

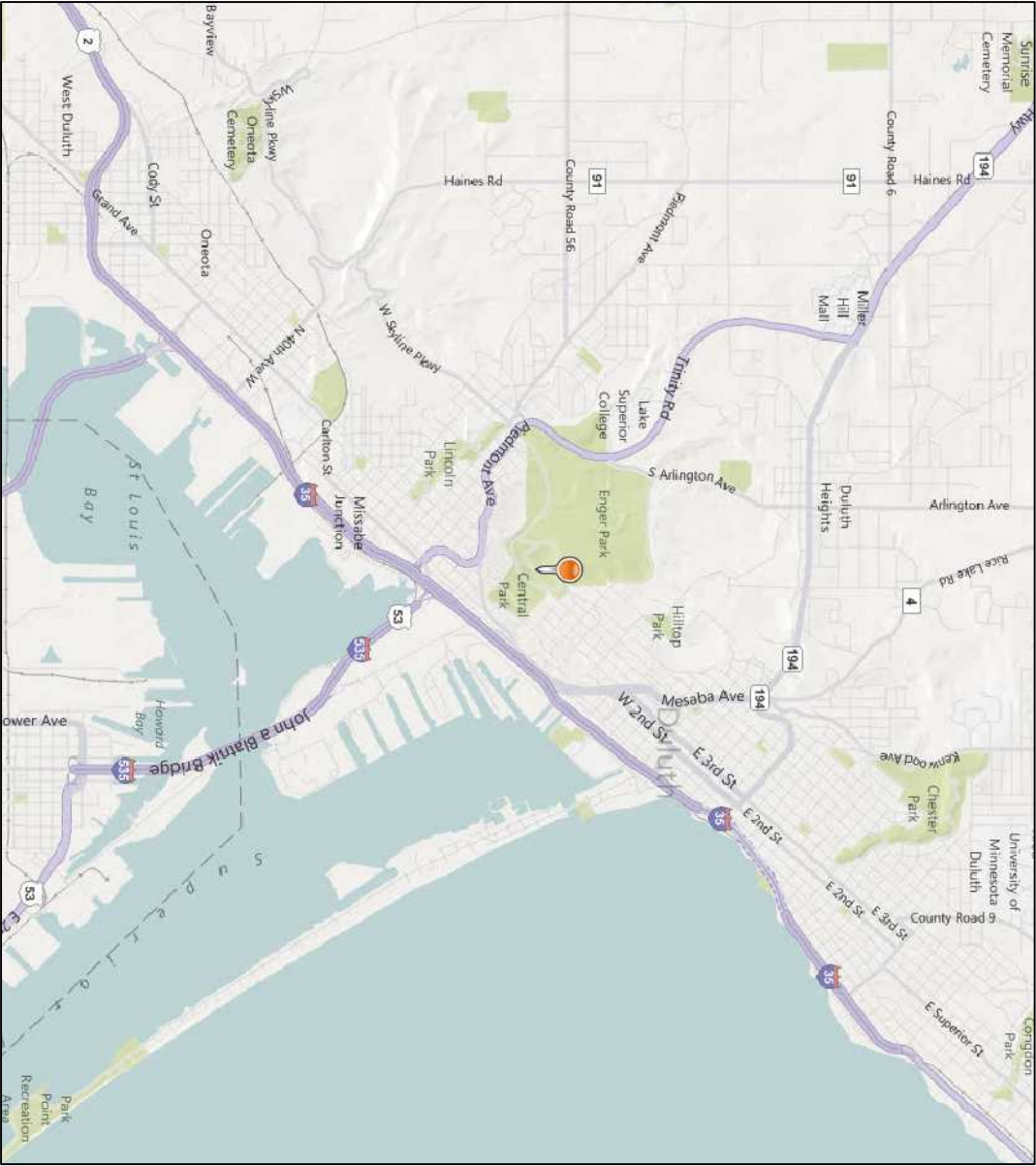
Enger Park Shelter Improvements and Rotary Peace Plaza

Project Number: 13-001
Bid Number: 13-03DS Enger Park Shelter

Project Image



Project Location



Project Team

Owner :
City of Duluth
Utilities Architectural Office
City of Duluth Maintenance Shop
1532 West Michigan Street
Duluth, Minnesota 55806
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Phone - (218) 724-4434
Email - treyale@duluthmn.gov

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Minneapolis, Minnesota 55401
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bhickey@collaborativedesigngroup.com

Structural Engineer :
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Contact - Craig Mihelt
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Mechanical and Electrical Engineer :
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Contact - Scott Handke
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Email - shandke@gausman.com

Civil Engineer :
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Duluth, MN 55811
PH: 218-721-8196
Fax: 218-721-0128
Contact - David Szyzkowski
Phone - (218) 721-8795 x 454
Email - dszyzkowski@saloeng.com

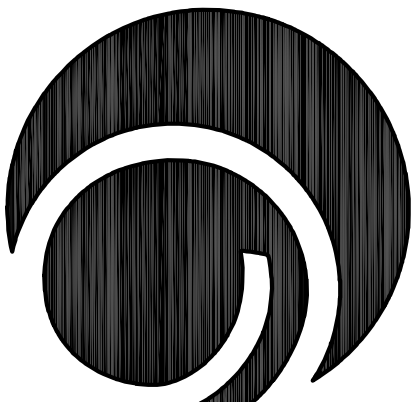
Duluth, Minnesota

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Abbreviations

AB	- Anchor bolt	HC	- Handicapped
ADD	- Addendum	HDR	- Header
ADJ	- Adjustable	HDV	- Hardware
ALT	- Alternate	HM	- Hollow metal
ALUM	- Aluminum	HT	- Height
ARCH	- Architectural	HT	- Height
AVG	- Average	INCL	- Included
BD	- Board	ID	- Inside diameter
BLDG	- Building	INSUL	- Insulation
BLDG	- Blocking	IS	- Is
BO	- Beam	LAM	- Laminated
BOT	- Bottom	LAV	- Lavatory
BTWN	- Between	LES	- Pounds
CG	- Corner guard	LF	- Linear foot
CJ	- Cast in place	LTG	- Light, lighting
CL	- Ceiling	MAX	- Maximum
CLG	- Ceiling	MECH	- Mechanical
CO	- Clean out	MFR	- Manufacturer
COL	- Column	MIN	- Minimum
CONST	- Construction	MISC	- Miscellaneous
CONT	- Continuous	MTD	- Mounted
COUNTR	- Countersunk	NIC	- Not in conflict
CT	- Ceramic tile	NOM	- Nominal
CTR	- Center	OC	- On center
CY	- Cubic yard	OD	- Outside diameter
CU	- Cubic	OP	- Opposite
CU	- Curb	OZ	- Ounce
DA	- Diameter	P.L.VWD	- Plywood
DM	- Dimension	PR	- Pair
DN	- Down	PRERAB	- Prefabricated
DNR	- Drawings	PSF	- Pounds/Square foot
EQ	- Equipment	PSI	- Pounds/Square inch
EXP	- Expansion	PVC	- Poly-vinyl chloride
FD	- Floor drain	R	- Riser
FE	- Fire extinguisher	RAD	- Radius, radiation
FEN	- Cabinet	REF	- Reference
FIN	- Finish	REV	- Reverse
FIXT	- Fixture	RM	- Room
FLR	- Floor	RO	- Rough opening
FLASH	- Flashing	SCHED	- Schedule
FTG	- Footing	SECT	- Section
FTG	- Foot or feet	SECT	- Section
FLR	- Floor	SECT	- Section
FLR	- Floor	SECT	- Section
GA	- Galvanized	SO	- Square
GALV	- Galvanized	SSTL	- Stainless steel
GB	- Grab bar	STD	- Standard
GEN	- General	TFT	- Top of footing
GWB	- Gypsum wall board	UNO	- Unless noted otherwise
WD	- Wood	WD	- Wood



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Gausman & Moore
Mechanical and Electrical Engineers
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Duluth, MN 55802
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Enger Park Shelter Improvements and Rotary Peace Plaza

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Signature _____
Name William D. Hickey, AIA
License # 20111 Date _____
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature _____
Name Craig A. Mihelt
License # 18360 Date _____

REVISION LOG

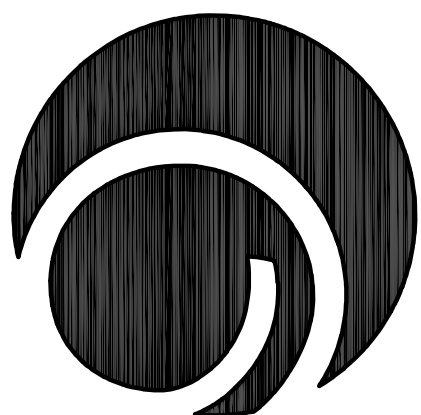
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WDH	CHECKED BY
WDH	DRAWN BY
WDH	PROJECT MGR.

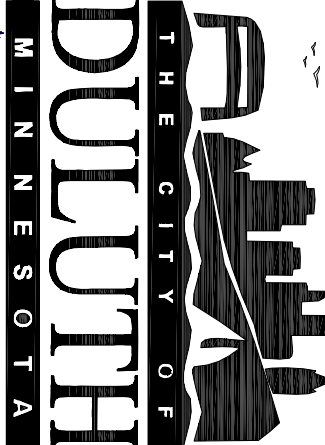
Project Number: 13-001
Bid Number: 13-03DS

TITLE SHEET

A001



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Enger Park Shelter Improvements and Rotary Peace Plaza

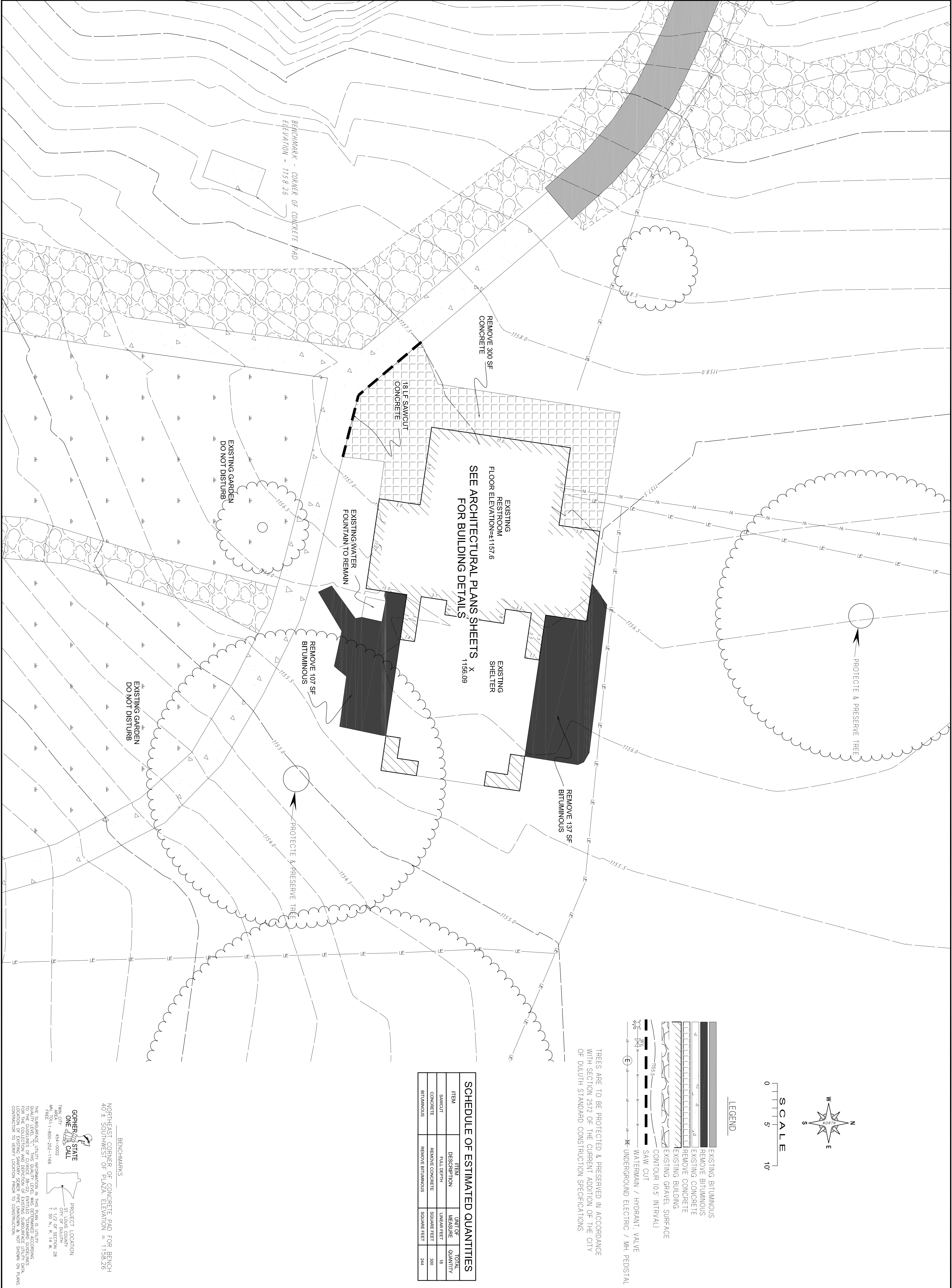
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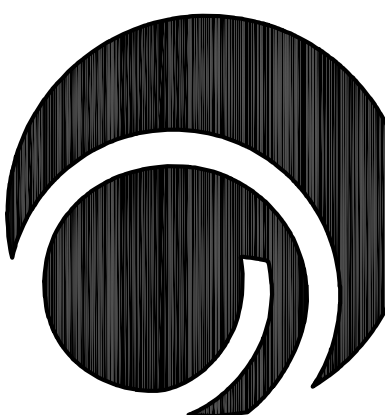
Signature _____
William D. Hickey, M.E.
Name
201111 _____
Date
License # _____
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature _____
DOUGLAS J. MERFELD
Name
49195 _____
Date
License # _____
REVISION LOG
NO. DATE DESCRIPTION

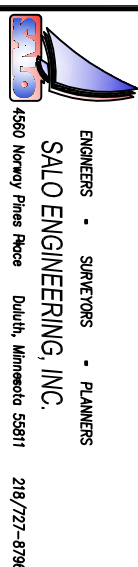
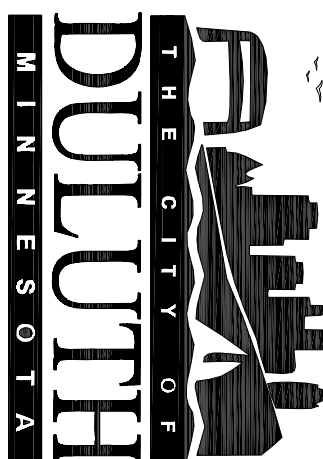
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DLK
DRAWN BY
DLK
CHECKED BY
WDH
PROJECT MGR.
PROJECT ARCH.

Project Number: ## - ##X
Bid Number: ## - ##XX Enger Park Shelter
C-001
EXISTING CONDITIONS
/ REMOVALS





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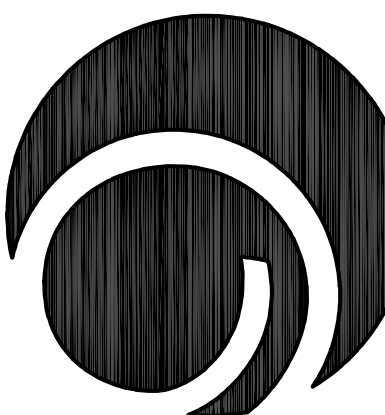
Signature
Craig A. Mihert
Name
13860
License #
Date

REVISION LOG
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B 03-18-13 ISSUED FOR BID

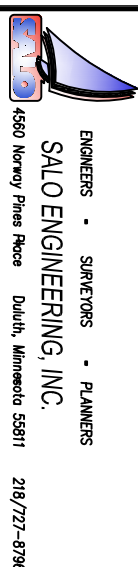
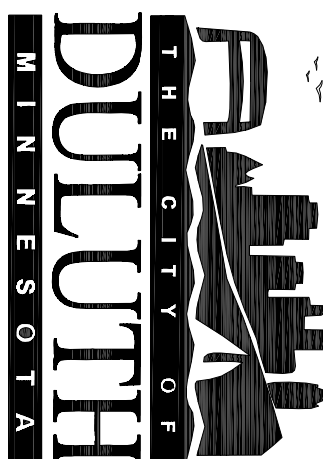
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DRAWN BY WDH
CHECKED BY WDH
PROJECT MGR. PROJECT ARCH.
Project Number: 13-001
Bid Number: 13-0305

SITE PLAN

A100



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Enger Park Shelter Improvements and Rotary Peace Plaza

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Signature
William D. Hickey, AIA
Name
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License #
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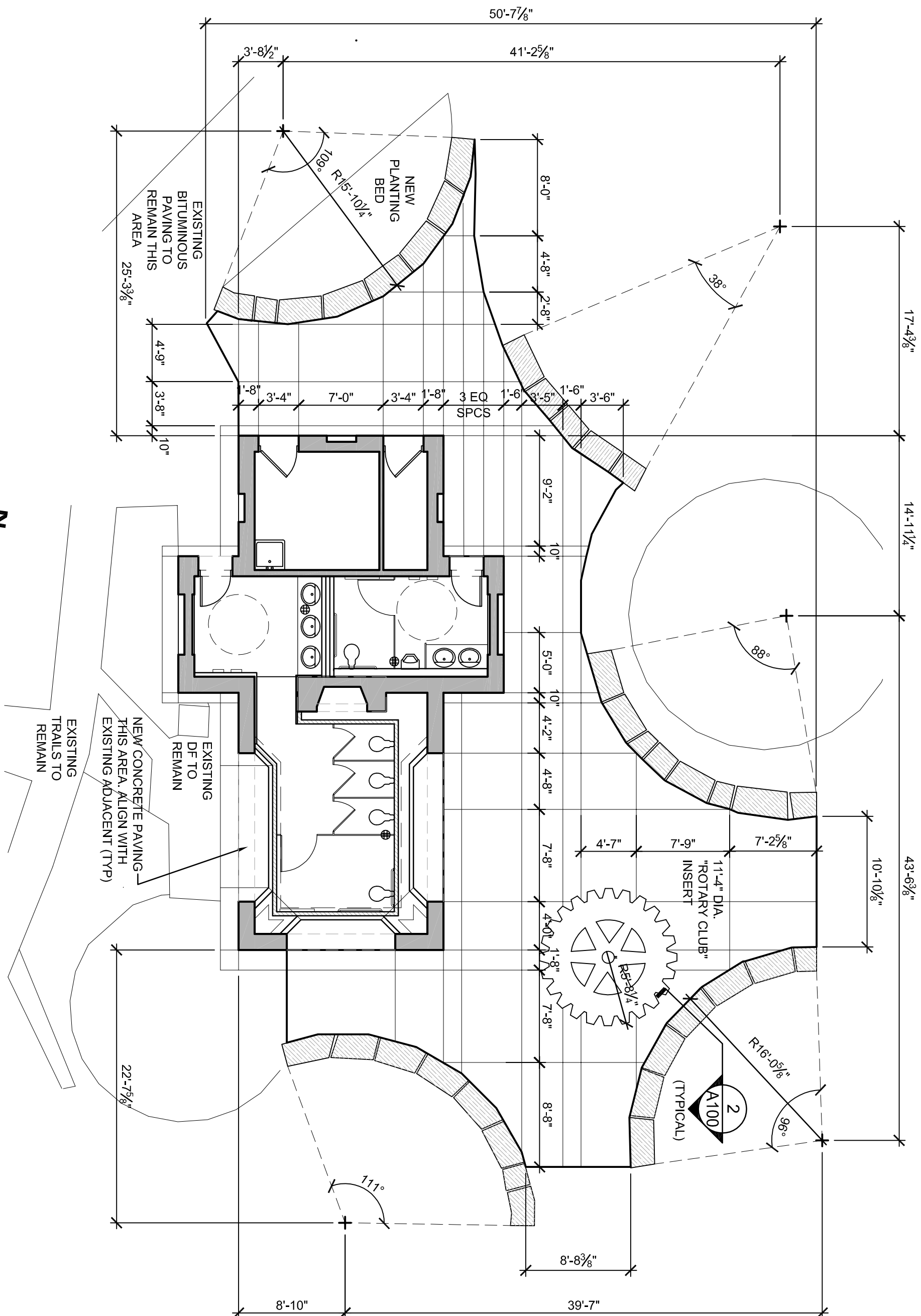
Signature
Craig A. Mihert
Name
13860
License #
Date

REVISION LOG
NO. DATE DESCRIPTION
A 02-22-13 90% OWNER REVIEW ISSUE
B 03-18-13 ISSUED FOR BID

100750.04
PROJECT NUMBER
JFS
DRAWN BY WDH
CHECKED BY WDH
PROJECT MGR. PROJECT ARCH.
Project Number: 13-001
Bid Number: 13-0305

SITE PLAN

A100



1 SITE CONSTRUCTION PLAN
A100 SCALE: 1/8" = 1'-0"



DIVISION 3 - CONCRETE

3.01 CONCRETE MIXES
A. CONCRETE SHALL BE A MIX DESIGNED FOR ULTIMATE STRENGTH CONCRETE IN ACCORDANCE WITH THE FOLLOWING TABLE:
STRENGTHS AND OTHER PROPERTIES ACCORDING TO THE FOLLOWING TABLE:

CONCRETE MIX SCHEDULE						
BUILDING COMPONENT	F _c CONCRETE WEIGHT (psf)	W/C	SLUMP (1")	MAXIMUM AGGREGATE SIZE	AIR ENTRAINMENT	
GRADE BEAMS	3000	NORMAL	0.60	4"	1/2"	2%
SLAB ON GRADE	3000	NORMAL	0.45	4"	3/4"	6% +/- 1.5%

*1. MAXIMUM 8" SLUMP WHEN WATER REDUCER IS USED ACCORDING TO SPECIFICATIONS.

3.02 CONCRETE REINFORCING AND ACCESSORIES

- REINFORCING STEEL SHALL BE DEFORMED BARS, FREE FROM LOOSE RUST AND SCALE, AND CONFORMING TO ASTM A618, GRADE 60.
- FABRICATION ACCESSORIES FOR REINFORCING SHALL BE IN ACCORDANCE WITH ACI CURRENT EDITION.
- LAP REINFORCING TO DEVELOP THE FULL TENSION CAPACITY OF THE (SMALLER) BAR.
- NO BARS SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF STEEPERS, DUCT OPENINGS, OR OTHER REASONS. BARS MAY BE CUT OR OMITTED WITHOUT CHANGE IN HEIGHT WITH THE PRIOR APPROVAL OF THE ARCHITECT.

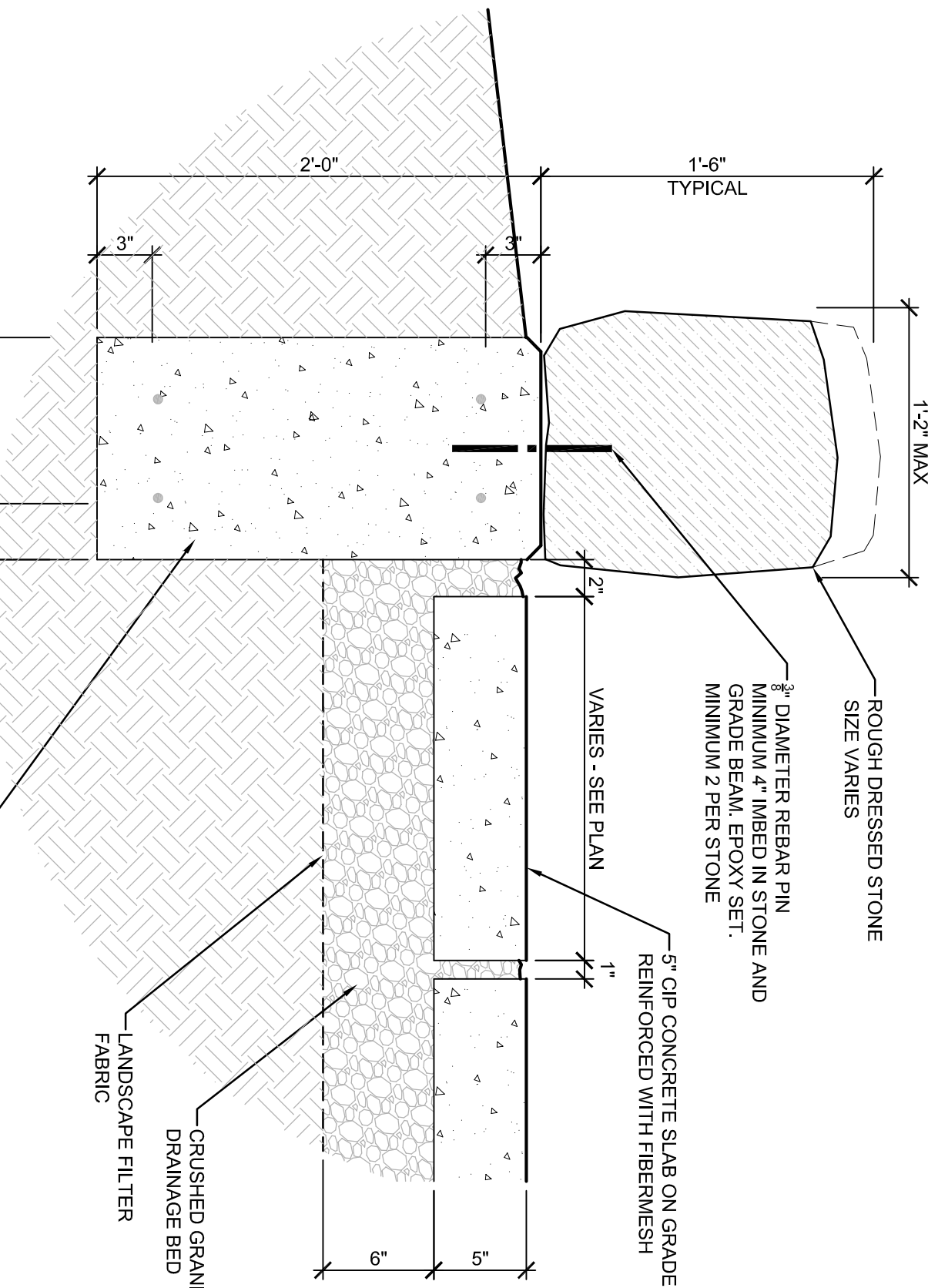
3.03 CONCRETE COVER FOR REINFORCING

- CLEAR CONCRETE COVER OVER BARS SHALL BE AS FOLLOWS (SEE ACI 318 FOR CONDITIONS NOT NOTED):
 - FOOTINGS

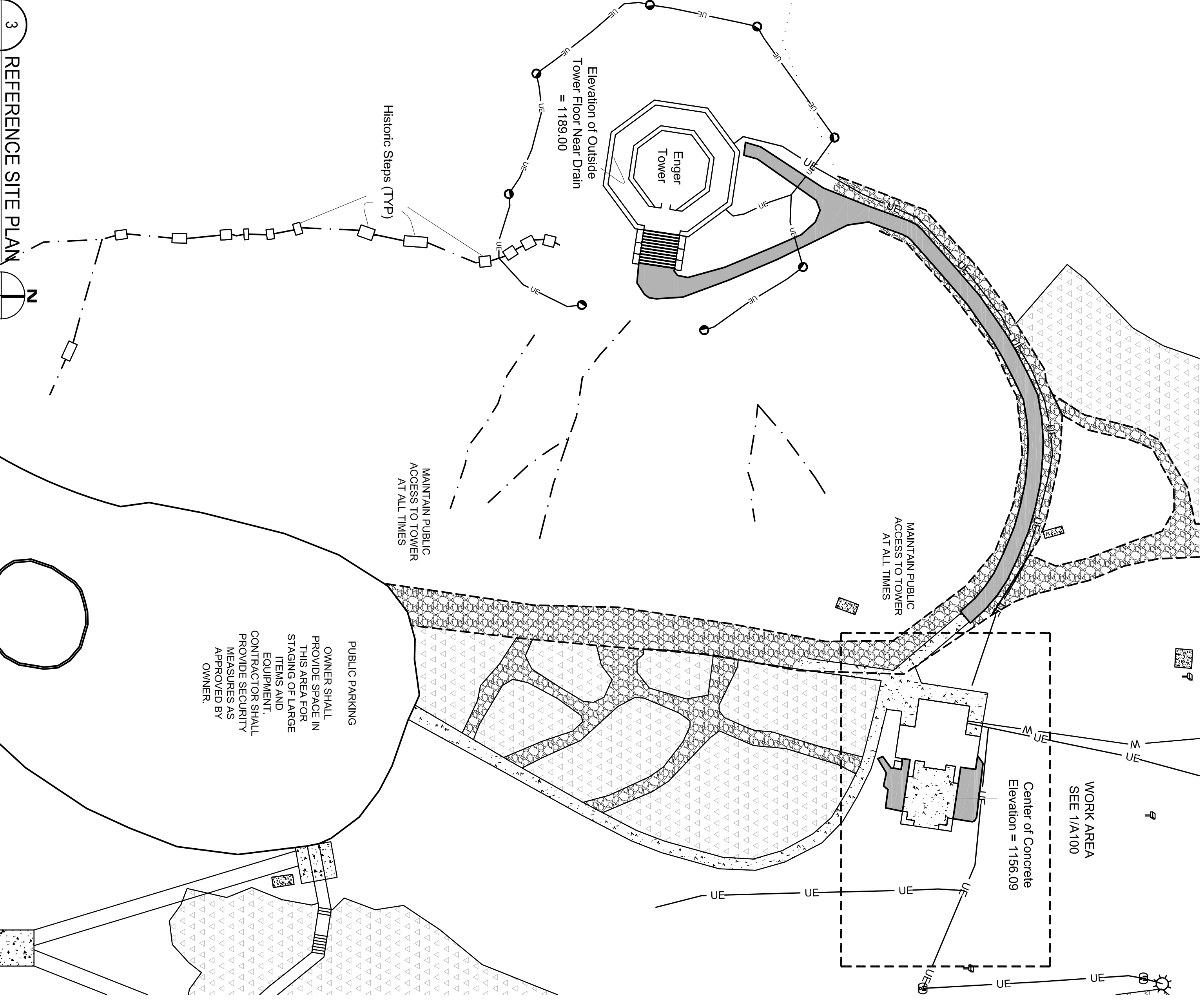
3" BOTT, 2" SIDES AND TOP

3.04 GENERAL CONCRETE CONSTRUCTION

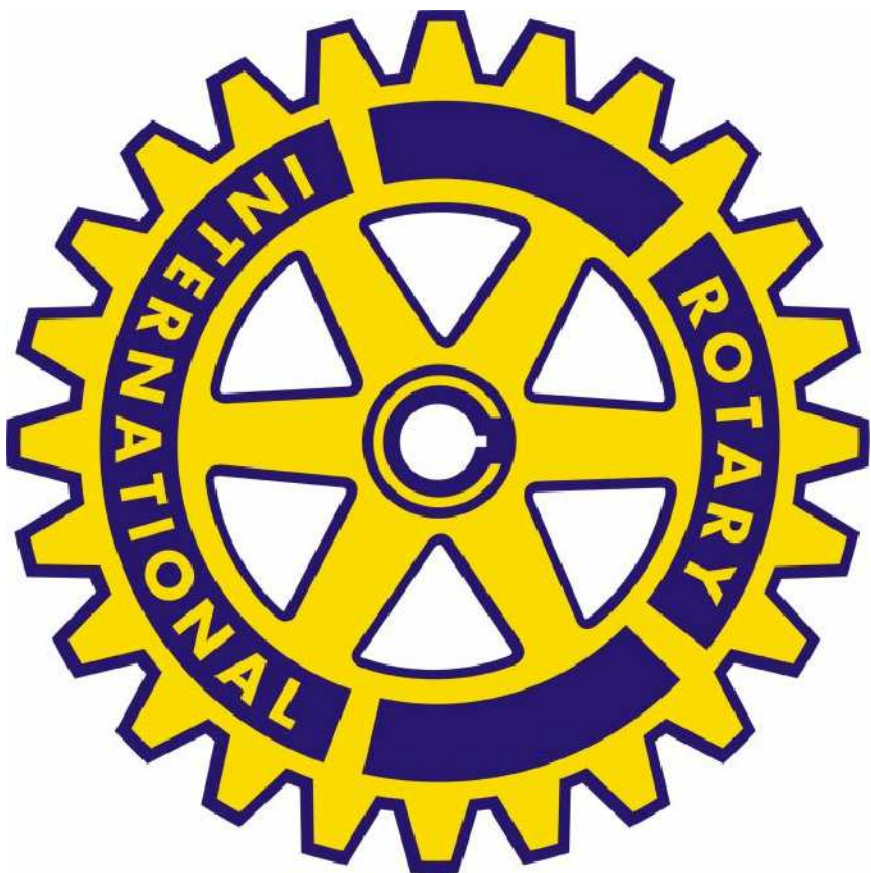
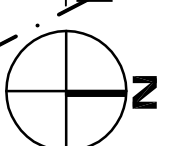
- CONCRETE SHALL NOT BE CAST IN WATER OR ON FROZEN GROUND.
- KEYS SHALL BE 2 INCH X 4 INCH, WITH BEVELED SIDES, UNLESS NOTED OTHERWISE.
- HORIZONTAL CONSTRUCTION JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. REINFORCING SHALL BE LAPPED TO DEVELOP THE FULL TENSION CAPACITY OF THE (SMALLER) BAR.
- PROVIDE FORMWORK FOR ALL FOOTINGS, WALLS AND PIERS. EARTH FORMED FOUNDATIONS ARE NOT ALLOWED.
- PROVIDE 1/2" CHAMFER AT ALL EXPOSED CONCRETE EDGES.



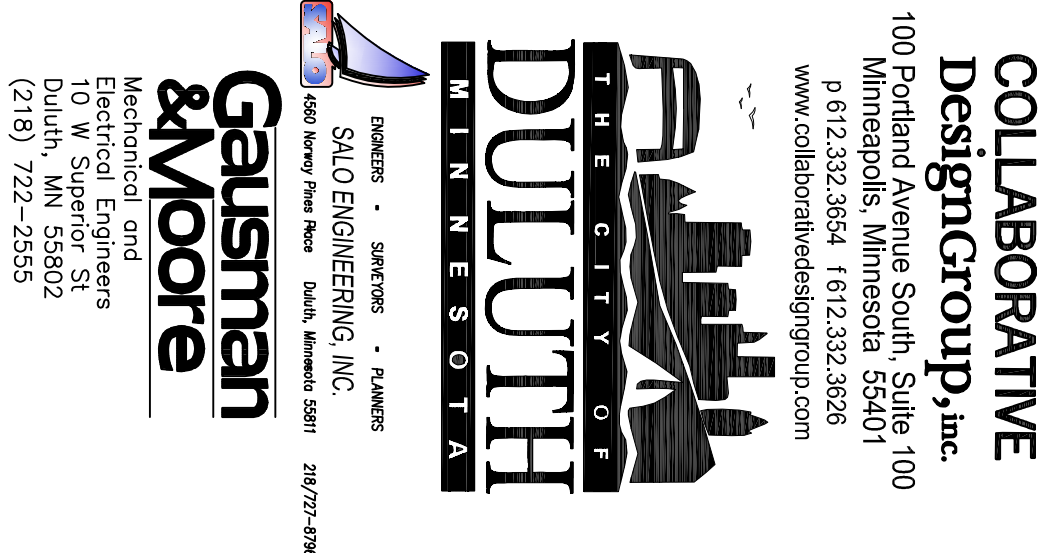
2 SECTION @ LANDSCAPE WALL
A100 SCALE: NOT TO SCALE



3 REFERENCE SITE PLAN
A100 SCALE: 1/320



4 REFERENCE - ROTARY SYMBOL FOR CASTING
A100 SCALE: NO SCALE



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Electrical Engineers
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(218) 722-2555

Project Number: 13 - 001
Bid Number: 13 - 0305
**DEMOLITION AND
CONSTRUCTION
PLANS & NOTES**
A200

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Name	
18360	
License #	
Date	

NO.	DATE	DESCRIPTION
-----	------	-------------

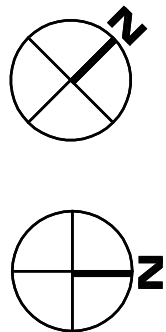
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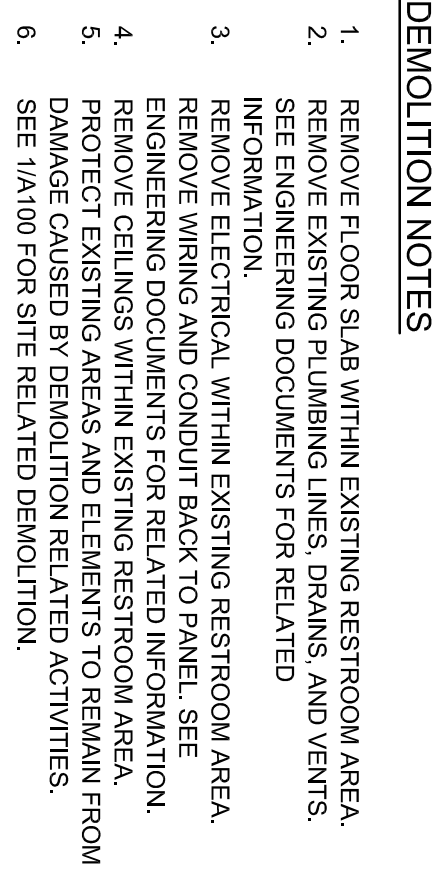
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Bid Number: 13 - 03DS

PLANS & NOIES



A200 SCALE: 1/4" = 1'-0"



A200 SCALE: 1/4" = 1'-0"

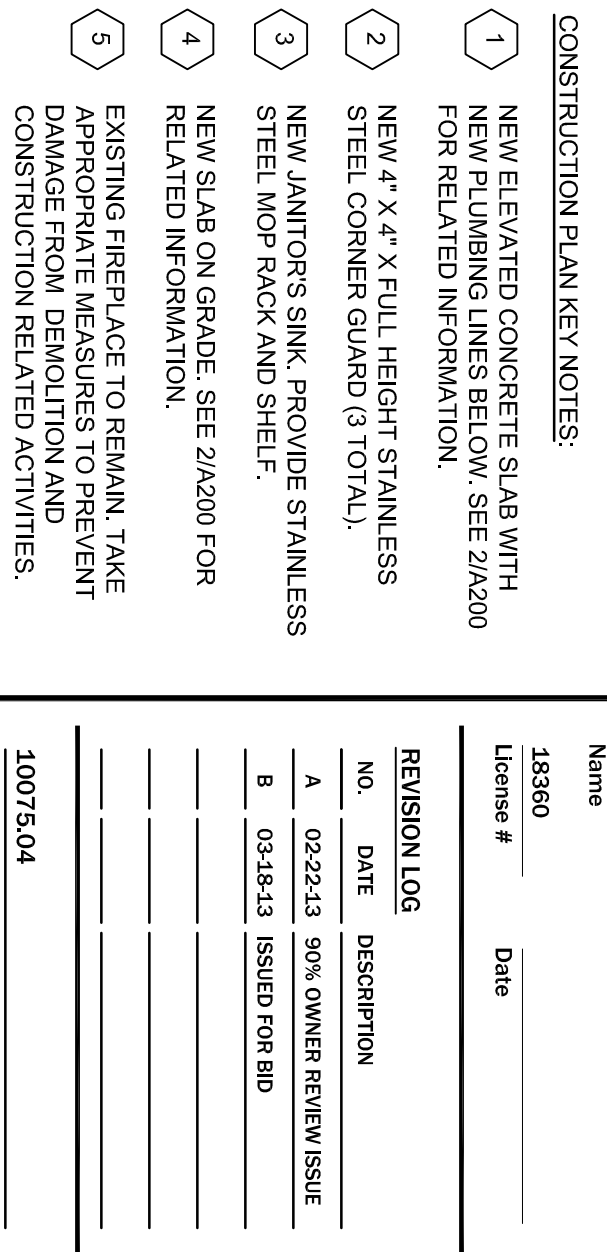
PART 1 - DESIGN DATA

A. CONCRETE SHALL BE A MIX DESIGNED FOR ULTIMATE STRENGTH CONCRETE IN ACCORDANCE WITH ACI 211.1 TO ACHIEVE THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS AND OTHER PROPERTIES ACCORDING TO THE FOLLOWING TABLE:

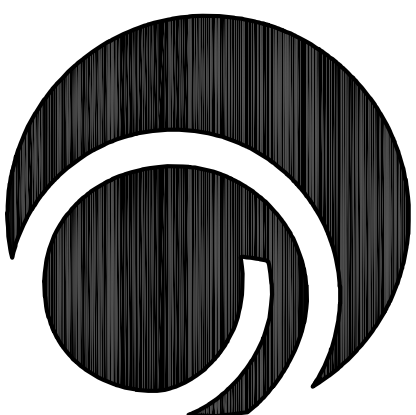
*1 MAXIMUM 8" SLUMP WHEN WATER REDUCER IS USED ACCORDING TO SPECIFICATIONS.

SPECIAL INSPECTION SCHEDULE	
DESCRIPTION	REPORT FREQUENCY
CONCRETE REINFORCING	PERIODIC
CONCRETE PLACEMENT	PERIODIC
BOLTS, EMBEDDED ITEMS	PERIODIC
WELDING	PERIODIC

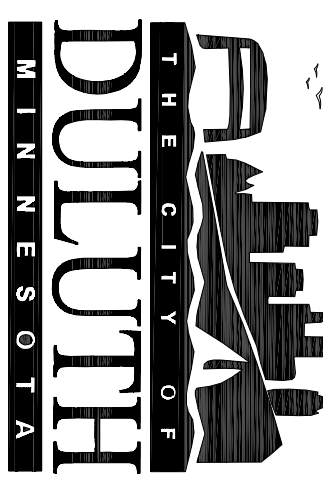
E. PROVIDE $\frac{3}{4}$ " CHAMFER AT ALL EXPOSED CONCRETE EDGES.



A200



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& Moore**
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Enger Park Shelter Improvements and Rotary Peace Plaza

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Signature
William D. Hickey, AIA
Name
20111
Date
License #
13860
Date

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Signature
Craig A. Mihert
Name
13860
Date

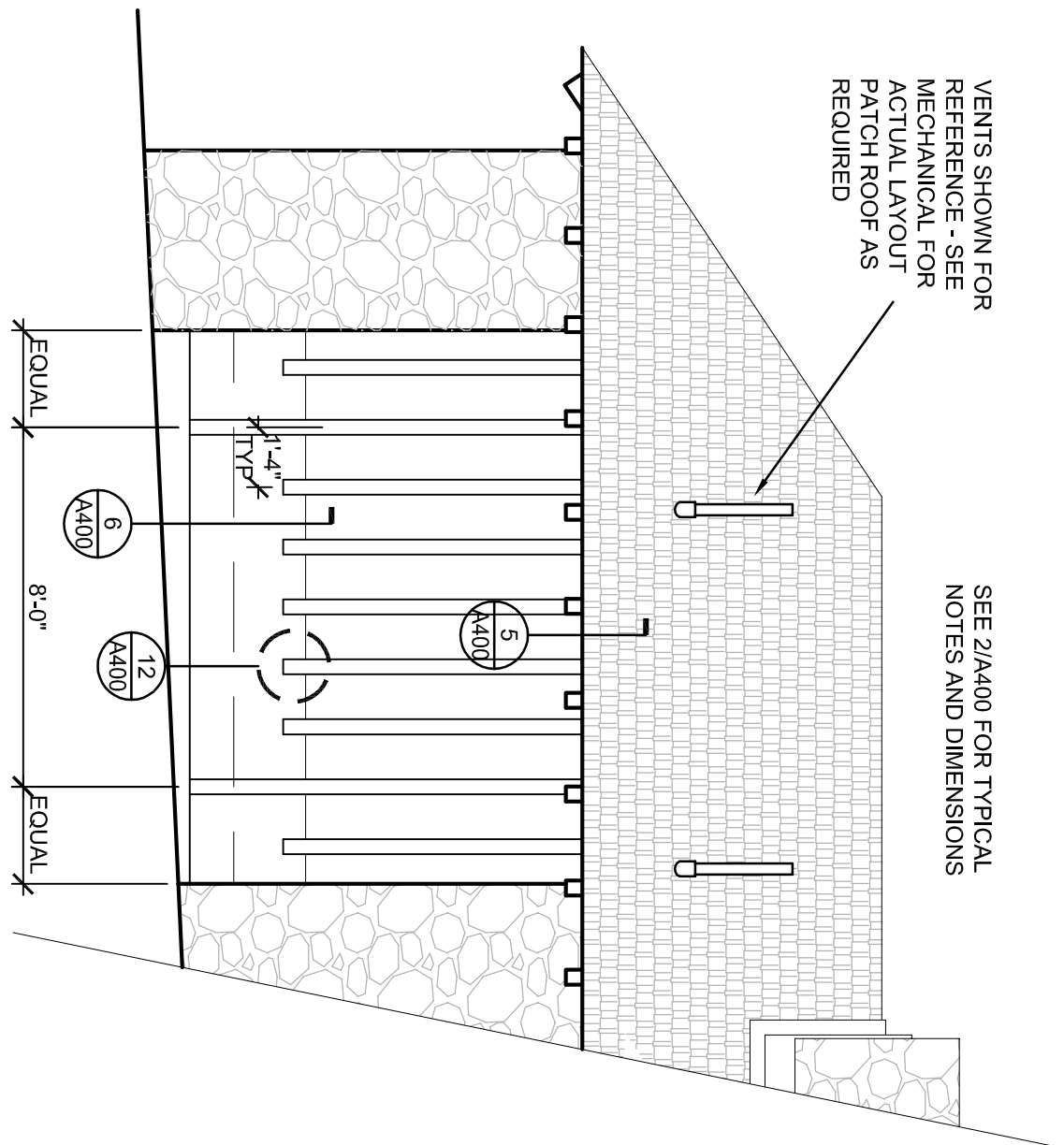
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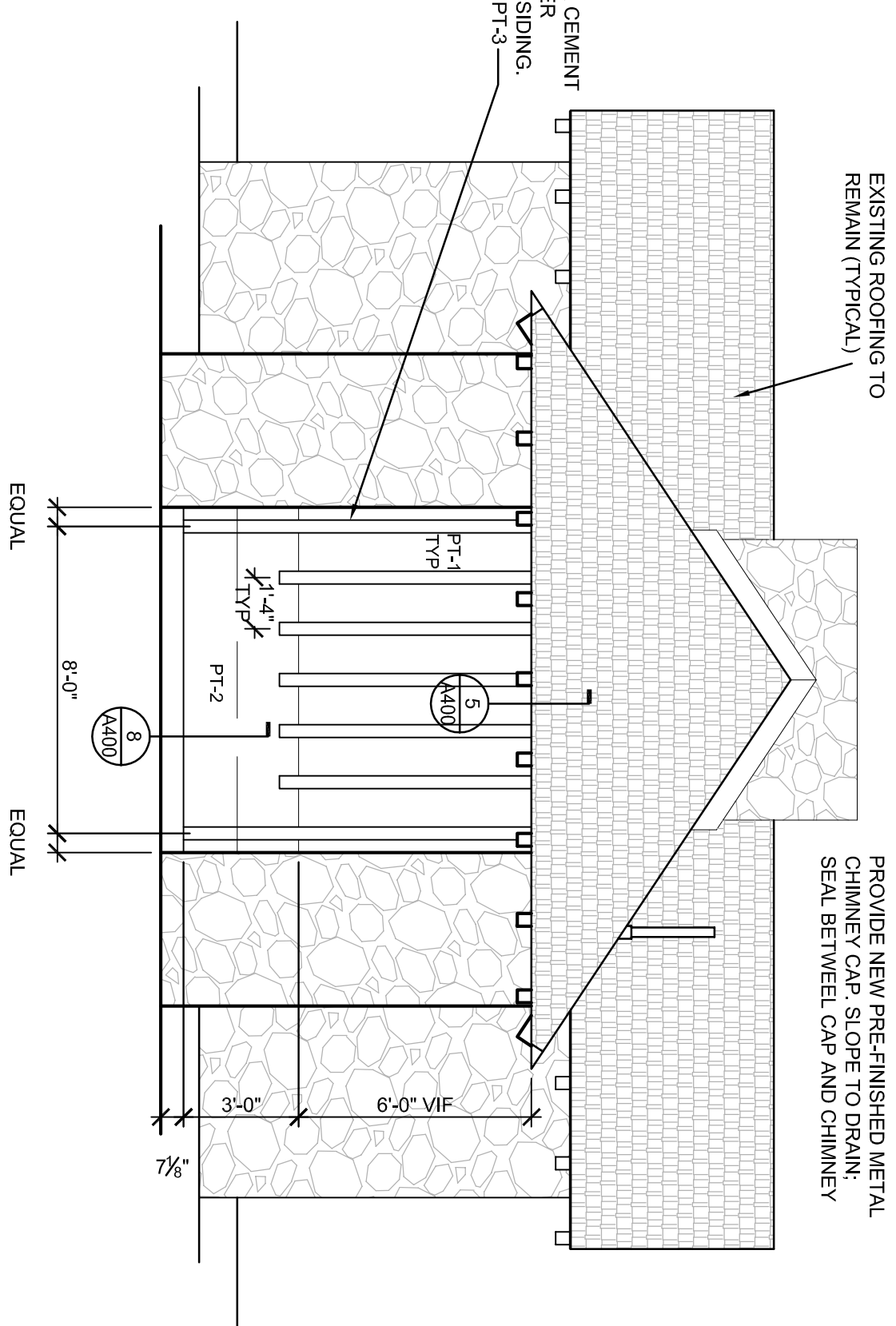
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PROJECT NUMBER
JRS
DRAWN BY
WDH
CHECKED BY
WDH
PROJECT MGR.
PROJECT ARCH.

Project Number: 13 - 001
Bid Number: 13 - 0305
EXIT. ELEVATIONS &
DETAILS

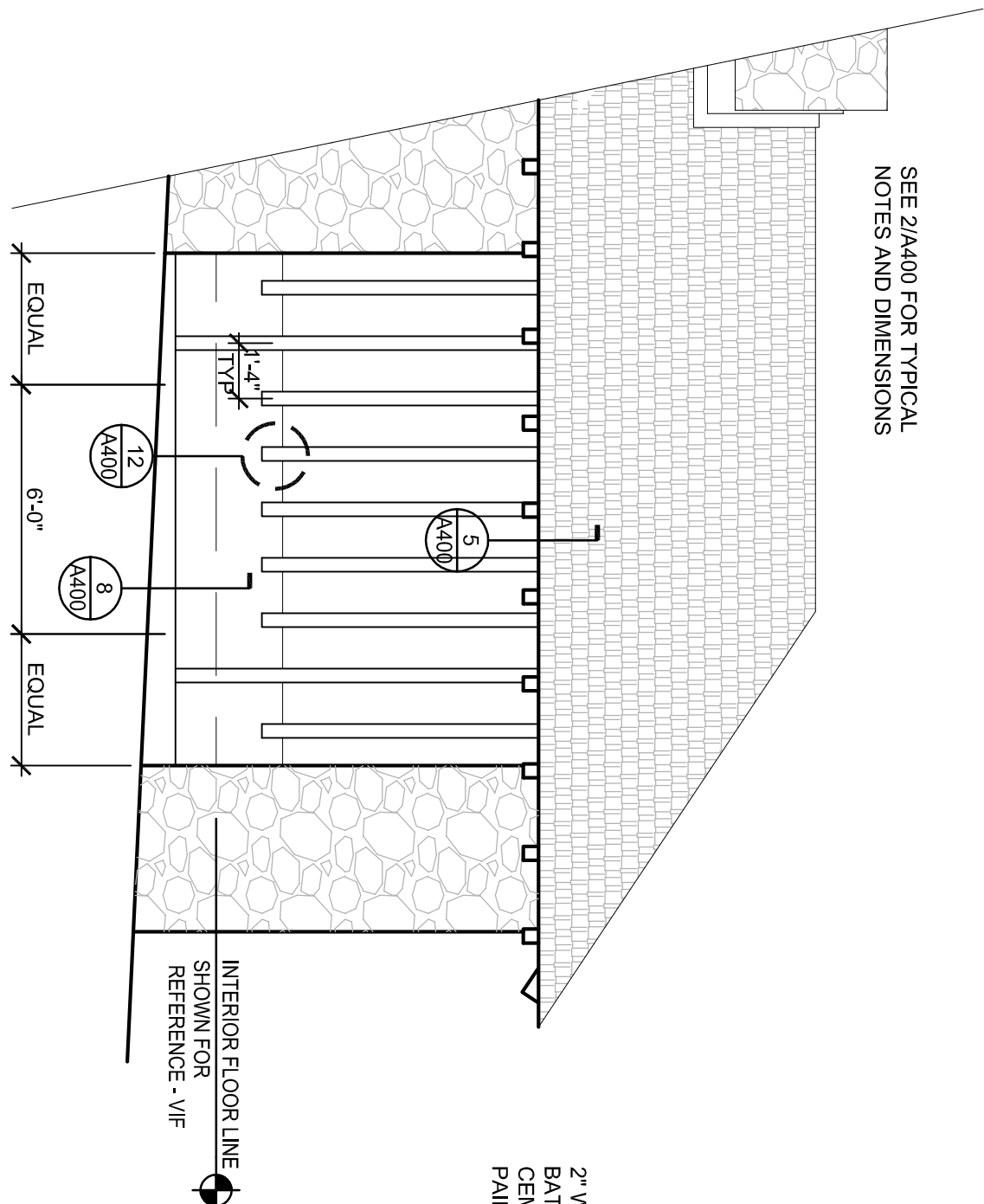
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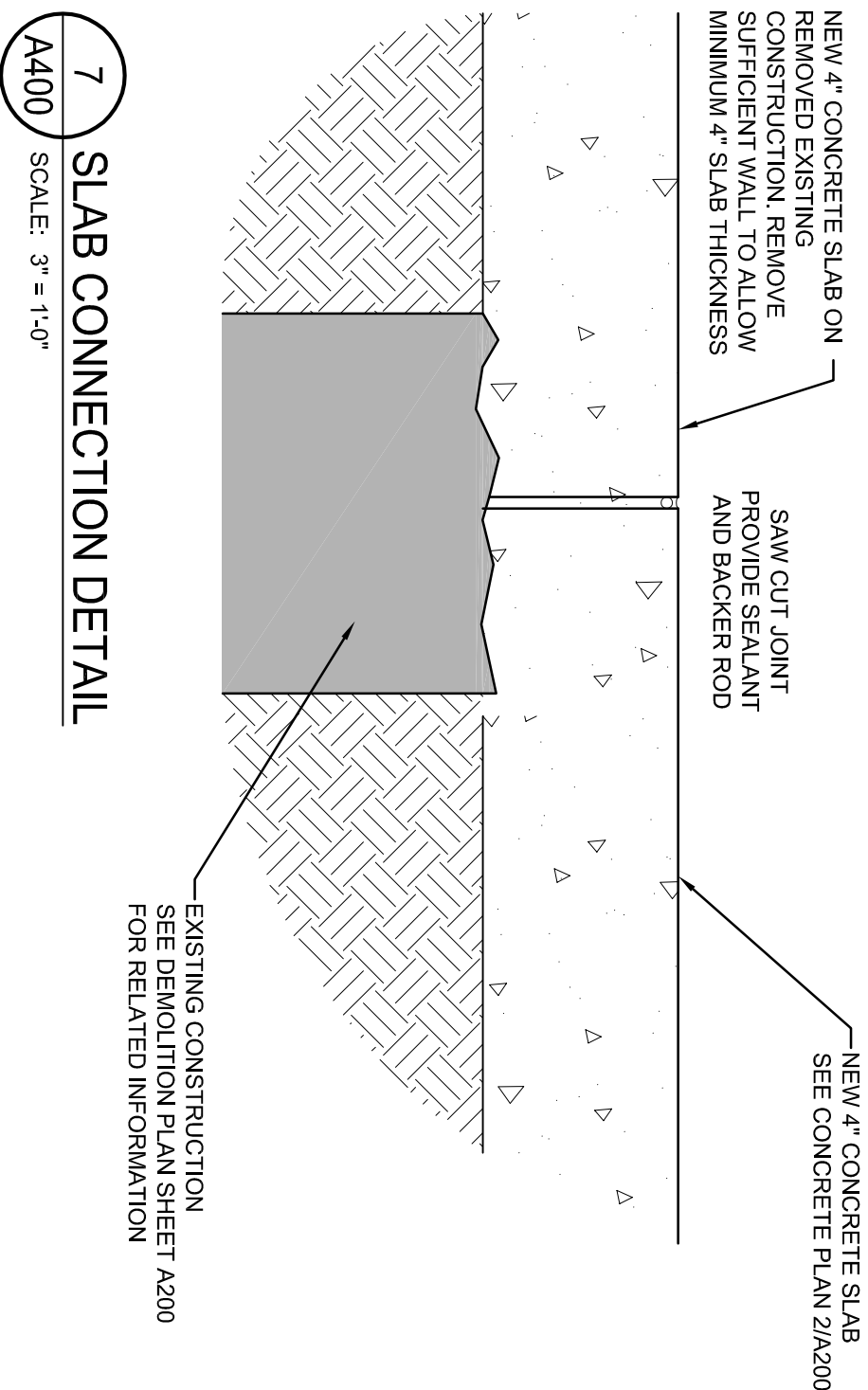
1 NORTH ELEVATION AT NEW ENCLOSURE
A400 SCALE: 1/4" = 1'-0"



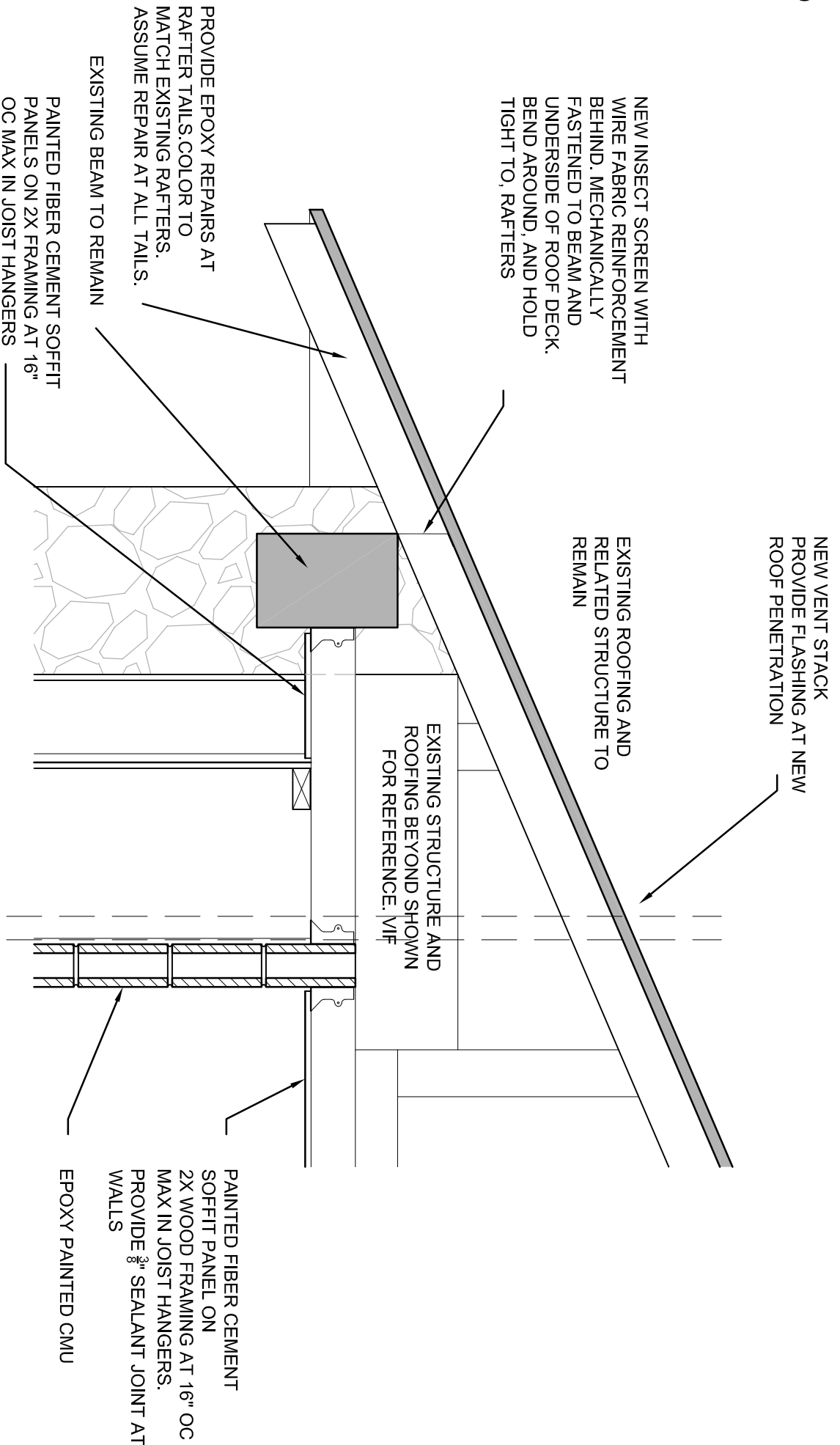
2 EAST ELEVATION AT NEW ENCLOSURE
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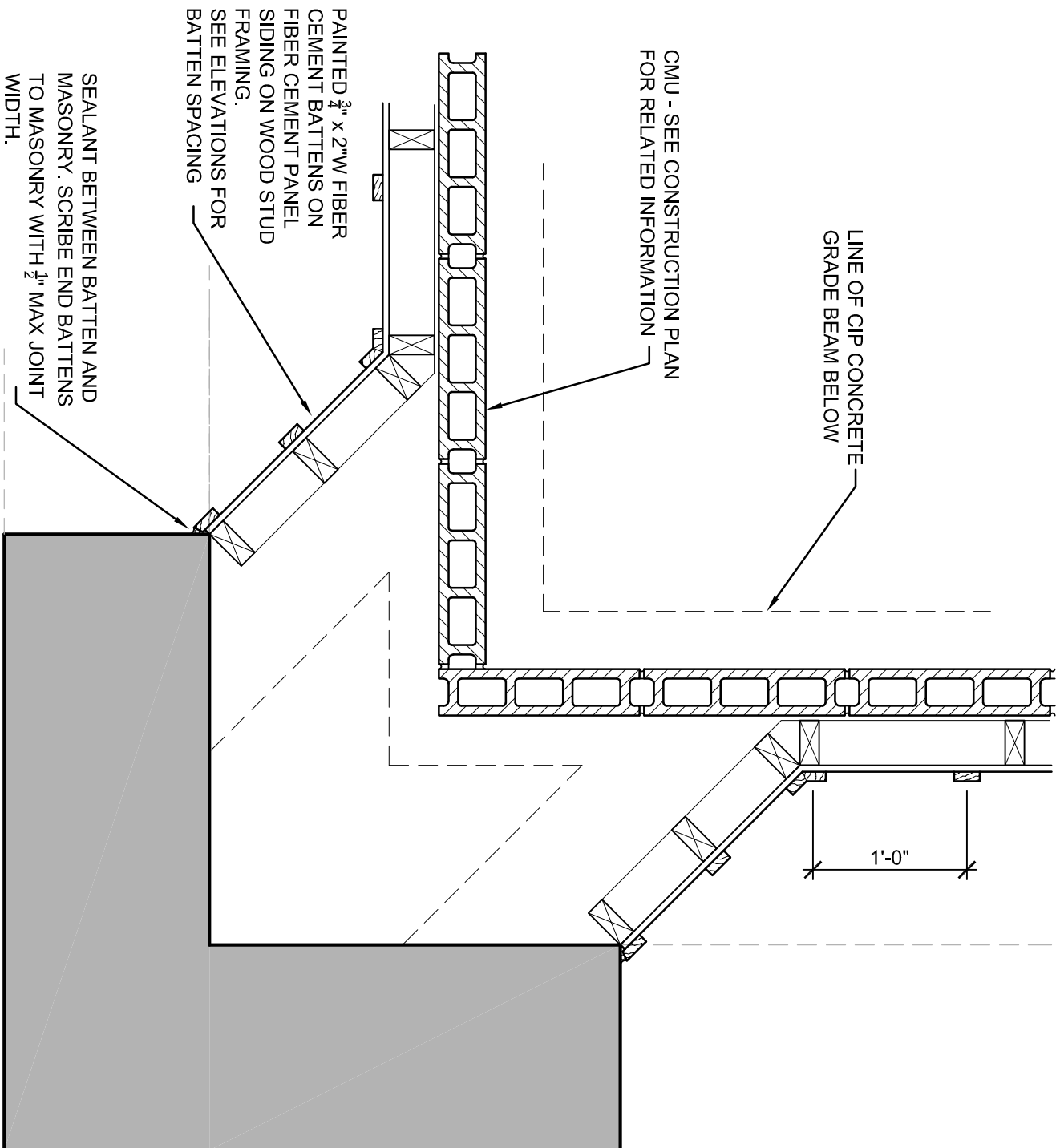
3 SOUTH ELEVATION AT NEW ENCLOSURE
A400 SCALE: 1/4" = 1'-0"



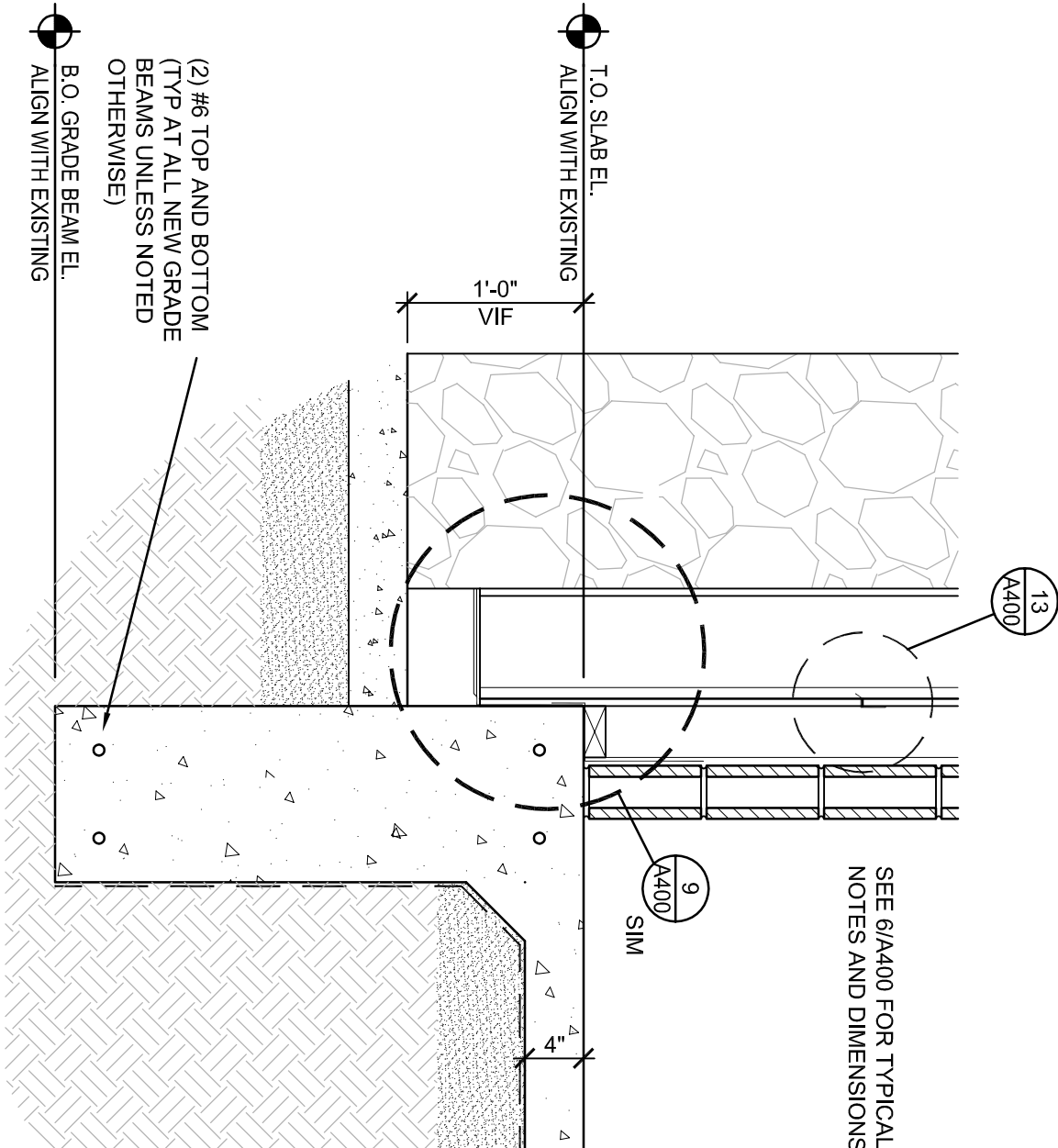
7 SLAB CONNECTION DETAIL
A400 SCALE: 3" = 1'-0"



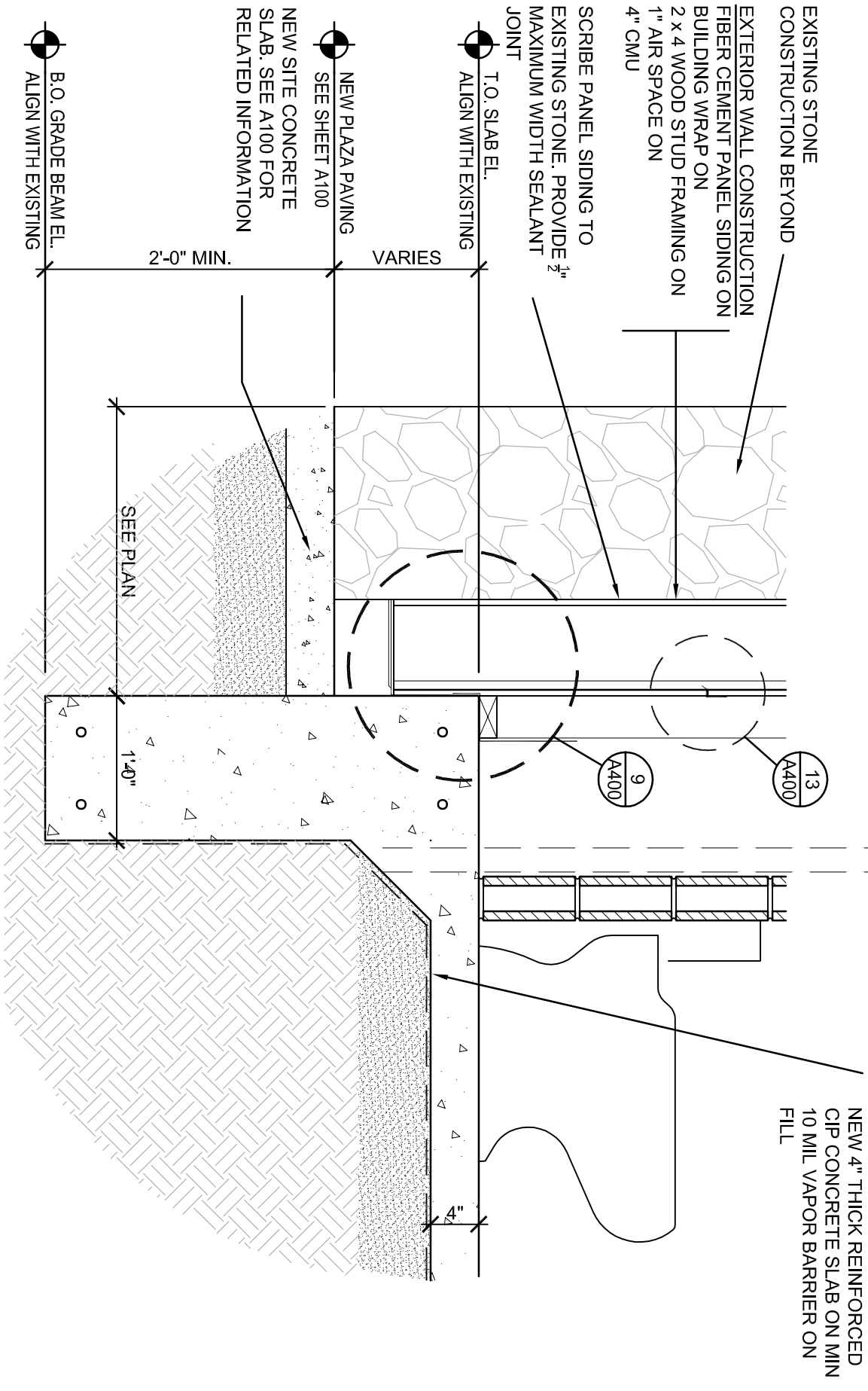
5 DETAIL AT NEW TOP OF WALL
A400 SCALE: 1-1/2" = 1'-0"



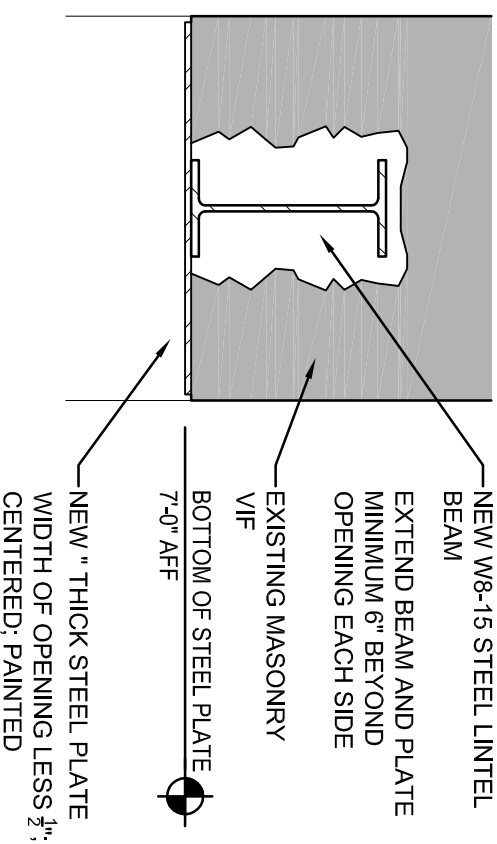
10 DETAIL AT TYPICAL CORNER
A400 SCALE: 1" = 1'-0"



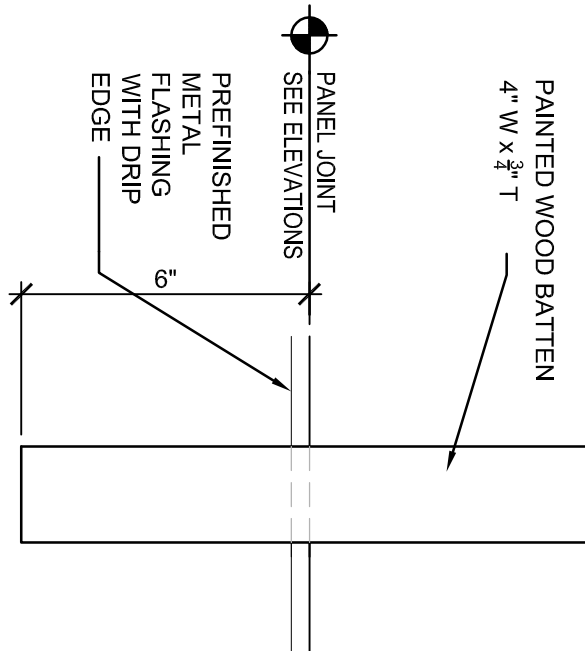
8 DETAIL AT TYPICAL NEW FLOOR SLAB
A400 SCALE: 1" = 1'-0"



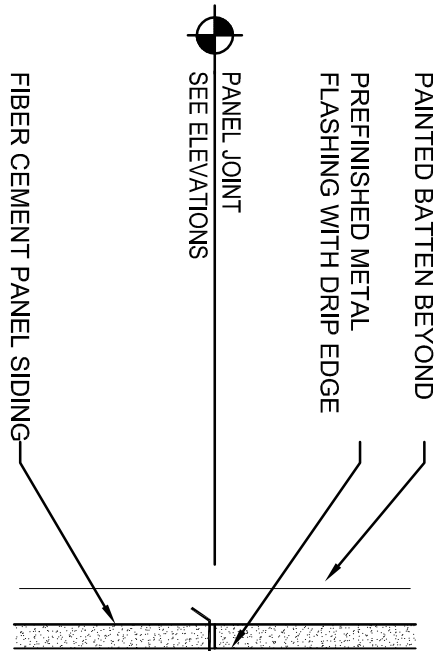
6 DETAIL AT NEW FLOOR SLAB AT PLUMBING WALL
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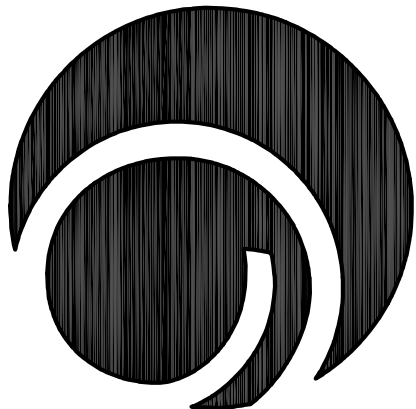
11 SECTION AT NEW LINTEL
A400 SCALE: 1-1/2" = 1'-0"



12 DETAIL AT BATTEN
A400 SCALE: 3" = 1'-0"



13 DETAIL AT SIDING FLASHING
A400 SCALE: 3" = 1'-0"



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Name _____
20111 _____
License # _____ Date _____
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Signature _____
Craig A. Wilkert
Name _____
18360 _____
License # _____ Date _____

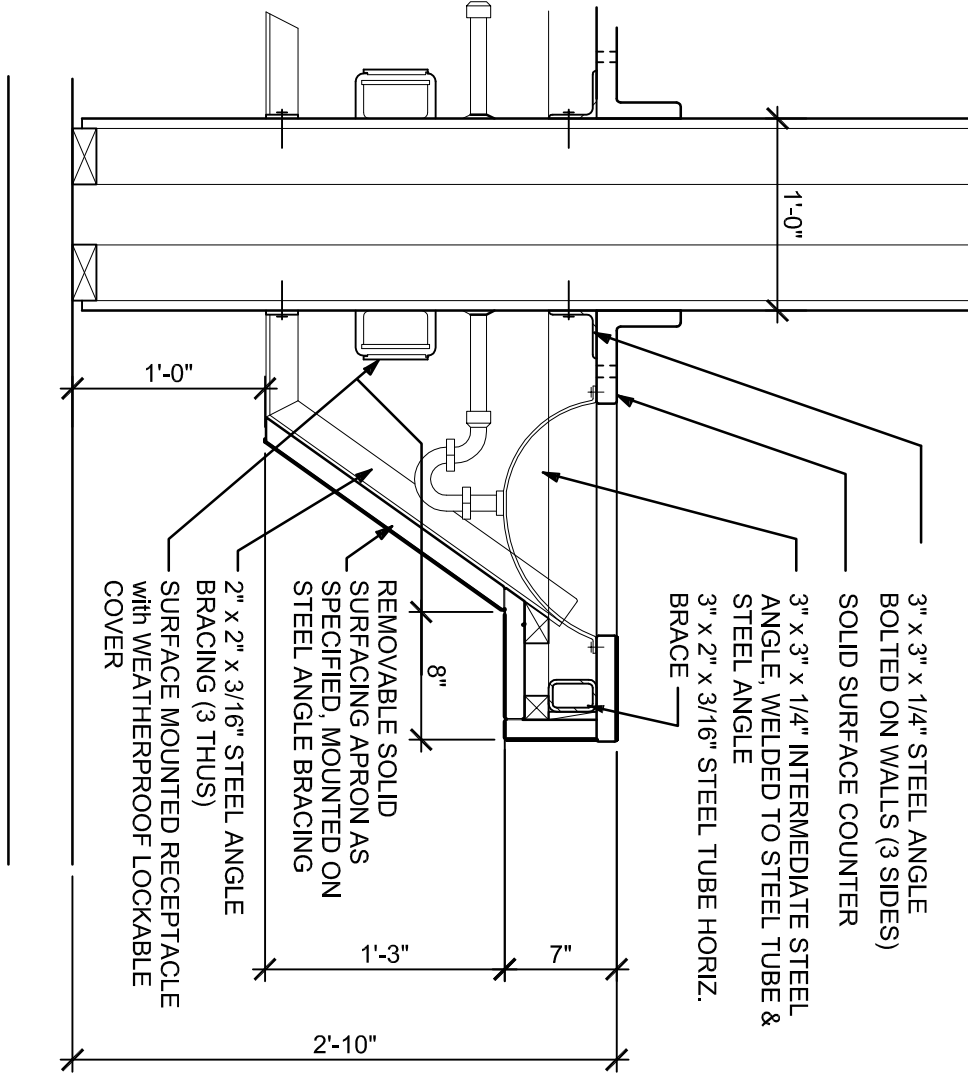
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PROJECT MGR.
PROJECT ARCH.

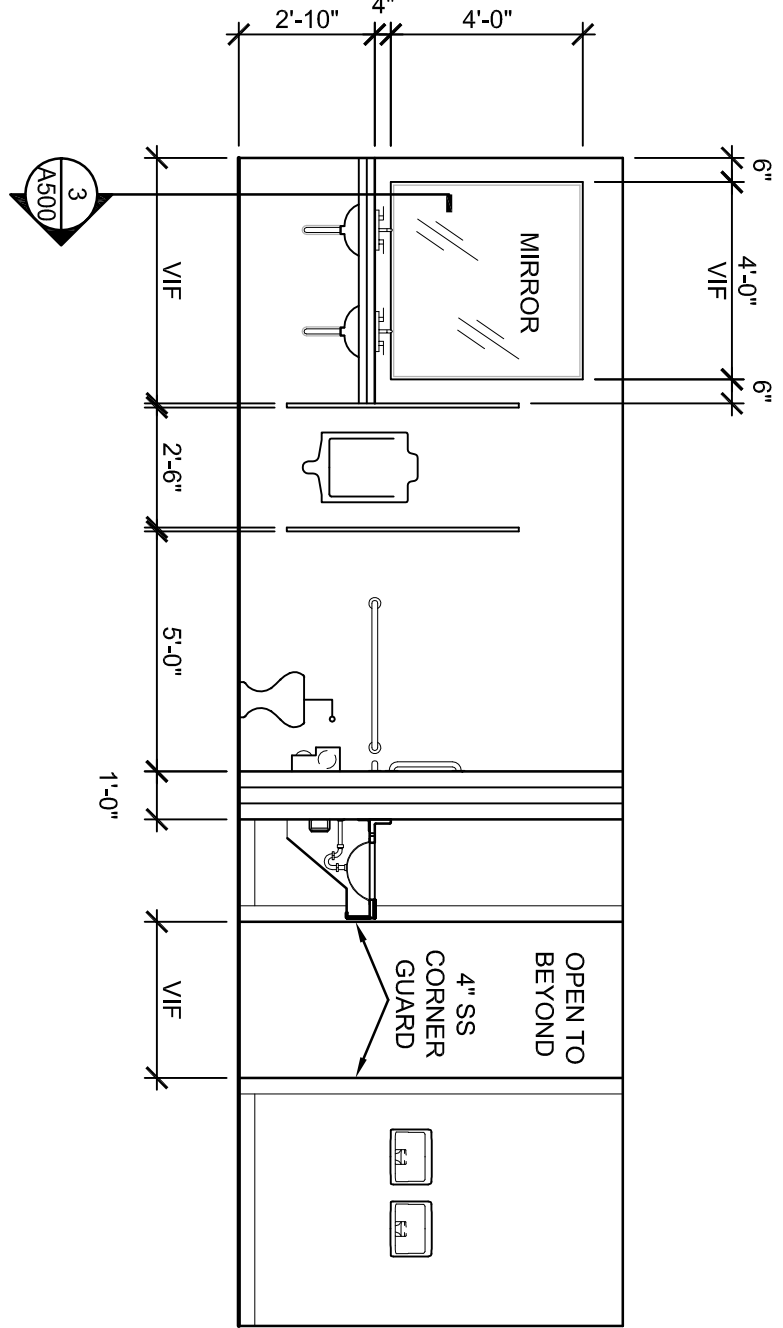
Project Number: 13-001
Bid Number: 13-0005

INTERIOR ELEVS

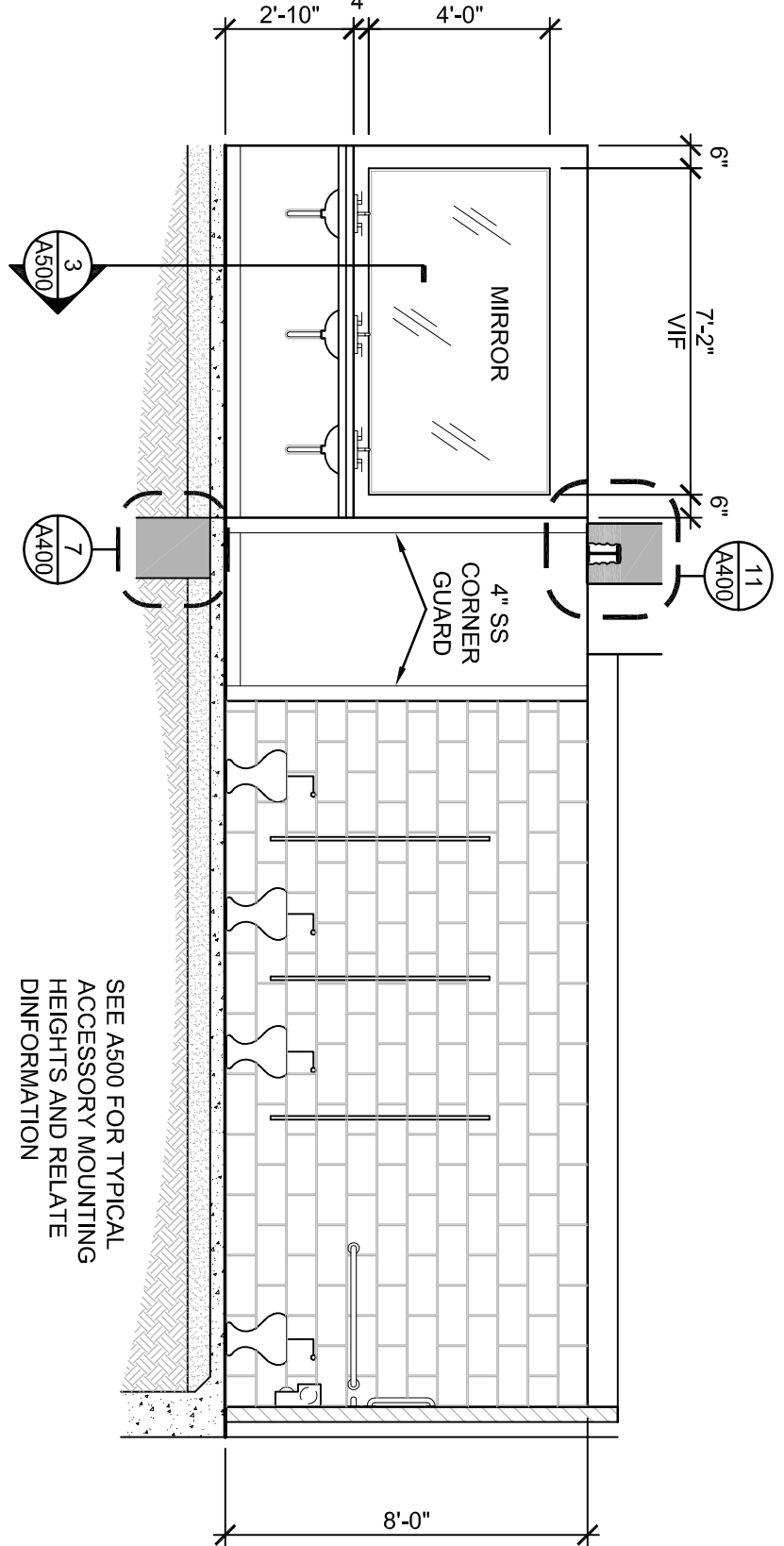
A500



3 SECTION THRU LAVATORY COUNTER
A500 SCALE: 1\"/>

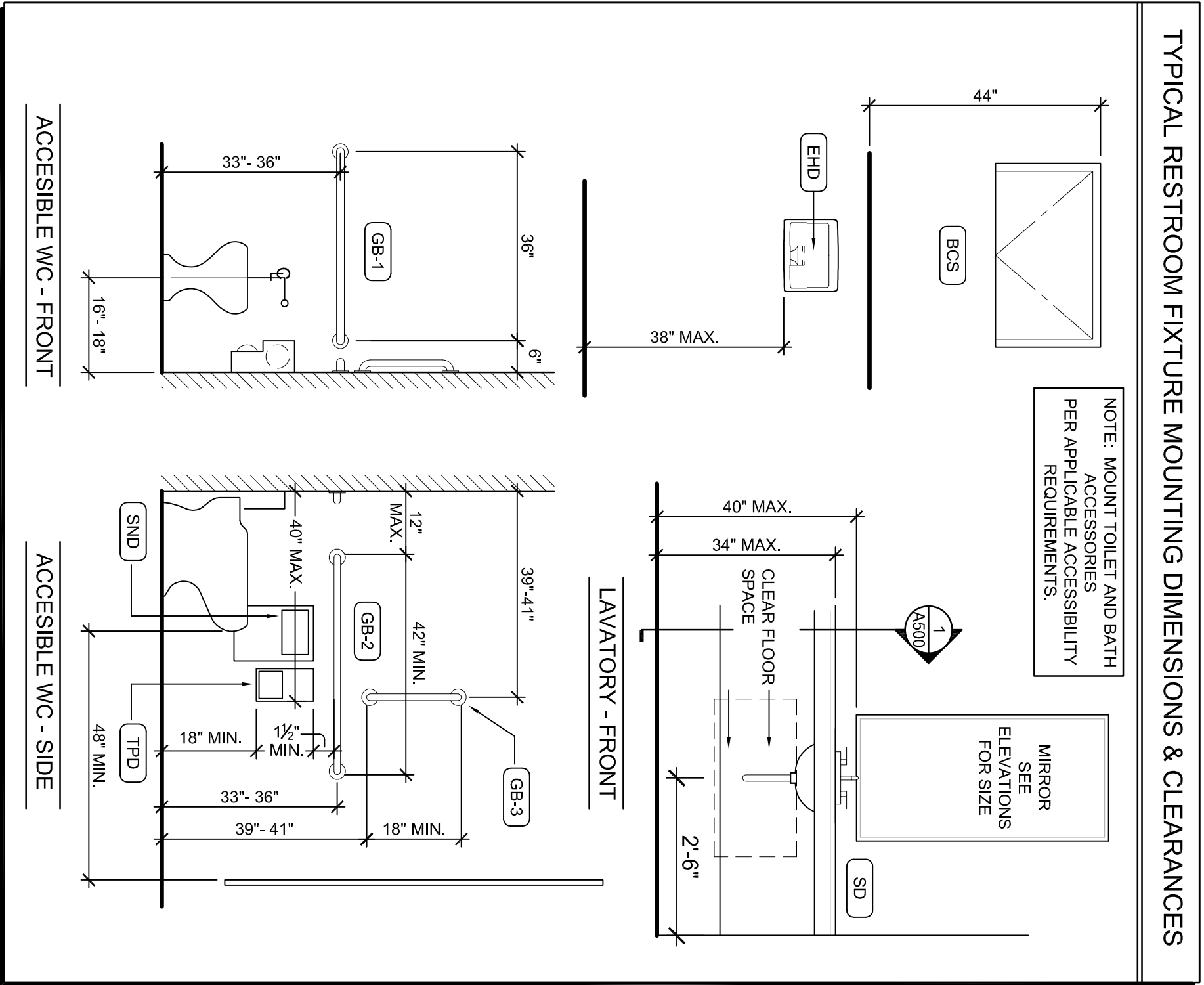


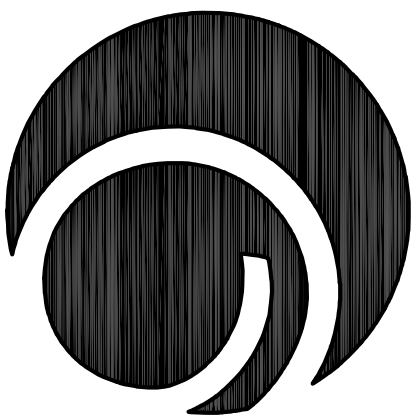
2 ELEVATION AT MEN'S AND WOMEN'S RESTROOMS
A500 SCALE: 1/4\"/>



1 ELEVATION AT WOMEN'S RESTROOM
A500 SCALE: 1/4\"/>

TOILET ROOM ACCESSORIES KEY		
(GB-1)	36" GRAB BAR (HORIZ. REAR)	SEE SPEC
(GB-2)	42" GRAB BAR (HORIZ. SIDE)	SEE SPEC
(GB-3)	16" GRAB BAR (VERT. SIDE)	SEE SPEC
(EHD)	ELECTRIC HAND DRIER	SEE SPEC
(TPD-1)	TOILET PAPER DISPENSER	SEE SPEC
(SND)	SANITARY NAPKIN DISPOSAL	SEE SPEC
(SD)	SOAP DISPENSER	SEE SPEC
(BCS)	BABY CHANGING STATION	SEE SPEC





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Wood Deck at Gazebo Enger Park

Duluth, Minnesota

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Signature	_____
Chief A. Miller	_____
Name	William D. Hickey, AIA
License #	20211
Date	2021.11
Description	I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Signature	_____
Chief A. Miller	_____
Name	William D. Hickey, AIA
License #	18380
Date	_____

BID DOCUMENTS MARCH 18th, 2013

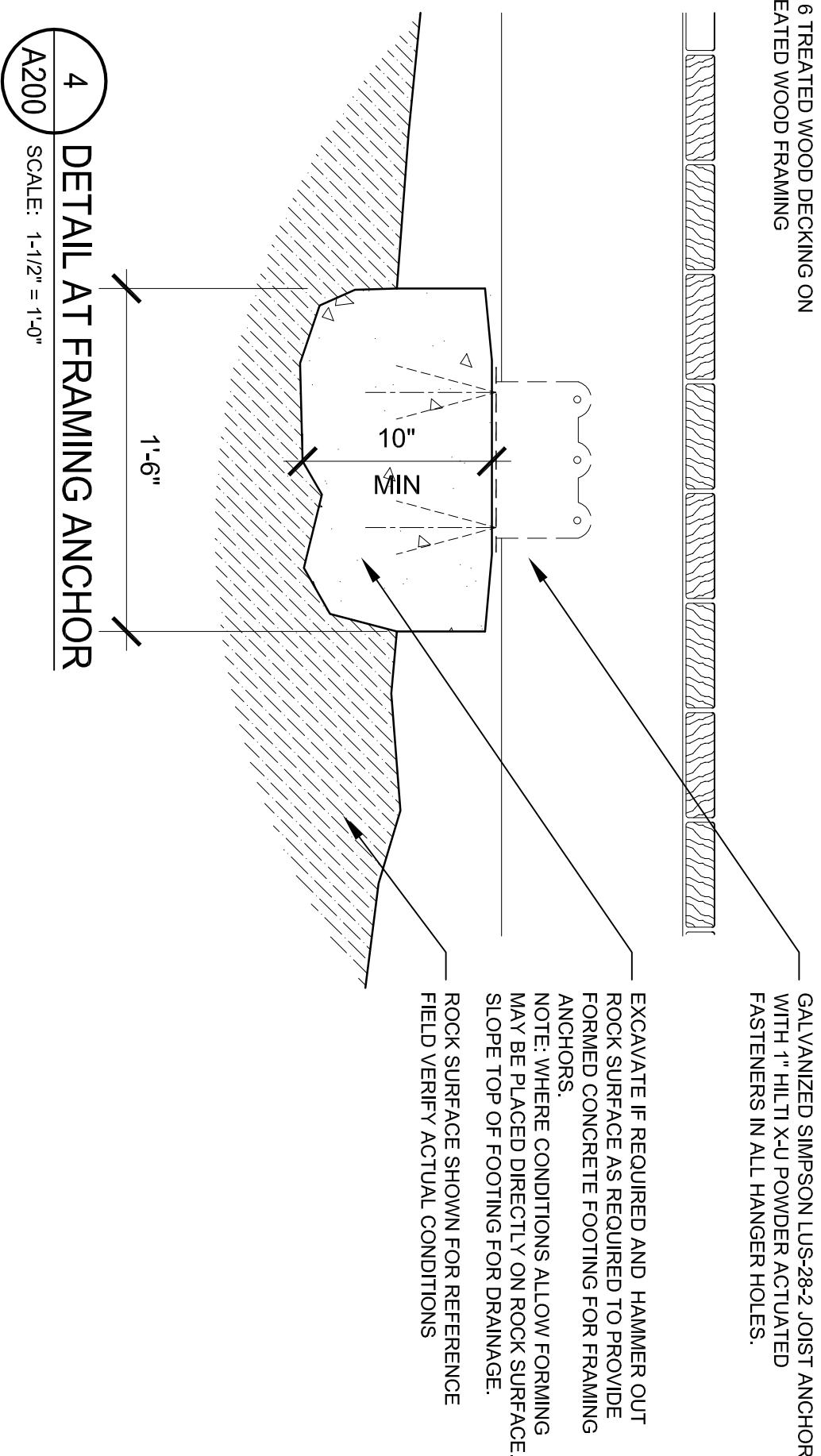
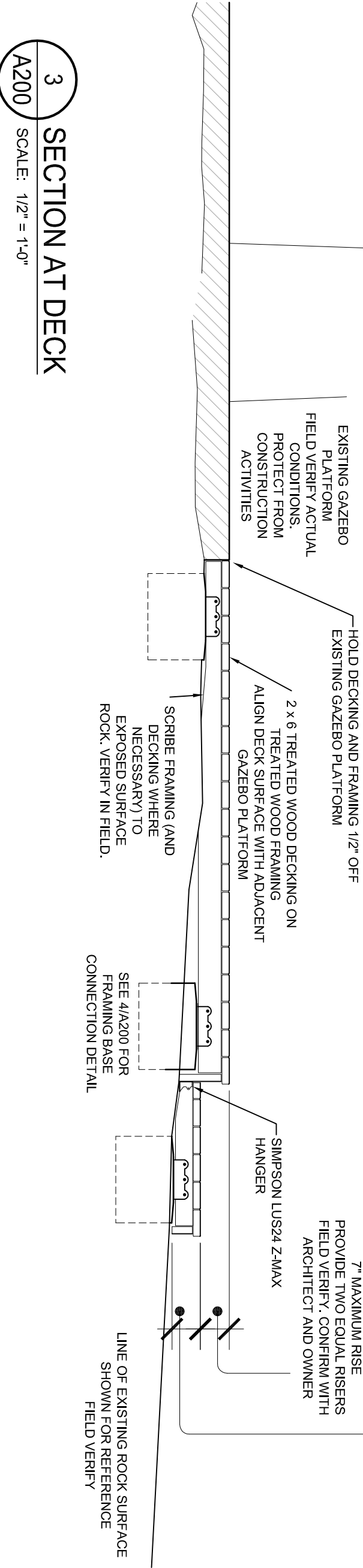
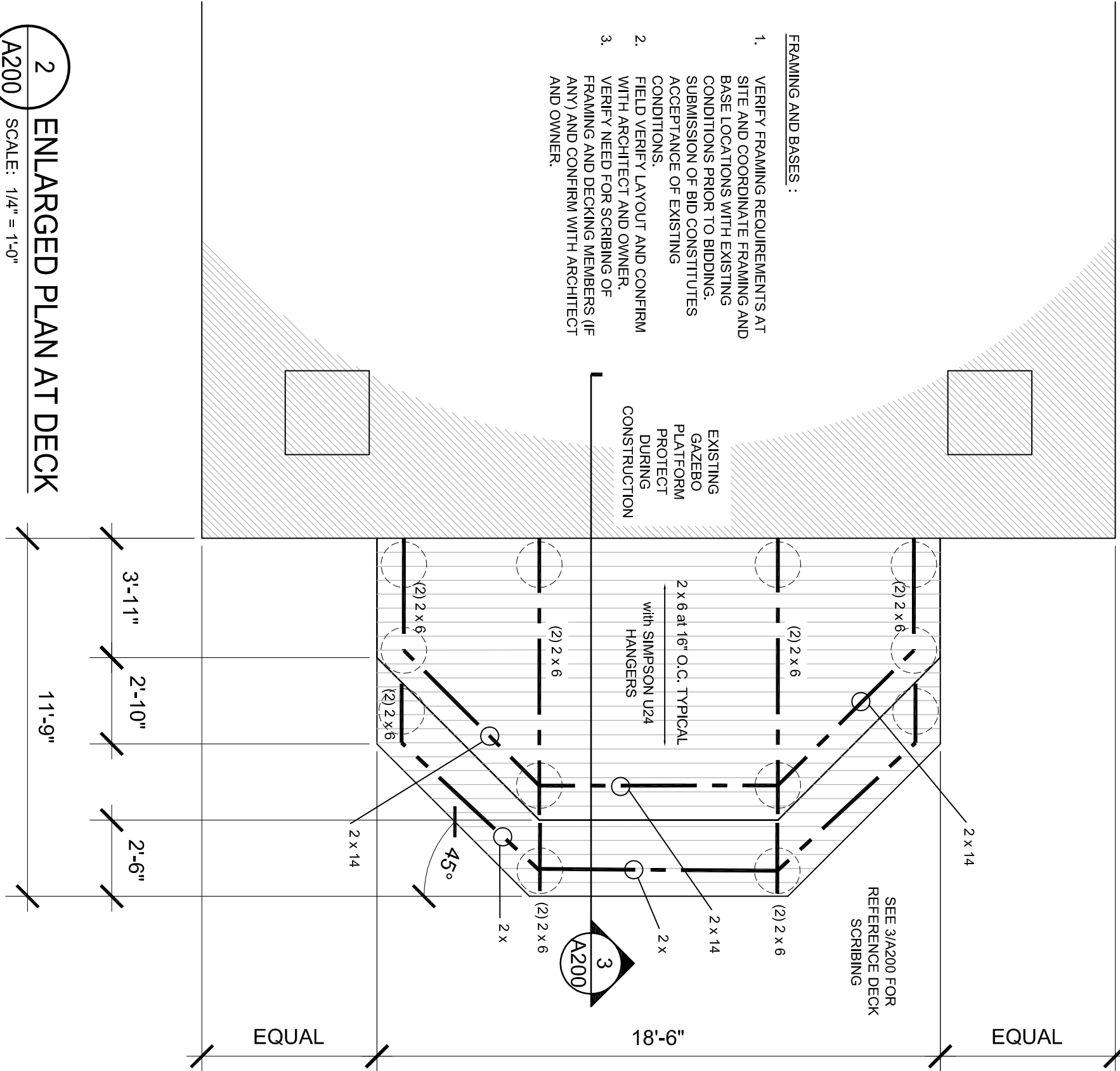
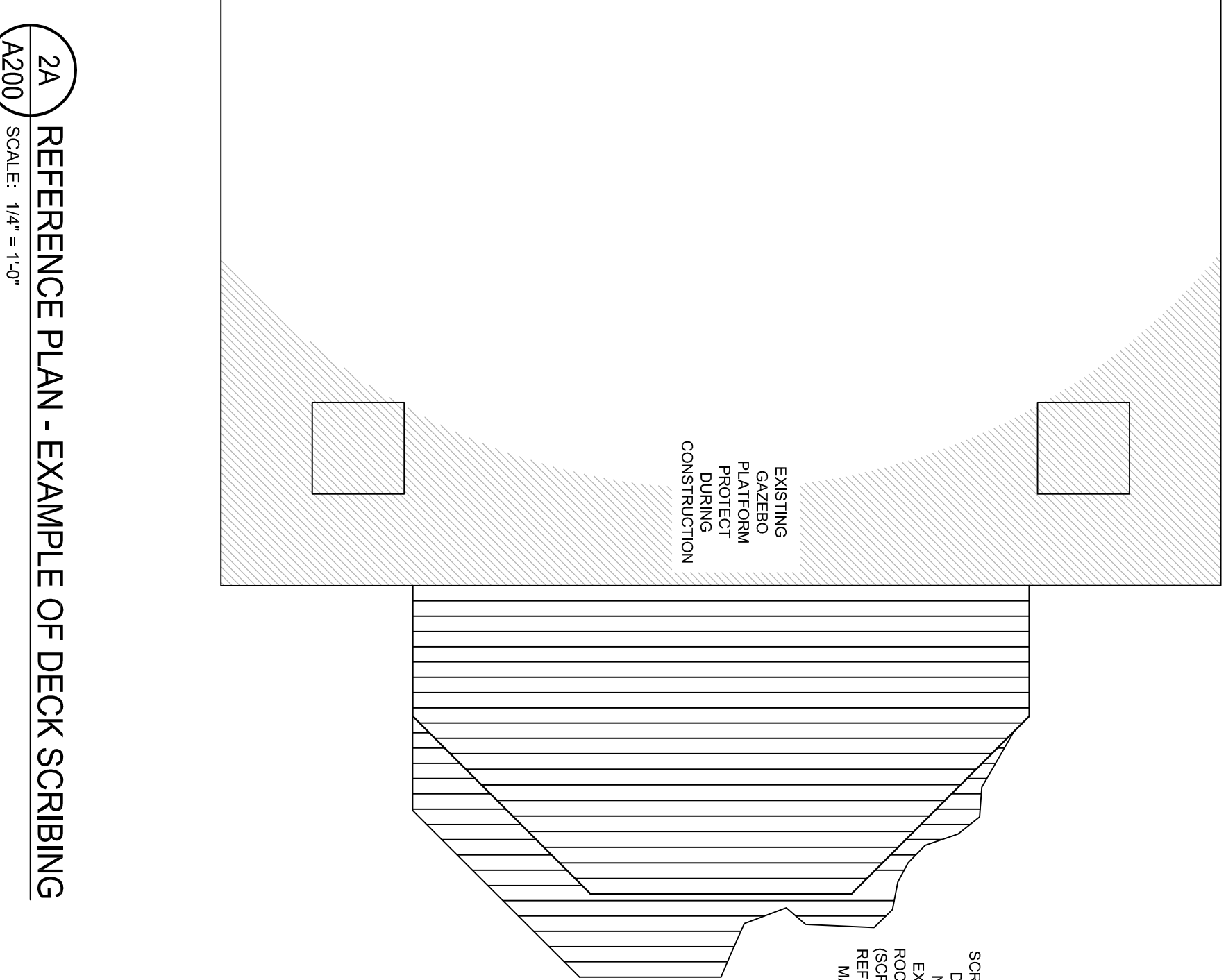
NO.	DATE	DESCRIPTION
1	02-22-13	90% OWNER REVIEW ISSUE
2	03-18-13	ISSUED FOR BID
3	_____	_____
4	_____	_____
5	_____	_____

10075.04	PROJECT NUMBER	WDH
JFS	DRAWN BY	WDH
WDH	CHECKED BY	WDH
PROJECT MGR.	PROJECT ARCH.	WDH

BID NO. 13-001
PROJECT NO. 13-0035

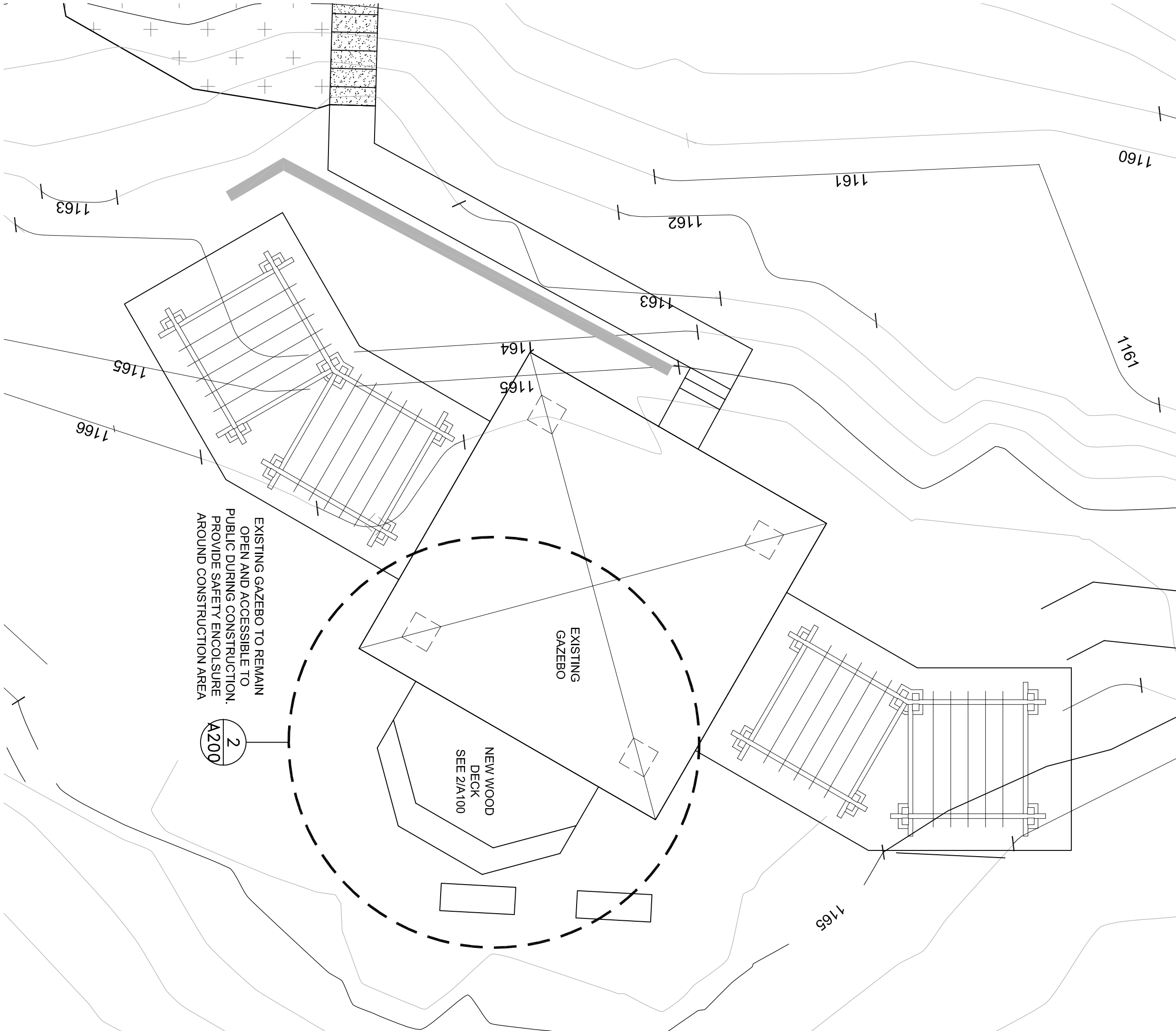
PLAN, SECTIONS, AND DETAILS

A600



EXAMPLE OF SCRIBING WOOD DECKING TO SURFACE ROCK FORMATIONS, FOR REFERENCE ONLY. SEE DRAWINGS FOR DECKING REQUIREMENTS, COORDINATE SCRIBING IN FIELD. VERIFY NEED FOR SCRIBING WITH ARCHITECT AND OWNER.

1 PARTIAL SITE PLAN A200 SCALE: NOT TO SCALE



DIVISION 3 - CONCRETE

- 3.01 CONCRETE MIXES
- A. CONCRETE SHALL BE A MIX DESIGNED FOR ULTIMATE STRENGTH CONCRETE IN ACCORDANCE WITH ACI 211.1 TO ACHIEVE THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS AND OTHER PROPERTIES ACCORDING TO THE FOLLOWING TABLE:

CONCRETE MIX SCHEDULE					
BUILDING COMPONENT	F _c CONCRETE (psi)	WEIGHT	W/C	SUMP AGGREGATE SIZE (")	AIR ENTRAINMENT
SITE CONCRETE (2)	3000	NORMAL	0.45	4"	¾"
					6.0% +/- 1.5%

*1. MAXIMUM SUMP WATER REDUCER IS USED ACCORDING TO SPECIFICATIONS.
*2. REINFORCE WITH FIBERGLASS UNO.

DIVISION 6 - WOOD

- 6.01 GENERAL WOOD
- A. STRUCTURAL LUMBER SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN SPECIFICATIONS (NDS) AND ITS SUPPLEMENTS.
- B. CONVENTIONAL FRAMING MEMBERS SHALL BE AS NOTED BELOW, UNLESS NOTED OTHERWISE.
- C. MEMBERS SHALL BE CUT TO THE PROPER LENGTH AND AND CONFIGURATIONS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. MEMBERS SHALL BE CONTINUOUS FROM SUPPORT TO SUPPORT. (NO SPLICING OF BEAMS OR HANGERS WILL BE ALLOWED.) JOIST HANGERS, HURRICANE CLIPS, AND BRIDGING SHALL HAVE ALL OF THE REQUIRED NAILS INSTALLED.
- D. SPRUCE-PAINE-FIR #2 OR BETTER.
- E. WOOD FRAMING IN CONTACT WITH CONCRETE OR MASONRY, TREATED WOOD (PRESSURE-IMPREGNATED BY PROCESS AND PRESERVATIVE APPROVED BY AITC) OR FOUNDATION REDWOOD.
- F. CONFORM TO BUILDING CODE TABLE 23-4.0 - NAILING SCHEDULE UNLESS NOTED OTHERWISE.

DIVISION 6 - WOOD (continued)

- 6.02 MATERIAL PROPERTIES
- A. FRAMING LUMBER:
1. SPRUCE-PAINE-FIR #2 OR BETTER
2. BENDING (F_b)
3. SINGLE MEMBER USE
4. TENSILE (F_t)
5. HORIZONTAL SHEAR (F_v)
6. COMPRESSION PERPENDICULAR TO GRAIN (F_c)
7. MODULUS OF ELASTICITY (E)
8. MAXIMUM MOISTURE CONTENT: LESS THAN OR EQUAL TO 19%
- B. PREFABRICATED METAL HANGERS, STRAPS, CLIPS, BRACKETS, BRACES, TIES AND COLUMNS, CAPS INDICATED ON PLANS ARE AS MANUFACTURED BY SIMPSON CO. (OR EQUAL). SIZE HANGERS OR OTHER CONNECTORS NOT CALLED OUT ON PLAN TO SUPPORT MAY ALLOWABLE LOAD ON MEMBER WITH MINIMUM SAFETY FACTOR OF 3. BOLTS USED IN RECOMMENDATIONS.
- C. NAILS CONNECTING PRESSURE TREATED WOOD MEMBERS SHALL BE HOT DIPPED GALVANIZED.



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Enger Park Shelter Improvements and Rotary Peace Plaza

Gausman & Moore

Mechanical and
Electrical Engineers
501 SOUTH LAKE AVENUE
DULUTH, MINNESOTA 55802
(218)722-2555 FAX 722-9306
Project No. 82666

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

Signature *David H. Gausman*
Name David H. Gausman
License # 24621 Date 3/15/13

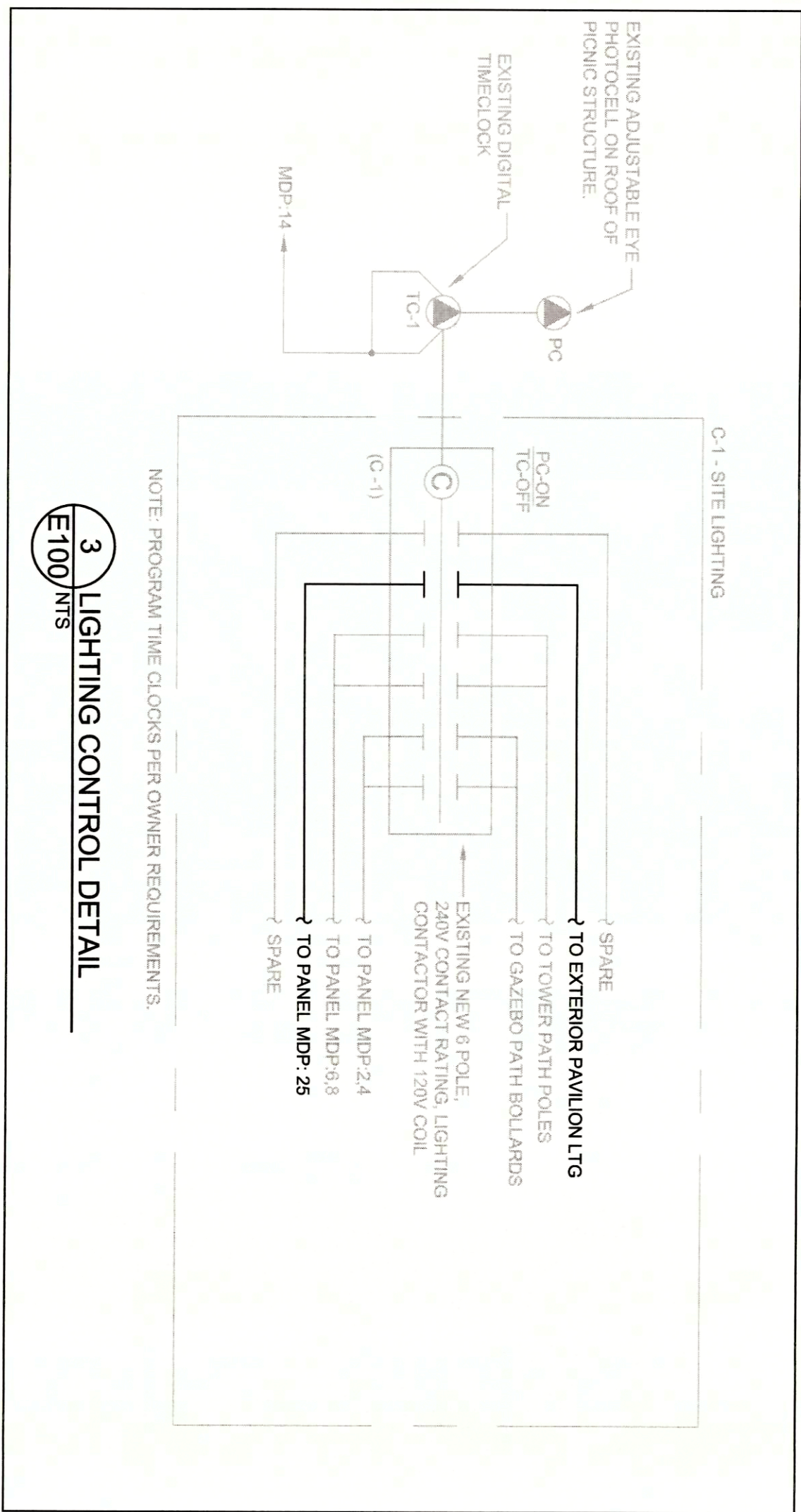
REVISION LOG
NO. DATE DESCRIPTION

82666
PROJECT NUMBER
TRP
DRAWN BY
SLH
PROJECT MGR.

LAH
CHECKED BY
PROJECT ARCH.

NUMBERED NOTES:

- DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES, ASSOCIATED SWITCHING, RECEPTACLES, CONDUIT AND CIRCUITING IN THIS AREA TO FACILITATE DEMOLITION AND REMODEL OF SPACE.
- DISCONNECT AND REMOVE EXISTING FIXTURES IN THIS AREA. REUSE EXISTING CIRCUITING TO EXTENT AVAILABLE TO FACILITATE INSTALLATION OF NEW LIGHTING IN THIS AREA REFER TO DETAIL 25100
- REUSE EXISTING CIRCUITING MADE AVAILABLE BY DEMOLITION.
- REPLACE EXISTING SWITCHES WITH NEW, VERIFY EXACT LOCATION.
- CONNECT EXTERIOR LIGHTING TO EXISTING CONTROLLED TIMECLOCK (TTC-1) PHOTOCELL INSTALLED ON PREVIOUS PROJECT. REFER TO DETAIL 30E100 FOR MORE INFORMATION.
- REPLACE EXISTING RECEPTACLES WITH NEW.
- PROVIDE FLUSH MOUNTED JUNCTION BOX AND ASSOCIATED BLANK COVERPLATE WITH POWER PACK FOR OPERATION OF EXHAUST FAN VIA OCCUPANCY SENSOR.
- PROVIDE FLUSH MOUNTED JUNCTION BOX AND ASSOCIATED BLANK COVERPLATE WITH POWER PACK FOR OPERATION OF EXHAUST FAN VIA OCCUPANCY SENSOR. PROVIDE INTERCONNECTION OF MULTIPLE OCCUPANCY SENSORS AS REQUIRED.



3 LIGHTING CONTROL DETAIL
E100 NTS

PANEL SCHEDULE

PANEL NAME: MDP-EXISTING	VOLT: 120/240	BUS SIZE: 400 AMP	ACC:
LOCATION: PH	PH: 3	MAIN BRK: 400 AMP	ACC: 1
MOUNTING: SURFACE	WIRE: 1	GRD BUS: 200	GR. NO. 1
RM NO. LOAD DESCRIPTION	ERRR	CKT	BRK
MDP-1 (EXISTING)	100V	1	200
MDP-2 (EXISTING)	100V	2	200
MDP-3 (EXISTING)	100V	3	200
MDP-4 (EXISTING)	100V	4	200
MDP-5 (EXISTING)	100V	5	200
MDP-6 (EXISTING)	100V	6	200
MDP-7 (EXISTING)	100V	7	200
MDP-8 (EXISTING)	100V	8	200
MDP-9 (EXISTING)	100V	9	200
MDP-10 (EXISTING)	100V	10	200
MDP-11 (EXISTING)	100V	11	200
MDP-12 (EXISTING)	100V	12	200
MDP-13 (EXISTING)	100V	13	200
MDP-14 (EXISTING)	100V	14	200
MDP-15 (EXISTING)	100V	15	200
MDP-16 (EXISTING)	100V	16	200
MDP-17 (EXISTING)	100V	17	200
MDP-18 (EXISTING)	100V	18	200
MDP-19 (EXISTING)	100V	19	200
MDP-20 (EXISTING)	100V	20	200
MDP-21 (EXISTING)	100V	21	200
MDP-22 (EXISTING)	100V	22	200
MDP-23 (EXISTING)	100V	23	200
MDP-24 (EXISTING)	100V	24	200
MDP-25 (EXISTING)	100V	25	200
MDP-26 (EXISTING)	100V	26	200
MDP-27 (EXISTING)	100V	27	200
MDP-28 (EXISTING)	100V	28	200
MDP-29 (EXISTING)	100V	29	200
MDP-30 (EXISTING)	100V	30	200
MDP-31 (EXISTING)	100V	31	200
MDP-32 (EXISTING)	100V	32	200
MDP-33 (EXISTING)	100V	33	200
MDP-34 (EXISTING)	100V	34	200
MDP-35 (EXISTING)	100V	35	200
MDP-36 (EXISTING)	100V	36	200
MDP-37 (EXISTING)	100V	37	200
MDP-38 (EXISTING)	100V	38	200
MDP-39 (EXISTING)	100V	39	200
MDP-40 (EXISTING)	100V	40	200
MDP-41 (EXISTING)	100V	41	200
MDP-42 (EXISTING)	100V	42	200

PANEL SCHEDULE

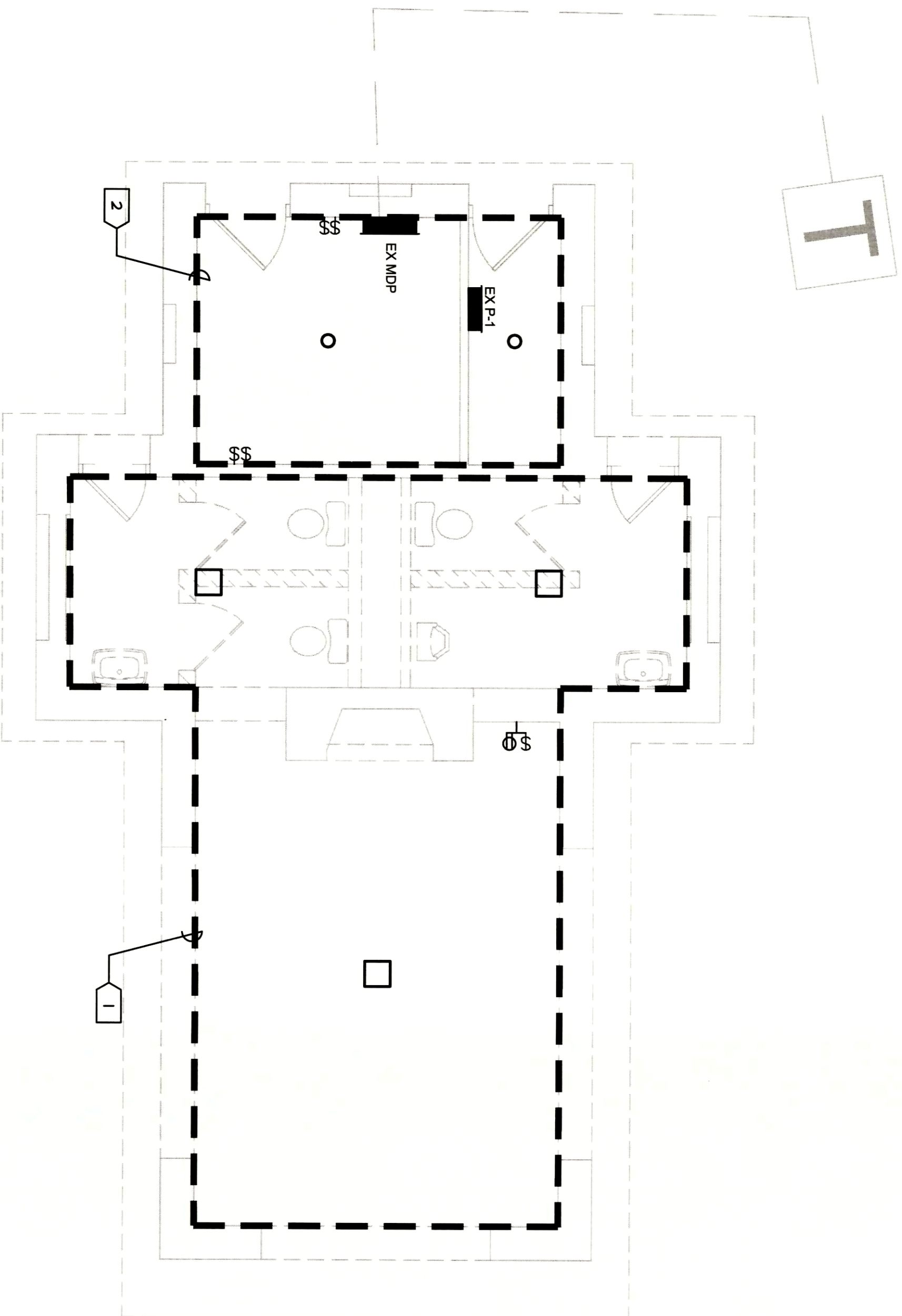
PANEL NAME: P-1 (EXISTING)	VOLT: 120/240	BUS SIZE: 100 AMP	ACC:
LOCATION: UTIL RM	PH: 1	MAIN BRK: 100 AMP	ACC:
MOUNTING: SURFACE	WIRE: 3	GRD BUS: YES	GR. NO. 1
RM NO. LOAD DESCRIPTION	BRKR	CKT	BRKR
MDP-1 (EXISTING)	100V	1	200
MDP-2 (EXISTING)	100V	2	200
MDP-3 (EXISTING)	100V	3	200
MDP-4 (EXISTING)	100V	4	200
MDP-5 (EXISTING)	100V	5	200
MDP-6 (EXISTING)	100V	6	200
MDP-7 (EXISTING)	100V	7	200
MDP-8 (EXISTING)	100V	8	200
MDP-9 (EXISTING)	100V	9	200
MDP-10 (EXISTING)	100V	10	200
MDP-11 (EXISTING)	100V	11	200
MDP-12 (EXISTING)	100V	12	200
MDP-13 (EXISTING)	100V	13	200
MDP-14 (EXISTING)	100V	14	200
MDP-15 (EXISTING)	100V	15	200
MDP-16 (EXISTING)	100V	16	200
MDP-17 (EXISTING)	100V	17	200
MDP-18 (EXISTING)	100V	18	200
MDP-19 (EXISTING)	100V	19	200
MDP-20 (EXISTING)	100V	20	200

NOTE: NEW CIRCUIT BREAKERS SHOWN IN BOLD.

MOTOR AND EQUIPMENT SCHEDULE

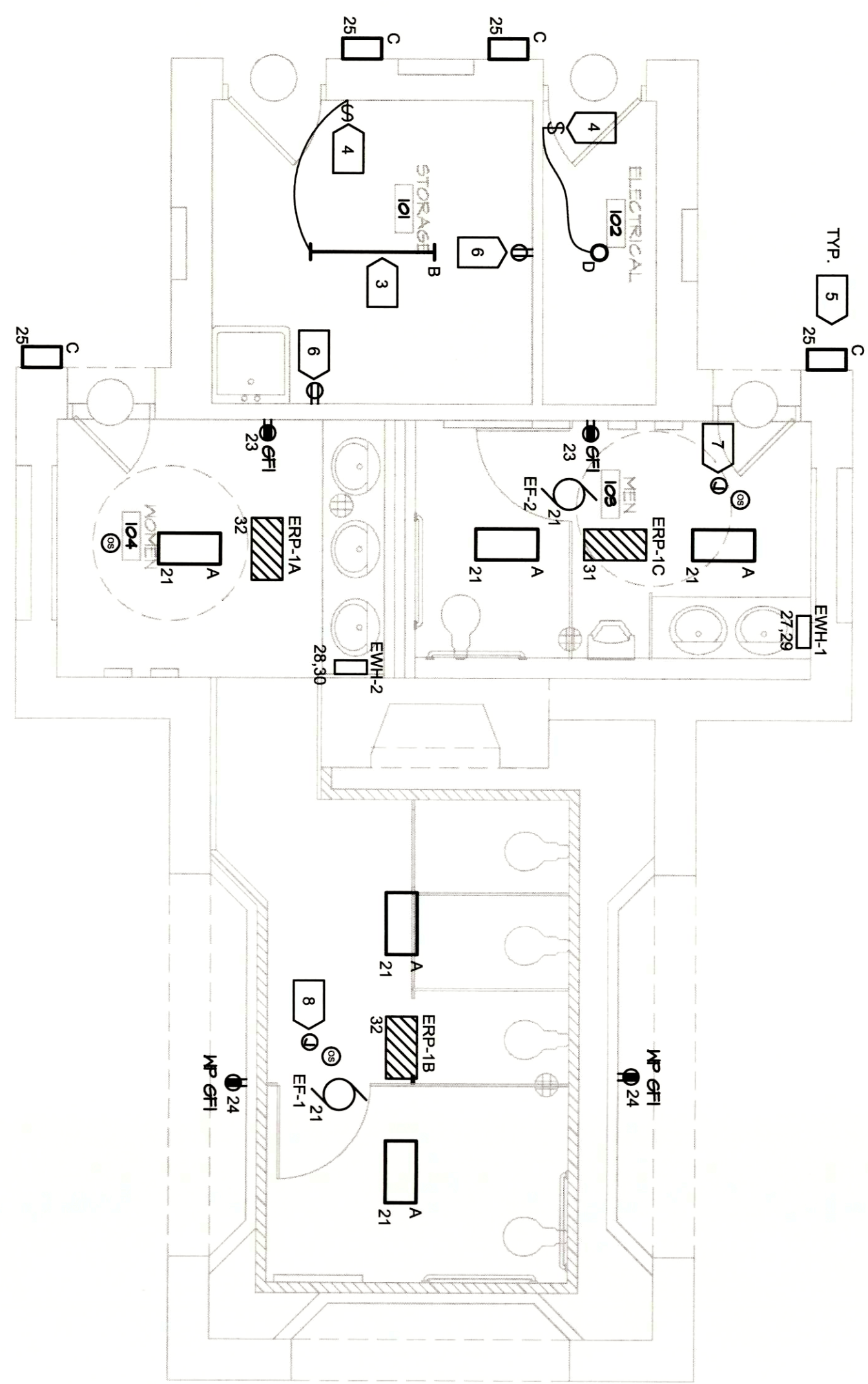
NO.	LOCATION OR ROOM #	DESCRIPTION	LOAD	PH	VOL T	TYPE	STARTER	CONTROL	BY	PANEL NAME	CONNECTION	NOTE
1	RESTROOM	EF-2	72W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
2	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
3	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
4	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
5	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
6	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
7	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
8	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
9	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
10	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
11	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
12	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
13	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
14	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
15	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
16	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
17	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
18	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
19	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
20	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
21	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
22	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
23	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
24	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
25	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
26	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
27	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
28	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
29	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
30	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
31	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
32	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
33	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
34	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
35	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
36	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
37	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
38	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
39	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
40	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
41	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS
42	RESTROOM	EF-1	119W	120V	MMS	26	ON UNIT	OS	26	21	DIRECT	CONTROL WALL LIGHTING OS

1 DEMOLITION PLAN
SCALE: 1/4"=1'-0"



NORTH
TRUE
PLAN

2 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"



NORTH
TRUE
PLAN

3 LIGHTING CONTROL DETAIL
E100 NTS

NORTH
TRUE
PLAN

4 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

5 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

6 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

7 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

8 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

9 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

10 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

11 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

12 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

13 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

14 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

15 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

16 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

17 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

18 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

19 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

20 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

21 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

22 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

23 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

24 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

25 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

26 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

27 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

28 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

29 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

30 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

31 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

32 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

33 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

34 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

35 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

36 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

37 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

38 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

39 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"

NORTH
TRUE
PLAN

40 LIGHTING AND POWER PLAN
SCALE: 1/4"=1'-0"



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Project No. 82666 ©

I hereby certify that this plan, specification, report was prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the State of Minnesota.

Signature Paul D. Hubbard

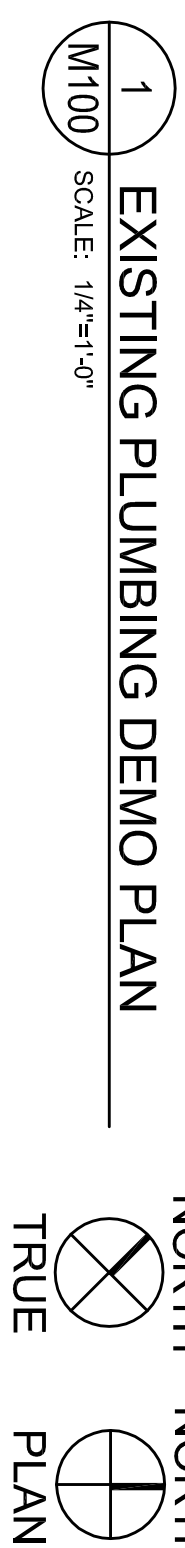
Name PAUL HASLACH
License # 24488
Date 03/15/2013

REVISION LOG		
NO.	DATE	DESCRIPTION

PROJECT NUMBER	
KID	PDH
DRAWN BY	CHECKED BY
DFC	
PROJECT MGR.	PROJECT ARCH.

MECHANICAL FLOOR PLANS

M100



- GENERAL NOTES:

- A. CONTRACTOR SHALL FIELD VERIFY EXISTING BUILDING & SITE SURFACE DEPTHS PRIOR TO STARTING WORK. NOTIFY ARCHITECT/ENGINEER IF DEPTHS ARE INADEQUATE.
- B. VERIFY EXACT LOCATIONS OF EXISTING ROOF & FLOOR OPENINGS FOR DRAINS & VENTS.
- C. COORDINATE PIPING WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS.
- D. VERIFY FOOTING LOCATIONS, SIZES, & DEPTHS PRIOR TO WASTE PIPE INSTALLATION, WHERE FOOTINGS ARE ENCOUNTERED. OFFSET DRAIN & DRAIN PIPING TO AVOID FOOTING.
- E. IF ADDITIONAL PLUMBING EQUIPMENT NOT SHOWN EXISTS IN THE BUILDING, INDIVIDUAL SUBCONTRACTORS ARE RESPONSIBLE FOR REMOVING AND REINSTALLING FIXTURES, EQUIPMENT ETC. THAT NORMALLY FALL WITHIN THEIR TRADES (E.G. SINKS, TOILETS, SHOWERS, TUBS, SLOTTED DRAIN VALVES, ETC.) IN AREAS WHERE FIXTURES/EQUIPMENT ETC. ARE SHOWN TO REMAIN.
- F. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE/PROTECT AND REINSTALL EXISTING CEILING TO ADJACULATE THE ABOVE OF EXISTING PLUMBING AND INSTALLATION OF NEW PLUMBING REMOVING EXISTING CEILINGS THAT ARE TO REMAIN. COORDINATE SANITARY INVERT ELEVATION PRIOR TO START OF WORK.
- G. ALL UNDERGROUND SANITARY PIPING & AND GREATER SHALL BE RUN AT NO LESS THAN 1/8" PER FOOT SLOPE AS ALLOWED BY THE LOCAL JURISDICTION.
- H. VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. COORDINATE WITH ARCHITECTURAL PLANS AND THE GENERAL CONTRACTOR.
- I. SLOPE ALL HOT AND COLD WATER PIPING TO ALLOW PIPES TO BE DRAINED.

NUMBERED NOTES:

1. CONNECT NEW 4" SANITARY SEWER TO EXISTING 4" LINE. VERIFY EXACT LOCATION AND INVERT.
2. ROUTE NEW UNDER FLOOR AND ABOVE GROUND PIPING THROUGH NEW WALL OPENING.
3. CONNECT NEW 2" COLD WATER TO EXISTING 2" COLD WATER SERVICE. VERIFY EXACT LOCATION AND SIZE.
4. EXISTING DRINKING FOUNTAIN TO REMAIN. VERIFY EXISTING WATER CONNECTION AND RECONNECT TO NEW AS REQUIRED TO MAINTAIN.
5. WATER PIPING ROUTED ABOVE THE CEILING, PITCH BACK TO WATER SERVICE/DRAIN LOCATION.
6. EXISTING WALL OPENING TO REMAIN.
7. ELECTRIC RADIANT CEILING PANEL, MOUNT BOTTOM OF PANEL 9'-0" AFF.
8. 24x14 EXHAUST GRILLE - 280 CFM.
9. 10"Ø EXHAUST DUCT UP TO GOOSENECK WINDSCREEN.
10. 24x12 EXHAUST GRILLE - 180 CFM.
11. 8"Ø EXHAUST DUCT UP TO GOOSENECK WINDSCREEN.
12. EXISTING WATER SERVICE PRESSURE TANK TO REMAIN.
13. DEMO EXISTING PLUMBING FIXTURE AND ASSOCIATED WASTE, VENT, AND COLD WATER PIPING IN UNDER FLOOR, CAP VENT ABOVE CEILING, AND CAP COLD WATER WHERE SHOWN ON PLANS.
14. RELOCATE 4" VENT AS REQUIRED TO ACCOMMODATE NEW WALL LAYOUT.

ELECTRICAL DESCRIPTION		ELECTRIC WATER HEATER SCHEDULE	
UNIT NO.	EFM-1	EFM-2	
LOCATION	MEN'S	WOMEN'S	
MANUFACTURER	EBM&X	EBM&X	
MODEL NO.	EX393ML	EX393ML	
TYPE	INSTANT/NEOUS	INSTANT/NEOUS	
MAX. TEMP. RISE (deg F)	45°F	45°F	
GALON STORAGE	0	0	
FLOW RATE (GPH)	1.5	1.5	
KW	9.5	9.5	
MAX POWER (AMPS)	40	40	
REMARKS	.	.	

PLUMBING FIXTURE RUNOUT SCHEDULE			
FIXTURE DESCRIPTION	SERVICE SIZE IN INCHES		
	WASTE	C.W.	H.W.
LAVATORY	2"	1 1/2"	1 1/2"
WATER CLOSET	4"	1-1/4"	--
URINAL	2"	1"	--
LAVATOR SINK	2"	3/4"	3/4"

FAN SCHEDULE			
UNIT NO.	EF-1	EF-2	
LOCATION	TOILET ROOM	TOILET ROOM	
TYPE	TOILET ROOM	TOILET ROOM	
MANUFACTURER	CEILING MOUNTED	CEILING MOUNTED	
MODEL NO.	FANTECH	BROAN	
CFM	300	180	
S.P. (IN.W.G.)	.60	.60	
FAN RPM	2550	2700	
DRIVE TYPE	DIRECT	DIRECT	
HP	119W.	72W.	
BACKCRAFT DAMPER	INTEGRAL	INTEGRAL	
REMARKS	.	.	

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MANUFACTURER	EBM&X
MODEL NO.	EX393ML
TYPE	INSTANT/NEOUS
MAX. TEMP. RISE (deg F)	4

