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July 7, 2017

PROJECT: **City of Sterling Heights – Dodge Park Improvements**
Sterling Heights, MI

DMA PROJECT NO: **16078A**

ADDENDUM NO: **3**

ADDENDUM CONTENTS: **Three (3) written pages.**
Four (4) Architectural Sheets (T002, TB-A1, RRB-A2, FM-A1.2)
Five (5) Irrigation Plans and Details Sheets
One (1) Mechanical Sheet (M5.1)
Two (2) Electrical Sheets (E0.1, E4.1)
Specification Table of Contents (5 Pages)
000115 List of Drawings Specification Section (4 Pages)
262416 – Panelboards (4 Pages)

ISSUE DATE: **July 7, 2017**

The following clarifications, revisions and/or additions to the Plans and Specifications are issued before the award of the construction contract and are to be included with the original Drawings and Specifications. This addendum shall take precedence over the original issued Drawings and Specifications and shall be referred to hereinafter as part of the Contract Documents.

The bidder shall acknowledge the receipt of this Addendum by signing this Addendum and enclosing it in the submission of their bids, and completing the Addenda section of the 004113 Bid Proposal Form. Failure to acknowledge Addendum No. 1 on page 2 of 11 of the 004113 Bid Proposal Form in the submission of bids may be justification for the bid proposal being rejected as non-responsive.

ADDENDUM #3
City of Sterling Heights
Dodge Park Improvements
DMA #16078A

07/07/17

Page 1

RESPONSE:

The Contractors/Bidders shall verify receipt and inclusion of this Addendum on their Bid Proposal Forms.

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DRAWING/SPECIFICATION REVISIONS, CLARIFICATIONS OR ADDITIONS:

Architectural Drawing Revisions:

1. Revised sheet T002 Sheet Index to indicate added irrigation sheets IRR-1 through IRR-5.
2. Revised sheet T002 Sheet Index to indicate drawings revised as part of Addendum #3.
3. Revised sheet TB-A1, Ticket Booth Plans, to indicate the hardware set number for the entry door.
4. Revised sheet RRB-A2, Renovated Restroom Building Schedules, to add the hardware set numbers to the Door Schedule.
5. Revised sheet FM-A1.2, Farmers Market Floor Plan, to clarify Seasonal Ice Rink design criteria and responsibility.

Landscape Drawing Revisions:

1. Revised sheet LS-1 to add “Treegator” slow release watering bags and seeding of bare spots in turf throughout site.
2. Revised sheet LS-2 to add “Treegator” slow release watering bags and seeding of bare spots in turf throughout site.
3. Revised sheet LS-3 to add “Treegator” slow release watering bags and seeding of bare spots in turf throughout site.
4. Revised sheet LS-3 to eliminate trees in the area to the east of the splash park to prevent conflict with the splash pad equipment.
5. Revised sheet LS-4 to adjust the tree quantities due to the elimination of trees in the area to the east of the splash park.
6. Re-issue of sheet LS-5 due to a printing error that did not allow all of the material patterning to show. There have not been any revisions to this sheet.
7. Irrigation Plans and Details, Sheets IRR-1 through IRR-2 have been added to the set and included on the sheet index (T002).

Mechanical Electrical Plan Revisions:

1. Revised sheet M5.1 for the following: clarified pipe sizes on plan as shown, added CW connection for irrigation system, replaced Mechanical General Notes with Plumbing General Notes, and revised Keyed Notes.
2. Revised sheet E0.1 for the following: Added circuit numbers for the site work and clarified scope of alternate work.
3. Revised sheet E4.1 for the following: Added location of electrical panel.

General Drawing Clarifications:

1. All items are considered to be part of the contract unless noted as “N.I.C.” – Not In Contract or as “By Owner”.
2. Some items that are to be installed by others will require coordination of work. These items are listed in the Project Manual Section 011000 Summary, 1.3 “Work Under Other Contracts.”

Specification Revisions:

1. Modified the 000115 List of Drawings section to include Irrigation Plans and Details Sheets. These items have been **bolded** on the Index of Drawings.
2. Modified Project Manual Table of Contents to add Section 262416 and delete 262200. The added item has been **bolded** in the Table of Contents.
3. Specification Section 262200 Low-Voltage Transformers is to be deleted.
4. Specification Section 262416 Panelboards has been added.

RECEIVED AND ACKNOWLEDGED BY:

Company: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

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LIST OF DRAWINGS (Section revised June 29, 2017 as part of Addendum #1 and July 7, 2017 as part of Addendum #3)

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C-11	Utility Plan
C-12	Utility Plan
C-13	Storm and Sanitary Sewer Profiles
C-14	Soil Erosion / Sedimentation Control Plan
C-15	Soil Erosion / Sedimentation Control Plan
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1 of 7	City of Sterling Heights Standard Details Notes
2 of 7	City of Sterling Heights Standard Details Sanitary

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SECTION 26 2416
PANELBOARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Power distribution panelboards.
- B. Lighting and appliance panelboards.
- C. Overcurrent protective devices for panelboards.

1.02 RELATED REQUIREMENTS

- A. Section 26 0526 - Grounding and Bonding for Electrical Systems.
- B. Section 26 0529 - Hangers and Supports for Electrical Systems.
- C. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.

1.03 REFERENCE STANDARDS

- A. FS W-C-375 - Circuit Breakers, Molded Case; Branch Circuit and Service; Federal Specification; Revision E, 2013.
- B. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2010.
- C. NECA 407 - Standard for Installing and Maintaining Panelboards; 2009.
- D. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2014.
- E. NEMA KS 1 - Heavy Duty Enclosed and Dead-Front Switches (600 Volts Maximum); 2013.
- F. NEMA PB 1 - Panelboards; 2011.
- G. NEMA PB 1.1 - General Instructions for Proper Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less; 2013.
- H. NETA ATS - Acceptance Testing Specifications for Electrical Power Equipment and Systems; 2013.
- I. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- J. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.
- K. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.
- L. UL 67 - Panelboards; Current Edition, Including All Revisions.
- M. UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches and Circuit Breaker Enclosures; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, overcurrent protective device arrangement and sizes, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- D. Project Record Documents: Record actual installed locations of panelboards and actual installed circuiting arrangements.
- E. Maintenance Data: Include information on replacement parts and recommended maintenance procedures and intervals.

- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 - Product Requirements, for additional provisions.
 - 2. Panelboard Keys: Two of each different key.

1.05 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Eaton Corporation: www.eaton.com.
- B. General Electric Company: www.geindustrial.com.
- C. Schneider Electric; Square D Products: www.schneider-electric.us.
- D. Siemens Energy & Automation, Inc..

2.02 PANELBOARDS - GENERAL REQUIREMENTS

- A. Provide products listed, classified, and labeled as suitable for the purpose intended.
- B. Unless otherwise indicated, provide products suitable for continuous operation under the following service conditions:
 - 1. Altitude: Less than 6,600 feet.
 - 2. Ambient Temperature:
 - a. Panelboards Containing Circuit Breakers: Between 23 degrees F and 104 degrees F.
- C. Short Circuit Current Rating:
- D. Mains: Configure for top or bottom incoming feed as indicated or as required for the installation.
- E. Branch Overcurrent Protective Devices: Replaceable without disturbing adjacent devices.
- F. Bussing: Sized in accordance with UL 67 temperature rise requirements.
 - 1. Provide solidly bonded equipment ground bus in each panelboard, with a suitable lug for each feeder and branch circuit equipment grounding conductor.
- G. Conductor Terminations: Suitable for use with the conductors to be installed.
- H. Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.
 - 1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
 - 2. Boxes: Galvanized steel unless otherwise indicated.
 - a. Provide wiring gutters sized to accommodate the conductors to be installed.
 - 3. Fronts:
 - a. Fronts for Surface-Mounted Enclosures: Same dimensions as boxes.
 - b. Fronts for Flush-Mounted Enclosures: Overlap boxes on all sides to conceal rough opening.
 - 4. Lockable Doors: All locks keyed alike unless otherwise indicated.
- I. Future Provisions: Prepare all unused spaces for future installation of devices including bussing, connectors, mounting hardware and all other required provisions.

2.03 POWER DISTRIBUTION PANELBOARDS

- A. Description: Panelboards complying with NEMA PB 1, power and feeder distribution type, circuit breaker type, and listed and labeled as complying with UL 67; ratings, configurations and features as indicated on the drawings.
- B. Conductor Terminations:
 - 1. Main and Neutral Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
 - 2. Main and Neutral Lug Type: Mechanical.

- C. Bussing:
 1. Phase and Neutral Bus Material: Aluminum.
 2. Ground Bus Material: Aluminum.
- D. Circuit Breakers:
 1. Provide bolt-on type or plug-in type secured with locking mechanical restraints.
- E. Enclosures:
 1. Provide surface-mounted enclosures unless otherwise indicated.

2.04 LIGHTING AND APPLIANCE PANELBOARDS

- A. Description: Panelboards complying with NEMA PB 1, lighting and appliance branch circuit type, circuit breaker type, and listed and labeled as complying with UL 67; ratings, configurations and features as indicated on the drawings.
- B. Conductor Terminations:
 1. Main and Neutral Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
 2. Main and Neutral Lug Type: Mechanical.
- C. Bussing:
 1. Phase Bus Connections: Arranged for sequential phasing of overcurrent protective devices.
 2. Phase and Neutral Bus Material: Aluminum.
 3. Ground Bus Material: Aluminum.
- D. Circuit Breakers: Thermal magnetic bolt-on type unless otherwise indicated.
- E. Enclosures:
 1. Provide surface-mounted or flush-mounted enclosures as indicated.
 2. Provide clear plastic circuit directory holder mounted on inside of door.

2.05 OVERCURRENT PROTECTIVE DEVICES

- A. Molded Case Circuit Breakers:
 1. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers listed and labeled as complying with UL 489, and complying with FS W-C-375 where applicable; ratings, configurations, and features as indicated on the drawings.
 2. Interrupting Capacity:
 - a. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated, but not less than:
 - b. Fully Rated Systems: Provide circuit breakers with interrupting capacity not less than the short circuit current rating indicated.
 3. Conductor Terminations:
 - a. Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
 4. Thermal Magnetic Circuit Breakers: For each pole, furnish thermal inverse time tripping element for overload protection and magnetic instantaneous tripping element for short circuit protection.
 5. Multi-Pole Circuit Breakers: Furnish with common trip for all poles.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install panelboards securely, in a neat and workmanlike manner in accordance with NECA 1 (general workmanship), NECA 407 (panelboards), and NEMA PB 1.1.
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- D. Provide required supports in accordance with Section 26 0529.
- E. Install panelboards plumb.

- F. Install flush-mounted panelboards so that trims fit completely flush to wall with no gaps and rough opening completely covered.
- G. Mount panelboards such that the highest position of any operating handle for circuit breakers or switches does not exceed 79 inches above the floor or working platform.
- H. Provide minimum of six spare 1 inch trade size conduits out of each flush-mounted panelboard stubbed into accessible space above ceiling and below floor.
- I. Provide grounding and bonding in accordance with Section 26 0526.
- J. Install all field-installed branch devices, components, and accessories.
- K. Provide filler plates to cover unused spaces in panelboards.

3.02 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Perform inspection, testing, and adjusting in accordance with Section 01 4000.
- C. Inspect and test in accordance with NETA ATS, except Section 4.
- D. Molded Case Circuit Breakers: Perform inspections and tests listed in NETA ATS, Section 7.6.1.1. Tests listed as optional are not required.
- E. Correct deficiencies and replace damaged or defective panelboards or associated components.

3.03 CLEANING

- A. Clean dirt and debris from panelboard enclosures and components according to manufacturer's instructions.

END OF SECTION

Project Data

GOVERNING CODES: 2015 MICHIGAN BUILDING CODE
 2015 MICHIGAN MECHANICAL CODE
 2015 MICHIGAN PLUMBING CODE
 2015 INTERNATIONAL FUEL GAS CODE
 MICHIGAN ELECTRICAL CODE BASED ON 2008 N.E.C. WITH PART 8 STATE AMENDMENTS
 2003 ICC/ANSI A117.1 FOR ACCESSIBILITY & MICHIGAN BARRIER FREE DESIGN LAW OF PUBLIC ACT 1 OF 1966 AS AMENDED.
 2015 INTERNATIONAL FIRE CODE

AMPHITHEATER

USE GROUP: MIXED USE - ASSEMBLY A-1
 STORAGE S-2

BUILDING CONSTRUCTION TYPE: TYPE II-B NON-COMBUSTIBLE UNPROTECTED

ALLOWABLE BUILDING AREA: BASED ON A-1 = 2,500 SF.

BUILDING AREA: TOTAL AREA = 5,566 SF.
 ASSEMBLY A-1 = 2,366 SF.
 BUSINESS = 3,200 SF.

ALLOWABLE BUILDING HEIGHT: BASED ON A-1 = 55 FEET

BUILDING HEIGHT: 30 FEET

OCCUPANCY LOAD: TOTAL AREA = 5,566 SF.
 ASSEMBLY A-1 = 2,366 SF. / 15 NET = 158 PERSONS
 BUSINESS = 3,200 SF. / 100 GROSS = 32 PERSONS
 TOTAL = 190 PERSONS

NUMBER OF EXITS: 2 REQUIRED
 3 PROVIDED

FARMERS MARKET

USE GROUP: ASSEMBLY A-3

BUILDING CONSTRUCTION TYPE: TYPE II-B NON-COMBUSTIBLE UNPROTECTED

ALLOWABLE BUILDING AREA: 9,500 SF. + OPEN PERIMETER INCREASE (7,125 SF.) = 16,625 SF.

BUILDING AREA: TOTAL AREA = 13,129 SF.

BUILDING FIRE AREAS: AREA 1 (RESTROOMS, CONCESSIONS, STORAGE) = 1,175 SF.
 AREA 2 (OPEN FARMERS MARKET / ICE RINK) = 13,129 SF.

ALLOWABLE BUILDING HEIGHT: 65 FEET

BUILDING HEIGHT: 32 FEET

OCCUPANCY LOAD: AREA 1 = 1,175 SF. / 100 GROSS = 12 PERSONS
 AREA 2 = 13,129 SF. / 50 GROSS = 275 PERSONS
 TOTAL OCCUPANCY = 287 PERSONS

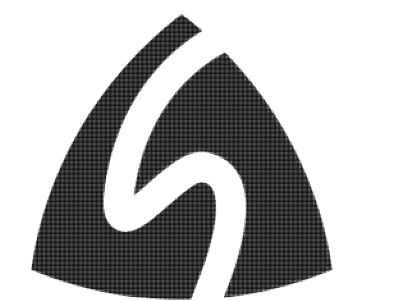
NUMBER OF EXITS: 2 REQUIRED
 13 PROVIDED

Sheet Index

Addendum #	Addendum #	No.	Description
		T001	Cover Sheet
		T002	Sheet Index/Project Data
		A001	Barrier Free Standards
		A002	General Structural Notes
		M00	Mechanical General Information
		MT1	Mechanical Details
		MT2	Mechanical Details
		E00	Electrical General Information
		E11	Electrical Details
		SF01	Site Plan
		SF02	Keyed Site Notes/Site Amenities
		SF03	Partial Enlarged Site Plan
		SF04	Partial Enlarged Site Plan
		SF05	Partial Enlarged Site Plan - Sand Volleyball Courts, Basketball Court, and Pavilion #4
		SF06	Partial Enlarged Site Plan - Mini Soccer Field and Pavilion #3
		SF07	Partial Enlarged Site Plan - Pavilion #2 and Renovated Restroom Building
		SF08	Partial Enlarged Site Plan - Splash Pad/Park and Pavilion #1
		SF09	Partial Enlarged Site Plan - Farmers Market
		SF10	Partial Enlarged Site Plan - Fire Pit Area and Pavilion #5
		SF11	Partial Enlarged Site Plan - Amphitheater
		SF12	Site Details
		SF13	Site Details - Mini Soccer Field Details
		SF14	Site Details - Sand Volleyball Court Details
		SF15	Site Details - Splash Park Details
			CIVIL
		C-0	Cover Sheet
		C-1	Boundary / Topographic / Tree Survey
		C-2	Boundary / Topographic / Tree Survey
		C-3	Existing Structure Table
		C-4	Demolition Plan
		C-5	Demolition Plan
		C-6	Dimensional Site Plan
		C-7	Dimensional Site Plan
		C-8	Paving & Grading Plan
		C-9	Paving & Grading Plan
		C-10	MDOT M0130a Detail
		C-11	Utility Plan
		C-12	Utility Plan
		C-13	Storm and Sanitary Sewer Profiles
		C-14	Soil Erosion / Sedimentation Control Plan
		C-15	Soil Erosion / Sedimentation Control Plan
		1 of 1	City of Sterling Heights Standard Details Soil Erosion Plan
		1 of 7	City of Sterling Heights Standard Details Notes
		2 of 7	City of Sterling Heights Standard Details Sanitary
		4 of 7	City of Sterling Heights Standard Details Storm
		5 of 7	City of Sterling Heights Standard Details Storm
		6 of 7	City of Sterling Heights Standard Details Watermain
		7 of 7	City of Sterling Heights Standard Details Watermain
			Mechanical - Site
		MD01	Mechanical Site Demolition Plan
		MD02	Mechanical Site Demolition Plan
		M01	Mechanical Site Plan - New Work Plan
		M02	Mechanical Site Plan - New Work Plan
			Electrical - Site
		ED01	Electrical Site Demolition Plan
		ED02	Electrical Site Demolition Plan
		E01	Electrical Site New Work Plan
		E02	Electrical Site New Work Plan
			Landscapes
		LS-1	Overall Landscape Planting View
		LS-2	Landscape Planting Detail
		LS-3	Landscape Planting Detail
		LS-4	Plant Material List, Planting Details, and Landscape Notes
		LS-5	Landscape Planting Detail - Paving Pattern
		IRR-1	Overall Irrigation Plan View
		IRR-2	Irrigation Plan Detail
		IRR-3	Irrigation Plan Detail
		IRR-4	Irrigation Details
		IRR-5	Irrigation Details
			Pavilion #1, 4 & 5
		PAV145-A1	Floor Plan, Foundation Plan and Details
			Pavilion #2
		PAV2-A1	Floor Plan, Foundation Plan and Details
		E11	Electrical New Work Plan
			Pavilion #3
		PAV3-A1	Floor Plan, Foundation Plan and Ceiling Plan
		PAV3-A2	Building Elevations
		PAV3-A3	Wall Sections
		PAV3-A4	Interior Elevations
		M12	Mechanical New Work Plans
		E12	Electrical New Work Plan

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Addendum #	Addendum #	No.	Description
			Amphitheater
		AMP-A11	Foundation Plan
		AMP-A12	Floor Plan
		AMP-A13	Reflected Ceiling Plan
		AMP-A14	Roof Plan
		AMP-A15	Roof Framing Plan
		AMP-A16	Roof Framing Plan
		AMP-A31	Building Elevations
		AMP-A32	Building Elevations
		AMP-A41	Building Sections
		AMP-A51	Wall Sections
		AMP-A52	Wall Sections
		AMP-A53	Wall Sections
		AMP-A61	Stair Details
		AMP-A62	Ramp Details
		AMP-A70	Floor Finish Plan
		AMP-A71	Room Schedule and Door Schedule
		M21	Plumbing New Work Plan
		M22	Sheet Metal New Work Plan
		E21	Electrical New Work Plan
			Farmers Market
		FM-A10	Foundation Detail & General Structural Notes
		FM-A11	Foundation Plan
		FM-A12	Floor Plan
		FM-A13	Reflected Ceiling Plan
		FM-A14	Roof Plan
		FM-A21	Enlarged Floor Plan
		FM-A31	Building Elevations
		FM-A32	Building Elevations
		FM-A41	Building Sections
		FM-A51	Wall Sections
		FM-A71	Door Schedule
		FM-A81	Interior Elevations
		M31	Plumbing New Work Plan
		M32	Sheet Metal New Work Plan
		E31	Electrical New Work Plan
			Ticket Booth
		TB-A1	Floor Plan, Foundation Plan, Reflected Ceiling Plan, Roof Plan and Structural Notes
		TB-A2	Building Elevations and Sections
		TB-A3	Wall Sections and Details
		M41	Mechanical New Work Plan (Splash Park)
		M42	Mechanical New Work Plan
		E41	Electrical New Work Plans (Splash Park)
			Renovated Restroom Building
		RRB-D1	Demolition Floor Plan and Demolition Reflected Ceiling Plan
		RRB-D2	Demolition Building Elevations
		RRB-A1	Floor Plan and Reflected Ceiling Plan
		RRB-A2	Door and Finish Schedule
		RRB-A3	Building Elevations
		RRB-A4	Building Sections
		RRB-A5	Wall Sections
		RRB-A6	Interior Elevations
		RRB-A7	Interior Elevations
		MD51	Mechanical - Demolition Plan
		M51	Plumbing New Work Plan
		M52	Sheet Metal New Work Plan
		ED51	Electrical Demolition Plan
		E51	Electrical New Work Plan



Issue / Revision Date	Description
3-7-17	Prelim. Review
3-21-17	Prelim. Review
5-9-17	Prelim. Review
5-16-17	Prelim. Review
6-7-17	City Review
6-19-17	Bids
6-29-17	Addendum #1
7-7-17	Addendum #2

drawn by _____ checked by _____

City of Sterling Heights
 Dodge Park Improvements
 Sterling Heights, Michigan

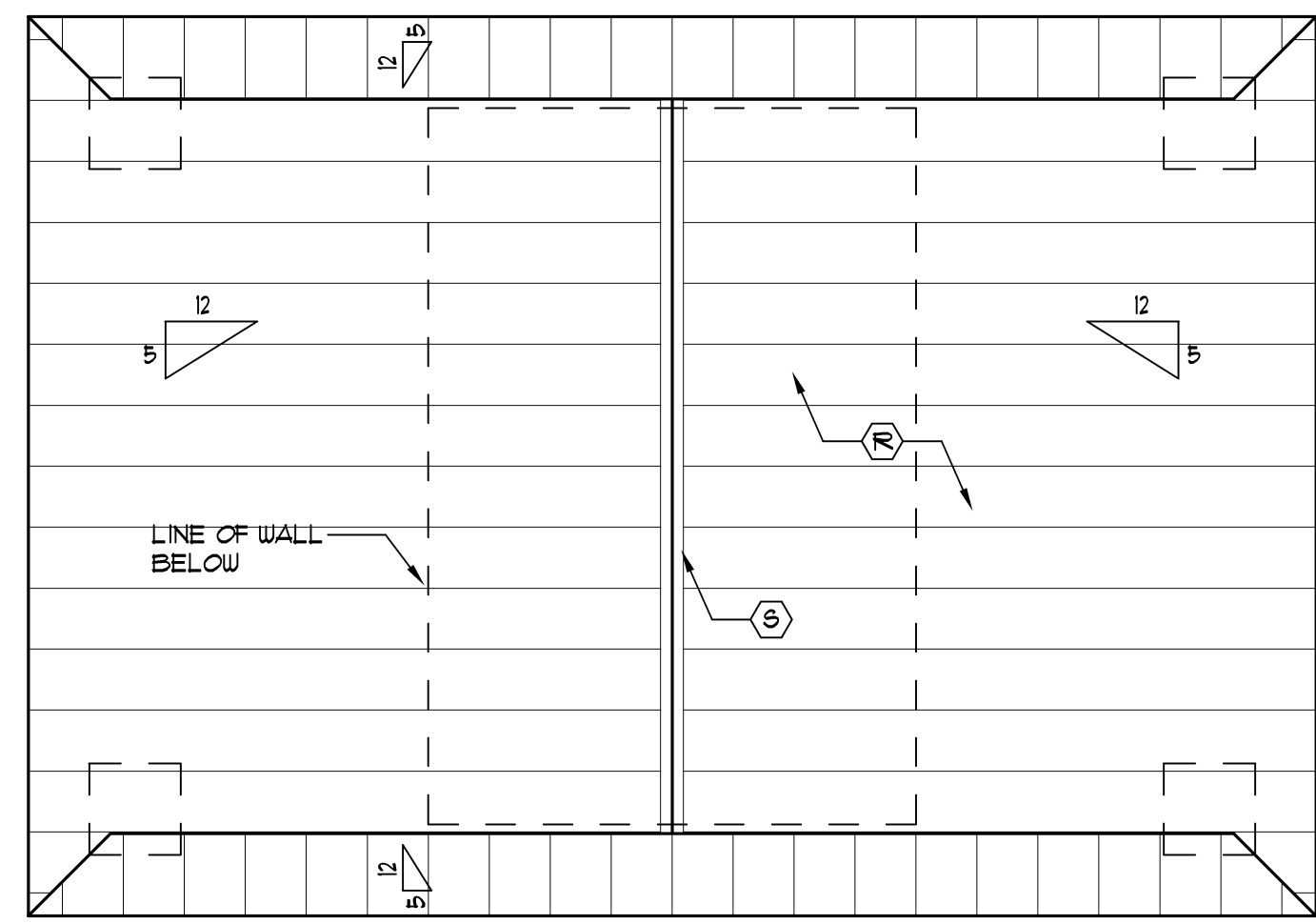
Sheet Index
 Project Data

project _____ sheet title _____

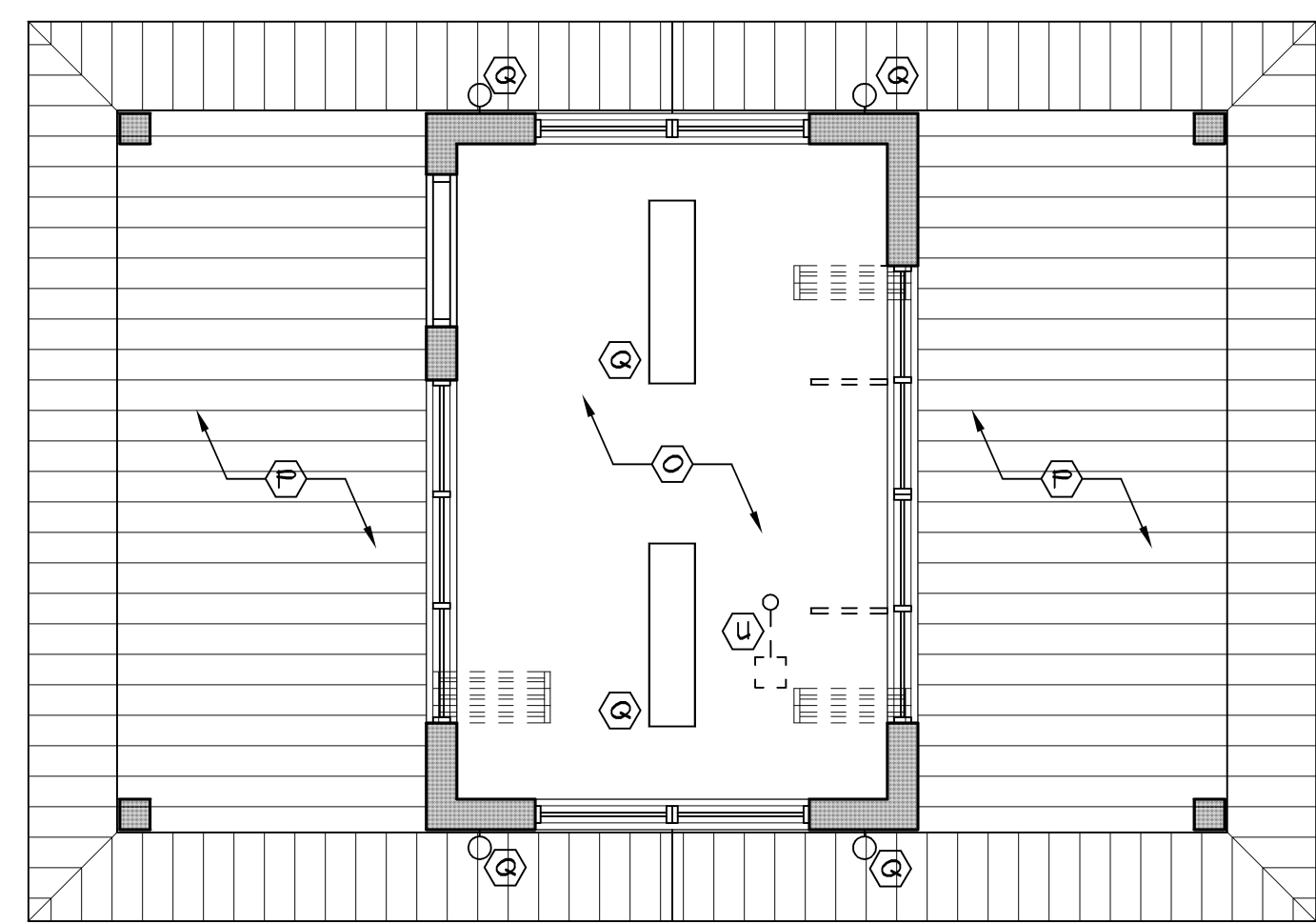


KEYED NOTES:

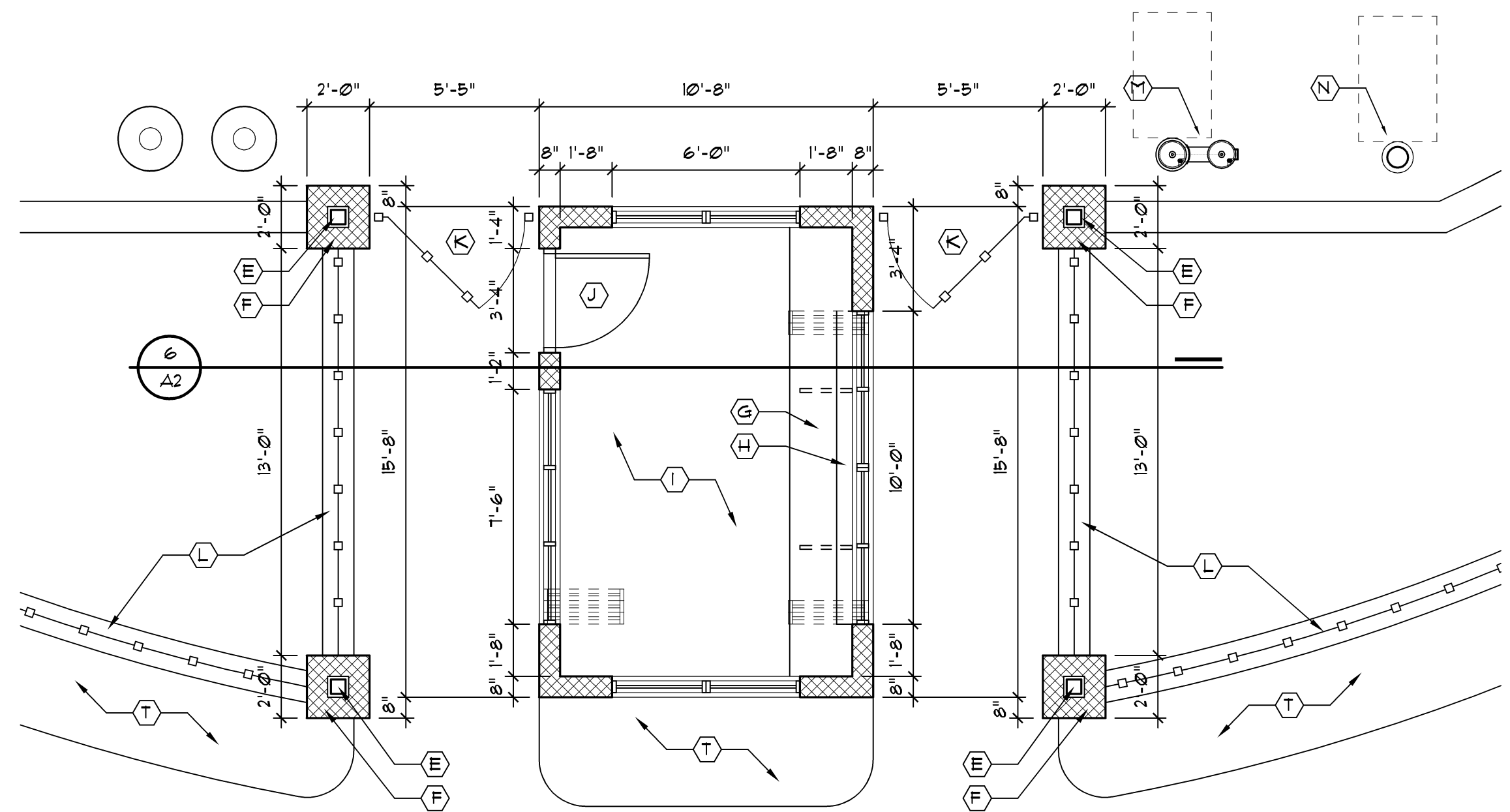
- (A) 8" FNDN. WALL ON 16"x12" CONCRETE SPREAD FOOTING W/ (2) #5 @ 4" BPTH. - SEE WALL SECTIONS FOR MORE INFORMATION
- (B) 4" CONC. SLAB ON 6 MIL. VAPOR BARRIER ON 4" COMP. GRANULAR BASE
- (C) 2'-0"x2'-0" CONC. PIER FOOTING - SEE WALL SECTIONS FOR MORE INFORMATION
- (D) SUPPORTED SLAB (SEE DETAIL THIS SHEET)
- (E) 6x6 MOISTURE TREATED POST W/ 1x8 FIBER CEMENT TRIM BOX-OUT (PAINT)
- (F) CMU PIER
- (G) SOLID SURFACE WORK SURFACE (SS-1) AT 30" AFF. SUPPORTED BY BRACKETS AS NECESSARY (SEE FLOOR PLAN. NO BRACKETS TO BE PLACED IN FRONT OF SLIDING WINDOW)
- (H) SOLID SURFACE TRANSACTION TOP (SS-1) AT 36" AFF.
- (I) CERAMIC TILE FLOOR AND BASE
- (J) 3'-0"x1'-0"x1'-3/4" HOLLOW METAL DOOR W/ SAFETY GLASS VISION LITE (PAINT)
- (K) HOLLOW METAL DOOR FRAME (PAINT) HARDWARE SET (2)
- (L) 5'-0" WIDE x 5'-0" HIGH ORNAMENTAL STEEL SWING GATE WITH LATCH AND LOCK
- (M) 3'-0" HIGH ORNAMENTAL STEEL FENCE ON RETAINING WALL
- (N) PEDESTAL DRINKING FOUNTAIN (SEE PLUMBING DRAWINGS)
- (O) FREESTANDING SHOWER (SEE PLUMBING DRAWINGS)
- (P) GYP. BD. CEILING - PAINT
- (Q) 5/8" 8" GROOVE FIBER CEMENT SOFFIT PANEL - PAINT
- (R) LIGHT FIXTURE (SEE ELECTRICAL DRAWINGS)
- (S) "SNAP-LOCK" STANDING SEAM METAL ROOFING ON 30" FELT ON 3/4" PLYWOOD SHEATHING ON WOOD ROOF TRUSSES @ 24" O.C. (TYP.)
- (T) RIDGE CAP
- (U) LANDSCAPING
- (V) EXHAUST FAN (SEE MECHANICAL PLANS)



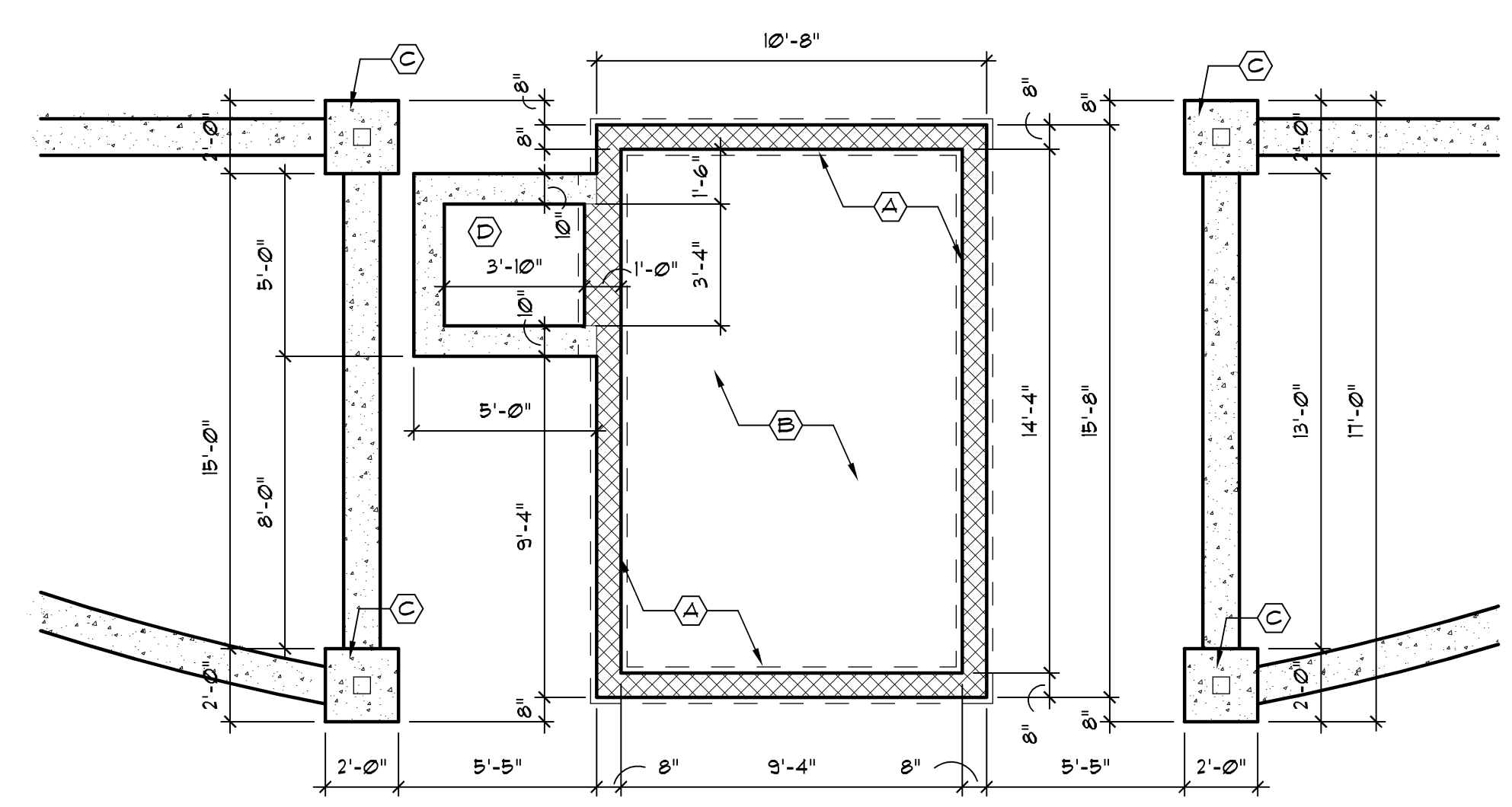
4 Roof Plan
Scale: 1/4" = 1'-0"



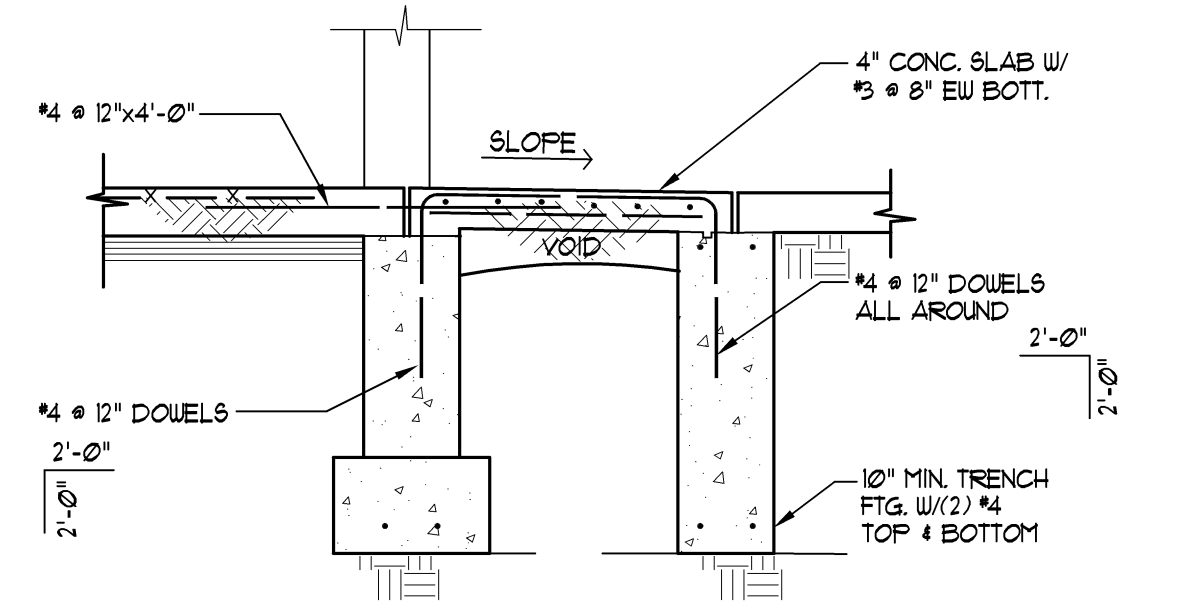
3 Reflected Ceiling Plan
Scale: 1/4" = 1'-0"



2 Floor Plan
Scale: 1/4" = 1'-0"



1 Foundation Plan
Scale: 1/4" = 1'-0"



5 Supported Slab Detail
Scale: Not to Scale



Issue / revision date
3-7-17 Prelim. Review
3-21-17 Prelim. Review
5-9-17 Prelim. Review
5-16-17 Prelim. Review
6-7-17 City Review
6-19-17 Bids
7-7-17 Addendum #3

drawn by _____ checked by _____

City of Sterling Heights
Dodge Park Improvements
Sterling Heights, Michigan
project
sheet title
Splash Park Ticket Booth - Floor Plan

Dorchen/Martin Associates, Inc.
Architects/Planners
29895 Greenfield Rd., Suite 107
Southfield, Michigan 48076
(248) 557-1062
Fax: (248) 557-1231

job no. 16078A sheet no. TB-A1

ROOM FINISH SCHEDULE											
ROOM NO.	ROOM NAME	FLOOR	BASE	CEILING			WALLS				REMARKS
				MTL.	HGT.	FINISH	N	E	S	W	
101	EXISTING WOMEN'S RESTROOM	C.T.-6,10,9	C.T. - 6	GYP. BD.	9'-4"	PT. - 4	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	SEE CT TILE PATTERN TYPICAL
102	EXISTING MEN'S RESTROOM	C.T.-6,10,9	C.T. - 6	GYP. BD.	9'-4"	PT. - 4	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	SEE CT TILE PATTERN TYPICAL
103	EXISTING MAINTENANCE/UTILITY	-	-	PLYWOOD	9'-4"	PT. - 4	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	MAS./PT. - 3	
104	FAMILY RESTROOM 1	C.T. - 6 & 7	C.T. - 5	GYP. BD.	9'-4"	PT. - 4	MAS./PT. - 3	GYP./PT. - 8 C.T. - 5	GYP./PT. - 8 C.T. - 5	MAS./PT. - 3	SEE CT TILE PATTERN TYPICAL
105	FAMILY RESTROOM 2	C.T. - 6 & 7	C.T. - 5	GYP. BD.	9'-4"	PT. - 4	MAS./PT. - 3	MAS./PT. - 3	GYP./PT. - 8 C.T. - 5	GYP./PT. - 8 C.T. - 5	SEE CT TILE PATTERN TYPICAL

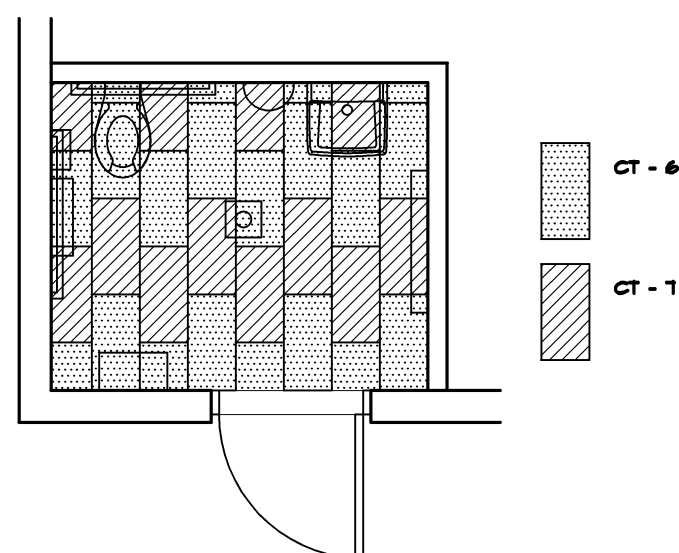
DOOR SCHEDULE													
DOOR NO.	DOOR SIZE	DOOR			HDUR. SET	FRAME			DETAILS			LABEL	CODED REMARKS
		TYPE	MAT'L.	FINISH		TYPE	MAT'L.	FINISH	SILL	JAMB	HEAD		
101	3'-0"x7'-0"x1-3/4"	B	H.M.	PAINT	18	EX.	H.M.	PAINT	202	-	-	-	1, 5, 10, 12, 13, 14
102	3'-0"x7'-0"x1-3/4"	B	H.M.	PAINT	18	EX.	H.M.	PAINT	202	-	-	-	1, 5, 10, 12, 13, 14
103	3'-0"x7'-0"x1-3/4"	A	H.M.	PAINT	19	EX.	H.M.	PAINT	202	-	-	-	1, 5, 11, 14, 15
104	3'-0"x7'-0"x1-3/4"	B	H.M.	PAINT	17	FI	H.M.	PAINT	202	201	-	-	1, 5, 9, 10, 14
105	3'-0"x7'-0"x1-3/4"	B	H.M.	PAINT	17	FI	H.M.	PAINT	202	201	-	-	1, 5, 10, 12, 13, 14

MATERIAL KEY

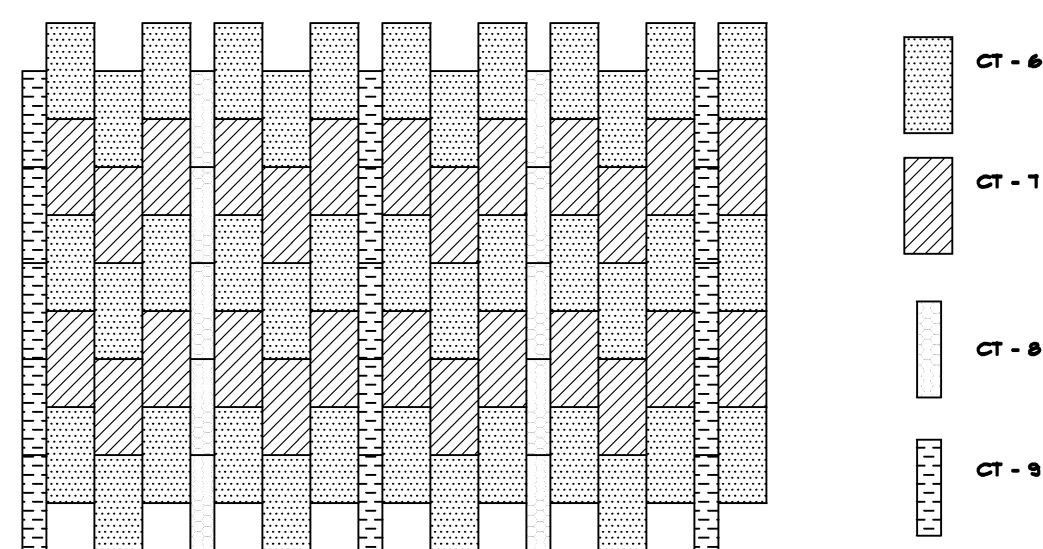
- ACT = ACOUSTIC CEILING TILE
- ACC = ACOUSTIC CEILING CANOPY
- AL/GL. = ALUMINUM & GLASS
- CAB. = CABINETRY
- CONC. = CONCRETE
- CPT. = CARPET
- C.T. = CERAMIC TILE
- C.T.B. = CERAMIC TILE BASE
- E.C. = EXPOSED CONSTRUCTION
- EFNT. = EPOXY PAINT
- FUC. = FABRIC WALL COVERING
- G.B. = GYPSUM BOARD
- MAS. = MASONRY
- FRKD. = PRE-FIN. METAL KNOCK DOWN FRAME
- F. LAM. = PLASTIC LAMINATE
- PT. = PAINT
- PRE-FIN. = PRE-FINISHED
- R.B. = RUBBER BASE
- WD. = STAINED WOOD
- V.B. = VINYL BASE
- VCT. = VINYL COMPOSITION TILE
- VSF. = VINYL SHEET FLOORING
- VWC. = VINYL WALL COVERING
- WP. = WALL PROTECTION

GENERAL REMARKS

1. FLOOR MATERIAL CHANGES OCCUR AT CENTERLINE OF DOOR.
2. ACCESS PANELS, ELECTRICAL PANELS, HVAC REGISTERS & FIRE EXTINGUISHER CABINETS SHALL BE PRE-FINISHED OR PAINTED TO MATCH ADJACENT WALLS OR CEILINGS.
3. ALL DOOR & WINDOW FRAMES TO RECEIVE A CONTINUOUS BEAD OF SEALANT AT ALL PERIMETER EDGES.
4. ALL EXPOSED STEEL SHALL BE PAINTED.
5. REFER TO REFLECTED CEILING PLANS AND SECTIONS WHERE CEILING HEIGHT VARIES.
6. ALL GYPSUM BOARD SOFFITS SHALL BE PAINTED.



TYPICAL TOILET ROOM 104 & 105 CERAMIC TILE PATTERN
NTA



TYPICAL TOILET ROOM 101 & 102 CERAMIC TILE PATTERN
NTA

ABBREVIATIONS

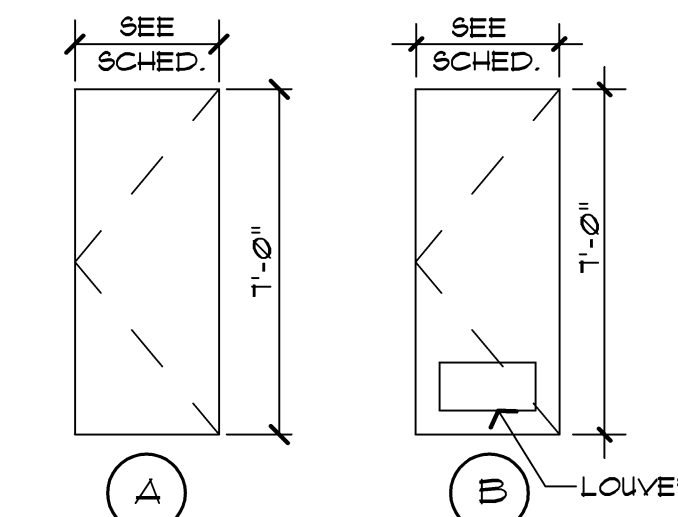
- AL/GL. = ALUMINUM & GLASS
- ALUM. = ALUMINUM
- CANOD. = CLEAR ANODIZED
- BI. = BI-FOLD
- H.M. = HOLLOW METAL
- H.M.K.D. = HOLLOW METAL KNOCK DOWN
- GL. = GLASS
- MANF. = BY MANUFACTURER
- O.H. = OVERHEAD DOOR
- FRKD. = PRE-FIN. METAL KNOCK DOWN FRAME
- F. LAM. = PLASTIC LAMINATE
- PRE-FIN. = PRE-FINISHED
- STL. = STEEL
- S.V. = STAIN & VARNISH (FIELD FINISHED)
- WD. = WOOD, SOLID CORE

CODED REMARKS

1. CLOSER
2. SAFETY GLASS VISION LITE
3. SAFETY GLASS SIDE LITE
4. VINYL CARPET TO TILE JOINER
5. METAL THRESHOLD
6. MARBLE THRESHOLD
7. VINYL REDUCING STRIP
8. TERRAZZO STRIP
9. GROUT FILLED FRAME
10. LIMIT DOOR TO 90° SWING
11. DOOR TO OPEN 135°
12. PUSH / PULL
13. WALL MOUNTED DOOR STOP
14. WEATHER STRIPPING
15. KICK DOWN DOOR STOP

GENERAL DOOR & FRAME NOTES

1. ALL DOOR FRAMES ARE TO RECEIVE CONTINUOUS BEAD OF SEALANT AT PERIMETER - BOTH SIDES.
2. ALL H.M. FRAMES SHALL BE GROUT FILLED.
3. ALL H.M. DOORS TO BE GALVANIZED, PAINTED



DOOR TYPES

NO SCALE

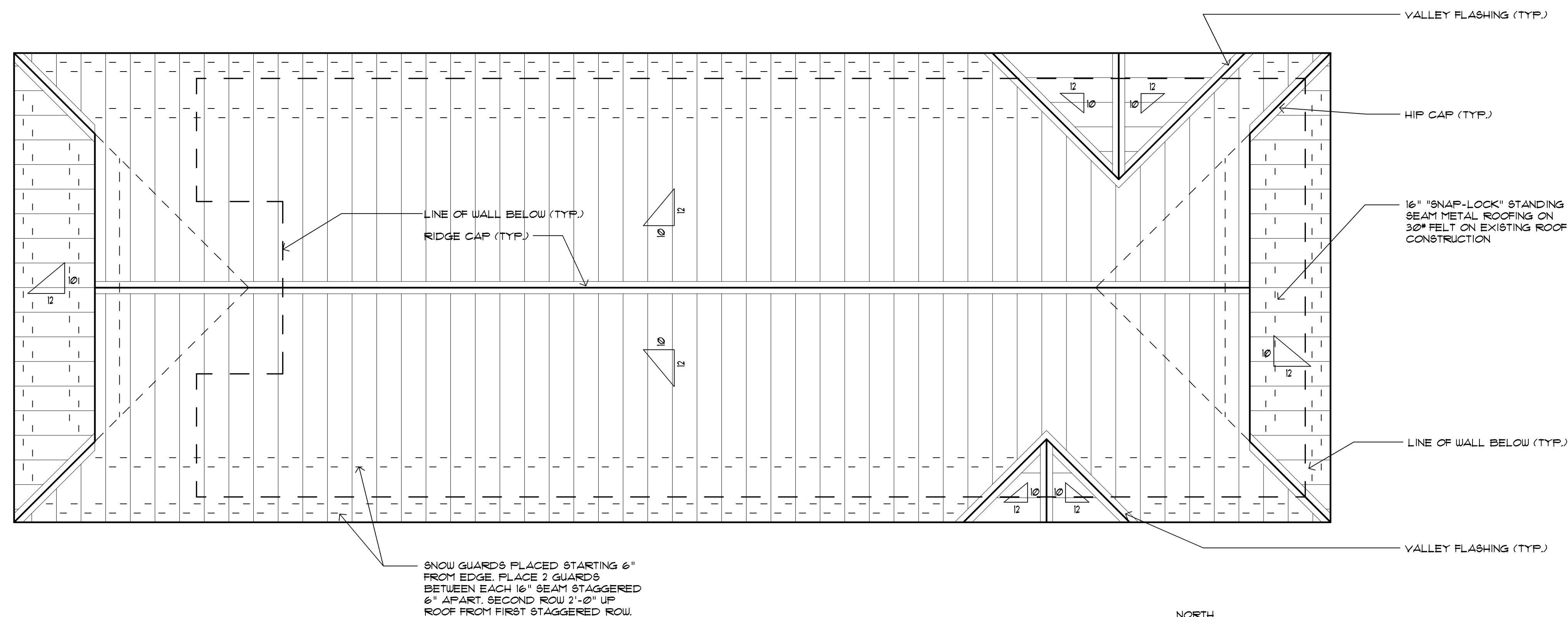


FRAME TYPES

NO SCALE

202 THRESHOLD DETAIL
SCALE: 3" = 1'-0"

201 JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



SNOW GUARDS PLACED STARTING 6" FROM EDGE, PLACE 2 GUARDS BETWEEN EACH 16" SEAM STAGGERED 6" APART, SECOND ROW 2'-0" UP ROOF FROM FIRST STAGGERED ROW.

2 Roof Plan
A2 Scale: 1/4" = 1'-0"



architect seal



issue / revision date	description
3-7-17	Prelim. Review
3-21-17	Prelim. Review
5-9-17	Prelim. Review
5-16-17	Prelim. Review
6-7-17	City Review
6-19-17	Bids
7-7-17	Addendum #3

drawn by _____ checked by _____

City of Sterling Heights
Dodge Park Improvements
Sterling Heights, Michigan

Renovated Restrooms & Utility Building
Roof Plan & Finish Schedule

project _____ sheet title _____

Dorchen/Martin Associates, Inc.
Architects/Planners
29895 Greenfield Rd., Suite 107
Southfield, Michigan 48076
(248) 557-1062
Fax: (248) 557-1231

job no. _____ sheet no. _____
16078A RRB-A2



Issue / Revision Date	Description
3-7-17	Prelim. Review
3-21-17	Prelim. Review
5-9-17	Prelim. Review
5-16-17	Prelim. Review
6-7-17	City Review
6-19-17	Bids
7-7-17	Addendum #3

drawn by _____ checked by _____

City of Sterling Heights
Dodge Park Improvements
Sterling Heights, Michigan

Farmers Market
Floor Plan

project _____ sheet title _____

Dorchen/Martin Associates, Inc.
Architects/Planners
29896 Greenfield Rd., Suite 107
Southfield, Michigan 48076
(248) 557-1062
Fax: (248) 557-1231

job no. _____ sheet no. _____
16078A **FM-A12**

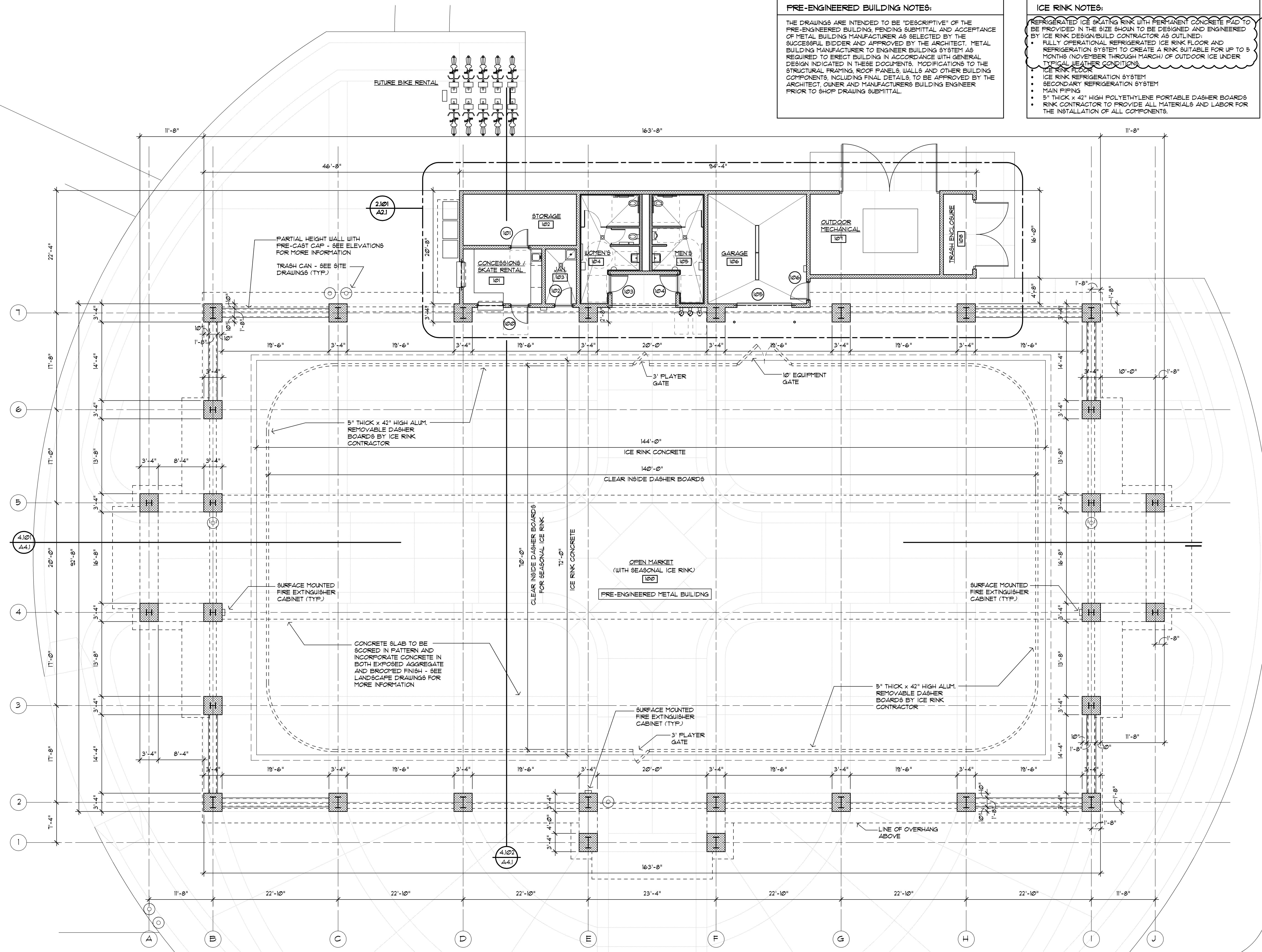
PRE-ENGINEERED BUILDING NOTES:

THE DRAWINGS ARE INTENDED TO BE "DESCRIPTIVE" OF THE PRE-ENGINEERED BUILDING, PENDING SUBMITTAL AND ACCEPTANCE OF METAL BUILDING MANUFACTURER AS SELECTED BY THE SUCCESSFUL BIDDER AND APPROVED BY THE ARCHITECT. METAL BUILDING MANUFACTURER TO ENGINEER BUILDING SYSTEM AS REQUIRED TO ERECT BUILDING IN ACCORDANCE WITH GENERAL DESIGN INDICATED IN THESE DOCUMENTS. MODIFICATIONS TO THE STRUCTURAL FRAMING, ROOF PANELS, WALLS AND OTHER BUILDING COMPONENTS, INCLUDING FINAL DETAILS, TO BE APPROVED BY THE ARCHITECT, OWNER AND MANUFACTURER'S BUILDING ENGINEER PRIOR TO SHOP DRAWING SUBMITTAL.

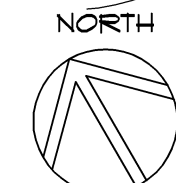
ICE RINK NOTES:

REFRIGERATED ICE SKATING RINK WITH PERMANENT CONCRETE PAD TO BE PROVIDED IN THE SIZE SHOWN TO BE DESIGNED AND ENGINEERED BY ICE RINK DESIGN/BUILD CONTRACTOR AS OUTLINED:

- FULLY OPERATIONAL REFRIGERATED ICE RINK FLOOR AND REFRIGERATION SYSTEM TO CREATE A RINK SUITABLE FOR UP TO 5 MONTHS (NOVEMBER THROUGH MARCH) OF OUTDOOR ICE UNDER TYPICAL WEATHER CONDITIONS.
- ICE RINK FLOOR
- ICE RINK REFRIGERATION SYSTEM
- SECONDARY REFRIGERATION SYSTEM
- MAIN PIPING
- 5" THICK x 42" HIGH POLYETHYLENE PORTABLE DASHER BOARDS
- RINK CONTRACTOR TO PROVIDE ALL MATERIALS AND LABOR FOR THE INSTALLATION OF ALL COMPONENTS.



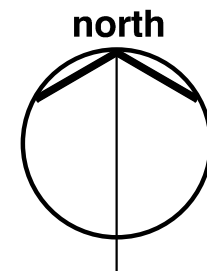
1201 Floor Plan
A12 Scale: 1/8" = 1'-0"



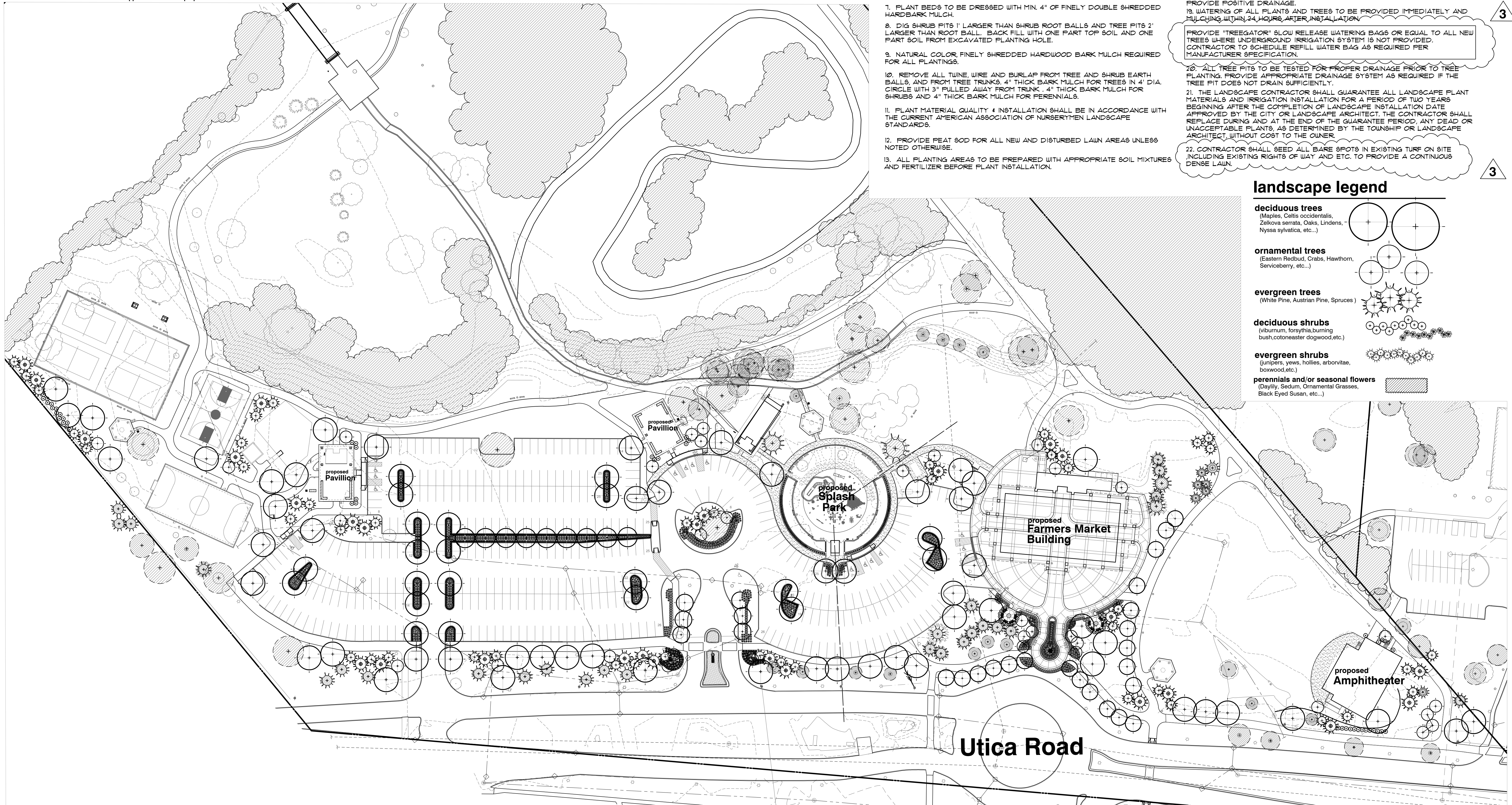
landscape plan for:
“Dodge Park”

City of Sterling Heights, Michigan

note
 preliminary concept plan for inspection purposes
 only and in no way a construction document or
 approved for record purposes.



scale: 0' 30' 60' 120' 180'



general landscape notes:

- LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISTING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK, CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.
- PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES, GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING.
- NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON SITE IF NECESSARY.
- ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY STERLING HEIGHTS AND LANDSCAPE ARCHITECT.
- ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAIL SHOWN ON PLAN.
- PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARBARK MULCH.
- DIG SHRUB PITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
- NATURAL COLOR FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.
- REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4" DIA. CIRCLE WITH 3" PULLED AWAY FROM TRUNK. 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.
- PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERMEN LANDSCAPE STANDARDS.
- PROVIDE PEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.
- ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.

- PLANT TREES AND SHRUBS GENERALLY NO CLOSER THEN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:
 - SHADE TREES 5 FT.
 - ORNAMENTAL AND EVERGREEN TREES (CRAB, PINE, SPRUCE, ETC.) 10 FT.
 - SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY 2 FT.
- NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.
- ALL LAWN AREAS AND LANDSCAPE BEDS TO BE FULLY IRRIGATED WITH A AUTOMATIC UNDERGROUND SYSTEMS. IRRIGATION SYSTEM TO HAVE SEPARATE ZONES FOR LAWN AREAS, PARKING ISLANDS, AND SHRUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED.
- UNLESS NOTED OTHERWISE, LANDSCAPE BEDS ADJACENT TO LAWN TO RECEIVE EDGING. EDGING SHALL BE 4" X 1/8" METAL (FINISH BLACK OR GREEN) OR APPROVED EQUAL, AND TO BE INSTALLED WITH HORIZONTAL METAL STAKES AT 32" O.C. OR PER MANUFACTURER'S SPECIFICATION.
- ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND FLOOR SOILS A MIN. OF 16"-18" DEPTH. BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS. ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.
- WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
- ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEARS BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLATION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.
- CONTRACTOR SHALL SEED ALL BARE SPOTS IN EXISTING TURF ON SITE INCLUDING EXISTING RIGHTS OF WAY AND ETC. TO PROVIDE A CONTINUOUS DENSE LAWN.

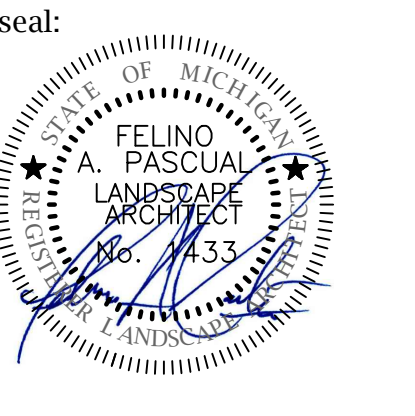
PROVIDE "TREEGATOR" SLOW RELEASE WATERING BAGS OR EQUAL TO ALL NEW TREES WHERE UNDERGROUND IRRIGATION SYSTEM IS NOT PROVIDED. CONTRACTOR TO SCHEDULE REFILL WATER BAG AS REQUIRED PER MANUFACTURER SPECIFICATION.

landscape legend

- deciduous trees**
 (Maples, Celtis occidentalis, Zelkova serrata, Oaks, Lindens, Nyssa sylvatica, etc...)
- ornamental trees**
 (Eastern Redbud, Crabs, Hawthorn, Serviceberry, etc...)
- evergreen trees**
 (White Pine, Austrian Pine, Spruces)
- deciduous shrubs**
 (viburnum, forsythia, burning bush, cotoneaster dogwood, etc.)
- evergreen shrubs**
 (Junipers, yews, hollies, arborvitae, boxwood, etc.)
- perennials and/or seasonal flowers**
 (Daylily, Sedum, Ornamental Grasses, Black Eyed Susan, etc...)



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 and ASSOCIATES
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 24333 Orchard Lake Rd, Suite G
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client:
City of Sterling Heights

PARKS and RECREATION

project:
Dodge Park

project location:
 City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:
overall landscape planting view

job no./issue/revision date:
 LS17.011.05 REVIEW 6-12-2017
 LS17.011.05 CITY 6-17-2017
 LS17.011.07 ADDENDUM # 3 7-7-2017

drawn by:
KM
 checked by:
FP
 date:
5-12-2017

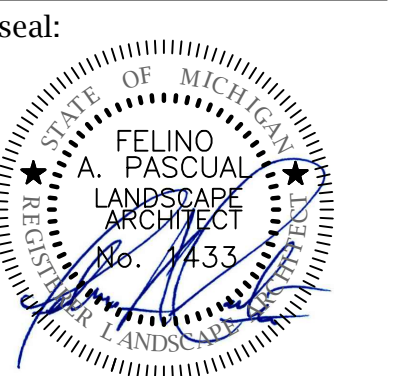
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project no:
LS17.011.05

sheet no:
LS-1 of 5



client:

City of Sterling Heights

PARKS and RECREATION

project:
Dodge Park

project location:
 City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:
landscape planting detail

job no./issue/revision date:
 LS17.011.05 REVIEW 6-12-2017
 LS17.011.05 CITY 6-17-2017
 LS17.011.07 ADDENDUM # 3 7-7-2017

drawn by:
KM
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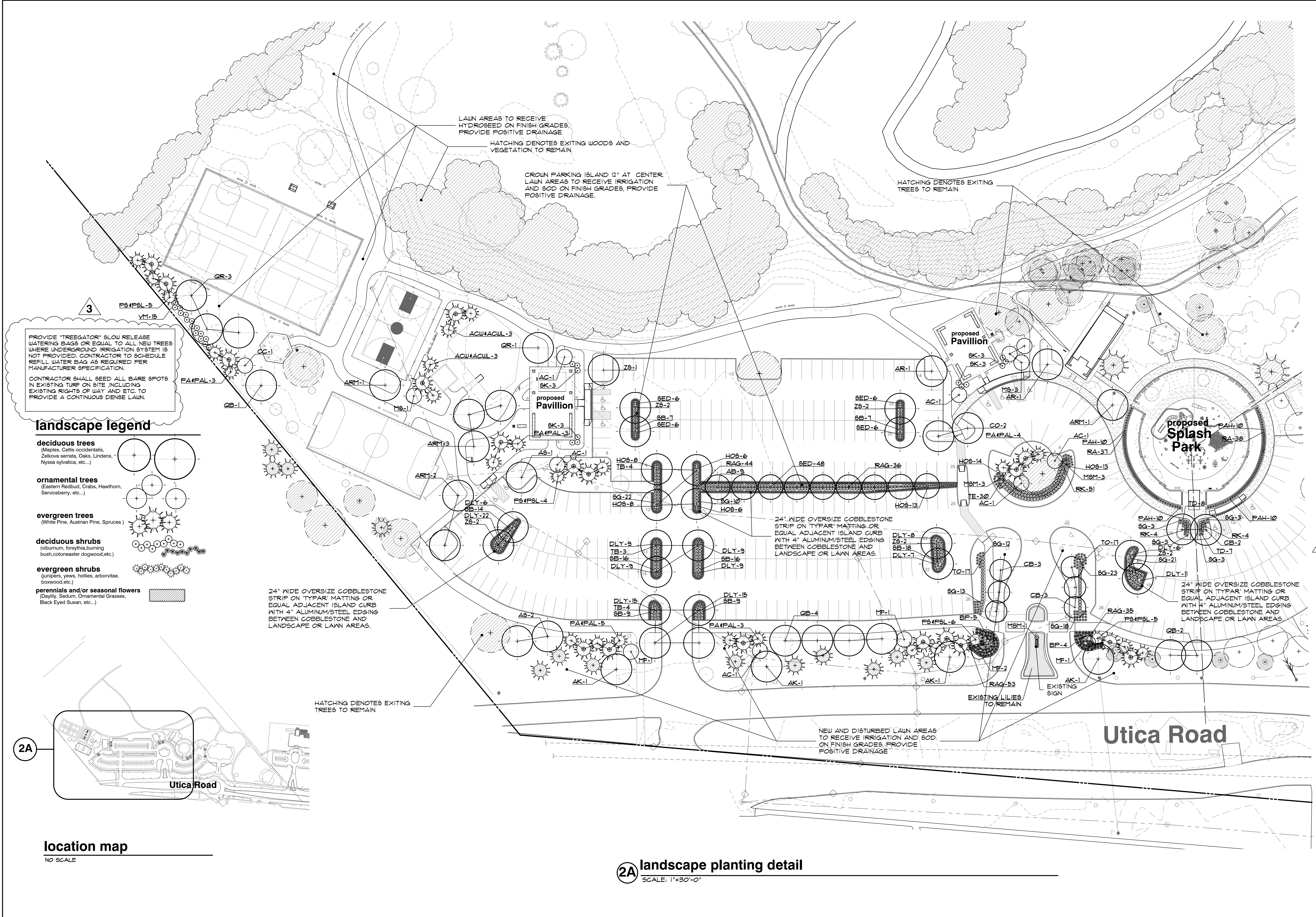
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project no:
LS17.011.05

sheet no:
LS-2 of 5



LAWN AREAS TO RECEIVE HYDROSEED ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

HATCHING DENOTES EXISTING TREES TO REMAIN

NEW AND DISTURBED LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

LAWN AREAS TO RECEIVE HYDROSEED ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE

HATCHING DENOTES EXISTING WOODS AND VEGETATION TO REMAIN

HATCHING DENOTES EXISTING TREES TO REMAIN

seal:



client:

City of Sterling Heights

PARKS and RECREATION

project:

Dodge Park

project location:

City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:

landscape planting detail

job no./issue/revision date:

LS17.011.05 REVIEW 6-12-2017
 LS17.011.05 CITY 6-17-2017
 LS17.011.07 ADDENDUM # 3 7-7-2017

drawn by:
KM

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5-12-2017

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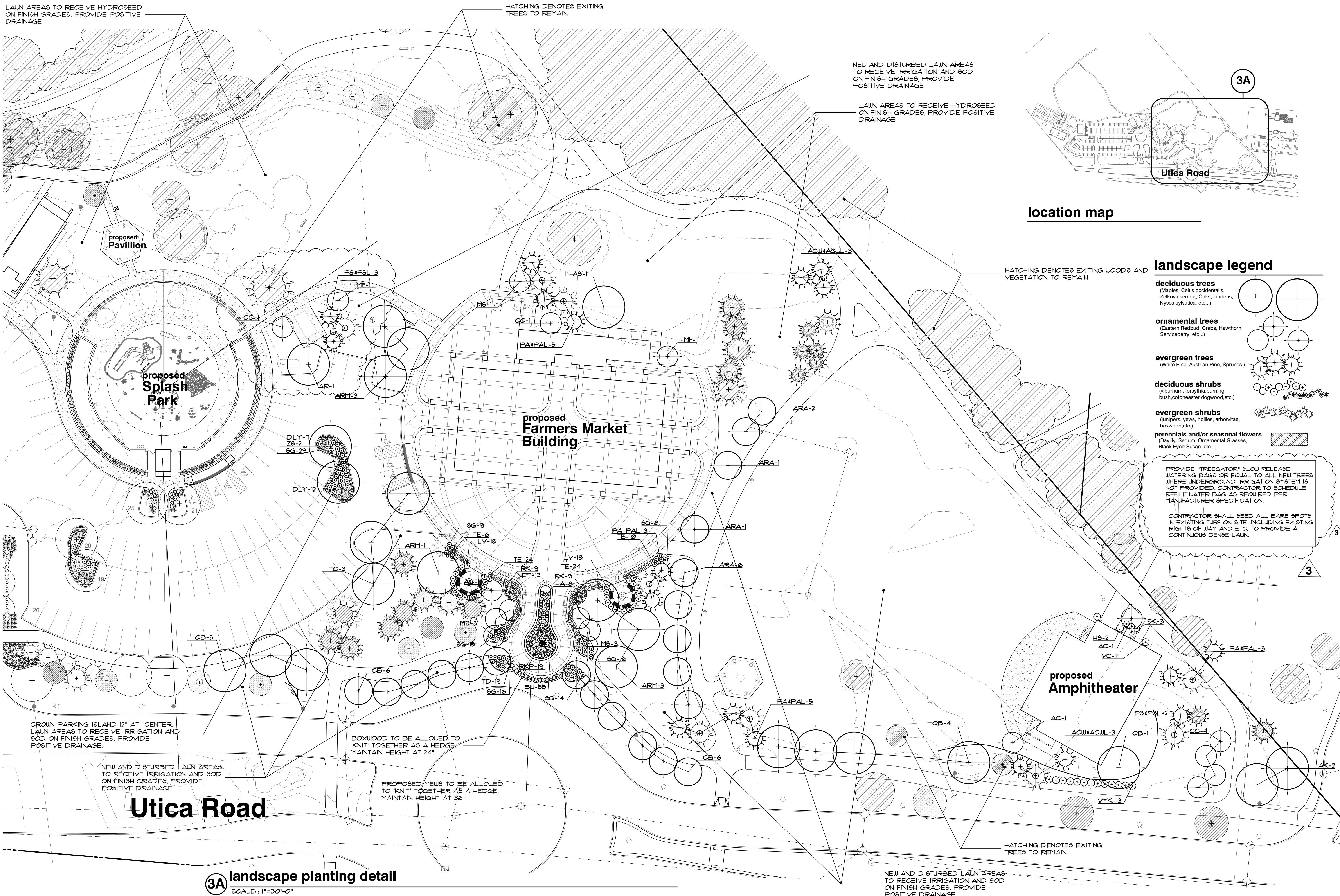
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project no.:

LS17.011.05

sheet no.:

LS-3 of 5



3A landscape planting detail
 SCALE: 1"=30'-0"

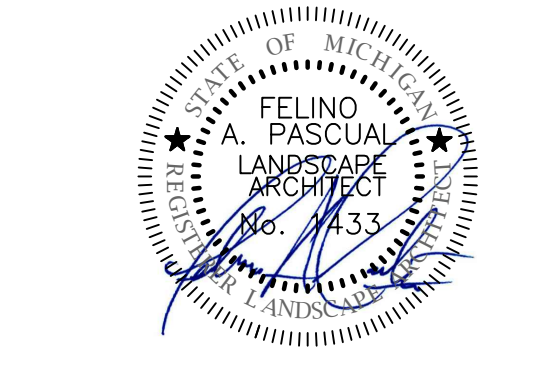
plant material list

key	quant. LS-2	quant. LS-3	botanical name	common name	size	comments
LARGE AND SMALL DECIDUOUS TREES						
AS	3	1	ACER S. 'MAJESTY'	MAJESTY SUGAR MAPLE	3" BB	
AK	4	2	ACER F. 'CRIMSON KING'	CRIMSON KING NORWAY MAPLE	3" BB	
AR	2	1	ACER RUBRUM	RED MAPLE	3" BB	
ARM	1	1	ACER RUBRUM	RED MAPLE	14" BB	(MULTI-STEM)
ARA	-	10	ACER R. 'ARMSTRONG'	ARMSTRONG RED MAPLE	3" BB	
TB	11	-	TILIA CORDATA 'BOULEVARD'	BOULEVARD LINDEN	3" BB	
TC	-	3	TILIA CORDATA	LITTLELEAF LINDEN	3" BB	
QR	4	-	QUERCUS RUBRA	RED OAK	3" BB	
QB	1	8	QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	
CB	8	12	CARPINUS BETULUS 'FASTIGIATA'	PYRAMIDAL EUROPEAN HORNBEAN	3" BB	
ZS	11	2	ZELKOVA BERRATA	JAPANESE ZELKOVA	3" BB	
CO	2	-	CELTIS OCCIDENTALIS	HACKBERRY	3" BB	
CC	1	-	CERCIS CANADENSIS	EASTERN REDBUD	8" BB	(MULTI-STEM)
AB	9	-	AESCULUS XC. 'BRIOTT'	BRIOTT RED HORSE CHESTNUT	2" BB	
AC	6	2	AMELANCHIER CANADENSIS	SHADLOW SERVICEBERRY	8" BB	(MULTI-STEM)
MF	5	2	MALUS FLORIBUNDA	JAPANESE FLOWERING CRABAPPLE	2" BB	
M6	4	1	MALUS SARGENTII	SNOWDRIFT CRABAPPLE	2" BB	
SHRUBS						
SK	12	3	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	3" B.B.	
RKP	-	19	ROSA X. 'RADCON'	PINK KNOCK-OUT ROSA	5" CONT.	
RK	50	18	ROSA X. 'OSA EASY DOUBLE RED'	OSA EASY DOUBLE RED ROSE	5" CONT.	
HA	-	8	HYDRANGEA A. 'ANNABELLE'	ANNABELLE HYDRANGEA	5" CONT.	
RA	75	-	RIBES ALPINUM	ALPINE CURRANT	5" CONT.	
VC	-	1	VIBURNUM CARLESII	KOREANSPICE VIBURNUM	3 1/2" BB	42" O.C. SPACING
VM	15	-	VIBURNUM P.T. 'MARIESII'	MARIESI DOUBLEFILE VIBURNUM	3 1/2" BB	
VHK	-	13	VIBURNUM X.B. 'MOHAUK'	MOHAUK VIBURNUM	3 1/2" BB	
SG	131	101	SPIRAEA X.B. 'GOLDFLAME'	GOLDFLAME SPIRAEA	5" CONT.	
H5	-	2	HIBISCUS S. 'APHRODITE'	APHRODITE ALTHEA	5" CONT.	
RAG	168	-	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	5" CONT.	
BP	9	-	BERBERIS T. 'ROSE GLOW'	ROSE GLOW BARBERRY	5" CONT.	
LV	-	36	LIGUSTRUM X. VICARYI	VICARY PRIVET	3" BB	
SB	96	-	SPIRAEA X.B. 'ANTHONY WATERER'	ANTHONY WATERER SPIRAEA	5" CONT.	
LARGE AND SMALL EVERGREENS						
BW	-	55	BUXUS 'GREEN VELVET'	GREEN VELVET BOXWOOD	18" BB	24" O.C. SPACING
TD	15	19	TAXUS XM. 'DENSIFORMIS'	DENSIFORMIS YEW	24"-30" BB	24" O.C. SPACING
TE	30	64	TAXUS XM. 'EVERLOW'	EVERLOW YEW	24"-30" BB	32" O.C. SPACING
TO	34	-	THUJA OCCIDENTALIS 'HETZ MIDGET'	HETZ MIDGET ARBORVITAE	5" CONT.	
ACW	4	5	ABIES CONCOLOR	CONCOLOR WHITE FIR	8" BB	
ACUL	2	1	ABIES CONCOLOR	CONCOLOR WHITE FIR	10" BB	O
PS	11	3	PINUS STROBUS	EASTERN WHITE PINE	8" BB	
PBL	9	2	PINUS STROBUS	EASTERN WHITE PINE	10" BB	O
PA	11	10	PICEA ABIES	NORWAY SPRUCE	8" BB	
PAL	7	6	PICEA ABIES	NORWAY SPRUCE	10" BB	O
PERENNIALS AND GRASSES						
PAH	40	-	FENNISETUM ALOPECUROIDES 'HAMELIN'	DWARF FOUNTAIN GRASS	5" CONT.	
M5M	7	-	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT JAPANESE SILVER GRASS	5" CONT.	
NEP	-	13	NEPETA X. FAASSBENII 'WALKERS LOW'	WALKERS LOW CATMINT	4" CONT.	
DLY	126	19	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	4" CONT.	
H05	68	-	HOSTA 'PATRIOT'	PATRIOT HOSTA	4" CONT.	
SED	12	-	SEDUM SPECTABILE 'NEON'	NEON SEDUM	4" CONT.	

3

3

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client:
City of Sterling Heights

PARKS and RECREATION

project:
Dodge Park

project location:
City of Sterling Heights, Michigan
 Dodge Park Road and Utica Park

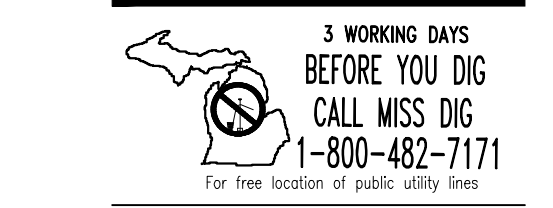
sheet title:
plant material list, planting details and landscape notes

job no./issue/revision date:
 LS17.011.05 REVIEW 6-12-2017
 LS17.011.05 CITY 6-17-2017
 LS17.011.07 ADDENDUM # 3 7-7-2017

drawn by:
KM

checked by:
FP
 date:
5-12-2017

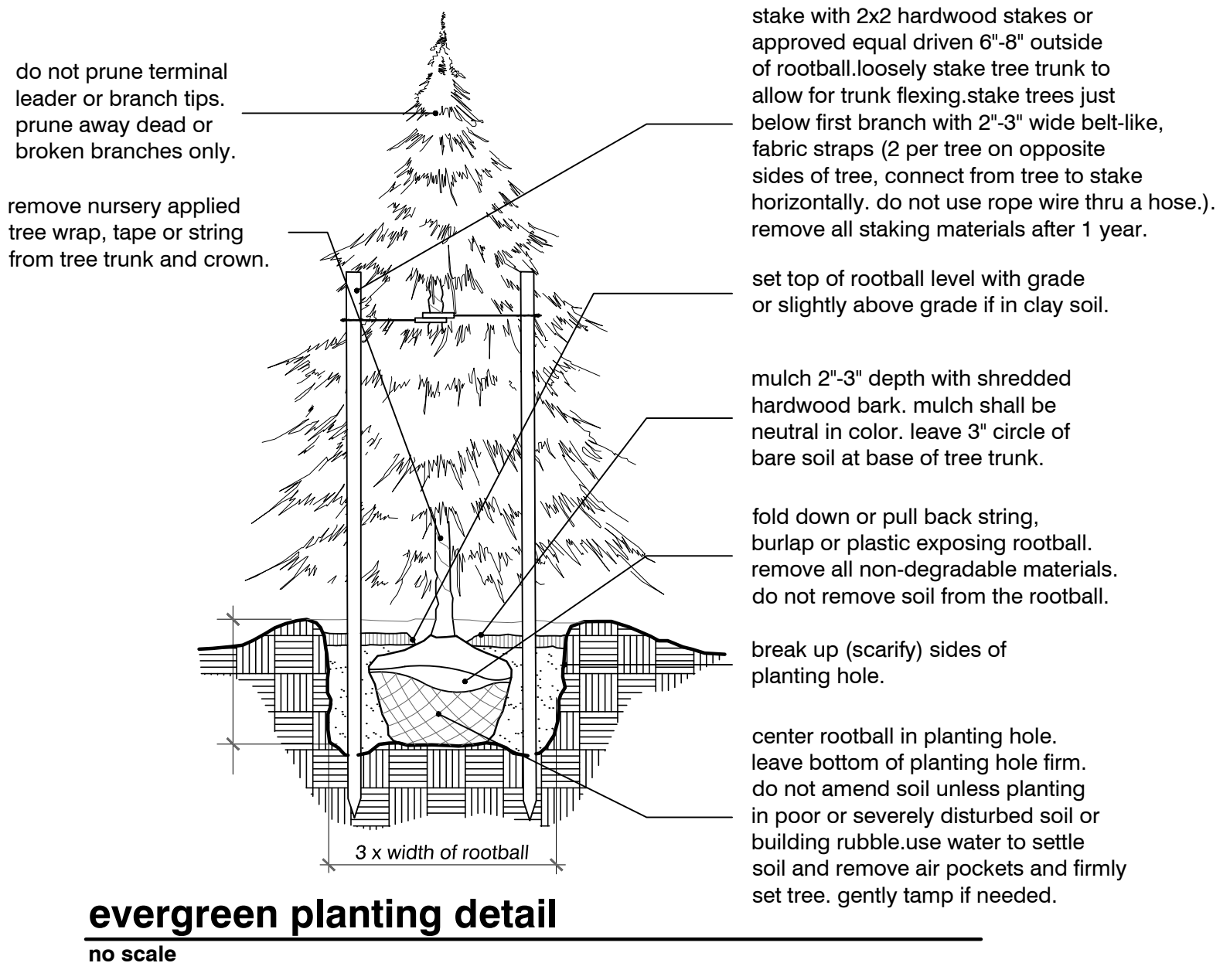
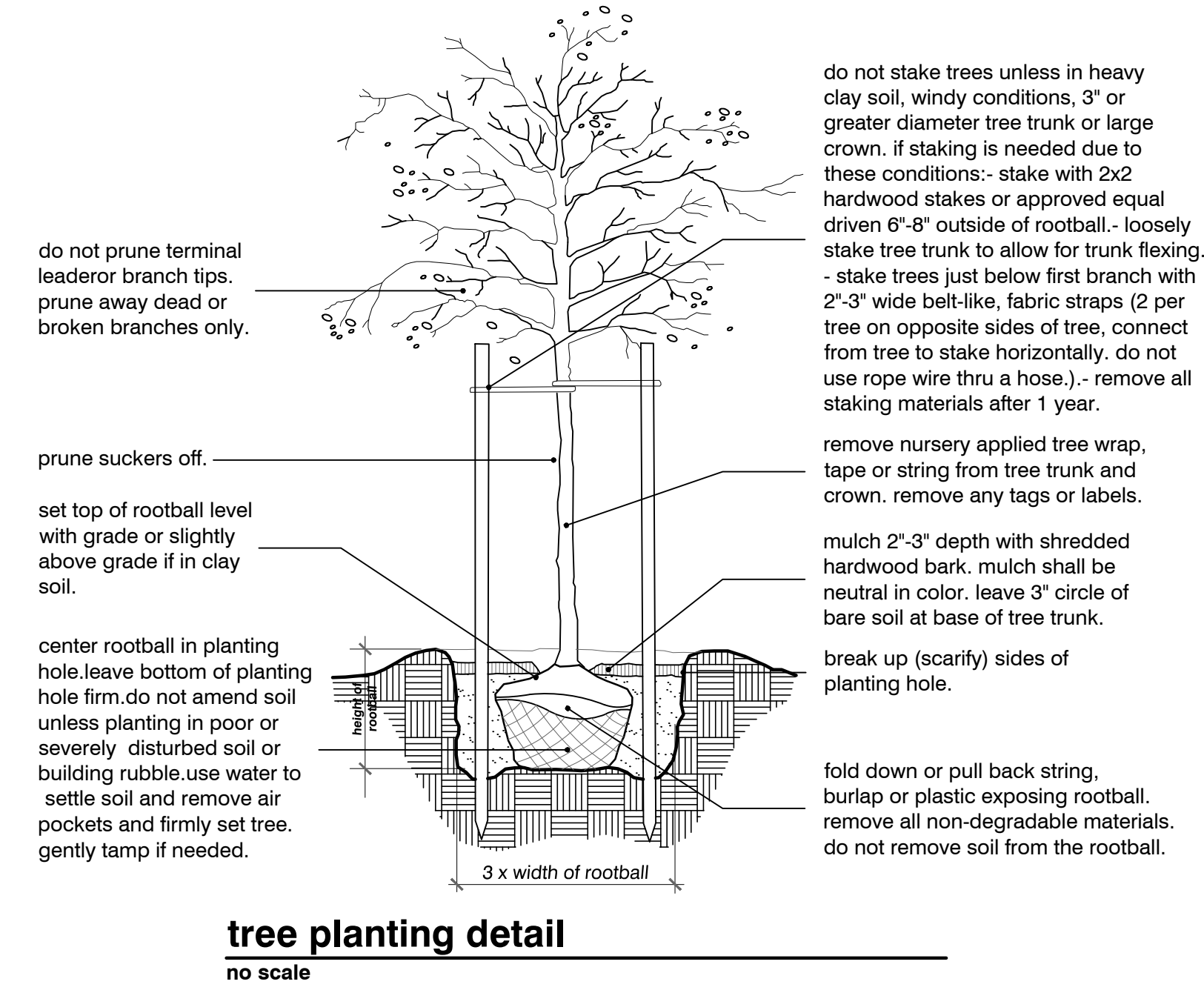
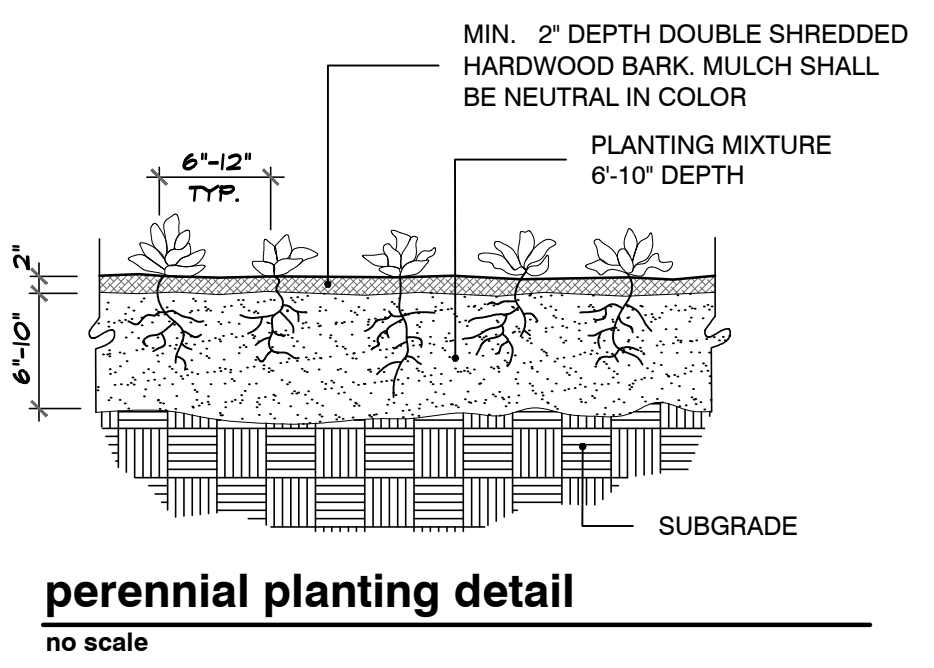
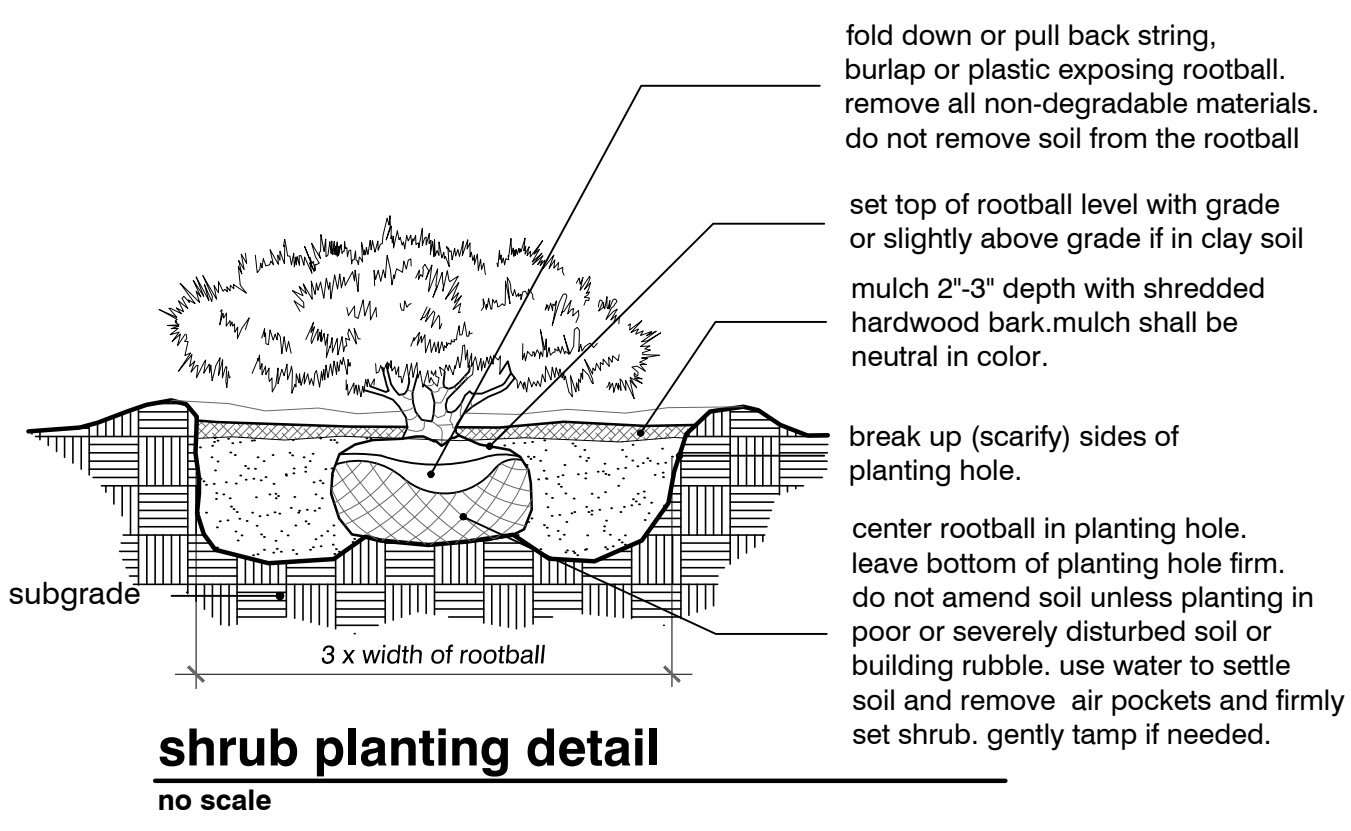
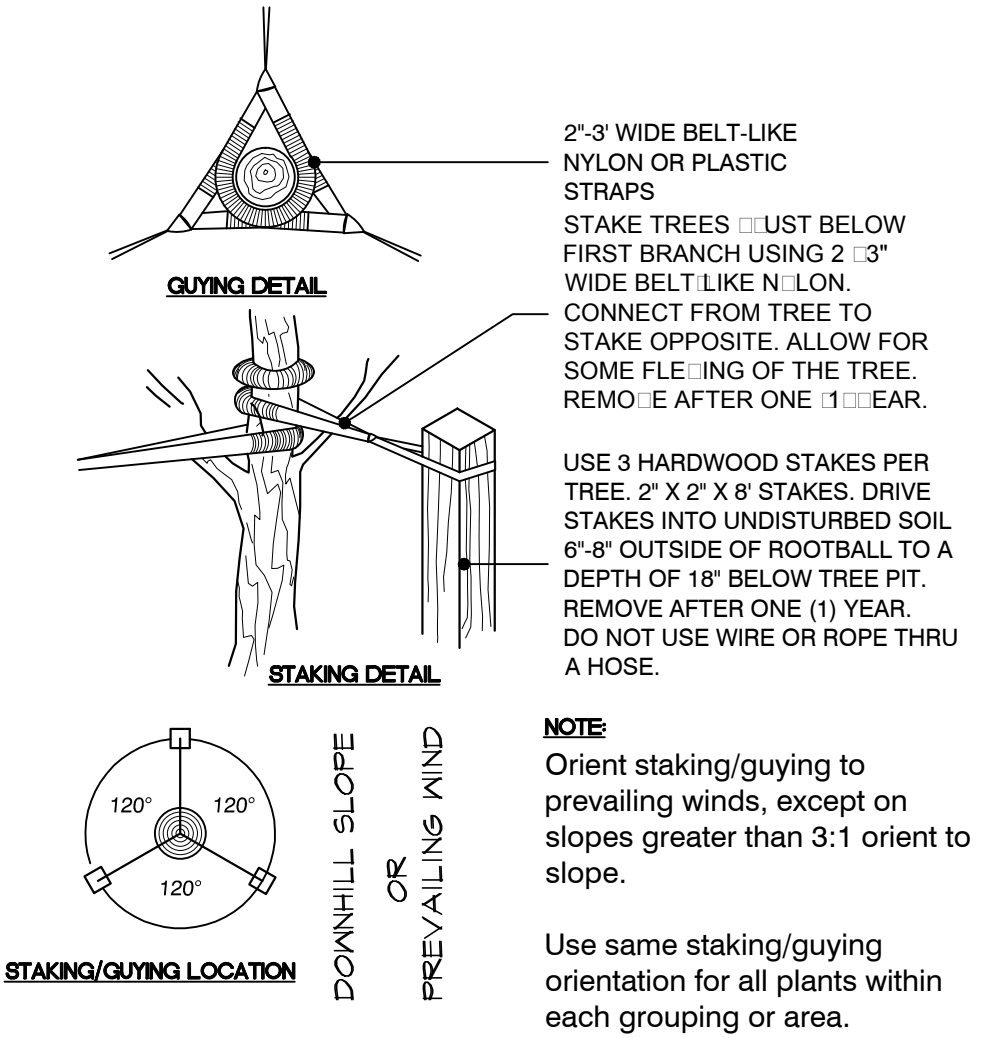
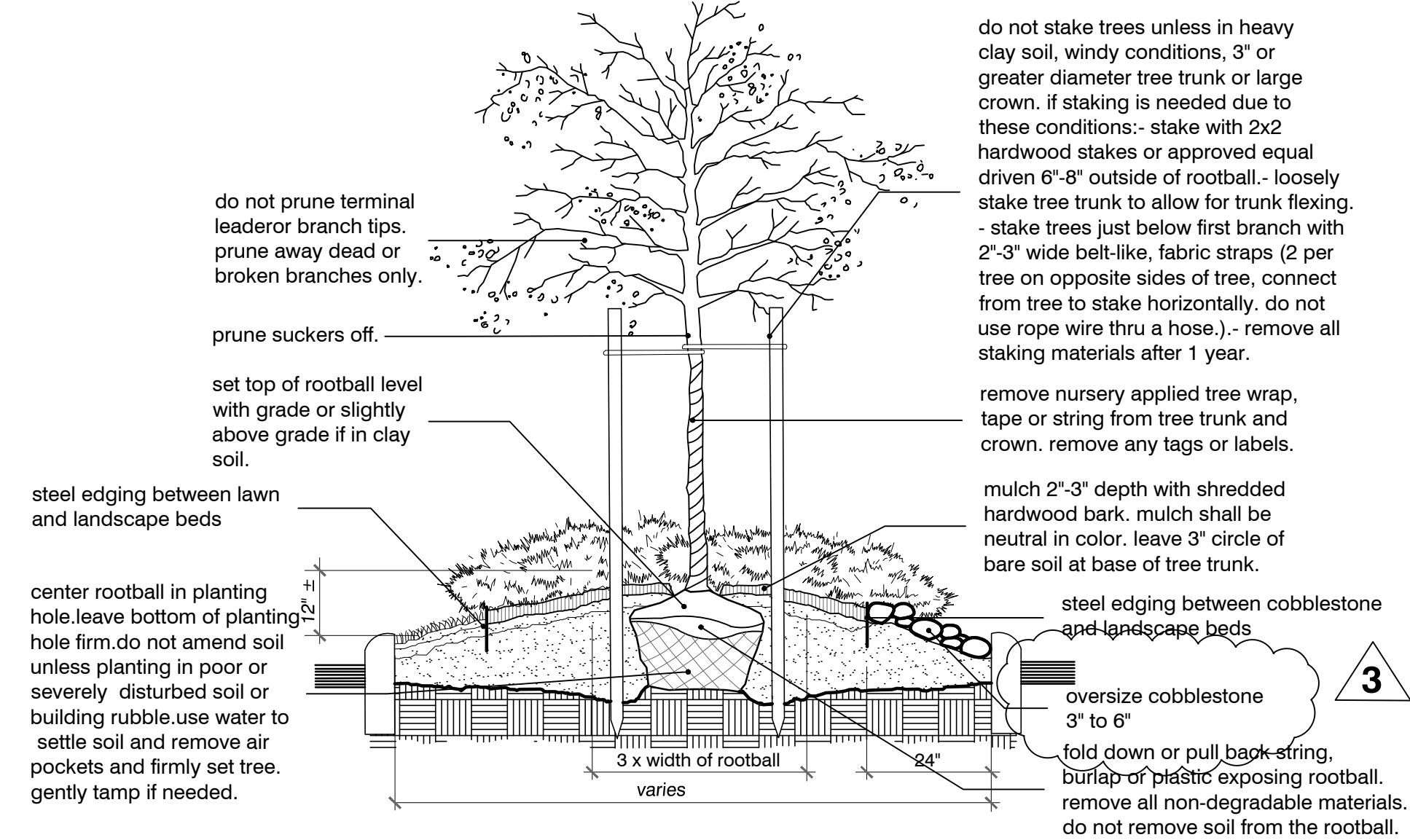
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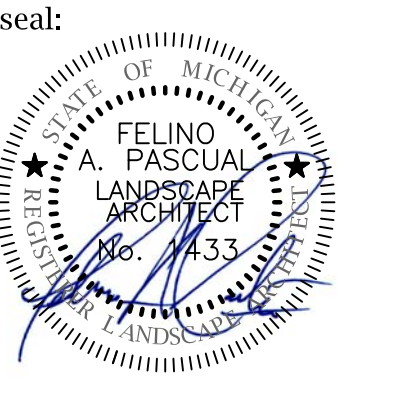
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project no:
LS17.011.05

sheet no:
LS-4 of 5



Plant Material List, Planting Details and Notes



client:

**City of Sterling
 Heights**

**PARKS and
 RECREATION**

project:

Dodge Park

project location:
 City of Sterling
 Heights, Michigan
 Dodge Park Road and
 Utica Road

sheet title:
**landscape planting
 detail**

job no./issue/revision date:

LS17.011.05	REVIEW	6-12-2017
LS17.011.05	CITY	6-17-2017
LS17.011.07	ADDENDUM # 3	7-7-2017

3

drawn by:
KM

checked by:
FP

date:
5-12-2017

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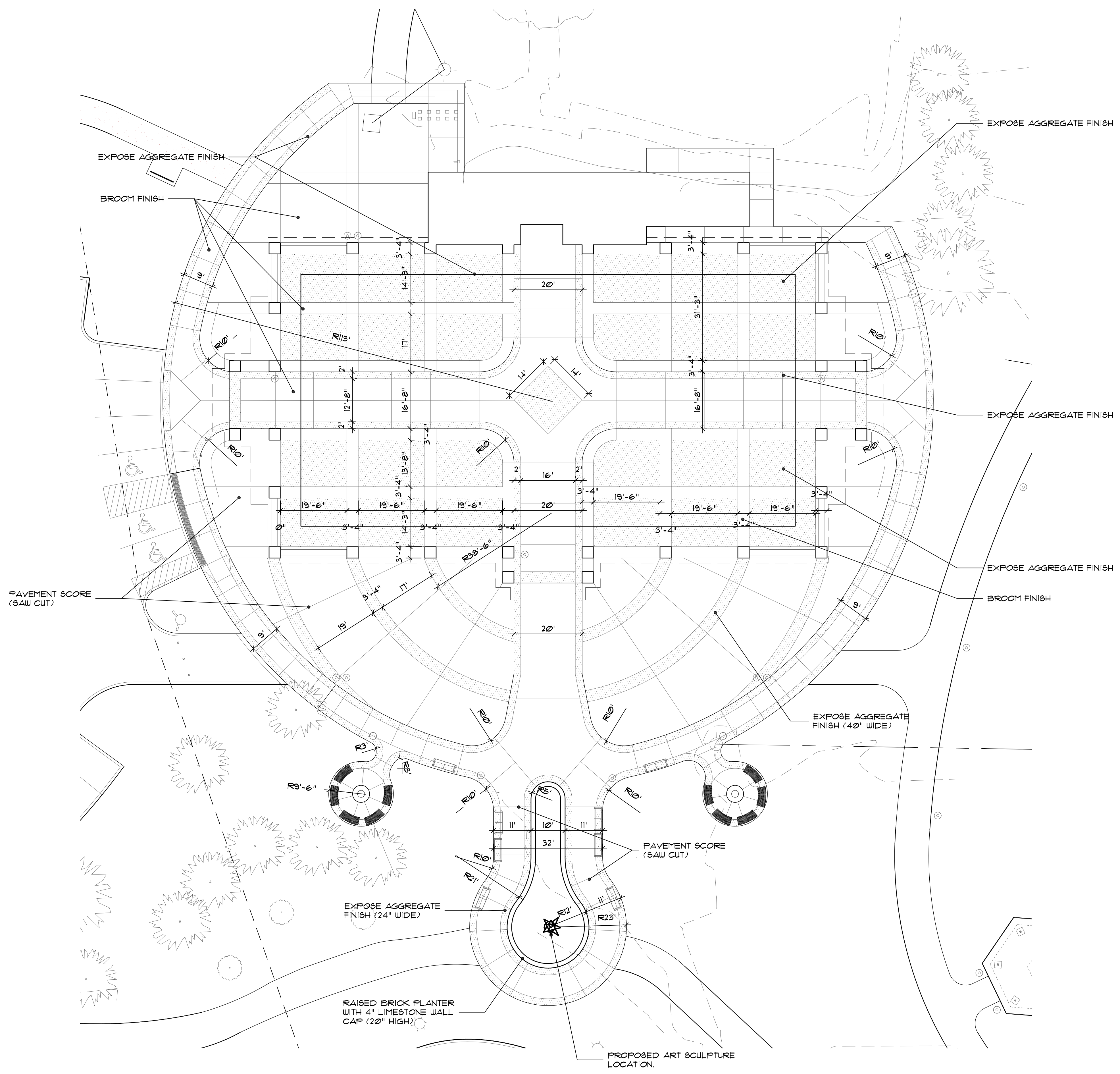


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 of construction

project no:
LS17.011.05

sheet no:

LS-5 of 5



5A Farmers Market-pavement plan detail
 SCALE: 1"=30'-0"

PLUMBING GENERAL NOTES

1. THESE DRAWINGS ARE DIAGRAMMATIC & INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE PLUMBING SYSTEMS COMPLETE AND PER APPLICABLE CODES INCLUDING REQUIRED COMPONENTS, OFFSETS REQUIRED TO AVOID THE STRUCTURE, ETC.
2. REFER TO ARCHITECTURAL PLANS FOR SPECIFICATIONS AND EXACT LOCATIONS OF FIXTURES (STANDARD AND BARRIER FREE), SINKS, ETC. REFER TO FOOD SERVICE PLANS FOR SPECIFICATIONS AND EXACT LOCATIONS OF FOOD SERVICE EQUIPMENT. REFER TO PLUMBING FIXTURE SCHEDULE FOR CONNECTION SIZES, ACCESSORIES, AND ADDITIONAL INFORMATION.
3. PLUMBING FIXTURES SHALL BE OF WATER CONSERVATION TYPE AND COMPLY WITH STATE ENERGY STANDARDS. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE STATE AND LOCAL COUNTY DEPARTMENT OF HEALTH CROSS CONTAMINATION CODE REQUIREMENTS.
4. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF PLUMBING AND PIPING WITH THE WORK OF ALL OTHER TRADES.
5. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT/PANELS. PROVIDE REQUIRED CLEARANCE IN FRONT/ABOVE OF ELECTRICAL EQUIPMENT. PIPING SHALL NOT INTERFERE WITH ELECTRICAL EQUIPMENT CLEARANCE.
6. PIPING SHALL NOT BE INSTALLED IN A LOCATION THAT RESTRICTS THE ACCESS TO MECHANICAL DEVICES REQUIRING ACCESS.
7. CONTRACTOR SHALL PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL MECHANICAL SYSTEMS.
8. HOT AND COLD WATER PIPING RUN-OUTS TO LAVS AND SINKS SHALL BE 3/4" UNLESS NOTED OTHERWISE. REFER TO SPECIFICATIONS FOR FIXTURE CONNECTION SIZES. PROVIDE BRANCH LINE ISOLATION VALVES ON DOMESTIC PIPING TO EACH GROUP OF FIXTURES AND TOILET ROOMS. PROVIDE FULL OPEN VALVES PER PLUMBING CODE.
9. PLUMBING VENT PIPING THRU THE ROOF SHALL BE LOCATED 10'-0" FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF PARAPET.
10. PROVIDE CODE REQUIRED CLEARANCE/ACCESS DOORS FOR VALVES/CLEANOUTS LOCATED IN WALLS OR ABOVE HARD CEILINGS, AND LOCATIONS OF CLEANOUTS INSTALLED IN STORM AND SANITARY PIPING. COORDINATE LOCATIONS WITH ARCHITECT. PROVIDE CLEANOUTS AT THE BASE OF ALL STACKS.
11. RUN ALL SANITARY AND STORM PIPING 2-1/2" OR LESS AT 1/4" PER FOOT AND 3"-10" PIPING AT 1/8" PER FOOT MINIMUM. UNLESS OTHERWISE NOTED MINIMUM UNDERGROUND PIPE SIZE SHALL BE 3".
12. PROVIDE VALVES ON ALL BRANCH PIPING SERVING GROUP TOILET ROOMS. PROVIDE FULL OPEN VALVES AND SHUT OFF VALVES PER PLUMBING CODE.
13. PROVIDE "SURESEAL" TRAP SEAL PROTECTION ON ALL FLOOR DRAINS AND TRAPS SUBJECT TO EVAPORATION.
14. ALL CORING THRU WALLS, ROOF AND FLOORS SHALL BE BY MECHANICAL CONTRACTOR. COORDINATE LOCATIONS/SIZES OF ALL FLOOR, WALL PENETRATIONS, AND SLEEVES WITH STRUCTURAL/ARCHITECTURAL TRADES AND SEAL PER SPECIFICATIONS.
15. PROVIDE A UNION, ISOLATION VALVE, TEE AND MIN. 6" LONG DIRT LEG WITH CAP AT EACH GAS SUPPLY CONNECTION.

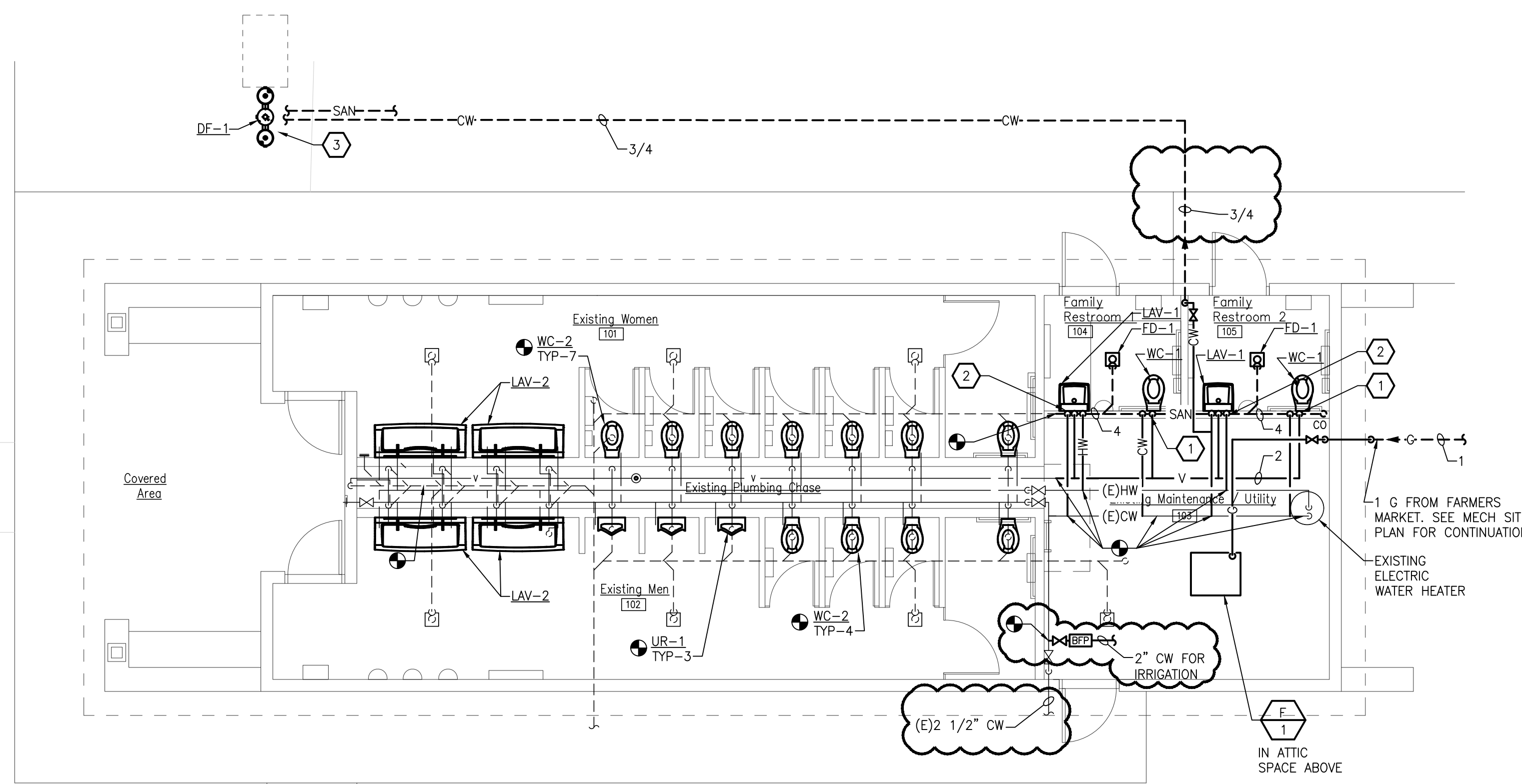
KEYED NOTES

- 1 ROUTE 4" SANITARY, 2" VENT AND 1" CW TO WATER CLOSET.
- 2 ROUTE 1 1/2" SANITARY, 1 1/4" VENT, 1/2" HOT & 1/2" COLD WATER TO LAVATORY.
- 3 ROUTE 2" SANITARY AND 1/2" COLD WATER UP TO DRINKING FOUNTAIN.

TAG	BARRIER FREE	ITEM	PIPE CONNECTION SIZES				MANUFACTURER & MODEL NO.	ACCESSORIES
			WASTE	VENT	CW	HW		
FD-1	-	FLOOR DRAIN	3"	1 1/2"	-	-	ZURN: Z-415-B	
LAV-1	Y	WALL MOUNTED LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	AMERICAN STANDARD: LUCERNE	FAUCET: AMERICAN STANDARD: RELIANT 3. DECK MOUNTED SOAP DISPENSER: AMERICAN STANDARD MODEL # 4503.115. PROVIDE ASSE 1070 MIXING VALVE.
LAV-2	Y	WALL MOUNTED TROUGH LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	BRADLEY: VERGE WASH BASIN: LVGD2	
DF-1	-	BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLER AND PET BOWL	2"	1 1/2"	1/2"	-	MOST DEPENDABLE: MODEL # 10145 SM, COLOR BLUE	ATTACHED HOSE BIBB. PROVIDE PET BOWL ADDITION
UR-1	Y	WALL MOUNTED URINAL	2"	1 1/2"	3/4"	-	KOHLER: DEXTER. MODEL: K-5016-ET	FLUSH VALVE: KOHLER K-13521, 1.0 GPF
WC-1	Y	WALL MOUNTED WATER CLOSET	4"	2"	1"	-	KOHLER: KINGSTON. MODEL: K-4325	FLUSH VALVE: KOHLER K-13516, 1.6 GPF
WC-2	Y	FLOOR MOUNTED WATER CLOSET	4"	2"	1"	-	KOHLER: WELLWORTH. MODEL: K-4406	FLUSH VALVE: KOHLER K-13517C, 1.28 GPF

NOTES:

1. SUPPLY ALL FIXTURES WITH LOOSE KEY STOPS.
2. PROVIDE ALL ACCESSORIES NECESSARY FOR COMPLETE AND OPERABLE INSTALLATION.
3. PROVIDE CARRIERS FOR ALL FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
4. WHERE REQUIRED AND WHERE DESIGNATED, FIXTURES SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE TO THE LATEST EDITION OF "THE BARRIER" FREE DESIGN REQUIREMENTS OF THE STATES CONSTRUCTION CODE.
5. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION/MOUNTING HEIGHT OF ALL FIXTURES.



RESTROOMS & UTILITY PLUMBING NEW WORK PLAN
SCALE: 3/16" = 1'-0"

architect seal



Issue / revision date	checked by
5-09-17 Owner Review	JMK
6-09-17 Coordination	
6-18-17 Bids	
7-07-17 Addendum #3	

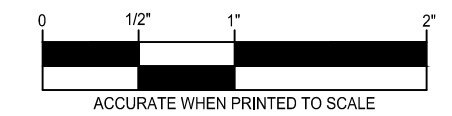
drawn by: RHM checked by: JMK

City of Sterling Heights
Dodge Park Improvements
Sterling Heights, Michigan
project

RESTROOMS & UTILITY
PLUMBING NEW WORK
PLAN
sheet title

Dorchen/Martin Associates, Inc.
Architects/Planners
29895 Greenfield Rd., Suite 107
Southfield, Michigan 48076
(248) 557-1062
Fax: (248) 557-1231

job no. 16078A sheet no. M5.1



Drawing: S:\17 0454 01 Sterling Heights Parks & Rec\CAD\Mech\16078A_RRB_M5-1.dwg Date: Jul 07, 2017, 8:37pm Layout: M5_1 Plotted by: jmk

ELECTRICAL GENERAL NOTES

- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED.
- SEE LUMINAIRE SCHEDULE ON ELECTRICAL GENERAL INFORMATION SHEET.
- EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.
- WHERE MORE THEN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION, THEY SHALL BE GROUPED UNDER ONE COMMON FACEPLATE.
- ALL ELECTRICAL DEVICES SHOWN ON THIS PLAN SHALL BE NEW UNLESS OTHERWISE NOTED.
- ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
- ALL RECEPTACLES SHALL BE 20A. RATED.
- ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE.
- ALL RECEPTACLES WITHIN 6'-0" OF SINK OR OTHER WATER SUPPLY SHALL BE GFCI TYPE RECEPTACLE.
- REFER TO ARCHITECTURAL FLOOR PLAN AND ELEVATIONS FOR EXACT LOCATION OF DEVICES.
- ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS SERVED.
- ALL 120 VOLT CIRCUITS SHALL UTILIZE A SEPARATE NEUTRAL.
- ALL CONDUITS SERVING 120 VOLTS OR GREATER SHALL INCLUDE A GROUND WIRE.
- ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL EQUIPMENT MOUNTED ON THE FLOOR SHALL BE MOUNTED ON A 4" CONCRETE HOUSE KEEPING PAD.
- ALL BRANCH CIRCUIT WIRING SHALL BE 2#12, 1#12GND IN 3/4" CONDUIT, UNLESS NOTED OTHERWISE.

architect seal



Strategic Energy Solutions
 4000 W. Eleven Mile Road Berkley, MI 48072
 Phone 248.399.1900 Fax 248.399.1901
 www.sesnet.com
 SES Project # 17 0454 01

KEYED NOTES

- NEW LIGHT POLE IN EXISTING LIGHT LOCATION.
- ALTERNATE SCOPE INCLUDES INSTALLATION OF 2" CONDUIT AND WIRE, 3'-0" MIN BELOW GRADE FOR BRIDGE AND FUTURE PATHWAY LIGHTING. NEW CONDUIT TO CONNECT UNDERGROUND TO EXISTING CONDUIT IN BRIDGE PIERS. NEW FIXTURES TO BE POST MOUNTED ON EXISTING PIERS.



Issue / revision date

5-09-17	Owner Review
6-09-17	Coordination
6-16-17	Bids
7-07-17	Addendum #3

drawn by
CEM

checked by
PDH

City of Sterling Heights
 Dodge Park Improvements
 Sterling Heights, Michigan

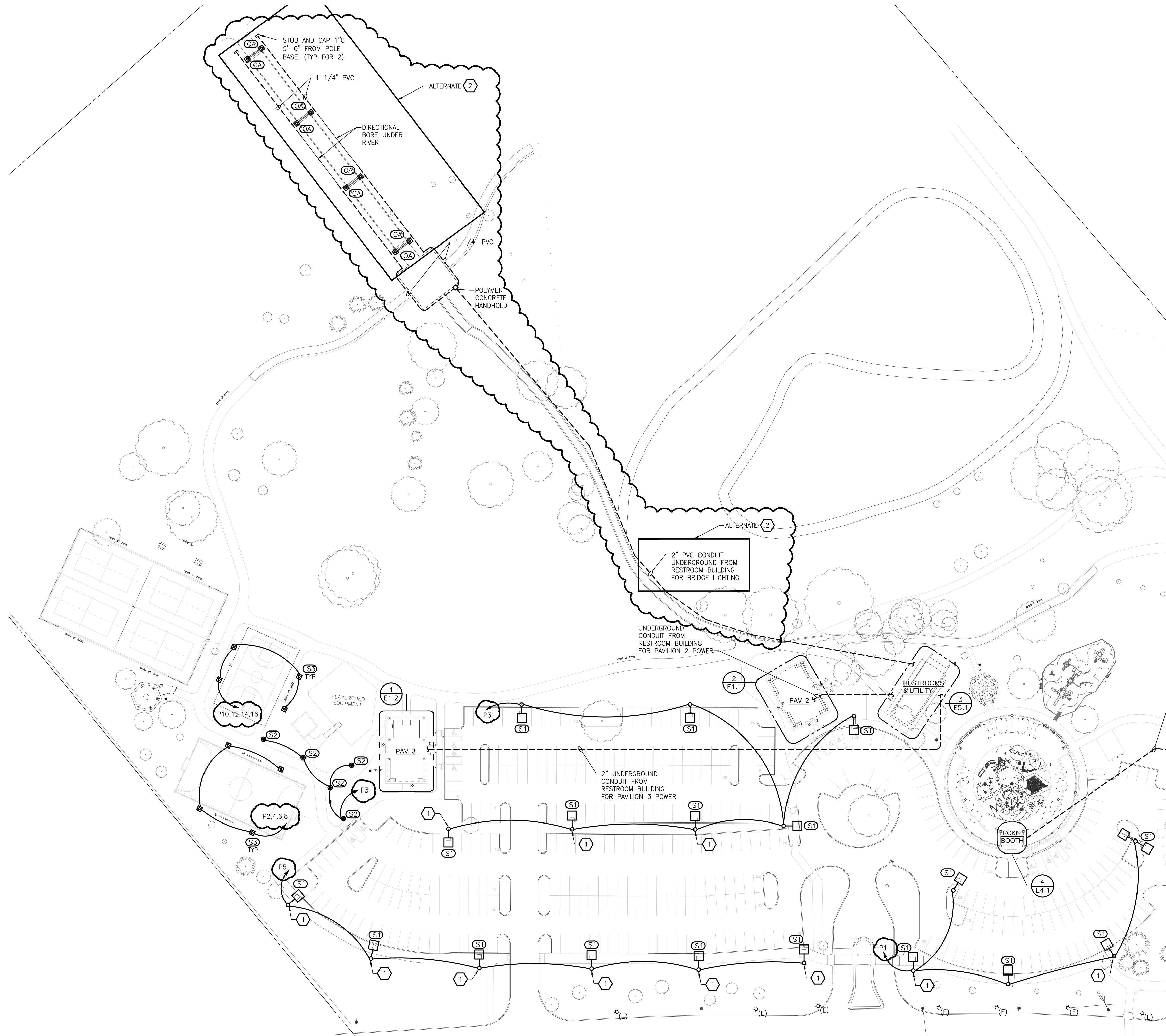
ELECTRICAL SITE NEW WORK PLAN

project sheet title

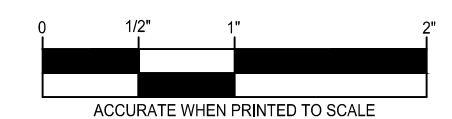
DM
 Dorchen/Martin Associates, Inc.
 Architects/Planners
 29895 Greenfield Rd., Suite 107
 Southfield, Michigan 48076
 (248) 557-1062
 Fax: (248) 557-1231

job no.
16078A

sheet no.
E0.1



ELECTRICAL SITE NEW WORK PLAN
 SCALE: 1"=50'



ACCURATE WHEN PRINTED TO SCALE

Drawing: S:\17 0454 01\Sterling Heights Parks & Rec\CAD\Elec\17 0454 01_E001.dwg
 Date: Jul 07, 2017, 2:38pm Layout: E0.1 Plotted by: path



Issue / revision date	Owner Review
5-09-17	Coordination
6-06-17	Bids
6-16-17	Addendum #3
7-07-17	

drawn by	checked by
CEM	PDH

City of Sterling Heights
Dodger Park Improvements
Sterling Heights, Michigan

SPLASH PARK ELECTRICAL NEW WORK PLAN

project sheet title

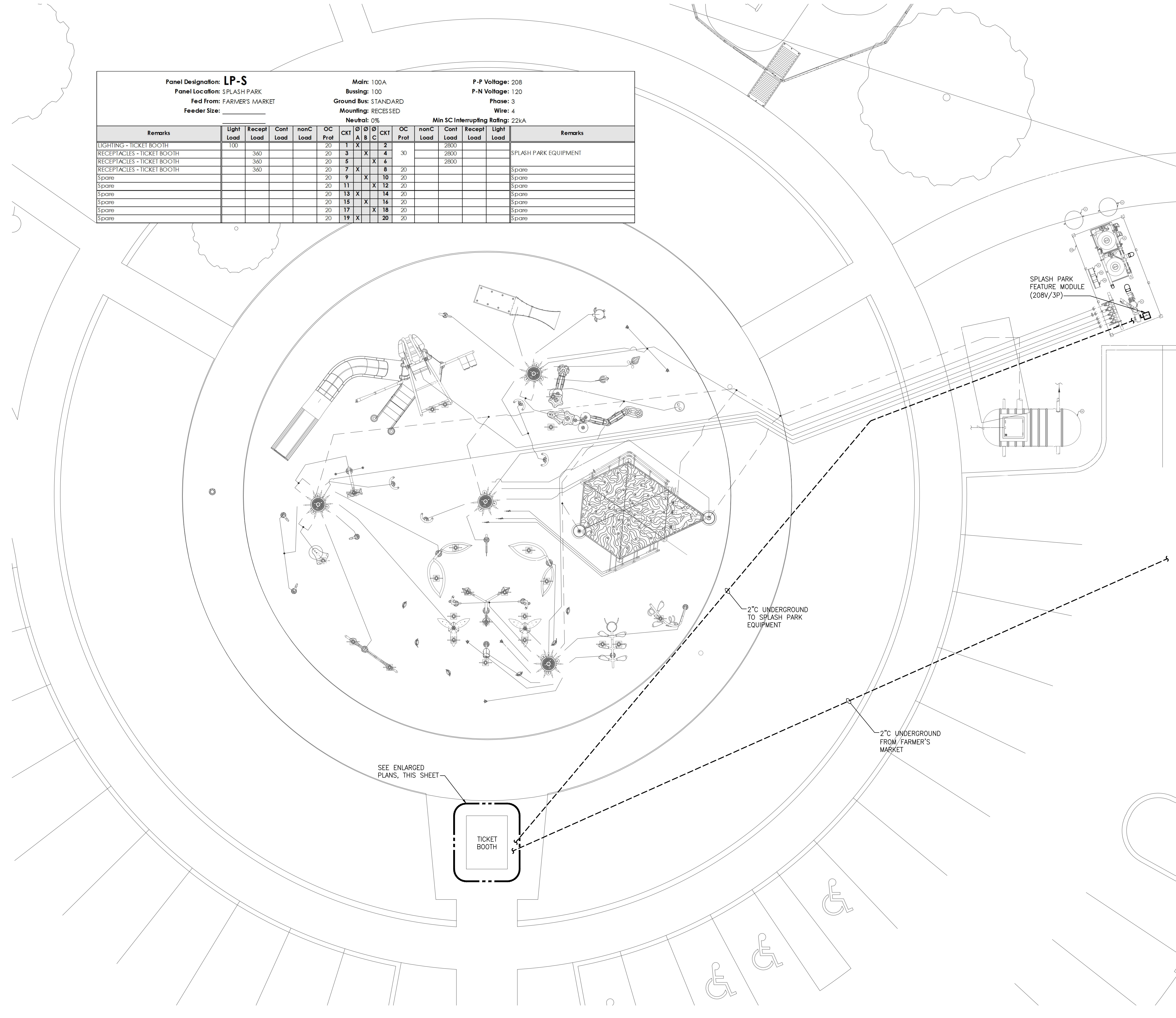
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Architects/Planners
29895 Greenfield Rd., Suite 107
Southfield, Michigan 48076
(248) 557-1062
Fax: (248) 557-1231

job no.	sheet no.
16078A	E4.1

ELECTRICAL GENERAL NOTES

- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL LIGHTING FIXTURES UNLESS OTHERWISE NOTED.
- SEE LUMINAIRE SCHEDULE ON ELECTRICAL GENERAL INFORMATION SHEET.
- EXIT LIGHTS AND EMERGENCY BATTERY UNITS SHALL BE UNCONTROLLED AND TIED AHEAD OF LOCAL AREA LIGHTING SWITCH, UNLESS CIRCUITED OTHERWISE.
- WHERE MORE THEN ONE LIGHT SWITCH IS INDICATED TO BE INSTALLED AT THE SAME LOCATION, THEY SHALL BE GROUPED UNDER ONE COMMON FACEPLATE.
- ALL ELECTRICAL DEVICES SHOWN ON THIS PLAN SHALL BE NEW UNLESS OTHERWISE NOTED.
- ANY 120 VOLT BRANCH CIRCUIT FEEDER LONGER THAN 75'-0" TO LAST DEVICE SHALL BE SIZED TO THE NEXT LARGER STANDARD AWG SIZE. E.C. SHALL FIELD VERIFY ALL LENGTHS OF FEEDERS.
- ALL RECEPTACLES SHALL BE 20A. RATED.
- ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE.
- ALL RECEPTACLES WITHIN 6'-0" OF SINK OR OTHER WATER SUPPLY SHALL BE GFCI TYPE RECEPTACLE.
- REFER TO ARCHITECTURAL FLOOR PLAN AND ELEVATIONS FOR EXACT LOCATION OF DEVICES.
- ALL JUNCTION BOXES SERVING BRANCH CIRCUIT WIRING SHALL BE LABELED WITH CIRCUITS SERVED.
- ALL 120 VOLT CIRCUITS SHALL UTILIZE A SEPARATE NEUTRAL.
- ALL CONDUITS SERVING 120 VOLTS OR GREATER SHALL INCLUDE A GROUND WIRE.
- ALL CONDUITS SHALL BE ROUTED CONCEALED UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL EQUIPMENT MOUNTED ON THE FLOOR SHALL BE MOUNTED ON A 4" CONCRETE HOUSE KEEPING PAD.
- ALL BRANCH CIRCUIT WIRING SHALL BE 2#12, 1#12GND IN 3/4" CONDUIT, UNLESS NOTED OTHERWISE.

Remarks	Light Load	Recept Load	Cont Load	nonC Load	OC Prot	CKT A	CKT B	CKT C	nonC Load	Cont Load	Recept Load	Light Load	Remarks
LIGHTING - TICKET BOOTH	100				20	1	X	2					
RECEPTACLES - TICKET BOOTH		360			20	3	X	4	30		2800		SPLASH PARK EQUIPMENT
RECEPTACLES - TICKET BOOTH		360			20	5	X	6			2800		
RECEPTACLES - TICKET BOOTH		360			20	7	X	8	20				Spare
Spare					20	9	X	10	20				Spare
Spare					20	11	X	12	20				Spare
Spare					20	13	X	14	20				Spare
Spare					20	15	X	16	20				Spare
Spare					20	17	X	18	20				Spare
Spare					20	19	X	20	20				Spare



seal:



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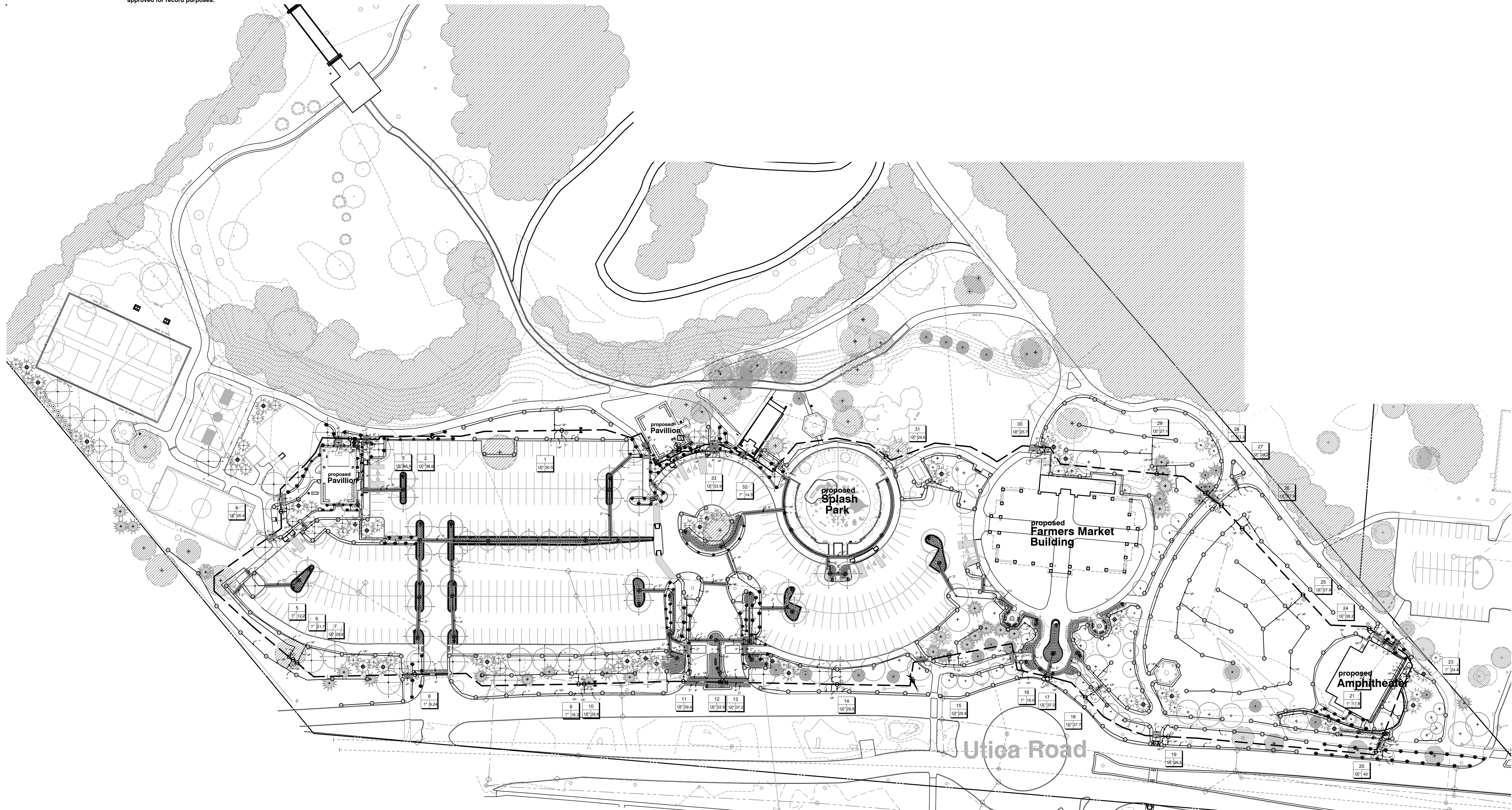
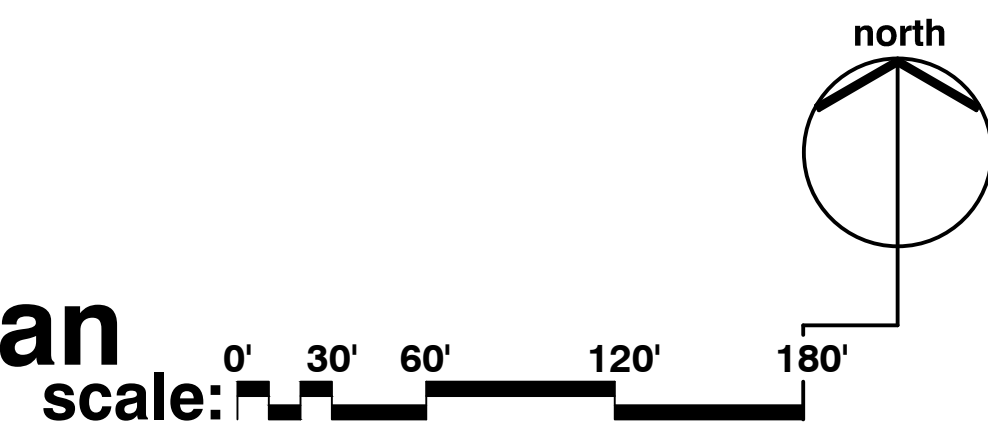
650 Stensson Highway
 Troy, Michigan 48063
 Phone 248.588.2100
 Fax 248.588.3528
 www.Siteone.com
 800.347.4272
 Project Services Number: 131610
 Design Date: 07/05/17

irrigation overview plan for:
“Dodge Park”

City of Sterling Heights, Michigan

note

preliminary concept plan for inspection purposes
 only and in no way a construction document or
 approved for record purposes.



client:

City of Sterling Heights

PARKS and RECREATION

project:

Dodge Park

project location:

City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:

overall irrigation plan view

job no./issue/revision date:

LS17.011.05 ADDENDUM #3 7-7-2017

drawn by:
KM

checked by:
FP

date:
5-12-2017

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project no:

LS17.011.05

sheet no:

IRR-1 of 5

seal:

client:

**City of Sterling
 Heights**

**PARKS and
 RECREATION**

project:

Dodge Park

project location:

City of Sterling
 Heights, Michigan
 Dodge Park Road and
 Utica Road

sheet title:

**IRRIGATION PLAN
 DETAIL**

job no./issue/revision date:

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drawn by:

KM

checked by:

FP

date:

5-12-2017

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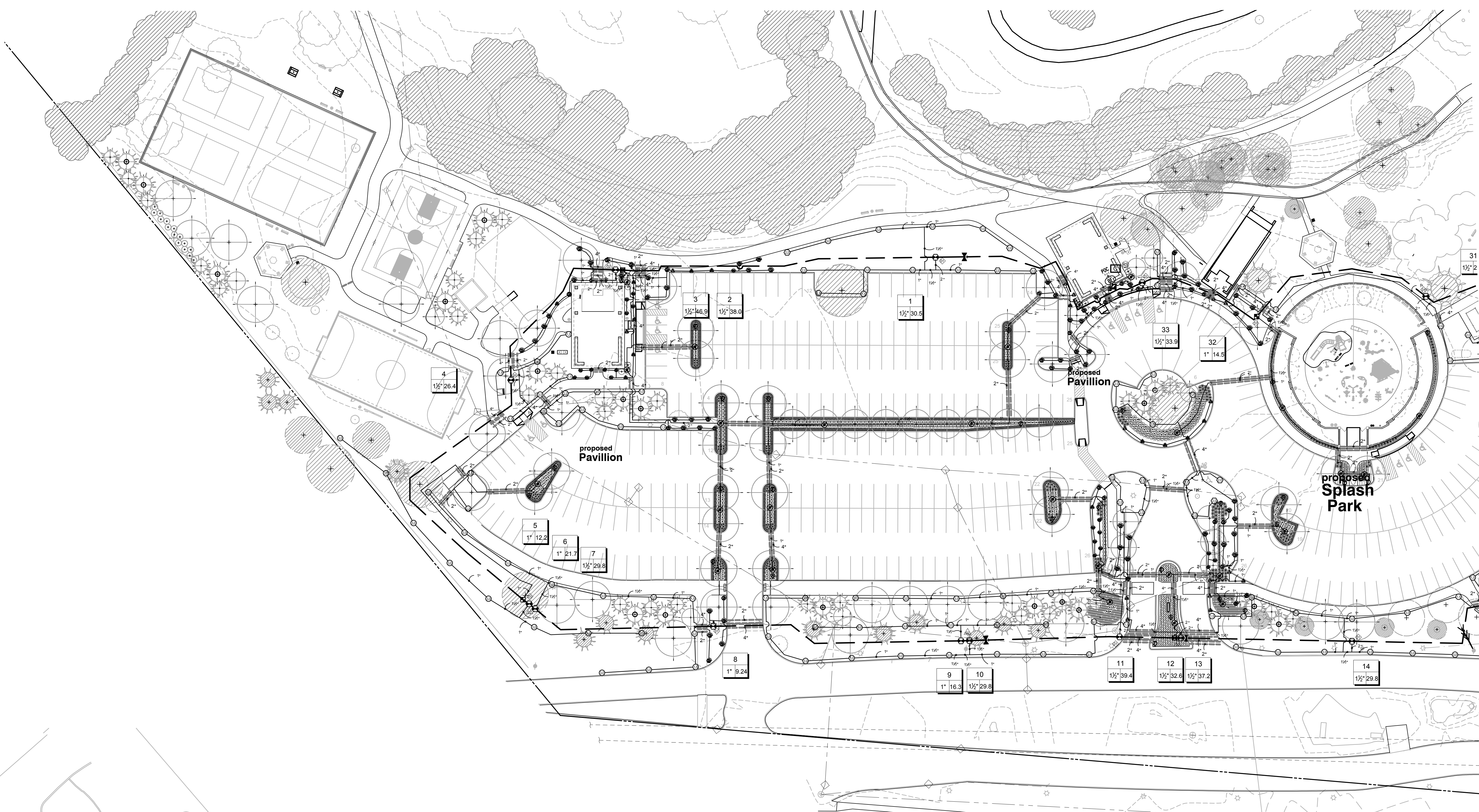
The location and elevations of existing
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 of construction

project no.:

LS17.011.05

sheet no.:

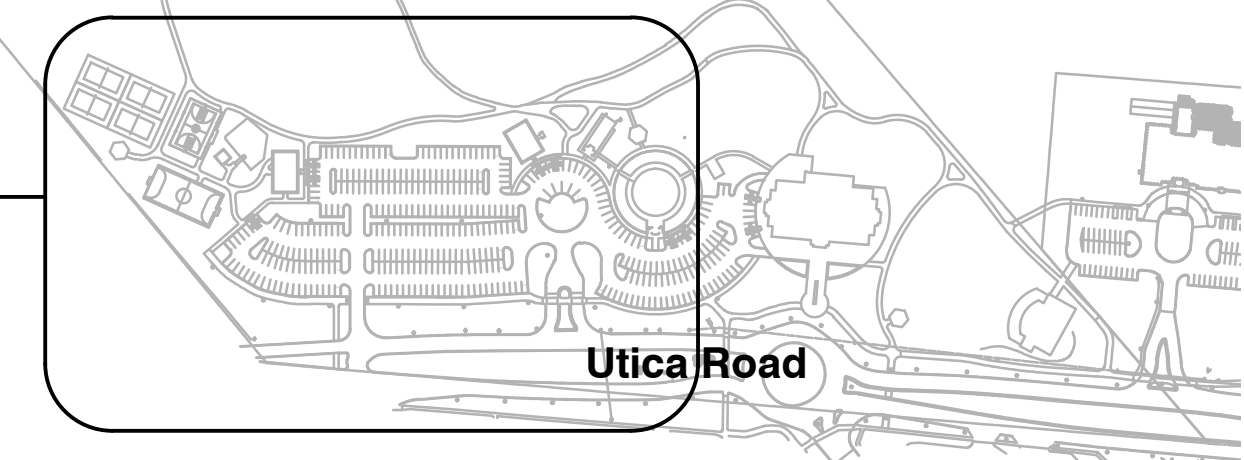
IRR-2 of 5



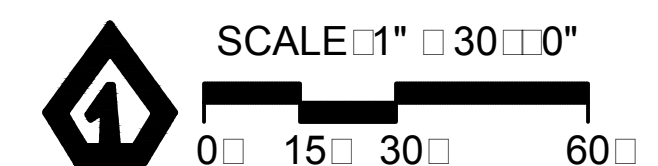
Utica Road

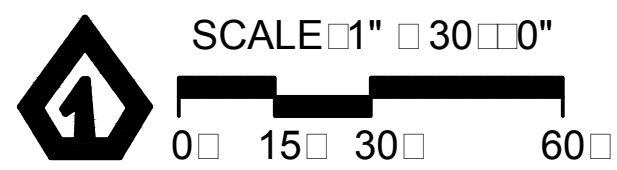
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 Project Services Number: 131610
 Design Date: 07.05.17



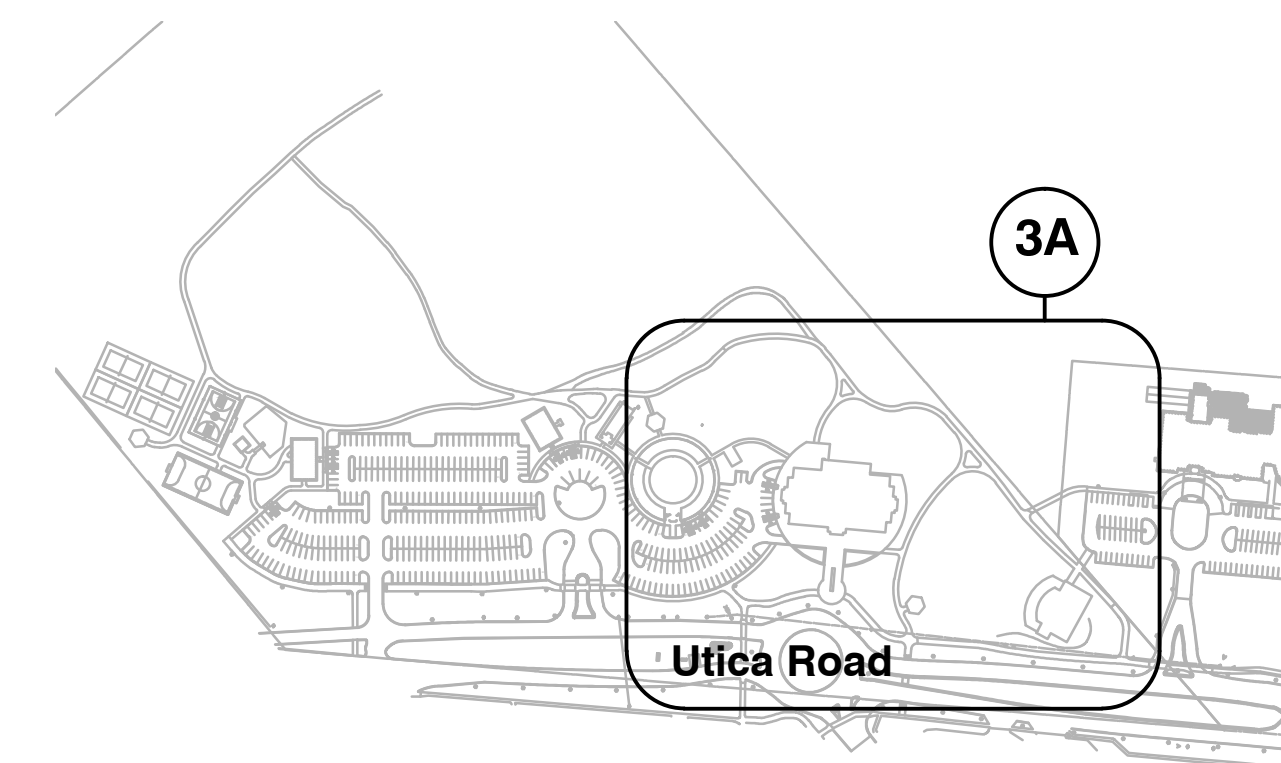
location map
 NO SCALE



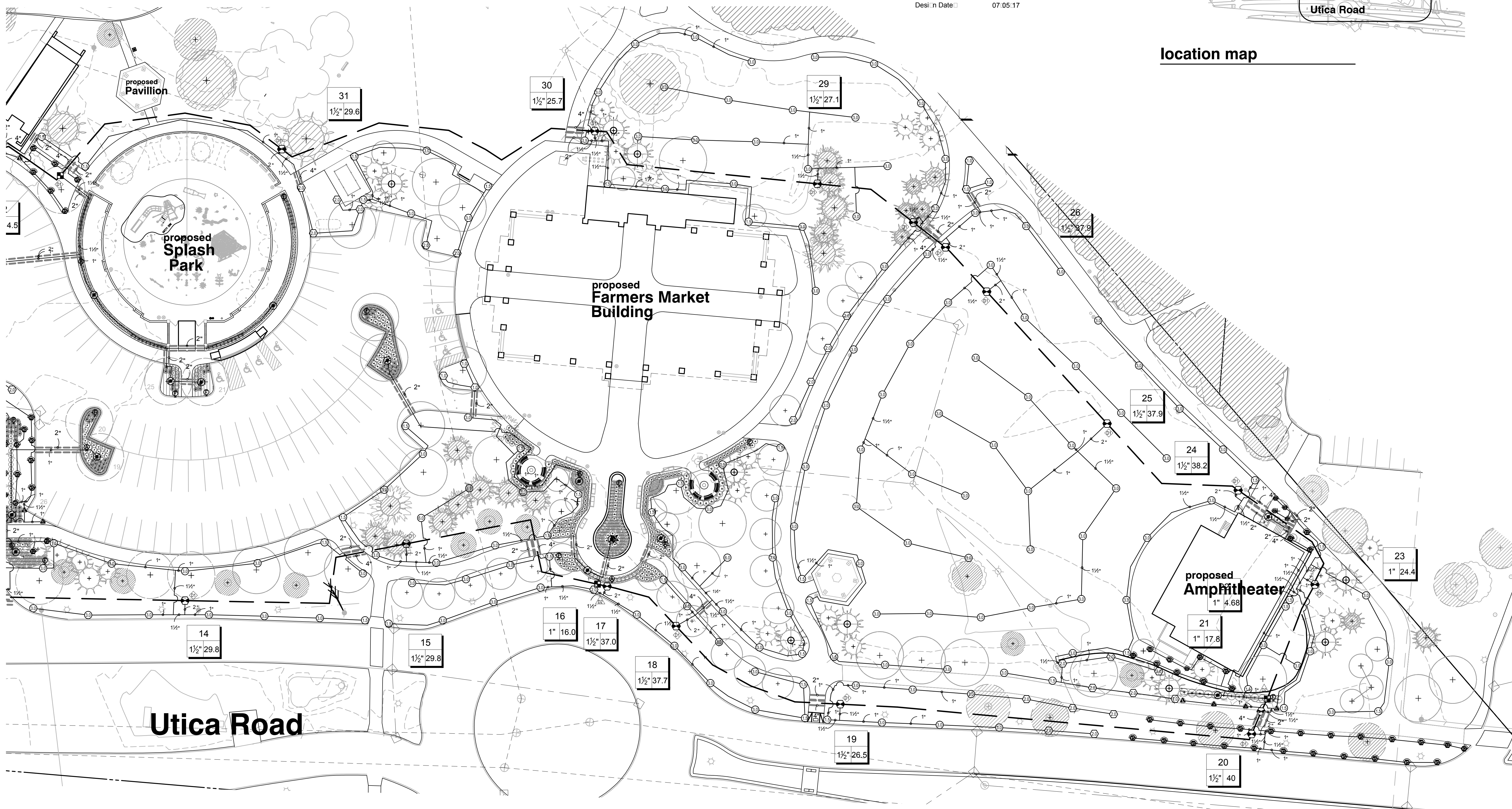


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location map



FELINO A. PASQUALI and ASSOCIATES

Community Land Planner and registered Landscape Architect
 24333 Orchard Lake Rd, Suite G
 Farmington Hills, MI 48336
 ph. (248) 557-5588
 fax. (248) 557-5416

client:

City of Sterling Heights

PARKS and RECREATION

project:

Dodge Park

project location:
 City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:

IRRIGATION PLAN DETAIL

job no./issue/revision date:
 LS17.011.05 ADDENDUM #3 7-7-2017

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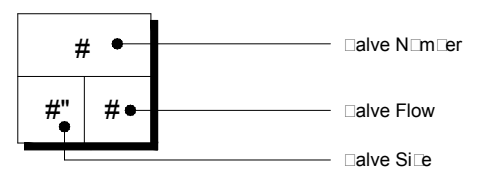
project no:
 LS17.011.05

sheet no:

IRR-3 of 5

IRRIGATION SCHEDULE

S YMBOL	MANUFACTURER/MODEL	QTY
	Rain Bird 1804 15 Striker Series	31
	Rain Bird 1804 8 Series MPR	27
	Rain Bird 1804 10 Series MPR	42
	Rain Bird 1804 12 Series MPR	24
	Rain Bird 1804 15 Series MPR	60
	Rain Bird 1804 AD	1
<hr/>		
S YMBOL	MANUFACTURER/MODEL	QTY
	Rain Bird 5004 PC, FC	56
	Rain Bird 5004 PC, FC	178
	Rain Bird 5004 PC, FC	3
	Rain Bird 5004 PC, FC LA	7
	Rain Bird 5004 PC, FC LA	41
<hr/>		
S YMBOL	MANUFACTURER/MODEL	QTY
	Rain Bird 100 PRF 1"	4
	Rain Bird 150 PRB COM 1.1/2"	2
	Pipe Transition Point	34
	Flush Valve	24
	Drain Air Relief Valve	11
	Area to Receive Drain Line Rain Bird 06.12.12	9,880 sq ft
<hr/>		
	Rain Bird 06.12 Drain Line	1,551 L.F.
<hr/>		
S YMBOL	MANUFACTURER/MODEL	QTY
	Rain Bird PGA Globe 1"	6
	Rain Bird PGA Globe 1.1/2"	21
	Rain Bird 5 RC 1"	1
	Isolation Valve Mainline Site	3
	Feco 765 2"	1
	Rain Bird ESP L.D.	1
	Rain Bird FD 101 TURF	21
	Rain Bird WR2 RC	1
	Rain Bird FD 102 TURF 2"	6
	Tape 2"	1
<hr/>	Irrigation Lateral Line: Polyethylene Pipe 1"	12,549 L.F.
<hr/>	Irrigation Lateral Line: Polyethylene Pipe 1 1/2"	2,444 L.F.
<hr/>	Irrigation Lateral Line: Polyethylene Pipe 2"	485.0 L.F.
<hr/>	Irrigation Mainline: P.C Class 160 SDR 26 2 1/2"	3,530 L.F.
<hr/>	Pipe Sleeve: P.C Class 160 SDR 26 2"	863.9 L.F.
<hr/>	Pipe Sleeve: P.C Class 160 SDR 26 4"	492.9 L.F.
	Valve Callout	



IRRIGATION SPECIFICATIONS

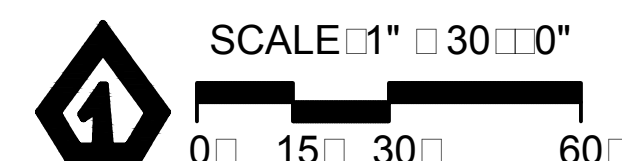
- IRRIGATION SYSTEM DESIGN BASED ON 80 GPM AT 60 PSI.
- IRRIGATION DESIGN IS FROM THE POINT OF CONNECTION (POC) ON. THE DESIGN IS BASED ON GALLONS PER MINUTE (GPM) AND POUNDS PER SQUARE INCH (PSI) FURNISHED BY OTHERS.
- IRRIGATION CONTRACTOR IS TO VERIFY POINT OF CONNECTION IN THE FIELD. INSTALLER IS TO CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE POINT OF CONNECTION AS INDICATED ON THE LEGEND PRIOR TO INSTALLATION.
- THE PRESSURE REQUIREMENT AT THE POINT OF CONNECTION IS BASED ON NO MORE THAN 5 FEET OF ELEVATION CHANGE IN THE AREAS OF IRRIGATION.
- ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO LOCAL BUILDING, ELECTRICAL, AND PLUMBING CODES.
- IRRIGATION CONTRACTOR WILL ARRANGE INSPECTIONS REQUIRED BY LOCAL AGENCIES AND ORDINANCES DURING THE COURSE OF CONSTRUCTION AS REQUIRED. ALL WIRING TO BE PER LOCAL CODE. BACKFLOW PREVENTION TO BE PER LOCAL CODE.
- LOCATION OF IRRIGATION COMPONENTS SHOWN ON DRAWING IS APPROXIMATE. ACTUAL PLACEMENT MAY VARY SLIGHTLY AS REQUIRED TO ACHIEVE FULL, EVEN COVERAGE.
- ALL SPRINKLER HEADS SHALL BE INSTALLED PERPENDICULAR TO FINISH GRADES. EXCEPT AS OTHERWISE INDICATED.
- INSTALL IRRIGATION MAINS WITH A MINIMUM 18" OF COVER BASED ON FINISH GRADES. INSTALL IRRIGATION LATERALS WITH MINIMUM 12" OF COVER BASED ON FINISH GRADES.
- PIPE LOCATIONS ARE DIAGRAMMATIC. VALVES AND MAINLINE SHOWN IN PAVED AREAS ARE FOR GRAPHIC CLARITY ONLY.
- THE IRRIGATION CONTRACTOR SHALL COMPLY WITH PIPE SIZES AS INDICATED.
- ALL WIRE SPLICES OR CONNECTIONS SHALL BE MADE WITH APPROVED WATERPROOF WIRE CONNECTIONS AND BE IN A VALVE OR SPLICE BOX.
- ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 2 WIRE, UL APPROVED DIRECT BURIED.
- THE DESIGN IS BASED ON THE SITE INFORMATION AND/OR DRAWING SUPPLIED WITH THE DESIGN CRITERIA BEING SET/AREA TO BE IRRIGATED, EQUIPMENT MANUFACTURER AND MODEL TO BE USED, WATER SOURCE INFORMATION, ELECTRICAL POWER AVAILABILITY, ETC. SITEONE LANDSCAPE SUPPLY BEARS NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS IN DESIGN OR INSTALLATION THAT ARISE DUE TO INACCURACIES IN THE ABOVE REFERENCED INFORMATION SUPPLIED TO SITEONE LANDSCAPE SUPPLY LANDSCAPES IN RELATION TO THIS PROJECT, UNLESS OTHERWISE NOTED.
- TWO VALVES SHALL OPERATE SIMULTANEOUSLY.



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Project Services Number: 131610
 Design Date: 07.05.17



client:

client:

City of Sterling Heights

PARKS and RECREATION

project:

Dodge Park

project location:

City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:

IRRIGATION DETAILS

job no./issue/revision date:

LS17.011.05 ADDENDUM #3 7-7-2017

drawn by:

KM

checked by:

FP

date:

5-12-2017

notice:

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project no:

LS17.011.05

sheet no:

IRR-4 of 5

client:

project:

City of Sterling Heights

PARKS and RECREATION

project:

Dodge Park

project location:

City of Sterling Heights, Michigan
 Dodge Park Road and Utica Road

sheet title:

IRRIGATION DETAILS

job no./issue/revision date:

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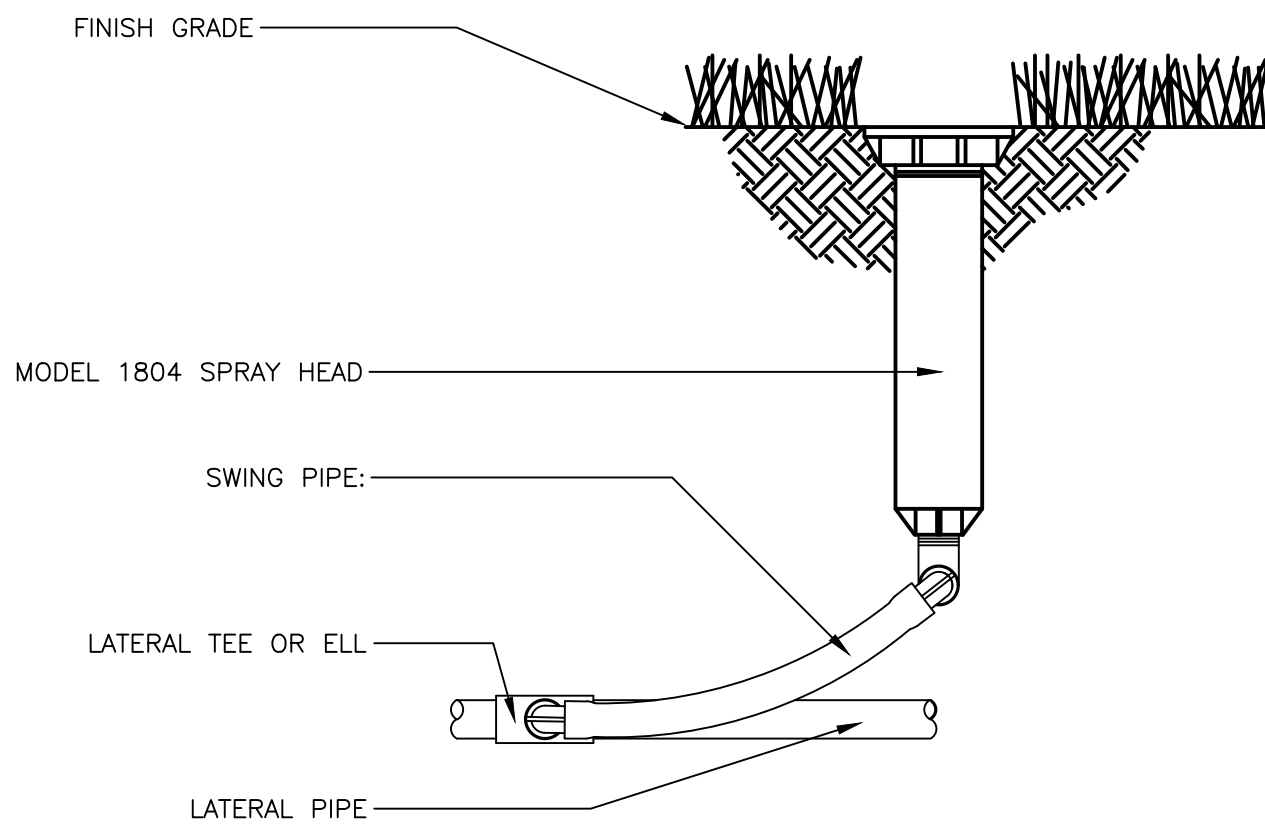


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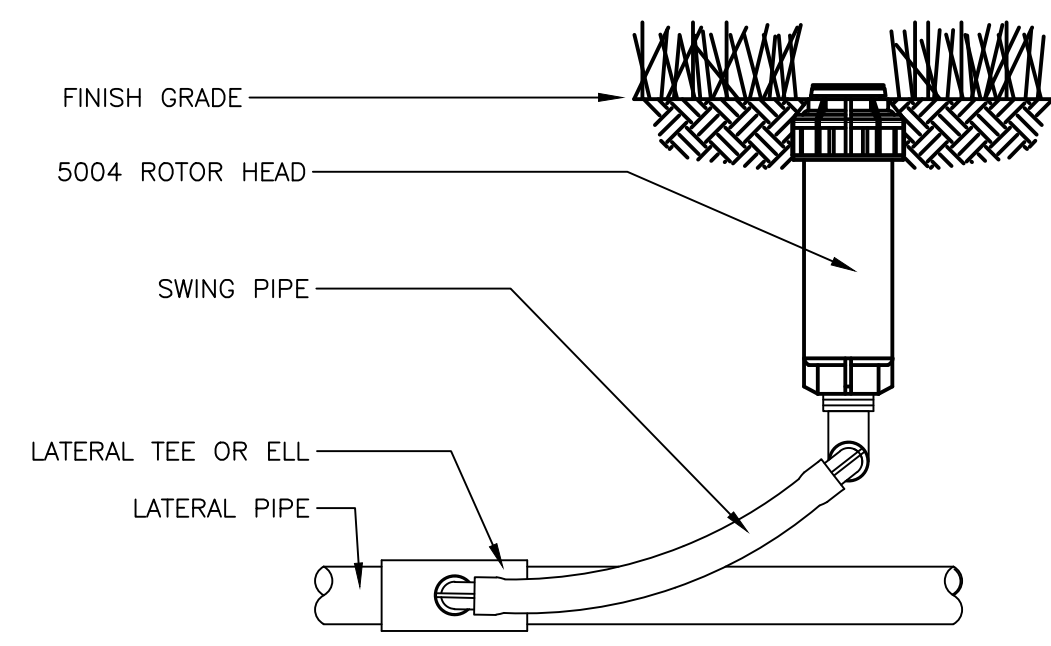
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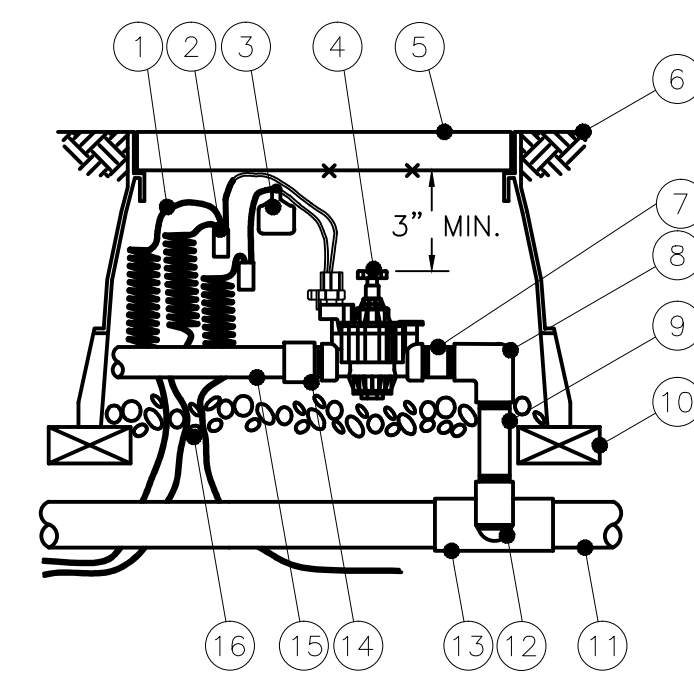
sheet no.:



1 1804 SPRAY HEAD WITH SWING PIPE
 S1-SP-RAI-01

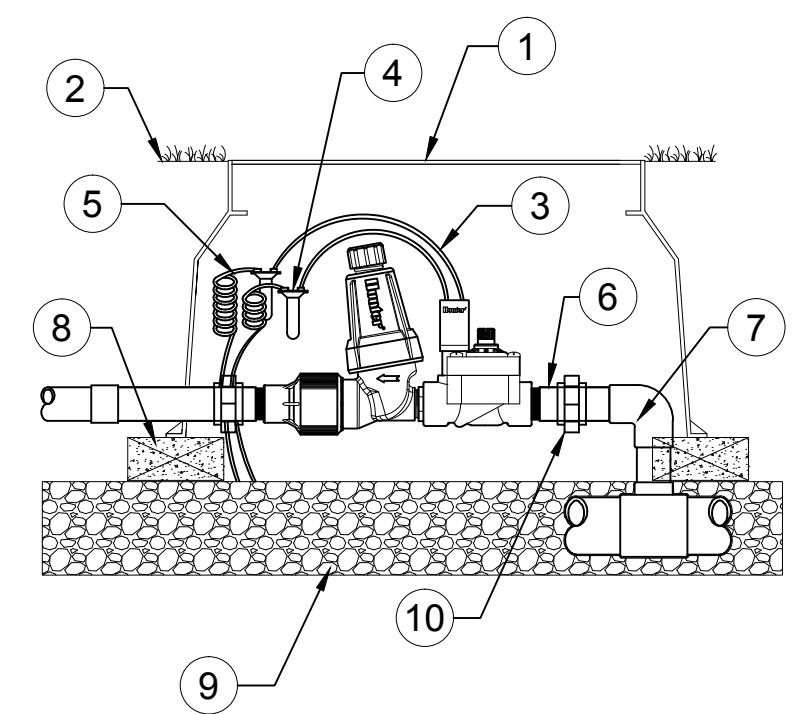


2 5004 ROTOR HEAD WITH SWING PIPE
 NTS S1-R0-RAI-01



3 PGA SERIES ELECTRIC VALVE
 S1-VA-RAI-02

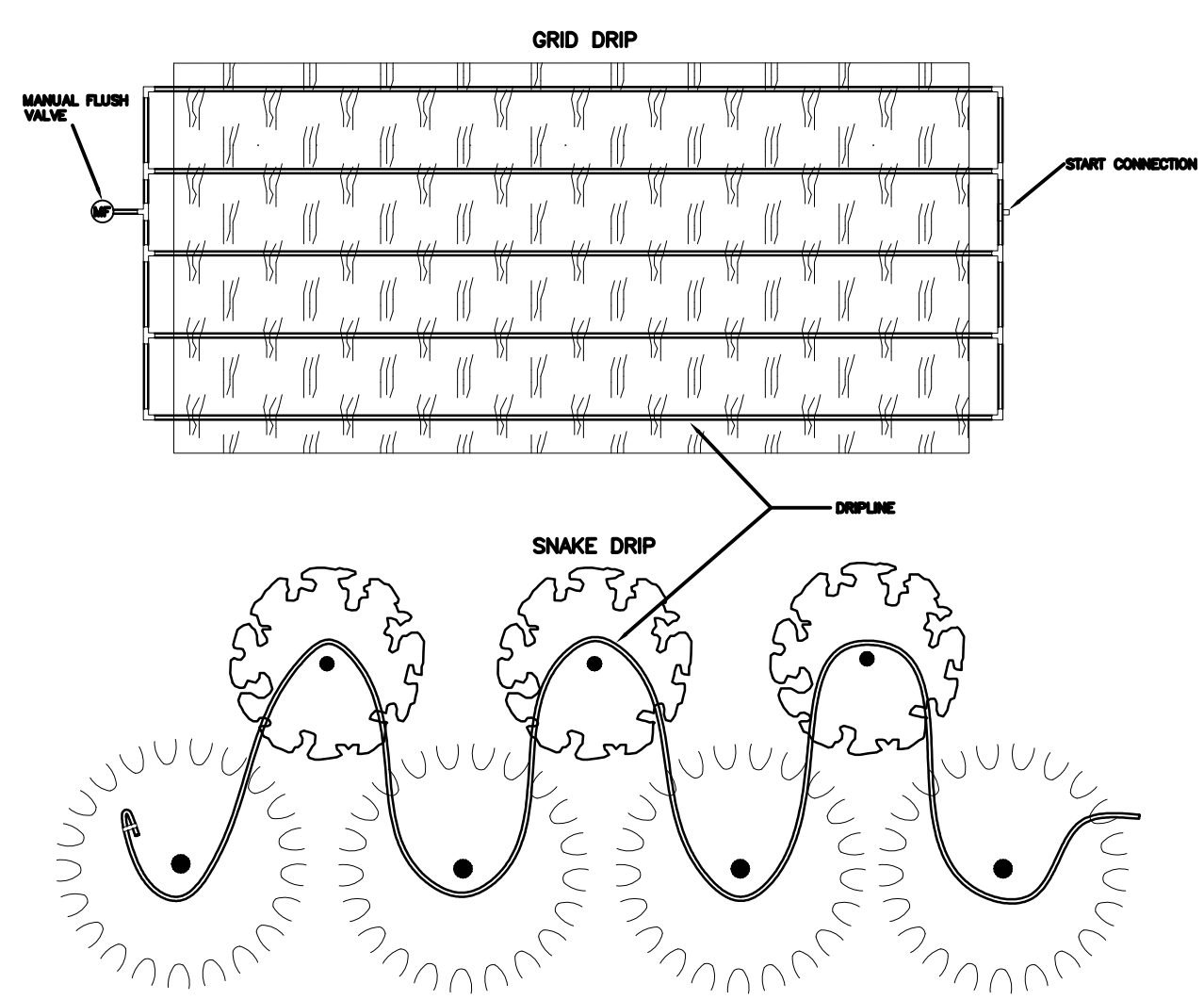
- 1 3/8-INCH LINEAR LENGTH OF WIRE, COILED
- 2 WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
- 3 ID TAG: RAIN BIRD VID SERIES
- 4 REMOTE CONTROL VALVE: RAIN BIRD PGA
- 5 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 6 FINISH GRADE/TOP OF MULCH
- 7 PVC SCH 80 NIPPLE (CLOSE)
- 8 PVC SCH 40 ELL
- 9 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 10 BRICK (1 OF 4)
- 11 PVC MAINLINE PIPE
- 12 SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
- 13 PVC SCH 40 TEE OR ELL
- 14 PVC SCH 40 MALE ADAPTER
- 15 PVC LATERAL PIPE
- 16 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL



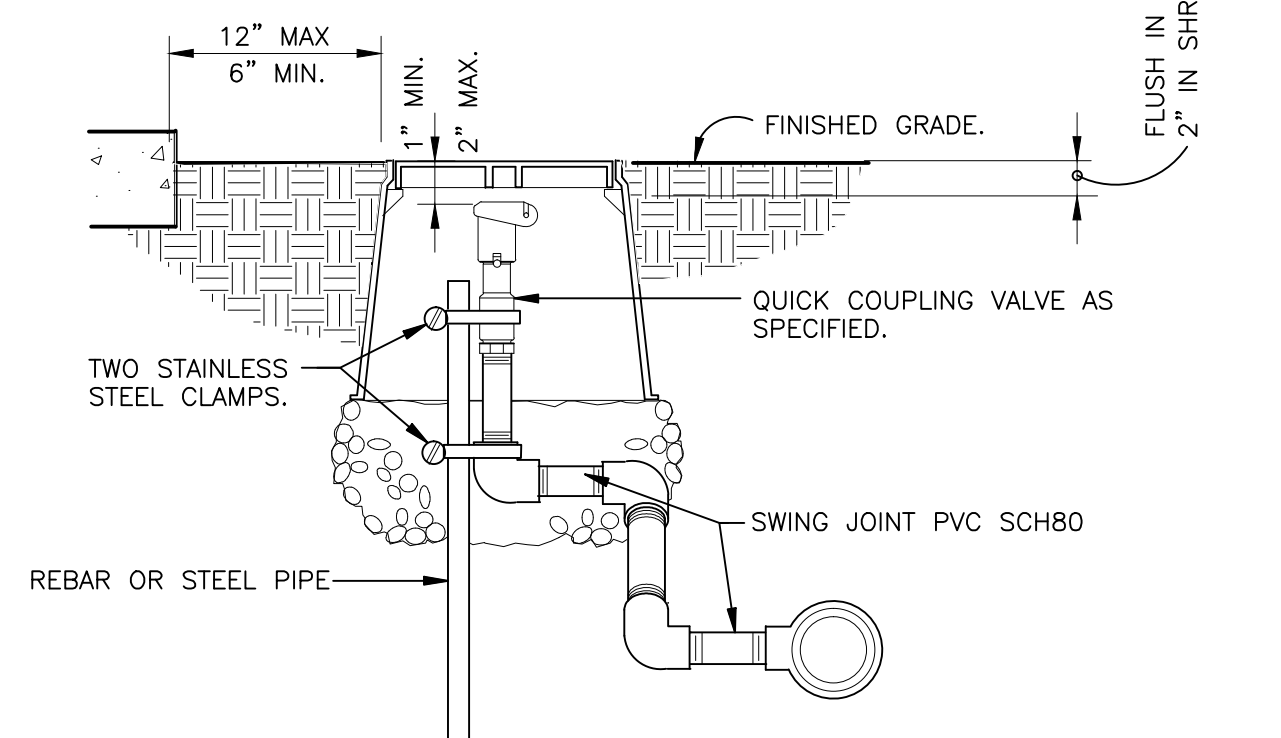
4 XCZ-100-PRF DRIP ZONE KIT
 S1-DR-HUN-01

- 1 STANDARD VALVE BOX
- 2 FINISH GRADE
- 3 DRIP ZONE KIT: MODEL XCZ-100-PRF FILTER, REGULATOR40 PSI
- 4 WATERPROOF CONNECTORS (2)
- 5 18-24" COILED WIRE
- 6 SCH 80 T.O.E. NIPPLE
- 7 MAIN LINE PIPE & FITTINGS
- 8 BRICK SUPPORTS (4)
- 9 3/4" MINUS WASHED GRAVEL
- 10 PVC SLIP UNIONS

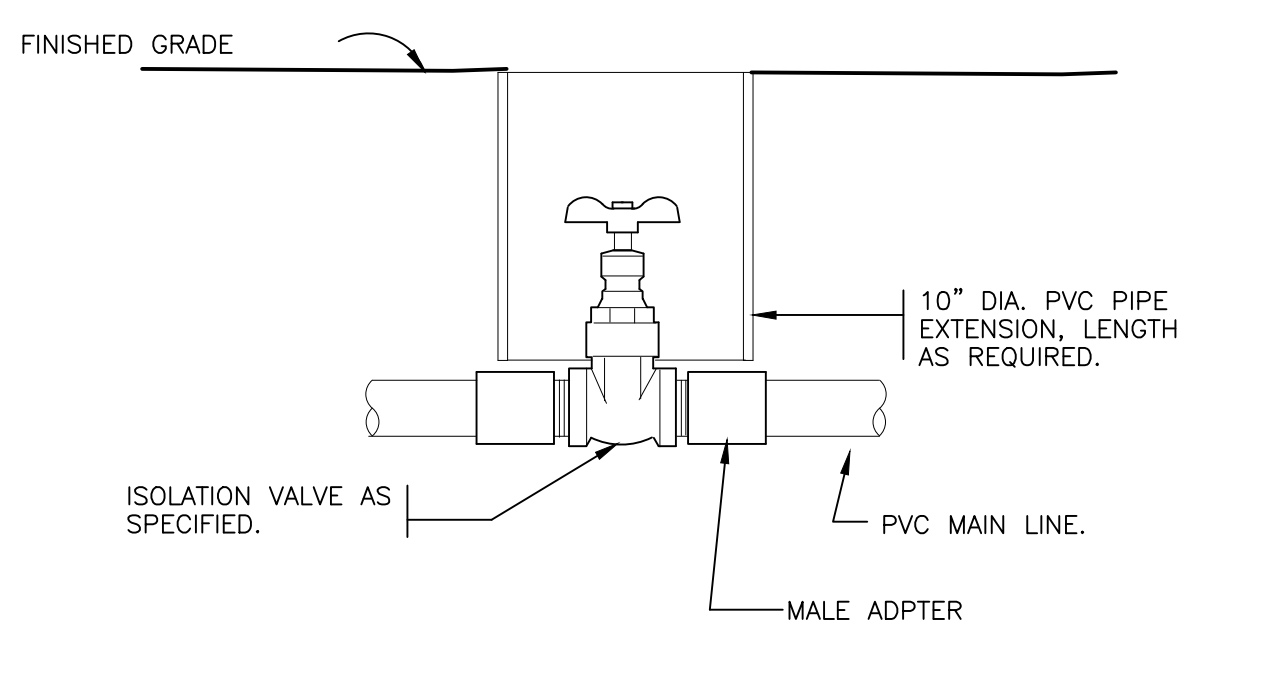
INSTALLATION MAY DIFFER PER LOCAL CODE



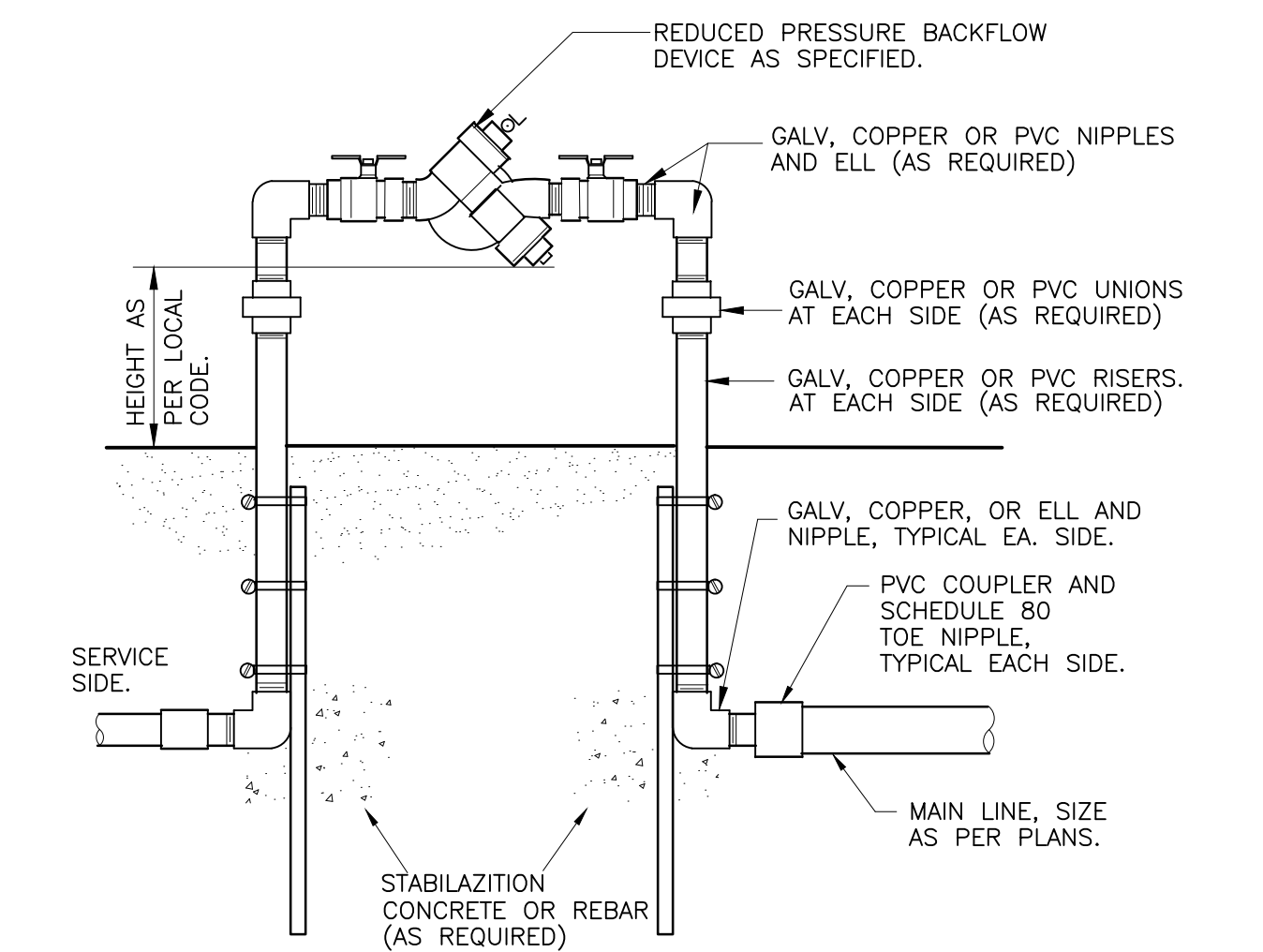
5 TYPICAL DRIP TUBING LAYOUT
 NTS



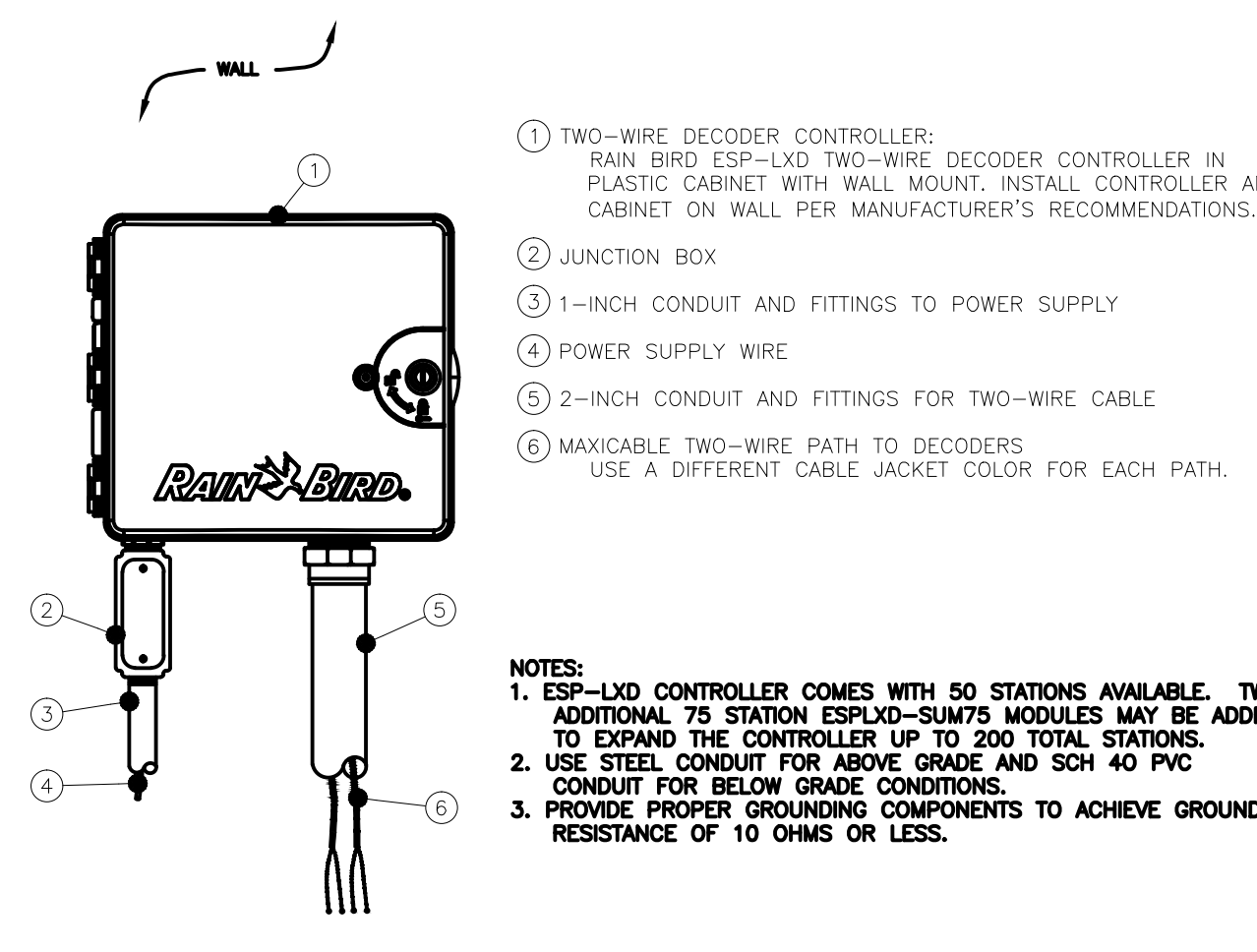
6 QUICK COUPLING VALVE IN BOX
 S1-QU-01



7 ISOLATION GATE VALVE
 S1-MI-02



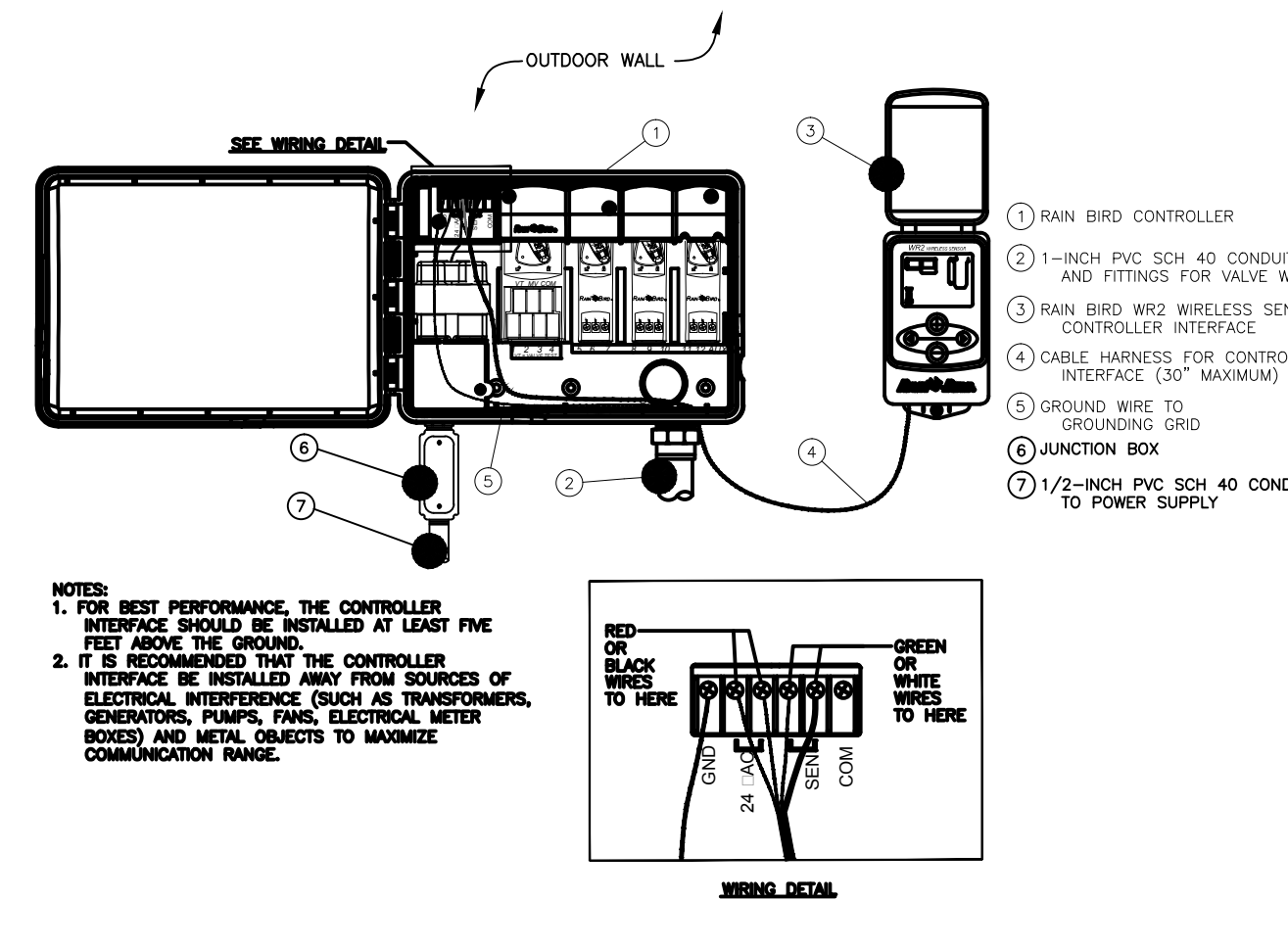
8 REDUCED PRESSURE BACKFLOW DEVICE STANDARD



9 ESP-LXD TWO-WIRE DECODER CONTROLLER
 NTS

- 1 TWO-WIRE DECODER CONTROLLER: RAIN BIRD ESP-LXD TWO-WIRE DECODER CONTROLLER IN PLASTIC CABINET WITH WALL MOUNT. INSTALL CONTROLLER AND CABINET ON WALL PER MANUFACTURER'S RECOMMENDATIONS.
- 2 JUNCTION BOX
- 3 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
- 4 POWER SUPPLY WIRE
- 5 2-INCH CONDUIT AND FITTINGS FOR TWO-WIRE CABLE
- 6 MAXICABLE TWO-WIRE PATH TO DECODERS. USE A DIFFERENT CABLE JACKET COLOR FOR EACH PATH.

NOTES:
 1. ESP-LXD CONTROLLER COMES WITH 50 STATIONS AVAILABLE. TWO ADDITIONAL 75 STATION ESPLO-SUN75 MODULES MAY BE ADDED TO EXPAND THE CONTROLLER UP TO 200 TOTAL STATIONS.
 2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
 3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.



10 WR2 WIRELESS RAIN SENSOR
 NTS

- 1 RAIN BIRD CONTROLLER
- 2 1/2-INCH PVC SCH 40 CONDUIT AND FITTINGS FOR VALVE WIRES
- 3 RAIN BIRD WR2 WIRELESS SENSOR CONTROLLER INTERFACE
- 4 CABLE HARNESS FOR CONTROLLER INTERFACE (30" MAXIMUM)
- 5 GROUND WIRE TO GROUNDING GRID
- 6 JUNCTION BOX
- 7 1/2-INCH PVC SCH 40 CONDUIT TO POWER SUPPLY

NOTES:
 1. FOR BEST PERFORMANCE THE CONTROLLER INTERFACE SHOULD BE INSTALLED AT LEAST FIVE FEET ABOVE THE GROUND.
 2. IT IS RECOMMENDED THAT THE CONTROLLER INTERFACE BE INSTALLED AWAY FROM SOURCES OF ELECTRICAL INTERFERENCE (SUCH AS TRANSFORMERS, GENERATORS, PUMPS, PANELS, ELECTRICAL METER BOXES) AND METAL OBJECTS TO MAXIMIZE COMMUNICATION RANGE.



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