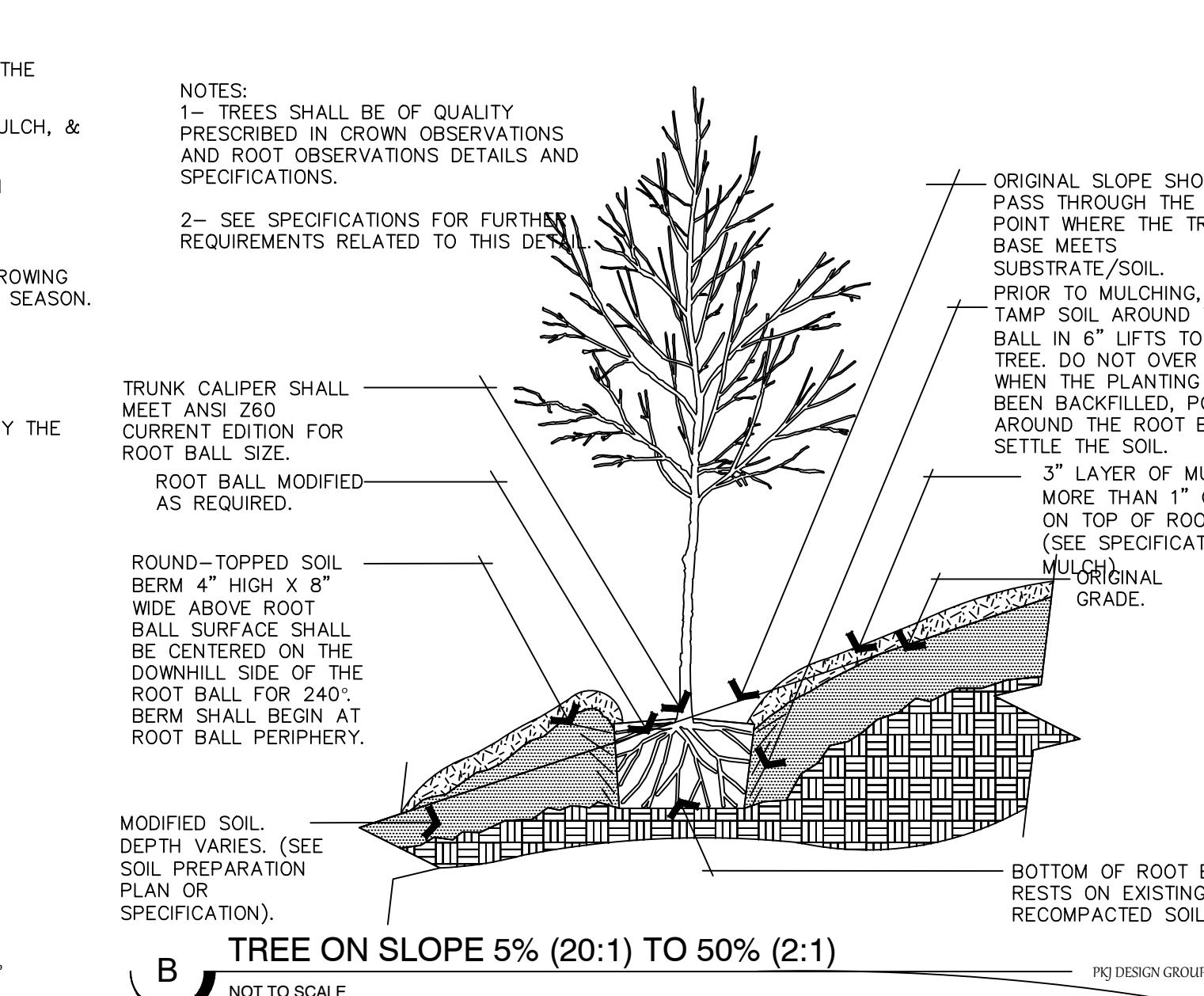
LANDSCAPE PLAN

PRELIMINARY PLANS NOT
FOR CONSTRUCTION

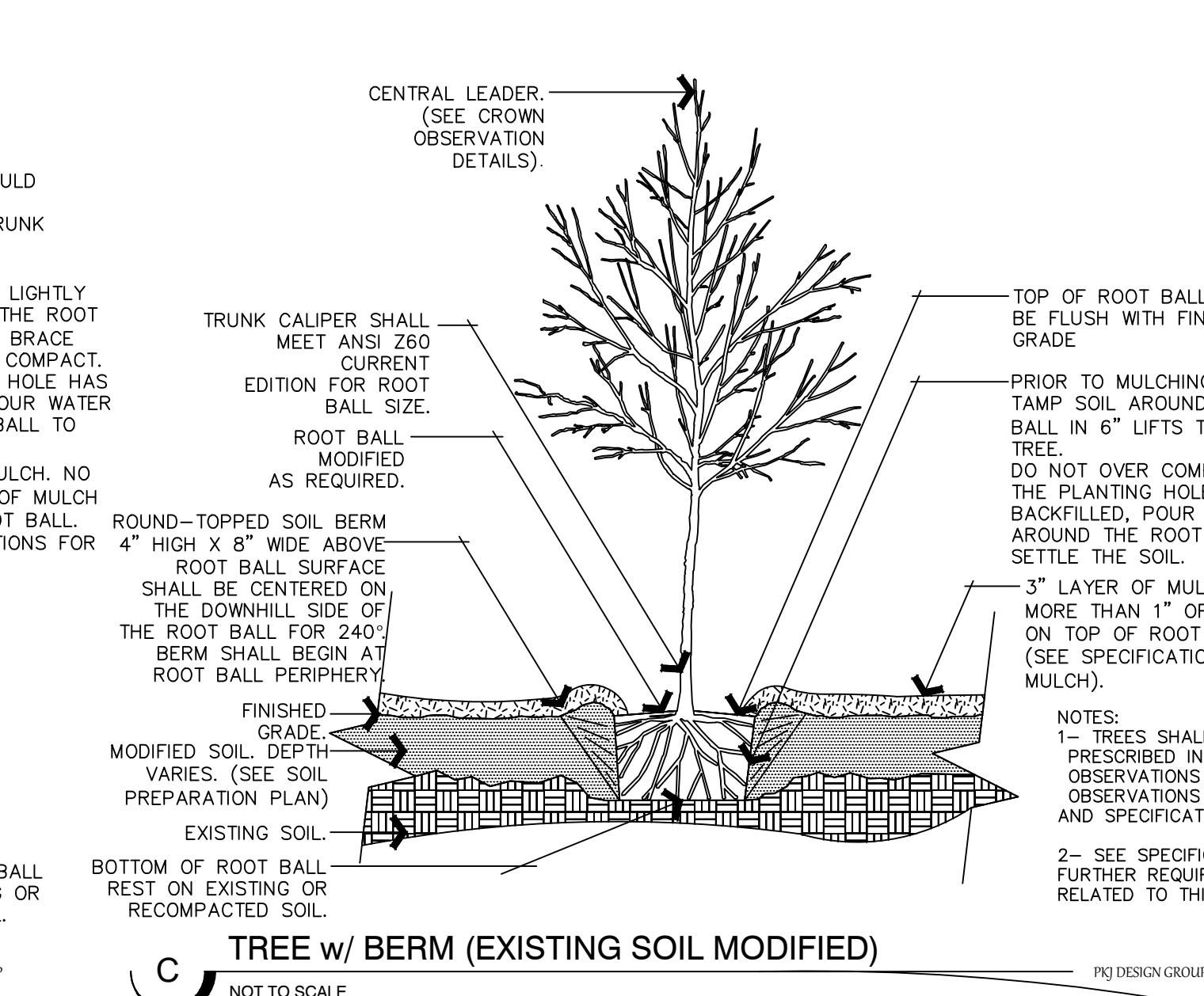
LP-101



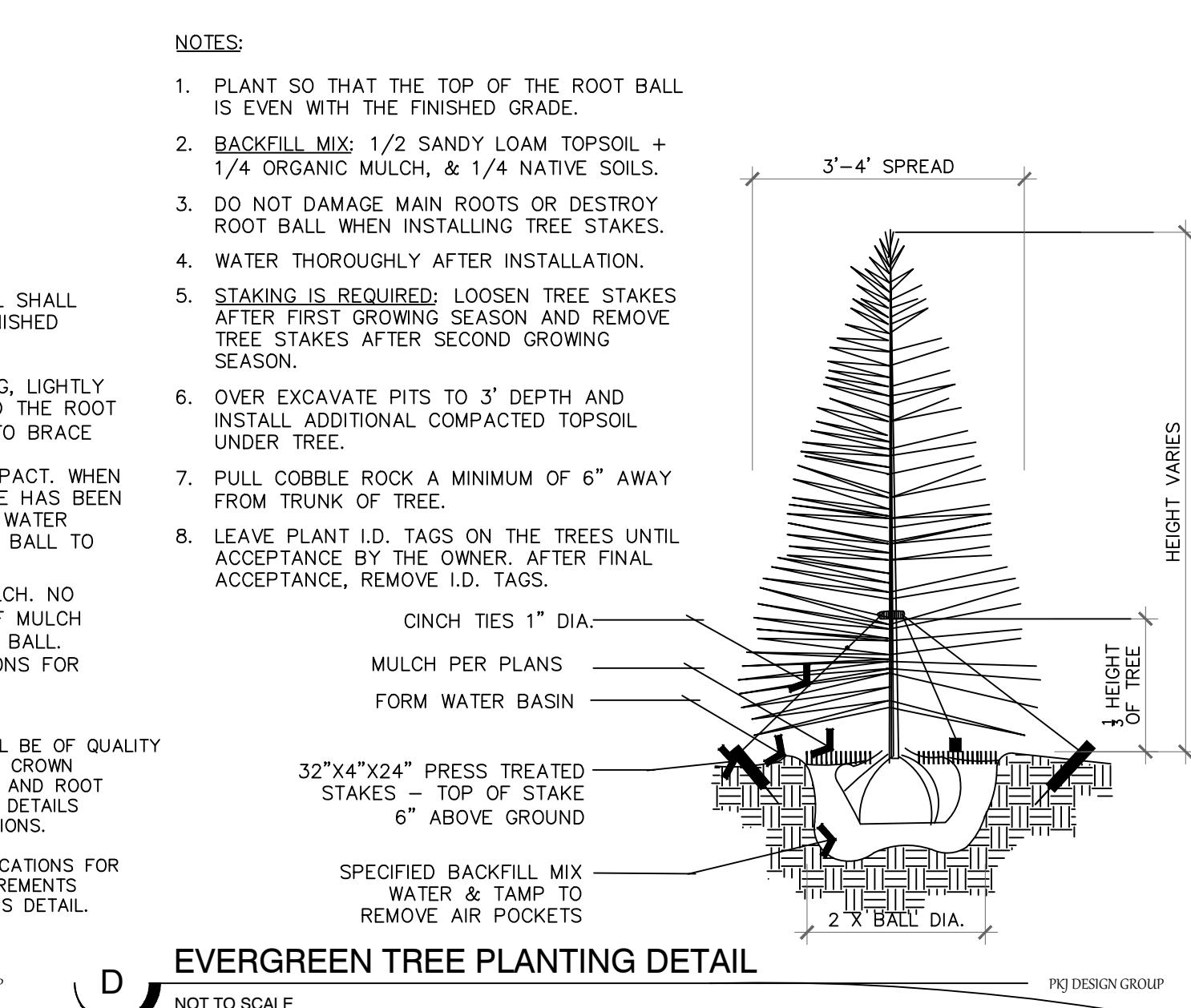
A DECIDUOUS TREE PLANTING DETAIL



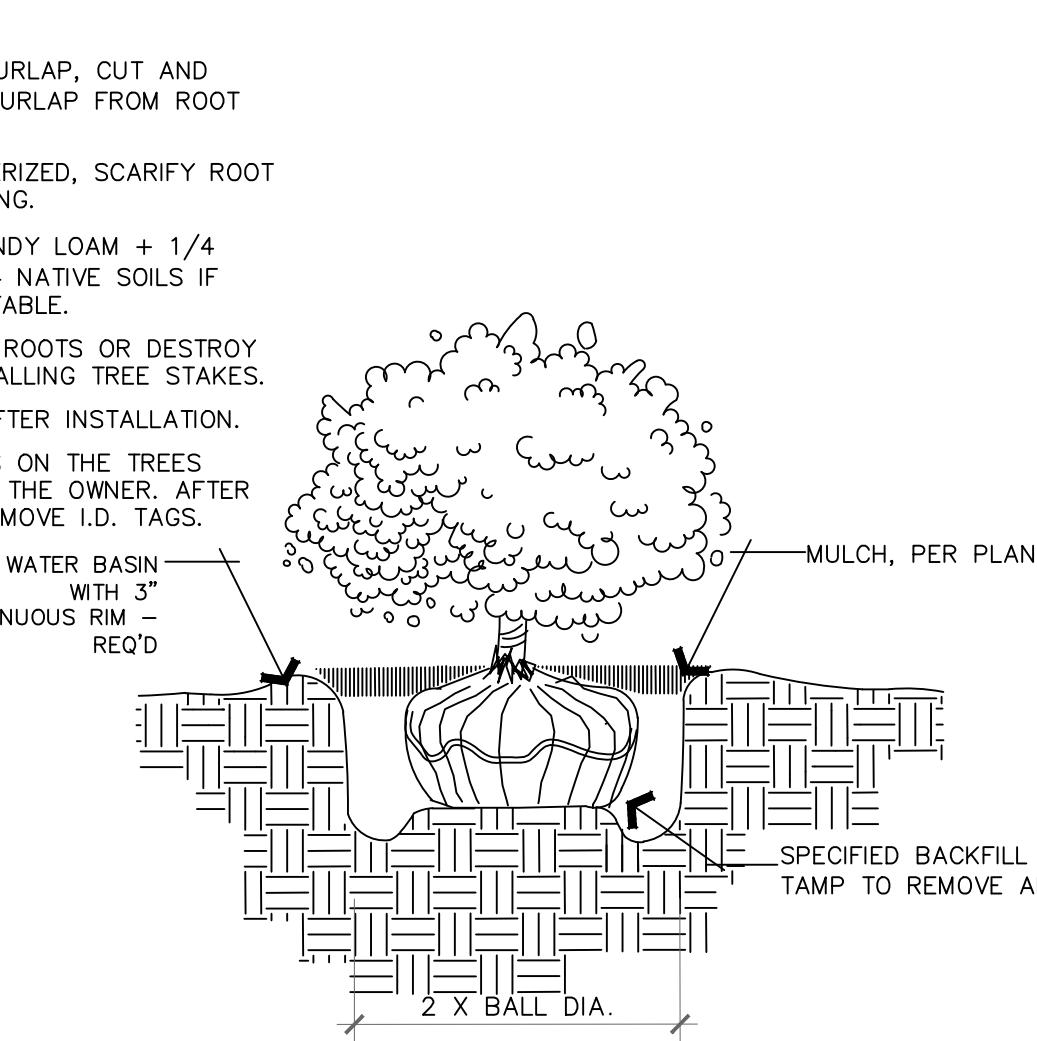
B TREE ON SLOPE 5% (20:1) TO 50% (2:1)



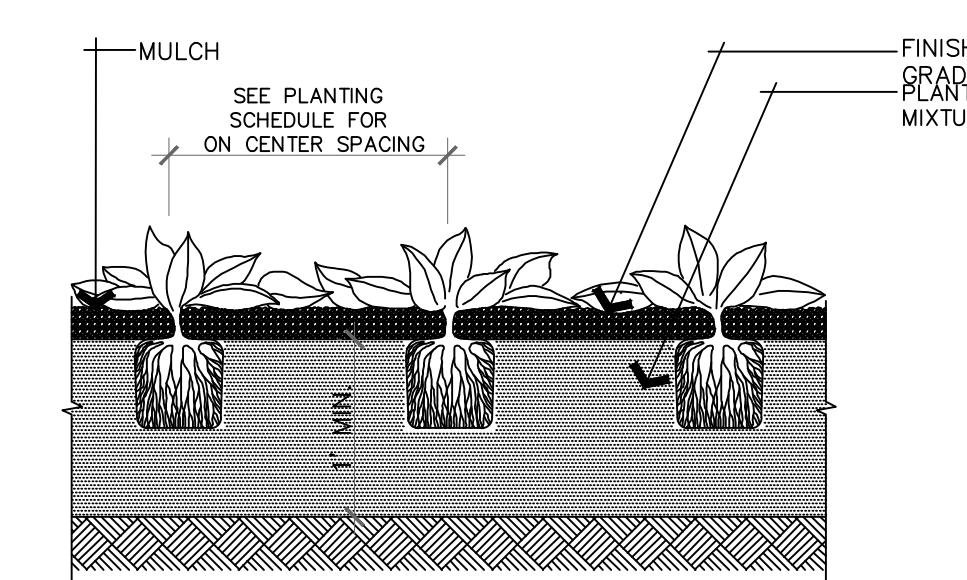
C TREE w/ BERM (EXISTING SOIL MODIFIED)



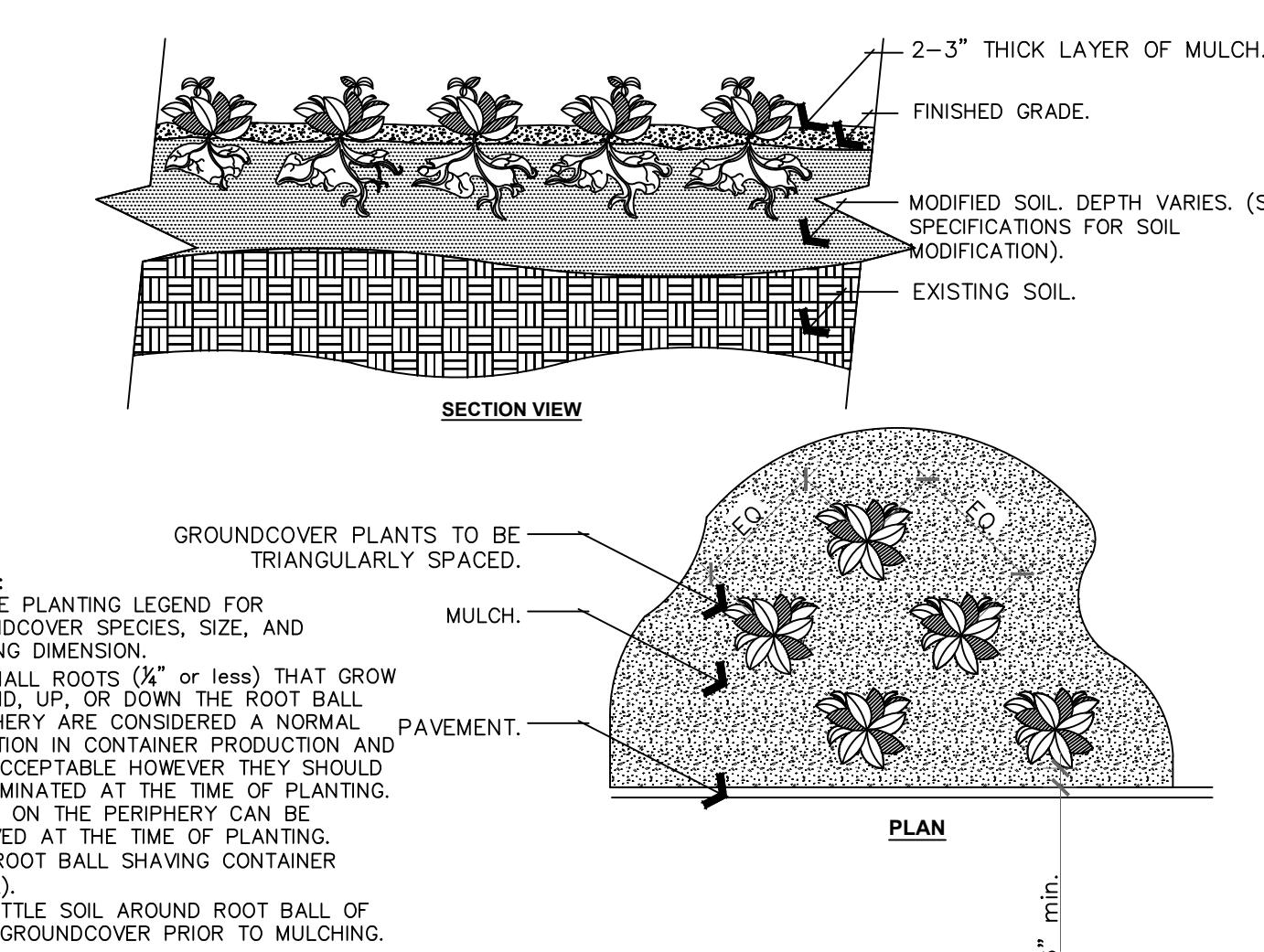
D EVERGREEN TREE PLANTING DETAIL



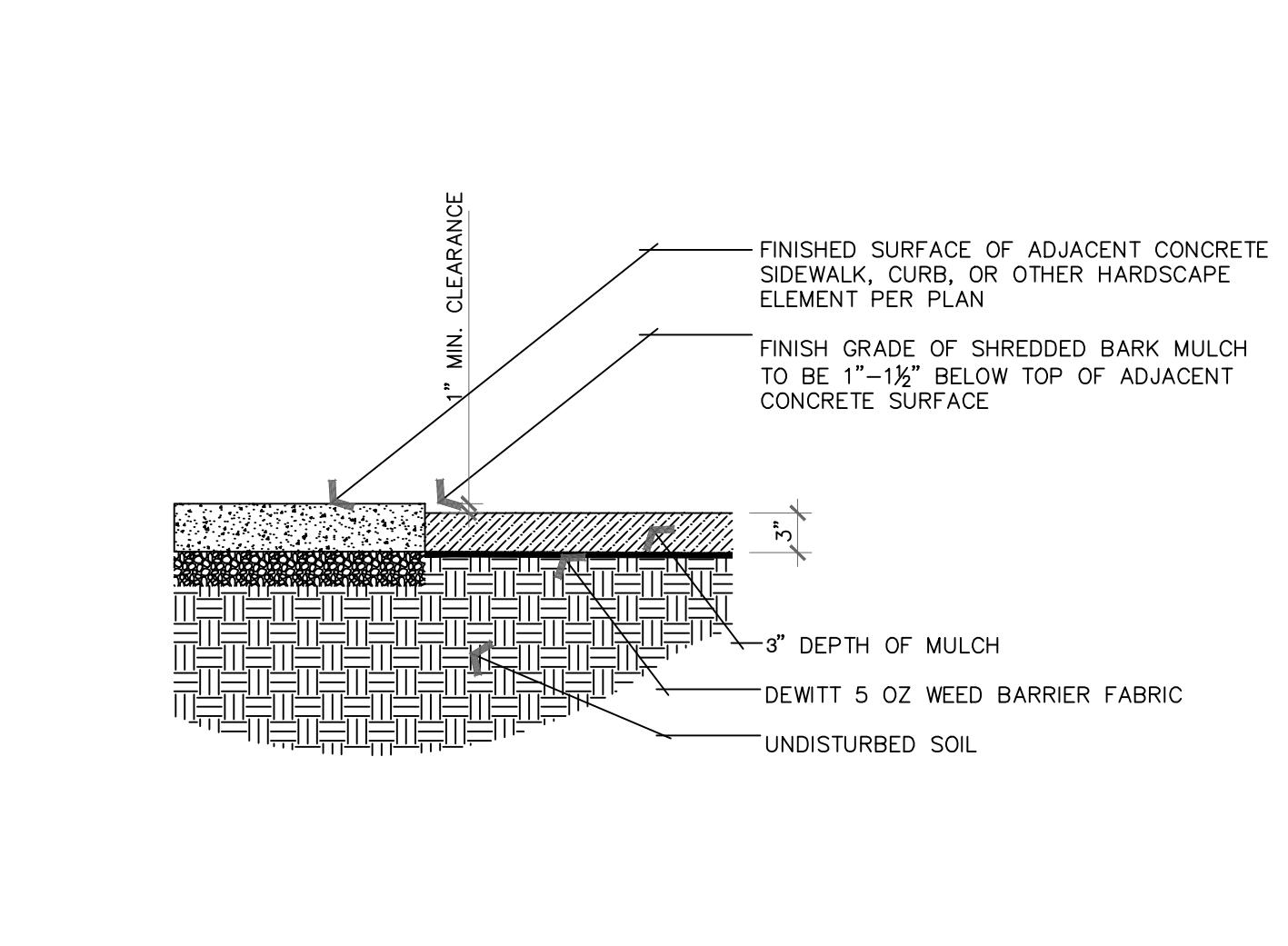
E SHRUB PLANTING DETAIL



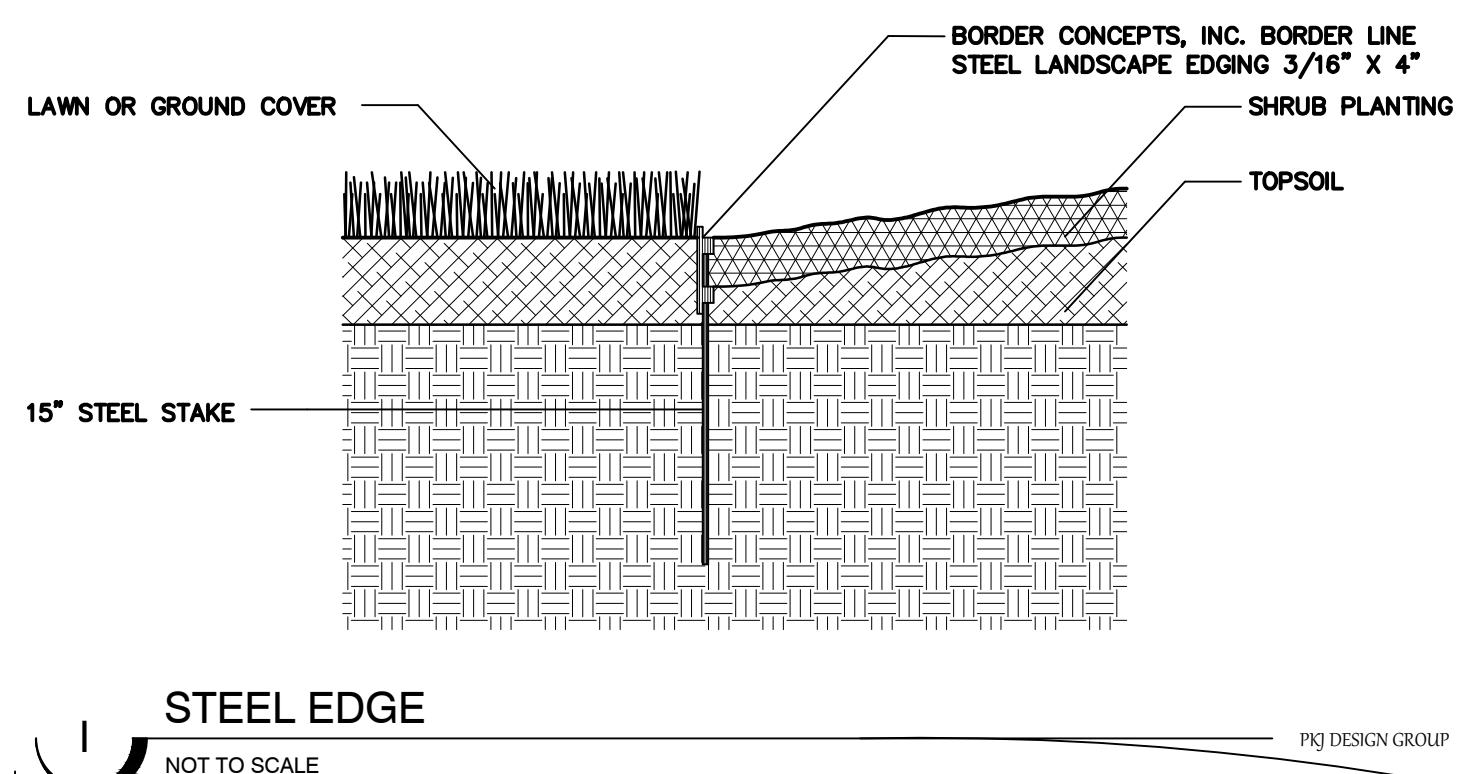
F PERENNIAL PLANTING



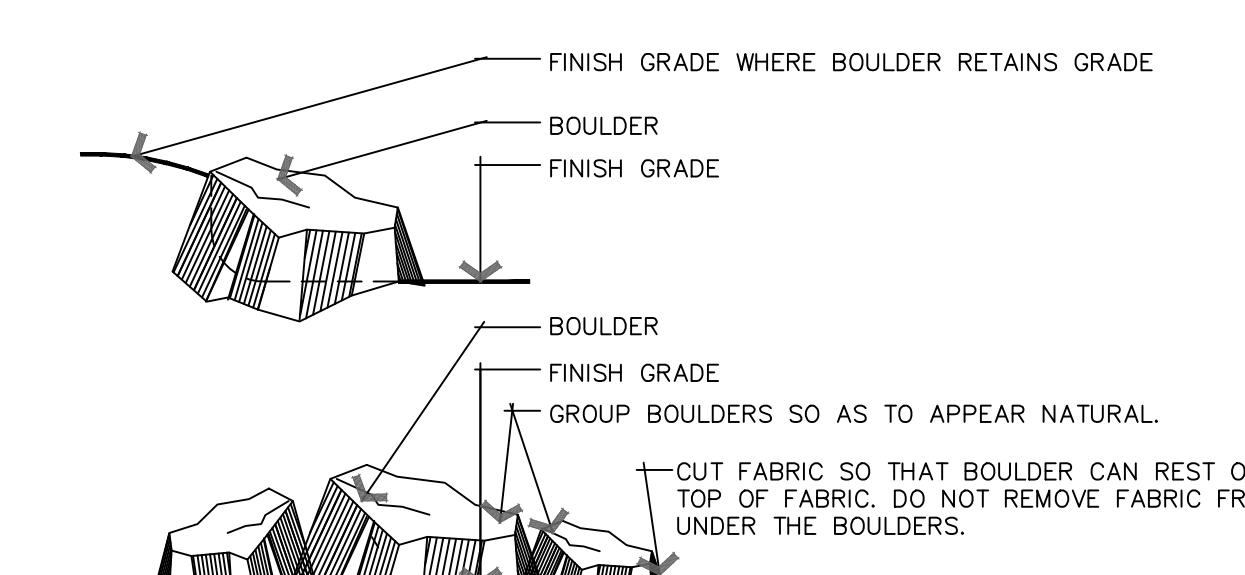
G GROUNDCOVER



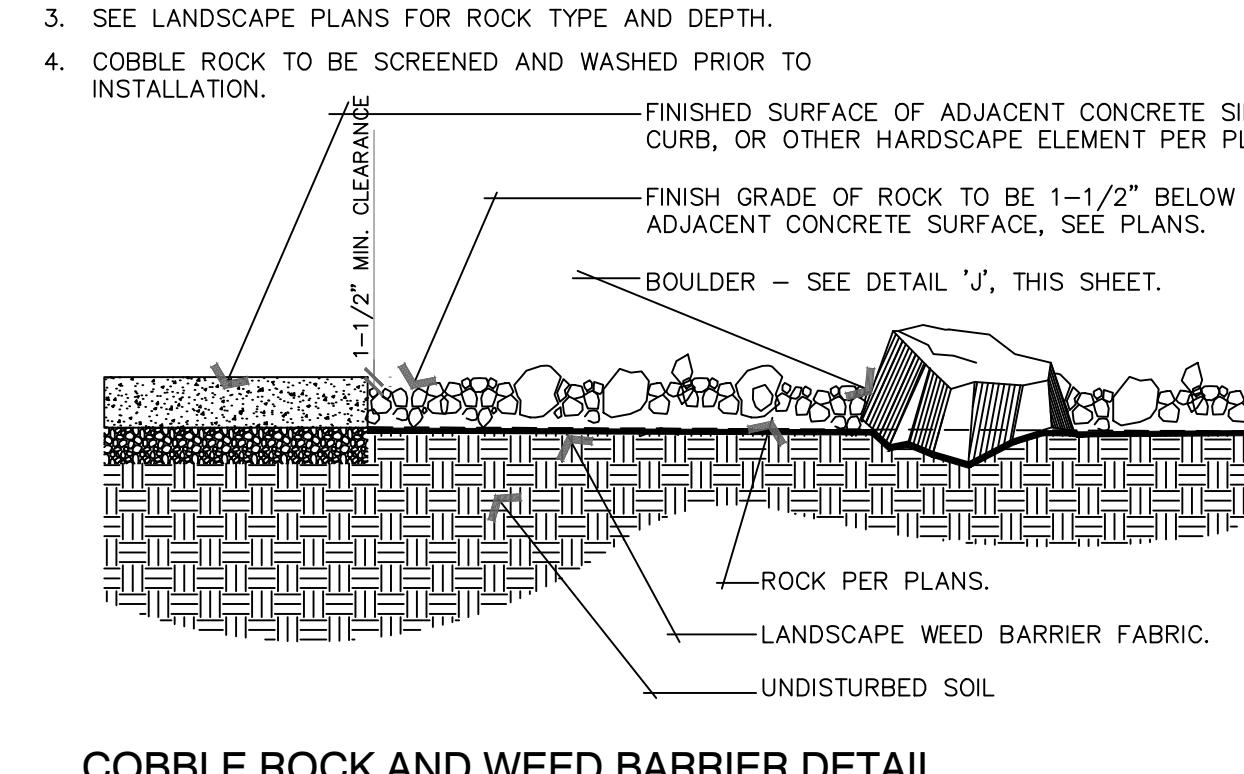
H MULCH DETAIL



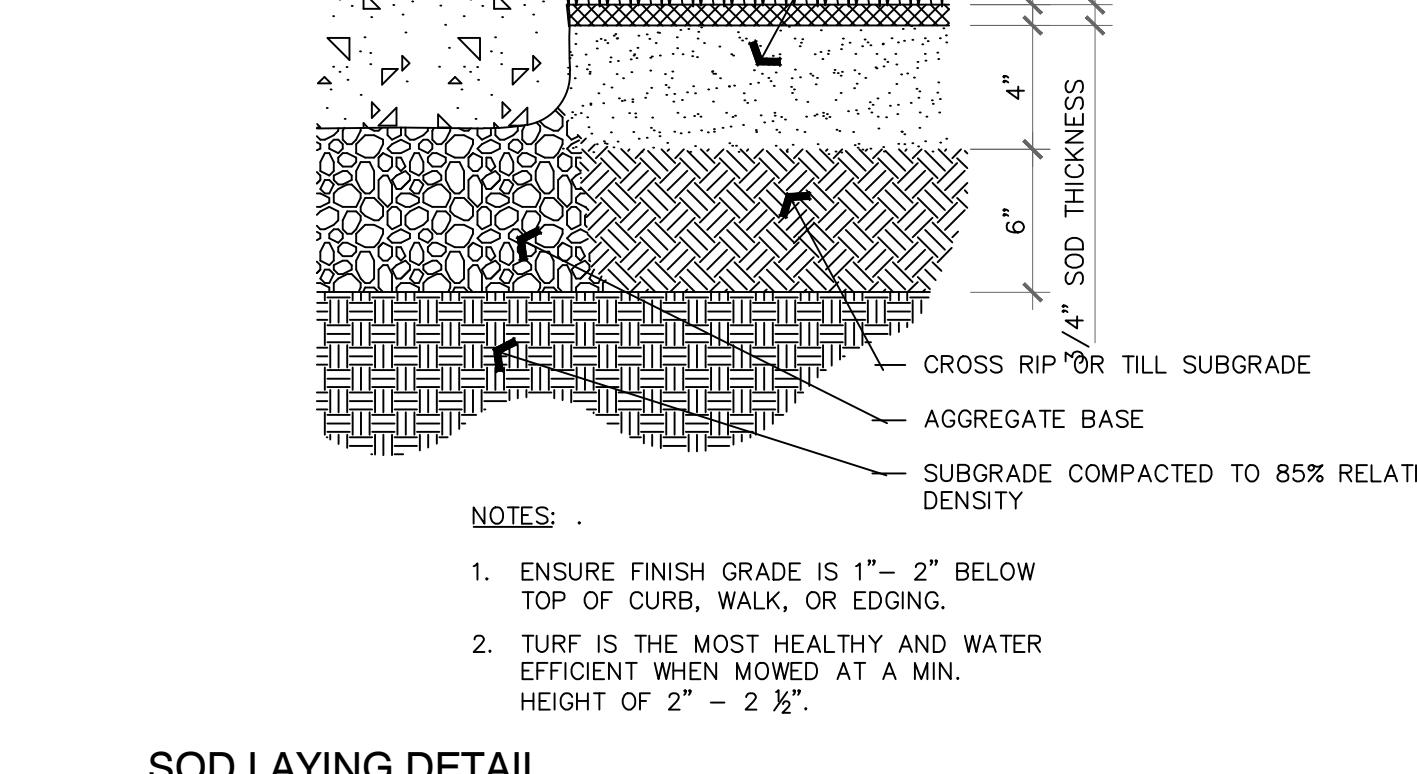
I STEEL EDGE



J BOULDER PLACEMENT DETAIL



K COBBLE ROCK AND WEED BARRIER DETAIL



L SOD LAYING DETAIL

VINE STREET APARTMENTS

184 E VINE ST. MURRAY, UTAH

ISSUE DATE	PROJECT NUMBER	PLAN INFORMATION	PROJECT INFORMATION	DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP	DRAWING INFO
11-02-2020	UT20111	811 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC 1-800-662-4111 www.bluestakes.org		JOE JOHNSEN JOE.JOHNSON@GMAIL.COM		JTA DRAWN: KBA	
NO. REVISION	DATE			Client / Engineer:		CHECKED: SAV	
1 XXXX	XX-XX-XX			JZW-ARCHITECTS 849 WEST HILLFIELD RD, STE 204 LAYTON, UTAH 84041 801-936-1343		PLOT DATE: 11/2/2020	
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VINE STREET APARTMENTS

MURRAY, UTAH

IRRIGATION SPECIFICATIONS

IRRIGATION SPECIFICATIONS

PART I - GENERAL

1.1 SUMMARY

Work to be done includes all labor, materials, equipment and services required to complete the Project irrigation system as indicated on the Construction Drawings, and as specified herein. Includes but is not limited to: Furnishing and installing underground and above ground sprinkler system complete with any accessories necessary for proper function and operation of the system. All plant material on the Project shall be irrigated. Removal and disposal of any existing sprinkler system components are not to be saved, which are disturbed during the construction process. Restoration of any altered or damaged existing landscape to original state and condition.

1.2 SYSTEM DESCRIPTION

A. Design of irrigation components: Locations of irrigation components on Construction Drawings may be approximate. Piping, steaming and/or other components shown on Construction drawings may be shown schematically for graphic clarity and demonstration of component groupings and separations. All irrigation components shall be placed in landscaped areas, with the exception of pipe and wire in steaming under hardscapes. Actual routing of pipe, wire or other components may be altered due to site conditions not accounted for in the design process.

B. Construction requirements: Actual placement may vary as required to achieve a minimum of 100% coverage without overspray onto hardscapes, buildings or other features.

C. Layout of Irrigation Components: During layout and staking, consult with Owner Approved Representative (hereafter referred to as OAR) to verify proper placement of irrigation components and to provide Contractor recommendations for changes, where revisions may be advisable. Small or minor adjustments to system layout are permissible to avoid existing field obstructions such as utility boxes or street light poles. Contractor shall place remote control valves in groups as practical to economize on quantity of manifold isolation valves. Quick coupler valves shall be placed with manifold groups and protected by manifold isolation valves. Quick coupler valves are shown on Construction Documents in approximate locations.

1.3 DEFINITIONS

A. Water Supply: Culinary water piping and components, furnished and installed by others to provide irrigation water to this Project; including but not limited to backflow preventor, saddles, nipples, spools, shut off valves, corporation stop valves, water meters, pressure regulation valves, and piping upstream of (or prior to) the Point of Connection.

B. Point of Connection: Location where the Contractor shall tie into the water supply. May require backflow preventor, saddle, nipples, spools, isolation valves or Stop and Waste valve for landscape irrigation needs and use.

C. Main Line Piping: Pressurized piping downstream of the Point of Connection to provide water to remote control valves and quick couplers. Normally under constant pressure.

D. Lateral Line Piping: Circuit piping downstream of remote control valves to provide water to sprinkler heads, sprinkler heads, drip systems or bubblers.

1.4 REFERENCES

A. The following standards will apply to the work of this Section:

a. ASTM-American Society for Testing and Materials

b. IA - The Irrigation Association: Main BMP Document, Landscape Irrigation Scheduling and Water Management Document.

1.5 SUBMITTALS

A. At least thirty (30) days prior to ordering of any materials, the Contractor shall provide manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system. Submittals shall be in ring binders or otherwise bound form. Provide five copies of submittals to OAR for distribution. Place cover or index sheet indicating order in submittal document. No material shall be ordered, delivered or any work preceded in the field until the required submittals have been reviewed in its entirety and stamped approved. Delivered material shall match the approved samples.

B. Operation and Maintenance Manual:

a. At least thirty (30) days prior to final inspection, the Contractor shall provide Operation and Maintenance manual to OAR, containing:

i. Manufacturer catalog cut sheet and current printed specifications for each element or component of the irrigation system.

ii. Parts list for each operating element of the system

iii. Completed printed literature on operation and maintenance of operating elements of the system.

iv. Section listing instructions for overall system operation and maintenance. Include directions for Spring Start-up and Winterization.

b. Project Record Copy

i. Maintain at project site one copy of all project documents clearly marked "Project Record Copy". Mark any deviation in material installation on Construction drawings. Maintain and update drawing at least weekly. Project Record Copy to be available to OAR on demand.

c. Completed As-Built Drawings

1. Prior to inspection, prepare and submit to OAR accurate as-built drawings

2. Show detail and dimension changes made during installation. Show significant details and dimensions that were not shown in original Contract Documents.

3. Field dimension locations of sleaving, points of connection, main line piping, wiring runs not contained in main line pipe trenches, valves and valve boxes, quick coupler valves.

4. Dimensions are to be taken from permanent constructed surfaces, features, or finished edges located at or above finished grade.

5. Controller Map: upon completion of system, place in each controller a color coded copy of the area that controller services; indicating zone number, type of plant material and location on project that zone services. Laminate map with heat shrink clear plastic.

1.6 QUALITY ASSURANCE

A. Acceptance: Do not install work of this section prior to acceptance by OAR of area to receive such work.

B. Regulatory Requirements: All work and materials shall be according to any and all rules, regulations or codes, whether they are State or Local laws and ordinances. Contract documents, drawings or specifications may not be construed or interpreted to permit work or materials not conforming to the above codes.

C. Adequate Water Supply: Water supply to this Project exists, installed by others. Connections to these supply lines shall be by the Contractor. Verify that proper connection is available to supply line and is of adequate size. Verify that secondary connection components may be installed if necessary. Perform static pressure test prior to commencement of work. Notify OAR in writing of problems encountered prior to proceeding.

D. Workmanship and Materials:

a. It is the intent of this specification that all material herein specified and shown on the construction documents shall be of the highest quality available and meeting the requirements specified.

b. All work shall be performed in accordance with the best standards of practice relating to the trade.

E. Contractor Qualifications:

a. Contractor shall provide document or resume including at least the following items:

i. That Contractor has been installing sprinklers on commercial projects for five previous consecutive years.

ii. Contractor is licensed to perform Landscape and Irrigation construction in the State of this Project.

iii. Contractor is bondable for the work to be performed.

iv. References of five projects of similar size and scope completed within the last five years. Three of the projects listed shall be local.

v. Listing of suppliers where materials will be obtained for use on this Project.

vi. Project site Foreman or Supervisor has at least five consecutive years of commercial irrigation installation experience. This person shall be a current Certified Irrigation Contractor in good standing as set forth by the

Irrigation Association. This person shall be on Project site at least 75% of each work day.

vii. Evidence that Contractor currently employs workers in sufficient quantities to complete Project within time limits that are established by the Contract.

viii. All General laborers or workers on the Project shall be previously trained and familiar with sprinkler installation and have a minimum of one-year experience. Those workers performing tasks related to PVC pipe shall have certificates designated below.

1.7 DELIVERY-STORAGE-HANDLING

A. During delivery, installation and storage of materials for Project, all materials shall be protected from contamination, damage, deterioration, and prolonged exposure to sunlight. All material stored at Project site shall be neatly organized in a compact arrangement and storage shall not disrupt Project Owner or other trades on Project site. All material to be installed shall be handled by Contractor with care to avoid breakage or damage. Damaged materials attributed to Contractor shall be replaced with new at Contractor's expense.

1.8 SEQUENCING

A. Perform site survey, research utility records, contact utility location services. The Contractor shall familiarize himself with all hazards and utilities prior to work commencement. Install sleaving prior to installation of concrete, paving or other permanent site elements. Irrigation system Point of Connection components, backflow prevention and pressure regulation devices shall be installed and operational prior to all downstream components. All main lines shall be thoroughly flushed of all debris prior to installation of any sprinkler heads.

1.9 WARRANTY

A. Contractor shall provide one year Warranty. Warranty shall cover all materials, workmanship and labor. Warranty shall include filling and/or repairing depressions or replacing turf or other plantings due to settlement of irrigation trenches or irrigation system elements. Valve boxes, sprinklers or other components settles from original finish grade shall be restored to proper grade. Irrigation system shall have been adjusted to provide proper, adequate coverage of irrigated areas.

1.10 OWNER'S INSTRUCTION

A. After system is installed, inspected, and approved, instruct Owner's Representatives in complete operation and maintenance procedures. Coordinate instruction with references to previously submitted Operation and Maintenance Manual.

1.11 MAINTENANCE

A. Furnish the following items to Owner's Representative:

a. Two quick coupler keys with hose swivels.

b. One of each type or size of quick coupler valve and remote control valve. Five percent of total quantities used of each sprinkler and sprinkler nozzle.

B. Provide the following services:

a. Winterize entire irrigation system installed under this contract. Winterize by "blow-out" method using compressed air. Compressor shall be capable of minimum of 175 CFM. This operation shall occur at the end of first growing season after need for plant irrigation but prior to freezing. Compressor shall be capable of evacuation of system of all water pressure regulation device. Compressor shall be regulated to not more than 60 PSI. Start up system the following spring after danger of freezing has passed. Contractor shall train Owner's Representative in proper start-up and winterization procedure.

PART 2 - PRODUCTS

2.1 GENERAL NOTES

A. Contractor shall provide materials to be used on this Project. Contractor shall not remove any material purchased for this Project from the Project Site, nor mix Project materials with other Contractor owned materials. Owner retains right to purchase and provide project material.

2.2 POINT OF CONNECTION

A. The Contractor shall connect onto existing irrigation or water main line as needed for Point(s) of Connection.

Contractor shall install new main line as indicate.

2.3 CONNECTION ASSEMBLY

A. Culinary water shall be used on this Project. Install backflow preventor and RPZ as needed.

2.4 CONTROL SYSTEM

A. Power supply to the irrigation controller shall be provided for by this Contract.

B. Controller shall be as specified in the drawings. Controller shall be surge protected.

a. Installation of wall-mount controllers: Irrigation contractor shall be responsible for this task. Power configuration for wall-mount controllers shall be 120 VAC unless otherwise noted.

b. Locate Controller(s) in general location shown on Construction drawings. Coordinate power supply and breaker allocation with electrical contractor. Contractor shall be responsible for all power connections to Controllers, whether they are wall mount or pedestal mount. Contractor shall coordinate with electrical or other Project trades as needed to facilitate installation of power to controllers.

C. Wires connecting the remote control valves to the irrigation controller are single conductors, type PE. Wire construction shall incorporate a solid copper conductor and polyethylene (PE) insulation with a minimum thickness of 0.045 inches. The wires shall be UL listed for direct burial in irrigation systems and be rated at a minimum of 30 VAC. Page Electric Co., LP specification number 1P70/90.

a. A minimum of 2" of additional wire shall be left at each valve, each splice box and at each controller.

b. Common wire shall be white in color, 12 gauge. Control wire shall be red in color, 14 gauge. Spare wire shall be looped within each valve box of the group it is to service.

D. RCV wire splicing connectors shall be 3M brand DBY or DBR. Wire splicing between controller and valves shall be avoided if at all possible. Any wire splices shall be contained within a valve box. Splices within a valve box that contains no control valves shall be stamped "WIRE SPLICE" or "VS" on box lid.

2.5 SLEEVING

A. Contractor shall be responsible to protect existing underground utilities and components. Sleaving minimum size shall be 2". Sleaving 2" through 4" in size shall be S/40 PVC solvent weld bell end. All main line pipe 3" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4" 8 GPM

1" 12 GPM

1-1/2" 30 GPM

2" 53 GPM

2-1/2" 75 GPM

3" 110 GPM

4" 180 GPM

b. Main line pipe shall be buried with 24" cover

2.6 MAIN LINE FITTINGS

A. All main line pipe 3" and larger shall be Class 200 gasketed bell end. All main line pipe 2" in size and smaller shall be Schedule 40 PVC solvent weld bell end.

a. Maximum flows allowed through main line pipe shall be:

3/4" 8 GPM

1" 12 GPM

1-1/2" 30 GPM

2" 53 GPM

2-1/2" 75 GPM

3" 110 GPM

4" 180 GPM

b. All main line fittings 3" and larger shall be gasketed ductile iron material. All ductile iron fittings having change of

direction shall have proper concrete thrust block installed. All main line fittings smaller than 3" in size shall be Schedule 80 PVC.

2.8 ISOLATION VALVES

A. Isolation valves 3" and larger shall be Waterous brand model 2500 cast iron gate valve, resilient wedge, push on type, with 2" square operating nut. Place sleeve of 6" or larger pipe over top of valve vertically and then extend to grade. Place 10" round valve box over sleeve at grade.

B. Isolation valves 2-1/2" and smaller shall be Apollo brand 70 series brass ball valves, contained in a Carson Standard size valve box. Valves shall be installed with S/80 PVC TOE Nipples on both sides of the valve. Valve shall be placed so that the handle is vertical toward the top of the valve box in the 'off' position.

2.9 MANIFOLDS

A. Action Manifold fittings shall be used to create unions on both sides of each control valve, allowing the valve to be removed from the box without cutting piping. Valves shall be located in boxes with ample space surrounding them to allow access for maintenance and repair. Where practical, group remote control valves in close proximity, and protect each grouping with a manifold box. Manifold components and isolation valves shall be at least as large as the largest diameter lateral served by the respective manifold.

2.10 REMOTE CONTROL VALVES

A. Remote control valves shall be as specified on the drawings. Remote control valves shall be located separately and individually in separate control boxes.

2.11 MANUAL CONTROL VALVES

A. Quick coupler valves shall be attached to the manifold sub-main line using a Lascor G175312 swing joint assembly with snap-lock couter and brass ball valve. Quick coupler valve shall be placed within a Carson 307 round valve box. Top of quick coupler valve cover shall allow for complete installation of valve box lid, but also allow for insertion and operation of key. Base of quick coupler valve and top of quick coupler swing joint shall be encased in 1/2" gravel. Contractor shall not place quick coupler valves further than 200 feet apart, to allow for spot watering or supplemental irrigation of new plant material. Quick coupler valve at POC shall not be eliminated or relocated.

2.12 LATERAL LINE PIPE

A. All lateral piping shall be Schedule 40 PVC, solvent weld, and bell end. Lateral pipe shall be buried with 12"-18" of cover typically. Lateral pipe shall be 2", 1", 1 1/4", 1 1/2" or 2" in size as indicated on Construction Drawings.

2.13 LATERAL LINE FITTINGS

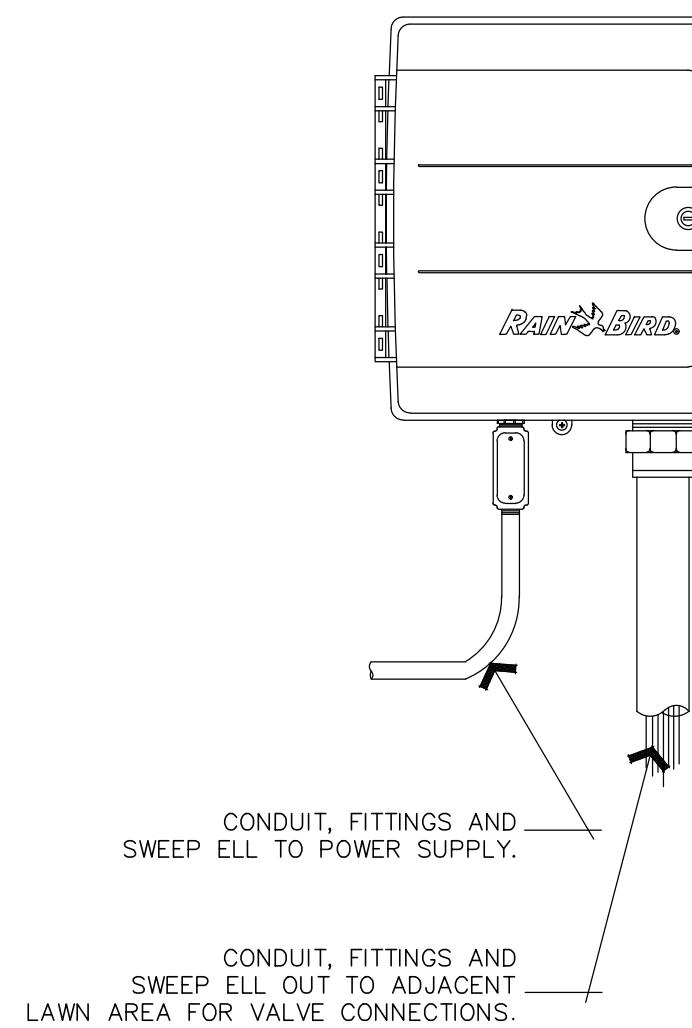
A. All lateral line fittings shall be S/40 PVC

2.14 SPRINKLERS

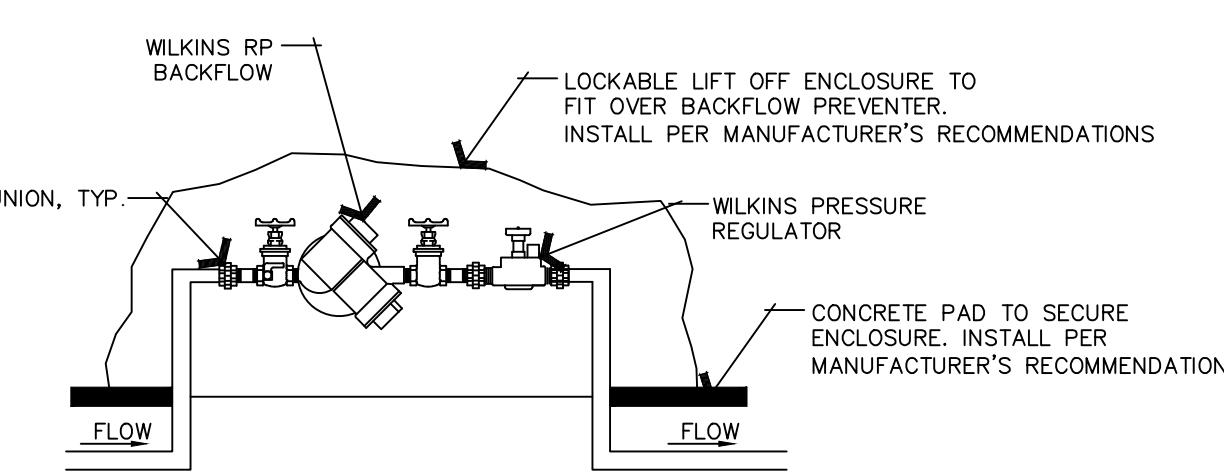
A. Spray head sprinklers shall be as specified on the drawings. Nozzles shall be as specified on the drawings.

2.15 VALVE BOXES

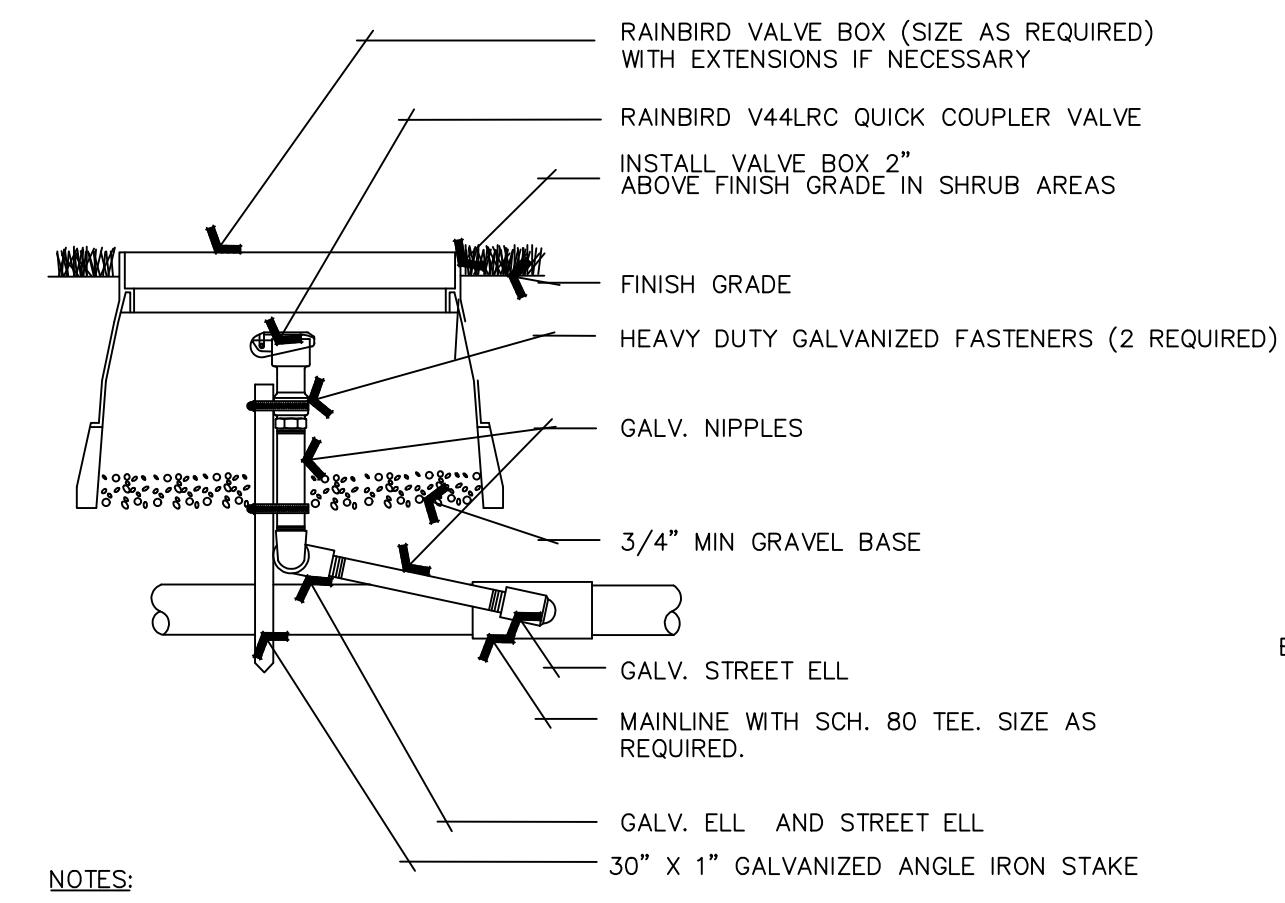
A. Carson valve boxes shall be used on this project. Sizes are as directed in these Specifications, detail sheets or plan sheets. Valve boxes shall be centered over the control valve or element they cover. Valve box shall be set large enough to allow ample room for services access, removal or replacement of valve or element. Valve box shall be set to flush to finish grade of topsoil or



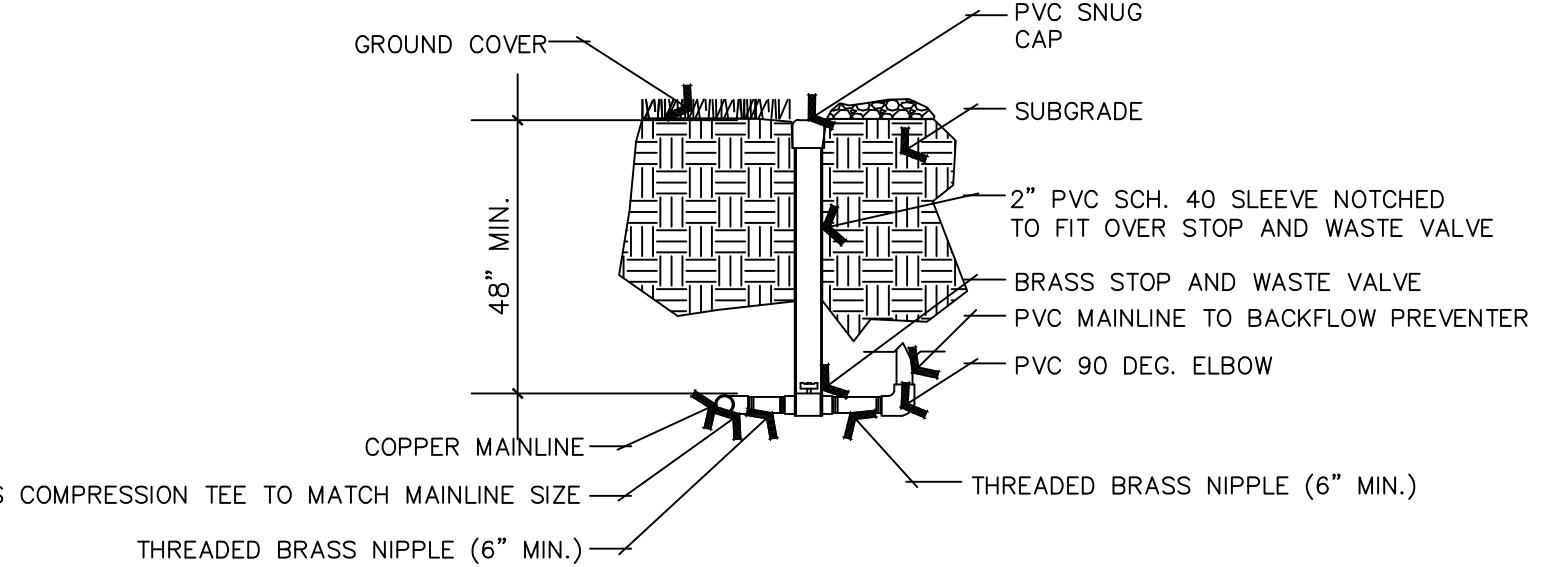
NOTES:
 1. MOUNT CONTROLLER PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL LOCAL CODES. EXACT LOCATION TO BE APPROVED BY OWNER. GROUND CONTROLLER PER MANUFACTURER'S RECOMMENDATION AND SPECIFICATIONS. ELECTRICAL CONTRACTOR SHALL GROUND CONTROLLER AND PROVIDE SLEEVING FROM ADJACENT LAWN AREA TO CONTROLLER LOCATION.
 2. CONNECT CONTROLLER TO POWER AND VALVES.
 3. LANDSCAPE CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR TO ENSURE PROPER GROUNDING OF CONTROLLER TO BUILDING GROUNDING GRID.



NOTES:
 1. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
 2. WHEREVER AN IRON BASED MATERIAL ADJOINS A BRASS BASED MATERIAL A DIELECTRIC UNION IS REQUIRED. SIZE AS NECESSARY.
 3. WRAP ALL THREADS WITH TEFLOON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
 4. MAIN LINE PIPE SIZE SHALL BE 1-1/2". DOWNSIZE TO 1" THRU BACKFLOW PREVENTER ASSEMBLY AND THEN UPSIZE TO 1-1/2" DIRECTLY DOWNSTREAM OF PRESSURE REGULATOR.



NOTES:
 1. FLUSH ALL PIPING PRIOR TO INSTALLING VALVE.
 2. WRAP ALL THREADS WITH TEFLOON TAPE. 1 1/2 TO 2 WRAPS MAXIMUM.
 3. COMPACT SOILS AROUND VALVE BOX TO 80% OF ORIGINAL DRY DENSITY.
 4. INSTALL GEOTEXTILE UNDER VALVE BOXES AND TAPE TO PIPE NIPPLES AND VALVE BOX.
 5. BOX COLOR - GREEN IN TURF AND TAN IN PLANTER AREAS.
 6. IRRIGATION SYSTEM TO BE BLOWN OUT WITH AIR COMPRESSOR THROUGH QUICK COUPLERS BEFORE FREEZING TEMPERATURES OCCUR, TYP.



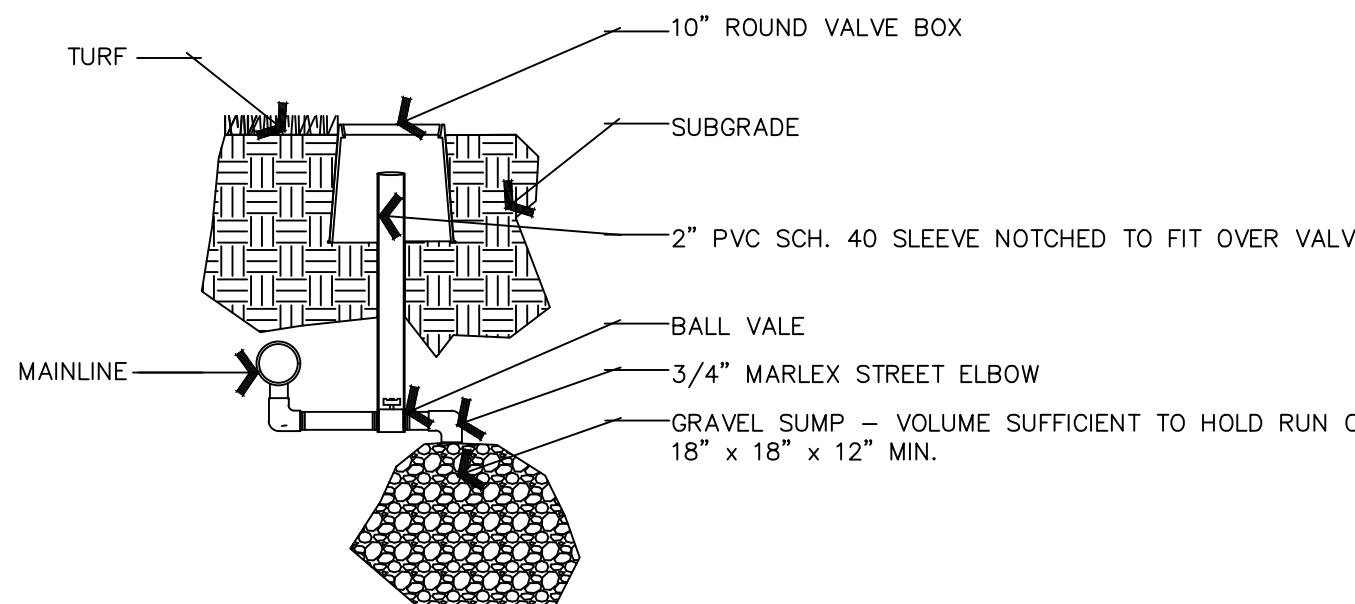
NOTES:
 1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 40 UNLESS OTHERWISE NOTED.
 2. PROVIDE VALVE KEY TO OWNER.

A RAINBIRD CONTROLLER DETAIL
NOT TO SCALE

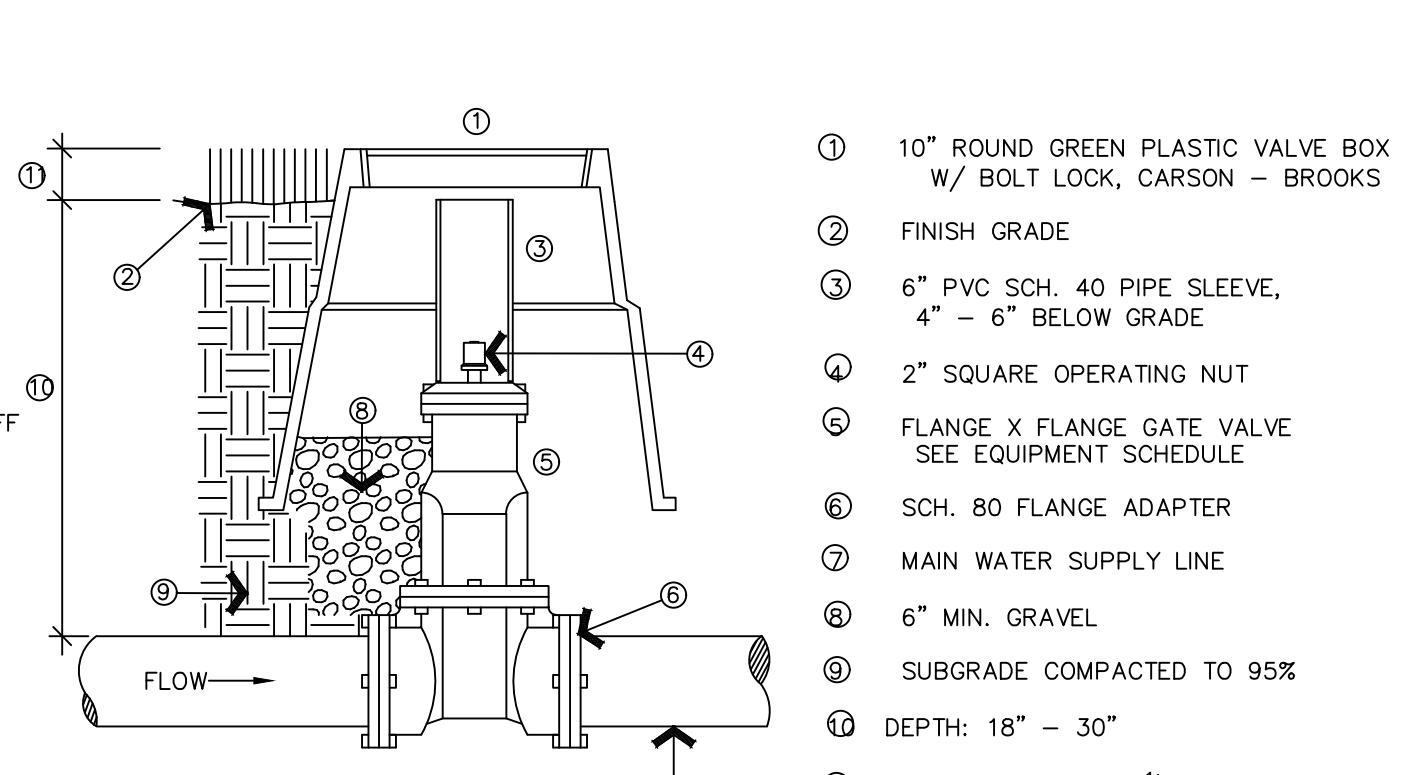
B BACKFLOW DETAIL
NOT TO SCALE

C RAINBIRD QUICK COUPLER
NOT TO SCALE

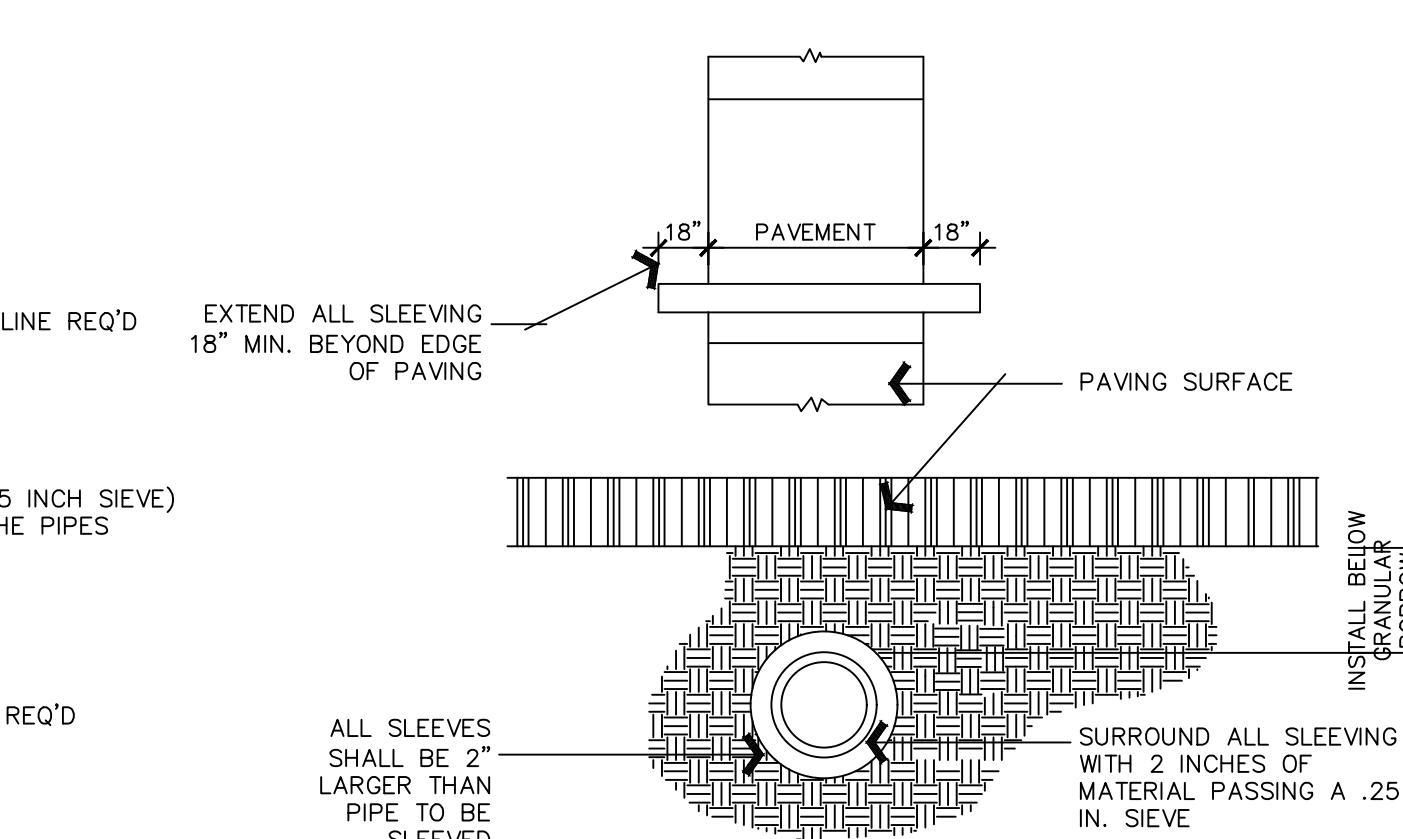
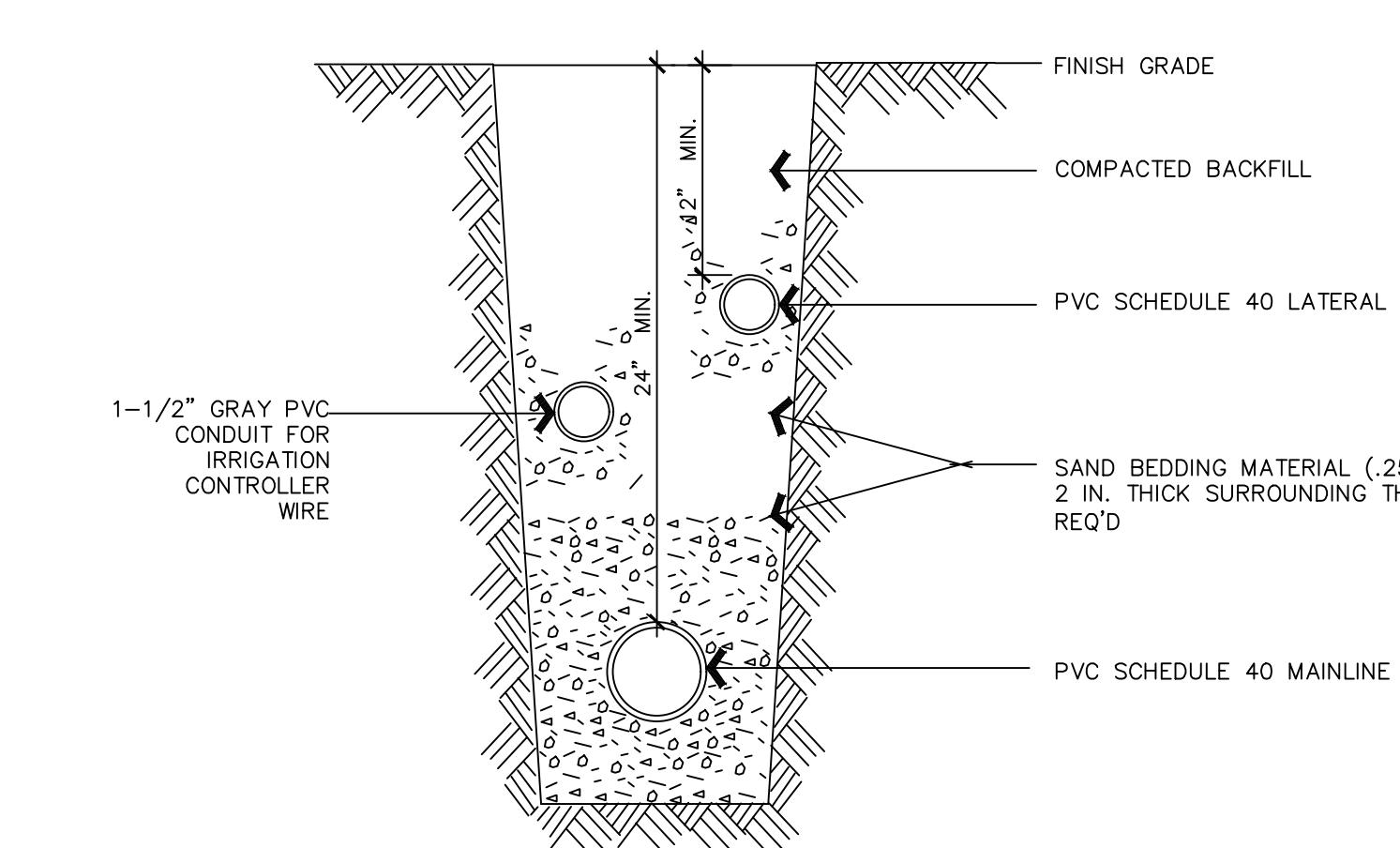
D STOP AND WASTE VALVE ASSEMBLY
NOT TO SCALE



NOTES:
 1. ALL PVC NIPPLES AND ELBOWS TO BE SCH. 80 UNLESS OTHERWISE NOTED.
 2. PROVIDE VALVE KEY TO OWNER.



① 10" ROUND GREEN PLASTIC VALVE BOX W/ BOLT LOCK, CARSON - BROOKS
 ② FINISH GRADE
 ③ 6" PVC SCH. 40 PIPE SLEEVE, 4" - 6" BELOW GRADE
 ④ 2" SQUARE OPERATING NUT
 ⑤ FLANGE X FLANGE GATE VALVE SEE EQUIPMENT SCHEDULE
 ⑥ SCH. 80 FLANGE ADAPTER
 ⑦ MAIN WATER SUPPLY LINE
 ⑧ 6" MIN. GRAVEL
 ⑨ SUBGRADE COMPACTED TO 95%
 ⑩ DEPTH: 18" - 30"
 ⑪ SHRUBS - 2": SOD-1/2"; SEED 1"

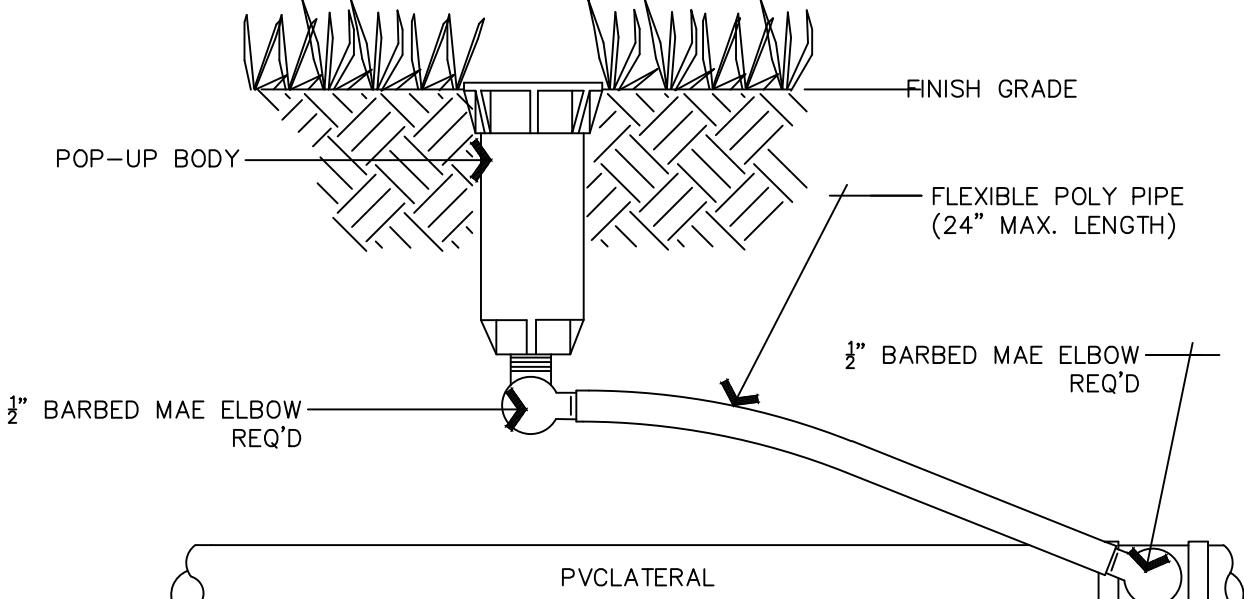


E MANUAL DRAIN ASSEMBLY
NOT TO SCALE

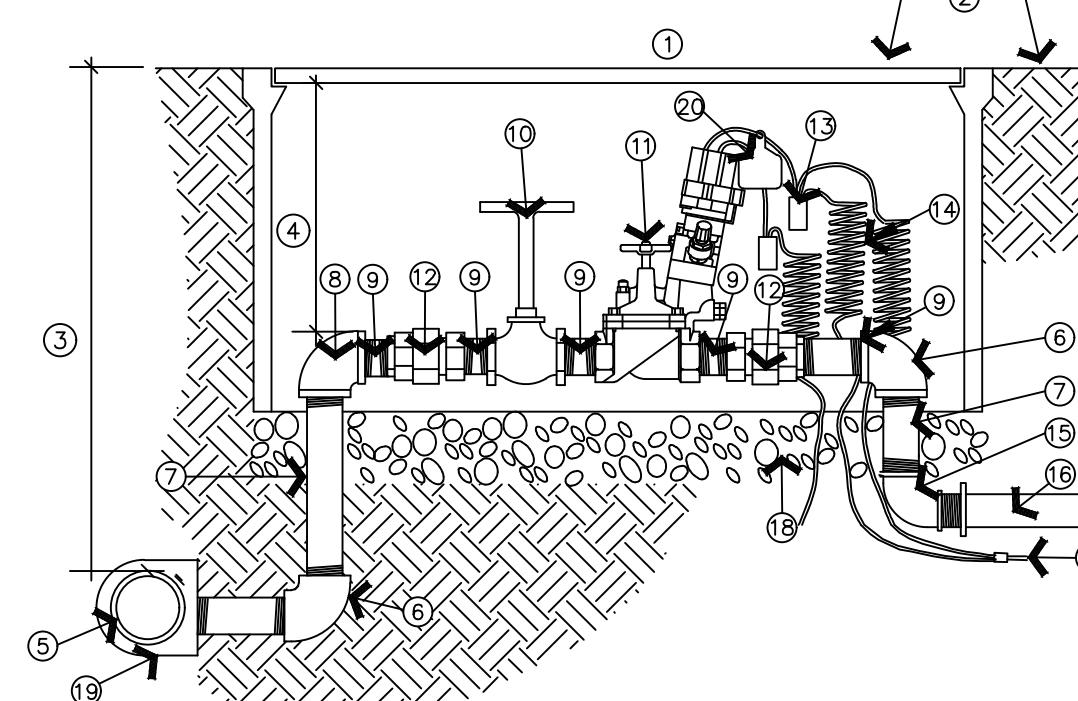
F GATE VALVE ASSEMBLY
NOT TO SCALE

G TRENCHING DETAIL
NOT TO SCALE

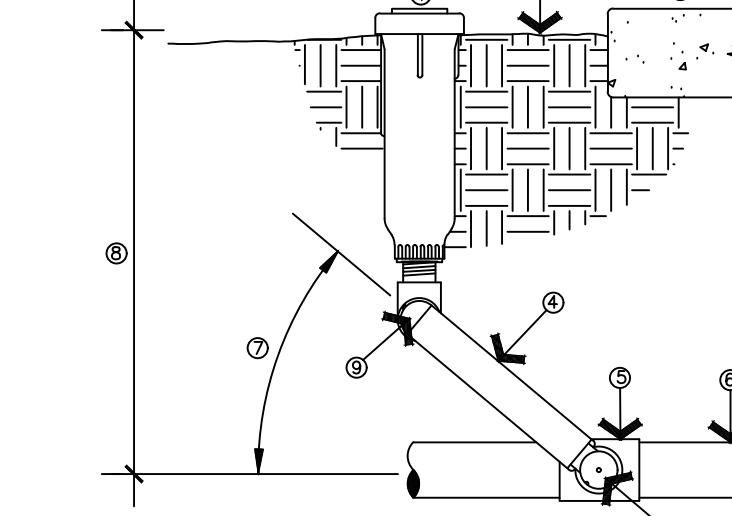
H TYPICAL SLEEVING
NOT TO SCALE



NOTES:
 1. INSTALL SPRAY AND ROTARY HEADS PER THIS DETAIL.
 2. INSTALL 2" AWAY FROM HARDCAPES.



① CARSON-BROOKS 1419-12 STANDARD OR 1220-12 JUMBO VALVE BOX WITH STAINLESS STEEL BOLTS (BOLT DOWN LID).
 ② INSTALL AT GRADE
 ③ 30" MAX. DEPTH
 ④ 10"-14"
 ⑤ MAIN WATER SUPPLY LINE
 ⑥ PVC SCH. 80 ELBOW
 ⑦ PVC SCH. 80 NIPPLE; LENGTH AS REQUIRED (TYP.)
 ⑧ PVC SCH. 80 ELL SAME SIZE AS VALVE
 ⑨ SCH. 80 NIPPLE, SIZE AS NECESSARY
 ⑩ MILWAUKEE BRAND OR APPROVED AMERICAN-MADE BRASS GATE VALVE W/ NON RISING STEM (LINE SIZE)
 ⑪ ELECTRIC CONTROL VALVE - SEE EQUIPMENT SCHEDULE
 ⑫ PVC SCH. 80 UNION
 ⑬ WATER TIGHT CONNECTORS (3M DBY ONLY)
 ⑭ PROVIDE 36" EXPANSION LOOP AT EACH WIRE CONNECTOR IN BOX
 ⑮ SCH. 80 ELL WITH SCH. 80 NIPPLE INTO 5x5 BUSHING TO LATERAL
 ⑯ LATERAL LINE
 ⑰ CONTROL WIRES
 ⑱ 6" MINIMUM DEPTH OF WASHED 3/4" GRAVEL
 ⑲ PVC SCH. 80 TEE SXsxs WITH SCH. 80 SX BUSHING OR DOUBLE STRAP SADDLE.
 ⑳ ID TAG: RAINBIRD VID SERIES OR APPROVED EQUAL



① POP-UP ROTOR SPRINKLER - SEE LEGEND
 ② FINISH GRADE
 ③ NOTE: ALL ROTOR HEADS TO BE PLACED 2" CLEAR OF ALL HARDCAPES SURFACES
 ④ SCH. 80 THREADED NIPPLE
 ⑤ PVC SCH. 40 5x5x5 TEE (OR ELL)
 ⑥ PVC LATERAL LINE, SIZE AS NOTED ON PLAN
 ⑦ SWING JOINT ARM INSTALLED AT ANGLE BETWEEN 30 AND 45 DRG. OF LATERAL PIPE, USE MALE THREAD MODEL
 ⑧ DEPTH - SEE NOTES & TRENCH DETAIL
 ⑨ MARLEX STREET ELL'S (3)

I SPRAY HEAD DETAIL
NOT TO SCALE

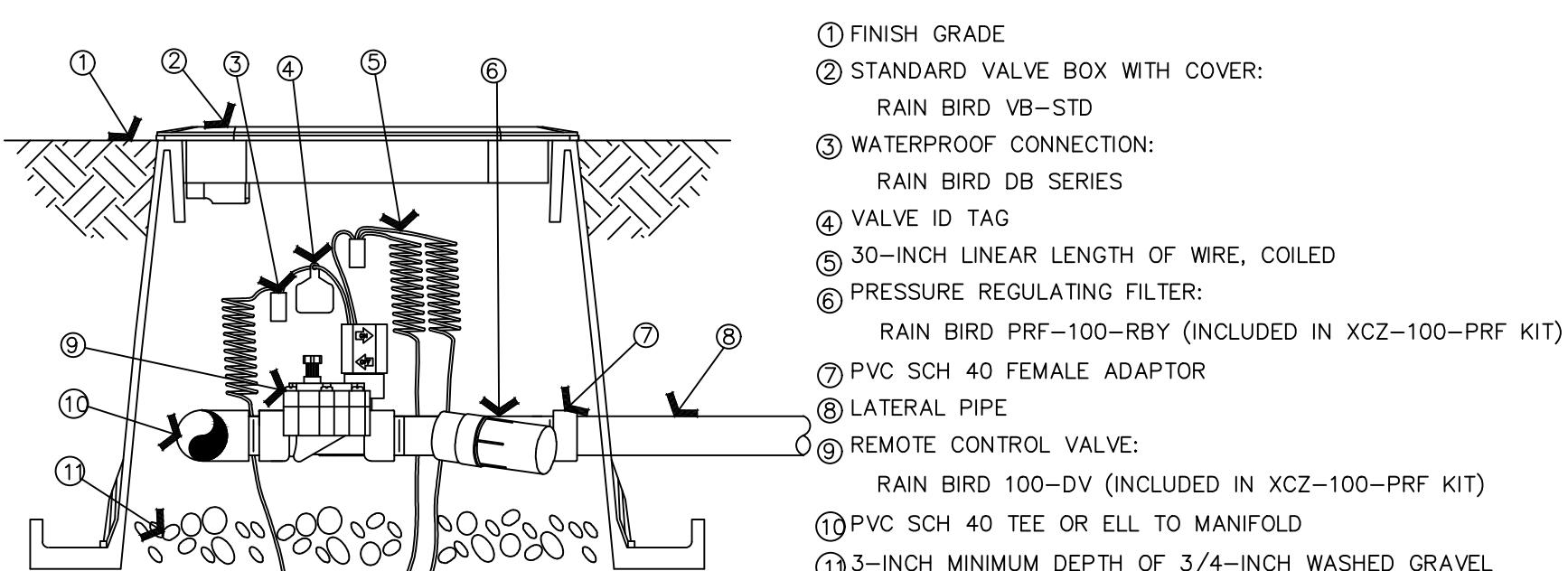
J CONTROL VALVE ASSEMBLY
NOT TO SCALE

I POP UP ROTOR DETAIL
NOT TO SCALE

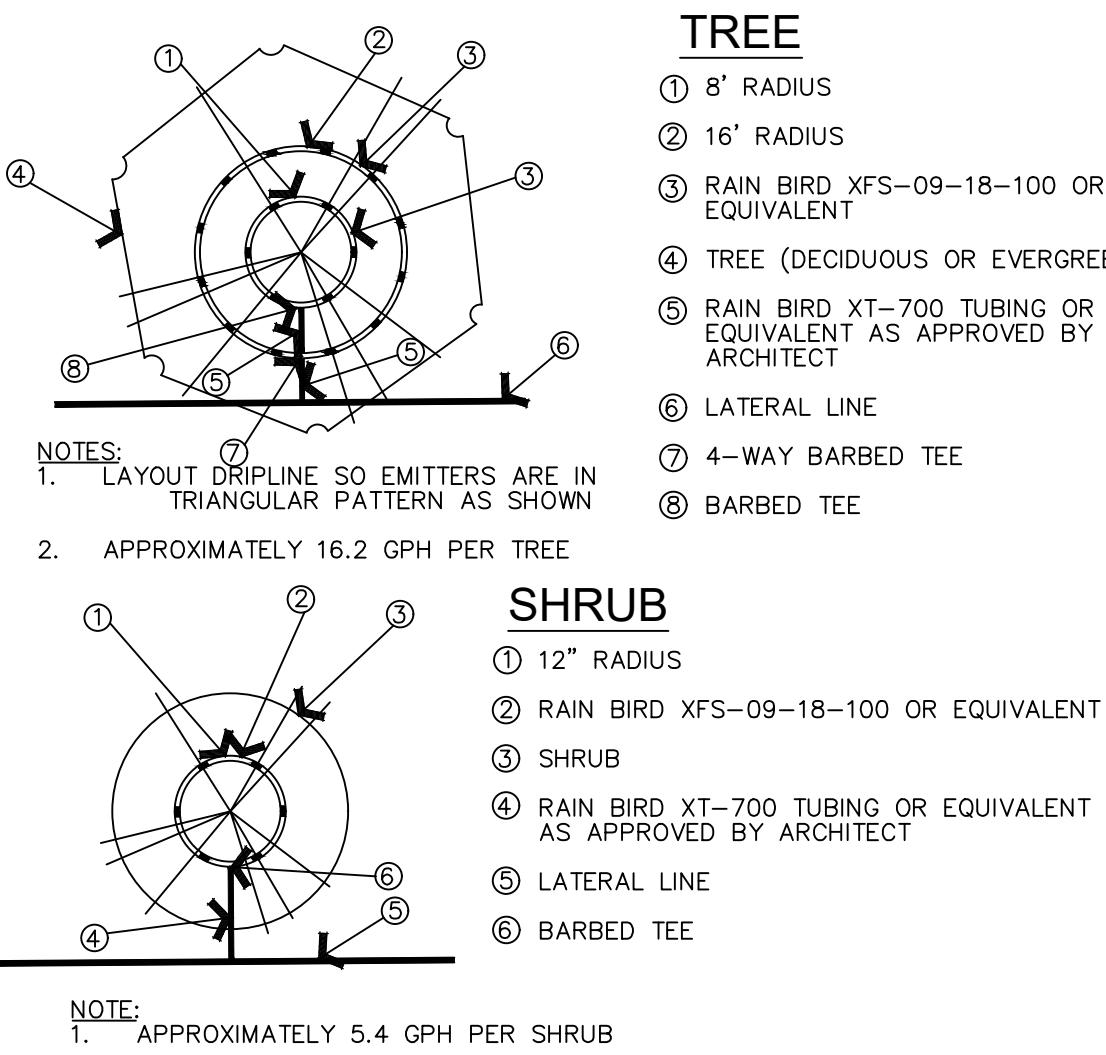
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11/3/2020	UT20111			Developer / Property Owner: JOE JOHNSEN JOE.JOHNSON@GMAIL.COM			PM: KBA DRAWN: KBA
NO. REVISION	DATE			Building Architect / Engineer: JZW-ARCHITECTS 849 WEST HILLFIELD RD, STE 204 LAYTON, UTAH 84041 801-936-1343			DRAWN: KBA CHECKED: JTA PLOT DATE: 11/3/2020
1		811 BLUE STAKES OF UTAH UTILITY NOTIFICATION CENTER, INC 1-800-662-4111 www.bluestakes.org	VINE STREET APARTMENTS 184 E VINE ST. MURRAY, UTAH				
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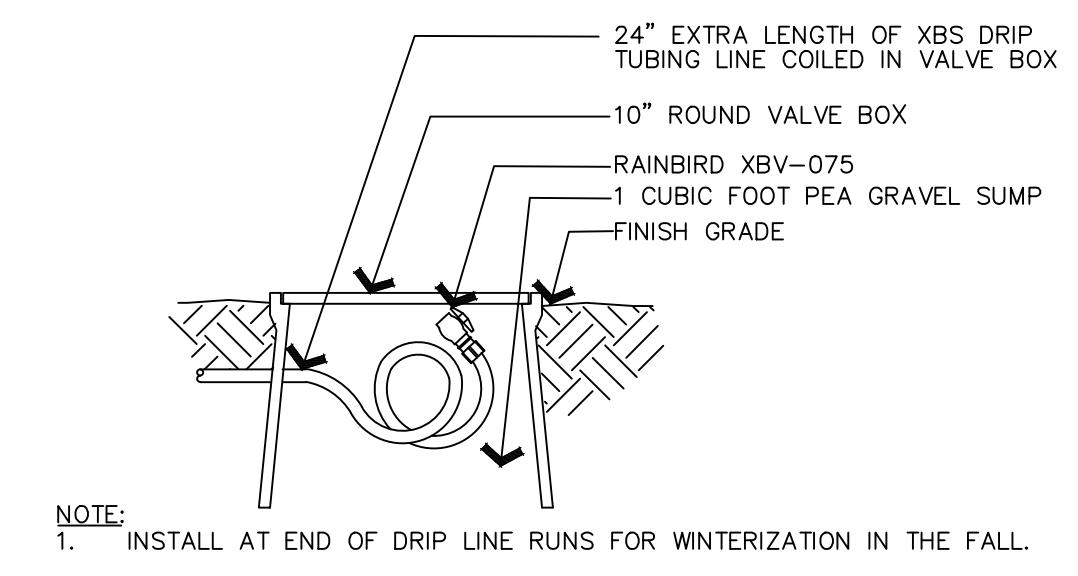
IR 501
IRRIGATION DETAILS
PRELIMINARY PLANS NOT FOR CONSTRUCTION



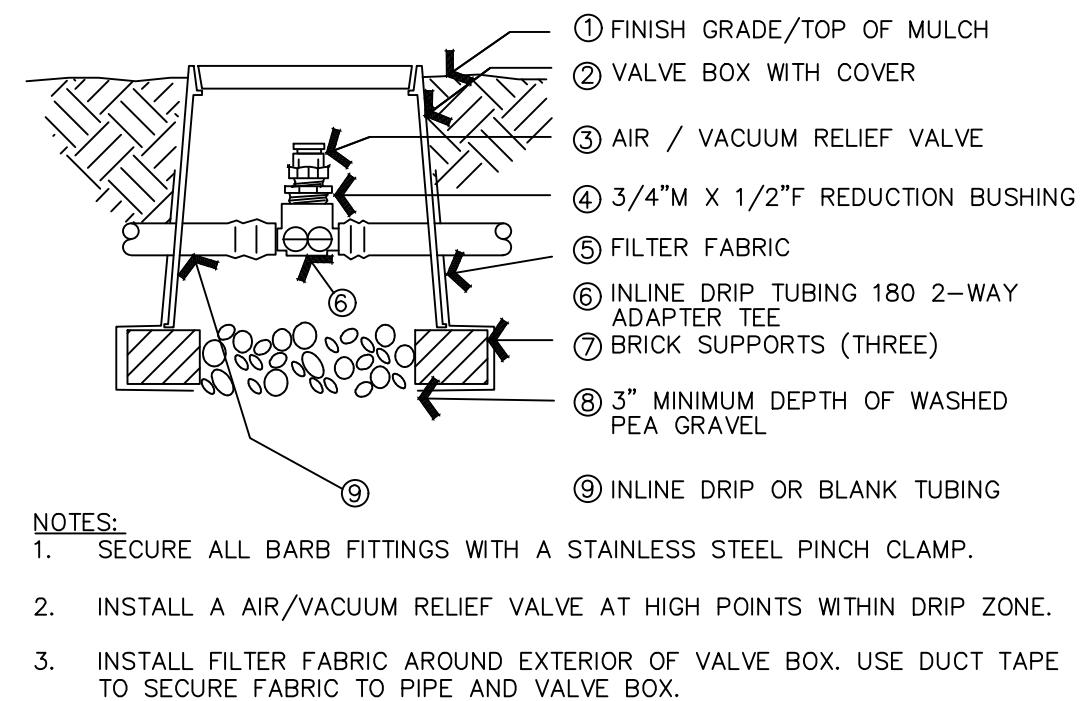
L Drip Control Valve Assembly
NOT TO SCALE



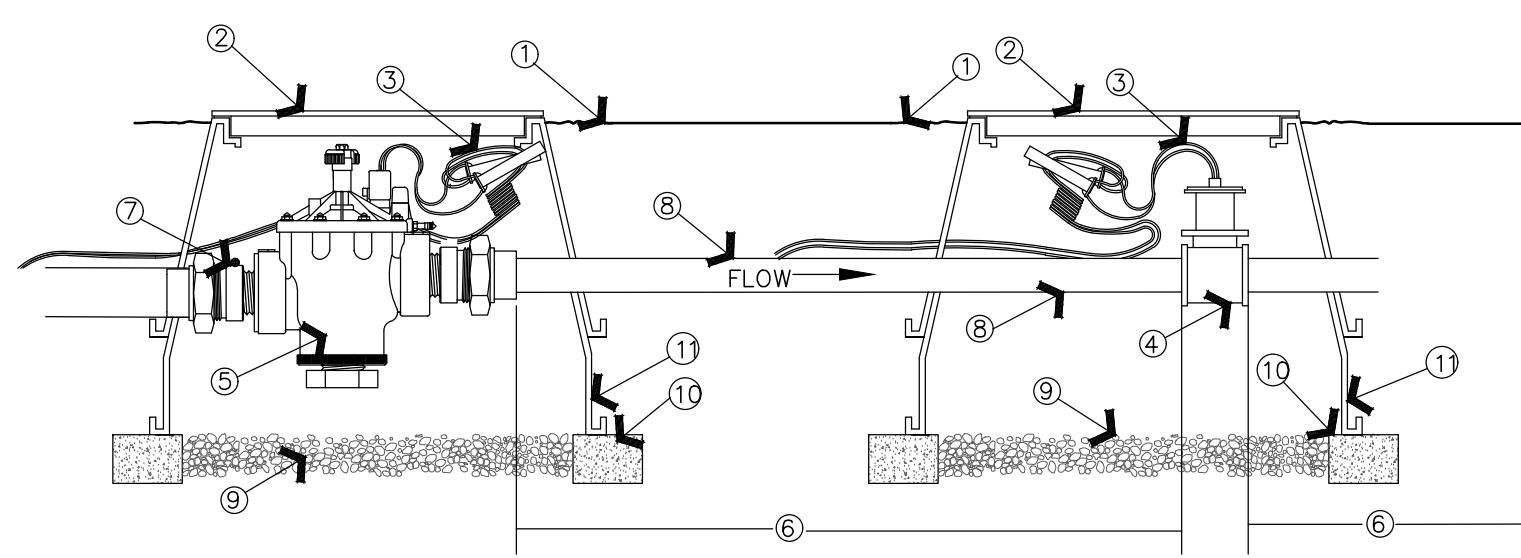
M Drip Irrigation - In Line Emitters
NOT TO SCALE



N Flush Cap Box
NOT TO SCALE



O Drip Air/Vacuum Relief Valve Assembly
NOT TO SCALE



P Master Valve & Flow Sensor
NOT TO SCALE

VINE STREET APARTMENTS
184 E VINE ST.
MURRAY, UTAH

PROJECT NUMBER			PLAN INFORMATION		PROJECT INFORMATION	
11/3/2020			UT20111			
NO.	REVISION	DATE				
1						
2						
3						
4						
5						
6						
7						



BLUE STAKES OF UTAH
UTILITY NOTIFICATION CENTER, INC
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DEVELOPER / PROPERTY OWNER / CLIENT	LANDSCAPE ARCHITECT / PLANNER	LICENSE STAMP
Developer / Property Owner: JOE JOHNSEN JOE.JOHNSON@GMAIL.COM		PKA DRAWN: KBA CHECKED: JTA PLOT DATE: 11/3/2020
Building Architect / Engineer: JZW-ARCHITECTS 849 WEST HILLFIELD RD, STE 204 LAYTON, UTAH 84041 801-936-1343		
 PKJ DESIGN GROUP Landscape Architecture Planning & Visualization 3450 N. TRIUMPH BLVD. SUITE 102 LEHI, UTAH 84043 (801) 960-2698 www.pkjdesigngroup.com		
PRELIMINARY PLANS NOT FOR CONSTRUCTION IR 502		

The Vine

Exterior Finishes

Exterior Finish Pallete



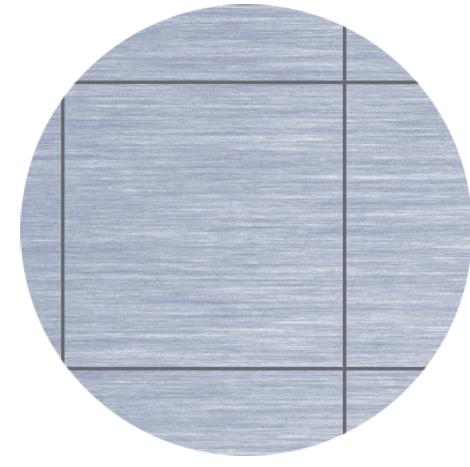
Brick



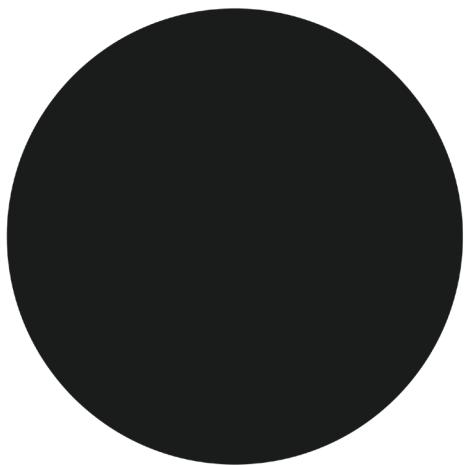
Stone



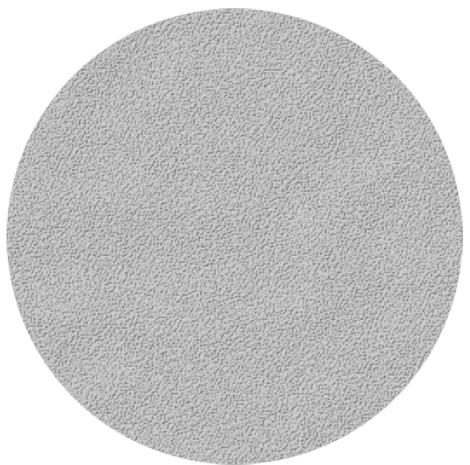
Wood Look Fiber
Cements Planks



Aluminum Metal Paneling



Black Metal Paneling



Grey Stucco



White Stucco

Perspective 1



Brick



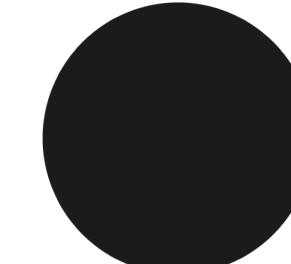
Stone



Wood



Aluminum Metal Paneling



Black Metal Paneling



Grey Stucco



White Stucco



Perspective 2



Brick



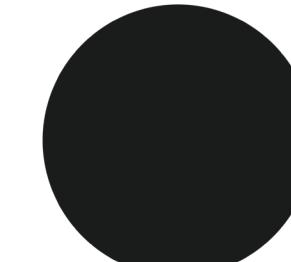
Grey Stucco



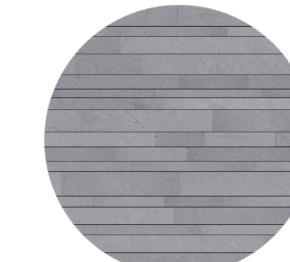
Wood



Aluminum Metal Paneling



Black Metal Paneling



Stone



White Stucco



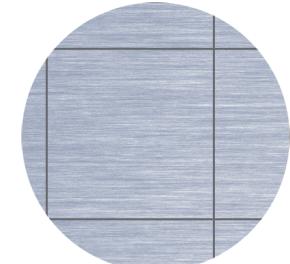
Perspective 3



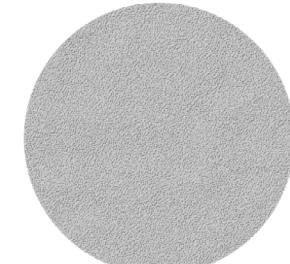
Brick



Wood



Aluminum Metal Paneling



Grey Stucco



White Stucco



Perspective 4



Stone



Brick



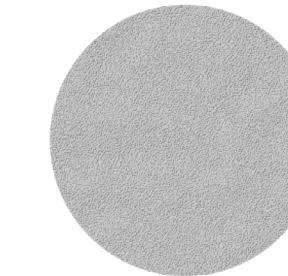
Aluminum Metal Paneling



White Stucco



Wood

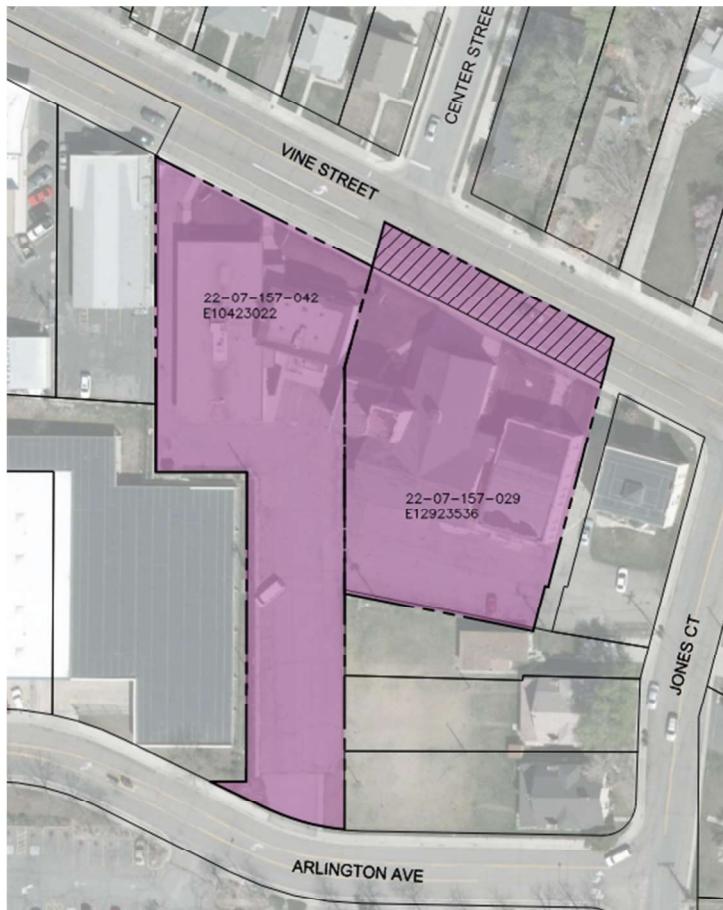


Grey Stucco



Vine Street Apartments

Traffic Impact Study



Murray, Utah

February 26, 2020

UT20-1618



EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed Vine Street Apartments development located in Murray, Utah. The Vine Street Apartments project is located on the south side of Vine Street, directly across from Center Street.

Included within the analyses for this study are the traffic operations and recommended mitigation measures for existing conditions and plus project conditions (conditions after development of the proposed project) at key intersections and roadways near the site. Future 2025 conditions were also analyzed.

The evening peak hour level of service (LOS) was computed for each study intersection. The results of this analysis are shown in Table ES-1.

TABLE ES-1
LOS Analysis - Evening Peak Hour
Murray - Vine Street Apartments TIS

Intersection	Level of Service (Sec/Veh) ¹				
	Existing (2020) Background	Mitigated Existing (2020) Background	Existing (2020) Plus Project	Future (2025) Background	Future (2025) Plus Project
Vine Street / State Street (US-89)	D (50.7)	D (36.2)	D (39.4)	D (49.3)	D (50.9)
Arlington Avenue / State Street (US-89)	A (5.4) / WB	A (5.7) / WB	A (5.7) / WB	A (7.0) / SB	A (6.7) / WB
North Access & Center Street / Vine Street	D (26.5) / WB	A (7.8) / SB	B (11.1) / NB	A (8.8) / SB	B (13.7) / NB
Jones Court / Vine Street	E (44.6) / NB	B (11.0) / NB	B (10.8) / NB	B (12.7) / NB	B (12.5) / NB
Jones Court / Arlington Avenue	E (49.9) / EB	A (2.2) / EB	A (2.1) / EB	A (2.2) / EB	A (2.2) / EB
South Access / Arlington Avenue ²	-	-	A (2.7) / SB	-	A (2.6) / SB

1. Intersection LOS and delay (seconds/vehicle) values represent the overall intersection average for roundabout, signalized, all-way stop controlled intersections and the worst approach for all other unsignalized intersections.

2. This intersection is a project access and was only analyzed in "plus project" scenarios.

Source: Hales Engineering, February 2020

SUMMARY OF KEY FINDINGS/RECOMMENDATIONS

The following is a summary of key findings and recommendations:

- The Jones Court / Vine Street and Jones Court / Arlington Avenue intersections are currently operating at an unacceptable LOS during the evening peak hour in existing (2020) background conditions due to the westbound queue from the Vine Street / State Street (US-89) intersection.
 - *Recommendation:* Restripe the westbound right-turn pocket of the Vine Street / State Street (US-89) intersection into a shared thru/right-turn lane. Remove the bike lane and mark the existing right-turn pocket as a sharrow. The west leg of the intersection currently has two lanes, which can accommodate this change.
- The development will consist of apartment units and mixed office/retail space.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour with project traffic added.
- All study intersections are anticipated to operate at an acceptable LOS during the evening peak hour in future (2025) background and plus project conditions.