

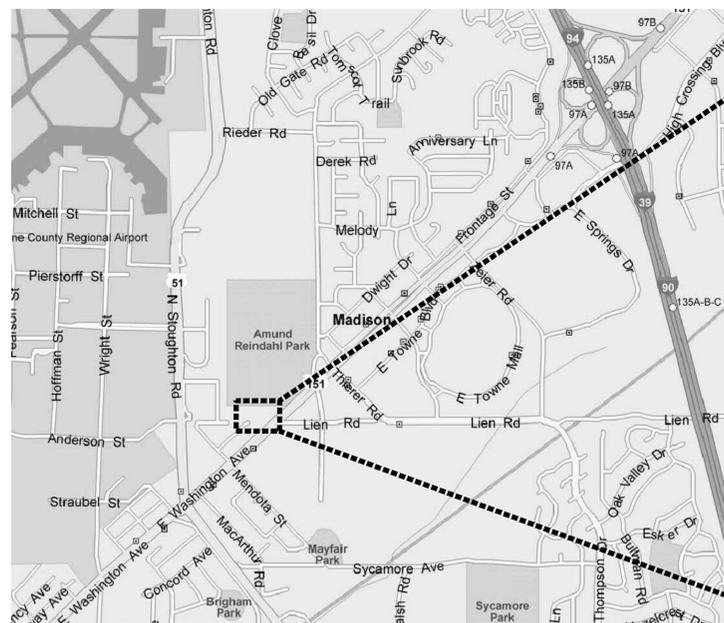
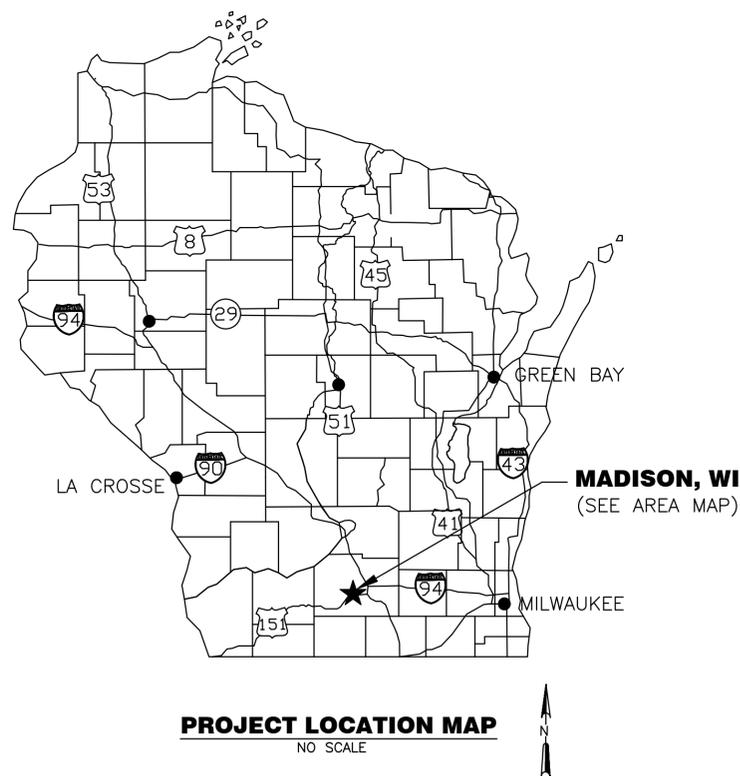
MADISON WELL NO. 15 VOC REMOVAL

FOR THE

MADISON WATER UTILITY

DANE COUNTY, WISCONSIN

XXXXXX, 2012



WELL NO. 15
3900 E. WASHINGTON AVE.



910 West Wingra Drive
Madison, WI 53715
608-251-4843
608-251-8655 fax
www.strand.com

CONTRACT _____

DRAFT



SHEET
G0.1

DATE:

REVISIONS

NO.

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DRAWING LIST AND DESIGN SUMMARY

MADISON WELL NO. 15 VOC REMOVAL
 3900 E. WASHINGTON AVENUE
 MADISON WATER UTILITY
 DANE COUNTY, WISCONSIN

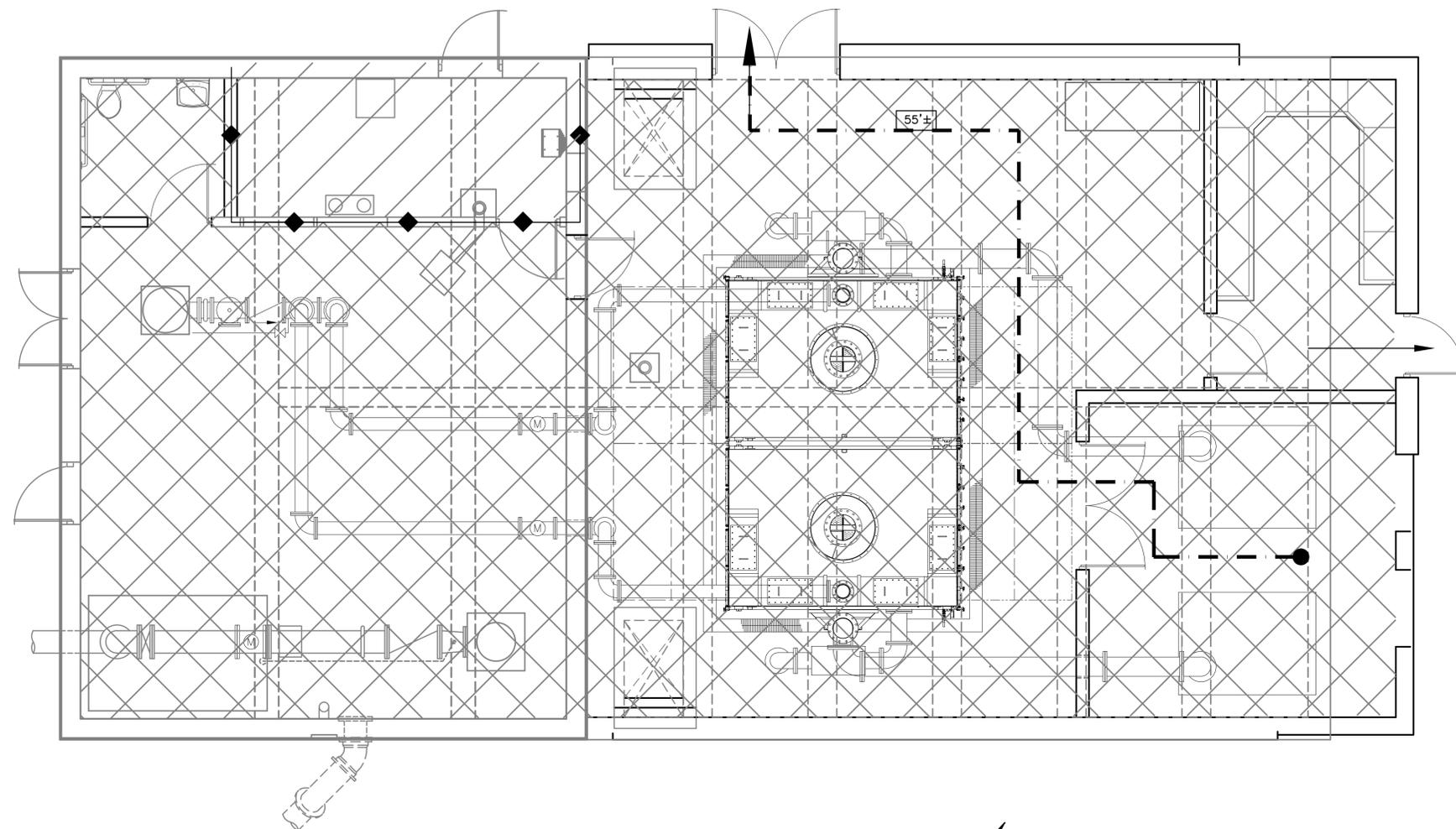
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LIFE SAFETY AND EXITING PLAN



LIFE SAFETY LEGEND

- 1 HOUR FIRE-RATED WALL
- 2 HOUR FIRE-RATED WALL
- TRAVEL DISTANCE (FEET)
- EXIT
- BARRIER FREE ACCESS ROUTE
- EXIT DISCHARGE
- REQUIRED EXIT
- H-3 OCCUPANCY
- F-1 OCCUPANCY

BUILDING CODE INFORMATION			
BUILDING CODE	WISCONSIN COMMERCIAL BUILDING CODE (2006 IBC WITH WISCONSIN EXCEPTION)		
SCOPE OF WORK: NEW MASONRY BUILDING TO BE BUILT ADJACENT/CONNECTED TO THE EXISTING FACILITY			
OCCUPANCY TYPE	SEPARATED USE		
USE GROUPS	F-1 FACTORY INDUSTRIAL (WATER TREATMENT) H-3 HAZARDOUS (CHEMICAL STORAGE)		
HAZARDOUS MATERIALS			
CHEMICAL	CHEMICAL CLASSIFICATION	MAX. CONTROL AREA QUANTITY	ACTUAL QUANTITY ^a
CHLORINE GAS			
NOTES: a. ACTUAL QUANTITY IS FOR COMBINED STORAGE AND CLOSED SYSTEMS USE. b. CONTROL AREA QUANTITY PER TABLE 307.1(1) FOOTNOTE i.			
CONSTRUCTION TYPE	TYPE 5B		
OCCUPANCY SEPARATION		FIRE RATING	
F-1: H-3		1 HOUR	
GENERAL BUILDING INFORMATION			
NO. OF STORIES	ALLOWABLE	ACTUAL	
1	1 STORY	1 STORY ¹	
HEIGHT	40 FEET	18'-0"	
AREA PER FLOOR LEVEL			
	F-1 8,500 SF		F-1
	H-3 5,000 SF		H-3
TOTAL ALLOWABLE AREA PER FLOOR LEVEL	XXXX SF	TOTAL ACTUAL AREA	7,400 SF
RATIO OF ACTUAL TO ALLOWABLE: PROJECT AREA ^{2,3} 8,500 S.F.			
FIRE SUPPRESSION SYSTEM			
AUTOMATIC SPRINKLER SYSTEM - ORDINARY HAZARD PORTABLE FIRE EXTINGUISHERS, RATED CLASS A, B, C; 10-POUND CAPACITY.			
TRAVEL DISTANCE			
	EXIT ACCESS	COMMON PATH	
	F-1 250 FEET	100 FEET	
	H-3 150 FEET	25 FEET	
EXITS			
REQUIRED (EACH AREA)		PROVIDED (EACH AREA)	
1		1	
NOTES: ALL OTHER SPACES/OCCUPANCIES NOT LISTED ABOVE REQUIRE 1 EXIT.			
ENERGY REQUIREMENTS			
HEATING			
COOLING			
LIGHTING			
NOTES:			

NO.	REVISIONS	DATE:

**LIFE SAFETY AND EXITING PLAN
AND CODE SUMMARY**
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G0.3

ELECTRICAL SYMBOLS

LIGHTING

FIXTURE SYMBOL (TYPICAL)
 A-INDICATES FIXTURE TYPE
 2-INDICATES CIRCUIT NUMBER
 B-INDICATES SWITCHING
 SOLID CIRCLE INDICATES ALWAYS ON

INCANDESCENT, HID, SURFACE OR PENDANT
 INCANDESCENT, HID, WALL
 1X4 FLUORESCENT, SURFACE OR PENDANT
 1X8 FLUORESCENT, SURFACE OR PENDANT
 FLUORESCENT, WALL
 1X4 FLUORESCENT, RECESSED
 2X2 FLUORESCENT, RECESSED
 2X4 FLUORESCENT, RECESSED
 CAN, FLUORESCENT OR HID
 EXIT, SURFACE, PENDANT OR RECESSED
 EXIT, WALL
 EMERGENCY LIGHTING

SWITCHES

SINGLE POLE
 TWO POLE
 THREE WAY
 FOUR WAY
 KEYED
 DIMMER
 MANUAL MOTOR SWITCH (3 PHASE)
 WEATHER PROOF
 SWITCH WITH PILOT LIGHT
 LIGHTING CONTROL STATION
 LOCKOUT STOP SWITCH
 DOOR POSITION SWITCH
 PHOTOCCELL

EQUIPMENT AND WIRING

GROUND ROD 10'-5/8" DIA. COPPER CLAD
 TRANSFORMER
 DISCONNECT, F=FUSED, B=CIRCUIT BREAKER, BLANK=NON-FUSED
 MOTOR STARTER MAGNETIC
 CIRCUIT BREAKER COMBINATION STARTER
 JUNCTION BOX
 LINE VOLTAGE THERMOSTAT
 LINE VOLTAGE THERMOSTAT W/REMOTE BULB
 480V LOAD, REFER TO MCC SCHEDULE FOR EQUIPMENT NUMBER
 VARIABLE FREQUENCY DRIVE

POWER SYMBOLS

E UNDERGROUND ELECTRIC
 OH OVERHEAD ELECTRIC

CIRCUIT NUMBER (TYPICAL)
 OTHERWISE SHOWN PANEL DESIGNATION (TYP.)
 DUPLEX, 125 VOLT, WP INDICATES WEATHERPROOF
 DUPLEX, 125 VOLT, ABOVE FURNITURE
 DOUBLE DUPLEX, 125 VOLT, ABOVE FURNITURE
 DOUBLE DUPLEX, 125 VOLT
 SINGLE CONVENIENCE, 125 VOLT FOR ELECTRIC WATER COOLER
 EXPLOSION-PROOF, ABOVE FURNITURE
 EXPLOSION-PROOF
 FIXED EQUIPMENT CONNECTION
 POWER OUTLET, VOLTAGE & AMPERAGE AS INDICATED
 AUTOMATIC TRANSFER SWITCH (ONE-LINE DIAGRAM)
 CIRCUIT BREAKER (ONE-LINE DIAGRAM)
 METER (ONE-LINE DIAGRAM)
 PANELBOARD

FIRE ALARM AND DETECTION SYMBOLS

FIRE ALARM CONTROL PANEL
 FIRE ANNUNCIATOR CONTROL PANEL
 STROBE; WALL MOUNT - ADA RATED STROBE CANDELA RATING 80" AFF
 HORN STROBE; WALL MOUNT - ADA RATED STROBE CANDELA RATING 80" AFF
 SPEAKER STROBE; WALL MOUNT - ADA RATED STROBE CANDELA RATING 80" AFF
 HORN; WALL MOUNT - ADA RATED
 SPEAKER; WALL MOUNT - ADA RATED
 STROBE; CEILING MOUNT - ADA RATED STROBE CANDELA RATING
 HORN STROBE; CEILING MOUNT - ADA RATED STROBE CANDELA RATING
 SPEAKER STROBE; CEILING MOUNT - ADA RATED STROBE CANDELA RATING
 AREA OF RESCUE ASSISTANCE
 EMERGENCY TELEPHONE SYSTEM
 HEAT DETECTOR; CEILING MOUNT
 SMOKE DETECTOR; CEILING MOUNT
 ELEVATOR RECALL SMOKE DETECTOR
 NITROUS OXIDE SENSOR
 CARBON MONOXIDE SENSOR
 SWITCH INDICATION
 DUCT SMOKE DETECTOR
 DUCT SIZE
 REMOTE TEST SWITCH
 SWITCH INDICATION
 FIRE ALARM PULL STATION
 SPRINKLER FLOW SWITCH
 SPRINKLER VALVE TAMPER SWITCH
 FIRE ALARM BELL

INSTRUMENTATION EQUIPMENT

ANALYSIS ELEMENT
 ANALYSIS INDICATING TRANSMITTER, * DO=DISSOLVED OXYGEN, PH=PH, TRB=TURBIDITY, TSS=TOTAL SUSPENDED SOLIDS, GD=GAS DETECTOR, CA=CHLORINE ANALYZER, OP=OXYGEN PURITY, LEL=LOWER EXPLOSIVE LIMIT, PR=PROXIMITY, MST=MOISTURE
 CONTROL SWITCH DEVICE TYPE (SEE MCC SCHEDULE)
 DENSITY ELEMENT
 DENSITY INDICATING TRANSMITTER
 FLOW ELEMENT
 FLOW INDICATING TRANSMITTER, * M=MAGNETIC, TM=THERMAL MASS, DP=DIFFERENTIAL PRESSURE, U=ULTRASONIC
 FLOW SWITCH * P=PADDLE, T=THERMAL, C=CAPACITANCE, A=AIR FLOW
 HAND SWITCH * SS=SAFETY SWITCH
 POWER ELEMENT (CURRENT XFMR, POTENTIAL XFMR)
 CURRENT SWITCH
 POWER INDICATING TRANSMITTER
 TIME SWITCH
 LEVEL ELEMENT
 LEVEL INDICATING TRANSMITTER, * S=SUBMERSIBLE, U=ULTRASONIC, R=RING TYPE
 LEVEL SWITCH, * C=CONDUCTANCE, F=BALL FLOAT, V=VIBRATING FORK, B=BUILDING FLOODING
 DIFFERENTIAL PRESSURE INDICATING TRANSMITTER
 PRESSURE ELEMENT
 PRESSURE INDICATING TRANSMITTER
 PRESSURE SWITCH
 SPEED SWITCH
 TEMPERATURE CONTROLLER
 TEMPERATURE ELEMENT, * R=RTD, T=THERMOCOUPLE
 TEMPERATURE INDICATING TRANSMITTER
 TEMPERATURE CONTROL STATION
 TEMPERATURE SWITCH
 TEMPERATURE TRANSMITTER
 VIBRATION ELEMENT
 VIBRATION INDICATING TRANSMITTER
 WEIGHT ELEMENT
 TORQUE SWITCH
 WEIGHT TRANSMITTER (SCALE)
 PRESENCE/ABSENCE DETECTOR
 POSITION SWITCH, * D=DOOR, L=LIMIT, P=PROXIMITY
 SOLENOID VALVE
 FIXED SECURITY CAMERA
 FAN, TILT, ZOOM SECURITY CAMERA

TECHNOLOGY SYMBOLS

DATA JACK
 PHONE JACK
 VOICE AND DATA JACKS
 WALL MOUNT VOIP PHONE JACK 54" AFF
 SCADA NETWORK JACK
 DATA RACK
 COAX CABLE
 POWER POLE
 PA SYSTEM HORN SPEAKER; 10'-0" AFF
 PA SYSTEM SPEAKER
 SPEAKER; CEILING MOUNT A=SPEAKER TYPE
 KEY PAD
 GLASS BREAK DETECTOR
 MOTION SENSOR
 PUSH BUTTON
 ELECTRIC STRIKE
 MAGNETIC LOCK
 INTERCOM STATION
 OCCUPANCY SENSOR
 SEE SPECIFICATION FOR SENSOR TYPE
 CARD READER
 REMOTE VOLUME CONTROL

DUCTWORK SYMBOLS

SUPPLY DUCT (UP OR SECTION)
 SUPPLY OR OUTSIDE AIR DUCT (DOWN/OR AWAY)
 EXHAUST DUCT (UP OR SECTION)
 EXHAUST OR RETURN DUCT (DOWN/OR AWAY)
 ROUND DUCTWORK UP
 ROUND DUCTWORK DOWN
 FLEXIBLE CANVAS CONNECTION
 TURNING VANES

DAMPER SYMBOLS

AUTOMATIC DAMPER
 BACKDRAFT DAMPER
 MANUAL VOLUME DAMPER
 1-1/2 HR. FIRE DAMPER

FIELD MOUNTED CONTROLS

THERMOSTAT
 ROOM HUMIDISTAT
 PRESSURE SENSOR
 ROOM SENSOR
 DUCT SMOKE DETECTOR
 PRESSURE GAUGE

ACTUATORS

MOTOR (ELECTRIC)
 PNEUMATIC
 SOLENOID

EQUIPMENT SYMBOLS

ACCUMULATOR
 AIR FLOW DIRECTION
 BASE MOUNTED PUMP
 BLOWER
 CEILING DIFFUSER WITH FLEXIBLE DUCT
 CENTRIFUGAL PUMP
 CONNECT TO EXISTING
 DRIP TRAP
 DUCT BOOST COIL
 EQUIPMENT TAG
 FLAME ARRESTER
 FLAME CELL
 FLAME TRAP ASSEMBLY
 GRINDER
 INLINE PUMP
 POSITIVE DISPLACEMENT PUMP
 ROOF EXHAUST FAN
 UNIT HEATER
 VARIABLE AIR VOLUME (VAV) BOX WITH ELECTRIC REHEAT COIL
 VARIABLE AIR VOLUME (VAV) BOX WITH HEATING HOT WATER REHEAT COIL
 FLOATING MIXER
 SCREW CONVEYOR

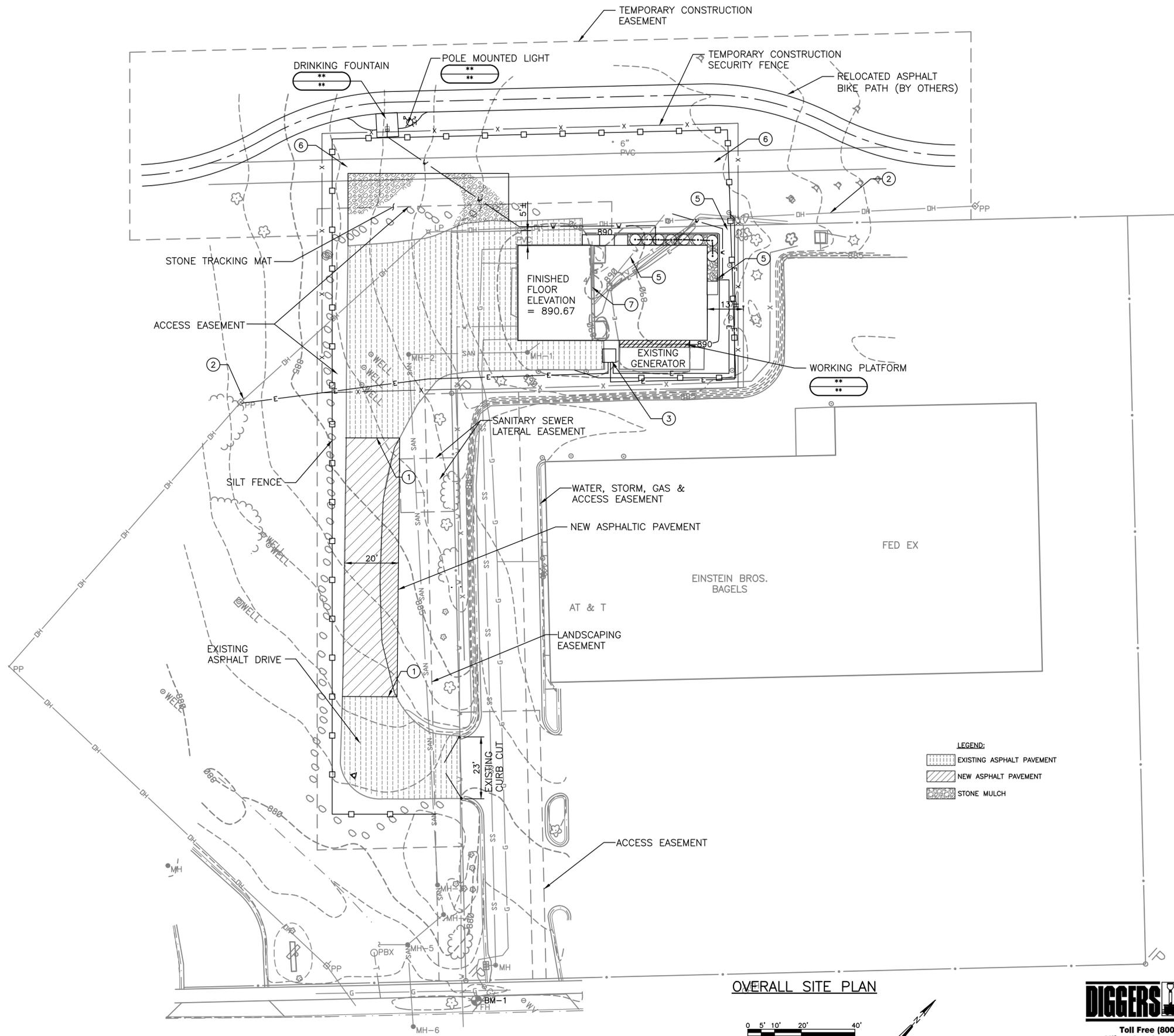
DATE:									
REVISIONS									
NO.									

STANDARD SYMBOLS - 2
 MADISON WELL NO. 15 VOC REMOVAL
 3900 E. WASHINGTON AVENUE
 MADISON WATER UTILITY
 DANE COUNTY, WISCONSIN

JOB NO.
 1020.066
PROJECT MGR.
 ANDY MULLENDORE



SHEET
 G0.5



OVERALL SITE PLAN

0 5' 10' 20' 40'

LEGEND:
 [Hatched Box] EXISTING ASPHALT PAVEMENT
 [Diagonal Lines Box] NEW ASPHALT PAVEMENT
 [Stippled Box] STONE MULCH

GENERAL NOTES:

1. BM-1 TOP NUT OF HYDRANT ELEVATION 880.10.
2. SEE SHEET C1.3 FOR EASEMENT PLANS..

KEY NOTES:

- ① SAWCUT EXISTING PAVEMENT AND REMOVE BETWEEN LIMITS SHOWN. NEW 20 FT. WIDE ASPHALT PAVEMENT. SEE [Symbol] FOR PAVEMENT AND SUBGRADE SECTION.
- ② OVERHEAD UTILITIES TO BE RELOCATED BY OTHER.
- ③ UTILITY TRANSFORMER.
- ④ PROPOSED RELOCATED UNDERGROUND ELECTRIC BY OTHERS. LOCATION SHOWN APPROXIMATE.
- ⑤ REMOVE METER STAND, GALVANIZED PIPE AND DI POLYETHYLENE PIPE. REINSTALL METER STAND AND PIPE AND RECONNECT POLYETHYLENE TUBING AT LIMITS OF EXCAVATION.
- ⑥ REMOVE EXISTING BIKE PATH WITHIN SITE LIMITS.
- ⑦ MAINTAIN EXISTING ROOF DRAIN DOWNSPOUT UNTIL DOWNSPOUT IS RELOCATED.

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.

NO.	REVISIONS	DATE:

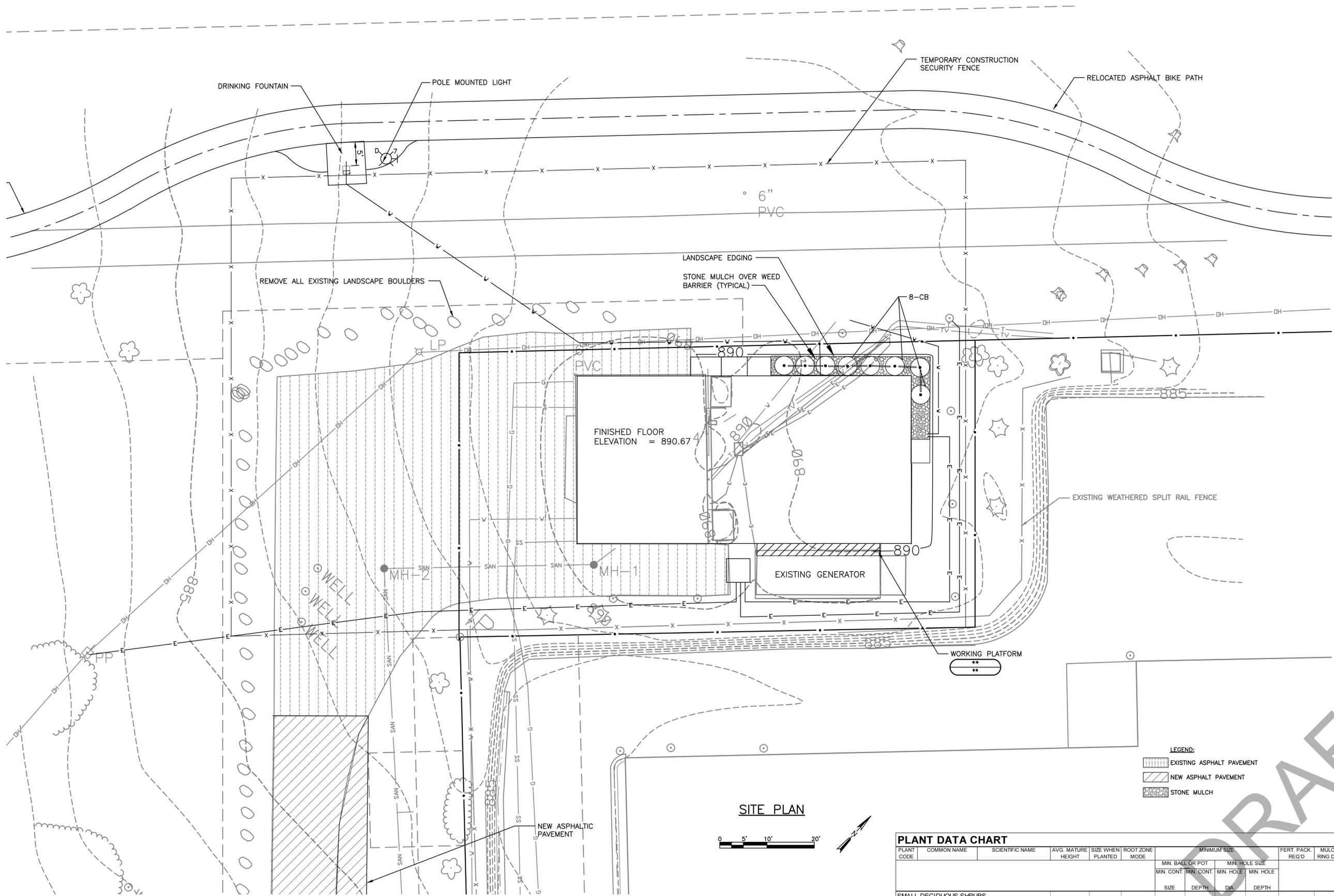
OVERALL SITE PLAN
 MADISON WELL NO. 15 VOC REMOVAL
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 MADISON WATER UTILITY
 DANE COUNTY, WISCONSIN

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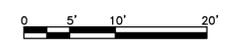


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C1.1

DIGGERS HOTLINE
 Toll Free (800) 242-8511
 Milwaukee Area (414) 259-1181
 Hearing Impaired TDD (800) 542-2289
 www.DiggersHotline.com



SITE PLAN



LEGEND:

	EXISTING ASPHALT PAVEMENT
	NEW ASPHALT PAVEMENT
	STONE MULCH

PLANT DATA CHART

PLANT CODE	COMMON NAME	SCIENTIFIC NAME	AVG. MATURE HEIGHT	SIZE WHEN PLANTED	ROOT ZONE MODE	MINIMUM SIZE				FERT. PACK. REQ'D	MULCH RING DIA.
						MIN. BALL OR POT	MIN. CONT.	MIN. CONT.	MIN. HOLE		
						SIZE	DEPTH	DIA.	DEPTH		
SMALL DECIDUOUS SHRUBS											
CB	Dwarf European Cranberrybush Viburnum	Viburnum opulus 'Nanum'	24"	20" HT	POT	12"	9"	28"	9"	1	Bed

DATE:	
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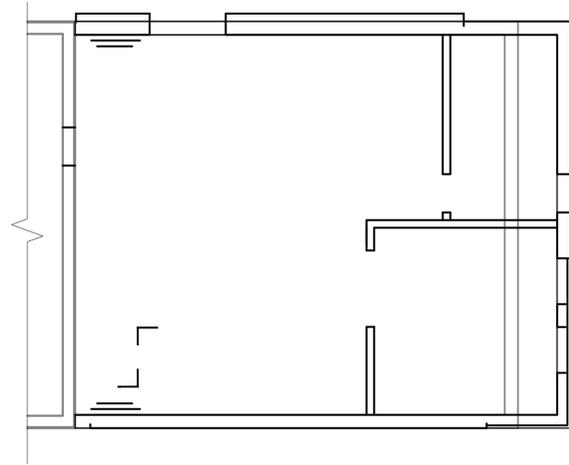
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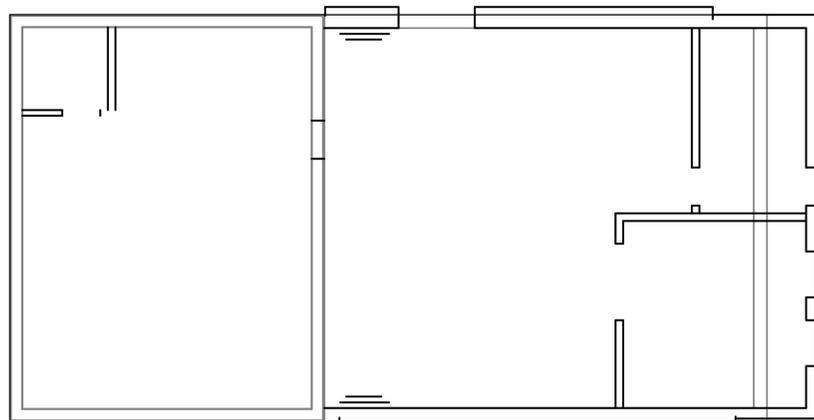
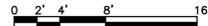


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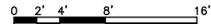
C1.2



FOUNDATION PLAN



ROOF PLAN



DATE:

REVISIONS

NO.

**FOUNDATION PLAN, ROOF PLAN
AND STRUCTURAL DESIGN CRITERIA**

MADISON WELL NO. 15 VOC REMOVAL
3900 E. WASHINGTON AVENUE
MADISON WATER UTILITY
DANE COUNTY, WISCONSIN

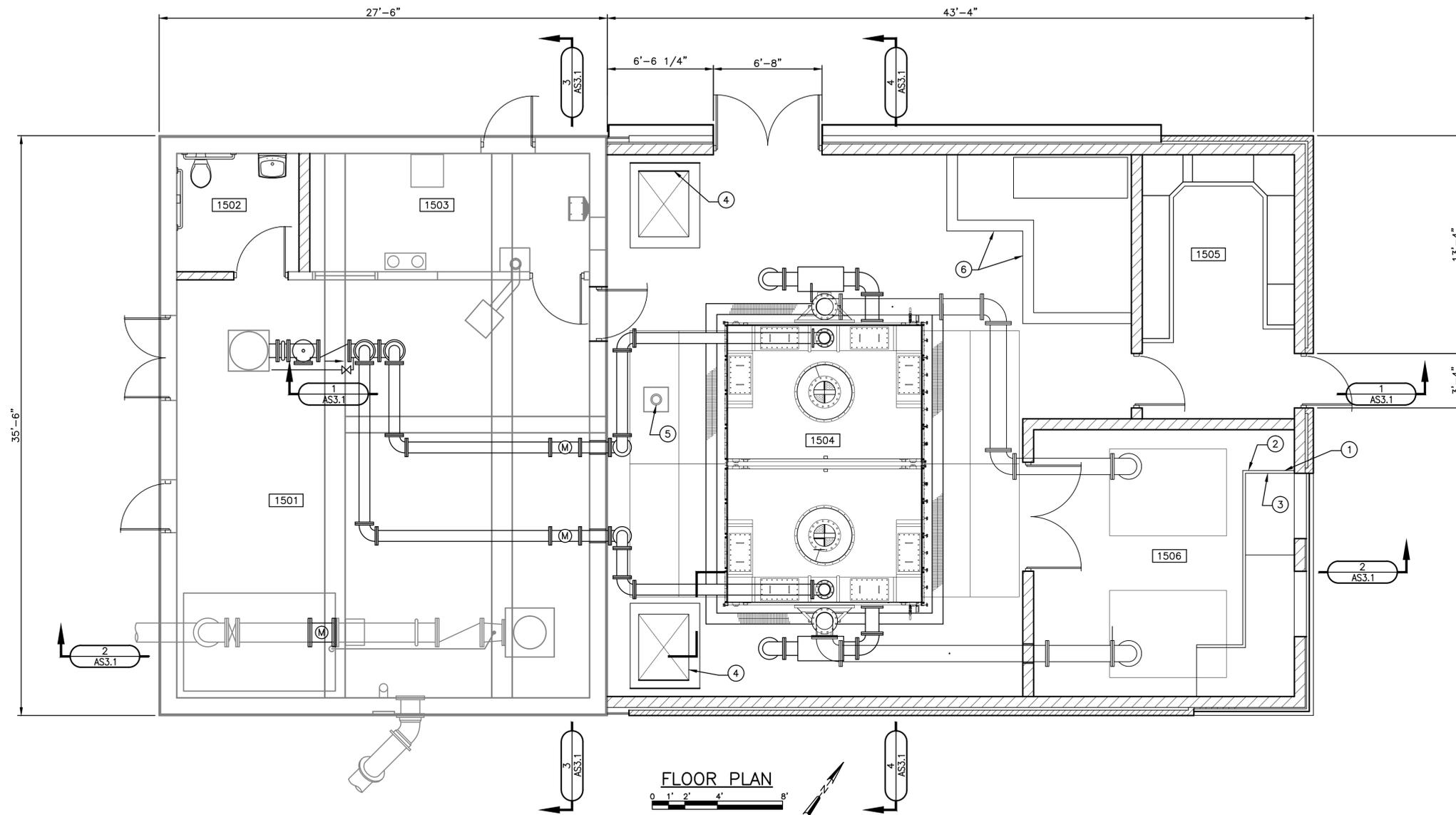
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ANDY MULLENDORE



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AS1.1

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KEY NOTES:

- ① 2x2 OR 2x4 FRAMING TO SUPPORT DUCTWORK AND SOFFIT. ANCHOR TO PRECAST AND BLOCK.
- ② 1/2 INCH GYPSUM BOARD SOFFIT.
- ③ 2 INCH DUCT BOARD LINER.
- ④ MODIFY EXISTING HATCH. SEE DETAIL .
- ⑤ EXTEND VALVE ACTUATOR .
- ⑥ 8" HIGH CONCRETE CONTAINMENT CURB.

NO.	REVISIONS	DATE:

OVERALL FLOOR PLAN
 MADISON WELL NO. 15 VOC REMOVAL
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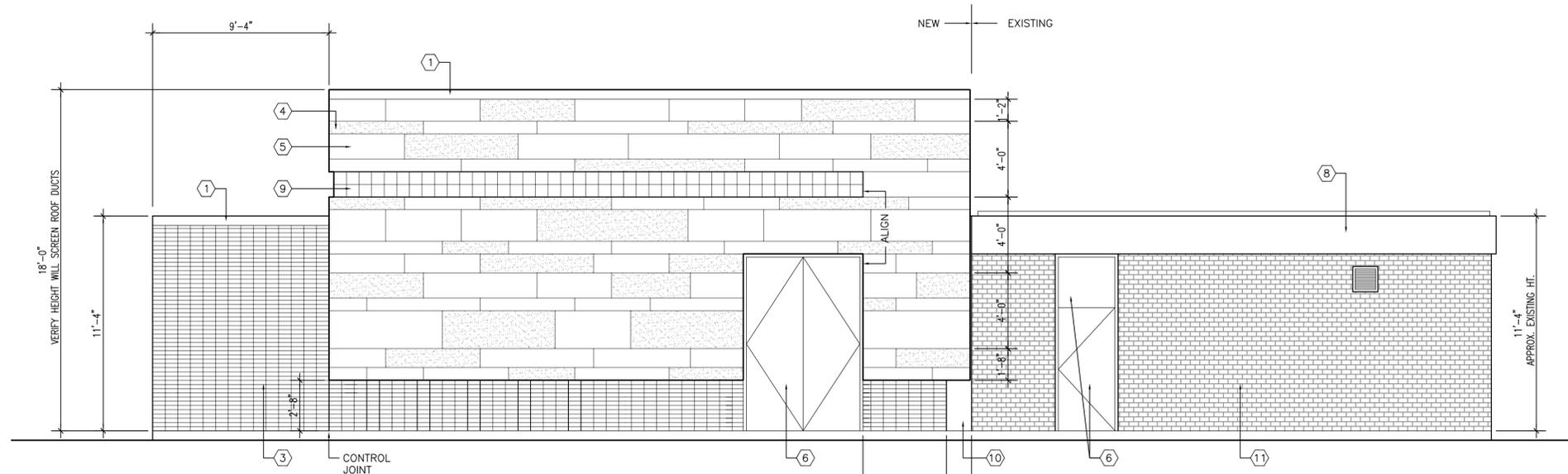
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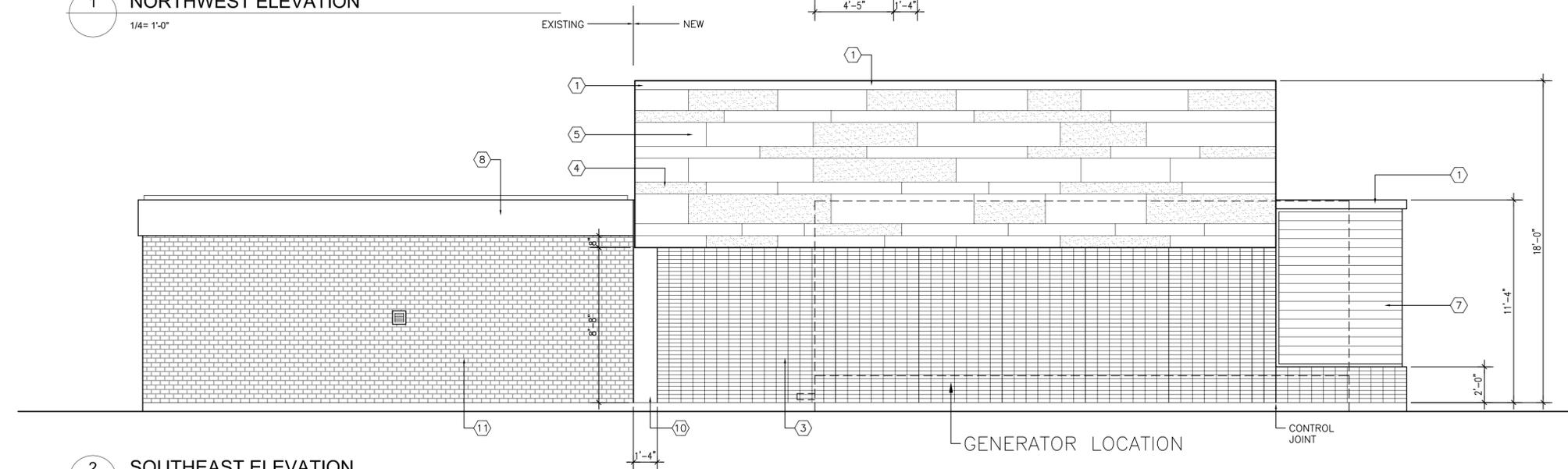
ELEVATION KEYNOTES

NOTES:
1. PAINT ALL EXISTING GRILLES TO MATCH:
MFR: BENJAMIN MOORE
COLOR: IRON MOUNTAIN
NUMBER: 2134-30

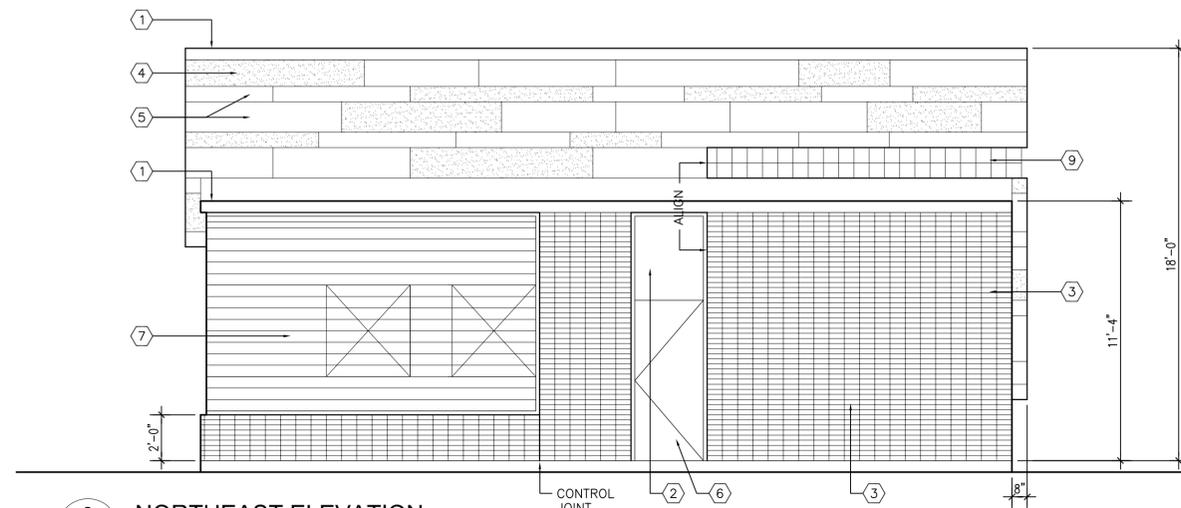
- ① METAL FASCIA:
FINISH: KYNAR 500
COLOR: MUSKET GRAY
- ② HM INFILL PANEL PAINTED TO MATCH:
MFR: BENJAMIN MOORE
COLOR: IRON MOUNTAIN
NUMBER: 2134-30
- ③ STACKED BOND BRICK:
MFR: ACME
COLOR: AMARETTO
FINISH: VELOUR
- ④ GLASS FIBER REINFORCED CONC. PANELS:
MFR: FIBER C
COLOR: ANTHRACITE
FINISH: FERRO LIGHT
- ⑤ GLASS FIBER REINFORCED CONC. PANELS:
MFR: FIBER C
COLOR: ANTHRACITE
FINISH: MATT
- ⑥ HM DOOR PAINTED TO MATCH:
MFR: BENJAMIN MOORE
COLOR: IRON MOUNTAIN
NUMBER: 2134-30
- ⑦ METAL LOUVER:
- CONCEALED MULLIONS
- MITERED CORNER
- SET 3" BACK FROM FACE OF BRICK
FACTORY FINISH COLOR TO MATCH:
MFR: BENJAMIN MOORE
COLOR: IRON MOUNTAIN
NUMBER: 2134-30
- ⑧ PAINTED CAST IN PLACE CONCRETE:
MFR: BENJAMIN MOORE
COLOR: KENDALL CHARCOAL HC-166
- ⑨ 8" X 8" X 4" GLASS BLOCK:
- SET 3" BACK FROM FACE OF CONC. PANEL
- 90 DEG. CORNER TO BE CONT. GLASS, NO
BUILDING STRUCTURE TO BE VISIBLE AT CORNER
MFR: PITTSBURGH CORNING
TYPE: VUE
- ⑩ COMPOSITE METAL PANEL:
- SET 1" BACK FROM FACE OF BRICK
MFR: REYNOLDBOND ACM
FINISH: CW 500
COLOR: DEEP BLACK
- ⑪ EXISTING BRICK TO REMAIN



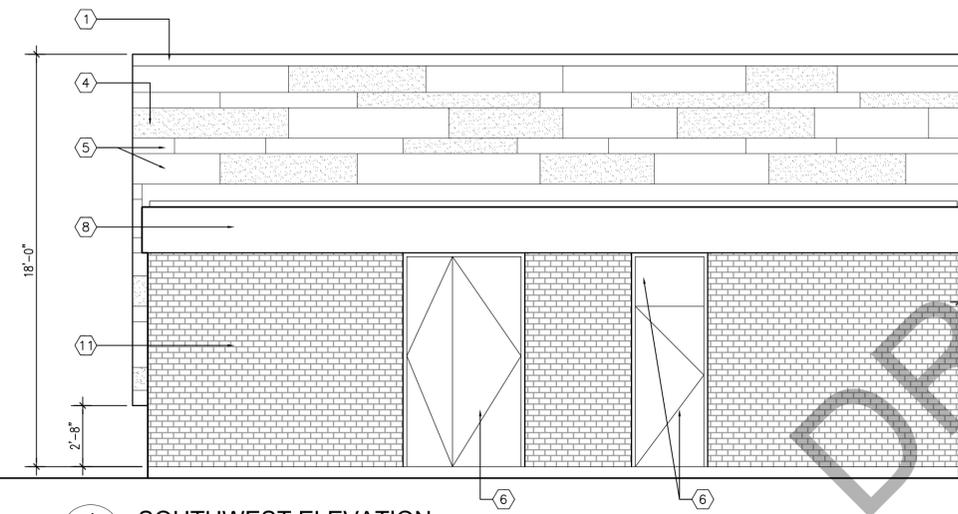
1 NORTHWEST ELEVATION
1/4" = 1'-0"



2 SOUTHEAST ELEVATION
1/4" = 1'-0"



3 NORTHEAST ELEVATION
1/4" = 1'-0"



4 SOUTHWEST ELEVATION
1/4" = 1'-0"

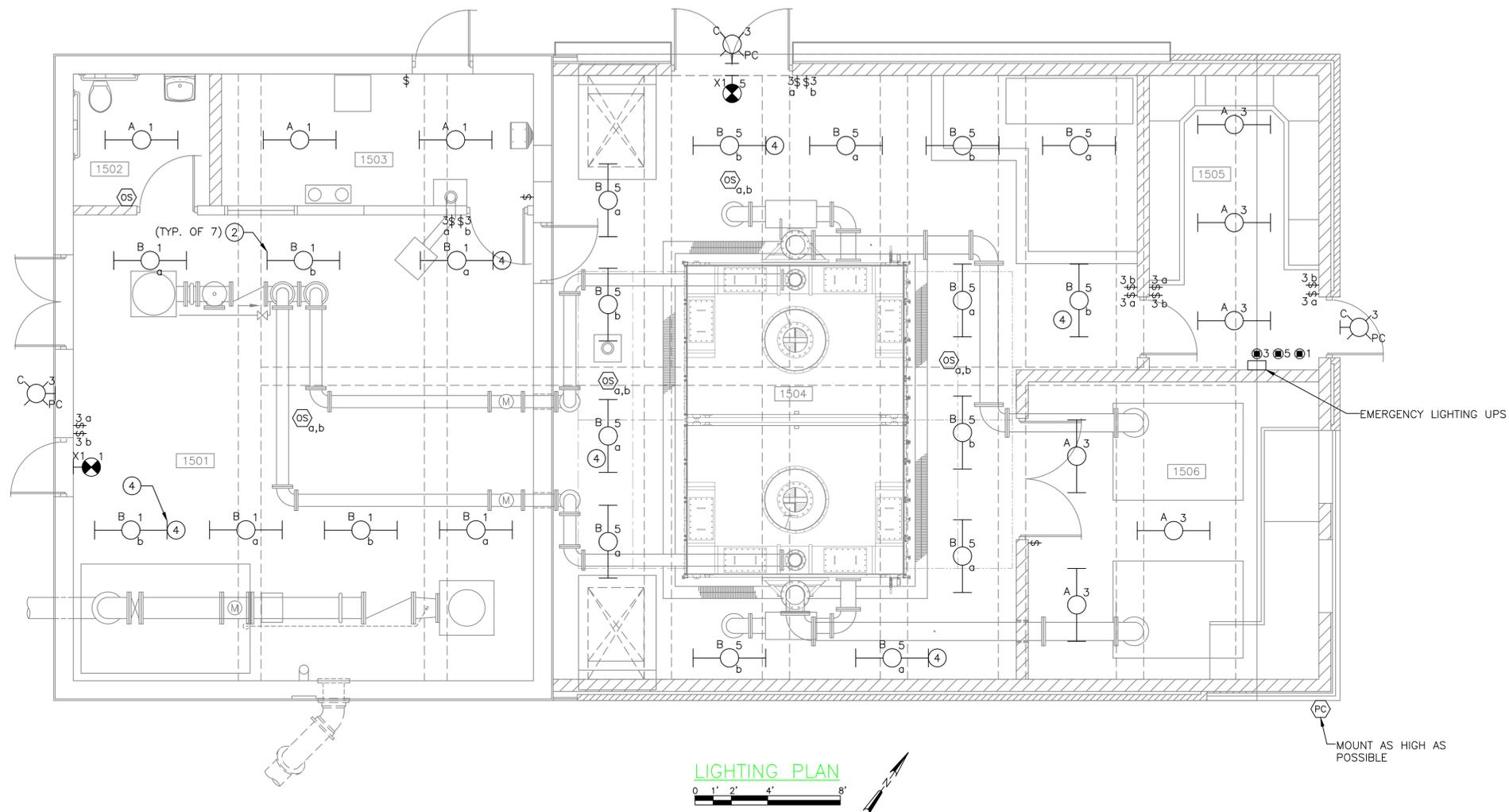
NO.	REVISIONS	DATE:

MADISON WELL NO. 15
VOC REMOVAL
MADISON WATER UTILITY
DANE COUNTY, WISCONSIN

JOB NO.
1020.066
PROJECT MGR.
ANDY MULLENDORE



SHEET



KEY NOTES:

- ① EMERGENCY LIGHTING UPS'S SHALL BE SURFACE MOUNTED ON THE WALL STACKED ABOVE EACH OTHER. ASSOCIATED FIXTURES SHALL BE WIRED IN SERIES THROUGH THE UPS FROM THE LOAD SIDE OF THE CONTROL DEVICE. PROVIDE SEPARATE REFERENCE VOLTAGE CIRCUIT TO POWER THE UPS FROM THE LINE SIDE OF THE CONTROL DEVICE.
- ② MOUNT LIGHTS IN SAME LOCATION AS EXISTING.
- ③ ALL ELECTRICAL WORK AND EQUIPMENT IN THIS ROOM SHALL BE RATED NEMA 4X.
- ④ 2 LAMPS SHALL POWERED THROUGH THE EMERGENCY LIGHTING UPS IN ELECTRICAL ROOM 1505. THE OTHER LAMPS SHALL BE SWITCHED WITH THE OTHER LAMPS.

NO.	REVISIONS	DATE:

ELECTRICAL LIGHTING PLAN

MADISON WELL NO. 15 VOC REMOVAL
 3900 E. WASHINGTON AVENUE
 MADISON WATER UTILITY
 DANE COUNTY, WISCONSIN

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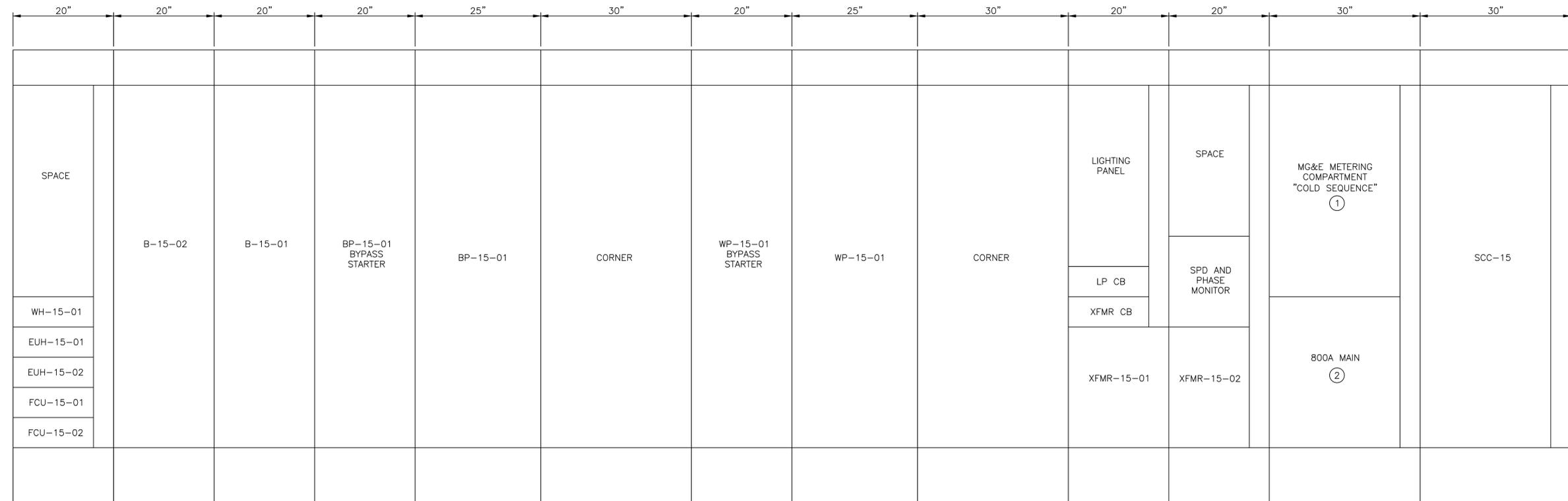
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DRAFT

MOTOR AND MOTOR CONTROL CENTER SCHEDULE MCC-15

EQUIPMENT AND NAMEPLATE TITLES			EQUIPMENT LOCATION	PANEL MCC	MOTOR INFORMATION				MOTOR STARTER INFORMATION				CONTROL & INTERLOCKS			REMARKS***	
EQUIPMENT NUMBER	FIRST LINE SECOND LINE WHEN EQUIPMENT NUMBER IS INDICATED	SECOND LINE THIRD LINE WHEN EQUIPMENT NUMBER IS INDICATED			HP/KW	VOLTS	F.L.I. IN AMPS	RPM	SIZE	TYPE	BREAKER BKR. TYPE	I IN AMPS	CONTROL DEVICE (SEE INFO)	DESCRIPTION	FURN. BY		WIRED BY
WP-15-01	WELL PUMP		1501	MCC-15	150	460	180	-	VFD ND	M	250	VFD-BYPASS H-O-A,R,R,G,ETM,4	SV-15-01, F-15-08, ZS-15-10 MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	8~#14 3~3/0 2"C.	SEE NOTE A R=VFD FAULT, R=MOTOR OVERTEMP
WP-15-01	WELL PUMP	BYPASS STARTER	1501	MCC-15	150	460	180	5	RVSS	M	250	VFD-BYPASS H-O-A,R,R,G,ETM,4	SV-15-01, FS-15-08, ZS-15-10 MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	8~#14 3~3/0 2"C.	SEE NOTE D R=MOTOR OVERTEMP, R=STARTER OVERLOAD
BP-15-01	BOOSTER PUMP		1501	MCC-15	150	460	180	-	VFD ND	M	250	VFD-BYPASS H-O-A,R,R,G,ETM,4	MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	3~3/0 2"C.	SEE NOTE B R=VFD FAULT, R=MOTOR OVERTEMP
BP-15-01	BOOSTER PUMP	BYPASS STARTER	1501	MCC-15	150	460	180	5	RVSS	M	250	VFD-BYPASS H-O-A,R,R,G,ETM,4	ZS-15-11 MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	3~3/0 2"C.	SEE NOTE E R=MOTOR OVERTEMP, R=STARTER OVERLOAD
B-15-01	BLOWER	NO. 1	1506	MCC-15	60	460	77	-	VFD ND	M	125	H-O-A,R,R,G,ETM,4	MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	3~#14 1"C.	SEE NOTE C R=VFD FAULT, R=MOTOR OVERTEMP
B-15-02	BLOWER	NO. 2	1506	MCC-15	60	460	77	-	VFD ND	M	125	H-O-A,R,R,G,ETM,4	MOTOR T-STAT, DISCONNECT	DIV. 11/16	DIV. 16	3~#14 1"C.	SEE NOTE C R=VFD FAULT, R=MOTOR OVERTEMP
EUH-15-01	CHEMICAL ROOM	UNIT HEATER	1503	MCC-15	-	480	6	-	-	A	15			DIV. 15	DIV. 16	3~#12 3/4"C.	
EUH-15-02	ELECTRICAL ROOM	UNIT HEATER	1505	MCC-15	-	480	3.6	-	-	A	15			DIV. 15	DIV. 16	3~#12 3/4"C.	
FCU-15-01	PUMP ROOM	FAN COIL UNIT	1501	MCC-15	-	480	2.5	-	-	A	15			DIV. 15	DIV. 16	3~#12 3/4"C.	
FCU-15-02	ELECTRICAL ROOM	FAN COIL UNIT	1505	MCC-15	-	480	1.1	-	-	A	15			DIV. 15	DIV. 16	3~#12 3/4"C.	
WH-15-01	WATER HEATER		1501	MCC-15	-	480	10.3	-	-	A	15			DIV. 15	DIV. 16	3~#12 3/4"C.	

DATE:																			
REVISIONS																			
NO.																			



MCC-15 ELEVATION
NO SCALE

- KEY NOTES:
- ① INTERNAL MG&E CURRENT TRANSFORMER (CT) COMPARTMENT SHALL MEET ALL UTILITY REQUIREMENTS. CONTRACTOR SHALL SUBMIT CT COMPARTMENT SHOP DRAWINGS TO MG&E FOR REVIEW AND APPROVAL. CONTRACTOR SHALL COORDINATE INSTALLATION OF CT COMPONENTS WITH THE UTILITY COMPANY. PROVIDE PROVISIONS FOR PADLOCKING COMPARTMENT.
 - ② PROVIDE 1" CONDUIT IN MCC FROM 400A MCB TO MG&E METERING COMPARTMENT.

CONTROL DEVICES (OIL TIGHT, HEAVY DUTY)			SELECTOR SWITCHES AND AUXILIARY DEVICES				BREAKER TYPE, CODE	MOTOR STARTER INFORMATION								
PUSHBUTTONS		INDICATING LIGHTS (PUSH TO TEST)	H-O-R	H-L-O-A	H-O-A-L	H-O-A	F-O-R	ETM	FVNR	FVR	TS2WR	TS2W	RVSS	VFD	ND	HD
1 START	7 FAST	R RED (FAIL)	H-O-R	H-L-O-A	H-O-A-L	H-O-A	F-O-R	ETM	FVNR	FVR	TS2WR	TS2W	RVSS	VFD	ND	HD
2 STOP	8 SLOW	G GREEN (RUN)														
3 LOCK OUT STOP	9 JOG FWD.	A AMBER														
4 RESET	0 JOG REV.	B BLUE														
5 FORWARD	Z SPECIAL	W WHITE														
6 REVERSE	C CLEAR	M MAINT. CONT.														

* IF APPLICABLE
 ** PROVIDE GROUND WIRE FOR EACH PIECE OF EQUIPMENT SIZED PER THE NEC
 *** SEE SPECIFICATIONS SECTION 16940-CONTROLS AND INSTRUMENTATION, PART 3 FOR NOTES REFERENCED

ELECTRICAL - MCC ELEVATION, SCHEDULE, ONE-LINE DIAGRAM, AND SCADA RISER
 MADISON WELL NO. 15 VOC REMOVAL
 3900 E. WASHINGTON AVENUE
 MADISON WATER UTILITY
 DANE COUNTY, WISCONSIN

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SHEET
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