Planning Commission
July 24, 2023
7:00PM
City Hall, 6090 Woodson Street

AGENDA

I. CALL TO ORDER
II. APPROVAL OF MINUTES FROM JUNE 26, 2023
III. NEW BUSINESS

1. Public Hearing: Case #23-13 - Residence on Rock Creek II Preliminary Development Plan at 5201 Johnson Drive (lot south of Martway)

2. Public Hearing: Case #23-14 - Tobacco Retailer Ordinance

3. Case #23-15 - Water Works Park Final Development Plan at 5814 West 53rd Street

IV. OLD BUSINESS
V. PLANNING COMMISSION COMMENTS
VI. STAFF UPDATES

Questions concerning this meeting may be addressed to the staff contact, Karie Kneller, City Planner, at (913) 676-8366 or kkneller@missionks.org

July 24, 2023

Planning Commission

Staff Report

At A Glance

Applicant:
Mission Bowl Apartments LLC

Location:
5201 Johnson Drive (South of Martway)

Property ID:
KP38000000 0007

Current Zoning:
MS-2

Proposed Zoning:
N/A

Current Land Use:
Surface Parking

Proposed Land Use:
Mixed-Use

[X] Public Hearing Required

Legal Notice:
July 4, 2023

Case Number:
23-13

Project Name:
Residence on Rock Creek Phase II

Project Summary:
The applicant proposes a mixed-use development of multi-family residential and retail for the existing parking area on the south side of Martway as phase two of the Residence on Rock Creek development that is currently under construction on the adjacent property to the west. It is a five-story structure, with four stories of 96 residential units over a first floor parking garage and small retail space with additional surface parking and on-street parking on site.

Staff Contact:
Karie Kneller, City Planner

Property Background and Information

The subject property is located at 5201 Johnson Drive, on the lot south of Martway. It is a proposed development for Phase II of the Residence on Rock Creek that is currently under construction. The property is zoned “MS-2” Main Street District 2. The lot is currently combined with the lot to the north on Martway, which is a high-rise office building.

The subject property is currently an impervious parking lot with an approximately 15-foot buffer between the lot and the stormwater channel. The north, west, and east perimeter also contain a small area of pervious landscaping strip; to the north is a two-foot strip on the south side of the existing sidewalk, with two landscaped islands at the west and east vehicular drives. According to County maps, the south side of the subject property lies partially within the 100-year floodplain, adjacent to the Rock Creek channel.

Stormwater generally flows from north to south and west to east on the property surface, without underground infrastructure to capture runoff. A concrete flume currently located on the southeast corner of the lot shunts stormwater from the surface into the Rock Creek channel. A water main is located on the north side of Martway and on the adjacent property to the west. Gas, electrical, and sanitary sewer utilities are available. The property is not currently platted.

Project Proposal

The applicant submitted a preliminary development plan for a 90,647 square foot 96-unit multi-family development with a 1,750-square foot retail component on the northwest corner of the ground floor. A structured parking and surface parking component with 98 spaces for residents is located under and at the back of the building, accessed on the south side of the lot via the east vehicular drive. There is an additional seven parking spaces located diagonally along Martway for retail customers. The building is a five-story structure, about the same height as the Residence on Rock Creek development that is currently under construction. This development is phase two of Residence on Rock Creek, and circulation through the phase two development consists of a drive onto the phase one property for fire access ingress and egress.

The building footprint is outside of the 100-year floodplain, with some surface parking located within the floodplain on the south side ground floor. While a stormwater capture component will be part of the final development plan, it is not included in the preliminary development plan as this time. The stormwater infrastructure needed to improve the site with this development will consist of best management practices for stormwater management according to the American Public Works Association (APWA) and Mid-America Regional Council (MARC) guidelines, and will be the standard of evaluation for plan details. Impervious surface will nominally increase by about 3.3% with this plan, therefore stormwater calculations are provided with the project packet. The conversion from paved parking to more than 23,000 square feet of rooftop impervious surface is anticipated to decrease runoff contaminates from oil, salt, and gasoline.

Landscaping consists of a variety of trees, bushes, and ground cover that will provide green space on

site on the perimeter and within the parking area. There are nine street trees proposed along Martway with this plan. Annual planter beds are also a part of the landscaping plan. An extension of the existing Rock Creek Trail is located on the north side of the lot to maintain that connection, and a small area with public exercise equipment is also located adjacent to the trail. This exercise equipment is an extension of equipment located similarly on the first phase of the Residence on Rock Creek project.

Materials consist of brick and stone, with breeze block detailing on the ground floor facing Martway east of the retail location. There are four glass doors proposed along street frontage, and spandrel glass detail along a storage wall on the north façade at the ground floor. Several balconies and vertical architectural details around 360-degrees of the building breaks up the frontage on each floor of the proposed development. Park benches and bike racks are available along Martway, as well.

The design team submitted a sustainability scorecard for review by the Sustainability Commission. The meeting will be scheduled to provide the Commission with an opportunity to review the project and provide feedback for ways to improve the sustainability of the project.

Plan Review and Analysis

Mission Comprehensive Plan and Municipal Code

The 2007 Comprehensive Plan indicates future land use for the subject property as mixed-use. The draft update to the Comprehensive Plan defines the property as “High-Density Residential,” defined as 21 or more units per acre. The municipal code for properties located in MS-2 zones at §410.230-410.240 states that multi-family dwellings have a minimum of 35 units per acre.

Analysis: The proposal conforms with the municipal code and the comprehensive plan (2007 and draft update) for lot density.

The maximum height permitted in MS-2 is three stories and/or 45 feet. No front, side, or rear setback is required, except where the lot is adjacent to properties in R-1 or R-2 zoning districts.

Analysis: Because the lot is separated by the adjacent Rock Creek channel, this stipulation would not apply, but development is not permitted within the floodplain, so there is a significant back yard setback as determined by the floodplain area. This project is consistent with the development type, height, and density of phase one to the western adjacent lot, and the proposal conforms with the density and land use stipulated in the municipal code.

Parking requirements per municipal code at §410.250 (A) stipulate that for each 1,000 square feet of gross floor area, four spaces shall be provided. The retail space is 1,750 square feet, therefore the requirement for parking is seven spaces. These are provided in diagonal parking along Martway at the north side of the property. Americans with Disability Act (ADA) guidelines state that one ADA-accessible parking space should be provided for every 20 parking spaces on a site. There are a total of 105 parking spaces proposed, therefore six accessible spaces are required. Additionally, parking requirements for residential uses (B) stipulate that one space per bedroom for one- and two-bedroom units is required.

The project contemplates 112 bedrooms in 96 units, with 98 resident parking spaces in covered and uncovered lots.

Analysis: Staff is currently working with the applicant and the property owner to provide an agreement for shared parking to accommodate parking needs between the office use on the north side of Martway and the residential needs of this project. Staff will also work with the applicant to ensure that the ADA needs are met for the residents and customers. The shared parking agreement and equitable ADA access will be required with the final development plan.

Screening on the property is provided on the east side of the property, via a 4-foot high wall, that will be detailed in the final development plan. Trash receptacles are located behind the building in the uncovered parking lot, with access from within the building or covered parking garage. The final development plan will detail the enclosure materials.

Per municipal code at §415.030, screening for trash bins must be provided so that it is not visible from the pedestrian realm or off site, and the enclosure shall be constructed of masonry or frame. All roof-mounted equipment shall be screened from adjacent property or street level.

Analysis: The trash enclosure is located at the back of the building and will be enclosed with details to be provided in the final development plan

Landscaping requirements are provided in the municipal code at §415.090, which states that one tree is required for each 50 feet of street frontage. The frontage measures 385 feet, with a required eight trees. The proposal shows nine trees along street frontage. Additionally, one tree for each 3,000 square feet of open spaces is required. The lot has 5,390 square feet of open space, for a required two additional trees, which are provided in the plan. Landscaping within parking lots requires 6% of landscaped space and one tree for each 20 parking spaces (not to include garage). There are 50 uncovered parking spaces and three trees required. The area that is required to be landscaped is at least 486 square feet, and the proposal shows 592 square feet of landscaped parking area.

Analysis: The landscaping requirements as set forth in the municipal code are met with the preliminary plan; staff requires a landscape plan that details native and non-invasive species for the final development plan as noted.

Johnson Drive Design Guidelines

Materials in accordance with the Johnson Drive Design Guidelines (referenced in the municipal code as the City Wide Design Guidelines) shall be neutral beige, tan, and yellow tones and shall be of durable, high quality such as brick and stone. Each façade shall be addressed to provide a 360-degree design. The pedestrian realm is a priority, and should provide adequate connections for improved walkability. Park benches and bike racks are encouraged as part of design for walkable connections throughout the community as part of new developments. Ground floor transparency is encouraged to provide an enhanced pedestrian experience.

Analysis: It is staff's determination that the materials and overall architectural design is in conformance with the Johnson Drive Design Guidelines and provides a comprehensive design that is in context with surrounding properties. The extension/retention of the Rock Creek Trail connection provides improved walkability that is inviting and safe for pedestrians and the additional seating, bike racks, and exercise equipment provides enhancements that are consistent with improvements along the corridor. The breeze block detail on the ground floor facing Martway, entry doorways, and spandrels create an environment that engages passing pedestrians and bicyclists.

Recommendation

Staff recommends that the Planning Commission recommend approval to the City Council of Case #23-13, the preliminary development plan for Residence at Rock Creek Phase II with the following conditions:

1. A final development plan will be submitted to the City and approved by the Planning Commission prior to the issuance of any building permits.

2. A Final Stormwater Management Report will be required with the Final Development Plan submittal. The stormwater report will document stormwater infrastructure and detention basin design details, subject to review and approval by Public Works staff.

3. All necessary stormwater infrastructure, as determined by guidance in the adopted 2009 APWA/ MARC Manual of Best Management Practices for Stormwater Quality, will be detailed in the final development plan.

4. A Cross Parking Access Agreement outlining arrangements for shared parking between the proposed development site and the office building to the north located at 5201 Johnson Drive is required for the final development plan. Said Cross Parking Access Agreement will be signed by all parties and recorded with the Johnson County Register of Deeds prior to a building permit being issued.

5. Provide adequate ADA parking; One stall for every 20 spaces is required for final development plan. At least one ADA parking stall should be available to residents on-site outside of the parking structure.

6. Provide an ADA parking stall for the retail use.

7. A study to determine the sight-line from the residential properties that are adjacent to the south to the equipment on the roof shall be completed to ensure that roof-mounted equipment is adequately screened from view; to be provided with the final development plan.

8. A detailed landscaping plan is required with the submittal of the final development plan;

landscaping that is native and non-invasive shall be provided.

9. A detailed lighting plan is required with the submittal of the final development plan; lighting specifications that adhere to International Dark Sky Standards is preferred.

10. A study to determine the need for an improved crosswalk and/or beacon for pedestrians at the mid-block crossing for access to parking on the north side of Martway shall be included in the final development plan.

11. Details of the trash enclosure shall be provided that ensure adequate screening of waste from view off the site; to be provided with the final development plan.

12. All necessary easements and dedicated rights-of-way shall be submitted in a preliminary plat prior to final development plan approval.

13. An application for a Land Disturbance Permit shall be submitted to, and issued by, the City before any clearing, grading, or digging occurs on the site beyond the demolition that has already occurred.

14. The applicant shall submit a Final Site Plan and construction documents to the City for review and approval prior to building permit issuance.

15. The applicant shall obtain all approvals from Johnson County Wastewater and Johnson County Water District #1 prior to building permit issuance.

16. The applicant shall obtain all necessary reviews, inspections, and approvals from Consolidated Fire District #2 prior to final occupancy permit being issued.

17. The applicant shall be responsible for all damage to existing City infrastructure, including roads, curbs, and sidewalks. Repairs shall be of a quality like or better than existing conditions before final Certificate of Occupancy issuance.

18. The applicant shall provide a two (2) year warranty bond on all public infrastructure installed as part of this Preliminary Development Plan; bond(s) will be placed on file with the City of Mission Community Development Department.

19. Maintenance agreement for all site improvements, including but not limited to structures, improved infrastructure, landscaping, parking, and pedestrian connections on the property shall be provided and signed by the applicant and the appropriate City officials prior to construction permitting.

20. This Preliminary Plan approval shall lapse in five (5) years from its effective date if construction on the project has not begun, or if such construction is not being diligently pursued; provided, however, that the applicant may request a hearing before the City Council to request an extension of this time period. The City Council may grant an extension for a maximum of 12 months for good cause.

Planning Commision Action

The Planning Commission will hear Case #23-13 at its July 24, 2023 public hearing.

City Council Action

The City Council will hear Case #23-13 at its August 16, 2023 public hearing.

Community Development Department
6090 Woodson Street
Mission, KS 66202
913-676-8360

Development Application

Permit #_____

Applicant Name: Banks Floodman	Company: Mission Bowl Apartments LLC
Address: 901 New Hampshire Street, Suite 201	
City/State/Zip: Lawrence, KS 66044	
Telephone: 816.998.2808	
Email: bfloodman@sunflowerkc.com	
Property Owner Name: Brain Dev 7 LLC	Company: Brain Dev 7 LLC
Address: 300 E 39th St.	
City/State/Zip: Kansas City, MO 64111	
Telephone:	
Email: abrain@braingroup.co	
Firm Preparing Application: Connor Treanor	Company: CT Design & Development
Address: 900 New Hampshire	
City/State/Zip: Lawrence, KS 66044	
Telephone:	
Email: ctreanor@ctdesigndev.com	
*All correspondence on this application should be sent to (check one) __X__ Applicant _____ Owner ____ Firm	

Application Type

Rezoning ☐ Plat ☐ Site Plan ☒ SUP ☐ Lot Split ☐ Other (Specify): _____

Description of Request

Please provide a brief description of the request: The applicant is requesting preliminary development plan (PDP) review in connection with its proposed redevelopment of the existing parking lot to approx 92-102 multifamily apartment units.

Project Details

General Location or Address of Property: 5201 Johnson Dr (part of Security Bank Parcel)

Present zoning of property: MS2

Present use of property: Vacant parking lot

Agreement to Pay Expenses

Applicant intends to file an application with the Community Development Department of the City of Mission, Kansas (City). As a result of the filing of said application, City may incur certain expenses, such as but not limited to publication costs, consulting fee, attorney fee, and court reporter fees. Applicant hereby agrees to be responsible for and to reimburse City for all cost incurred by City as a result of said application. Said costs shall be paid within ten (10) days of the receipt of any bill submitted by City to Applicant. It is understood that no requests granted by City or any of its commissions will be effective until all costs have been paid. Costs will be owed whether or not Applicant obtains the relief requested in the application.

Affidavit of Ownership and/or Authorization of Agent

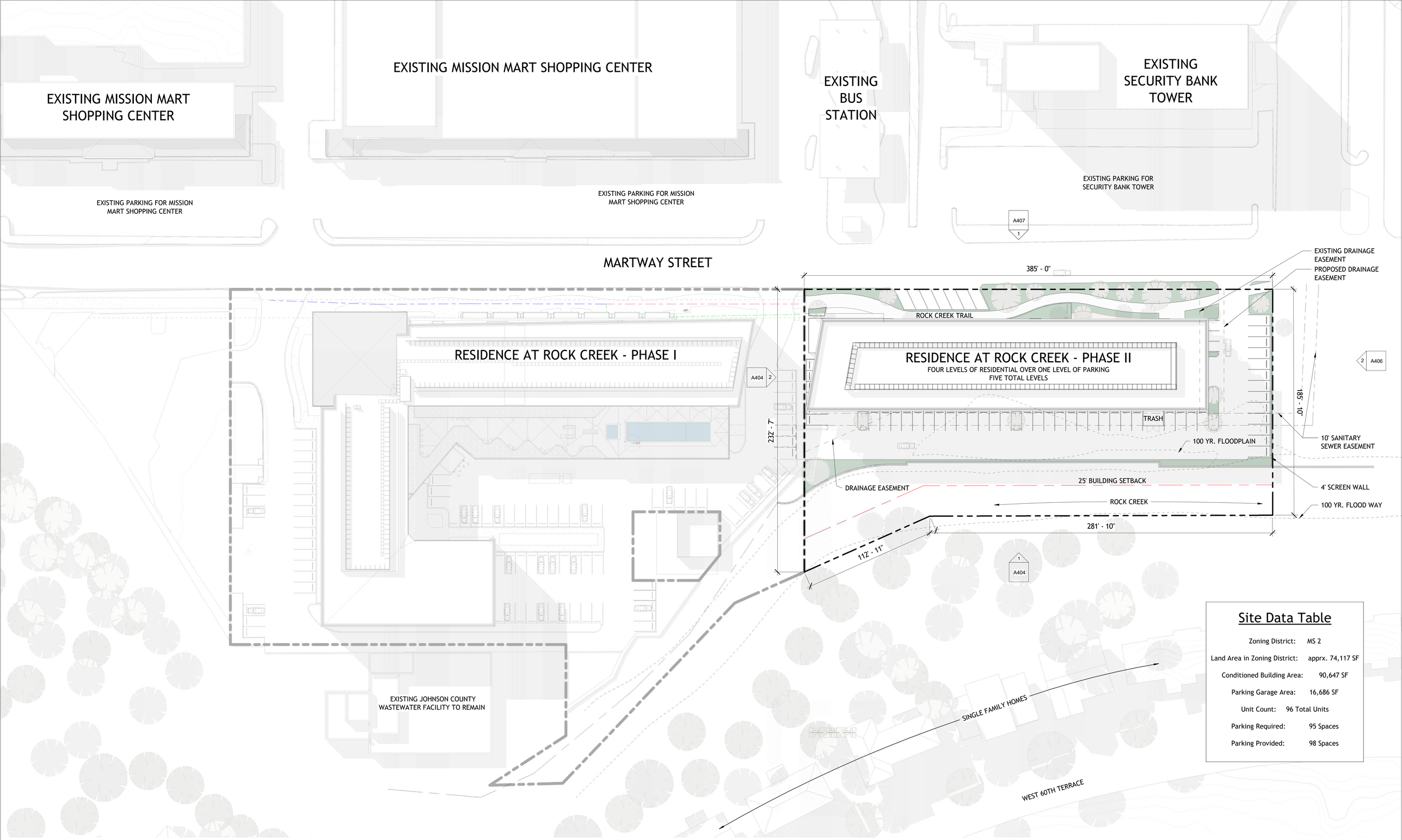
I, Jason Swords, manager of Mission Bowl Apartments LLC certify that I am the owner or contract purchaser of the subject property. I give my permission for the undersigned to act as my agent on behalf of the application hereby being submitted.

X _____ Date 5/16/23
Signature (Owner)

X Andrew Brain Date 5/16/23
Signature (Owner's Agent)

**********FOR OFFICE USE ONLY**********

File Fee: $	**Meeting Date**
Total:	PC CC **Date Notices Sent**
Receipt #	
Notes:	**Date Published**
	Decision



Site Data Table

Zoning District:	MS 2
Land Area in Zoning District:	apprx. 74,117 SF
Conditioned Building Area:	90,647 SF
Parking Garage Area:	16,686 SF
Unit Count:	96 Total Units
Parking Required:	95 Spaces
Parking Provided:	98 Spaces

RESIDENCE AT ROCK CREEK - PHASE 2

07/13/23

SHEET A401 - PDP SITE PLAN

1/32" = 1'-0"

C.T DESIGN + DEVELOPMENT

MARTWAY STREET

SAN MH 251

SAN

SAN

ROCK CREEK TRAIL

8'-0"

EXISTING DRAINAGE EASEMENT

EXISTING STORM MANHOLE W/ 36" PIPE

SAN MH 228

10' SANITARY SEWER EASEMENT

PROPOSED DRAINAGE EASEMENT

ROOF BELOW

AWNING BELOW

FIVE (5) STORY MULTI-FAMILY BUILDING

EVERGREEN HEDGE

TRASH

DRAINAGE EASEMENT

BUILDING DOWNSPOUTS COLLECT UNDERGROUND AND ROUTE TO HDS

DRAINAGE FLOW ARROWS TYP.

HYDRODYNAMIC SEPARATOR (HDS) DISCHARGES TO EXISTING M.H. IN DRIVEWAY.

GRATE INLET ROUTE TO HDS

6' WOOD FENCE BEHIND RETAINING WALL

EXISTING RETAINING WALL

25' BUILDING SETBACK

PROPERTY LINE

ROCK CREEK

PLANTING LEGEND

MEDIUM OR LARGE DECIDUOUS TREE (2" CAL. MIN.)

SMALL DECIDUOUS OR ORNAMENTAL TREE (6' HT. MIN.)

CONIFEROUS TREE (6' HT MIN.)

PKG LOT INTERIOR PLANTING AREA

TURF/ SHRUBS/GROUND COVER PLANTINGS

PLANTER BED

EVERGREEN HEDGE

LANDSCAPE PLAN DEVELOPMENT DATA:

THE FOLLOWING LANDCAPE REQUIREMENTS WERE DERIVED FROM SECTION 415 OF THE CITY OF MISSION DEVELOPMENT CODE.

415.090 MINIMUM TREE REQUIREMENTS PER ZONING DISTRICT

415.090 A.

TREES - 1 TREE/50 LF OF FRONTAGE LOCATED WITHIN THE LANDSCAPE SETBACK.

REQUIRED: 385 LF FRONTAGE/50 = 7.7 TREES = 8 TREES
SHOWN: 9 TREES

TREES - 1 TREE/ EACH 3,000 SF OF LANDSCAPE OPEN SPACE.

REQUIRED: 5,390 SF LANDSCAPE OPENSPACE/3,000 = 1.79 TREES = 2 TREES REQUIRED.
SHOWN: 2 TREES

TREES - 1 TREE/ EACH 20 PARKING SPACES. NOT INCLUDING GARAGE SPACES. TO BE LOCATED WITHIN THE PARKING AREA NOT ON THE PERIMETER.

REQUIRED: 50 PKG SPACES/20 = 2.5 = 3 TREES REQUIRED
SHOWN: 4 TREES

415.110 PLANT REQUIREMENTS WITHIN PARKING AND VEHICULAR AREAS
B.1 REQUIREMENT: 6% OF THE INTERIOR OF THE PARKING LOT SHALL BE LANDSCAPED.

REQUIRED: 50 SPACES x 162 SF x 0.06 = 486 SF REQUIRED
SHOWN: INTERIOR PARKING LOT LANDSCAPE AREA = 592 SF

PARKING LOT SCREENING FROM RESIDENTIAL ZONING SOUTH OF ROCK CREEK:
- WOOD FENCE ALONG SURFACE LOT
- NO ADDITIONAL LANDSCAPING IS SHOWN AS IT WOULD BE LOCATED WITHIN THE CREEK FLOW LIMITS

ALL VEGETATION AND TREES WILL BE NATIVE AND DISEASE RESISTANT. THE FDP WILL DETAIL SPECIFIC LANDSCAPING.

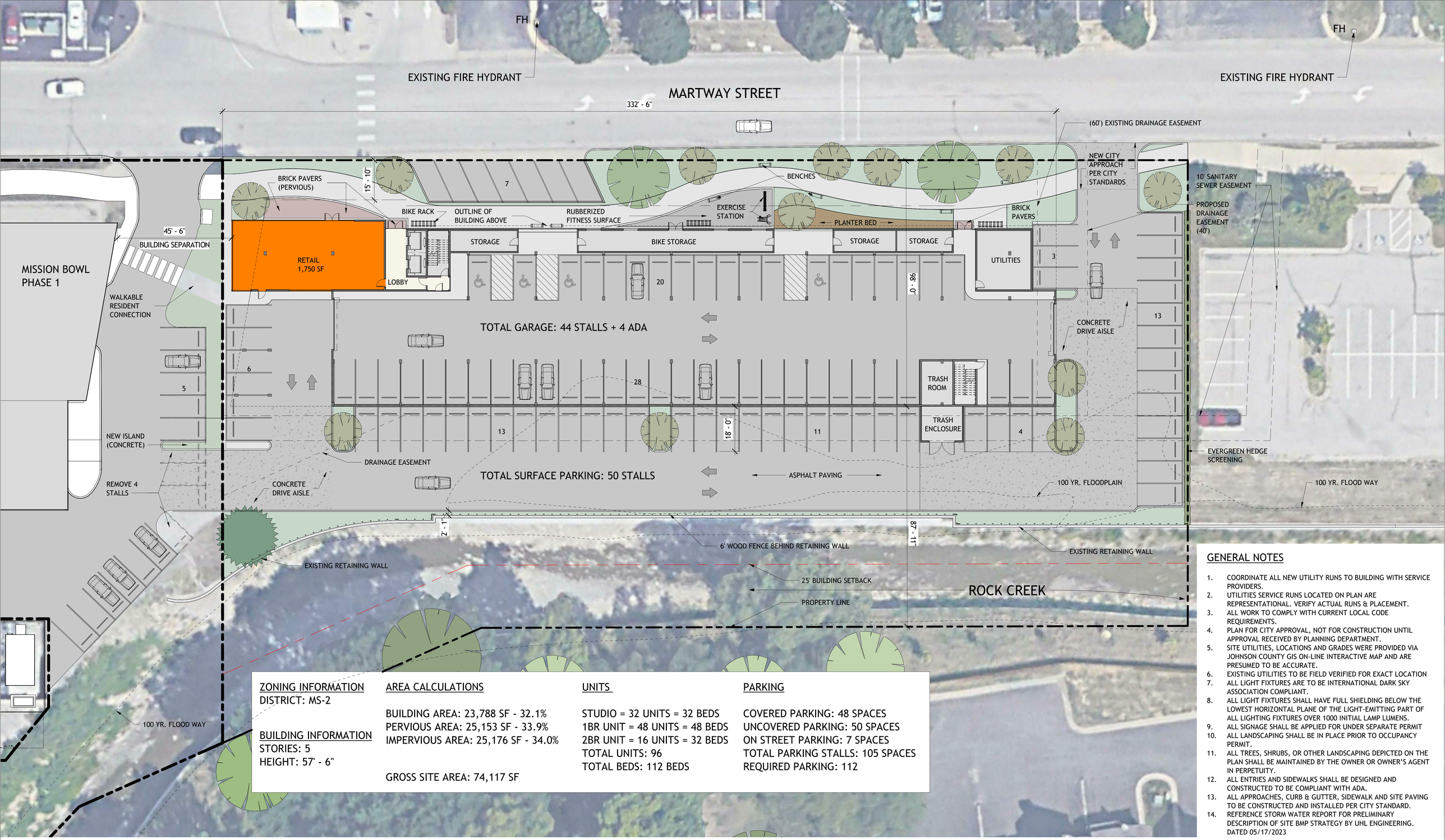
RESIDENCE AT ROCK CREEK - PHASE 2

SHEET A402 - PDP LANDSCAPE AND DRAINAGE PLAN

1/16" = 1'-0"

07/13/23

C.T DESIGN + DEVELOPMENT



ZONING INFORMATION
DISTRICT: MS-2

BUILDING INFORMATION
STORIES: 5
HEIGHT: 57' - 6"

AREA CALCULATIONS

BUILDING AREA: 23,788 SF - 32.1%
PERVIOUS AREA: 25,153 SF - 33.9%
IMPERVIOUS AREA: 25,176 SF - 34.0%

GROSS SITE AREA: 74,117 SF

UNITS

STUDIO = 32 UNITS = 32 BEDS
1BR UNIT = 48 UNITS = 48 BEDS
2BR UNIT = 16 UNITS = 32 BEDS
TOTAL UNITS: 96
TOTAL BEDS: 112 BEDS

PARKING

COVERED PARKING: 48 SPACES
UNCOVERED PARKING: 50 SPACES
ON STREET PARKING: 7 SPACES
TOTAL PARKING STALLS: 105 SPACES
REQUIRED PARKING: 112

GENERAL NOTES

1. COORDINATE ALL NEW UTILITY RUNS TO BUILDING WITH SERVICE PROVIDERS.
2. UTILITIES SERVICE RUNS LOCATED ON PLAN ARE REPRESENTATIONAL. VERIFY ACTUAL RUNS & PLACEMENT.
3. ALL WORK TO COMPLY WITH CURRENT LOCAL CODE REQUIREMENTS.
4. PLAN FOR CITY APPROVAL, NOT FOR CONSTRUCTION UNTIL APPROVAL RECEIVED BY PLANNING DEPARTMENT.
5. SITE UTILITIES, LOCATIONS AND GRADES WERE PROVIDED VIA JOHNSON COUNTY GIS ON-LINE INTERACTIVE MAP AND ARE PRESUMED TO BE ACCURATE.
6. EXISTING UTILITIES TO BE FIELD VERIFIED FOR EXACT LOCATION
7. ALL LIGHT FIXTURES ARE TO BE INTERNATIONAL DARK SKY ASSOCIATION COMPLIANT.
8. ALL LIGHT FIXTURES SHALL HAVE FULL SHIELDING BELOW THE LOWEST HORIZONTAL PLANE OF THE LIGHT-EMITTING PART OF ALL LIGHTING FIXTURES OVER 1000 INITIAL LAMP LUMENS.
9. ALL SIGNAGE SHALL BE APPLIED FOR UNDER SEPARATE PERMIT
10. ALL LANDSCAPING SHALL BE IN PLACE PRIOR TO OCCUPANCY PERMIT.
11. ALL TREES, SHRUBS, OR OTHER LANDSCAPING DEPICTED ON THE PLAN SHALL BE MAINTAINED BY THE OWNER OR OWNER'S AGENT IN PERPETUITY.
12. ALL ENTRIES AND SIDEWALKS SHALL BE DESIGNED AND CONSTRUCTED TO BE COMPLIANT WITH ADA.
13. ALL APPROACHES, CURB & GUTTER, SIDEWALK AND SITE PAVING TO BE CONSTRUCTED AND INSTALLED PER CITY STANDARD.
14. REFERENCE STORM WATER REPORT FOR PRELIMINARY DESCRIPTION OF SITE BMP STRATEGY BY UHL ENGINEERING. DATED 05/17/2023

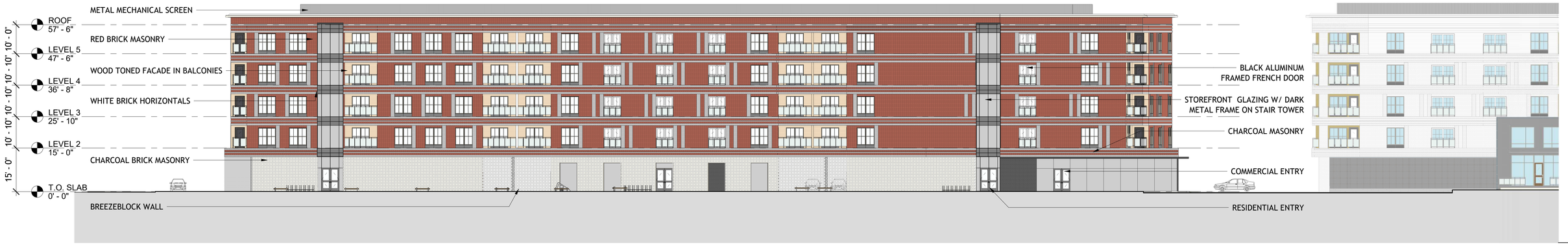
RESIDENCE AT ROCK CREEK - PHASE 2

07/13/23

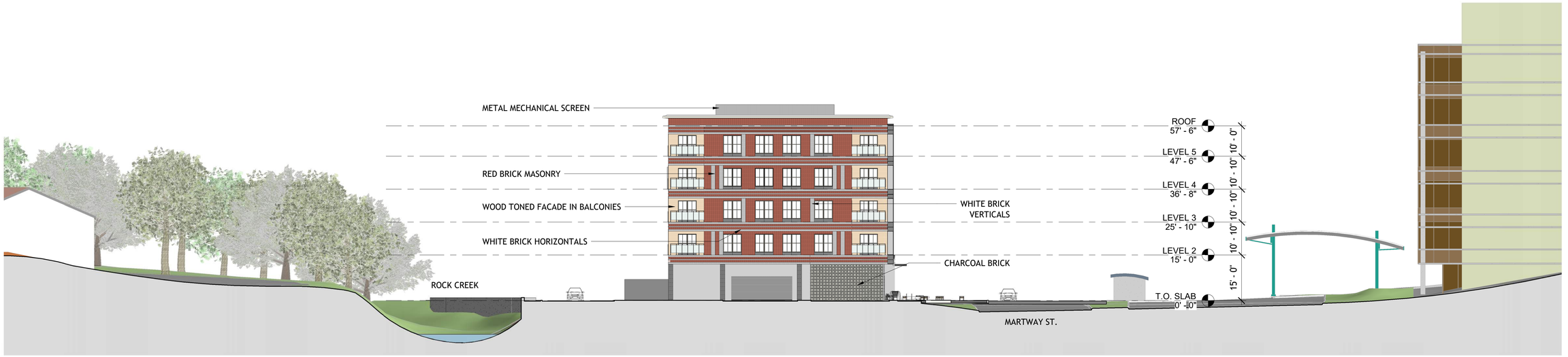
SHEET A400 - PDP SITE PLAN - LEVEL 1

1/16" = 1'-0"

C.T DESIGN + DEVELOPMENT



1 NORTH ELEVATION



2 EAST ELEVATION

RESIDENCE AT ROCK CREEK - PHASE 2

07/13/23

SHEET A404 - PDP BUILDING ELEVATIONS

1/16" = 1'-0"

C.T DESIGN + DEVELOPMENT

1 SOUTH ELEVATION

2 WEST ELEVATION

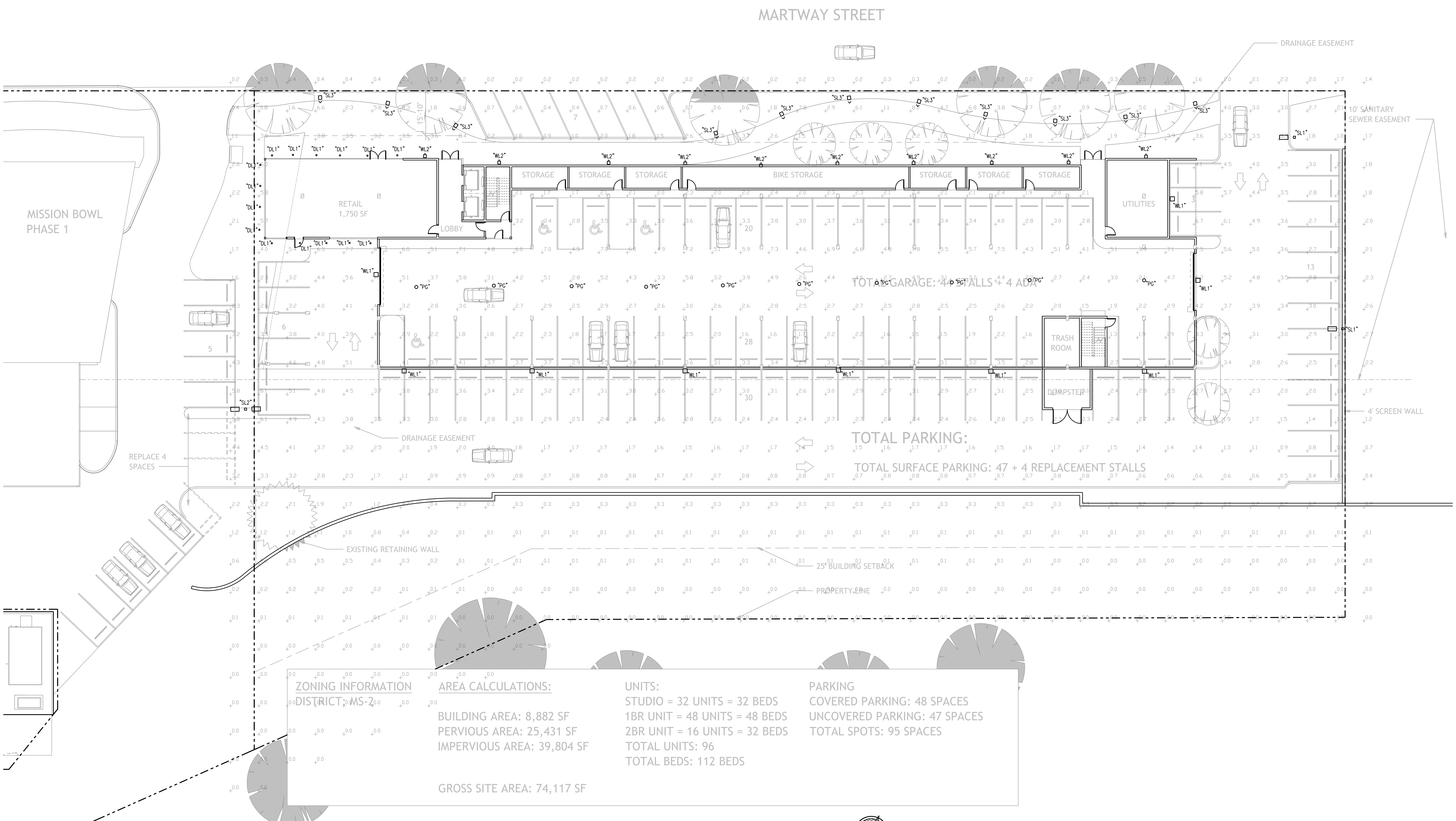
RESIDENCE AT ROCK CREEK - PHASE 2

07/13/23

SHEET A403 - PDP BUILDING ELEVATIONS

1/16" = 1'-0"

C.T DESIGN + DEVELOPMENT



ZONING INFORMATION
DISTRICT: MS-2

AREA CALCULATIONS:

BUILDING AREA: 8,882 SF
PERVIOUS AREA: 25,431 SF
IMPERVIOUS AREA: 39,804 SF

GROSS SITE AREA: 74,117 SF

UNITS:
STUDIO = 32 UNITS = 32 BEDS
1BR UNIT = 48 UNITS = 48 BEDS
2BR UNIT = 16 UNITS = 32 BEDS
TOTAL UNITS: 96
TOTAL BEDS: 112 BEDS

PARKING
COVERED PARKING: 48 SPACES
UNCOVERED PARKING: 47 SPACES
TOTAL SPOTS: 95 SPACES

1 **SITE PHOTOMETRIC PLAN**
1/16"=1'-0"
NORTH

LS&A
Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
8625 College Boulevard, Suite 102
Overland Park, Kansas 66210
Telephone: (785) 233-3232
Email: lsapa@lsapa.com
LSA PROJECT NO. 2307

RESIDENCE AT ROCK CREEK - PHASE 2

SITE PLAN - LEVEL 1

1/16" = 1'-0"

06/27/23

C.T DESIGN + DEVELOPMENT

"DL1"

WAFER LED | SURFACE MOUNT

57710 / 57712 / 57714 / 57780 / 57784

Job Name :
Job Type :
Quantity :
Comments :

- Die Cast Aluminum
- Size options between 5", 7" and 10"
- Ultra thin 0.5" H
- Approved for use in closets and storage spaces
- Suitable for Closets according to NEC Section 410.8 & 410.16
- Available in White (WT), Bronze (BZ), Black (BK), and Satin Nickel (SN)
- Dimmable with Triac and ELV Dimmers
- Easy to install: fits in 3-0 and 4-0 Outlet Box
- Edge-Lit LED Technology
- Suitable for Wet Location, for use on ceilings outdoor and above showers
- ETL/cETL IP65

57780WT
Empty Shell for 7" Round Wafer

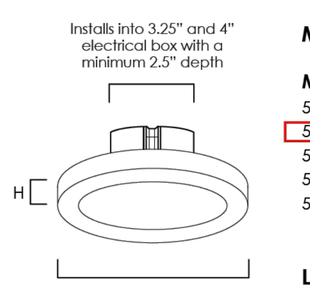
57784WTWT
Wafer LED 7" RD w/ 1.5 hours Emergency Back Up

PRODUCT DESCRIPTION

Wafer was designed for the discriminate consumer who wants the low profile look of recessed without the high cost. Manufactured of die cast aluminum, Wafer brings ultimate heat dissipation to its edge lit technology. Edge lighting gives very even light distribution while dispersing heat over a larger area. The result of this is longer LED life and better light diffusion.

FINISHES OPTIONS:
White (WT)
Bronze (BZ)
Black (BK)
Satin Nickel (SN)

MEASUREMENTS



MODEL	DIMENSION	HANGING WEIGHT
57710	5"D x 0.5"H	0.88 lb
57712	7"D x 0.5"H	1.21 lb
57780	7"D x 1.25"H	
57784	7"D x 1.75"H	
57714	10"D x 0.5"H	1.75 lb

MATERIAL:
Die Cast Aluminum
PMMA Acrylic Diffuser

AVAILABLE SIZES:
5" | 7" | 10"

LAMPING

MODEL	BULB TYPE	CRI	LUMENS INIT	LUMENS DEL	COL TEMP.	DIMMABLE	INPUT
*57710	10W LED (Integrated)	90+	700	400	3000K	ELV	120V
*57712	15W LED (Integrated)	90+	1050	900	3000K	ELV	120V
*57780	Add on shell						
*57784	15W LED (Integrated)	90+	1100	900	3000K	ELV	120V
*57714	20W LED (Integrated)	90+	1400	1200	3000K	ELV	120V

*120-277V input and 0-10V dimming available upon request

RATINGS:
ETL/cETL IP65
Wet Location
Energy Star
Title 24 JA8 compliant
ADA
Dimmable
Closets Rated: 410.8 & 410.16

ADDITIONAL:
RATED LIFE: 50,000 Hours
OPERATING TEMP: -20° C (-4°), 40°C (104°F)
PHOTOMETRIC: Report Found Online

Always consult a qualified electrician before installing any lighting product

MAXIM LIGHTING

WESTERN DISTRIBUTION CENTER (HEADQUARTER)
253 NORTH VINELAND AVE I CITY OF INDUSTRY, CA 91746

EASTERN DISTRIBUTION CENTER
4200 SHIRLEY DR. I ATLANTA, GA 30336

P. 626.956.4200 I F. 626.956.4225 I maximlighting.com

Project		Catalog #		Type	PG
Prepared by		Notes		Date	

McGraw-Edison

TT TopTier

Parking Garage / Canopy
Low-Bay Luminaire

Typical Applications
Parking Garages • Parking Lots

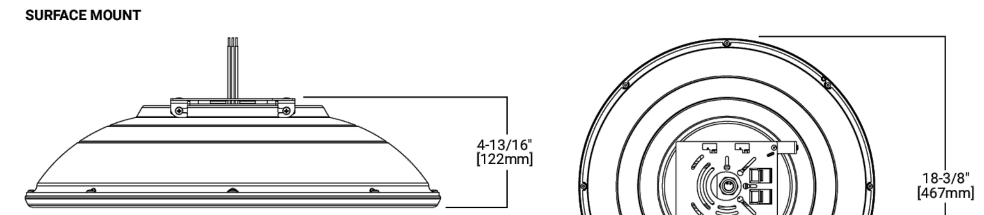
Interactive Menu
- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 2
- Mounting Details page 3
- Energy and Performance Data page 4
- Control Options page 6

Product Certifications / Features

Quick Facts
- Lumen packages range from 3,000 - 13,300
- Efficacies up to 146 lumens per watt
- Utilizes patented waveguide technology for maximum visual comfort
- Surface, pendant, trunnion, wall and direct conduit mount options

Connected Systems
- WaveLinx Lite
- Synapse
- Enlighted

Dimensional Details



COOPER Lighting Solutions

PS515001EN page 1
February 19, 2021 2:35 PM

Project		Catalog #		Type	SL1 (1 HEAD) SL2 (1 HEAD)
Prepared by		Notes		Date	

McGraw-Edison

GLEON Galleon

Area / Site Luminaire

Typical Applications
Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu
- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

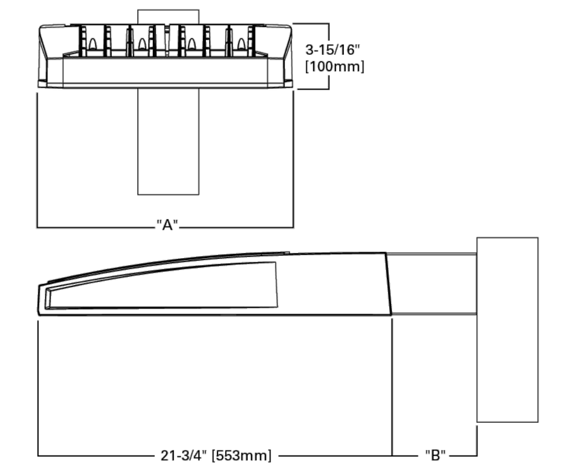
Product Certifications

Product Features

Quick Facts
- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

Connected Systems
- WaveLinx
- Enlighted

Dimensional Details



Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Extended Arm Length	"B" Quick Mount Arm Length	"B" Quick Mount Extended Arm Length
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	--
9-10	33-3/4"	7"	18"	--	--

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

COOPER Lighting Solutions

PS500020EN page 1
April 12, 2021 1:45 PM

Project		Catalog #		Type	SL3
Prepared by		Notes		Date	

Lumière

EON 303-B1-LEDB2

Bollard

Typical Applications
Hospitality • Commerical Landscape • Outdoor Area/Site • Residential • Architectural

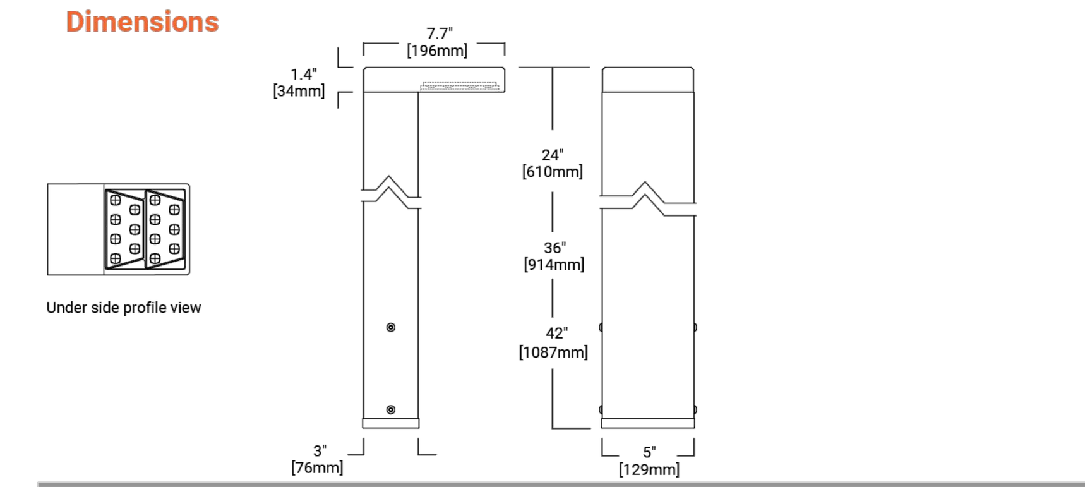
Interactive Menu
- Order Information page 2
- Product Specifications page 2
- Lumen Maintenance page 3
- Product Warranty

Product Certification

Product Features

Top Product Features
- Full Cut Off Downlight, 12", 24", 36" or 42" height
- 2700K, 3000K or 3500 or 4000K Color Temperature and Amber (585-595nm)
- Type II, Type IV or Type V Optics with clear glass sealed lens
- Patented AccuLED OpticsTM System
- Universal Input LED Driver Included (120 - 277V, 50/60 Hz)
- ELV or 0-10 Dimming

Dimensions



Under side profile view

TECHNICAL DATA
90°C Maximum Temperature Rating
External Supply Wiring 90°C Minimum

COOPER Lighting Solutions

PS526024EN page 1
April 23, 2020 1:31 PM

Project		Catalog #		Type	WL1
Prepared by		Notes		Date	

Streetworks

GAW Galleon Wall

Wall Mount Luminaire

Product Features

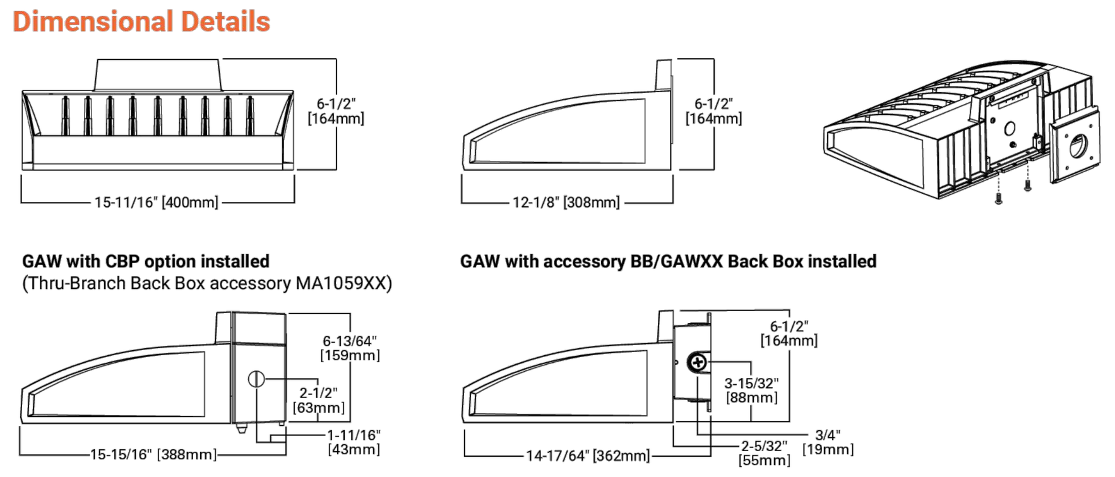
Interactive Menu
- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 3
- Energy and Performance Data page 4
- Control Options page 6

Product Certifications

Quick Facts
- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Connected Systems
- WaveLinx
- Enlighted

Dimensional Details



GAW with CBP option installed (Thru-Branch Back Box accessory MA1059XX)

GAW with accessory BB/GAWXX Back Box installed

COOPER Lighting Solutions

PS500045EN page 1
December 5, 2022 5:35 PM

"WL2"

Rev: 2019/05/15

OW1464 – WRAP™

VISA LIGHTING

Type: SL1 Project:

VisaLighting.com/products/Wrap

Fill in shaded boxes using information listed below

Order Code: OW1464 - MVOLT

MODEL | SOURCE | VOLTAGE | FINISH | OPTION(S)

SOURCE (Select one) and VOLTAGE

MVOLT fixture accepts 120 through 277 input voltage
LED Sources are 80CRI, within 3-step MacAdam and are dimmable 0-10V to 1%

LED Sources	CCT	Delivered Lumens	Power (Watts)	Voltage
L30K-L	3000K	1600	20	MVOLT
L35K-L	3500K	1600		
L40K-L	4000K	1700		
L30K-H	3000K	2400	32	MVOLT
L35K-H	3500K	2500		
L40K-H	4000K	2500		

FINISHES (Select one) See page 2 for color chart

Powder Coat Painted Finishes (Standard)

AG7038	Agate Grey	CVBL	Cove Blue	GW9002	Grey White	PB1035	Pearl Beige
BMAT	Bronze Matte	CW9001	Cream	HTHR	Heather	RUST	Rust
BRNZ	Bronze	GLIM	Glimmer	JB9005	Jet Black	SUNG	Sungold
BSIL	Blade Silver	GSIL	Graphite Silver	OBRZ	Old Bronze	TW9016	Traffic White

OPTIONS (Multiple Selections Allowed)

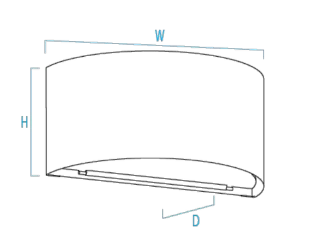
Option availability may be interdependent with Voltage, Source or Other Options
Top and bottom lenses are standard

BC	Bottom cover, matches finish (creates 90% uplight)
TC	Top cover, matches finish (creates 100% downlight for full cut off)

Characterized by simplicity of form, with its smooth, clean crescent curve, Wrap provides stunning direct and indirect light. The optional top cover provides a full cutoff solution.

DIMENSIONS
Depth is measured from wall to front of fixture
W = Width H = Height D = Depth

W 15-7/8" (403 mm)
H 8" (203 mm)
D 7-7/8" (200 mm)



IP65 Rated | LED | ETL Listed | 5 Year Warranty

800-788-VISA | VisaLighting.com | Page 1

EXTERIOR LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	MOUNTING RECESS.	MOUNTING SURF.	MOUNTING WALL	MOUNTING HEIGHT	FINISH	LAMP TYPE	CODE	WATTAGE	LUMENS	LIGHT LOSS FACTOR	REMARKS
SL1	COOPER LIGHTING	GLEON-SA2C-730-U-SL3-HSS	SINGLE HEAD POLE FIXTURE		POLE		20'-0"	BLACK	LED	3000K	113	14,474	0.9	1
SL2	COOPER LIGHTING	GLEON-SA2C-730-U-SL3-HSS	DOUBLE HEAD POLE FIXTURE		POLE		20'-0"	BLACK	LED	3000K	113	14,474	0.9	2
SL3	COOPER LIGHTING	EON 303-B1-LEDB2-3000K-UNV-T2-DIM10-BK-42	BOLLARD		BOLLARD		3'-6"	BLACK	LED	3000K	16	1,250	0.9	
DL1	MAXIM LIGHTING	57712WWT	SURFACE DOWNLIGHT		X		13'-0"	BLACK	LED	3000K	15	900	0.9	
WL1	COOPER LIGHTING	GAW-SA1C-730-U-T4W-BK	WALL PACK			X	15'-0"	BLACK	LED	3000K	59	7,556	0.9	
WL2	VISA LIGHTING	OW1464-L35K-H	WALL SCONCE			X	7'-0"	BLACK	LED	3000K	32	2,500	0.9	
SL3	COOPER LIGHTING	EON 303-B1-LEDB2-3000K-UNV-T2-DIM10-BK-42	BOLLARD		BOLLARD		3'-6"	BLACK	LED	3000K	16	1,250	0.9	

REMARKS
1. PROVIDE WITHSQUARE STRAIGHT STEEL POLE, 20'-0" MAXIMUM HEAD HEIGHT ABOVE FINISHED GRADE.
2. MOUNT HEAD TO EXISTING POLE PROVIDED AS PART OF PHASE 1 PROJECT 180 DEGREES APART FROM EXISTING HEAD.

LS&A Latimer Sommers & Associates, P.A.
CONSULTING ENGINEERS
3639 SW Summerfield Drive, Suite A
Topeka, Kansas 66614-3974
6625 College Boulevard, Suite 102
Overland Park, Kansas 66210
Telephone: (785) 233-3232
Email: lsapa@lsapa.com
LSA PROJECT NO. 2307

RESIDENCE AT ROCK CREEK - PHASE 2

SITE PLAN - LEVEL 1

1/16" = 1'-0"

C.T DESIGN + DEVELOPMENT

06/27/23


C.T
DESIGN +
DEVELOPMENT

UHL ENGINEERING, INC.
7211 west 98th Terrace, Suite 110 • Overland Park, Kansas 66212
(913) 385-2670

May 17, 2023

Celia Duran
City Engineer
Mission, Kansas

Preliminary Stormwater Letter - Site Improvements
Rock Creek Apartments, Phase 2
Mission, Kansas

Celia:

This report is a preliminary summary of existing and proposed stormwater conditions for planned improvements at the Rock Creek Apartments, Phase 2 site located along Martway Street, adjacent to the Mission Bowl, Phase 1 development (on its east side).

A. SCOPE

This report accompanies a preliminary submittal to the City of Mission addressing the feasibility of a second phase to the Mission Bowl Apartments project (currently under construction).

The information contained herein was gathered from Johnson County AIMs mapping, copies of previous surveys, Google imagery, and independent observation/verification of existing storm drainage systems by removing manholes covers. No site/field surveys have been conducted to date. No digital models have been created to date for this (proposed) project.

B. SUMMARY

The proposed site is currently a paved parking area, adjacent to and east of the Mission Bowl, Phase I development. This Phase 2 project includes removing the existing pavement for parking and constructing a multi-story building parking at the ground floor level, similar to the design in Phase 1.

The site runoff generally flows from west to east, and north to south with a ridge line at the east side entry that diverts a small portion of the flow toward Martway, with the majority of flow to a concrete flume at the southeast corner of the site, releasing to Rock Creek. Said concrete flume rests atop the recently installed modular wall system on the north side of Rock Creek that contains the Floodway and Floodplain along this reach.

Generally, the proposed improvements create an increase in impervious area of approximately 2,455+/- square feet (sf), or 3.3% of total area, and while the City of Mission has stipulated that stormwater detention for any added stormwater runoff and stormwater treatment may be required, the lack of any buried stormwater systems make it difficult to propose design elements that are below the finished grade.

The portion of flow that reaches Martway Street falls into the gutter and continues east to a curb inlet where it is captured. There are no enclosed storm drainage systems on-site or fronting the site.

C. IDENTIFICATION OF DOWNSTREAM DRAINAGE ISSUES

Rock Creek channel improvements have recently been completed, including concrete block walls, reduction of downstream erosion in Rock Creek, and improvement of the 100-year floodplain relative to the proposed channel. No downstream flooding problems have been reported.

D. CORPS OF ENGINEERS REQUIREMENTS

No permit from the Army Corps of Engineers is required for this project.

E. FEMA/DWR REQUIREMENTS

The recent improvements to Rock Creek (ATTACHMENT C) contain the Floodway within the walls, and remove Floodway and Floodplain from this property, except for an area of Floodplain at the southeast corner of this site, where the aforementioned concrete flume discharges to Rock Creek.

F. STREAM CORRIDORS

No City ordinances for natural streams and preservation of stream corridors were indicated.

G. PROPOSED ON-SITE DRAINAGE SYSTEM

Existing:

There are no on-site storm drainage systems.

The Rock Creek channel upgrades and improvements were finished during the summer of 2020. An existing 24" corrugated metal pipe located along the western side of this property was abandoned as part of the 2020 Rock Creek Channel Improvements.

The manhole cover on a concrete drainage structure in the existing east drive approach was opened to reveal a larger diameter (36" +/-) pipe, but there was no flow, and the City confirmed that they have no record of said system. (ATTACHMENTS D & E)

There is a curb inlet further east along the south curb line of Martway, but the limits and capacity of that system have not been evaluated. (ATTACHMENTS D & E)

Proposed On-site:

No on-site storm drainage systems are proposed. Altering the north wall of the recently improved Rock Creek (to attain vertical depth) appears to be very problematic, possibly requiring approval by FEMA, the US Army Corps of Engineers and State of Kansas agencies.

Proposed Off-site:

No off-site improvements are proposed.

H. PROPOSED STORMWATER TREATMENT

The proposed improvements, while increasing net impervious, also convert 23,838 sf from paved parking to rooftop, thereby decreasing the contamination caused by oil, salt and gasoline landing on the paved parking areas. Accordingly, the Developer requests a waiver from stormwater treatment.

I. CONCLUSIONS

- The proposed improvements will increase the impervious area on site by 2,455 sf, or 3.3%.
- Waivers for stormwater detention and stormwater treatment are requested for these reasons:
  - While there is net increase in impervious area created by the proposed improvements, approximately 23,838 sf is being converted from paved parking to roof area, significantly reducing the contamination from the oil, salt, gasoline contributed from paved parking areas.
  - The lack of buried storm drainage systems within or surrounding the site precludes the possibility of buried on-site storm drainage systems to provide the required depth for both stormwater detention and treatment.
  - The runoff from this site reaches Rock Creek along the south side of the site.

If you have any questions or comments regarding the contents of this report, please contact me directly at 913-385-2670.

Sincerely,

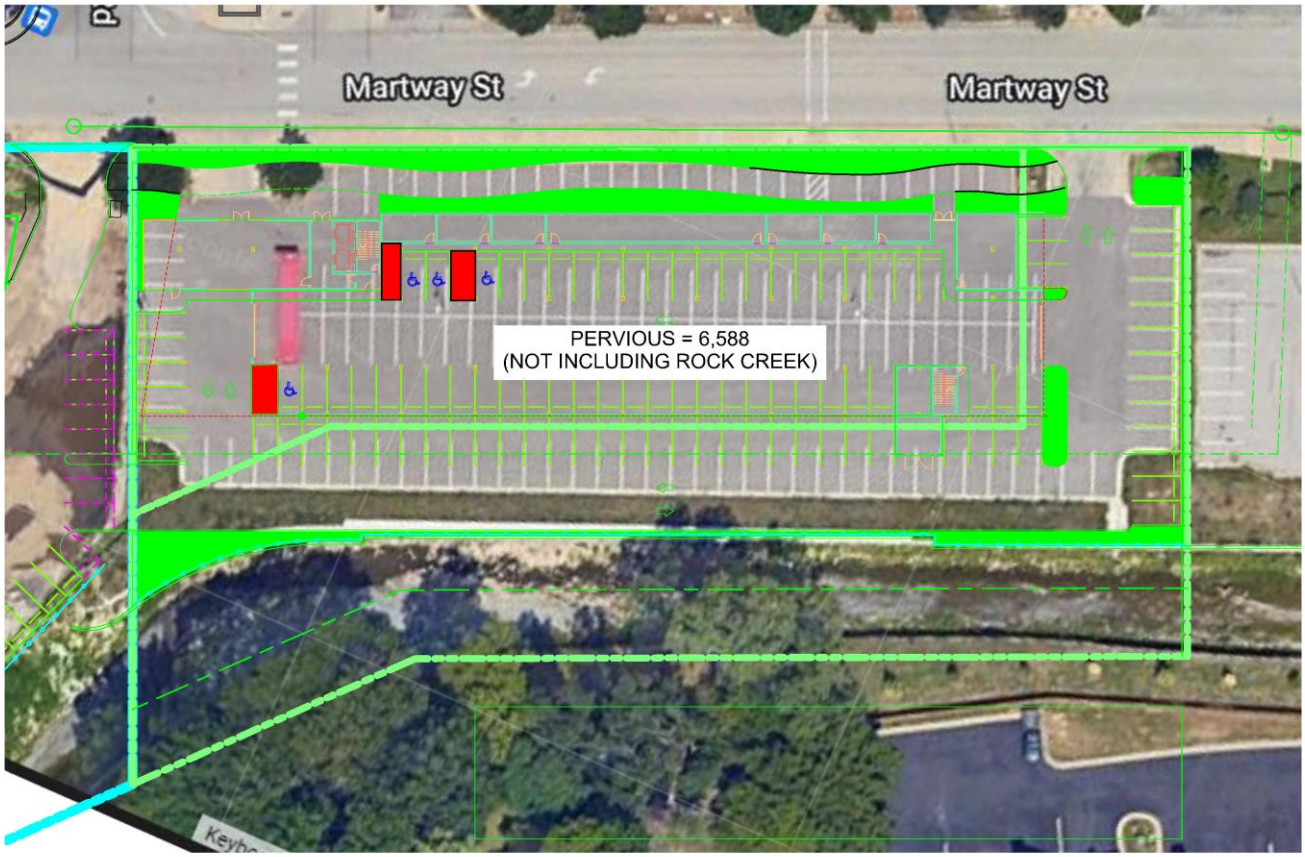
Terry S. Uhl

UHL ENGINEERING, INC.

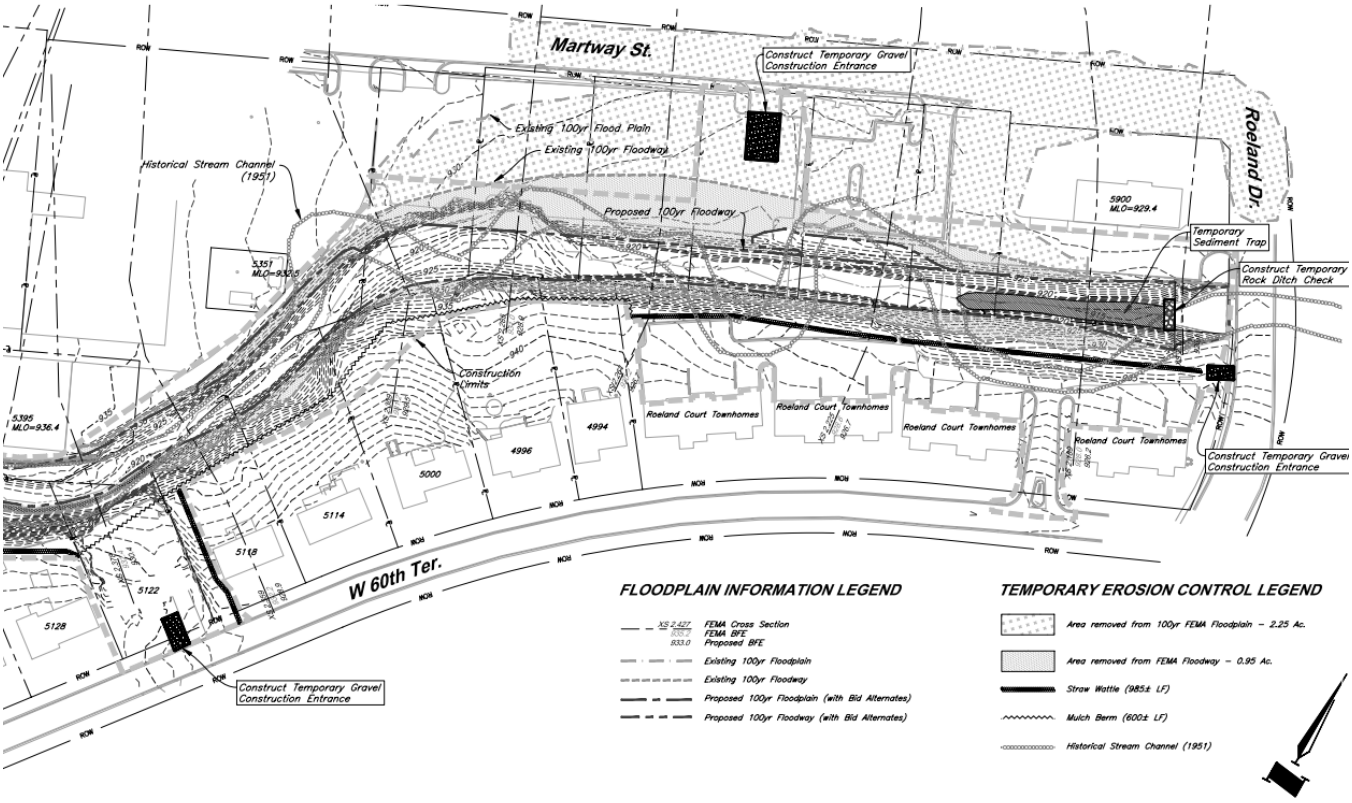
Enclosures:
ATTACHMENT A: Existing Site Plan
ATTACHMENT B: Proposed Site Plan
ATTACHMENT C: 'SNAPSHOT' FROM GBA IMPROVEMENT PLANS
ATTACHMENT D: Photograph of Existing Manhole at East Entrance
ATTACHMENT E: Photograph of Curb Inlet East of Site on South Side of Martway

ATTACHMENT A:
Existing Site Plan

ATTACHMENT B:
Proposed Site Plan

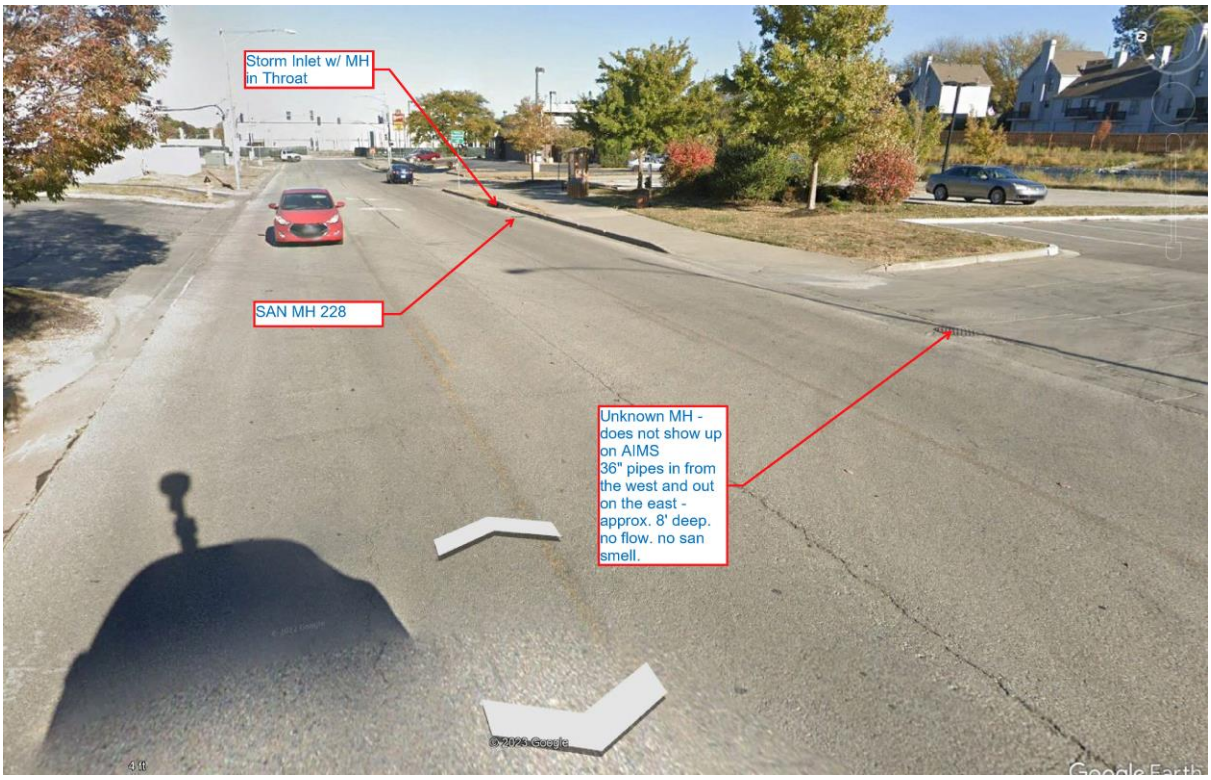


ATTACHMENT C:
'SNAPSHOT' FROM GBA IMPROVEMENT PLANS



ATTACHMENT D:
Photograph of Existing Manhole at East Entrance

ATTACHMENT E:
Photograph of Curb Inlet East of Site on South Side of Martway



Trip Generation Analysis for Residence at Rock Creek Phase II Development

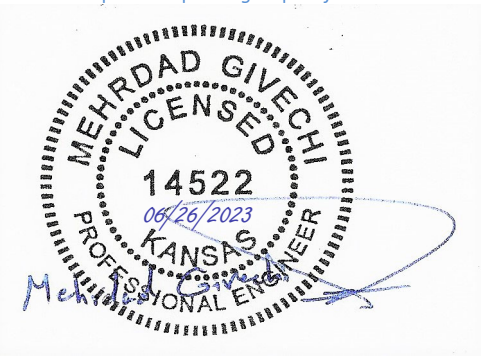
Martway Street, approx. 450 ft. west of Roeland Drive
Mission, Kansas

Prepared
for
CT Design + Development

Prepared
By

MGS
MGineering Solutions

Serving Communities Through Excellence
Missouri | Kansas | Michigan | California



Mehrdad Givechi, P.E., PTOE

June 2023

According to the *City of Mission's Transportation Impact Study Guidelines*, preparation of a traffic impact study is required for all land development and redevelopment applications. Different levels of traffic study are warranted at certain thresholds depending on the number of trips that the development generates and/or its deviation from the comprehensive plan. For developments generating under 100 trip-ends during the peak-hour of a typical weekday, the study should address the first five tasks listed in the guidelines. The information presented in this document is compiled to fulfill these requirements for the proposed *Phase II of the Residence at Rock Creek* development located on the south side of Martway Street approximately 400 ft. west of Roeland Drive in Mission, Kansas (See *Location Map,* ***Figure 1*** of ***Appendix I***).

1. ***Proposed Development Plan*** - The project site is bounded by Martway Street on the north, an approved multifamily residential development *(Phase I of the Residence at Rock Creek)* on the west, Rock Creek on the south, and a fast-food restaurant with drive through lane *(Wendy's)* on the east. The site is currently a surface parking lot with 144 marked stalls. Under the proposed development plan, the parking lot will be replaced by a 5-story building with the top 4 floors consisting of 96 dwelling units of multifamily residential development (24 units per floor comprised of studio, 1-bedroom and 2-bedroom units). The Ground Level has a small retail area of 1,600 sq. ft. that is available for lease as well as built storage rooms that will be available for use by the tenants of the building. The building is built as a podium style structure and thus covers 48 resident parking stalls on the ground level, which will be secured by fencing and garage doors. The remainder of the parking will be surface parking outside of the building's footprint with 47 more marked stalls. Overall, the number of parking spaces for the project are 197 for *Phase I* and 95 for *Phase II*. The residents of the *Phase II* building will be granted access to the *Phase I* building Amenity spaces, such as pool, workout rooms, yoga, etc. (See the Site Plan, ***Figure 2*** of ***Appendix I***.)

2. ***Zoning, Lan Use and Roadway Classifications –*** The existing and proposed zoning is MS-2. According to the *Comprehensive Plan 2007 with updates adopted March 16, 2011*, the

existing land use for the project site is *commercial* and the future land use is *parks and pathways.* The *Linkage Map* of the same document indicates that Martway Street is designated as a *proposed trail* facility.

According to the *City Traffic Code, Schedule III, Table III-A, Ordinance No. 1109,* Nall Avenue, Roeland Drive and Martway Street are designated main trafficway whose primary function are the movement of through traffic between areas of concentrated activity within the city limits or between such areas within the city limits and traffic facilities outside the city limits performing the function of a main trafficway.

According to the *East Gateway Long-Range Development Plan, June 2006,* Nall Avenue is a primary north/south street, Roeland Drive is a secondary north/south street, and Martway Street is a primary east/west Street.

3. ***Roadway Characteristics*** **-** Near the project site:
   - Martway Street and Roeland Drive are 3-lane roadways with one through lane in each direction, a two-way center left-turn lane and posted speed limit of 25 mph.
   - Nall Avenue is a 3-lane roadway with one through lane in each direction, a two-way center left-turn lane and posted speed limit of 30 mph.
   - The intersections of Martway Street with Roeland Drive and Nall Avenue are controlled by traffic signals.

4. ***Proposed Site Access Characteristics*** **–** The site is currently served by two driveways near the east and west property lines. Under the proposed development plan, the west driveway will be eliminated, and the east driveway will be modified to serve as the only access point to the site as shown on the site plan in ***Appendix I***.

   Field investigations indicate that the proposed access drive to the site is on a flat and tangent section of Martway Street with no sight distance restriction.

5. ***Site Generated Traffic*** **-** Trip generation of a proposed land development project is typically estimated using trip generation rates suggested by the latest edition of the *Institute of Transportation Engineers, Trip Generation Manual (Currently, the 11th Edition).* For this analysis, ITE land use codes 221 *(Mid-Rise Multifamily Housing)* with *number of dwelling units* as the independent variable; and 932 (High-Turnover, Sit-Down Restaurant) with *gross floor area* as the independent variable are selected for the residential and retail components of the project, respectively. For each use, both *weighted average rate* and *regression equation* methods were examined and the method with higher trip numbers was selected,

Results, as shown in the ***Appendix II***, indicate that the proposed *Phase II of the Residence at Rock Creek* development will generate the following *unadjusted* trips during peak-hours of a typical weekday as described below:

- On average, 51 trip-ends (16 inbound – 35 outbound) during morning peak-hour of the *adjacent street network*.
- On average, 52 trip-ends (32 inbound – 20 outbound) during afternoon peak-hour of the *adjacent street network*.
- On average, 608 trips-ends during a 24-hour period.

The proposed development project consists of a mix of residential and retail components with potential for internal trip capture that is typically estimated using the information published in the *ITE Trip Generation Handbook, 3rd Edition* and the *NCHRP 684 Internal Trip Capture Estimation Tool*. The internal trip capture for this project, as shown in ***Appendix II*** is:

- 8% total (13% inbound – 6% outbound) during morning peak-hour
- 8% total (6% inbound – 10% outbound) during afternoon peak-hour

Furthermore, the project site is approximately 360 ft. south of Johnson Drive, which is designated as *a local transit route* according to the City's Comprehensive Plan. It is, therefore, anticipated that a portion of the external trips generated by the development project will be

utilized by the public transportation and non-motorized modes. For this analysis, a value of 5% for each mode is assumed as a reasonable mode share.

The results of the analysis indicate that the proposed *Phase II of the Residence at Rock Creek* development project generates less than 100 external trip-ends during peak-hours of adjacent street network as follows:

- On average, 45 trip-ends (14 inbound – 31 outbound) during morning peak-hour of the *adjacent street network*.
- On average, 44 trip-ends (28 inbound – 16 outbound) during afternoon peak-hour of the *adjacent street network*.

Further analysis indicates that the approved *Phase I of the Residence at Rock Creek* development consisting of 176 dwelling units generates the following trip numbers:

- On average, 66 trip-ends (15 inbound – 51 outbound) during morning peak-hour of the *adjacent street network*.
- On average, 69 trip-ends (42 inbound – 27 outbound) during afternoon peak-hour of the *adjacent street network*.
- On average, 799 trips-ends during a 24-hour period.

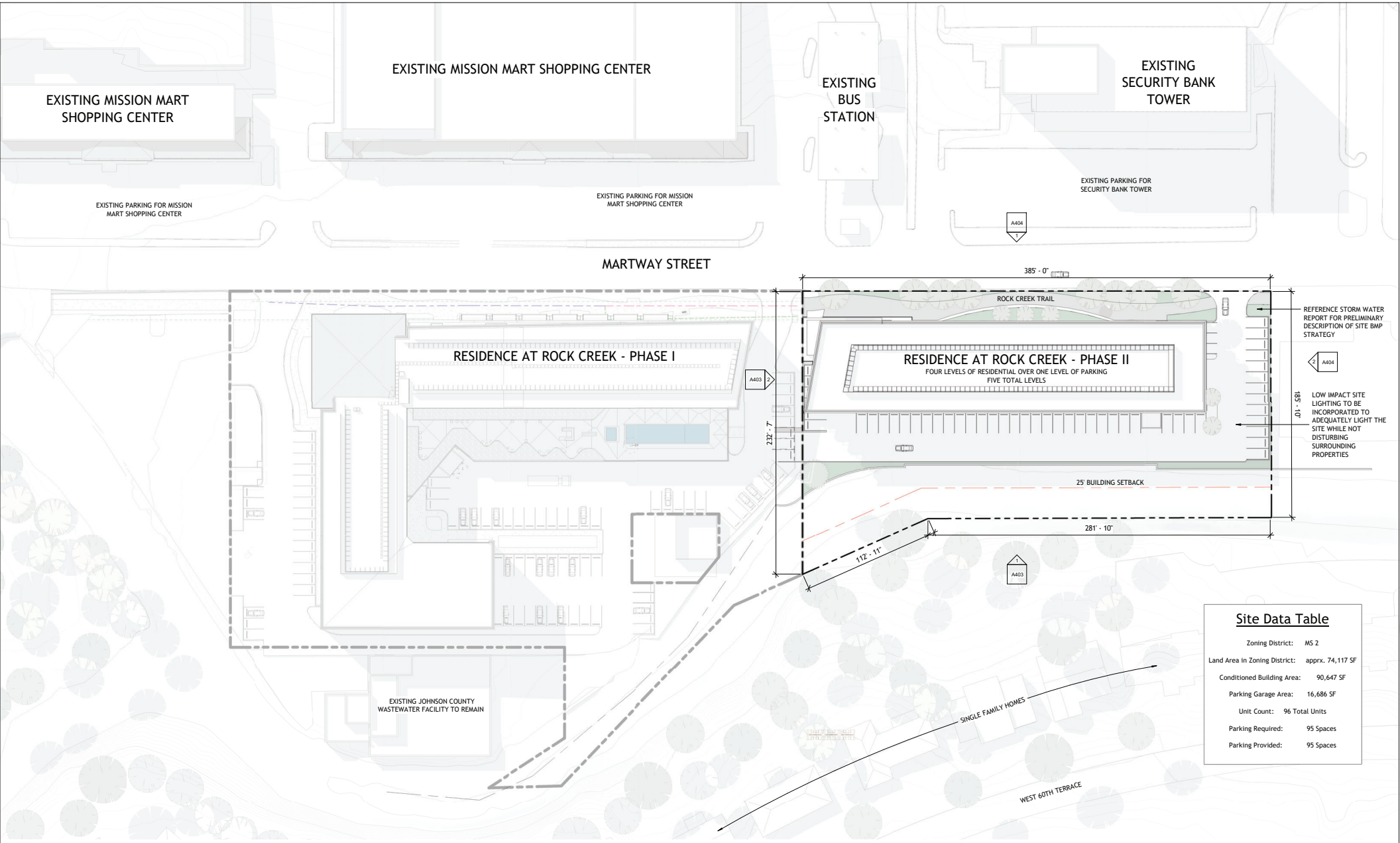
In summary, the entire residence at Rock Creek development, at build out, will generate the following external trips:

- On average, 111 trip-ends (29 inbound – 82 outbound) during morning peak-hour of the *adjacent street network*.
- On average, 113 trip-ends (70 inbound – 43 outbound) during afternoon peak-hour of the *adjacent street network*.
- On average, 1,235 trips-ends during a 24-hour period.

APPENDIX I

Figures

Figure 1 - Location Map



Site Data Table

Zoning District:	MS 2
Land Area in Zoning District:	apprx. 74,117 SF
Conditioned Building Area:	90,647 SF
Parking Garage Area:	16,686 SF
Unit Count:	96 Total Units
Parking Required:	95 Spaces
Parking Provided:	95 Spaces

RESIDENCE AT ROCK CREEK - PHASE 2

05/17/23

SHEET A401 - PDP SITE PLAN

1/32" = 1'-0"

C.T DESIGN + DEVELOPMENT

APPENDIX II

Results of Trip Generation Analysis
Using
ITE Trip Generation Manual, 11th Edition

PHASE II

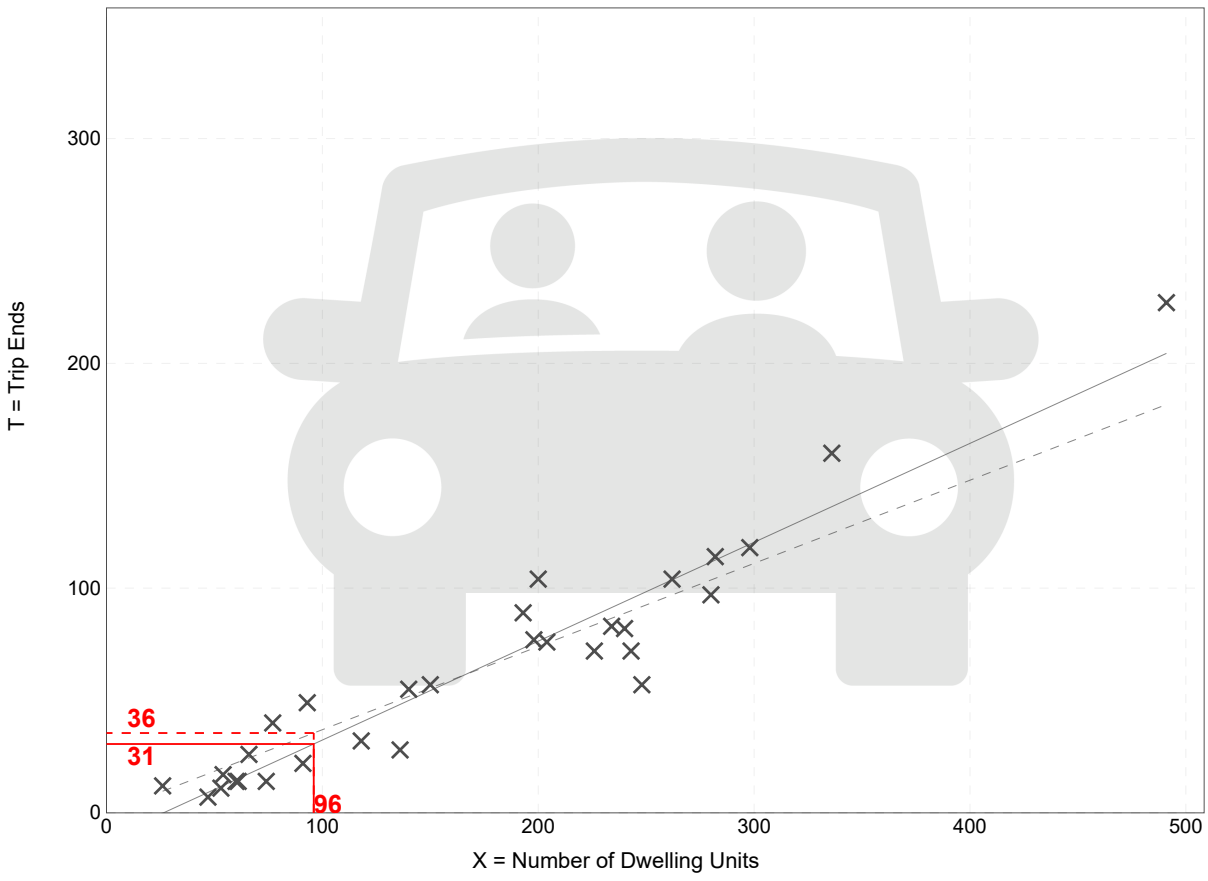
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.44(X) - 11.61

R^2= 0.91

PHASE II

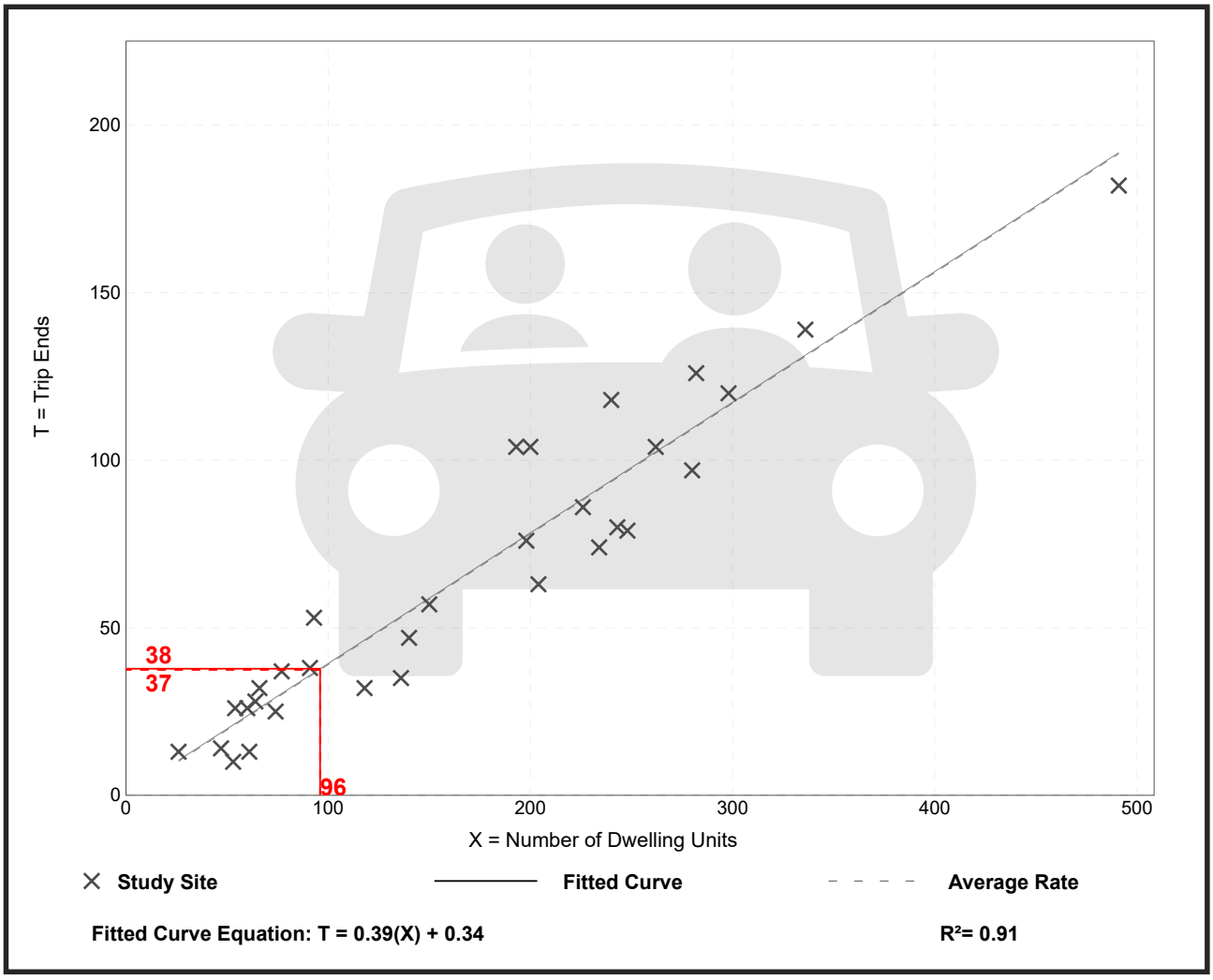
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



PHASE II

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

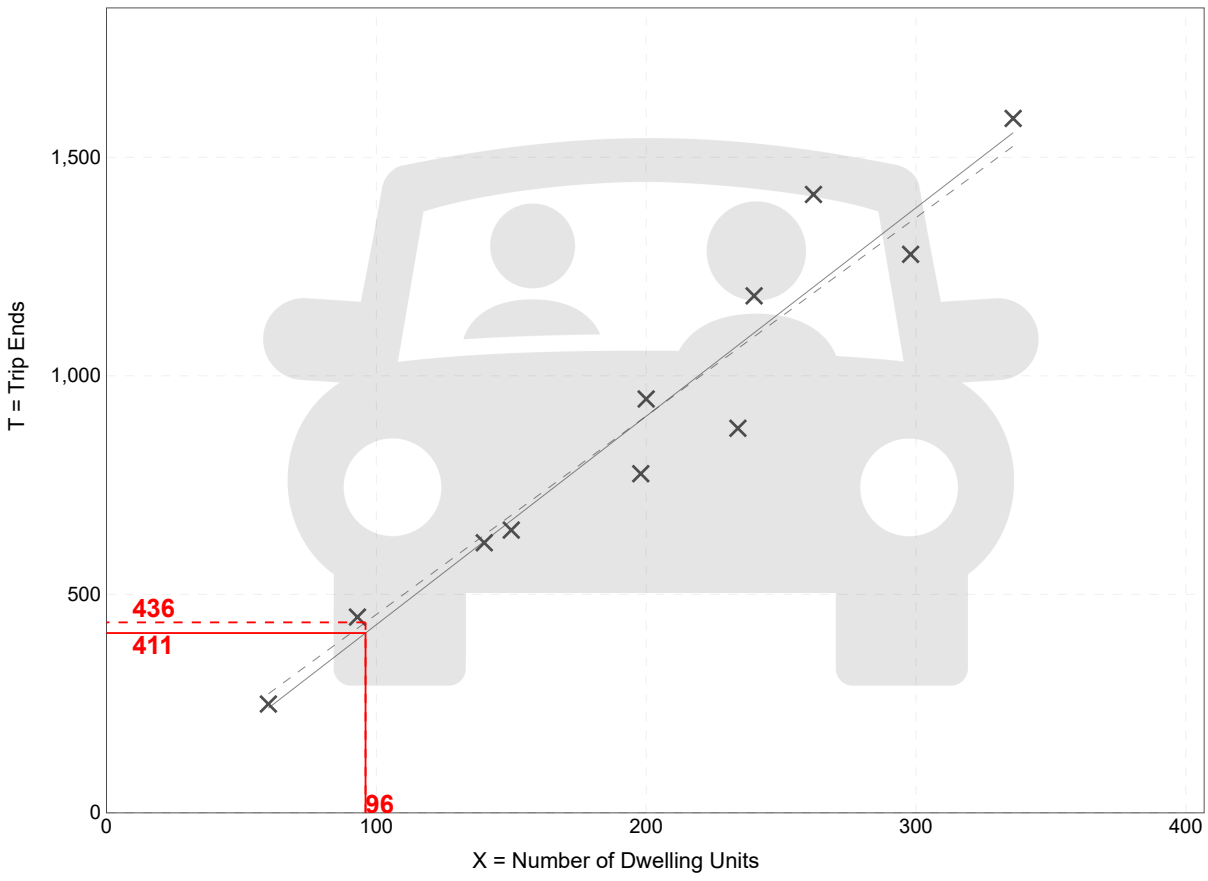
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



Fitted Curve Equation: T = 4.77(X) - 46.46

R^2= 0.93

PHASE II

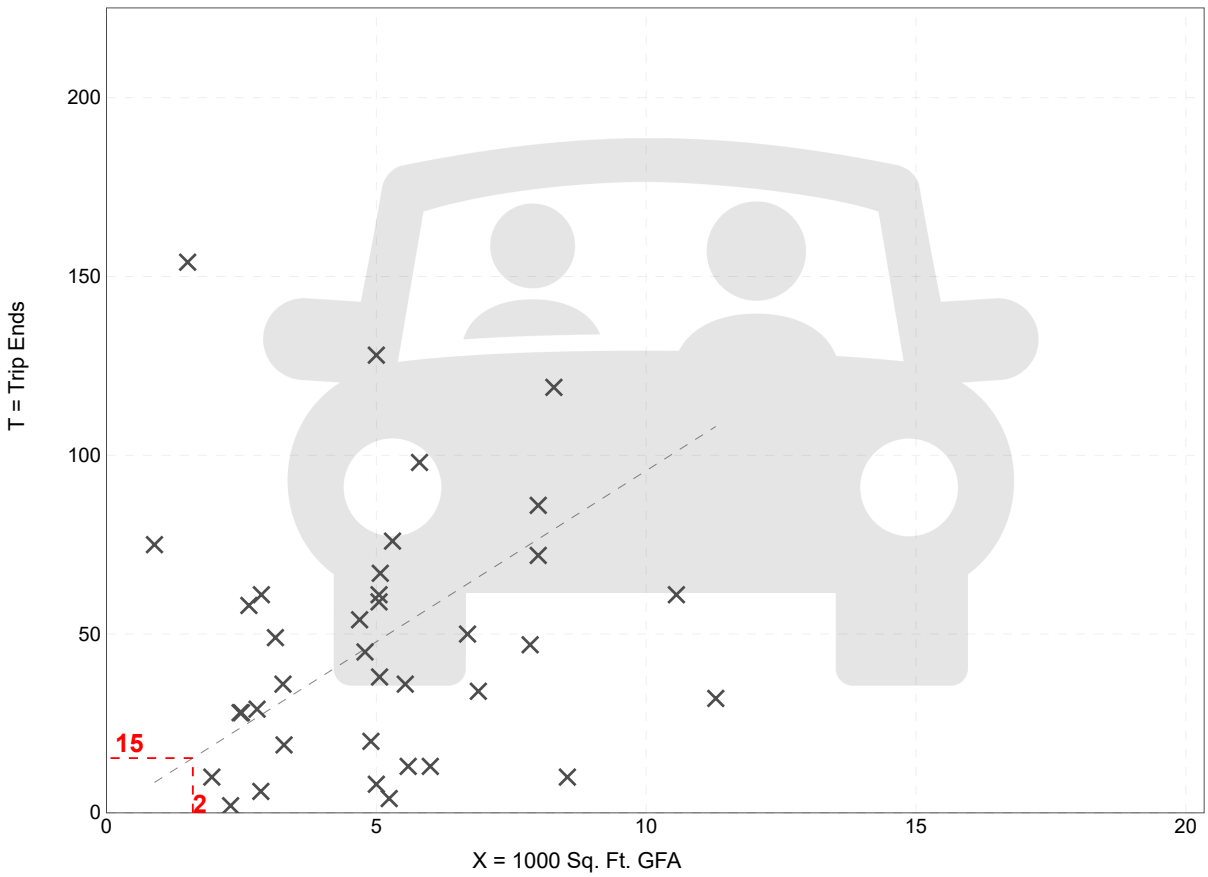
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 37
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

PHASE II

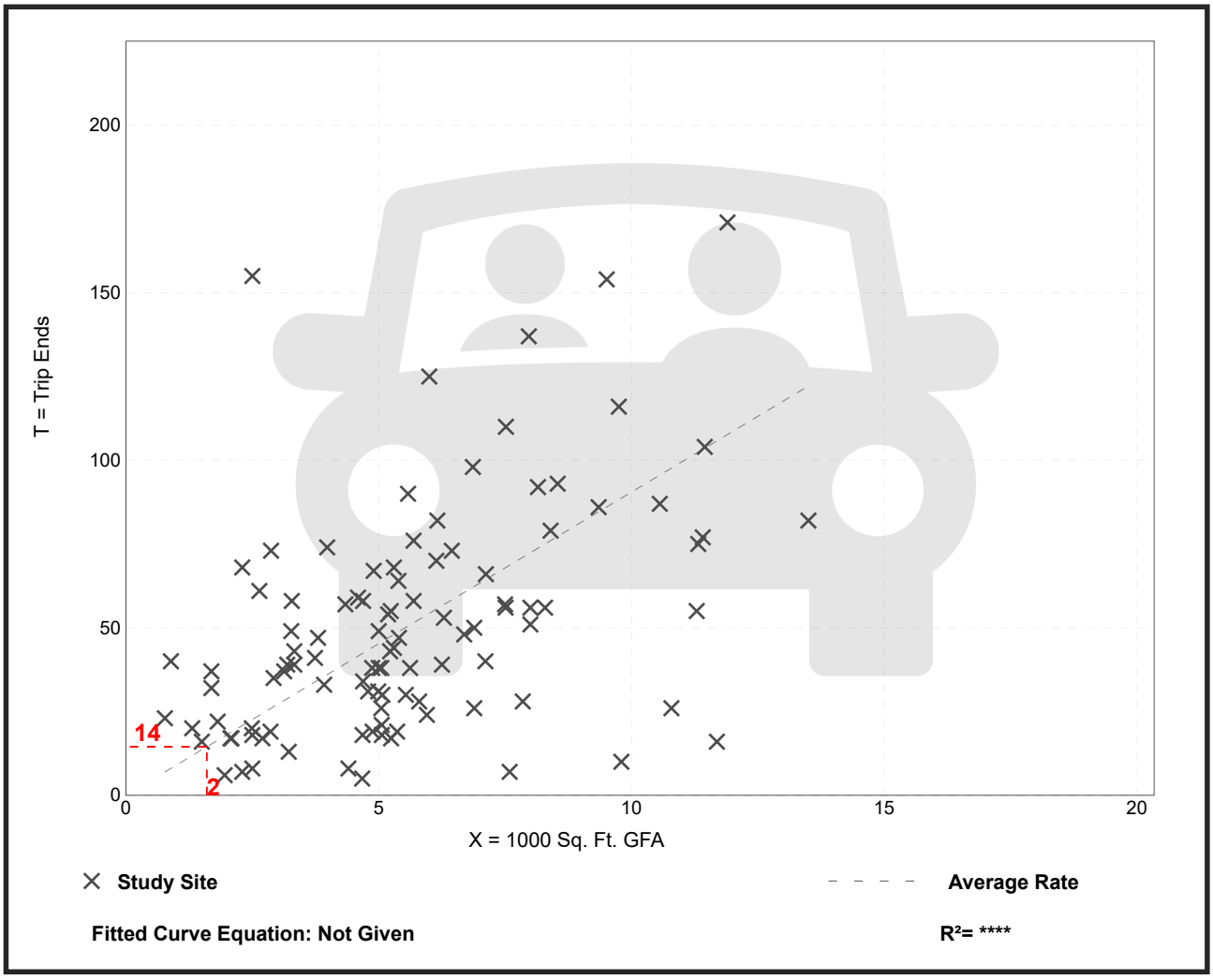
High-Turnover (Sit-Down) Restaurant
(932)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 104
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



PHASE II

High-Turnover (Sit-Down) Restaurant
(932)

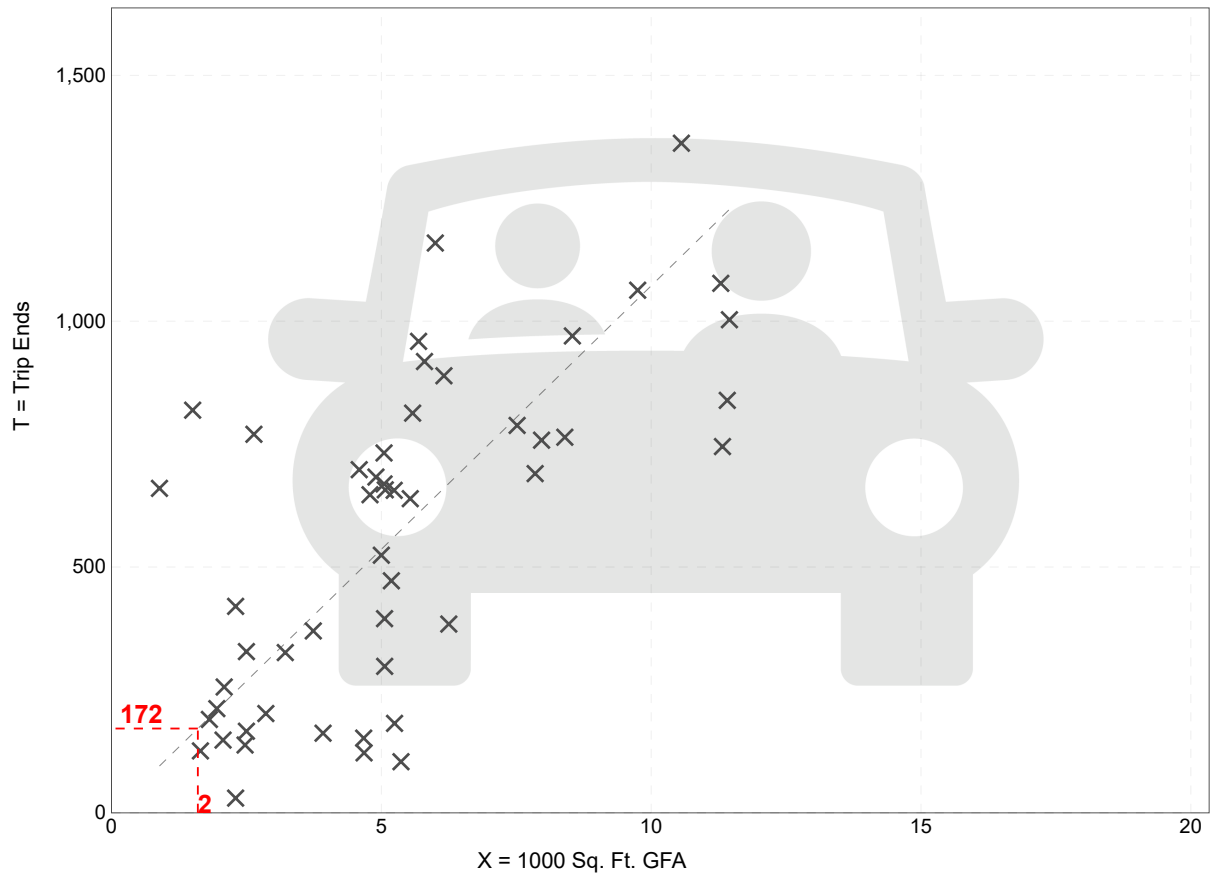
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
107.20	13.04 - 742.41	66.72

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= **

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Residence at Rock Creek, Phase II	**Organization:**	MGS
Project Location:	Mission, KS	**Performed By:**	MG
Scenario Description:	Project at Build-Out	**Date:**	6/26/2023
Analysis Year:	2023	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	1,600	sq. ft. (GFA)	15	8	7
Cinema/Entertainment				0		
Residential	221	96	dwelling units	36	8	28
Hotel				0		
All Other Land Uses[2]				0		
Total				51	16	35

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant	1.00	5%	5%	1.00	5%	5%
Cinema/Entertainment						
Residential	1.00	5%	5%	1.00	5%	5%
Hotel	1.00	0%	5%	1.00	0%	5%
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	2	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	51	16	35
Internal Capture Percentage	8%	13%	6%
External Vehicle-Trips[3]	45	14	31
External Transit-Trips[4]	1	0	1
External Non-Motorized Trips[4]	1	0	1

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	25%	0%
Cinema/Entertainment	N/A	N/A
Residential	0%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Residence at Rock Creek, Phase II
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	8	8	1.00	7	7
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	8	8	1.00	28	28
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	2	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	6	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	2	0	0	0
Retail	0		4	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	2	0		0
Hotel	0	0	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	2	6	8	6	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	8	8	8	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	0	7	7	7	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	26	28	24	1	1
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Residence at Rock Creek, Phase II	**Organization:**	MGS
Project Location:	Mission, KS	**Performed By:**	MG
Scenario Description:	Project at Build-Out	**Date:**	6/26/2023
Analysis Year:	2023	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				0		
Restaurant	932	1,600	sq. ft. (GFA)	14	9	5
Cinema/Entertainment				0		
Residential	221	96	dwelling units	38	23	15
Hotel						
All Other Land Uses[2]				0		
Total				52	32	20

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant	1.00	5%	5%	1.00	5%	5%
Cinema/Entertainment						
Residential	1.00	5%	5%	1.00	5%	5%
Hotel	1.00	0%	5%	1.00	0%	5%
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					200	
Restaurant						
Cinema/Entertainment						
Residential		200				
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	1	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	52	32	20
Internal Capture Percentage	8%	6%	10%
External Vehicle-Trips[3]	44	28	16
External Transit-Trips[4]	2	1	1
External Non-Motorized Trips[4]	2	1	1

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	11%	20%
Cinema/Entertainment	N/A	N/A
Residential	4%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Residence at Rock Creek, Phase II
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	0	0	1.00	0	0
Restaurant	1.00	9	9	1.00	5	5
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	23	23	1.00	15	15
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	2		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	6	3	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	1	0
Retail	0		3	0	11	0
Restaurant	0	0		0	4	0
Cinema/Entertainment	0	0	0		1	0
Residential	0	0	1	0		0
Hotel	0	0	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	1	8	9	8	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	22	23	20	1	1
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	0	0	0	0	0
Restaurant	1	4	5	4	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	14	15	12	1	1
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

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PHASE I

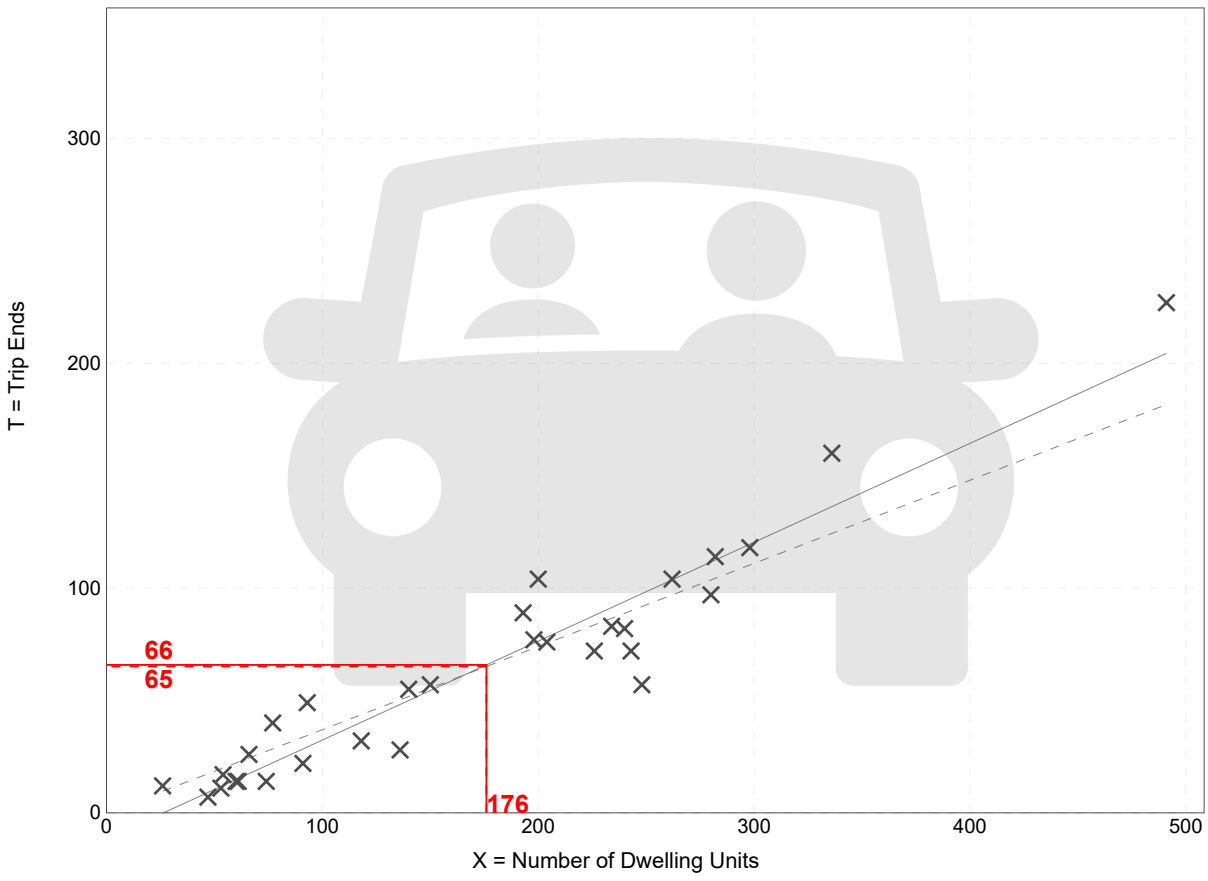
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.44(X) - 11.61

R^2= 0.91

PHASE I

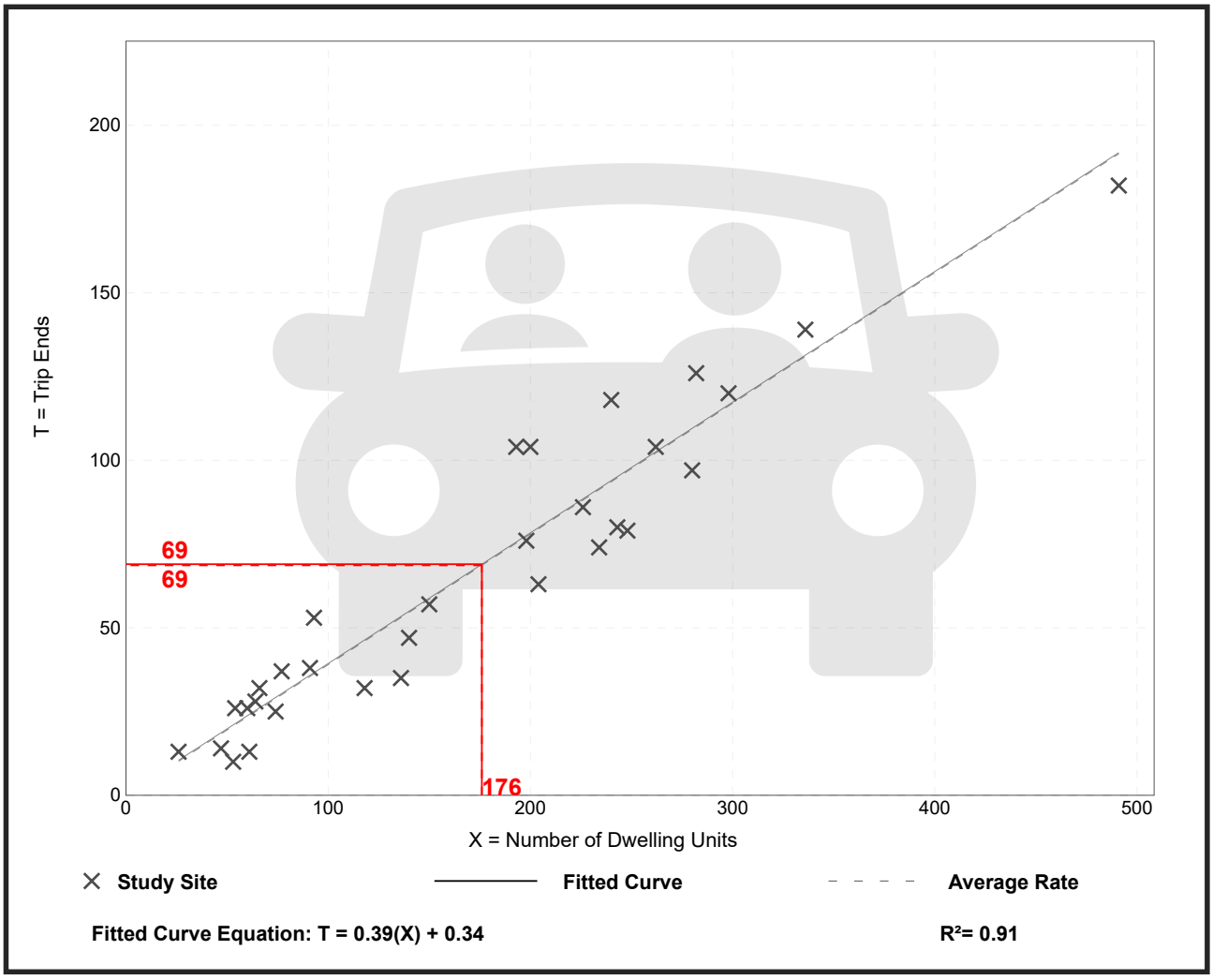
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



PHASE I

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

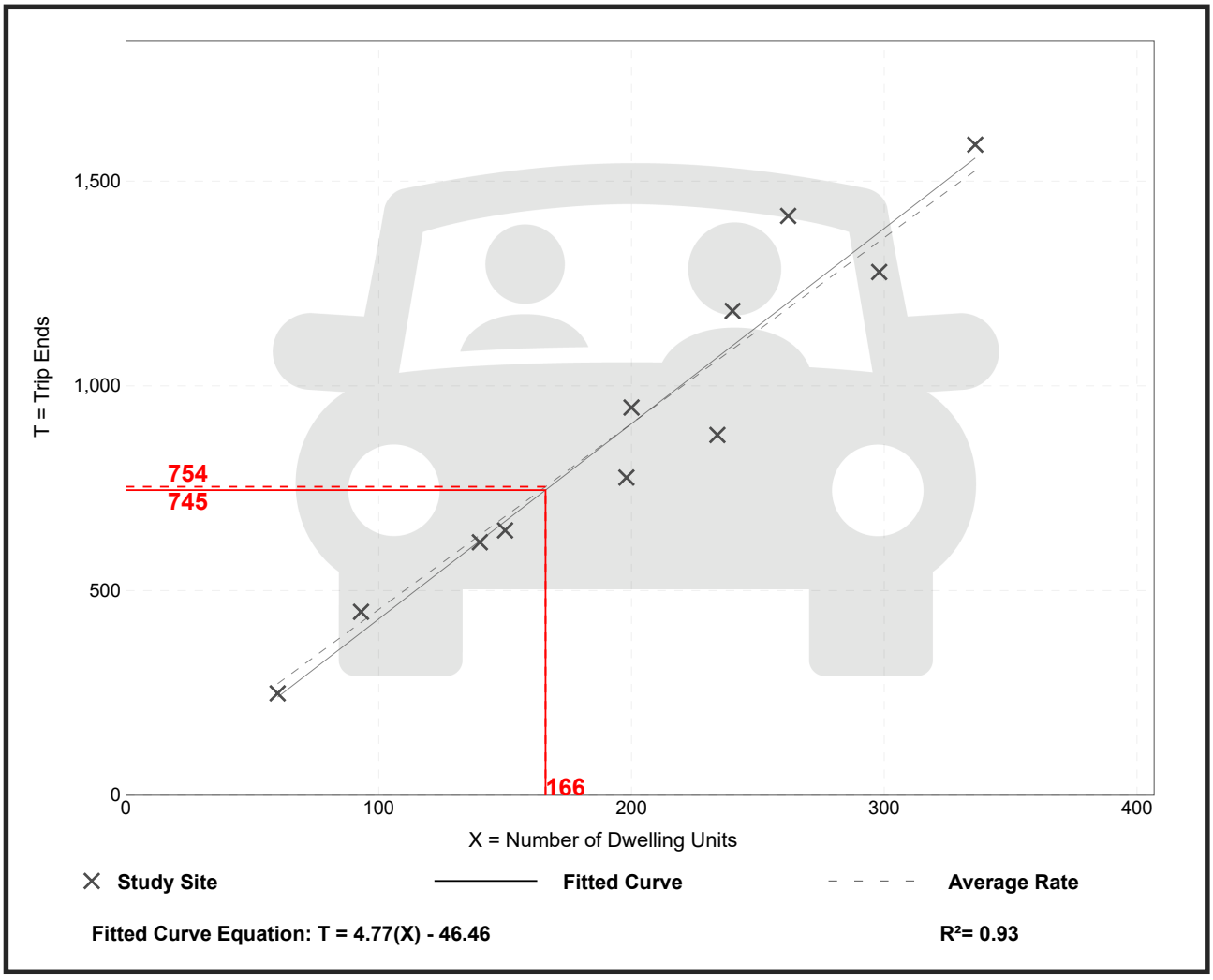
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



Fitted Curve Equation: T = 4.77(X) - 46.46

R^2= 0.93

SUSTAINABLE MISSION

Making a sustainable difference in Mission, Kansas

Thank you for your interest in the City of Mission, Kansas Sustainability Scorecard. The Sustainability Commission has developed this scorecard for prospective development projects. This is a voluntary program that seeks to reward those making sustainable choices in new construction, redevelopment, or renovations.

It is a way to capture considerations taken into account through project design and construction that go above and beyond minimum Building Code. We have used the scorecard with projects like:

- The Mission Gateway Development,
- The Cornerstone Commons development at Johnson Drive and Barkley Street,
- The EPC Mission Trails project on Johnson Drive, and
- The Martway Apartments project.

Once you go through the scorecard document and the supplemental information, we would invite you to score your project to the best of your judgement, and then come to a Sustainability Commission meeting to talk through your scoring. The priority is to have a dialogue between you and the Sustainability Commission members, with you sharing your decision making. We will benefit from hearing you explain when implementing some of these criteria makes sense, and if it doesn't, the reasons why not. To the extent that the conversation may lead you to consider enhanced sustainability measures, all the better.

Following a presentation from you or someone from your team, the Sustainability Commission will review your scoring, and then forward its comments and/or recommendation to you and to the Planning Commission. If a project scores high enough, the Sustainability Commission will award Sustainable Mission certification at one of four levels: Bronze, Silver, Gold or Platinum.

There is no binding authority in this process, just an additional opportunity for community involvement in the context of our sustainability values.

We have seen the scoring summarized in a simple letter format, in a slide presentation, and we have seen a more formal design piece that addressed each set of criteria, so the format of how you share the information with the Sustainability Commission is up to you.

The group meets the first Monday of each month, at 6:30 p.m. at City Hall. We would be happy to coordinate a date with you, based on the progress of your project and when your schedule allows.

Emily Randel, assistant to the city administrator, can assist with questions at erandel@missionks.org or 913-676-8368.

Thank you very much,

Mission Sustainability Commission
6090 Woodson Road
Mission, KS 66202

SUSTAINABLE MISSION
Making a sustainable difference in Mission, Kansas

Project: Residence on Park Creek Phase II
Expected completion: 2024 early 2025
Project Team: Sunflower / CT Design / First Construction

Building Scorecard (Revised December 2018)

Please complete all sections that are applicable to this project. Check any boxes for areas that apply to the work, and use the blank area to explain further. You may also assign point totals for each section; though these will be reviewed and a final score determination will be made by the Mission Sustainability Commission. Additional explanations and clarifications for each item can be found in the building scorecard supplemental document.

1. Will this project pursue any sustainable building certifications? Include rating details.

LEED Silver or equivalent

2. Site Development, Land Use, Location and Transportation Impact

- ☑ a. Pre-design site assessment
- ☑ b. Preserve natural resources
- ☐ c. Manage storm water
- ☑ d. Landscape irrigation
- ☑ e. Manage plants/ vegetation
- ☑ f. Manage soils/ erosion control
- ☐ g. Site waste management
- ☑ h. Walking/ bicycle paths
- ☑ i. Bicycle storage
- ☑ j. Changing/ shower facilities
- ☐ k. Carpool/ car share
- ☑ l. EV charging
- ☑ m. Bus access
- ☐ n. Heat island mitigation
- ☑ o. Reduce light pollution

Points scored - 16 out of **20**

3. Materials and Resource Use

- ☐ a. Reuse existing building
- ☑ b. Construction material management
- ☐ c. Construction waste management
- ☐ d. Sustainable/ local materials
- ☑ e. Occupant waste management
- ☑ f. Occupant recycling/ composting

We will reuse materials where possible on the site and creatively work with material management

Points scored - 10 out of **20**

4. Energy Conservation, Efficiency, and CO_{2e} Emission Reduction

- ☑ a. Energy Modeling
- ☐ b. CO_2e modeling
- ☑ c. Energy metering/ monitoring
- ☐ d. Automated demand response
- ☑ e. Building envelope/ insulation
- ☐ f. Mechanical systems
- ☑ g. Electrical/ lighting systems
- ☐ h. Appliances/ equipment
- ☐ i. Onsite renewable energy
- ☐ j. Refrigerant management
- ☐ k. Control air pollution

Considering solar ready design, but it's still very early in the process.

Points scored - 12 out of **20**

5. Water Conservation and Efficiency

☑ a. Water metering ☑ b. Fixtures/ fittings ☑ c. Appliances/ equipment
□ d. HVAC water use □ e. Water treatment devices ☑ f. Reduce irrigation
□ g. Rainwater □ h. Graywater

Points scored - 13 out of **20**

6. Indoor Environmental Quality and Comfort

□ a. IAQ management plan ☑ b. Air handling filtration ☑ c. Increase ventilation
□ d. IAQ during construction ☑ e. Thermal comfort □ f. Indoor pollutant control
☑ g. Material emissions control ☑ h. Acoustics ☑ i. Daylighting/ views
□ j. Accessibility/ Community for All Ages

Very similar to those 1. Indoor pollutants are a big part of LEED silver and we will work to mitigate.

Points scored - 7 out of **10**

7. Commissioning, Operations, and Maintenance

☑ a. Inspections □ b. Mechanical commissioning □ c. Energy commissioning
☑ d. Building controls systems □ e. O+M documentation ☑ f. Maintenance staff training

Points scored - 5 out of **10**

8. Additional Comments

Any additional sustainable attributes that will be incorporated in this project.

Bonus Points (if applicable, 5 maximum) - _____

Total Points Scored - 63 out of **100**

Rating Achieved - _____ (Bronze 20-39, Silver 40-59, Gold 60-89, Platinum 90+)

SUSTAINABLE MISSION
Making a sustainable difference in Mission, Kansas

City of Mission, Kansas Sustainability Commission Building Scorecard – Supplemental Document

This scorecard is a way to encourage projects to consider sustainability throughout the entire lifecycle of a building. It is designed with the 2015 International Green Construction Code (IgCC) in mind, and is meant to reward voluntary efforts to make projects more sustainable than currently required. It is a project of the Mission Sustainability Commission, an advisory body to the City Council that aims to be a good steward of natural resources, make Mission, Kansas a desirable community, be advisors to the City Council, and increase visibility of sustainability in our community. This supplemental document provides some definitions and further explanation related to the Mission Sustainability Commission Building Scorecard. The scorecard is intended for developers, architects, builders, building owners, tenants, or anyone wishing to be more sustainable. This scorecard can be a helpful guide for anyone pursuing new construction, renovation, or upgrading a few light bulbs.

Although this can be a helpful resource, it is not intended to be an all-inclusive guide. Please see the additional resources section at the end of this document for links to further information.

How to Complete the Scorecard

We encourage users to check all boxes applicable to the project. The goal is to reward buildings that surpass minimum building code requirements and incorporate sustainability. In the commentary section, include a description of the features/strategies, and whether they fall short, meet, or exceed code requirements. If the project includes any attributes that are not included in this scorecard, describe them in detail in the additional comments section.

1. Sustainable Building Certifications

Note if this project is pursuing any sustainable rating including IgCC, LEED, WELL, ASHRAE 189.1, Green Globes, EnergyStar Building, ICC-700, etc. Include details of which rating system and the level/score the building will achieve. See additional resources at the end of this document.

2. Site Development, Land Use, and Location, and Transportation Impact

Each building should consider how its location, natural geography, and occupant access are encouraging sustainability. Additional details on many of the items are available in the most current International Green Construction Code.

a. Pre-design site assessment – Projects could take an inventory of the building site baseline conditions including areas to protect, native plants/ trees, invasive species, terrain/ topography, hazard areas, storm water hydrology, and site features to be preserved. Make a plan to minimize the negative effects of altering the site.

b. Preserve natural resources – Any site near flood hazard areas, surface water bodies, wetlands, conservation areas, parklands, agricultural land, or previously undeveloped land, could limit the disturbance of these natural resources. In the comments, please explain what natural resource is present, and how this project aims to preserve that portion of the site.

c. Manage storm water – Projects could consider how this project will address the increased/redirected runoff and water contaminants like coal tar. The project could identify a water management system for rain events, snowmelt, etc.

d. Landscape irrigation – To reduce potable water use, projects could limit the amount of irrigation required for site landscaping. This can be accomplished by using native plants which require less watering, and designing a more efficient irrigation system. Irrigation systems could be installed to aim away from building/ pavement, create less overspray, incorporate smart controls/ sensors, group plants of similar water needs, include pressure regulators, and include efficient nozzles. Decorative fountains and water features should be designed to limit water usage by recirculating, treating, and limiting evaporation of water. Creative solutions may involve using collected rainwater for site water use.

e. Manage plants/ vegetation – Projects should preserve existing vegetation, protect trees, eliminate invasive species, and landscape with native plants. Plants depend on good soil, therefore managing soils goes hand-in-hand with managing vegetation.

f. Manage soils/ erosion control – Projects should protect the topsoil, limit importing soil, prepare and restore the soil nutrients, and stabilize the earth to prevent erosion. Erosion could occur during construction and throughout the lifecycle of the building. Go beyond the standard erosion control requirements.

g. Site waste management – Projects should avoid depositing site waste, such as land clearing debris, vegetation, or previous hardscape materials from the site into the land fill. Waste could be diverted from the traditional waste stream by reusing, recycling, composting, or upcycling. In the comments, describe any site waste that will be removed for this project and where it willgo.

h. Walking/ bicycle paths – Projects could incorporate paved walkways and bicycle paths to encourage pedestrian and bicycle access to existing paths/ infrastructure. IgCC requires at least one independent path for bicycles, strollers, pedestrians and other non-motorized locomotion connected to a building entrance and a street or existing walkway/ bicycle path. Include a description or site plan showing the location of the paths.

i. Bicycle storage – Projects could provide long-term and short-term bicycle storage with adequate accessibility, lighting, space, and location near a building entrance. Describe the location and number of spaces of bicycle storage provided for this building.

j. Changing/ shower facilities – If building occupants have access to a changing/ shower facility, this could encourage pedestrian and bicycle commuting.

k. Carpool/ car share – To decrease energy use of accessing a building or commuting, the site could encourage carpooling or car sharing through methods like parking spaces reserved for high occupancy vehicles. Companies such as Zipcar or CarToGo provide occupants an opportunity to borrow a car.

l. Electric Vehicles – Projects could provide preferred parking and/or charging stations for low-emission, hybrid, and electric vehicles.

m. Bus access – Projects could encourage building occupants to access bus transit by locating the nearest bus stops and providing convenient pathways to encourage people to use the bus and alternative transportation.

n. Heat island mitigation – Temperatures can be significantly warmer in cities than in surrounding rural areas due to the heat island effect. To reduce the heat island effect, a building could consider hardscape materials, light reflectance, shading by structures, shading by trees, pervious pavement, solar reflective roof coverings, and vegetative roofs.

o. Reduce light pollution – Exterior lighting could be designed or installed to limit up-light, light trespass, and glare. Solutions include proper fixture selection, efficient layout, and automated controls. Consider reducing lighting of facades and areas beyond the site boundary.

3. Material And Resource Use

Building materials should be sustainable. Conserving material resources involves material selection, recycling, reuse, renewability, limiting toxicity, and durability, including resistance to damage caused by moisture. Consider the life cycle of materials, transportation, and waste material.

a. Reuse existing building – It is beneficial to reuse existing buildings to limit demolition waste. Buildings can be reused in total, or materials can be reused on new projects.

b. Construction material management – Most products have specific instructions for storage and handling. Instructions generally include moisture control, temperature regulations, and stacking instructions. Care should be taken to not let products be damaged in order to prevent wasting materials and reduce the chance of mold growth.

c. Construction waste management – Projects could develop a construction material and waste management plan to recycle or salvage construction materials and waste.

d. Sustainable/local materials – Projects could select materials that are sustainable and local. In addition, materials should be free from harmful chemicals such as lead, cadmium, and mercury. Material selection could include used/ reclaimed materials or content that is recycled, recyclable, bio-based, sustainably sourced, rapidly renewable, or indigenous. Alternatively, projects could undertake whole building life cycle assessments or provide environmental product declarations.

e. Occupant waste management/ recycling/ composting – Recycling areas could be provided for occupants after the building is completed. Describe the services offered, location of collection areas, and signage.

4. Energy Conservation, Efficiency and CO_2e Emission Reduction

Energy and atmosphere are perhaps the most common items considered in sustainability. There are many building attributes that work together to achieve energy efficiency. The items below should all be considered to reduce energy consumption, install efficient systems, and utilize renewable energy when possible. Consult the International Green Construction Codes for additional specific information for these items.

a. Energy modeling – Energy modeling uses computerized calculations to predict the energy consumption of a building due to a wide variety of inputs. International Green Construction Codes require a zero energy performance index (zEPI) of 50 or less. The IgCC provides a calculation which compares the proposed performance to a baseline building.

b. CO_2e modeling – Equivalent carbon dioxide (CO_2e) emissions can be modeled in a similar way as energy modeling, by adding the type of energy sources used for a building.

c. Energy metering/ monitoring – To identify where energy is used in a building, it is helpful to install energy meters and sub-meters. These can be used to monitor and efficiently operate loads from many different building systems. By continuously monitoring and reporting, energy meters can identify areas or systems of the building that are operating improperly or inefficiently. By performing simple maintenance, buildings can save money on utility bills. Describe any efforts the project uses to track electric power, gas, liquid and solid fuels as well as heating and cooling as applicable.

d. Automated demand response – Utilities can operate more efficiently if buildings offer to shed energy on peak load days. Enrolling in an automated demand response allows the utility to shift building energy usage to another time to limit additional energy production needed at peak times.

e. Building envelope/ insulation – To conserve energy related to heating and cooling a building, the building façade and insulation should be considered. Shading combines with the insulation performance of all exterior elements (walls, roof, windows, etc.) to create a building envelope. Projects also could seal all windows and doors, and prevent air leakage for the entire building.

f. Mechanical systems – Heating ventilation and air conditioning (HVAC) systems are often the largest consumers of energy in any building. There are many types of HVAC systems, some are more efficient than others depending on the building location and usage. There are federal standards for energy efficiency detailed in the International Energy Conservation Code (IECC).

g. Electrical/ lighting systems - Many strategies exist to reduce the energy used by electrical and lighting systems. Daylight can be used to reduce required lighting during the day. Controls systems and occupancy sensors can turn off interior and exterior lights when they are not required. It is also important to consider all of the electrical plug loads, and what can be done to reduce energy from appliances plugged into electrical outlets.

h. Appliances/ equipment – There are federal requirements for energy efficiency in many appliances. In addition to these federal requirements, ENERGY STAR labelled appliances can reduce overall energy use.

i. Onsite renewable energy – Another way to reduce utility energy is to install renewable energy systems on the project site like solar or wind energy.

j. Refrigerant management – Refrigerants can be detrimental to human health and the atmosphere if they are not used or disposed of properly. It is illegal to use CFCs and HFCs are also bad for the environment. When possible, select natural refrigerants such as water or propane to reduce atmospheric damage. Also, any existing refrigerants should be disposed of properly.

k. Control air pollution – Buildings can pollute the air directly or indirectly by using energy from utilities burning fossil fuels. Buildings should consider reducing air pollution or planting trees to offset releasing CO_2 into the atmosphere.

5. Water Resource Conservation, and Efficiency

Water is a limited resource, and it should be conserved and protected in all buildings. Potable water (suitable for drinking) is a precious commodity that humans require. Items in this section are strategies to decrease water use and increase water quality. Check the International Green Construction Codes for specific examples.

a. Water metering – Water meters track the water usage of a project. If alternative water sources are used (i.e. reclaimed water, well water, or other potable water) each water source could be metered individually. Metering can identify any abnormal conditions in order to correct and prevent wasting water. Water sub-meters can be helpful when there are multiple tenants or pieces of equipment that consume large quantities of water.

b. Fixtures/ fittings – Installing water efficient fixtures can significantly reduce building water consumption. Some fixtures have a WATER SENSE label which is similar to ENERGY STAR for energy efficiency. To reduce water use, consider maximum flow rates for all water fixtures within a building (lavatory, kitchen, drinking fountains, etc.). In addition, automatic or metered fixtures can save water by preventing a fixture from remaining on when not in use.

c. Appliances/ equipment – Many appliances in a building may require a water connection. Projects could consider maximum flow rates for clothes washers, icemakers, steam cookers, and dishwashers. Plumbing design and equipment layout could also focus on conserving water.

d. HVAC water use – The building HVAC system can consume large amounts of water if not designed and installed properly. Any equipment that uses water including condensate drainage, humidification systems, hydronic loops, heat exchangers, and cooling towers should have protections in place to reduce water usage. In addition to reducing water, the HVAC system should maintain good water quality in all systems.

e. Water treatment devices – Any water treatment device should limit the amount of wasted water. Check green building codes for specific requirements for water softeners, reverse-osmosis water treatment systems, and onsite reclaimed water treatment systems.

f. Reduce irrigation – Selecting vegetation and plants that require less irrigation helps to reduce the overall water usage for the entire project. If irrigation is required, ensure that the system is operated efficiently by only watering the necessary areas, and watering at an efficient time of day to reduce evaporation.

g. Rainwater – Collecting rainwater is a strategy to reduce municipal potable water use. Be sure to follow requirements in building codes for storing water and preventing water borne diseases.

h. Graywater – Graywater is water that has been used once and is no longer potable (i.e. water from hand washing sinks), however it may be reclaimed and used for non-potable water requirements (such as irrigation). Reusing graywater is another strategy to reduce overall water usage.

6. Indoor Environmental Quality and Comfort

Human comfort and quality of life has a direct impact on productivity and health. It is important to remember the building occupants for a truly sustainable project. The items below can help create a better interior environment for the building occupants. International Green Construction Codes can provide specific guidance.

a. Indoor air quality (IAQ) management plan – Managing the indoor air quality inside a building starts during construction and continues into occupancy. It is important to have a plan in place before the project begins.

b. Air handling filtration – All air handling equipment should have sufficient filters to clean the air supplied to occupied spaces.

c. Increase ventilation – Indoor air quality can be improved by providing more fresh air to occupied spaces. IgCC requires projects to provide either natural ventilation (operable windows) or increased mechanical ventilation in excess of building code requirements.

d. Indoor air quality (IAQ) during construction – During construction it is important to protect the building and HVAC system from collecting dust and contaminants. It is also important to store construction materials in a responsible way to reduce mold. Check green construction codes for specific ways to do this.

e. Thermal comfort – Human productivity and comfort are affected by humidity and temperature within a space. It is important to provide a comfortable thermal environment and controls for occupants to be comfortable. IgCC requires compliance with ASHRAE 55.

f. Indoor pollutant control – Everyday products can contain many indoor pollutants. Projects should decrease the use of harmful indoor pollutants and locate pollutant sources in enclosed rooms, away from building occupants. Pollutant sources can include printers, copiers, and janitorial rooms.

g. Material emissions control – Choosing materials with low emissions can improve the indoor air quality. Volatile organic compounds are common in many building materials. Check green building codes for prohibitions and limits on volatile organic compounds in composite wood, adhesives, sealants, paints, flooring, and insulation.

h. Acoustics – Another factor that contributes to indoor environmental quality is sound. Productivity depends on good speech communication and limiting distracting noises. Projects could consider sound transmission, mechanical system noise, structure borne sound, and sound absorbing room surfaces.

i. Daylighting/ views – Occupants benefit from natural sunlight and being able to see outdoors. Consider access to windows or glazing that allow views for as many occupants as possible.

j. Accessibility/ community for all ages – Consider all people that may be occupants of your project site and building. Projects could also consider how they contribute to the Mid-America Regional Council's Communities for All Ages initiative. City of Mission participates in this program.

7. Commissioning, Operations, and Maintenance

It is important to check building systems to ensure they are working efficiently. Commissioning is a process to verify that all building systems are operating as intended. To maintain efficiency throughout the lifecycle of the building it is important to perform routine maintenance and ensure the building is operating properly.

a. Inspections – An independent commissioning agent can verify that all systems were installed correctly and meet the project requirements in all of the sections above. Consider a special inspection and commissioning report by an approved agency before building occupancy.

b. Mechanical system commissioning – Commissioning can be considered "fine-tuning" to ensure the building HVAC system is functioning at peak efficiency. Mechanical systems commissioning includes measuring the occupied spaces and each piece of mechanical equipment to verify proper operation. Check green construction codes for a list of mechanical items that could be commissioned.

c. Energy system commissioning – Similar to mechanical system commissioning above, energy system commissioning ensures that electrical generation and distribution systems are operating properly to ensure energy efficiency.

d. Building controls systems – Automated control systems can be a great benefit to controlling equipment and operating a building efficiently. However, they must be checked to ensure theyare programed and installed correctly, or the outcome may be negative.

e. Operations and maintenance (O+M) documentation/ schedule – It is important for the owner or project manager to have access to important information related to operations and maintenance to keep the building functioning efficiently. Green construction codes require a user manual for each building system, and record documents be provided to the owner.

f. Maintenance staff training – The maintenance staff can be a huge factor in whether a project achieves its sustainability goals or not. Consider maintenance documentation to help the staffkeep the project operating properly.

8. Additional Comments

This section is meant to address any sustainable building elements that do not fit neatly into the categories above. Please describe any items this project incorporates that contribute to a more sustainable community. This could include description of the design team and integrative process, building orientation decisions, community gardens, access to local food/ farmers, markets, increased durability, reduced maintenance, incorporating open outdoor space, occupant sustainability training/ education, increased occupant comfort, carbon monoxide alarms in every space, community engagement, or involvement with programs such as Community for All Ages, Walk/Bike/Ride KC, or Smart Growth. But don't feel limited to those, either. Document anything that improves the economy, people of our community, and/or the natural environment.

This is your chance to highlight any sustainable attributes that this scorecard does not cover. Feel free to attach additional documentation or narratives to add further detail for any comments that do not fit in the comments section.

Green construction codes and other sustainable rating systems

- International Green Construction Code (IgCC) 2015
  The IgCC is the first model code to include sustainability measures for the entire construction project and its site — from design through construction, certificate of occupancy and beyond. The new code is expected to make buildings more efficient, reduce waste, and have a positive impact on health, safety and community welfare.
  https://www.iccsafe.org/codes-tech-support/international-green-construction-code-igcc/international-green-construction-code/

- Leadership in energy and environmental design (LEED)
  LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world. Available for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement. There are several different rating systems (Building Design and Construction, Interior Design and Construction, Building Operations and Maintenance, Neighborhood Development, and Homes). Projects can achieve awards of certified, silver, gold, or platinum based on meeting prerequisites and a certain number of credits in each rating system.
  https://new.usgbc.org/leed

- ENERGY STAR Buildings
  ENERGY STAR is the simple choice for saving energy in buildings and plants. Buildings receive a percentile score from 1 to 100 based on energy usage compared to similar buildings across the country. To be eligible for ENERGY STAR certification, a building must earn an ENERGY STAR score of 75 or higher, indicating that it performs better than at least 75 percent of similar buildings nationwide.
  https://www.energystar.gov/buildings

- Green Globes
  Green Globes offers a different approach: one that provides in-depth support for improvements ideally suited to each project. Building owners and facility managers know their buildings and operations better than anyone else. We respect and leverage that knowledge with personalized assistance to produce best practices in sustainable design, construction and operations. Incorporating third-party assessors available throughout the certification process, we forge a partnership that allows experienced green building project teams to shine and reduces the learning curve for those new to green building. The building gets a rating from 1 to 4 globes.
  https://www.thegbi.org/green-globes-certification/

- ASHRAE 189.1
  ASHRAE is the American Society for Heating Refrigeration and Air Conditioning Engineers. Standard 189.1 provides total building sustainability guidance for designing, building, and operating high-performance green buildings. From site location to energy use to recycling, this standard sets the foundation for green buildings by addressing site sustainability, water use efficiency, energy efficiency, indoor environmental quality (IEQ), and the building's impact on the atmosphere, materials and resources. Standard 189.1 is a compliance option of the International Green Construction CodeTM (IgCC).
  https://www.ashrae.org/resources--publications/bookstore/standard-189-1

- ICC/ASHRAE 700-2015
  The ICC/ASHRAE 700-2015 National Green Building Standard™ (NGBS) is the first residential green building standard to undergo the full consensus process and receive approval from the American National Standards Institute (ANSI). A residential building can achieve bronze, silver, gold, or emerald rating.
  https://www.nahb.org/en/research/nahb-priorities/green-building-remodeling-and-development/icc-700-national-green-building-standard.aspx

July 24, 2023

Planning Commission

Staff Report

At A Glance

Applicant:
City of Mission

Location:
6090 Woodson Street, Mission, KS

Property ID:
N/A

Current Zoning:
N/A

Proposed Zoning:
N/A

Current Land Use:
N/A

Proposed Land Use:
N/A

[X] Public Hearing Required

Legal Notice:
July 4, 2023

Case Number:
23-14

Project Name:
Tobacco Retail Ordinance

Project Summary:
An ordinance providing for a new ordinance for Article IV, Chapter 415 of the Municipal Code for the City of Mission, Kansas to require tobacco retailers and electronic cigarette retail establishments to comply with a distance requirement in certain zoning districts.

Staff Contact:
Karie Kneller, City Planner

(Citywide Context)

Background Information

The Mid-America Regional Council's (MARC) Community for All Ages program that Mission has adopted is an integral aspect of Mission's culture that residents have identified as a priority Community for All Ages criteria are woven throughout the final draft of the updated Comprehensive Plan. The program applies to all aspects of integrated health in planning and development policy. Policies and regulations that address these issues build a healthy and resilient community for residents of all ages.

Since October 2022, the City Council has discussed issues related to potential revisions to Mission's zoning code as it pertains to retailers selling tobacco, electronic cigarettes, or electronic cigarette paraphernalia. To provide sufficient time for review and discussion, on March 15, 2023, the City adopted an ordinance of a 150-day moratorium on all new business licenses for establishments that sell tobacco, electronic cigarettes, and/or electronic cigarette paraphernalia in Mission. The moratorium expires on August 21, 2023.

Staff has been analyzing the impact of restrictions to permitting these type of retail establishments in certain buffer zones around parks, churches, schools, and existing tobacco retailers, as shown in the map as part of the hearing packet (Figure 1). Current zoning regulations permit tobacco retailers in the following zones: MS-1, MS-2, C-1 (CP-1), C-2 (CP-2), and MXD.

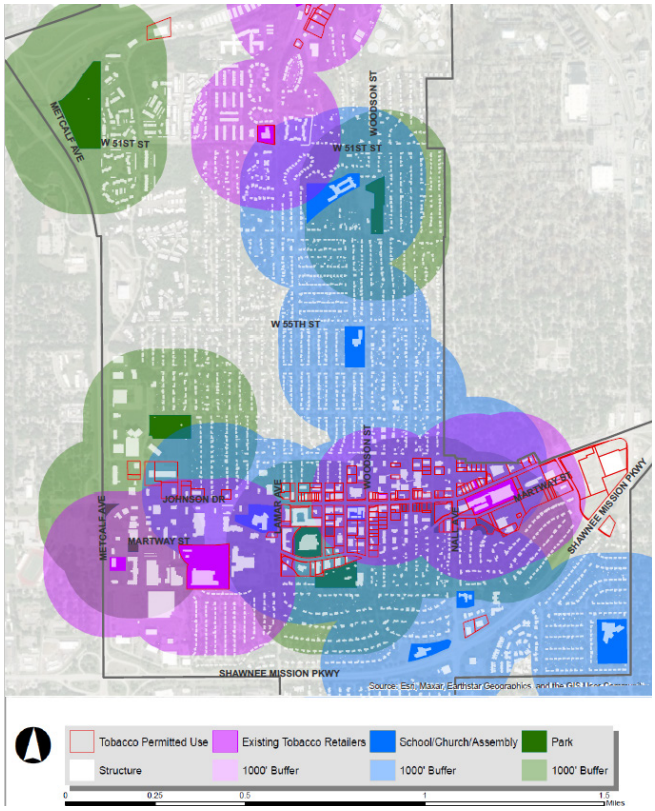


Figure 1

Throughout Mission, there are eight existing tobacco retailers. There are 222* parcels that are zoned to permit tobacco retailers, which are broken down by district in the following table:

Zoning District	Number of Parcels
MS-2	101
MS-1	76
MXD	15
C-2	10
C-1	9
CP-2	5
CP-1	5

*34 parcels are established rights-of-way not appropriate for development.

In April 2023, the Finance & Administration Committee directed staff to explore expanded buffer zones around certain land uses, to review potential impacts new legislation might have on marijuana/marijuana paraphernalia sales if legalized in Kansas, and potentially prohibiting tobacco/e-cigarette sales in any Mixed-Use (MXD) zoning district. In May 2023, Council directed staff to move forward with an ordinance to effect changes to Mission's zoning code.

Proposal

Under City Council direction, staff requests that the Planning Commission consider an ordinance to restrict tobacco retailers from acquiring a business license or operating a business which sells tobacco products within a 1000-foot buffer of a property used or zoned for a park, church, school, or an existing tobacco retail establishment. The ordinance defines the terms "electronic cigarette," "electronic cigarette retail establishment," "tobacco," "tobacco products," and "tobacco retailer." Further, the ordinance makes an exception for established tobacco retailers, with the stipulation that if the establishment abandons or discontinues operations, future tobacco retailers at that location would be held to the stipulations of the distance requirements. The mere change of ownership of a continuous occupancy and use of a property as a tobacco retailer would not be subject to the distance requirement.

Analysis:

The ordinance would establish the 1000-foot buffer to protect the health, safety, and welfare of its youth by limiting the access, exposure, and marketing of smoking to under-age children. This ordinance does not prohibit outright the establishment of new tobacco retailers in Mission. Within the existing MXD-zoned properties at the southeast corner of Roeland Drive and Johnson Drive, as well as the property at the southwest corner of Shawnee Mission Parkway and Roeland Drive that is zoned C-1, tobacco retailers would not be excluded by the 1000-foot buffer. The ordinance is exclusive at this time to tobacco retailers, and does not include prohibition of tobacco products in MXD zones or restrictions for marijuana retailers at this time.

Recommendation

Staff recommends that the Planning Commission vote to recommend to the City Council approval of Case #23-14, the proposed ordinance pertaining to retail tobacco establishments.

Planning Commision Action

The Planning Commission will consider Case #23-14 at a public hearing on July 24, 2023.

City Council Action

The City Council will consider Case #23-14 at a public hearing on August 16, 2023.

CITY OF MISSION

ORDINANCE NO.

_____

AN ORDINANCE PROVIDING FOR A NEW ARTICLE IV TO CHAPTER 415 OF THE MUNICIPAL CODE OF THE CITY OF MISSION, KANSAS TO REQUIRE TOBACCO RETAILERS AND ELECTRONIC CIGARETTE RETAIL ESTABLISHMENTS TO COMPLY WITH A DISTANCE REQUIREMENT IN CERTAIN ZONING DISTRICTS.

WHEREAS, the Governing Body of the City of Mission deems it to be in the best interests of the health, safety and welfare of its youth to limit the access and exposure of under-age children to retail stores that sell tobacco and electronic cigarette items and marketing by imposing a distance restriction for such establishments.

NOW THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF MISSION, KANSAS:

PARAGRAPH 1. That Title IV, Chapter 415 of The Municipal Code of the City of Mission, Kansas is hereby amended to add a new Article IV, Tobacco Retailers and Electronic Cigarette Retail Establishments, to read as follows:

Article IV, Tobacco Retailers and Electronic Cigarette Retail Establishments.

Section 415.140 Application.

The provisions of this Article shall apply to all zoning districts within the City of Mission.

Section 415.150 Definitions.

A. "Electronic Cigarette" means a battery-powered device, whether or not such device is shaped like a cigarette, which can provide inhaled doses of nicotine by delivering a vaporized solution by means of cartridges or other chemical delivery systems.

B. "Electronic Cigarette Retail Establishment" means a retail establishment that derives at least 50% of such establishment's revenue from Electronic Cigarettes and Electronic Cigarette products or a retail establishment that holds itself out or advertises itself primarily as an electronic cigarette retail establishment.

C. “Tobacco” means plants of the nightshade family with high levels of nicotine.

D. “Tobacco Products” means cigarettes, cigars, cheroots, stogies,

periques; granulated, plug cut, crimp cut, ready rubbed and other smoking tobacco; snuff, snuff flour; cavendish; plug and twist tobacco; fine cut and other chewing tobaccos; shorts; refuse scraps, clippings, cuttings and sweepings of tobacco, and other kinds and forms of tobacco, prepared in such manner as to be suitable for chewing or smoking in a pipe or otherwise, or both for chewing and smoking.

E. "Tobacco Retailer" means any person who sells, offers for sale, or exchanges or offers to exchange for any form of consideration, tobacco products. This definition is without regard to the quantity of tobacco products sold, offered for sale, exchanged, or offered for exchange.

Section 415.160 Distance Requirements.

A. No Tobacco Retailer or Electronic Cigarette Retail Establishment shall be located within 1,000 feet of any other Tobacco Retailer or Electronic Cigarette Retail Establishment within Mission City Limits or outside City Limits, or within 1,000 feet of any property used or zoned for parks, school, college, or church. The separation distances shall be measured from or to the outer wall of the Tobacco Retailer or Electronic Cigarette Retail Establishment to the property line of the property containing the park, school, college or church.

1. Exception: If such park, school, college or church is established within 1,000 feet of any Tobacco Retailer or Electronic Cigarette Retail Establishment after the premises has been licensed for such, the premises shall remain an eligible location for said licensing as long as the premises remains in compliance with subsection B below.

B. In the event any Tobacco Retailer or Electronic Cigarette Retail Establishment abandons or discontinues as a Tobacco Retailer or an Electronic Cigarette Retail Establishment in operation prior to the effective date of this Ordinance, any future Tobacco Retailer or Electronic Cigarette Retail Establishment operated at the same location shall be required to comply with the distance requirements set forth in this Section. This provision shall not apply to a change in ownership which may occur by operation of law, including a court order, divorce, death, mortgage foreclosure, bankruptcy or transfer by contract, provided there is a continuous occupancy or operation of the Tobacco Retailer or Electronic Cigarette Retail Establishment at the licensed location.

C. Each Tobacco Retailer or Electronic Cigarette Retail Establishment shall retain the records of purchases and sales for a period of one year. These records are subject to inspection by the City and shall be provided within a reasonable time upon request. The records may be in electronic or paper format. If electronic, the records must be available to print upon request

by the City.

PARAGRAPH 2. Severability. If any one or more sections, subsections or other part of this Ordinance shall be declared invalid by a court of competent jurisdiction, it is the intent of the City that the remaining portions of the Ordinance shall remain effective. The City states that it would have enacted such remaining portions irrespective of the fact that one or more sections, subsections, or other part of the Ordinance have been held invalid.

PARAGRAPH 3. This Ordinance shall be in full force and effect from and after its passage and publication as provided by law.

City of Mission	Item Number:	10a.
ACTION ITEM SUMMARY	Date:	March 15, 2023
Administration	From:	Laura Smith

Action items require a vote to recommend the item to full City Council for further action.

RE: Ordinance Establishing a Temporary Moratorium on all New Business Licenses for Establishments that Sell Tobacco, Eletronic Cigarettes and/or Electronic Cigarette Paraphernalia in the City of Mission

RECOMMENDATION: Approve the Ordinance establishing a temporary moratorium on all new business licenses for establishments that sell tobacco, electronic cigarettes and/or electronic cigarettr paraphernalia for a period of one hundred fifty (150) days.

DETAILS: Since October 2022, the Council has been discussing issues related to Mission's zoning code regulations for retailers selling tobacco, electronic cigarettes, or electronic cigarette paraphernalia. Most recently the issue was discussed during the February 1 Finance & Administration Committee meeting where additional direction was given to staff to continue to researach options and alternatives to bring back to the Council.

Recognizing the Council's interest in a thorough review and evaluation of Mission's regulations for establishments selling tobacco, electronic cigarettes, or electronic cigarette paraphernalia staff is recommending Council establish a temporary moratorium on the issuance of new business licenses for establishments selling the same. In order to appropriately study the issue, and to ensure time for any contemplated changes to the zoning regulations to be heard and considered, Staff is recommending the moratorium be imposed for a period of one hundred fifty (150) days. No application for a new business license for such establishment will be considered or processed until the expiration of the Temporary Moratorium Period.

CFAA CONSIDERATIONS/IMPACTS: The Communities for All Ages program suggests that residents are interested in healthy, vibrant communities. This is often related to walkable communities, but applies to all aspects of integrating health into planning and development policy. Discussing policies and regulations such as this can signal to residents a community's willingness to review and consider all aspects of building a healthy and resilient community for residents of all ages.

Related Statute/City Ordinance:	
Line Item Code/Description:	
Available Budget:	

City of Mission	Item Number:	11.
DISCUSSION ITEM SUMMARY	Date:	May 3, 2023
Administration	From:	Laura Smith

Discussion items allow the committee the opportunity to freely discuss the issue at hand.

RE: Regulations for Tobacco and Electronic Cigaretter Retailers

DETAILS: Since October 2022, the Council has been discussing issues related to potential revisions to Mission's zoning code as it relates to retailers selling tobacco, electronic cigarettes, or electronic cigarette paraphernalia. At the April 12, 2023 Finance & Administration Committee meeting staff was directed to continue to explore expanded buffer zones, to review the potential impacts any proposed legislation might have on marijuana/marijuana paraphernalia sales should it be legalized by the Kansas Legislature, and the potential for speficially prohitibing tobacco/e-cigarette sales in any Mixed-Use (MXD) zoning district.

The materials included in this action item and the packet respond to that discussion and Staff is hopeful that final direction can be secured to move to the next step in the process. While the temporary 150 day moratorium does not expire until August 21, 2023, staff would like to move foward through this multi-step process as soon as possible. The map included in the packet illustrates a 1000' buffer surrounding the following:

- Existing tobacco retailers
- Schools/Churches/Other Assembly Places
- Parks

Council will note that a buffer of this size covers all parcels whose current zoning (MS-1, MS-2 and C-1) would allow for tobacco/electronic cigarette sales with the exception of portions of the Gateway site (zoned MXD) and the Bank of America property located at Shawnee Mission Parkway and Roeland Drive. During the April Committee meeting there was also some interest expressed about potentially revising the definition of allowable uses within a Mixed-Use zoning district to speficially prohibit the sale of tobacco/e-cigarettes. Staff would recommend the following next steps if Council is ready to advance a recommendation forward to begin the process for making amendments to Mission's Zoning Code:

- Prepare a draft ordinance establishing the 1000' buffers as shown on the map
- Ensure ordinance language is crafted narrowly to ensure that marijuana retailers would not be included should the sale of marijuana (medical, recreational or both)

Related Statute/City Ordinance:	Chapter 405 Mission Municipal Code
Line Item Code/Description:	NA
Available Budget:	NA

City of Mission	Item Number:	11.
DISCUSSION ITEM SUMMARY	Date:	May 3, 2023
Administration	From:	Laura Smith

Discussion items allow the committee the opportunity to freely discuss the issue at hand.

Staff would recommend that the discussion and decisions related to the sale of tobacco or electronic cigarettes in a Mixed-Use zoning district be included as part of the more comprehensive zoning code updates which are anticipated to get underway later this year. Since there are currently no functional retail spaces located in the MXD district, this will allow for any and all modifications to allowed or prohibited uses to be considered at one time.

CFAA IMPACTS/CONSIDERATIONS: The Communities for All Ages program suggests that residents are interested in healthy, vibrant communities. This is often related to walkable communities, but applies to all aspects of integrating health into planning and development policy. Discussing policies and regulations such as this can signal to residents a community's willingness to review and consider all aspects of building a healthy and resilient community for residents of all ages.

Related Statute/City Ordinance:	Chapter 405 Mission Municipal Code
Line Item Code/Description:	NA
Available Budget:	NA

June 26, 2023

Planning Commission

Staff Report

At A Glance

Applicant:
City of Mission Parks + Recreation Department

Location:
5814 West 53rd Street

Property ID:
KP70000000 0001, KF251205-4039, KP62500000 0010, KP70000000 0001, KP70000000 0002, KP62500000 0009B, KP70000000 0008, KP70000000 0007

Current Zoning:
R-1

Proposed Zoning:
N/A

Current Land Use:
Park

Proposed Land Use:
Park

N/A Public Hearing Required

Legal Notice:
N/A

Case Number:
23-15

Project Name:
Water Works Park Final Development Plan

Project Summary:
Proposed final development plan (FDP) for the redesign of the Water Works Park site. The Planning Commission recommended approval of the preliminary development plan (PDP) to the City Council on June 26, 2023, and the City Council approved the PDP on July 19, 2023.

Staff Contact:
Karie Kneller, City Planner

Background and Property Information

Water Works Park is located on 53rd Street just west of residential properties facing Outlook Street. The property is a four-acre site owned by WaterOne for a pump station facility, and in 1982 WaterOne leased the site to the City of Mission to operate the park facilities through the Parks and Recreation Department. The park is currently programmed with play equipment, trails, and a small shelter. The trail connects to Rushton Elementary, which is currently under construction, via a four-foot sidewalk. There is an unstriped parking lot for up to seven vehicles along 53rd Street. Restrooms are temporary portable facilities. WaterOne also owns several 24-inch water main and smaller transmission pipes under and adjacent to the property.

The project team provided modifications to the approved preliminary development plan that include feasible connection to the Rushton Elementary walkway, and storm water management design details that follow best management practices (BMPs) according to the American Public Works Association (APWA) and Mid-America Regional Council (MARC) guidelines. An updated landscaping plan that includes native species and consideration for adjacent neighboring properties for sun and shade is also included with the final development plan. The applicant requested information from the solar table manufacturer about potential for damage to the charging ports. The manufacturer stated that mud, sticks, or other debris placed in the ports would require that the USB port is replaced. The manufacturer did not anticipate ports would be a major effort to replace. The applicant also visited a site with the same type of musical play equipment located in a park to measure decibels on site. The play equipment did not exceed 60 decibels as measured directly next to the equipment. In R-1 districts, the regulation is that noise levels would not exceed 50 decibels at the property line. To reduce the possibility that noise exceeds the regulation, the equipment has been moved slightly further west from the property line and tall grasses are indicated as a buffer between the equipment and residential properties. Staff also received a letter and phone call from a Mission resident following the Planning Commission hearing that outlined many of the same concerns residents addressed in-person, adding that “we don’t need parking for [fourteen] cars” and that the increase in parking amenities would encourage people outside of the community to use the public park.

Parks and Recreation Master Plan (2018)

As part of the preliminary development plan staff report, staff included The Parks + Recreation Mission Statement, which is, “to enrich the quality of life for residents of Mission and surrounding areas by fostering a strong sense of community and providing a variety of multi-generational activities that promote healthy lifestyles,” with a Vision to “become the most integrated, connected and accessible parks and recreation system in northeast Johnson County.”

It is staff’s determination that the amenities, improvements, and inclusivity efforts at Water Works Park do adhere to the tenets of the Mission and Vision statements in the Master Plan.

Municipal Code

Consideration of Final Development Plans is outlined in the Mission Municipal Code at §440.190. A Final Development Plan which contains modifications from the approved Preliminary Development Plan but is in substantial compliance with the Preliminary Development Plan, may be approved by the Planning

Recommendation and Actions

Commission without a public hearing if the landscaping and screening plan is adequate as determined by the Commission.

Modifications are not significant and are in compliance with the municipal code. The applicant and design team considered Planning Commission, City Council, and public input in its final design.

Sustainability Commission

A member of the Sustainability Commission provided the design team with a scorecard that includes checked boxes for typical elements that a park may incorporate to increase sustainability. The design team commented on those elements and provided the ways the park would address those elements. That scorecard is part of the FDP packet and includes various elements related to natural resource preservation, heat island mitigation, bicycle storage and EV parking, materials, energy and water conservation methods, indoor air quality, and others.

Staff Recommendation

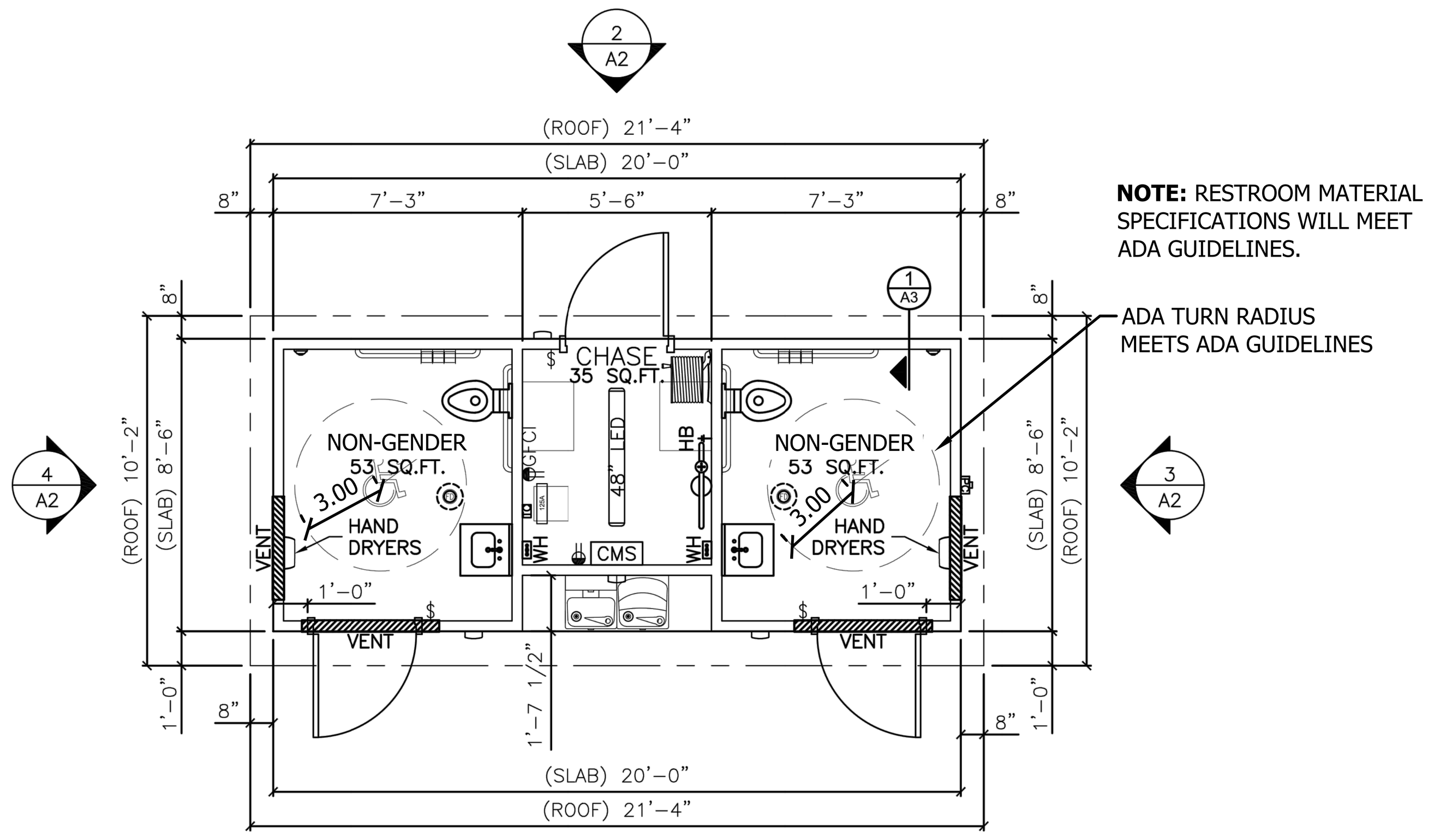
Staff recommends that the Planning Commission vote to approve the Final Development Plan for the redesign of Water Works Park.

Planning Commission Action

The Planning Commission will hear Case #23-15, Water Works Park Final Development Plan, at its regularly scheduled meeting on July 24, 2023.

City Council Action

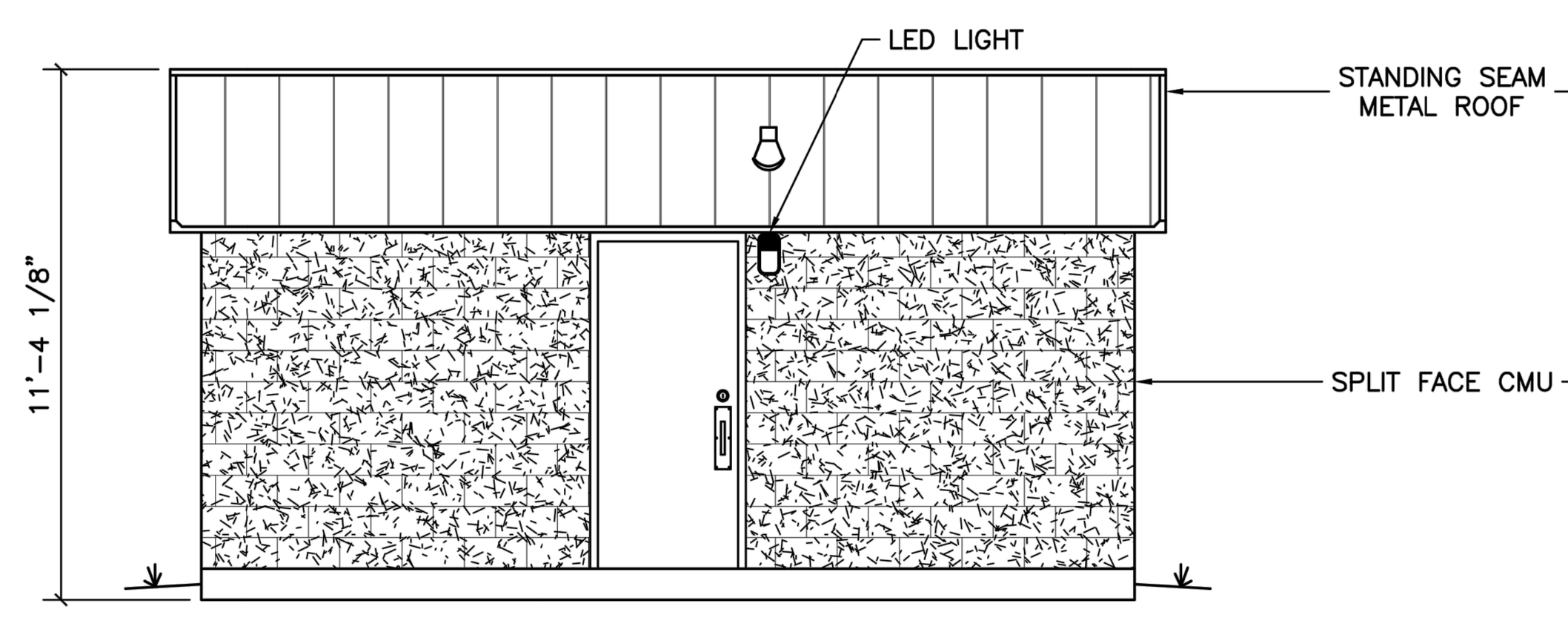
No Action



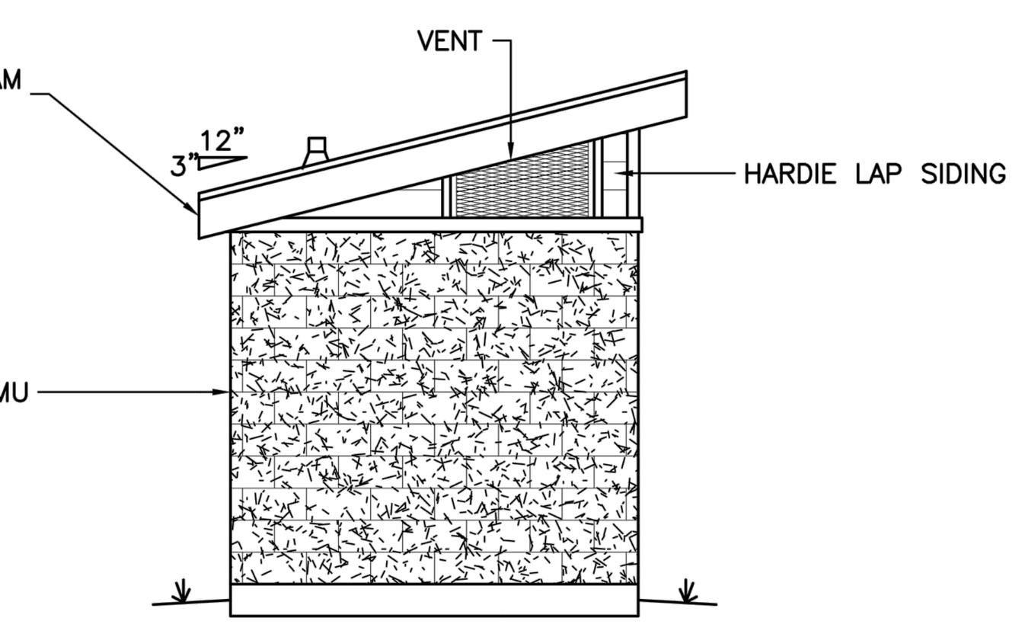
NOTE: RESTROOM MATERIAL SPECIFICATIONS WILL MEET ADA GUIDELINES.

ADA TURN RADIUS MEETS ADA GUIDELINES

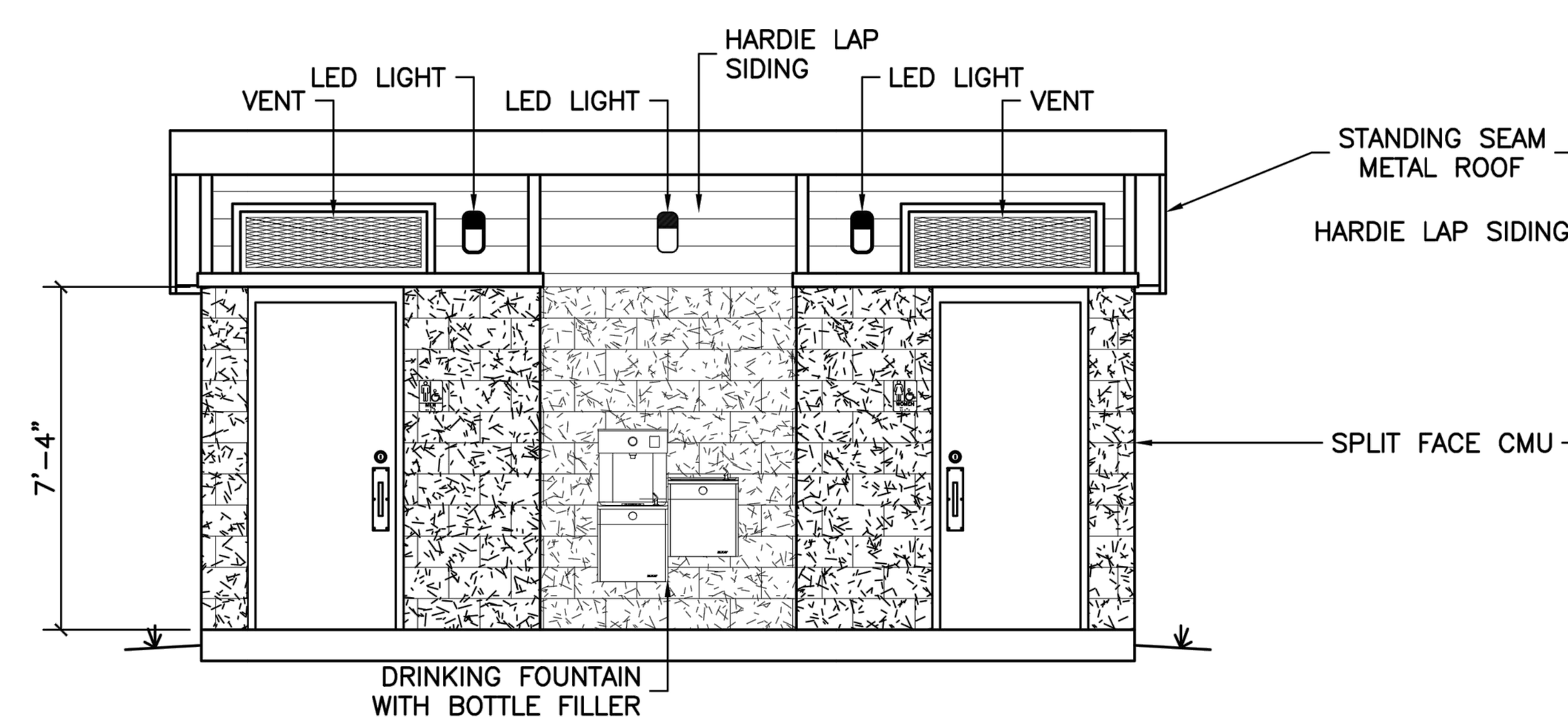
FLOOR PLAN - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



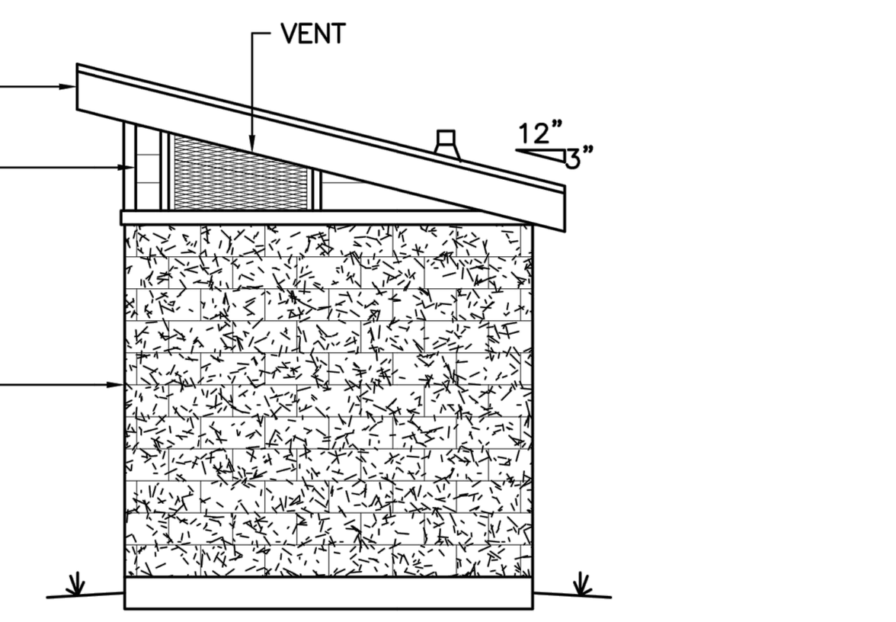
2-A2 REAR ELEVATION - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



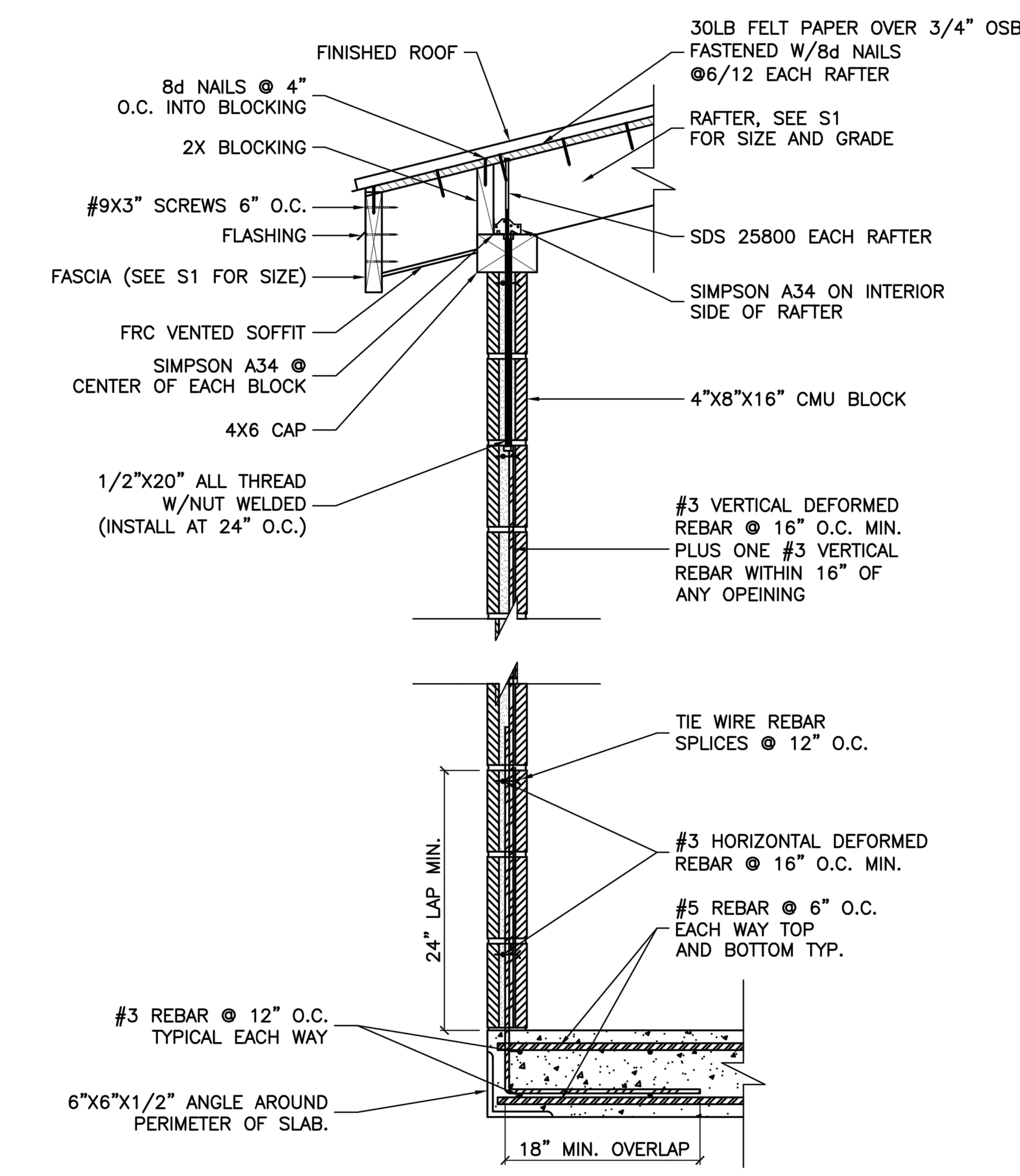
4-A2 LEFT SIDE ELEVATION - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



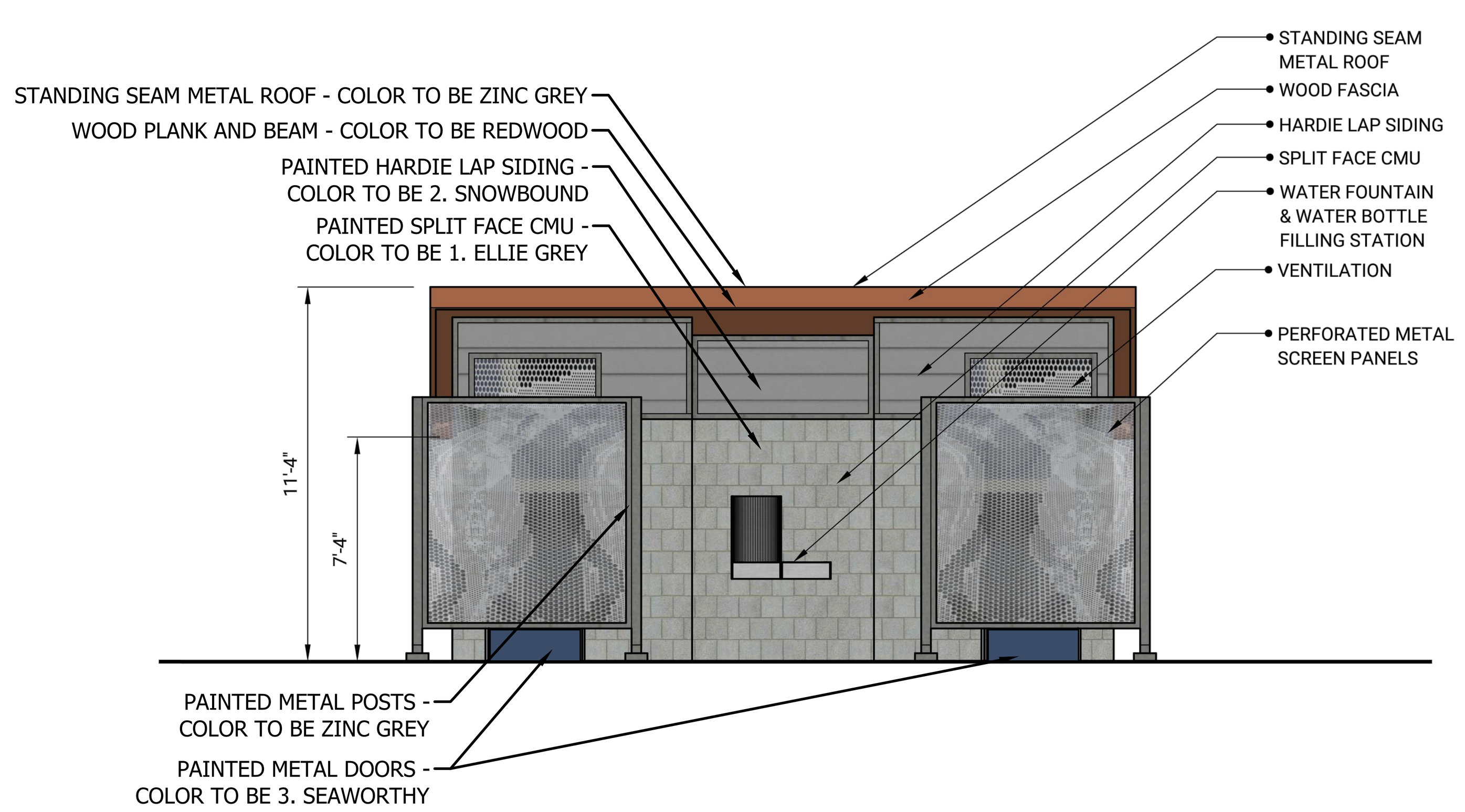
1-A2 FRONT ELEVATION - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



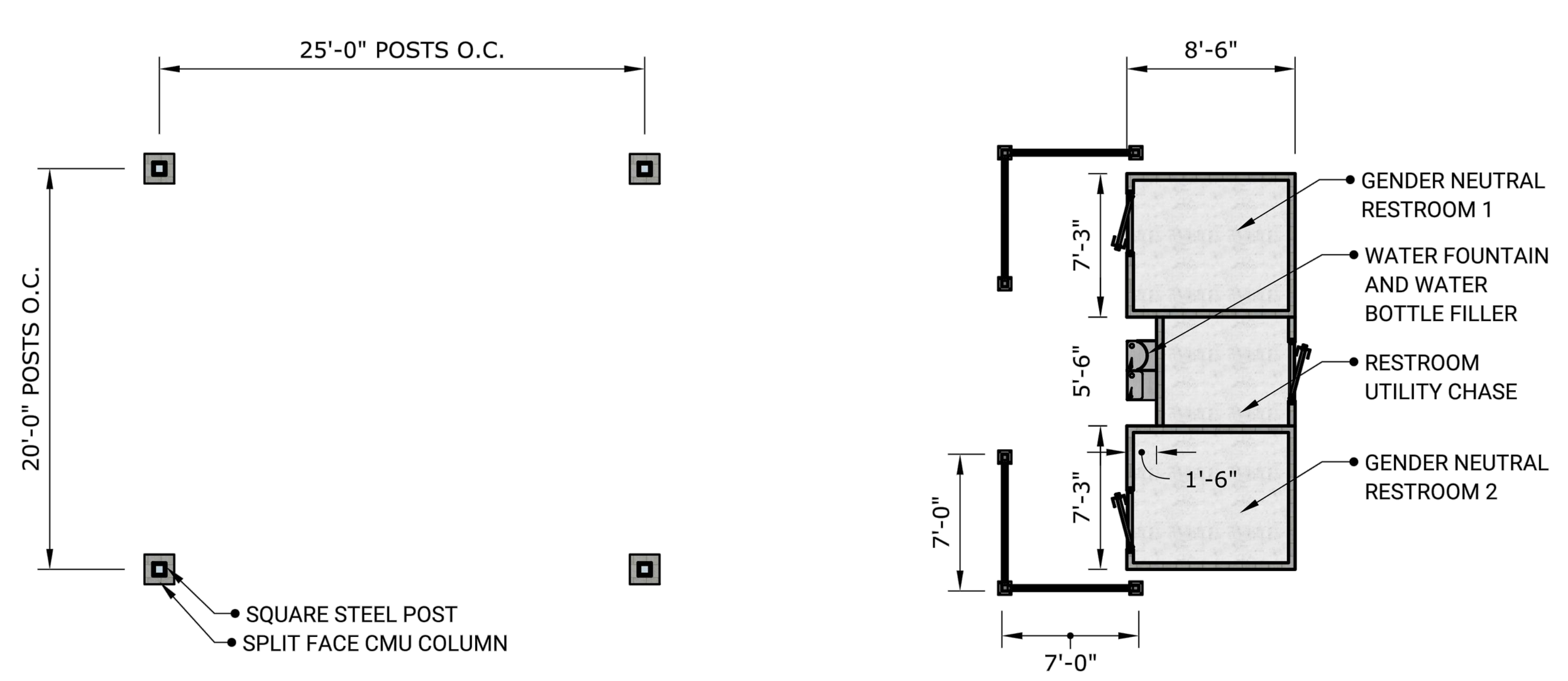
3-A2 RIGHT SIDE ELEVATION - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



1-A3 WALL SECTION (4X RAFTERS) - DRAWINGS BY CORWORTH
SCAEL: 1/4" = 1'-0"



RENDERED FRONT ELEVATION
SCAEL: 1/4" = 1'-0"

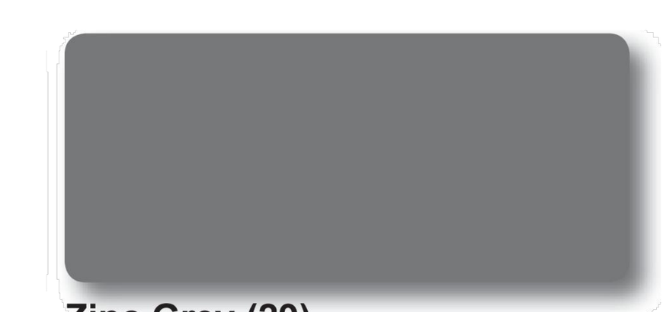


RENDERED FLOOR PLAN
SCAEL: 1/8" = 1'-0"

1. Ellie Gray SW 7650
2. Snowbound SW 7004
3. Seaworthy SW 7620

RESTROOM BUILDING COLORS

MANUFACTURER: SHERWIN WILLIAMS OR APPROVED EQUAL
MATERIAL: PAINT
COLOR: NUMBER CALLOUTS REFER TO ELEVATIONS
LOCATION: RESTROOM



Zinc Grey (29)

SR = 0.41	TE = 0.86	SRI = 45

RESTROOM ROOF MATERIAL

MANUFACTURER: METAL SALES MFG CORP. OR APPROVED EQUAL
MATERIAL: STANDING SEAM METAL ROOF WITH PVDF PAINT
COLOR: ZINC GREY
LOCATION: RESTROOM ROOF

Zinc Grey (29)

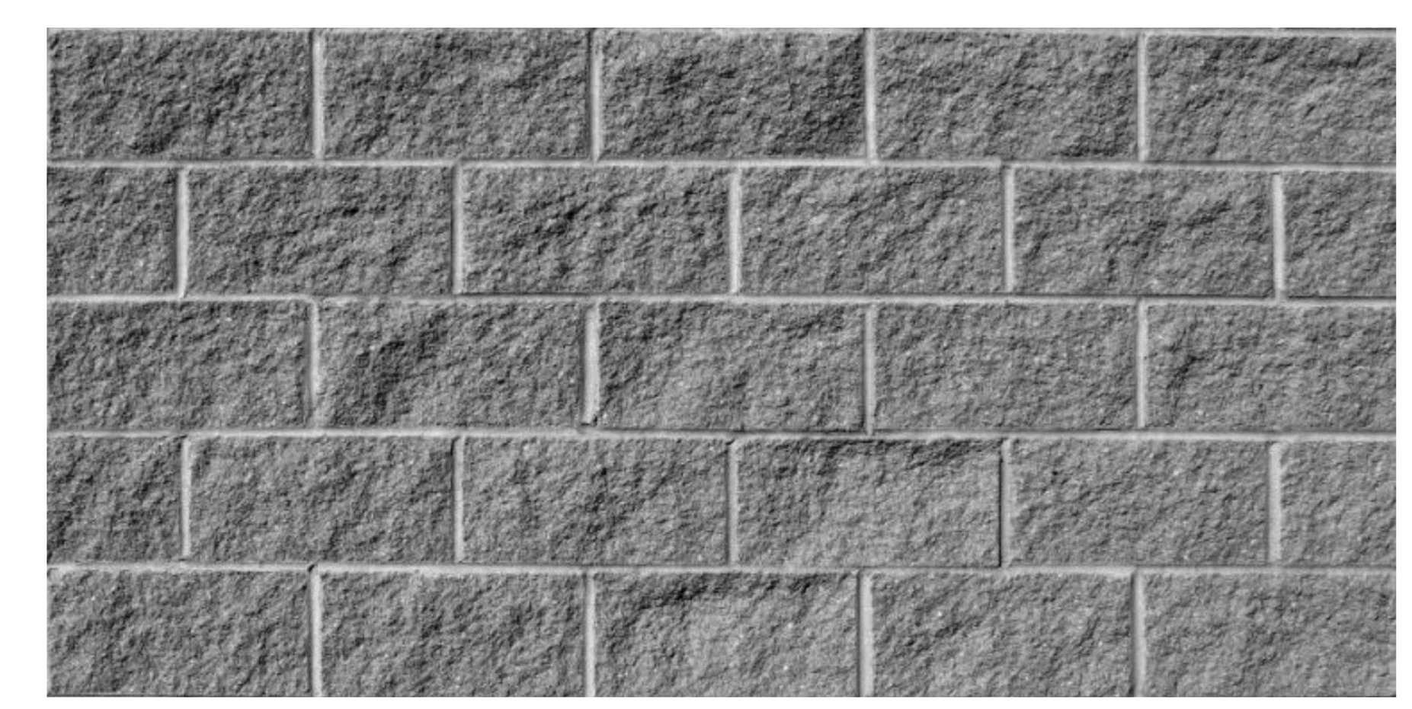
SR = 0.41	TE = 0.86	SRI = 45

SCREEN WALL POST MATERIAL

MANUFACTURER: METAL SALES MFG CORP. OR APPROVED EQUAL
MATERIAL: POWDER COATED ALUMINUM
COLOR: ZINC GREY
LOCATION: RESTROOM SCREEN WALL

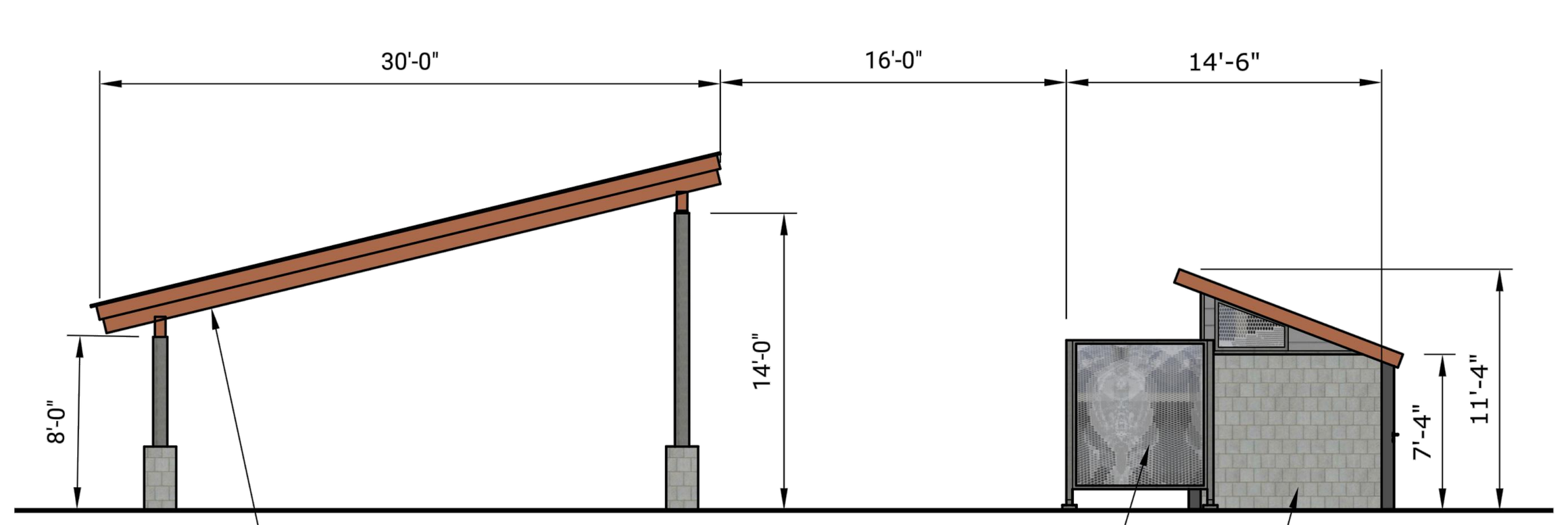
PAINTED HARDIE LAP SIDING

MATERIAL: HARDIE LAP SIDING
COLOR: NUMBER CALLOUTS REFER TO ELEVATIONS
LOCATION: RESTROOM WALLS



PAINTED SPLIT FACE CMU

MATERIAL: SPLIT FACE CMU
COLOR: NUMBER CALLOUTS REFER TO ELEVATIONS
LOCATION: RESTROOM WALLS

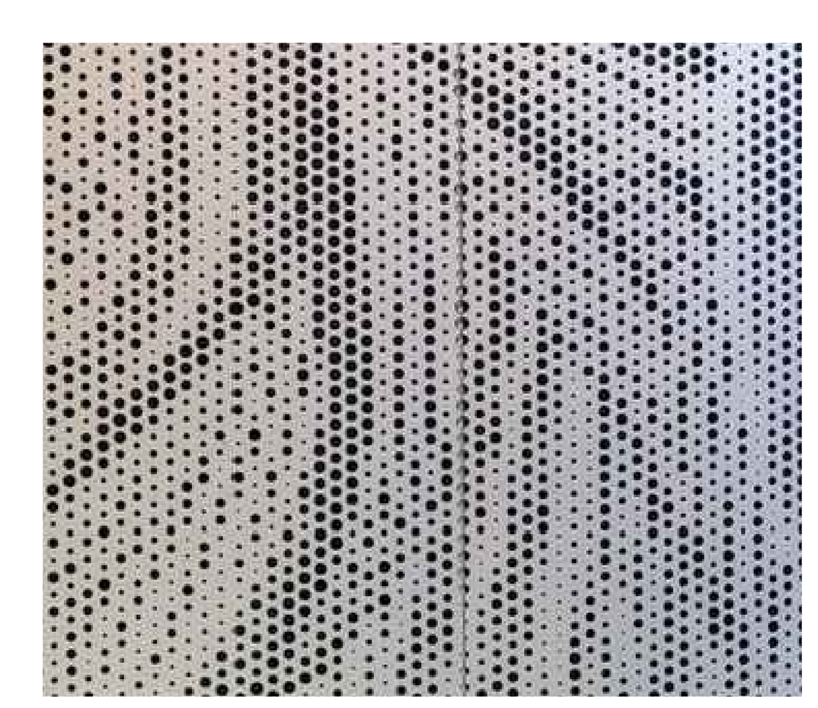


PERFORATED METAL SCREEN PANEL - DESIGN TBD

RESTROOM TO HAVE 2 UNISEX BATHROOMS AND STORAGE ROOM. RESTROOM TO BE CONDITIONED AND LOCKED FOR YEAR ROUND USE.

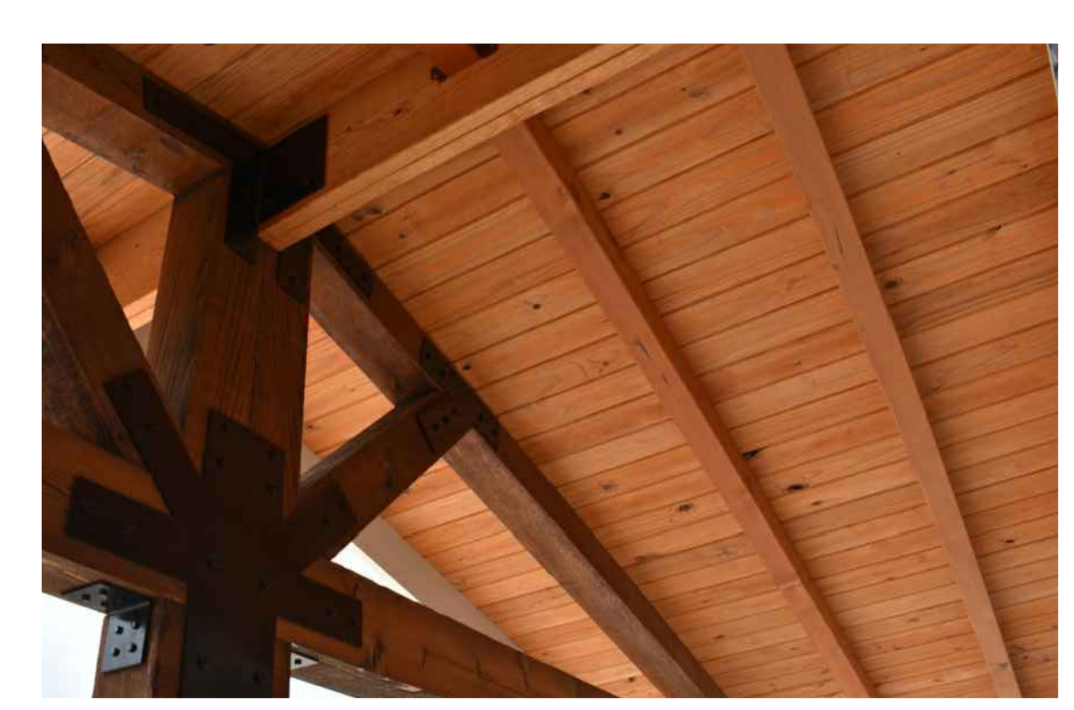
SHELTER TO BE 750 SF WITH SLANTED ROOF. SHELTER TO BE ENLARGED TO 30'-0" X 25'-0".

RENDERED SIDE ELEVATION
SCAEL: 1/8" = 1'-0"



PERFORATED METAL

MATERIAL: PERFORATED ALUMINUM
COLOR: PATTERNED
LOCATION: RESTROOM SCREEN WALLS



WOOD MATERIAL

MATERIAL: DOUGLAS FIR
COLOR: REDWOOD
LOCATION: RESTROOM CEILING

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PDP SUBMITTAL	JS	KVE	23.07.13

Issued — By / Appd. / YY.MM.DD

File Name: — Dwn. / Chkd. / Dsgn. / YY.MM.DD

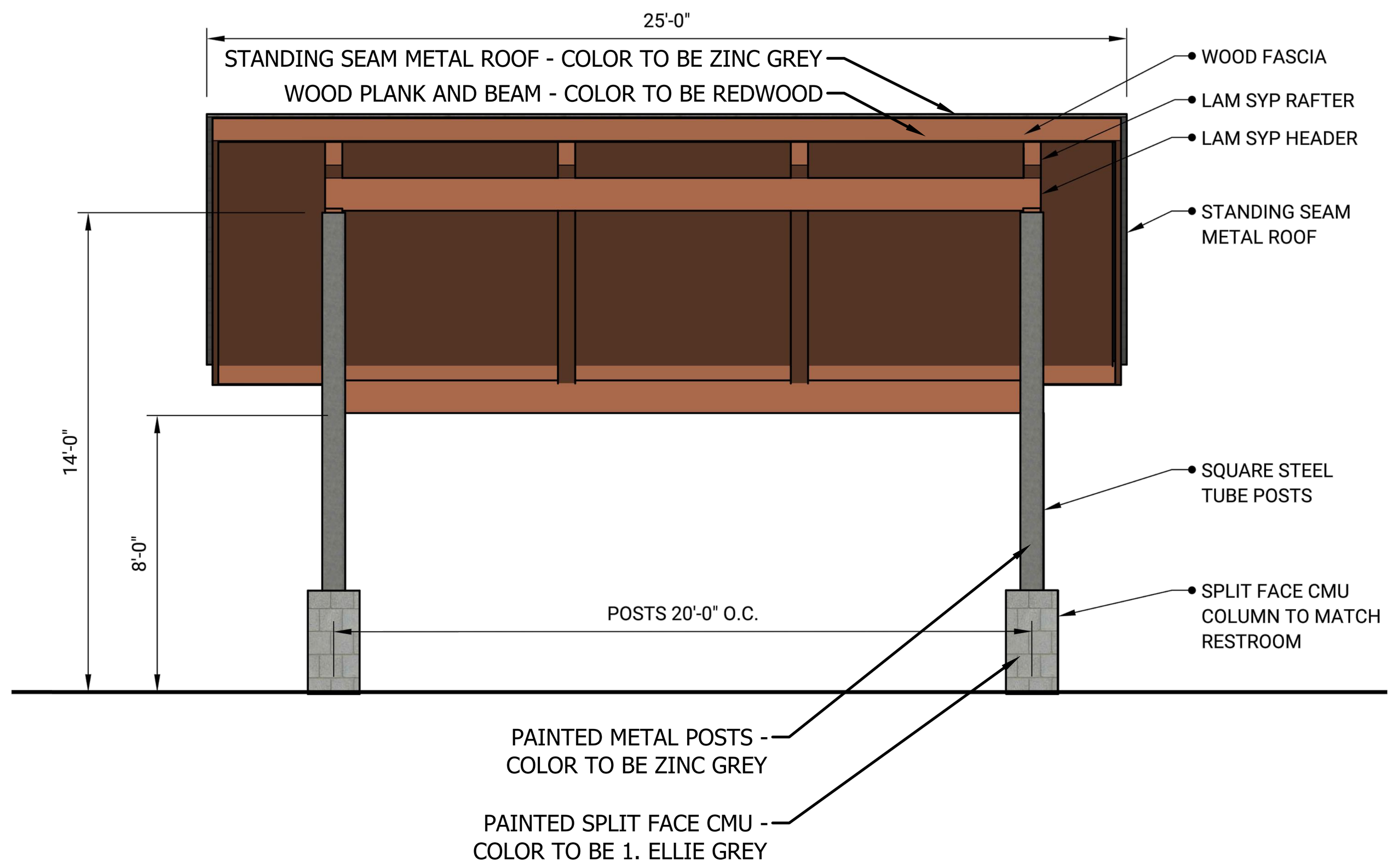
Permit-Seal

Client/Project
CITY OF MISSION
WATER WORKS PARK
Mission, KS

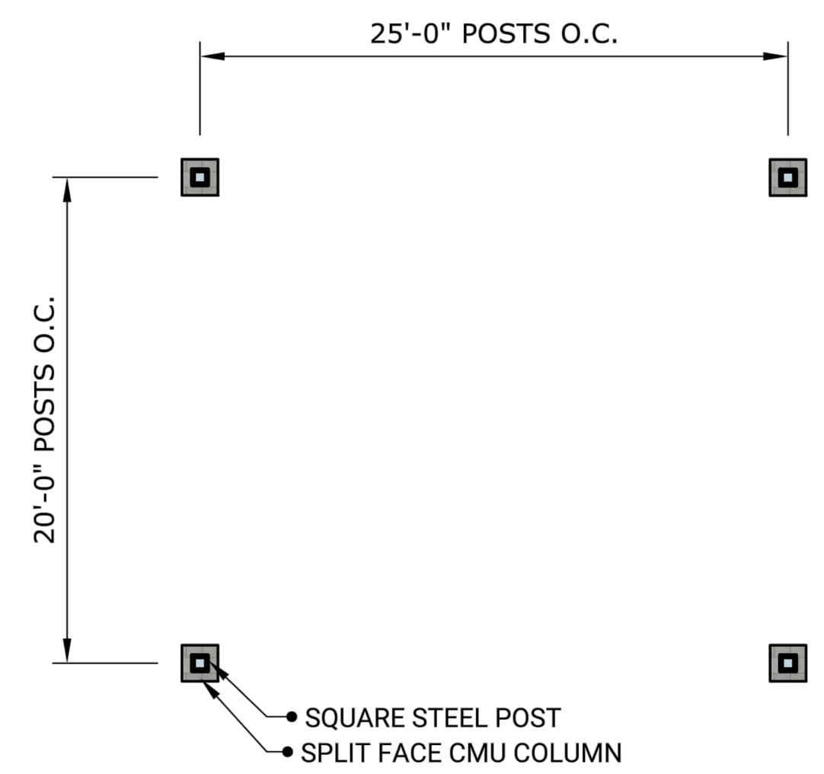
Title
ARCHITECTURAL ELEVATIONS

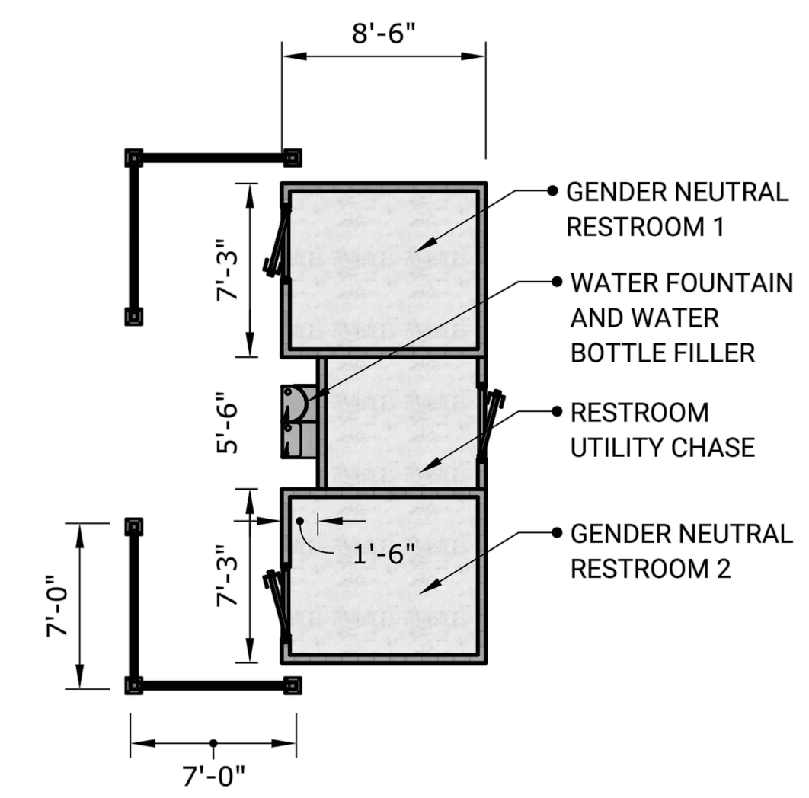
Project No. 193806110
Scale
Drawing No. A-100
Sheet
Revision 0

ORIGINAL SHEET - ARCH E1

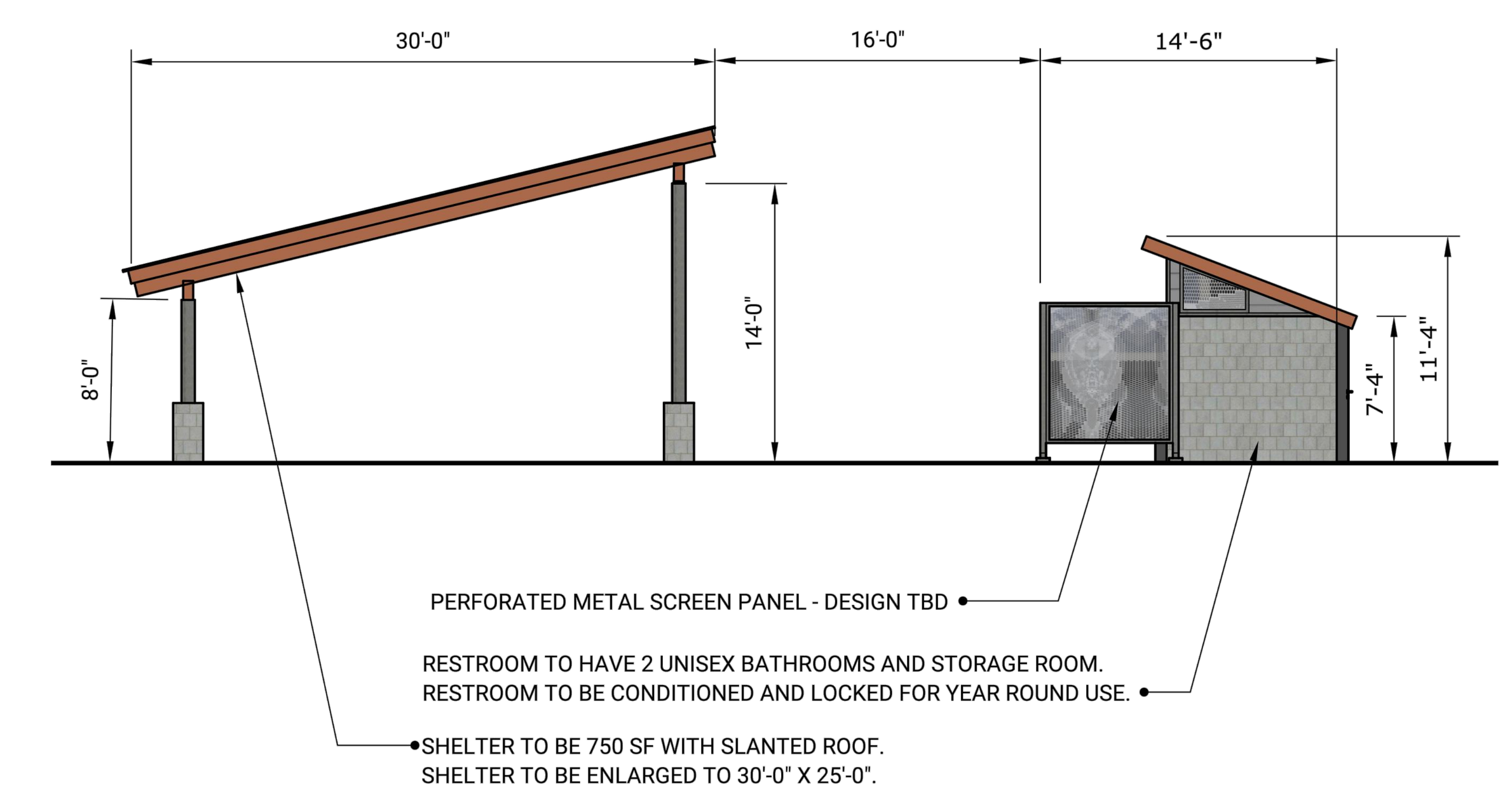


RENDERED FRONT ELEVATION
SCAEL: 1/4" = 1'-0"





RENDERED FLOOR PLAN
SCAEL: 1/8" = 1'-0"

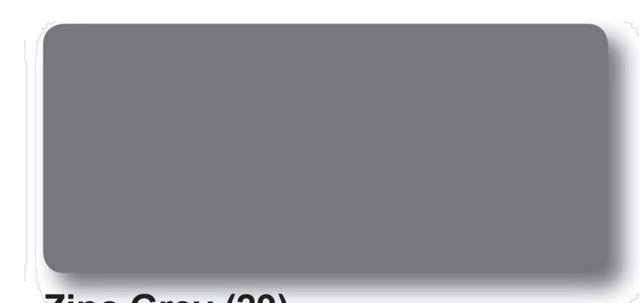


RENDERED SIDE ELEVATION
SCAEL: 1/8" = 1'-0"

1.	Ellie Gray	SW 7650
2.	Snowbound	SW 7004
3.	Seaworthy	SW 7620

SHELTER COLORS

MANUFACTURER: SHERWIN WILLIAMS OR APPROVED EQUAL
MATERIAL: PAINT
COLOR: NUMBER CALLOUTS REFER TO ELEVATIONS
LOCATION: SHELTER COLUMNS

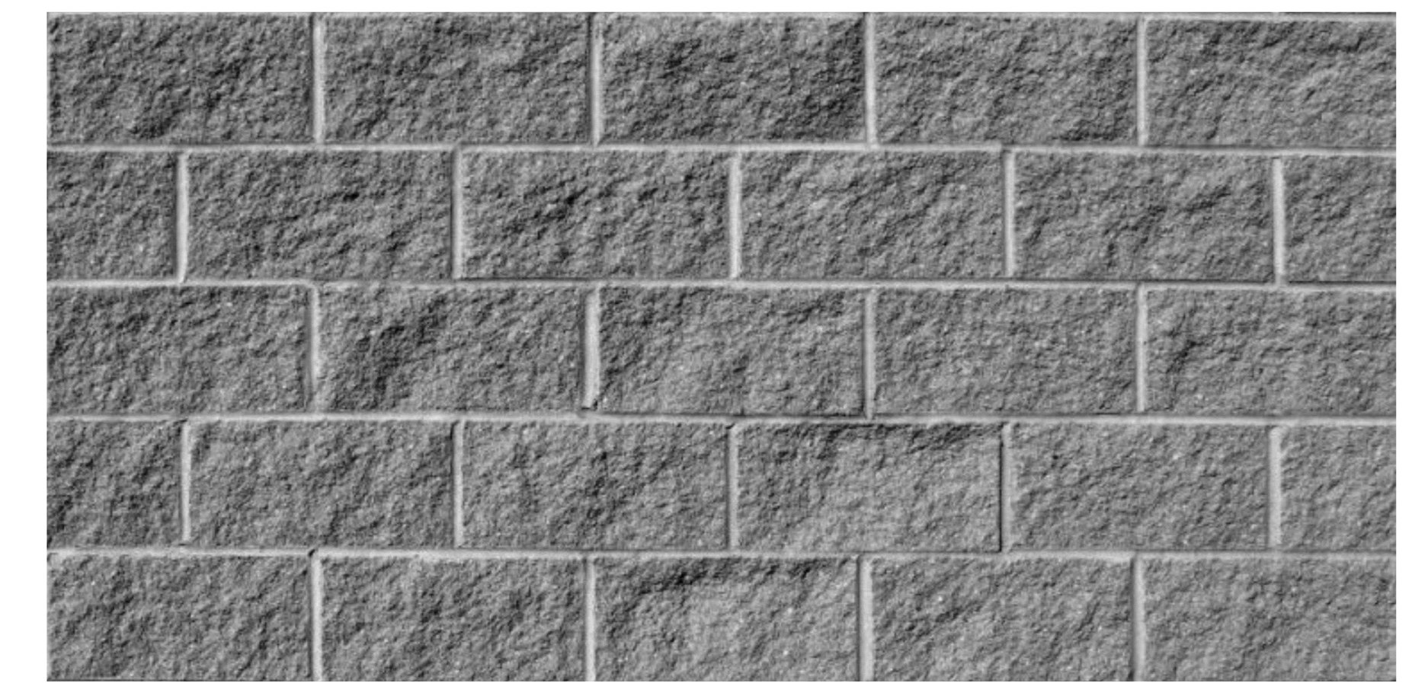


Zinc Grey (29)

SR = 0.41	TE = 0.86	SRI = 45

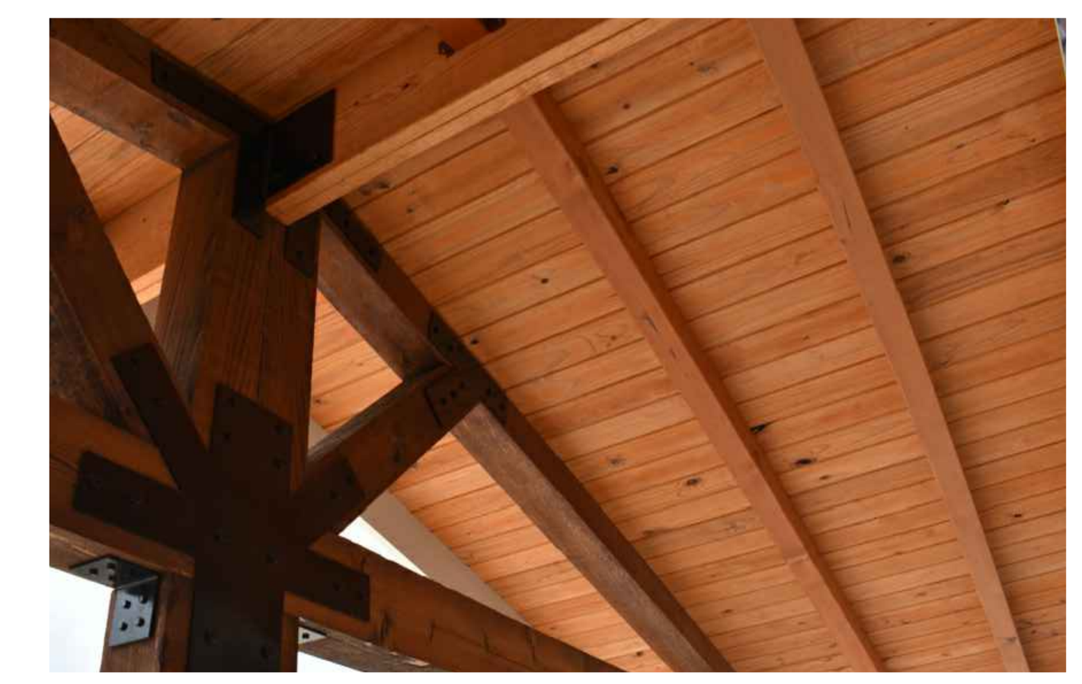
SHELTER METAL MATERIAL

MATERIAL: POWDER COATED STEEL
COLOR: ZINC GREY
LOCATION: SHELTER STRUCTURAL SYSTEM



PAINTED SPLIT FACE CMU

MATERIAL: SPLIT FACE CMU
COLOR: NUMBER CALLOUTS REFER TO ELEVATIONS
LOCATION: COLUMNS WRAP AROUND SHELTER POSTS



WOOD MATERIAL

MATERIAL: XX WOOD
COLOR: REDWOOD
LOCATION: SHELTER CEILING

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WATER WORKS PARK

Mission, KS

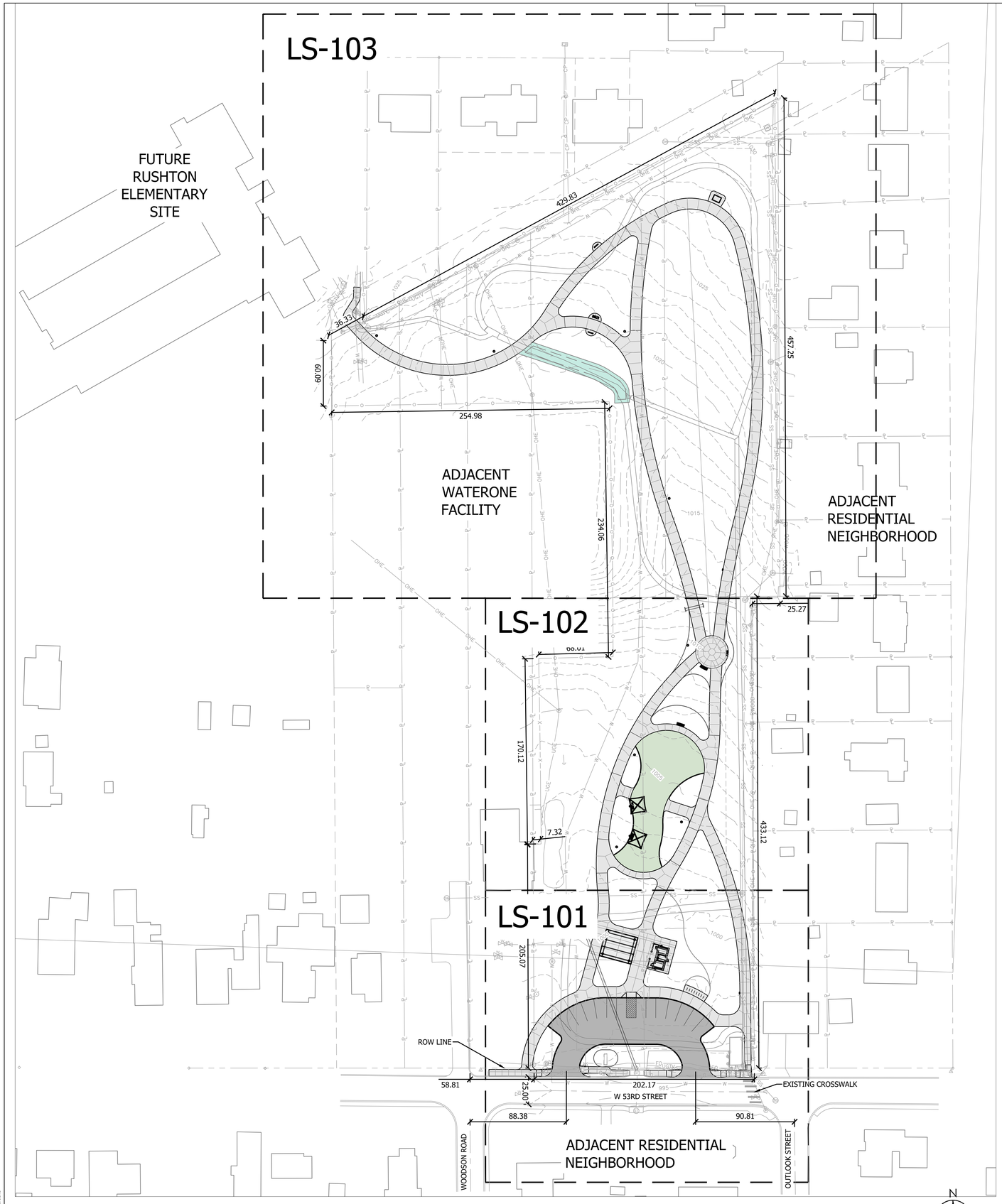
Title

ARCHITECTURAL ELEVATIONS

Project No. 193806110
Scale

Drawing No.	Sheet	Revision
A-101		0

ORIGINAL SHEET - ARCH E1



01 OVERALL SITE PLAN

SITE DATA TABLE	
ZONING DISTRICT LAND AREA	100% OF SITE (4.11 ACRES) R-1 SINGLE FAMILY RESIDENTIAL DISTRICT
TOTAL BUILDING FLOOR AREA	920 SF
SITE FLOOR AREA RATIO	0.0051
NUMBER OF DWELLING UNITS	0
DENSITY OF RESIDENTIAL DEVELOPMENT	N/A
REQUIRED NUMBER OF PARKING STALLS	EXISTING - 7 STALLS
PROVIDED NUMBER OF PARKING STALLS	12 STALLS AND 2 ADA ACCESSIBLE STALLS

LEGEND

FEATURE LEGEND

- CONTROL POINT
- FIRE HYDRANT
- GATE
- GUY POLE
- GUY WIRE
- POST (BOLLARD)
- POWER POLE
- PROPERTY PIN
- SANITARY MANHOLE
- SECTION CORNER
- TREE
- SIGN
- STORM INLET
- STORM MANHOLE
- TELEVISION VAULT
- UNKNOWN VAULT
- WATER MANHOLE
- WATER METER
- WATER VALVE

LINE STYLE LEGEND

- BUILDING OUTLINE
- CHAIN LINK FENCE
- CULVERT PIPE
- ELECTRIC (BURIED)
- FIBER OPTIC LINE (BURIED)
- GAS LINE (BURIED)
- OVERHEAD ELECTRIC
- PROPERTY LINE
- RIGHT OF WAY LINE
- SANITARY SEWER (BURIED)
- SECTION LINE
- STORM DRAIN (BURIED)
- TELEVISION (BURIED)
- WATER LINE (BURIED)
- WOOD FENCE

- CONCRETE PAVING
- ASPHALT PAVING
- POURED-IN-PLACE PLAY SURFACING
- BMP TREATMENT AREA

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Title
OVERALL SITE PLAN

Project No. 193806110
Scale
Drawing No. LS-100
Sheet
Revision 0

MATCHLINE - SEE SHEET LS-102

PROPOSED 750 SF OPEN AIR PARK SHELTER STRUCTURE. UNIVERSAL DESIGN COMPONENT: OPEN AIR SHELTER WITH MULTIPLE ACCESS POINTS GIVES FLEXIBLE FUNCTIONALITY FOR THE USE OF THIS SPACE.

PROPOSED STORMWATER AREA INLET. STORMWATER PIPE CONNECTS INTO EXISTING STORMWATER SYSTEM.

PROPOSED 2 STALL UNISEX RESTROOM STRUCTURE. UNIVERSAL DESIGN COMPONENT: NON-GENDER BASED RESTROOMS ALLOW FOR INCLUSIVE USE FOR ALL.

DECORATIVE SCREEN FENCE

ADA RAMP PER ADA CODE

8 - BIKE RACKS

EXISTING PET WASTE STATION TO BE RELOCATED TO THIS LOCATION.

EXISTING SIDEWALK EXTENTS TO BE REMOVED

(2) ADA STALLS

14 TOTAL PARKING STALLS

EXISTING PARK ENTRY SIGN

VEGETATIVE SCREEN AROUND UTILITY ENCLOSURE

EXISTING CROSSWALK

CURB RAMP PER ADA CODE

REPLACE ALL SIDEWALKS ALONG STREET

PLANTING AREA

W 53RD STREET

OUTLOOK STREET

01 ENLARGED SITE PLAN

LEGEND

FEATURE LEGEND

CONTROL POINT
FIRE HYDRANT
GATE
GUY POLE
GUY WIRE
POST (BOLLARD)
POWER POLE
PROPERTY PIN
SANITARY MANHOLE
SECTION CORNER
TREE
SIGN
STORM INLET
STORM MANHOLE
TELEVISION VAULT
UNKNOWN VAULT
WATER MANHOLE
WATER METER
WATER VALVE

LINE STYLE LEGEND

BUILDING OUTLINE
CHAIN LINK FENCE
CULVERT PIPE
ELECTRIC (BURIED)
FIBER OPTIC LINE (BURIED)
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OVERHEAD ELECTRIC
PROPERTY LINE
RIGHT OF WAY LINE
SANITARY SEWER (BURIED)
SECTION LINE
STORM DRAIN (BURIED)
TELEVISION (BURIED)
WATER LINE (BURIED)
WOOD FENCE

- CONCRETE PAVING
- ASPHALT PAVING
- POURED-IN-PLACE PLAY SURFACING
- BMP TREATMENT AREA

KEYMAP

N

0 10' 20'

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Title
ENLARGED SITE PLAN

Project No. 193806110	Scale	
Drawing No. LS-101	Sheet	Revision 0

MATCHLINE - SEE SHEET LS-103

PROPOSED STORMWATER PIPE CROSSING UNDER TRAIL.

EXISTING SITE SECURITY FENCING TO REMAIN

PROPOSED SOLAR LED LIGHTING

PROPOSED BENCH SEATING

PROPOSED COMMUNITY GREETING SPACE UNIVERSAL DESIGN COMPONENT: CREATING A KEY GATHERING POINT WHERE USERS PASS EACH OTHER WILL PROMOTE SOCIAL ENGAGEMENT AND NEIGHBORHOOD CONNECTIONS WHILE ALSO SERVING AS A CENTRAL LOCATION FOR EVENTS SUCH AS ART IN THE PARK.

USING LARGE SHADE TREES TO CREATE SHADED SPACE WITH VIEWS OUTWARD WILL HELP CREATE A SENSE OF PLACE IN THE PARK.

PROPOSED SIGNAGE PANEL WILL EDUCATE ON THE WORKINGS OF WATERONE SYSTEMS ON SITE.

PLANTING AREA

30.00

EXISTING SIDEWALK EXTENTS TO BE REMOVED

10.00

R5.00

6.00

R35.00

PROPOSED PARK TRAILS UNIVERSAL DESIGN COMPONENT: 10' WIDE TRAILS ALLOW FOR THE SHARED USE OF WALKING OR BIKING THROUGH THE PARK.

PROPOSED MULTI-TIERED PLAYGROUND - TOP TIER - ALL AGES PLAY AREA. UNIVERSAL DESIGN COMPONENT: SWINGS FOR ALL TYPES OF ABILITY WILL BE LOCATED AT THE TOP TIER OF THE PLAYGROUND WITH VIEW LOOKING OUT OVER THE PLAYGROUND.

R247.00

R245.00

PROPOSED MULTI-TIERED PLAYGROUND - MIDDLE TIER - AGE 5-12 FOCUSED PLAY AREA. UNIVERSAL DESIGN COMPONENT: CLIMBING AND SLIDING PLAY FEATURES WILL PROMOTE CREATIVE PLAY FOR ALL USERS.

PROPOSED SHADE STRUCTURE

R25.00

R3.00

PROPOSED MULTI-TIERED PLAYGROUND - BOTTOM TIER - AGE 2-5 FOCUSED PLAY AREA. UNIVERSAL DESIGN COMPONENT: THE LOWER TIER WILL PROVIDE ACCESSIBLE PLAY FEATURES WHILE BEING IN CLOSE PROXIMITY TO THE PARK SHELTER FOR SUPERVISION. NON-VERBAL COMMUNICATION BOARDS AND MUSICAL PLAY ELEMENTS WILL PROMOTE PLAY FOR ALL USERS.

R32.00

R5.00

6.00

MATCHLINE - SEE SHEET LS-101

01 ENLARGED SITE PLAN

LEGEND

FEATURE LEGEND

CONTROL POINT
FIRE HYDRANT
GATE
GUY POLE
GUY WIRE
POST (BOLLARD)
POWER POLE
PROPERTY PIN
SANITARY MANHOLE
SECTION CORNER
TREE
SIGN
STORM INLET
STORM MANHOLE
TELEVISION VAULT
UNKNOWN VAULT
WATER MANHOLE
WATER METER
WATER VALVE

LINE STYLE LEGEND

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OVERHEAD ELECTRIC
PROPERTY LINE
RIGHT OF WAY LINE
SANITARY SEWER (BURIED)
SECTION LINE
STORM DRAIN (BURIED)
TELEVISION (BURIED)
WATER LINE (BURIED)
WOOD FENCE

- CONCRETE PAVING
- ASPHALT PAVING
- POURED-IN-PLACE PLAY SURFACING
- BMP TREATMENT AREA

KEYMAP

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0 10' 20'

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Mission, KS

Title
ENLARGED SITE PLAN

Project No. 193806110
Scale
Drawing No. LS-102
Sheet
Revision 0

FUTURE RUSHTON ELEMENTARY SITE

ADJACENT WATERONE FACILITY

ADJACENT RESIDENTIAL NEIGHBORHOOD

BLOCK 2 LOT 1

BLOCK 2 LOT 2

BLOCK 2 LOT 3

BLOCK 3 LOT 6

LOT 6

LOT 7

LOT 5

AREA INLET
FL 12" CMP 1028.57'

FL 12" CMP 1023.91'

SANITARY MANHOLE #1625
RIM ELEVATION = 1028.66'
FLOOT (E) = 1002.65'

SANITARY MANHOLE #1274
RIM ELEVATION = 1030.82'
FL OUT (S) = 1019.12' (8" CLAY)
FL IN (W)= 1018.42' (8" CLAY)
FL IN (NE) = 1019.42' (8" CLAY)

SANITARY MANHOLE #1249
RIM ELEVATION = 1025.02'
FL OUT (S) = 1016.52' (8" CLAY)
FL IN (NE) = 1017.12' (8" CLAY)
FL IN (N) = 1016.62' (8" CLAY)

SANITARY MANHOLE #1218
RIM ELEVATION = 1016.15'
FL OUT (SW) = 1006.45' (8" CLAY)
FL IN (E) = 1006.75' (8" CLAY)
FL IN (N) = 1011.65' (8" CLAY)
FL IN (N) = 1006.65' (8" CLAY)

SANITARY SEWER #1211
RIM ELEVATION = 1013.90'

PROPOSED SIGNAGE PANEL WILL EDUCATE ON THE HISTORY OF THE STRANG LINE RAILROAD.

EXISTING SIDEWALK EXTENTS TO BE REMOVED

PARK CONNECTION INTO RUSHTON ELEMENTARY

PROPOSED BENCH SEATING

PROPOSED SOLAR LED LIGHTING

PROPOSED SIGNAGE PANEL WILL EDUCATE ON THE NATURAL SYSTEMS OF A NATIVE VEGETATED SWALE AND THE HYDROLOGIC CYCLE.

PROPOSED NATIVE VEGETATED SWALE BMP.

PROPOSED PARK TRAILS
UNIVERSAL DESIGN COMPONENT: 10' WIDE TRAILS ALLOW FOR THE SHARED USE OF WALKING OR BIKING THROUGH THE PARK.

PROPOSED SOLAR LED LIGHTING

EXISTING SITE SECURITY FENCING TO REMAIN

PROPOSED SOLAR CHARGING TABLE AND BENCH
UNIVERSAL DESIGN COMPONENT: SOLAR CHARGING TABLE WILL PROVIDE A SPACE FOR USERS OF ALL TYPES TO SIT AND RECHARGE PHONES, TABLETS, OR OTHER ELECTRONICS WHICH IN TURN PROMOTES SOCIAL INTERACTION.

EXISTING SIDEWALK EXTENTS TO BE REMOVED

EXISTING PET WASTE STATION TO BE RELOCATED TO THIS LOCATION.

46.50

49.00

10.00

R42.00

R495.00

R495.00

R855.00

10.00

R495.00

R495.00

10.00

R745.00

R745.00

MATCHLINE - SEE SHEET LS-102

01 ENLARGED SITE PLAN

0 20' 40'

LEGEND

FEATURE LEGEND

- CONTROL POINT
- FIRE HYDRANT
- GATE
- GUY POLE
- GUY WIRE
- POST (BOLLARD)
- POWER POLE
- PROPERTY PIN
- SANITARY MANHOLE
- SECTION CORNER
- TREE
- SIGN
- STORM INLET
- STORM MANHOLE
- TELEVISION VAULT
- UNKNOWN VAULT
- WATER MANHOLE
- WATER METER
- WATER VALVE

LINE STYLE LEGEND

- BUILDING OUTLINE
- CHAIN LINK FENCE
- CULVERT PIPE
- ELECTRIC (BURIED)
- FIBER OPTIC LINE (BURIED)
- GAS LINE (BURIED)
- OVERHEAD ELECTRIC
- PROPERTY LINE
- RIGHT OF WAY LINE
- SANITARY SEWER (BURIED)
- SECTION LINE
- STORM DRAIN (BURIED)
- TELEVISION (BURIED)
- WATER LINE (BURIED)
- WOOD FENCE

- CONCRETE PAVING
- ASPHALT PAVING
- POURED-IN-PLACE PLAY SURFACING
- BMP TREATMENT AREA

KEYMAP

N

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Revision	By	Appd.	YY.MM.DD
FDP SUBMITTAL	JS	KVE	23.07.13

Issued	By	Appd.	YY.MM.DD

File Name: | Dwn. | Chkd. | Dsgn. | YY.MM.DD

Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
ENLARGED SITE PLAN

Project No. 193806110 | Scale

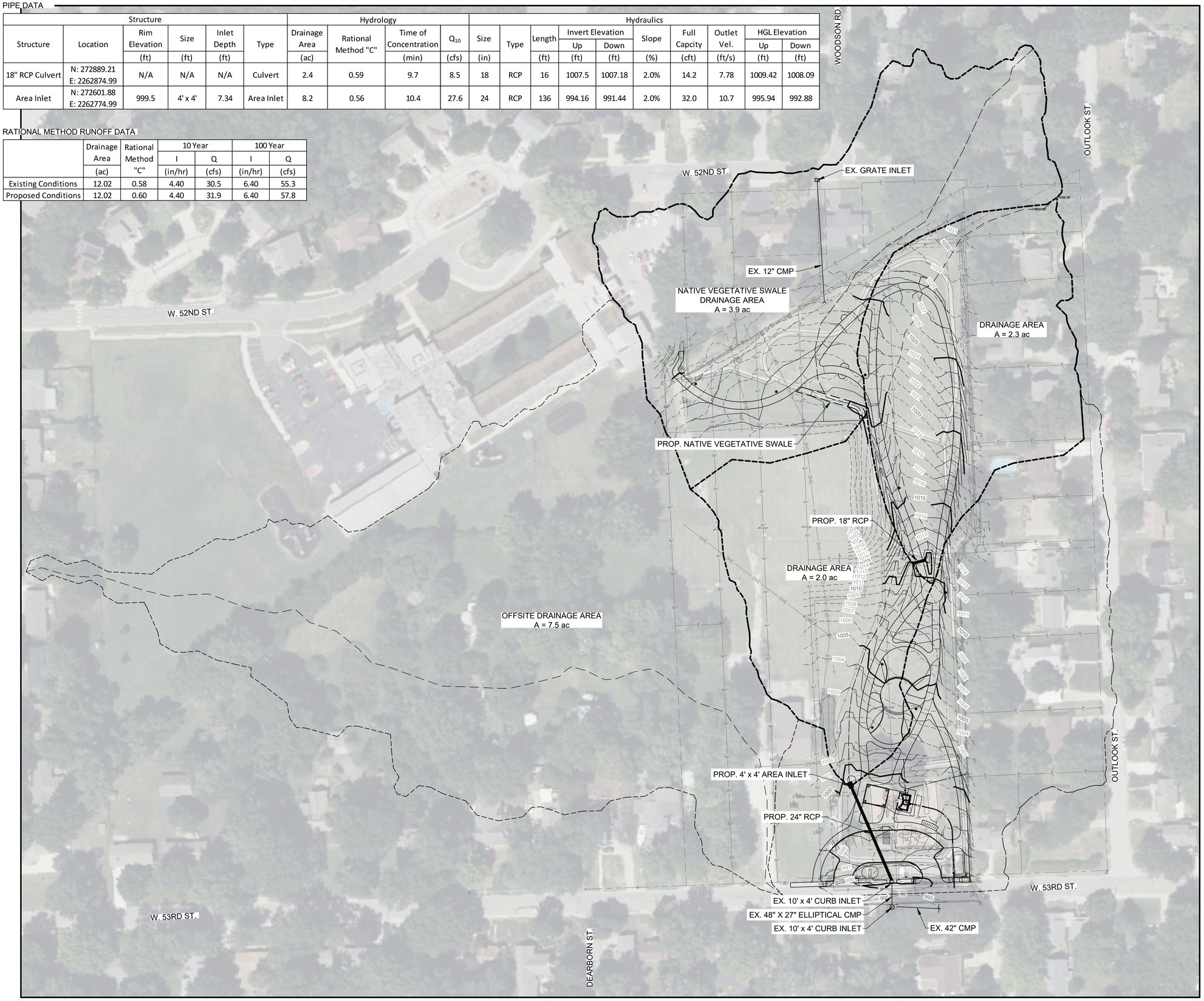
Drawing No. LS-103 | Sheet | Revision 0

PIPE DATA

Structure						Hydrology				Hydraulics									
Structure	Location	Rim Elevation	Size	Inlet Depth	Type	Drainage Area	Rational Method "C"	Time of Concentration	Q_{10}	Size	Type	Length	Invert Elevation		Slope	Full Capcity	Outlet Vel.	HGL Elevation	
													Up	Down				Up	Down
		(ft)	(ft)	(ft)		(ac)		(min)	(cfs)	(in)		(ft)	(ft)	(ft)	(%)	(cft)	(ft/s)	(ft)	(ft)
18" RCP Culvert	N: 272889.21 E: 2262874.99	N/A	N/A	N/A	Culvert	2.4	0.59	9.7	8.5	18	RCP	16	1007.5	1007.18	2.0%	14.2	7.78	1009.42	1008.09
Area Inlet	N: 272601.88 E: 2262774.99	999.5	4' x 4'	7.34	Area Inlet	8.2	0.56	10.4	27.6	24	RCP	136	994.16	991.44	2.0%	32.0	10.7	995.94	992.88

RATIONAL METHOD RUNOFF DATA

	Drainage Area	Rational Method	10 Year		100 Year	
			I	Q	I	Q
	(ac)	"C"	(in/hr)	(cfs)	(in/hr)	(cfs)
Existing Conditions	12.02	0.58	4.40	30.5	6.40	55.3
Proposed Conditions	12.02	0.60	4.40	31.9	6.40	57.8



NOTE: LiDAR WAS UTILIZED TO DETERMINE DRAINAGE BOUNDARIES OUTSIDE OF SURVEY EXTENTS

N

0 20' 40'

Longest Flow Path
Drainage Subbasin Area
Drainage Area

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FINAL DEVELOPMENT PLAN	TAW	CLP	23.07.13

Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD

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Client/Project
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WATER WORKS PARK

Mission, KS

Title
DRAINAGE AREA MAP

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
C-100		0

ORIGINAL SHEET - ARCH E1

01 OVERALL GRADING PLAN

ORIGINAL SHEET - ARCH E1

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Title
OVERALL GRADING PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LS-200		0

MATCHLINE - SEE SHEET LS-202

W 53RD STREET

OUTLOOK STREET

SURFACE SLOPE DATA			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	0.000%	5.900%	
2	6.000%	10.900%	
3	11.000%	17.900%	
4	18.000%	100.000%	

KEYMAP

N

0 10' 20'

01 ENLARGED GRADING PLAN

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Title
ENLARGED GRADING PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LS-201		0

MATCHLINE - SEE SHEET LS-203

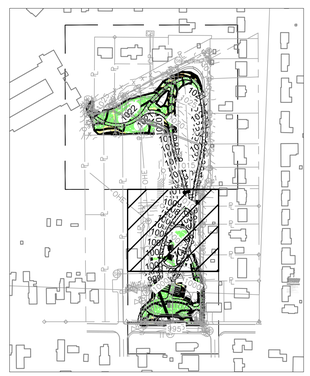
MATCHLINE - SEE SHEET LS-201

01 ENLARGED GRADING PLAN

ORIGINAL SHEET - ARCH E1

SURFACE SLOPE DATA			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	0.000%	5.900%	
2	6.000%	10.900%	
3	11.000%	17.900%	
4	18.000%	100.000%	

KEYMAP



N

0 10' 20'

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Mission, KS

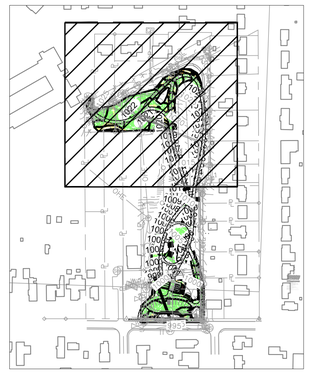
Title
ENLARGED GRADING PLAN

Project No. 193806110 | Scale

Drawing No. LS-202 | Sheet | Revision 0

SURFACE SLOPE DATA			
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	0.000%	5.900%	
2	6.000%	10.900%	
3	11.000%	17.900%	
4	18.000%	100.000%	

KEYMAP



N

0 20' 40'

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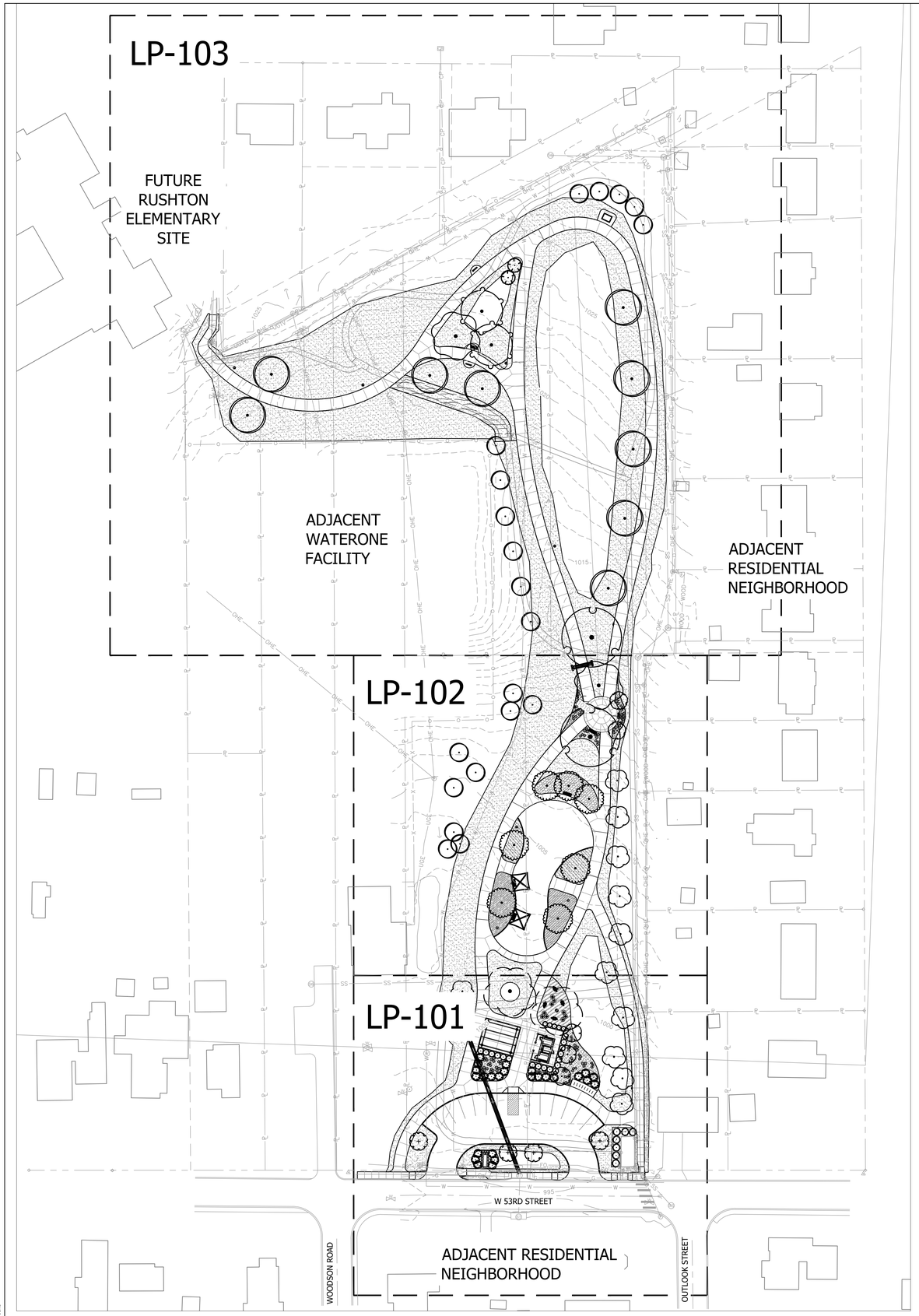
Title
ENLARGED GRADING PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LS-203		0



01 OVERALL LANDSCAPE PLAN

PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL
	QM	2	QUERCUS MUEHLENBERGII	CHINKAPIN OAK	B&B	2.5" CAL.
	UP	2	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	B&B	2.5" CAL.
	ZG	2	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE JAPANESE ZELKOVA	B&B	2.5" CAL.
EVERGREEN TREE	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**
	JF	7	JUNIPERUS CHINENSIS 'FAIRVIEW'	FAIRVIEW JUNIPER	B&B	6` HT.
ORNAMENTAL TREES	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	**CAL**
	AB	2	ACER PALMATUM 'BLOODGOOD'	BLOODGOOD JAPANESE MAPLE	B&B	1.5" CAL.
	AP	2	AMELANCHIER X GRANDIFLORA 'PRINCESS DIANA'	PRINCESS DIANA APPLE SERVICEBERRY	B&B	1.5" CAL.
	CC	7	CERCIS CANADENSIS	EASTERN REDBUD	B&B	1.5" CAL.
	CR	3	COTINUS COGGYGRIA 'ROYAL PURPLE'	ROYAL PURPLE SMOKE TREE	B&B	1.5" CAL.
SHRUBS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	
	BB	5	BUDDLEJA DAVIDII 'BLACK KNIGHT'	BLACK KNIGHT BUTTERFLY BUSH	#5 CONT.	
	JH	25	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP CREEPING JUNIPER	#5 CONT.	
	SM	17	SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	#5 CONT.	
PERENNIALS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	
	AM	51	ACHILLEA MILLEFOLIUM	COMMON YARROW	#1 CONT.	
	BA	9	BAPTISIA AUSTRALIS	BLUE WILD INDIGO	#1 CONT.	
	GM	24	GERANIUM MACULATUM	SPOTTED GERANIUM	#1 CONT.	
	SO	68	SYMPHYOTRICHUM OBLONGIFOLIUM	FALL ASTER	#1 CONT.	
GROUND COVERS	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	
	TS	60,931 SF	TURF SOD	DROUGHT TOLERANT FESCUE BLEND	SOD	
PERENNIALS & ORNAMENTAL GRASSES (HATCH)	**CODE**	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONT**	
	CV	324	CAREX VULPINOIDEA	FOX SEDGE	#1 CONT.	18" o.c.
	PC	115	PANICUM VIRGATUM 'CLOUD NINE'	CLOUD NINE SWITCH GRASS	#1 CONT.	36" o.c.
	PH	102	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	#1 CONT.	36" o.c.
	PS	277	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#1 CONT.	36" o.c.
	SS	776	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	THE BLUES LITTLE BLUESTEM	#1 CONT.	18" o.c.
	SI	96	SORGHASTRUM NUTANS 'INDIAN STEEL'	INDIAN STEEL INDIAN GRASS	#1 CONT.	36" o.c.

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE RE-PLANTED
- FUTURE TREE - MASTER PLAN

NOTE:

LANDSCAPE PLAN SHALL BE IN ACCORDANCE WITH THE MUNICIPAL CODE FOR NATIVE AND NON-INVASIVE SPECIES.

DISEASED OR DEAD VEGETATION WILL BE REMOVED AND REPLANTED ACCORDING TO THE PLAN DURING THE NEXT SEASONAL PLANTING CYCLE.

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Permit-Seal

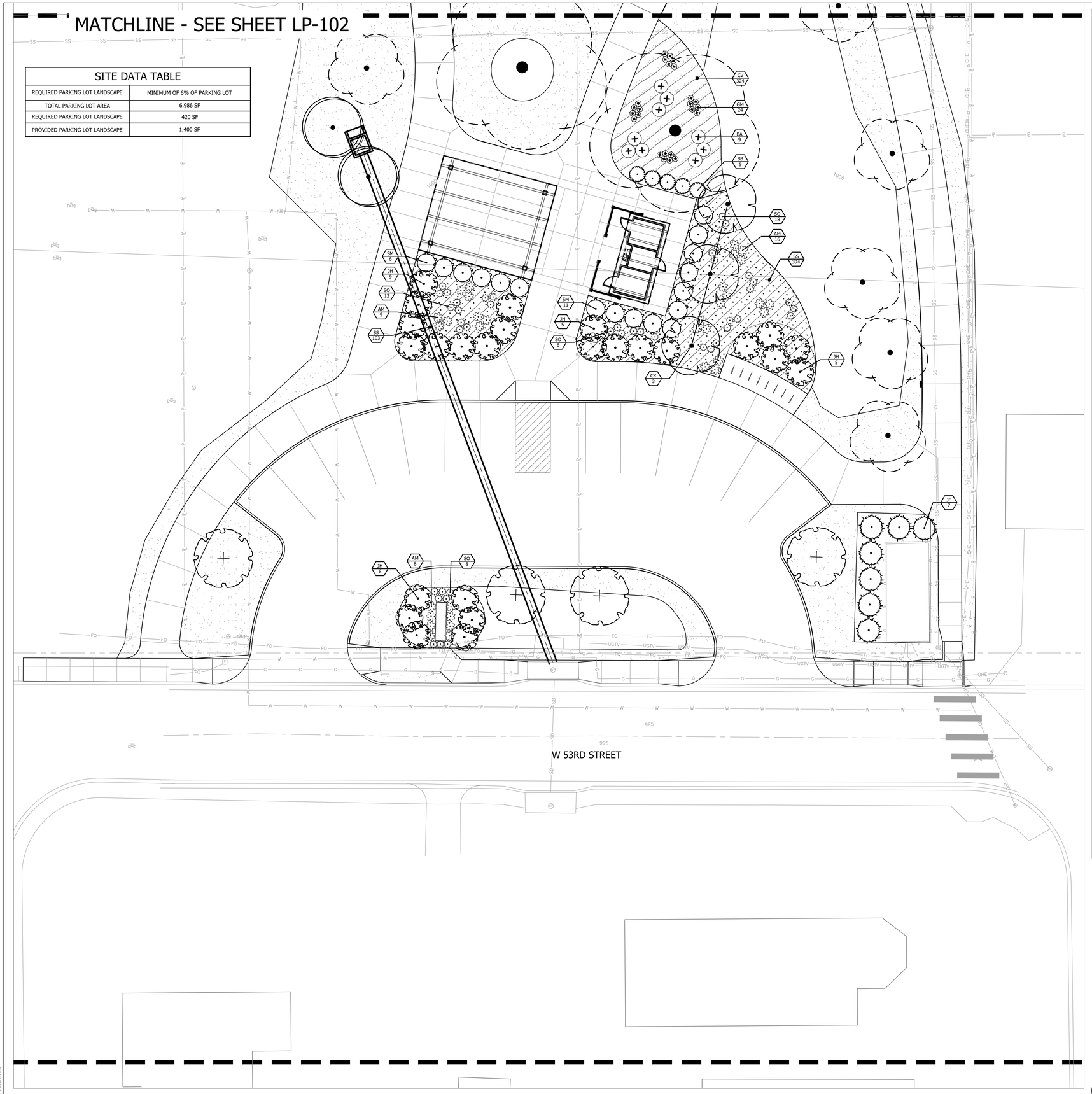
Client/Project
CITY OF MISSION
WATER WORKS PARK
Mission, KS

Title
OVERALL LANDSCAPE PLAN

Project No. 193806110 | Scale | Drawing No. LP-100 | Sheet | Revision 0

MATCHLINE - SEE SHEET LP-102

SITE DATA TABLE	
REQUIRED PARKING LOT LANDSCAPE	MINIMUM OF 6% OF PARKING LOT
TOTAL PARKING LOT AREA	6,986 SF
REQUIRED PARKING LOT LANDSCAPE	420 SF
PROVIDED PARKING LOT LANDSCAPE	1,400 SF



PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL NAME
	QM	QUERCUS MUEHLENBERGII
	UP	ULMUS AMERICANA 'PRINCETON'
	ZG	ZELKOVA SERRATA 'GREEN VASE'

EVERGREEN TREE	CODE	BOTANICAL NAME
	JF	JUNIPERUS CHINENSIS 'FAIRVIEW'

ORNAMENTAL TREES	CODE	BOTANICAL NAME
	AB	ACER PALMATUM 'BLOODGOOD'
	AP	AMELANCHIER X GRANDIFLORA 'PRINCESS DIANA'
	CC	CERCIS CANADENSIS
	CR	COTINUS COGGYGRIA 'ROYAL PURPLE'

SHRUBS	CODE	BOTANICAL NAME
	BB	BUDDLEJA DAVIDII 'BLACK KNIGHT'
	JH	JUNIPERUS HORIZONTALIS 'BLUE CHIP'
	SM	SYRINGA MEYERI 'PALIBIN'

PERENNIALS	CODE	BOTANICAL NAME
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	BA	BAPTISIA AUSTRALIS
	GM	GERANIUM MACULATUM
	SO	SYMPHYOTRICHUM OBLONGIFOLIUM

GROUND COVERS	CODE	BOTANICAL NAME
	TS	TURF SOD

PERENNIALS & ORNAMENTAL GRASSES (HATCH)	CODE	BOTANICAL NAME
	CV	CAREX VULPINOIDEA
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	SS	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'
	SI	SORGHASTRUM NUTANS 'INDIAN STEEL'

- EXISTING TREE TO REMAIN
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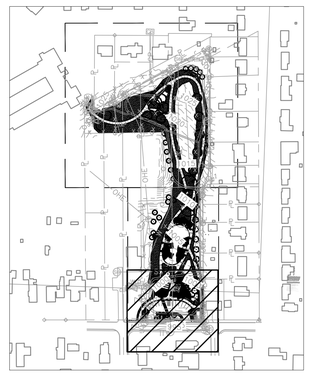
KEYMAP



N

0 10' 20'

01 ENLARGED PLANTING PLAN

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WATER WORKS PARK

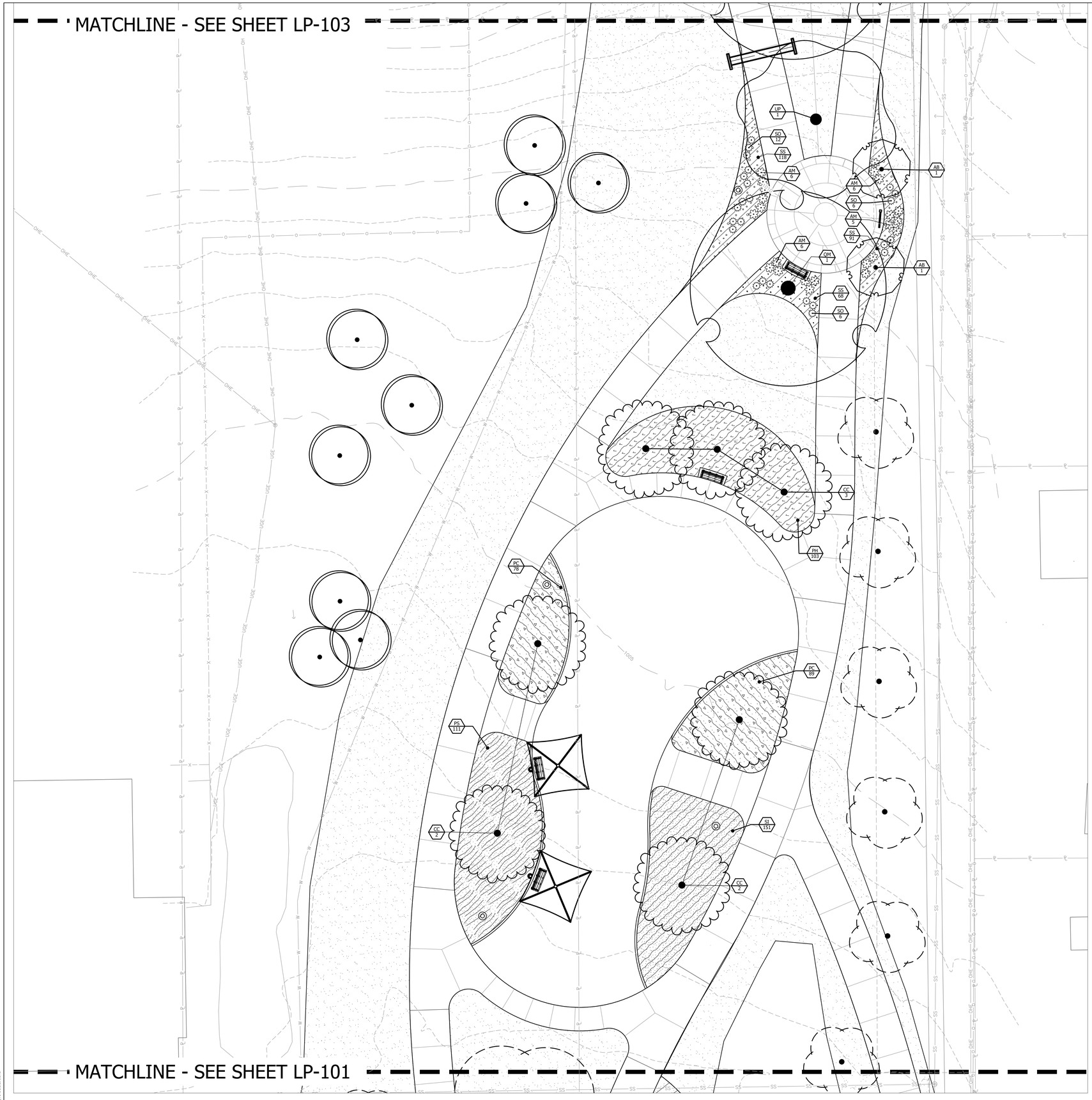
Mission, KS

Title
ENLARGED PLANTING PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LP-101		0

ORIGINAL SHEET - ARCH E1

MATCHLINE - SEE SHEET LP-103



MATCHLINE - SEE SHEET LP-101

01 ENLARGED PLANTING PLAN

0 10' 20'

PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL NAME
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	UP	ULMUS AMERICANA 'PRINCETON'
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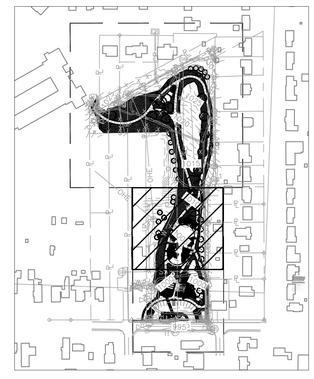
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE RE-PLANTED
- FUTURE TREE - MASTER PLAN

KEYMAP



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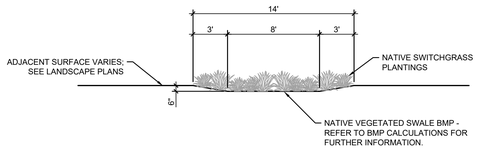
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
ENLARGED PLANTING PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LP-102		0



A NATIVE VEGETATED SWALE SECTION
SCALE: 3/16" = 1'-0"

01 ENLARGED PLANTING PLAN

0 20' 40'

PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL NAME
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ORNAMENTAL TREES	CODE	BOTANICAL NAME
	AB	ACER PALMATUM 'BLOODGOOD'
	AP	AMELANCHIER X GRANDIFLORA 'PRINCESS DIANA'
	CC	CERCIS CANADENSIS
	CR	COTINUS COGGYGRIA 'ROYAL PURPLE'

SHRUBS	CODE	BOTANICAL NAME
	BB	BUDDLEJA DAVIDII 'BLACK KNIGHT'
	JH	JUNIPERUS HORIZONTALIS 'BLUE CHIP'
	SM	SYRINGA MEYERI 'PALIBIN'

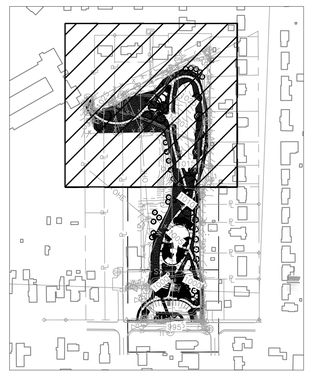
PERENNIALS	CODE	BOTANICAL NAME
	AM	ACHILLEA MILLEFOLIUM
	BA	BAPTISIA AUSTRALIS
	GM	GERANIUM MACULATUM
	SO	SYMPHYOTRICHUM OBLONGIFOLIUM

GROUND COVERS	CODE	BOTANICAL NAME
	TS	TURF SOD

PERENNIALS & ORNAMENTAL GRASSES (HATCH)	CODE	BOTANICAL NAME
	CV	CAREX VULPINOIDEA
	PC	PANICUM VIRGATUM 'CLOUD NINE'
	PH	PANICUM VIRGATUM 'HEAVY METAL'
	PS	PANICUM VIRGATUM 'SHENANDOAH'
	SS	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'
	SI	SORGHASTRUM NUTANS 'INDIAN STEEL'

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE RE-PLANTED
- FUTURE TREE - MASTER PLAN

KEYMAP



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Notes

Revision	By	Appd.	YY.MM.DD
FDP SUBMITTAL	JS	KVE	23.07.13

Issued	By	Appd.	YY.MM.DD

File Name: Dwn. Chkd. Dsgn. YY.MM.DD

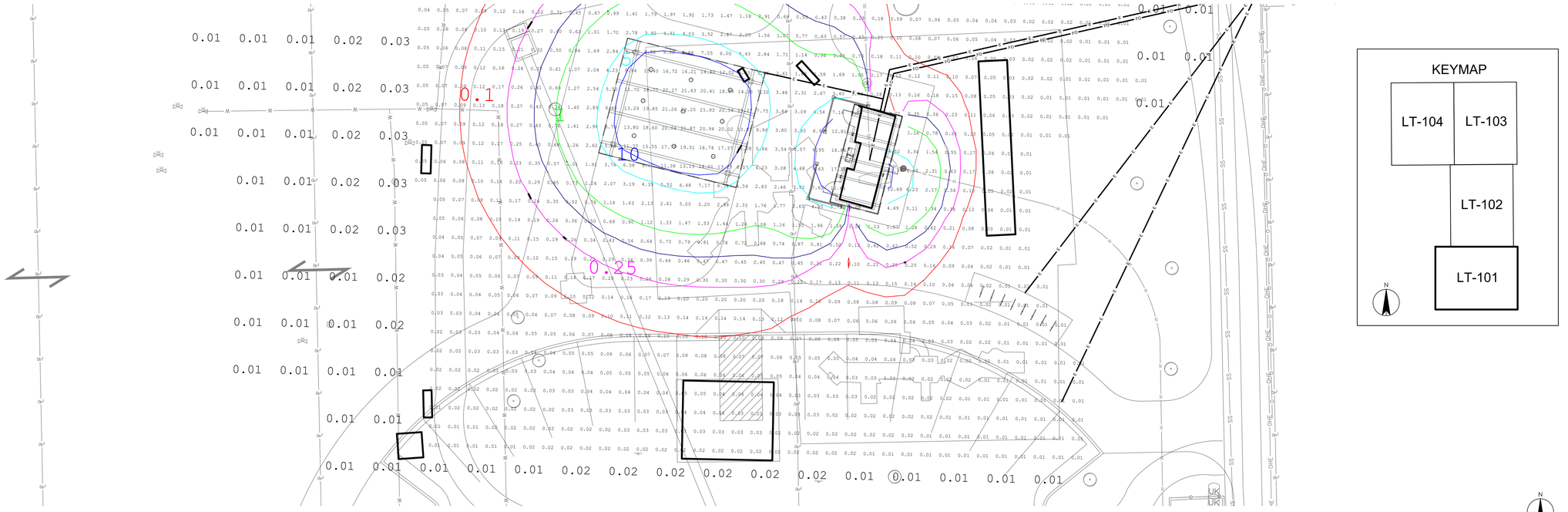
Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK
Mission, KS

Title
ENLARGED PLANTING PLAN

Project No. 193806110
Scale
Drawing No. LP-103
Sheet
Revision 0



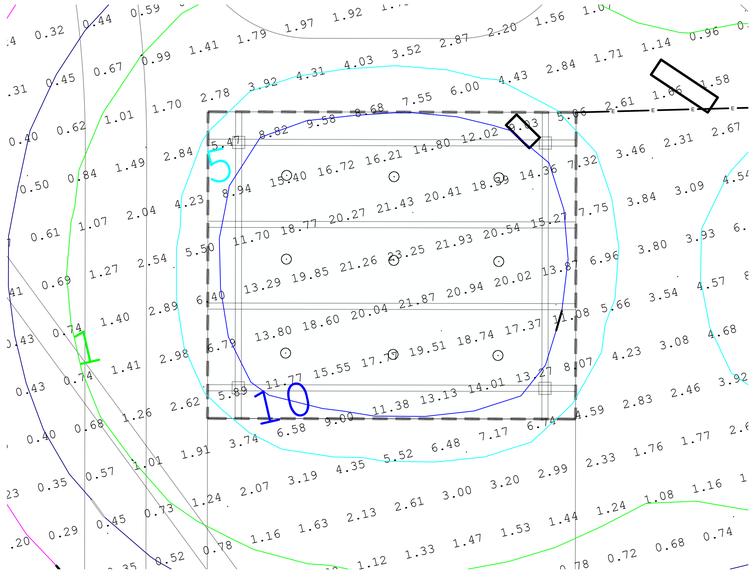
PHOTOMETRIC PLAN

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	4	CK16B 20W 3000K T2	Single	3900	0.900	YTR215925
	4	CK16B 20W 3000K T4	Single	3900	0.900	YTR215964
	4	slim17fa15adj_4k	SINGLE	1904.4	0.900	SLIM17FA15ADJ_4K
	9	MR13FD-PP-MW-20L35K-DCC-DV	SINGLE	N.A.	0.900	MR13FD-PP-MW-20L35K-DCC-DV

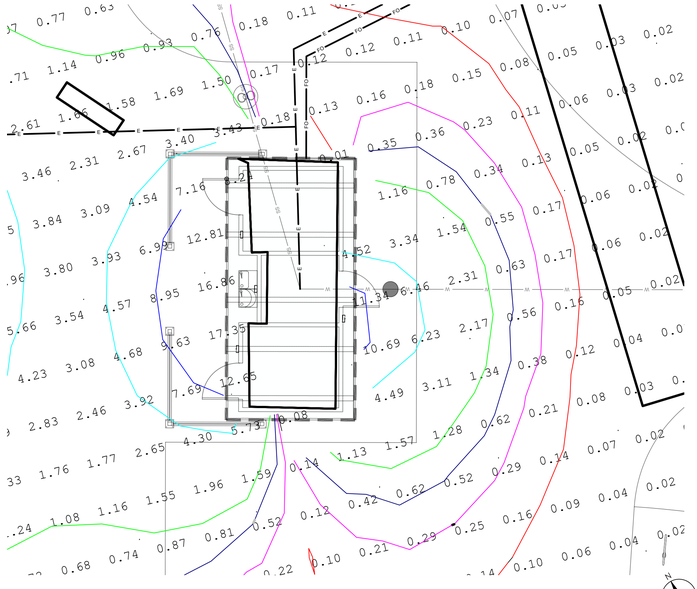
NOTE:
FULL SHIELDING BELOW THE LOWEST HORIZONTAL PLANE OF THE LIGHT-EMITTING PART OF ALL LIGHTING FIXTURES OVER 1000 INITIAL LAMP LUMENS.

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
area	Illuminance	Fc	0.23	2.11	0.00	N.A.	N.A.
building	Illuminance	Fc	1.10	23.25	0.01	110.00	2325
Pathway	Illuminance	Fc	0.67	2.14	0.02	33.50	107.00

LIGHTING SCHEDULE



SHELTER ENLARGEMENT PHOTOMETRIC PLAN



RESTROOM ENLARGEMENT PHOTOMETRIC PLAN

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Notes
1. All Light Fixtures Shall Meet the Requirements of The International Dark Sky Association.
   a. Trail Lighting - 3000k LED
   b. Restroom Lighting - 4000k LED
   c. Shelter Lighting - 3500k LED

Legend

Contour Color	Illuminance Level (Fc)
	10
	5
	1
	0.5
	0.25
	0.1

Revision	By	Appd.	YY.MM.DD
FINAL DEVELOPMENT PLAN	TAW	CLP	23.07.13

Issued	By	Appd.	YY.MM.DD

File Name: Dwn. Chkd. Dsgn. YY.MM.DD

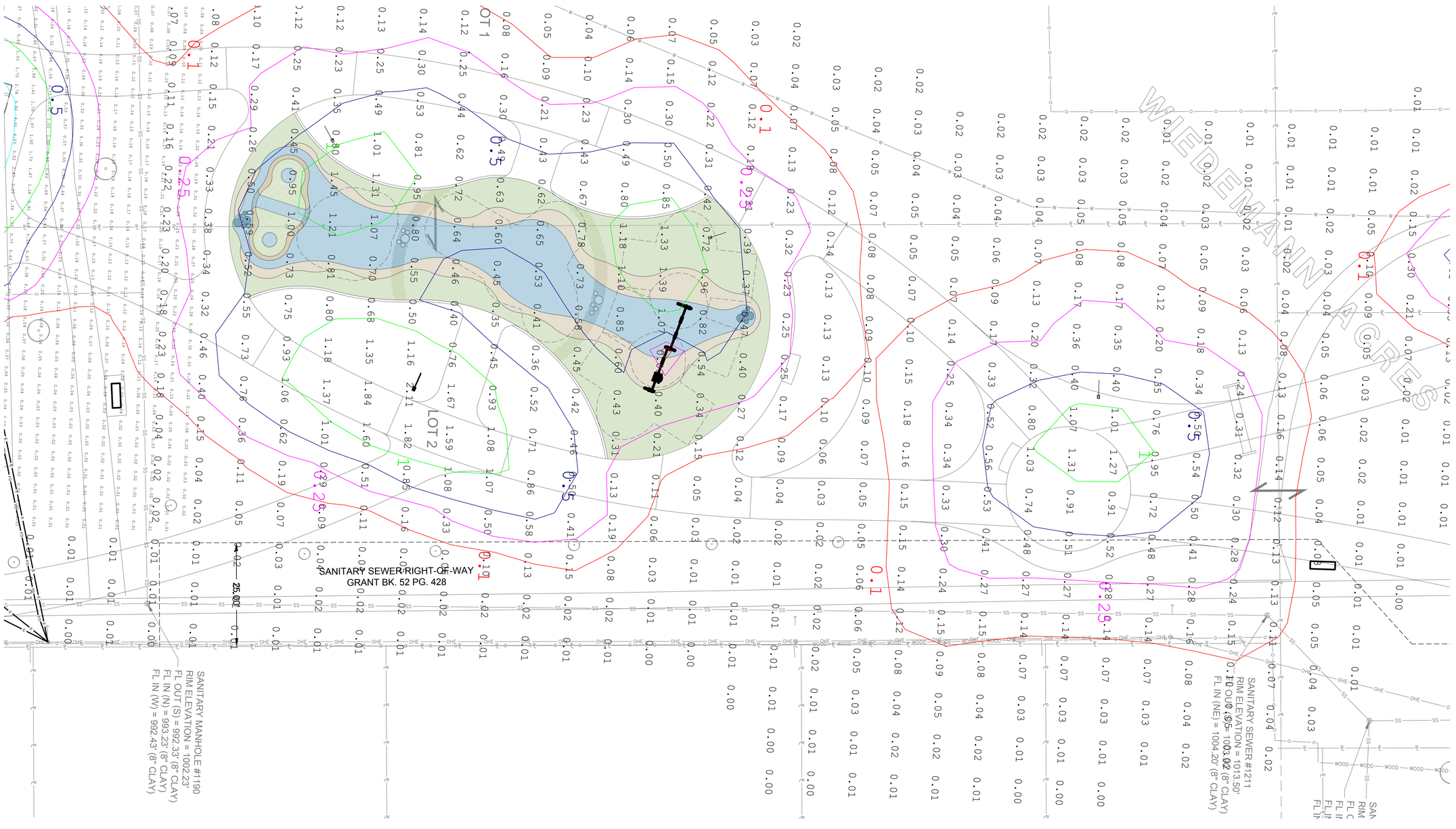
Permit-Seal

Client/Project
CITY OF MISSION
WATER WORKS PARK
Mission, KS

Title
PHOTOMETRIC PLAN

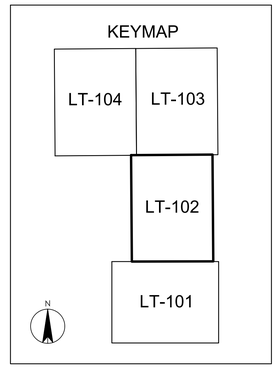
Project No. 193806110
Scale
Drawing No. LT-101
Sheet
Revision 0

ORIGINAL SHEET - ARCH E1



PHOTOMETRIC PLAN

KEYMAP



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	0.5
	0.25
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Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
PHOTOMETRIC PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LT-102		0

ORIGINAL SHEET - ARCH E1

PHOTOMETRIC PLAN

0 10' 20'

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	10
	5
	1
	0.5
	0.25
	0.1

Revision	By	Appd.	YY.MM.DD
FINAL DEVELOPMENT PLAN	TAW	CLP	23.07.13

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Permit-Seal

Client/Project
CITY OF MISSION

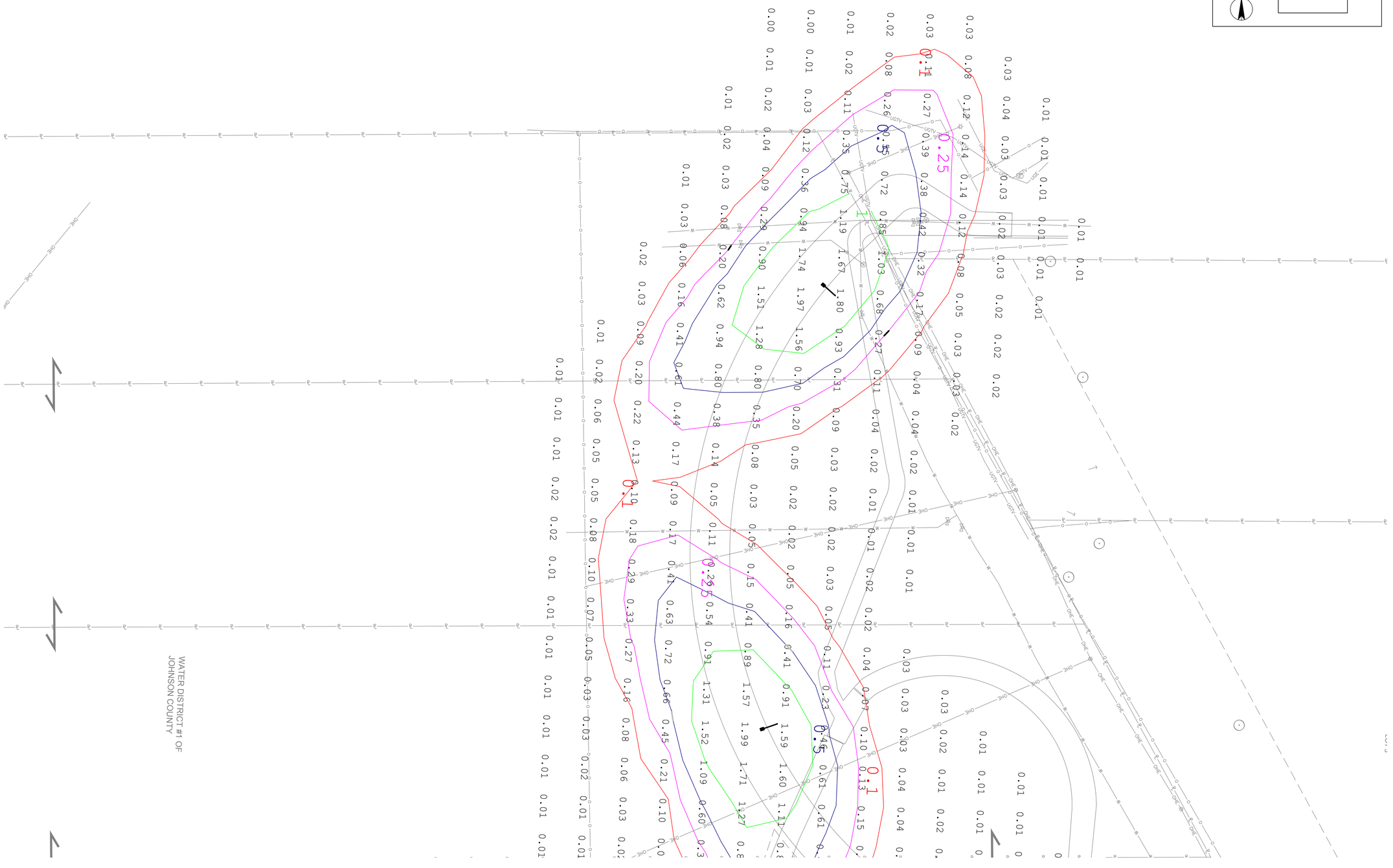
WATER WORKS PARK

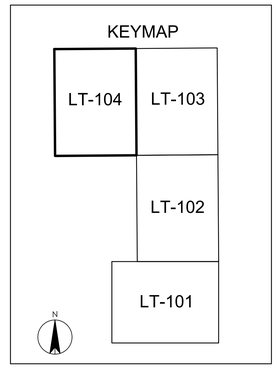
Mission, KS

Title
PHOTOMETRIC PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LT-103		0

ORIGINAL SHEET - ARCH E1





PHOTOMETRIC PLAN

0 10' 20'

ORIGINAL SHEET - ARCH E1

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	10
	5
	1
	0.5
	0.25
	0.1

Revision	By	Appd.	YY.MM.DD
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Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
PHOTOMETRIC PLAN

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
LT-104		0

FIELD ADJ.

100,000 HOUR LED LIFESPAN

INTEGRATED PHOTOCELL

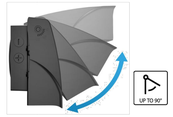
EASY INSTALL

DLC PREMIUM

IP65 RATING

5-YEAR LIMITED WARRANTY

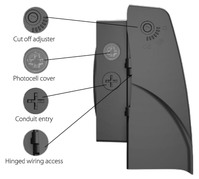
Fold1 warranty is subject to all terms and conditions found at ratiolighting.com/warranty



Control where light goes.

The SLIM17 comes in 15W and 30W models and has fully adjustable cut off, from full cutoff up to 90° in 15° increments, so you can put the light where you need it.

When mounted and kept at its 0° setting, the SLIM FA is a full cutoff wall pack and is Dark Sky friendly.



The proof is in the performance.

Tight budgets don't mean having to sacrifice on performance. The SLIM17 delivers 70+ CRI and a high efficacy of up to 130 lm/W, all with 0-10V dimming. Its diffuse, uniform output comes without the flickering or humming often found in ultra-economy lighting.

Easy installation.

Hinged wiring access and conduit entries on the back, sides, top and bottom make installation a snap.

Ordering Matrix

Family	Wattage	Style	Color Temp	Finish	Driver/Voltage	Options
SLIM17FA	15 15W 30 30W	ADJ Angle Adjustable	Blank 5000K/4000K/3000K selectable	Blank Bronze	Blank 120-277V	Blank Integrated button photocell

NOTE: FULL SHIELDING WILL BE INCORPORATED BELOW THE LIGHT SOURCE.

RESTROOM LIGHTING SPEC

MILLENIUM™ ROUND

MR13 SERIES – DEEP PROFILE HOUSING

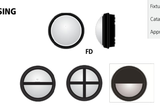
PROJECT INFORMATION

Job Name: _____

Fixture Type: _____

Catalog Number: _____

Approved by: _____



PRODUCT FEATURES:

- Surface mount – ceiling (n/a with MR13ED) or wall; 13' Dia.=4.5' O
- Peace of Mind Guarantee® against breakage
- Dust and water protected to IP64 standards

SPECIFICATIONS

HOUSING: Marine grade die-cast aluminum. Rib reinforced construction. Integral heat sinks. Housing flange interlocks and wraps around lens base producing maximum moisture deflection and resistance to prying. Housing provided with four-point mounting holes, one wireway hole and temporary junction box mounting drill points. Standard matte black, dark bronze or matte white exterior TGIC polyester powder coat – 5-step pre-treatment. See Ordering Information for optional finishes.

REFLECTOR: Full reflector/wire cover – 92% reflectivity.

LENS: UV-stabilized, high impact resistant, virgin injection molded polycarbonate. High efficiency blondel fluted lens maximizes uniformity. Close tolerance push/turn/lock-in-place mating of injection molded lens and lens base. Lens and lens base secured with one concealed captive Torx® with center pin fastener.

LENS BASE: High impact resistant, injection molded matte black, dark bronze or matte white polycarbonate. Optional Light Gray, Silver, Forest Green or Custom Color (see Ordering Information below) are chemically bonded, impact resistant finishes.

GASKETING: Die-cut, closed cell neoprene self adhesive gasket seals housing to mounting surface. Closed cell, silicone "O" ring gaskets positioned and friction secured in gasket channels of lens base and housing.

HARDWARE: One stainless steel Torx® T-20 with center pin fastener.

ELECTRICAL: Available in 3500K, 4000K, and 5000K color temperatures, 80 CRI. 120-277VAC, 50/60Hz electrical input with high power factor electronic, constant-current driver (> 90 PF). Standard 0-10V dimming with 1-100% range; maximum driver source of 200 µA. Optional embedded microwave motion sensor (MS) has factory default settings of 20 minute time out, dims down to 30%.

SENSOR & CONTROLS: Optional sensor available with compatible third party controls. To see the full list of compatible controls, click here.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC-ISO17025 accredited laboratory. For additional photometric information, go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty. Peace of Mind Guarantee against breakage.

LISTINGS: Luminaire is certified to UL Standards by either Underwriters Laboratory or Intertek Testing Laboratory for Wet Location (listing includes Emergency Battery Pack "-LEL" option). UL certified IP64 per IEC 60598.

LED PEACE OF MIND Guarantee® c UL us ETL IP64

ORDERING INFORMATION (Ex: MR13BD-PP-DB-20L40K-DV)

Model	Lens Type	Finish	Lamp Type	Voltage	Options
MR13FD	PP	MB	10L35K	120	

Model
MR13BD Bar
MR13CD Cross
MR13ED Eyelid
MR13RD Full face

Lens Type
PP Pearlescent Polycarbonate

Finish
DB Dark Bronze
FG Forest Green
LG Light Gray
MB Matte Black
MW Matte White
SL Silver
CC Custom Color (Consult factory)

Lamp Type
10L35K 10 Watt 3500K LED
10L40K 10 Watt 4000K LED
10L50K 10 Watt 5000K LED
20L35K 20 Watt 3500K LED
20L40K 20 Watt 4000K LED
20L50K 20 Watt 5000K LED
50L35K* 50 Watt 3500K LED
50L40K* 50 Watt 4000K LED
50L50K* 50 Watt 5000K LED

Voltage
120 120 Volts
277 277 Volts
347 347 Volts
DV 120-277 Volts

Options
LEL LED Emergency Battery Backup (n/a with 347V, n/a with 50L)
BPC† Photo Control – Shielded Button Type (120V or 277V only)
20KV 20KV/KA Surge Protection per IEEE/ANSI C62.41.2 Cat. A
FS Single Fuse & Holder
NAT Natatorium Environment Option
MS Motion Sensor (n/a with 347V)

* n/a with MR13ED
† BPC n/a in conjunction with MS option

NOTE: FULL SHIELDING WILL BE INCORPORATED BELOW THE LIGHT SOURCE.

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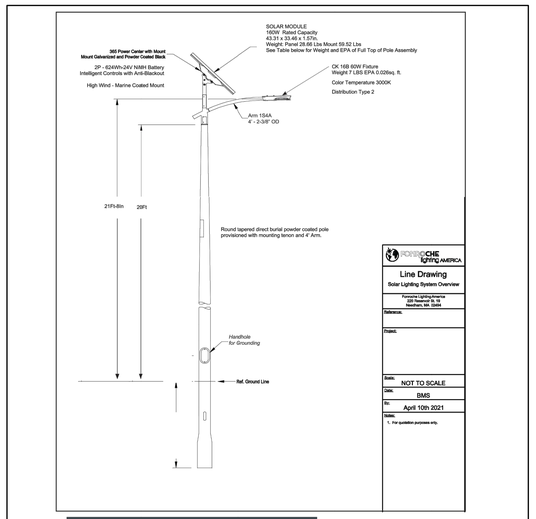
A brand of legrand®

MR13_D-103122

SHELTER LIGHTING SPEC



TOTAL TOP OF POLE ASSEMBLY - PANEL, MOUNTING, 365 POWER CENTER

Solar Assembly	Weight (Pounds) 1P	2P	3P	4P	EPA (Sq.Ft.) 10° Tilt	25° Tilt	45° Tilt
P160F-HW-MC	102.73	113.31	123.89	134.48	2.67	3.89	7.45
P270F-HW-MC	120.37	130.95	141.53	152.12	4.48	7.24	13.93
P310F-HW-MC	120.37	130.95	141.53	152.12	4.48	7.38	14.36

FONROCHE lighting AMERICA

NOTE: FULL SHIELDING WILL BE INCORPORATED BELOW THE LIGHT SOURCE.

OK-168	-	DK	-	T2		P160F	-	2P	-	HW-MC	-	20Ft. Round Tapered Pole-Direct Burial-1-4FT Arm	-	BK	-	BK	-	RS
Fixture		Temp		Type	WS	Solar		Power Center		Option		Pole		Color (Pole)		Color (Fixture)		Tilt Panel

SOLAR PEDESTRIAN LIGHT SPECS

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Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
LIGHTING SPECS

Project No. 193806110
Scale
Drawing No. LT-105
Sheet
Revision 0

ORIGINAL SHEET - ARCH E1

SUSTAINABLE MISSION
Making a sustainable difference in Mission, Kansas

Project: Water Works Park
Expected completion: Aug '24
Project Team: Stantec

Building Scorecard (Revised December 2018)

Please complete all sections that are applicable to this project. Check any boxes for areas that apply to the work, and use the blank area to explain further. You may also assign point totals for each section; though these will be reviewed and a final score determination will be made by the Mission Sustainability Commission. Additional explanations and clarifications for each item can be found in the building scorecard supplemental document.

1. Will this project pursue any sustainable building certifications? Include rating details.

2. Site Development, Land Use, Location and Transportation Impact

- ☑ a. Pre-design site assessment
- ☑ b. Preserve natural resources
- □ c. Manage storm water
- ☑ d. Landscape irrigation
- ☑ e. Manage plants/ vegetation
- □ f. Manage soils/ erosion control
- □ g. Site waste management
- ☑ h. Walking/ bicycle paths
- ☑ i. Bicycle storage
- □ j. Changing/ shower facilities
- □ k. Carpool/ car share
- ☑ l. EV charging
- □ m. Bus access
- ☑ n. Heat island mitigation
- ☑ o. Reduce light pollution

2A. Pre-design Site Assessment has been done and documented in our design process.
2B. Open space has been maintained, the two champion trees on site have been prioritized in the design.
2D. Irrigation will not be needed due to native plantings. **2E.** All plantings will be native.
2H. The walking paths create the main hierarchy of the park and the rest of the design responds. Parking has been improved to pull away from the street for safety, circulation, and front door aesthetic.
2I. Bike racks will be included with electric hookup nearby.
2L. EV charging hookups will be provided for future EV Parking stalls in parking lot.
2N. Buildings and gathering spaces are located under the shade of existing trees, shade canopy will be provided over play features.
2O. Solar light fixtures will implement Dark Sky compliance throughout the site and will light downward reducing light pollution.

3. Materials and Resource Use

- □ a. Reuse existing building
- ☑ b. Construction material management
- □ c. Construction waste management
- ☑ d. Sustainable/ local materials
- □ e. Occupant waste management
- ☑ f. Occupant recycling/ composting

3B. Site Protection Plans can be created to ensure contractors have proper staging areas and wash down points for enhanced management.
3D. Site furnishings will be purchased from vendor who specializes in using recycled materials. Playground components will feature sustainable and recycled construction methods and materials. Site materials can be sourced locally. pip is recycled content.
3F. recycling receptacles can be added to the trash receptacles throughout the park.

Points scored - _____ out of **20**

4. Energy Conservation, Efficiency, and CO_{2e} Emission Reduction

- □ a. Energy Modeling
- □ b. CO_2e modeling
- □ c. Energy metering/ monitoring
- □ d. Automated demand response
- ☑ e. Building envelope/ insulation
- □ f. Mechanical systems
- ☑ g. Electrical/ lighting systems
- □ h. Appliances/ equipment
- ☑ i. Onsite renewable energy
- □ j. Refrigerant management
- □ k. Control air pollution

4E. Restroom will be located near large shade trees on site for shading, utility chase will be fully insulated and heated for year round use. Solar gain has been accounted for the winter months by keeping the southerly edge of the restroom free of any shade.
4G. Lighting systems will use LED lights with motion sensors vents for natural light and air flow. Exterior lights will be Dark Sky compliant and have photocell controls. Remote controlled locking system will be incorporated into structure.
4I. Solar powered lighting will utilize renewable energy, Solar powered charging table will utilize renewable energy, Vents will utilize renewable sources for light and ventilation of the restroom.

Points scored - _____ out of **20**

5. Water Conservation and Efficiency

? □ a. Water metering ☑ b. Fixtures/ fittings □ c. Appliances/ equipment

□ d. HVAC water use □ e. Water treatment devices ☑ f. Reduce irrigation

□ g. Rainwater □ h. Graywater

5A. Meters could be installed to track usage for data purposes if the city needs this information.
5B. Fixtures include low water use urinals and toilets that meet CA water standards, Metered push button sink faucets, and Tankless electric water heater to reduce heat loss in piping while outperforming bulky hot water tanks.
5F. Irrigation wont be needed in this park due to native plantings.

Points scored - _____ out of **20**

6. Indoor Environmental Quality and Comfort

□ a. IAQ management plan □ b. Air handling filtration ☑ c. Increase ventilation

□ d. IAQ during construction □ e. Thermal comfort □ f. Indoor pollutant control

□ g. Material emissions control ☑ h. Acoustics ☑ i. Daylighting/ views

☑ j. Accessibility/ Community for All Ages

6C. Ventilation will be provided using natural vents in the restroom. Floor surface has material that will break down urine to prevent odor concerns.
6H. Acoustics in the park have been accounted for by location most active spaces together surrounded by tree and native plantings while more passive spaces are located further away and utilize the sense of peace and quiet. Restroom utilizes proper acoustics by placing mechanical components in the utility chase reducing mechanical noise.
6I. Park design accounts for diverse mix of shaded and sunny areas with proper view sheds at multiple points in the park.
6J. ADA requirements have been met on site, communities for all ages design has been incorporated with playground features for all ages, shelter and restroom for all, shaded gathering spaces for all ages, 10' wide trails through the park that intersect at key gathering points to promote community and social engagement for all.

Points scored - _____ out of **10**

7. Commissioning, Operations, and Maintenance

? ☑ a. Inspections □ b. Mechanical commissioning □ c. Energy commissioning

□ d. Building controls systems ☑ e. O+M documentation ☑ f. Maintenance staff training

7A. 3rd party inspection company will provide inspection after park is complete.
7E. Binder of products and vendors used on site will be created to keep track of warranties and maintenance.
7F. Binder of products and vendors will be used by staff to reach out to vendors for maintenance training.

Points scored - _____ out of **10**

8. Additional Comments

Any additional sustainable attributes that will be incorporated in this project.

Signage will be included in the park design. Potential signage topics include Historical Site information, Native Plantings and identification, WaterOne processes for the site the park is located on.

A tree master plan will be provided to continue the legacy of planting trees for Arbor Day at the school.

Bonus Points (if applicable, 5 maximum) - _____

Total Points Scored - _____ out of **100**

Rating Achieved - _____ (Bronze 20-39, Silver 40-59, Gold 60-89, Platinum 90+)

Drainage Memo

WILSON & COMPANY
HIGHER RELATIONSHIPS

To: City of Mission, Kansas
From: Chelsea Pfaffly, PE
Re: Water Works Park Drainage Memo

Date: 7/5/2023

Wilson & Company is assisting Stantec with the designing of improvements at Water Works Park in Mission, Kansas to improve accessibility and compliance with ADA standards. The park is bounded by single family homes and Rushton Elementary to the north (W. 52nd Street) and east (Outlooks Street), W. 53rd Street on the south, and a WaterOne building and small parking lot to the west. The existing park consists of a walking trail, a 7-stall parking lot, a covered shelter with two picnic tables, and a playground. The proposed improvements include replacement of the trail to meet ADA standards, upgraded and expanded parking with ADA stalls, upgraded playground area and equipment, permanent restrooms, and an expanded covered shelter.

Existing Conditions

The project site is approximately 4.7-acres. The drainage area encompassing the park is approximately 12-acres and drains south from W. 52nd Street, to the curb inlet (to remain) just west of the park parking lot on W. 53rd Street. The 12-acre drainage area encompasses the east portion of Rushton Elementary, which is currently under construction. The Rushton Elementary Design Team indicated in the Final Stormwater Management Study, sealed on 8/19/2022, that proposed conditions of that site will not adversely impact Water Works Park. The existing park site has 0.3-acres of impervious area. See Table 1 for existing condition peak runoff.

Proposed Conditions

The proposed improvements will disturb 3.1-acres. The existing trail will be removed, and a new trail will be constructed to meet ADA standards. The playground will be expanded. The proposed parking lot provides 12 standard stalls and 2 ADA stalls with green space between the road and parking lot. The proposed grading with regards to stormwater runoff will generally remain unchanged from the existing conditions. Of the approximately 12-acre drainage area 3.9-acres will be treated for water quality by a native vegetation swale. Another 2.3-acres will follow the existing drainage patterns and be conveyed under the proposed trail by a proposed 18-inch RCP culvert. Both sub basins and an additional 2.0-acres, for a total of 8.2-acres, will flow to an area inlet that will the flow into the existing downstream curb inlet via 24-inch RCP. See the attached drainage area map for more information.

The proposed impervious area of the park will increase from 0.3-acres to 0.8-acres. Table 1 below compares existing and proposed peak runoff from the site at the inlet on W. 53rd Street runoff for the 10-year storm event will increase by approximately 1.4 cfs for the proposed extended parking lot while the 100-year peak runoff will increase by 2.5 cfs.

The existing downstream system is a 48-inch by 28-inch horizontal elliptical corrugated metal pipe (36-inch round equivalent) with a maximum capacity of 60 cfs. The total drainage area for the curb inlet/receiving storm sewer system is 19.5-acres, including the 12-acres encompassing the park, with a 10-year peak runoff of 53.4 cfs, causing no adverse impacts to the downstream system.

Table 1. Existing vs. Proposed Runoff

	Park Impervious Area (ac)	Total Drainage Area (ac)	Rational Method "C"	10-Year		100-Year	
				I (in/hr)	Q (cfs)	I (in/hr)	Q (cfs)
Existing Conditions	0.32	12.02	0.58	4.40	**30.5**	6.40	**55.3**
Proposed Conditions	0.84	12.02	0.60	4.40	**31.9**	6.40	**57.8**

Water Quality best management practices (BMP) features were added to the park facility for water quality treatment. A Native Vegetated Swale is provided to capture the water quality volume from the north area of the park. Several native vegetation planting beds are also included on site for additional treatment. Level of Service calculations have been included as an attachment to this memo.

Summary

The change from existing to proposed conditions results in an increase of approximately 1.4 cfs for the 10-year storm event and 2.5 cfs for the 100-year storm event due to the increased impervious area for the proposed conditions. This is approximately a 3% increase in runoff from existing conditions. The increase in runoff is negligible and will cause no adverse impacts to the downstream system. We request approval for a detention waiver, as the impacts are negligible. The proposed conditions include several native vegetation beds along with a native vegetation swale for water quality treatment but provide no detention for the 10-year or 100-year event.

WILSON & COMPANY
HIGHER RELATIONSHIPS

By:	DBM	**Date:**	6/27/23
Checked By:	CLP	**Date:**	6/28/23
Backchecked By:	CLP	**Date:**	6/28/23
WCI Project Number:	23-600-079-00	**Sheet:**	1 of 1

Calculations For: Water Works Park Improvements

I. Water Quality Rainfall Runoff

DA= 3.88 Acres

Q = K*C*I*A

$K_{(1.37)}$ = 1.00

C = Runoff Coefficient = 0.65

I = Rainfall Intensity (in/hr)

where:

T_c = $T_1 + T_T$

T_1 = $[1.8\ (1.1\text{-}C)D^{.5}]/S^{.33}$

C = 0.65

D = Overland Flow Distance Parallel to Slope = 30 ft

S = Average Slope of the Primary Drainage Path, in Percent = 2.25 %

T_1 = 15 (shall not be greater than 15 minutes)

T_T = L/V/60

L = Length of Channelized Flow = 600 feet

V = Velocity Based on Average Channel Slope = 10 ft/s

T_T = 1 minutes (MARC BMP Manual Table 6.4)

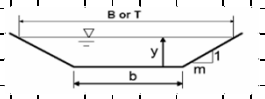
T_c = 15 + 1 minutes = 16

$I_{1.37}$ = 1.40 in/hr (APWA Rainfall Intensity Tables for Kansas City)

$Q_{(1.37)}$ = 1.00 * 0.65 * 1.40 * 3.88 = 3.53 cfs

II. Size Native Vegitative Swale

1) Calculate Provided Capacity



$Q = \frac{C}{n} AR^{2/3} So^{1/2}$ (Manning's Equation for flow) (cfs)

n value	Depth (y) (ft)	Side Slope (m)	Width (b) (ft)	Area (A) (ft^2)	Wetted Perimeter (ft)	Hydraulic Radius (R_h) (ft)	Longitudinal Slope (ft/ft)	Q (cfs)
0.09	0.40	3.00	8.00	3.68	10.53	0.35	0.02	4.27

2) Calculate Velocity

$V = \frac{Q}{A}$ (ft/s) V = $\frac{4.27}{3.68}$ = 1.16 ft/s

This is less than 2 ft/s YES therefore, recommendations for the Water Quality Storm are met.

WORKSHEET 1A: REQUIRED LEVEL OF SERVICE - DEVELOPED SITE

Project:	Waterworks Park Improvements	By:	DBM	Date:	6/27/2023
Location:	Mission, KS	Checked:	CLP	Date:	6/28/2023

1. Required Treatment Acres

A. Total Area Disturbed by Redevelopment Activity (ac.):

Disturbed Area Description	Acres
Playground	0.15
Asphalt Trail and Parking	0.31
Grass	2.67
"1A" Total:	3.13

B. Existing Impervious Area Inside Disturbed Area (ac.):

Existing Impervious Area Description	Acres
Asphalt Trail and Parking	0.31
"1B" Total:	0.31

C. Required Treatment Area (ac.):

"1A" Total Less "1B" Total — "1C": 2.82

2. Percent Impervious in Postdevelopment Condition and Level of Service (LS)

A. Total Postdevelopment Impervious Area Inside Disturbed Area (ac.):

Postdevelopment Impervious Area Description	Acres
Multi-Use Trail and Shelter	0.67
Parking Lot	0.17
"2A" Total:	0.84

B. Existing Impervious Area Inside Disturbed Area (ac.)

"1B" Total: 0.31

C. Net Increase in Impervious Area (ac.)

"2A" Total Less "1B" Total — **"2C" Total:** 0.53

D. Percent Impervious

Net Increase in Impervious Area / Required Treatment Area

"2C"/"1C" x 100: 19% (Round to Integer)

E. Level of Service

Use Percent Impervious to Enter Table 4.3 — **LS =** 4.5

3. Minimum Required Total Value Rating of BMP Package

Total Value Rating = LS x Required Treatment Area — **VR =** 12.68

WORKSHEET 2: DEVELOPED MITIGATION PACKAGE(S) THAT MEET THE REQUIRED LS

Project:	Waterworks Park Improvements		By:	DBM	Date: 6/27/2023
Location:	Misson, KS		Checked:	CLP	Date: 6/28/2023
Sheet	1	of 1			

1. Required LS (New Development, Wksht 1) or Total VR (Redevelopment Wksht 1A): 12.68

Note: Various BMPs may alter CN of proposed development, and LS; recalculate both if applicable

2. Proposed BMP Option Package No. 1

Cover/BMP Description	Treatment Area	VR from Table 4.4 or 4.6[1]	Product of VR x Area
Native Veg. Swale	2.92	4.00	11.68
Native Veg. (reestablished)	0.21	9.25	1.94
Total[2]:	3.13	**Total:**	13.62
		***Weighted VR:**	= total product/total area

1 VR calculated for final BMP only in Treatment Train:

2 Total treatment area cannot exceed 100 percent of the actual site area

* Blank In Redevelopment

Meets required LS (Yes/No)? Yes (If No, or if additional options are being tested, proceed below)

3. Proposed BMP Option Package No. _____

Cover/BMP Description	Treatment Area	VR from Table 4.4 or 4.6[1]	Product of VR x Area
Total[2]:		**Total:**	
		***Weighted VR:**	= total product/total area

1 VR calculated for final BMP only in Treatment Train:

2 Total treatment area cannot exceed 100 percent of the actual site area

* Blank In Redevelopment

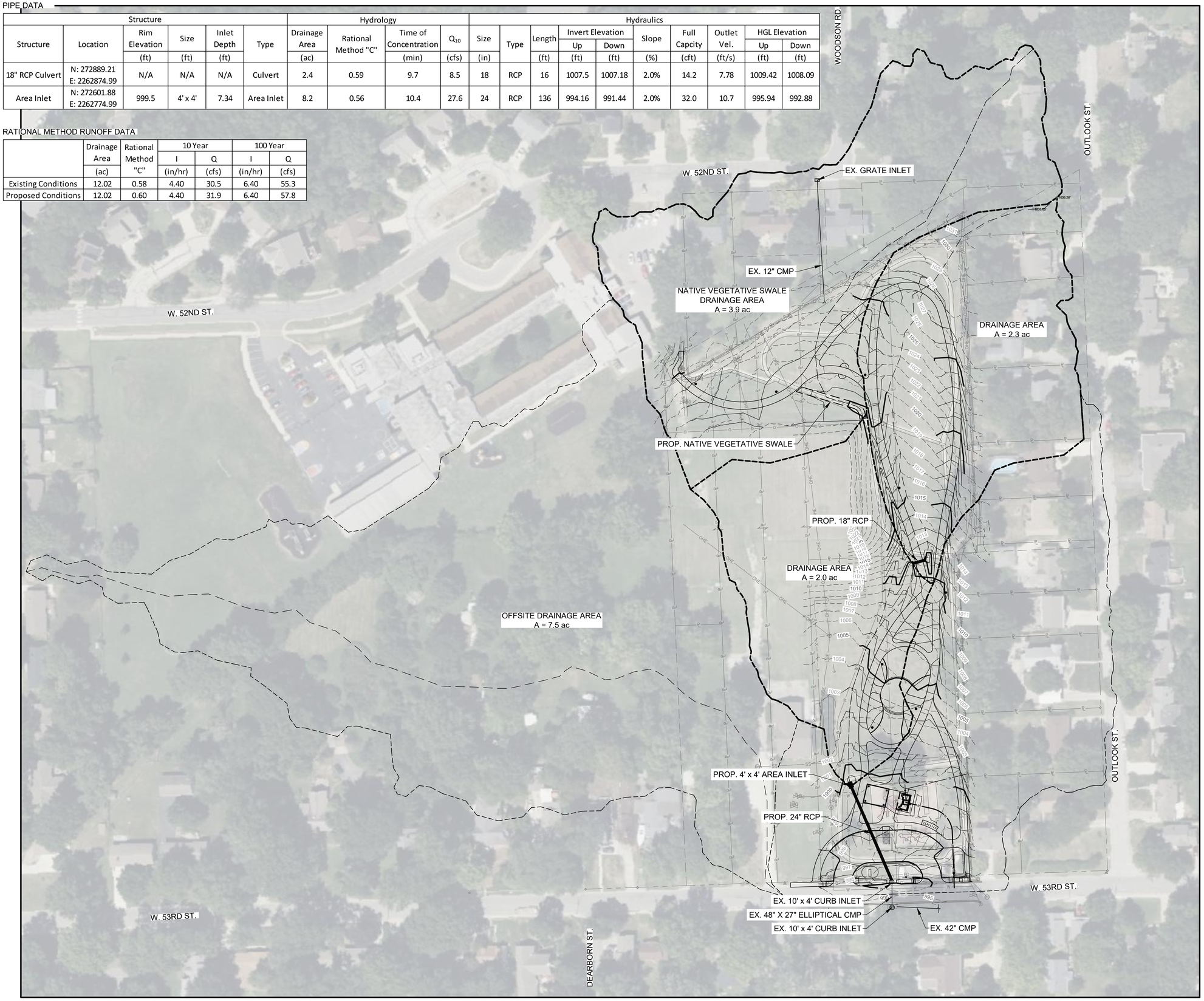
Meets required LS (Yes/No)? (If No, or if additional options are being tested, proceed below)

PIPE DATA

Structure						Hydrology				Hydraulics									
Structure	Location	Rim Elevation	Size	Inlet Depth	Type	Drainage Area	Rational Method "C"	Time of Concentration	Q_{10}	Size	Type	Length	Invert Elevation		Slope	Full Capcity	Outlet Vel.	HGL Elevation	
													Up	Down				Up	Down
		(ft)	(ft)	(ft)		(ac)		(min)	(cfs)	(in)		(ft)	(ft)	(ft)	(%)	(cft)	(ft/s)	(ft)	(ft)
18" RCP Culvert	N: 272889.21 E: 2262874.99	N/A	N/A	N/A	Culvert	2.4	0.59	9.7	8.5	18	RCP	16	1007.5	1007.18	2.0%	14.2	7.78	1009.42	1008.09
Area Inlet	N: 272601.88 E: 2262774.99	999.5	4' x 4'	7.34	Area Inlet	8.2	0.56	10.4	27.6	24	RCP	136	994.16	991.44	2.0%	32.0	10.7	995.94	992.88

RATIONAL METHOD RUNOFF DATA

	Drainage Area	Rational Method	10 Year		100 Year	
			I	Q	I	Q
	(ac)	"C"	(in/hr)	(cfs)	(in/hr)	(cfs)
Existing Conditions	12.02	0.58	4.40	30.5	6.40	55.3
Proposed Conditions	12.02	0.60	4.40	31.9	6.40	57.8



NOTE: LiDAR WAS UTILIZED TO DETERMINE DRAINAGE BOUNDARIES OUTSIDE OF SURVEY EXTENTS

N

0 20' 40'

Longest Flow Path
Drainage Subbasin Area
Drainage Area

ORIGINAL SHEET - ARCH E1

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Stand Engineering

Signage Design
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Notes

Revision	By	Appd.	YY.MM.DD
FINAL DEVELOPMENT PLAN	TAW	CLP	23.07.12

Issued	By	Appd.	YY.MM.DD

File Name:	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project
CITY OF MISSION

WATER WORKS PARK

Mission, KS

Title
DRAINAGE AREA MAP

Project No.	Scale	
193806110		
Drawing No.	Sheet	Revision
C-100		0