

APPLICATION FOR
URBAN DESIGN COMMISSION
REVIEW AND APPROVAL

AGENDA ITEM # _____
Project # _____
Legistar # _____

DATE SUBMITTED: April 20, 2011

UDC MEETING DATE: April 27, 2011

Action Requested

☐ Informational Presentation

☒ Initial Approval and/or Recommendation

☒ Final Approval and/or Recommendation

PLEASE PRINT!

PROJECT ADDRESS: 2900 TRACEWAY

ALDERMANIC DISTRICT: BRUER

OWNER/DEVELOPER (Partners and/or Principals) ARCHITECT/DESIGNER/OR AGENT:

CITY OF MADISON WATER UTILITY STRAND ASSOCIATES INC

119 EAST OLIN AVE

910 W. WINGRA DR.

MADISON WI 53713

MADISON WI 53715

CONTACT PERSON: ERIC URTEG AIA, Andy Mullendor P.E.

Address: 910 W. WINGRA DR

MADISON WI 53715

Phone: 608 251 4843

Fax: 608 251 8655

E-mail address: eric.urtes@strand.com, andy.mullendor@strand.com

PLEASE PRINT!

TYPE OF PROJECT:

(See Section A for:)

☐ Planned Unit Development (PUD)

☐ General Development Plan (GDP)

☐ Specific Implementation Plan (SIP)

☐ Planned Community Development (PCD)

☐ General Development Plan (GDP)

☐ Specific Implementation Plan (SIP)

☐ Planned Residential Development (PRD)

☐ New Construction or Exterior Remodeling in an Urban Design District * (A public hearing is required as well as a fee)

☒ School, Public Building or Space (Fee may be required)

☐ New Construction or Addition to or Remodeling of a Retail, Hotel or Motel Building Exceeding 40,000 Sq. Ft.

☐ Planned Commercial Site

(See Section B for:)

☐ New Construction or Exterior Remodeling in C4 District (Fee required)

(See Section C for:)

☐ R.P.S.M. Parking Variance (Fee required)

(See Section D for:)

☐ Comprehensive Design Review* (Fee required)

☐ Street Graphics Variance* (Fee required)

☐ Other _____

*Public Hearing Required (Submission Deadline 3 Weeks in Advance of Meeting Date)

Where fees are required (as noted above) they apply with the first submittal for either initial or final approval of a project.

Narrative Description of the Project

The 2006 Madison Water Utility (MWU) Water Master Plan noted that supplemental fire flow supply was required in the Arbor Hills area. The first public meeting was held on May 27, 2009 to establish the project. A second public meeting was held on August 10, 2009 to examine alternatives to meet the fire flow requirements. The alternative selected was constructing a pump station in conjunction with the cannonball trail water main extension.

Preliminary design in conjunction was public and Citizen's Advisory Panel (CAP) meetings occurred between June 2010 and December 2010. It was decided that most the feasible site location for a pump station in the Arbor Hills area was an outlot in the northwest corner of Aldo Leopold Park.

The project design and construction at this site will include one building (approximately 25 feet-wide by 45 feet-long by 10 feet-tall). The building exterior will be constructed with brick a it will have a pitched roof. The project will also include water main extension from the building, new booster pumps, chemical rooms, and associated HVAC and electrical equipment.



910 West Wingra Drive
Madison, WI 53715
Phone: 608-251-4843
Fax: 608-251-8655

March 15, 2011

Office Locations

Madison, WI
Joliet, IL
Louisville, KY
Lexington, KY
Mobile, AL
Columbus, IN
Columbus, OH
Indianapolis, IN
Milwaukee, WI
Cincinnati, OH
Phoenix, AZ

Madison Plan Commission
215 Martin Luther King Jr. Blvd–Room LL-100
PO Box 2985
Madison, WI 53701-2985

Re: Letter of Intent–Booster Station No. 118

Dear Plan Commission:

www.strand.com

This letter serves as the Letter of Intent for the Booster Station No. 118 project for the City of Madison Water Utility. The following describes the project.

1. Project Name: Booster Station No. 118

2. Preliminary Construction Schedule

Advertisement Date	May 15, 2011
Bid Date	June 15, 2011
Notice to Proceed	August 1, 2011
Substantial Completion	May 1, 2012
Final Completion including landscaping	June 1, 2012

3. Description of Existing Conditions: The proposed site is located in the northwest corner of Aldo Leopold park. The land is relatively flat. Water, sewer, gas, and overhead electric are located on the northern portion of the proposed outlot. The construction project is being proposed in conjunction with the Cannonball Trail bike path water main extension project that is being completed this year.

4. Names of People Involved: Andy Mullendore is the project manager for Strand Associates, Inc.[®]. Strand Associates will serve as the surveyor and engineer. Al Larson is the project manager for the Madison Water Utility (MWU). Al Larson and Andy Mullendore will share project coordinator responsibilities. This project will be bid, so the contractor is unknown at this time. The property is currently owned by the Madison Parks department.

5. Uses: The building will be used by the MWU as a booster station to pump water from one pressure zone to another pressure zone. The project is intended to improve local water system pressures, increase available fire flow, and improve the system flexibility and reliability. The building will be one story.



Madison Plan Commission

Page 2

March 15, 2011

6. Gross Square Footage: Approximately 1,200 square feet.
7. The booster station is designed to run automatically through the MWU Supervisory Control and Data Acquisition system without any on-site employees needed. Standard operating procedure calls for an operator to visit the site on a daily basis during normal business hours (7 A.M. through 4 P.M.). This will consist of a single vehicle.
8. Capacity: Not applicable. The facility is not staffed.
9. Hours of Operation: See description in Item 7 above.
10. Square Footage of Site: 18,271 square feet (0.42 acres).
11. Number of Dwelling Units: Not applicable
12. Number of Bedrooms per Dwelling Unit: Not applicable.
13. Potential School Children: Zero
14. Trash Removal and Storage, Snow Removal, and other Maintenance Equipment Requirements: The Rounder who visits the site on a daily basis removes trash as necessary. Snow removal is by Water Utility staff.

If any additional information is required, please contact Andy Mullendore or Al Larson.

Sincerely,

STRAND ASSOCIATES, INC.®

A handwritten signature in black ink, appearing to read 'AM', is written over the printed name of Andy L. Mullendore.

Andy L. Mullendore, P.E.

c: Al Larson, MWU

Contextual Site Information



Picture 1
Facing east on Greenway View towards Cannonball Bikepath; Adjacent house is 2501 Greenway View.



Picture 3
Facing north within Aldo Leopold Park towards proposed site location. Apartment complex located at 2234 Luann Lane shown in background.



Picture 2
Facing northwest within Aldo Leopold Park towards proposed site location. House in Picture 1 shown in background.



Picture 4
Facing southeast within proposed site location towards Aldo Leopold park.

Contextual Site Information



Picture 5
Facing south at the eastern end of Greenway View; house is 2501 Greenway View.



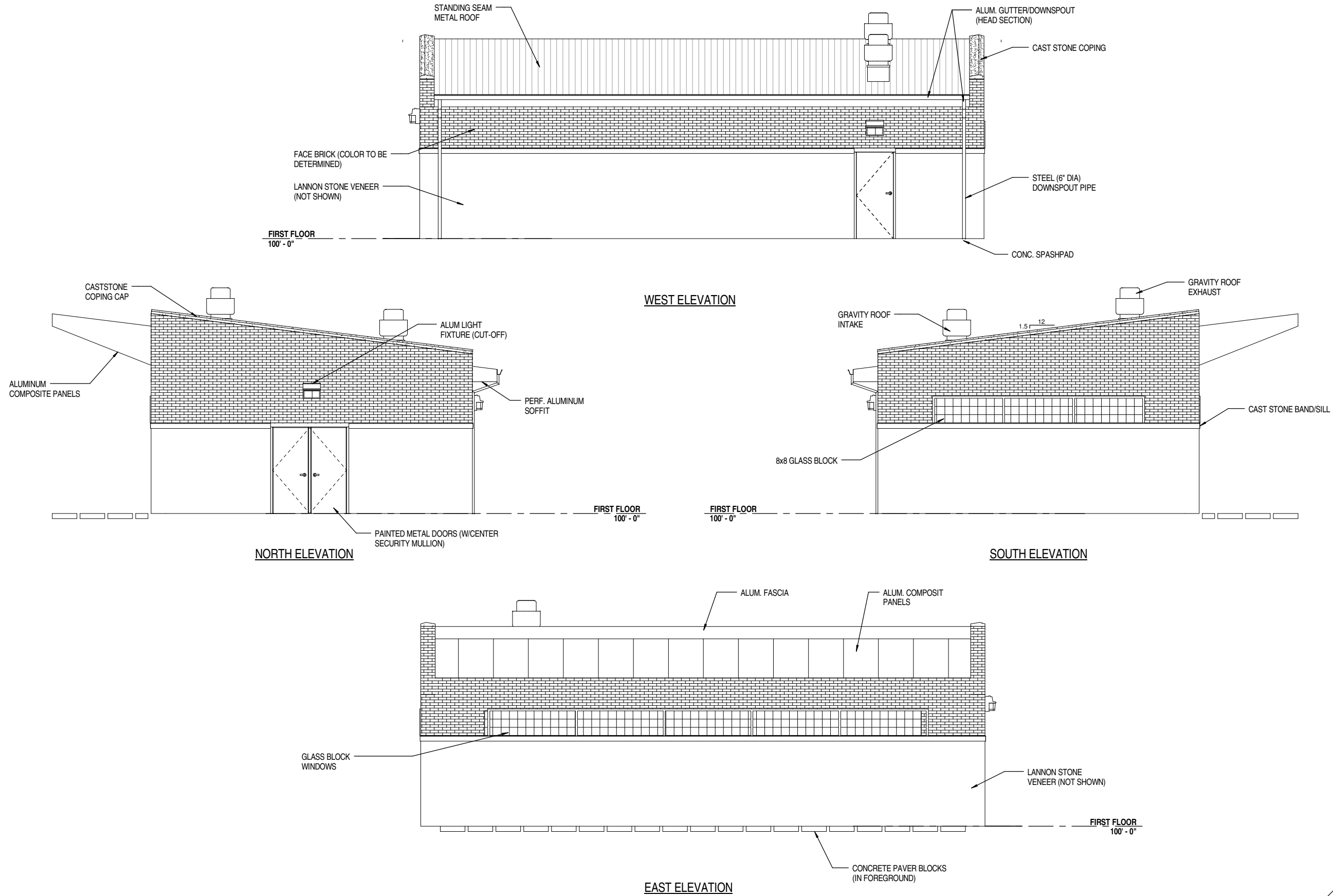
Picture 7
Facing east at the end of Greenway View. Start of future Leopold Bike Path is visible on the left side of the road.



Picture 6
Facing east within Aldo Leopold Park within proposed site location. Brush-line generally follows future Leopold Bike Path.



Picture 8
Facing southwest between the end of greenway view and our proposed site location (at the intersection of the future Cannonball and Leopold Bike Paths). House 2501 Greenway View is in the background. Cannonball Path runs along the left edge of the picture.



NOTE: PLUMBING VENT STACK NOT SHOWN

NO.	REVISIONS	DATE:

DATE:	DES. BY:	CHK. BY:	RECORD DRAWING	CONTRACTOR:

OPTION 2 - GABLE ROOF
BUILDING ELEVATIONS
BOOSTER PUMP STATION NO. 118
MADISON, WI

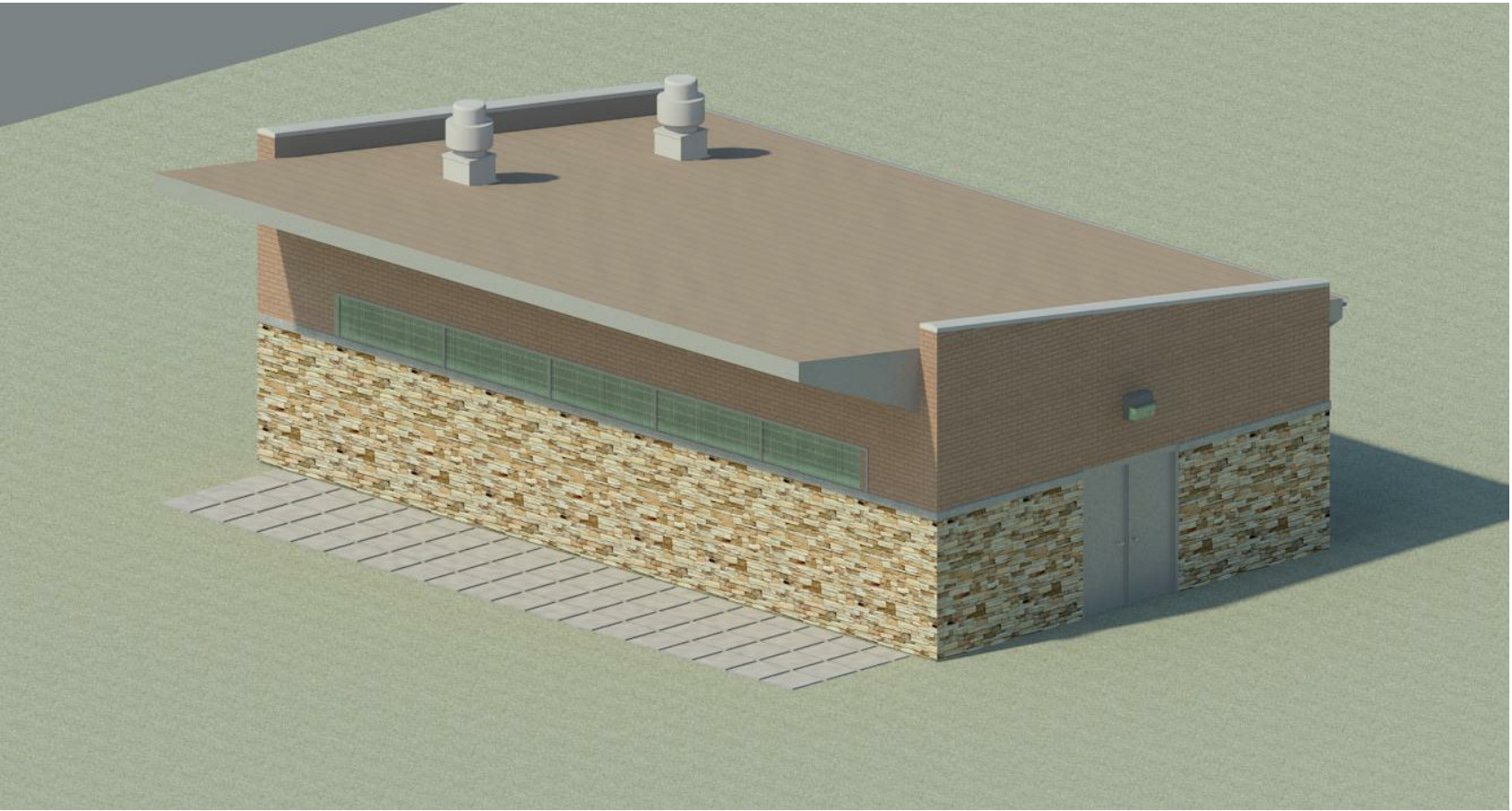


SHEET
A1.1
JOB NO. 1020056

NOT FOR
CONSTRUCTION



PERSPECTIVE VIEW



AERIAL VIEW

NO.	REVISIONS	DATE:

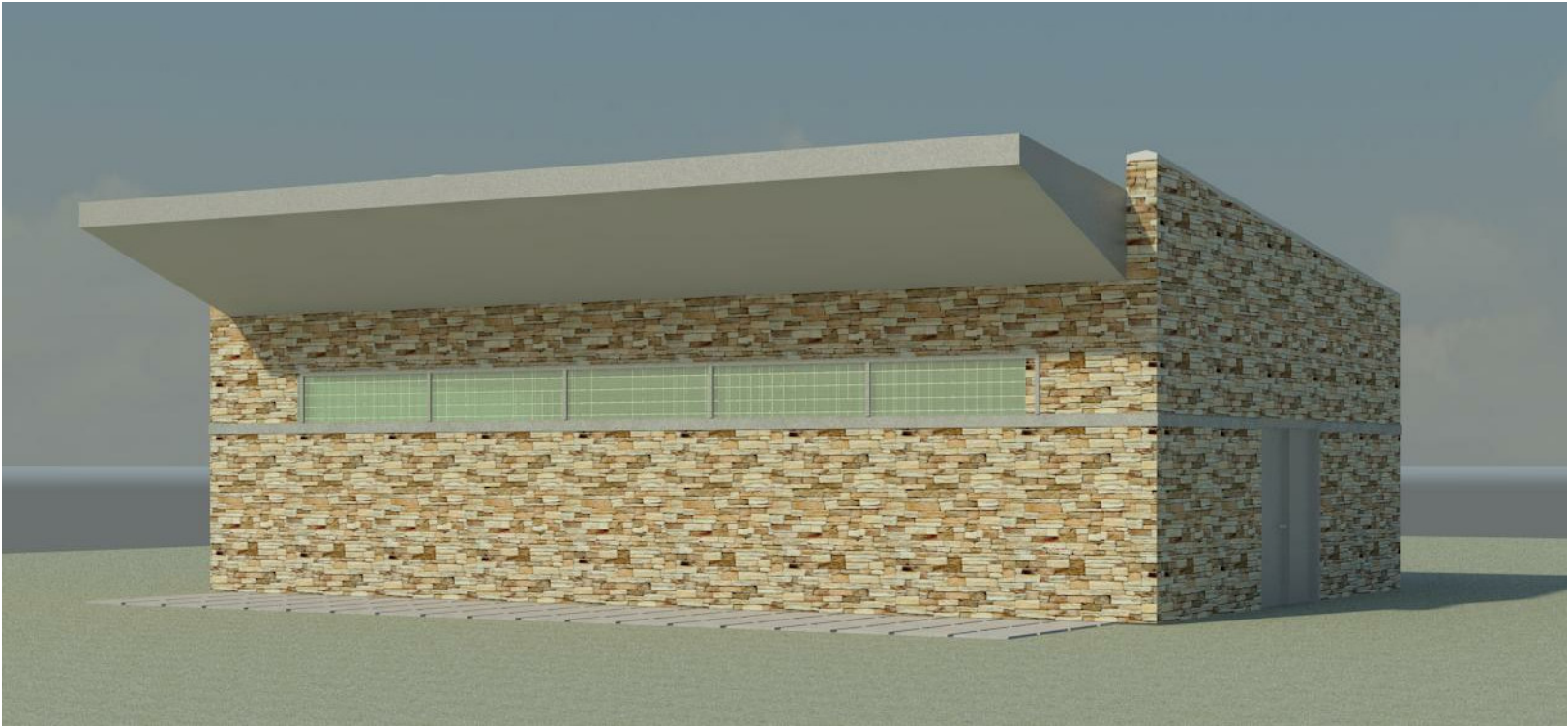
DATE: APRIL 2011	DES BY: KRT	CHK BY: JEU
RECORD DRAWING		
BY:	DATE:	CONTRACTOR:

3D VIEWS
BOOSTER PUMP STATION NO. 118
MADISON, WI

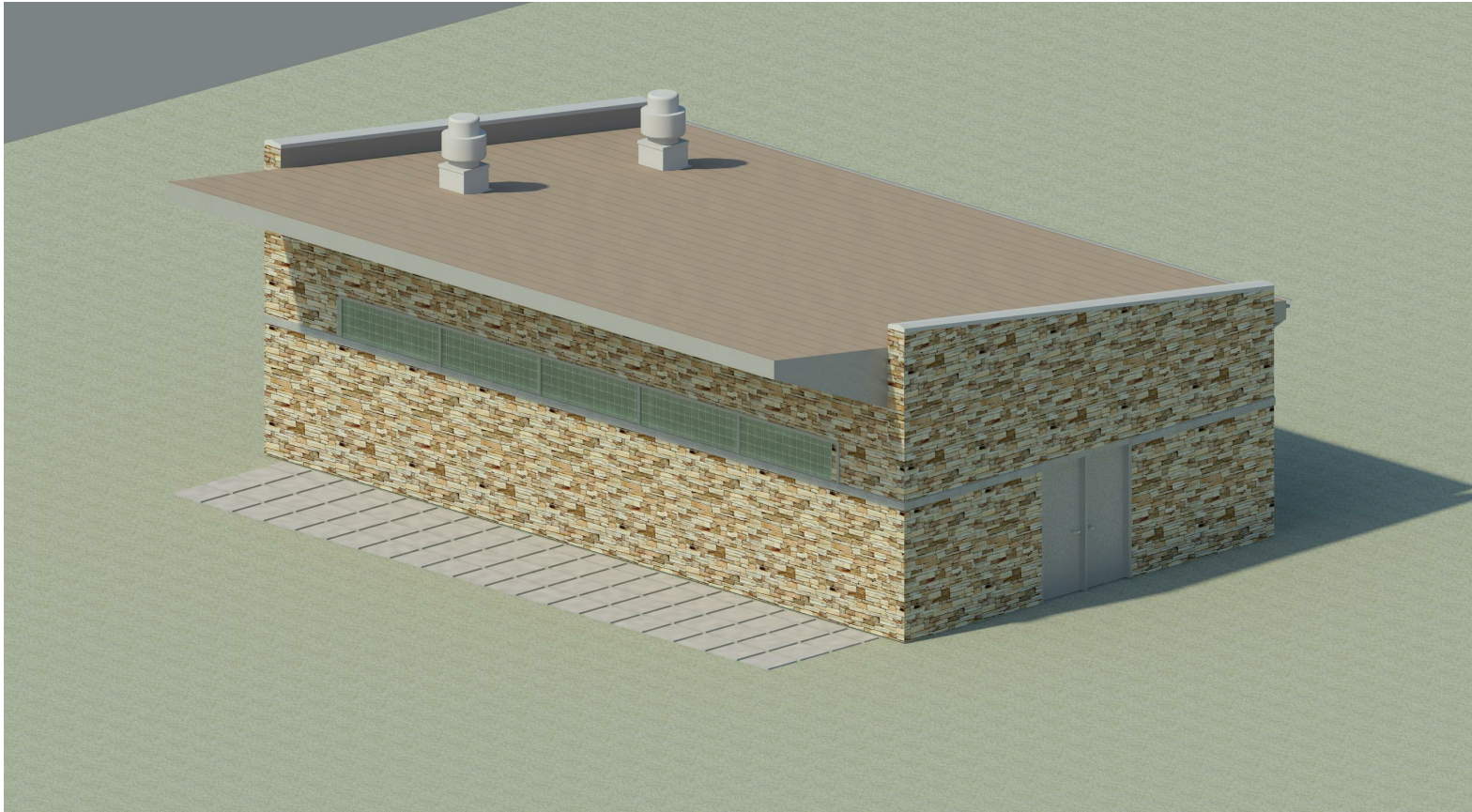


SHEET
A1.3
JOB NO. 1020056

NOT FOR
CONSTRUCTION



PERSPECTIVE VIEW



AERIAL VIEW

NO.	REVISIONS	DATE:

DATE: APRIL 2011	DES BY: KRT	CHK BY: JEU
RECORD DRAWING		
BY:	DATE:	CONTRACTOR:

3D VIEWS
BOOSTER PUMP STATION NO. 118
MADISON, WI



SHEET A1.3
JOB NO. 1020056

NOT FOR
CONSTRUCTION

DESCRIPTION

The IMPACT Elite Trapezoid cutoff wall luminaire makes an ideal complement to site design. Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities. U.L. and cUL Listed for wet locations in down mount applications and damp locations in up mounted applications.

McGRAW-EDISON®

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction

Two-piece die-cast aluminum housing and removable hinged door frame nests securely for precise tolerance control and repeatability. Hinged door frame inset for clean mating with housing surface and secured via two [2] captive stainless steel fasteners. Optional tamper resistant torx head fasteners [TR] offer vandal resistant access to the electrical compartment. 1/8" clear, heat and impact resistant tempered flat glass lens combined with molded silicone gasket to seal the integrated optical assembly while ensuring peak optical performance.

Electrical

Integral hard mount electrical components are secured and grounded within the die-cast aluminum housing for optimal heat sinking and extended component life. Minimum starting temperatures are -40°C (-40°F) for

HPS and -30°C (-22°F) for MP. Compact fluorescent luminaires feature electronic universal 120-277V high efficiency 50/60Hz ballast with -18°C (-0°F) minimum starting. Available in 50-175W HID or 26-84W CF.

Optical

Premium anodized 95% reflective aluminum optical assemblies provide high efficiency Type II distribution. Optional silk screened house side flat glass shield provides decreased wall brightness. All Impact Elite Wall Series luminaires classify as IESNA full cutoff in downlight applications. Available with 10% or 50% uplight options for architectural highlighting of building details.

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact

Elite "Hook-N-Lock" system for fast installation and mounting in both traditional downlighting [wet location] or inverted uplighting [damp location] mounting positions. Secured via two [2] captive corrosion resistant allen head set screws concealed from view, but accessible from bottom of fixture.

Finish

Housing and door are protected with 5-stage premium TGIC polyester powder coat paint. Premium TGIC powder coat finishes withstand extreme climate changes while providing optimal color and gloss retention over the fixture's installed life. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult McGraw-Edison Architectural Colors Brochure for complete selection.



IST IMPACT ELITE TRAPEZOID

50 - 175W

Pulse Start Metal Halide

Metal Halide

High Pressure Sodium

26 - 84W

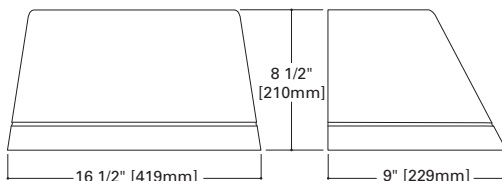
Compact Fluorescent

FULL CUTOFF
WALL MOUNT LUMINAIRE



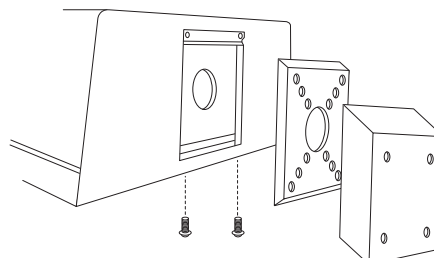
NOTE: In downlight applications only.

DIMENSIONS



HOOK-N-LOCK MOUNTING

(Mounting attachment included. J-Box not included.)



IMPACT™

TECHNICAL DATA

UL1598 Listed, CUL Listed
25°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum
Down Mounted—Wet Location
Up Mounted—Damp Location

ENERGY DATA

High Reactance Ballast Input Watts

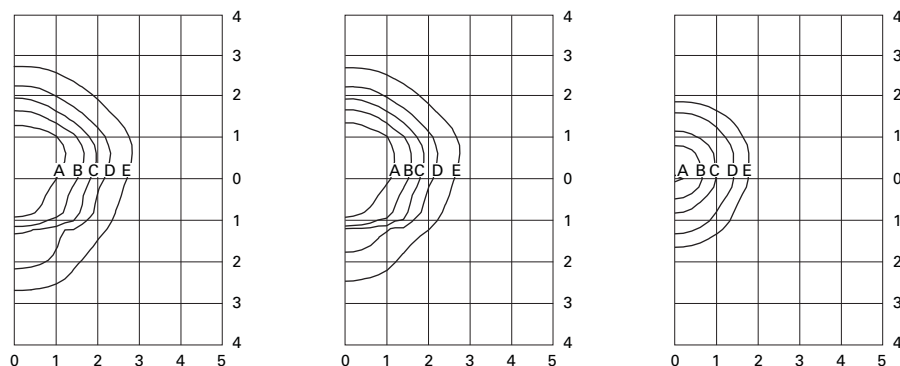
50W HPS HPF (66 Watts)
50W MP HPF (72 Watts)
70W HPS HPF (91 Watts)
70W MP HPF (90 Watts)
100W HPS HPF (130 Watts)
100W MP HPF (129 Watts)
150W HPS HPF (190 Watts)
150W MP HPF (185 Watts)

Electronic Ballast Input Watts

26W CF HPF (29 Watts)
32W CF HPF (36 Watts)
42W CF HPF (46 Watts)
52W CF HPF (55 Watts)

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)

PHOTOMETRICS (Complete IES files available at www.cooperlighting.com)

IST-150-MP-XX-2S

150—Watt MP
14,000—Lumen Clear Lamp

IST-150-HPS-XX-2S

150—Watt HPS
16,000—Lumen Clear Lamp

IST-42-CF-XX-2S

42—Watt CF
3,200—Lumen Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
150-MP / 150-HPS					
10'	7.20	2.88	1.44	0.72	0.29
12'	5.00	2.00	1.00	0.50	0.20
14'	3.65	1.46	0.73	0.37	0.07
42-CF					
18'	2.46	1.23	0.62	0.25	0.12
20'	2.00	1.00	0.50	0.20	0.10
25'	1.28	0.64	0.32	0.13	0.06

ORDERING INFORMATION

Sample Number: IST-100-MP-120-2S-GM

IST	70	MP	120V	25	BZ	2EM/SC/12V
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Product Family

IST=Impact Elite Small Trapezoid

Lamp Wattage ¹

MP
50=50W²
70=70W²
100=100W
150=150W
HPS
50=50W²
70=70W²
100=100W
150=150W
MH
175=175W¹
CF
26=(1) 26W
32=(1) 32W
42=(1) 42W
52=(2) 26W
64=(2) 32W
84=(2) 42W

Lamp Type

MP=Pulse Start Metal Halide
HPS=High Pressure Sodium
MH=Metal Halide¹
CF=Compact Fluorescent

Voltage ³

120=120V
208=208V
240=240V
277=277V
347=347V
480=480V
DT=Dual-Tap⁴
MT=Multi-Tap⁴
TT=Triple-Tap⁴
E1=Electronic 120-277V⁵

Distribution

2S=Type II Segmented

Color ⁶

AP=Grey
BZ=Bronze
BK=Black
WH=White
DP=Dark Platinum
GM=Graphite Metallic

Options

F=Single Fuse (120, 277 or 347V)⁷
FF=Double Fuse (208, 240 or 480V)⁷
L=Lamp Included
P=Button Type Photocontrol (120V, 208, 240, or 277V)⁷
TR=Tamper Resistant Fasteners
UPL10=10% Uplight
HS=House Side Shield Glass⁵
PL=Polycarbonate Lens^{5, 8}
Q=Quartz Restrike T4 Lamp⁹
EM=Emergency Quartz Restrike T4 Lamp w/ Time Delay Relay⁹
EM/SC=Emergency Separate Circuit T4 Lamp^{9, 10}
QMR=Quartz Restrike MR16 Lamp^{11, 12}
2QMR=Quartz Restrike w/ (2) MR16 Lamps^{11, 12}
2QMR/SC=Quartz Restrike (1) MR16 Lamp and (1) Emergency^{10, 11, 12} Separate Circuit MR16 Lamp
EMMR=Emergency Quartz Restrike MR16 Lamp w/ Time Delay Relay^{11, 12}
2EMMR=Emergency Quartz Restrike with (2) MR16 Lamps w/Time^{11, 12} Delay Relay
2EMMR/SC=Emergency Quartz Restrike with Time Delay Relay (1)^{10, 11, 12} MR16 and (1) MR16 Emergency Separate Circuit Lamp
EM/SC/MR=Emergency Separate Circuit MR16 Lamp^{10, 11, 13}
2EM/SC/MR=Emergency Separate Circuit with (2) MR16 Lamps^{10, 11, 13}
EM/SC/12V=Emergency Separate Circuit 12V Low Voltage (1) MR16^{10, 14} Lamp
2EM/SC/12V=(2) Emergency Separate Circuit MR16 Lamps (12V)^{10, 14}
EMI40=Emergency Cold Temperature (UL924 Listed) Power Pack -18^{7, 15} degrees C / 0 degrees F, (1) CF Lamp
CFEM=Emergency CF Power Pack (UL924 Listed) (1) CF Lamps, 0^{7, 16} Degrees C/32 Degrees F

Notes: 1 HID lamps are medium base. 175W MH is available for non-U.S. markets only.

2 Not available in 480V.

3 Products also available in non-US voltages and 50Hz for international markets. Consult your Cooper Representative for availability and ordering information.

4 Dual-Tap ballast is 120/277V wired 277V. Multi-Tap ballast is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V.

5 Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels.

6 Add as suffix.

7 Must specify voltage.

8 Down lighting position only.

9 (1) 120W Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others.

10 Leads out of the back of the unit for auxiliary power.

11 (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others.

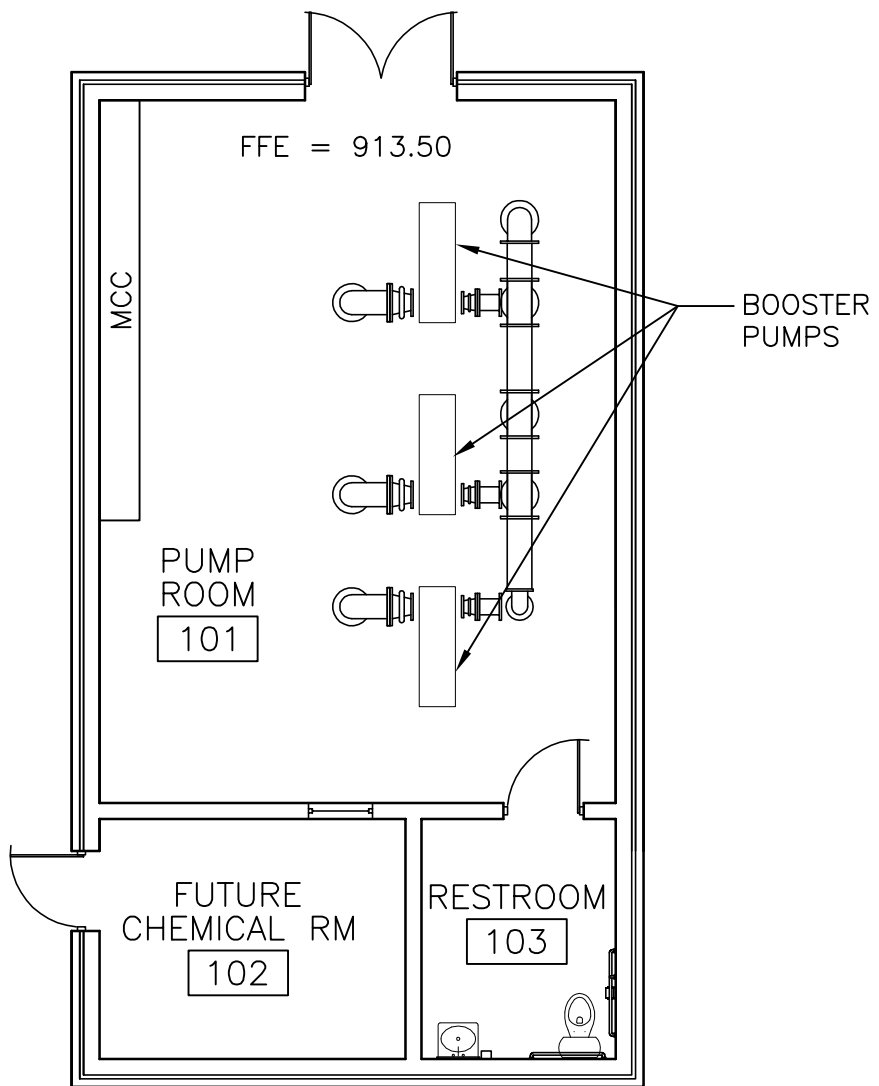
12 Not available with CF lamps.

13 Not available with 52, 64, 84 CF wattages.

14 (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamp supplied by others.

15 Specify 120 or 277V, (-18°C) minimum temperature, not available with UPL10.

16 Specify 120 or 277V, (0°C) minimum temperature, not available with UPL10.



FLOOR PLAN
0 2' 4' 8' 16'

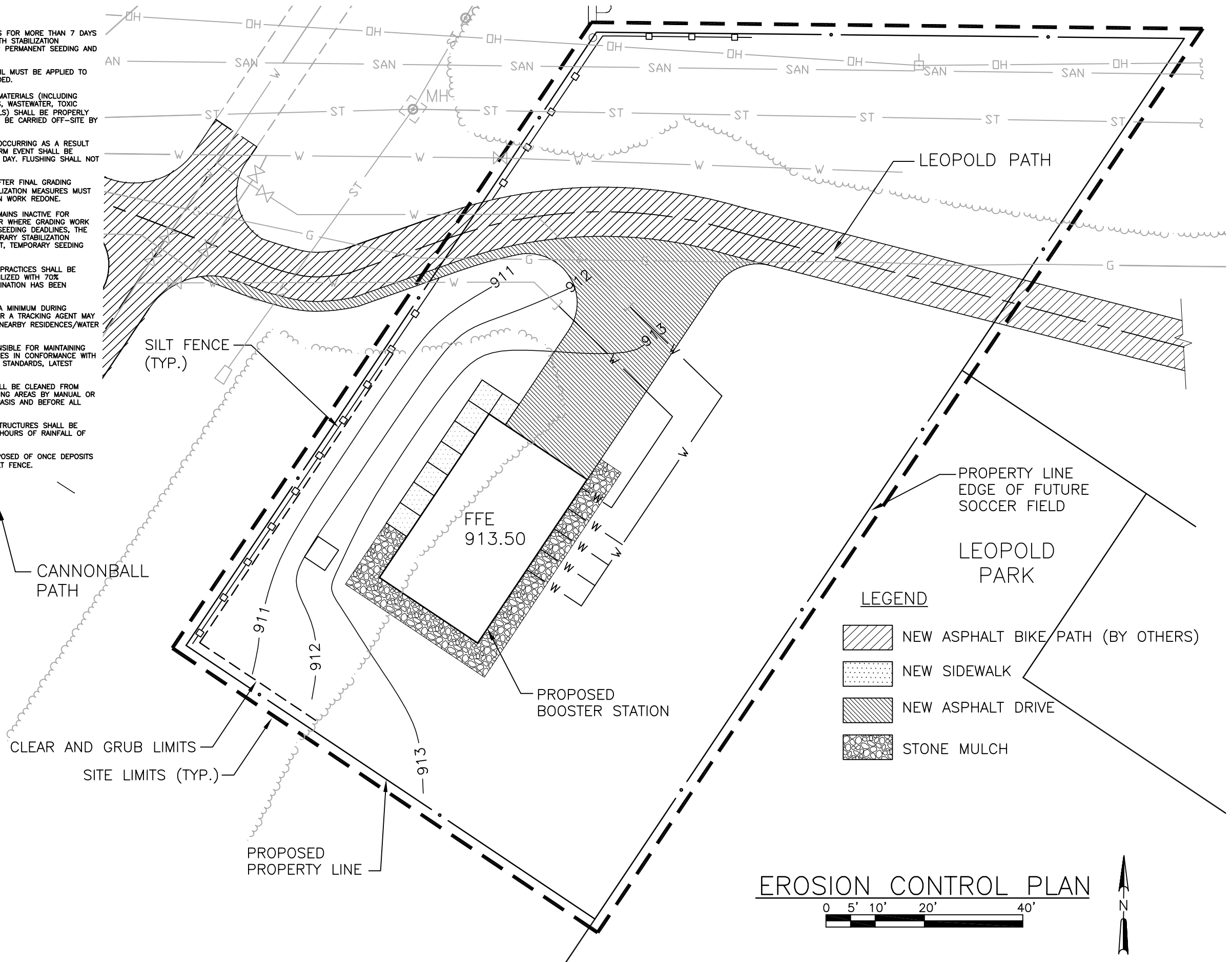
FLOOR PLAN LAYOUT
BOOSTER STATION 118
CITY OF MADISON
DANE COUNTY, WISCONSIN



FIGURE 4
1020.056

EROSION CONTROL NOTES:

1. ANY SOIL STOCKPILED THAT REMAINS FOR MORE THAN 7 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.
2. A MINIMUM OF 4 INCHES OF TOPSOIL MUST BE APPLIED TO ALL AREAS TO BE SEEDED OR SODDED.
3. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
4. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH DAY. FLUSHING SHALL NOT BE ALLOWED.
5. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR THE APPLICATION OF STABILIZATION MEASURES MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
6. FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING.
7. ALL TEMPORARY EROSION CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED WITH 70% VEGETATION AND A NOTICE OF TERMINATION HAS BEEN APPROVED BY THE DNR.
8. WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH OR A TRACKING AGENT MAY NEED TO BE UTILIZED TO PROTECT NEARBY RESIDENCES/WATER RESOURCES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL THE EROSION CONTROL MEASURES IN CONFORMANCE WITH THE WDNR CONSERVATION PRACTICE STANDARDS, LATEST EDITION.
10. FINE SEDIMENT ACCUMULATIONS SHALL BE CLEANED FROM STREETS, PRIVATE DRIVES, OR PARKING AREAS BY MANUAL OR MECHANICAL SWEEPING ON DAILY BASIS AND BEFORE ALL IMMINENT RAINS.
11. EROSION AND SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF RAINFALL OF 0.5 INCH OR MORE.
12. SEDIMENT SHALL BE PROPERLY DISPOSED OF ONCE DEPOSITS REACH 1/2 THE HEIGHT OF THE SILT FENCE.



EROSION CONTROL PLAN

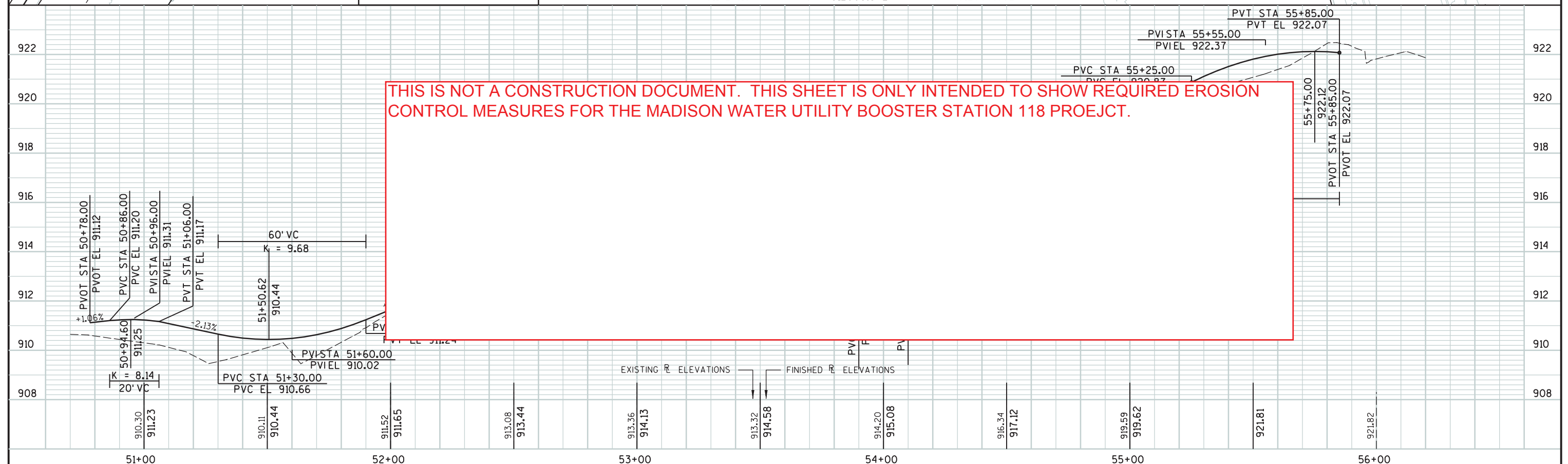
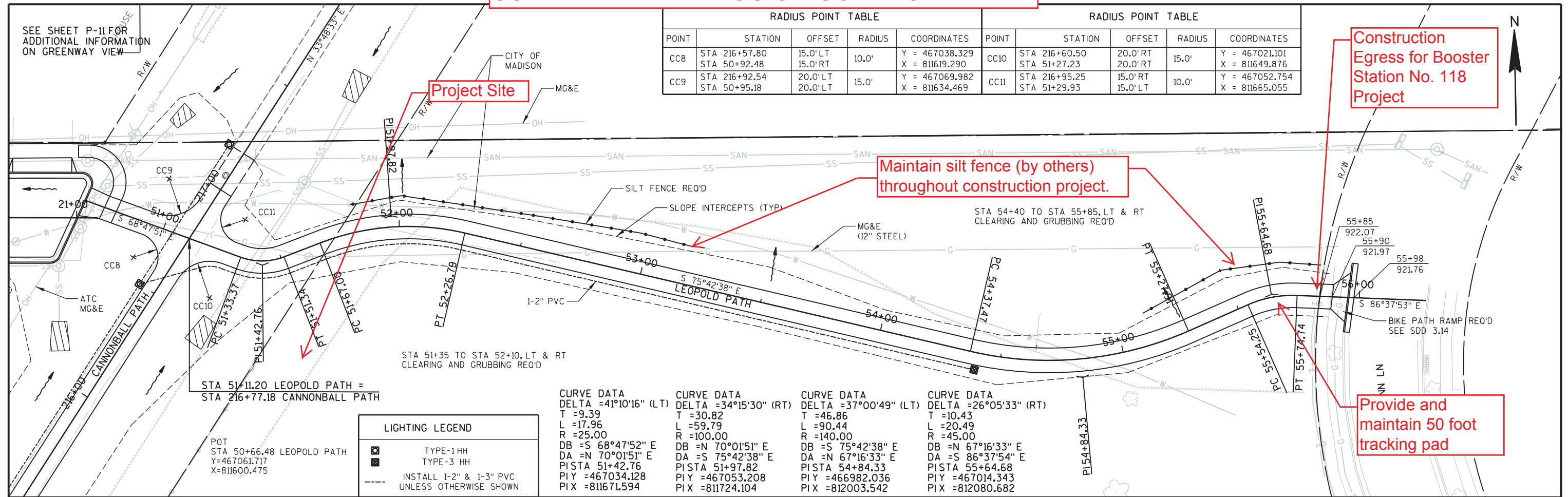
BOOSTER STATION 118
CITY OF MADISON
DANE COUNTY, WISCONSIN

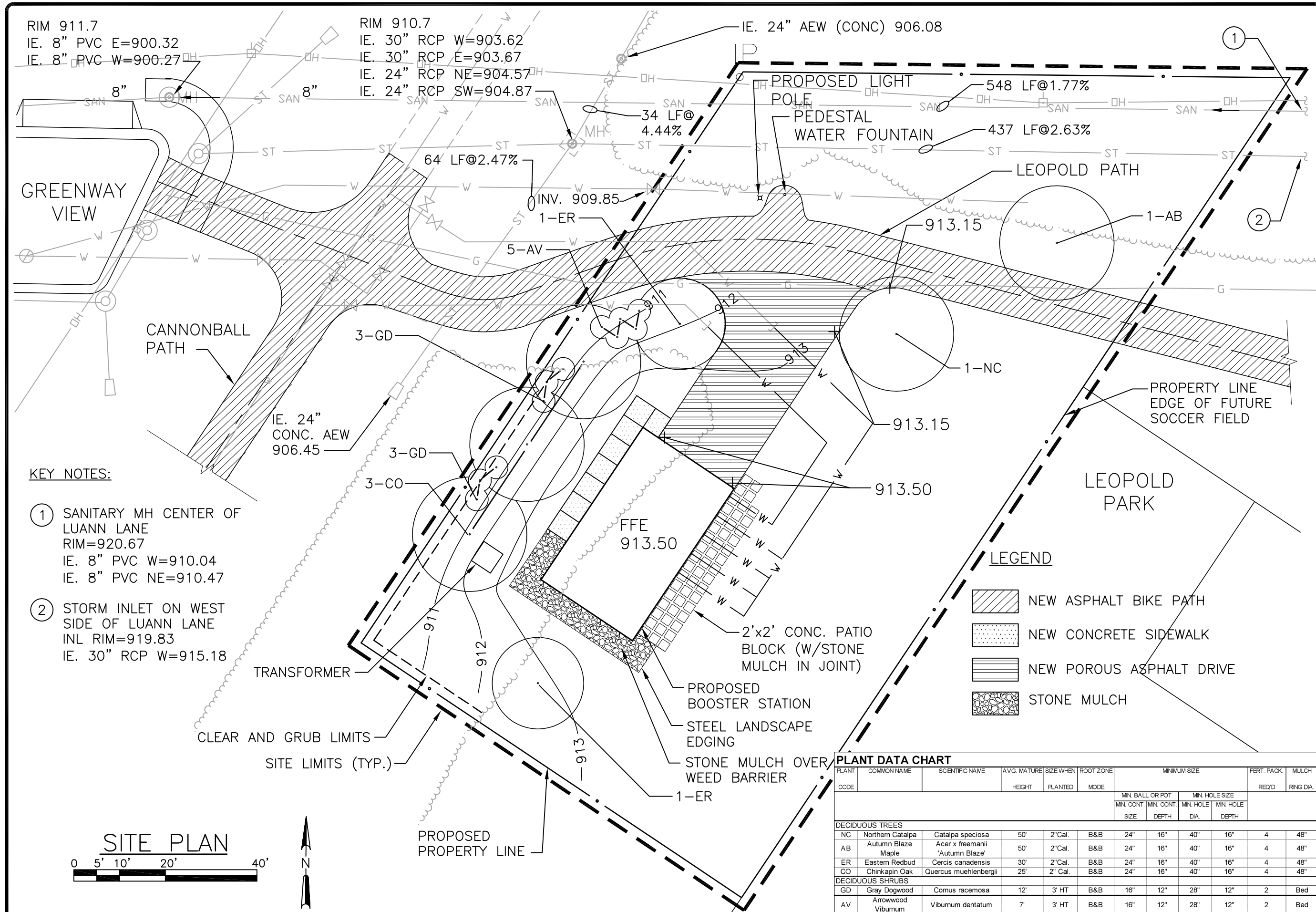


FIGURE 5

1020.056

SUPPLEMENTAL EROSION CONTROL PLAN





SITE, LANDSCAPING, AND GRADING PLAN

**BOOSTER STATION 118
CITY OF MADISON
DANE COUNTY, WISCONSIN**



FIGURE 1

1020.056